In this eight-week, research-based module, students explore the benefits and harmful consequences of the use of the controversial pesticide DDT. In Unit 1, students begin the novel *Frightful’s Mountain* (640L) by Jean Craighead George. Students will read closely to practice citing evidence and drawing inferences from this compelling text as they begin to think about the interactions between people and the natural world. They also will read informational texts and watch videos to gather evidence and trace arguments about the uses, benefits, and harmful consequences of DDT, its effects on the environment, and its use in the battle against malaria. At the end of this unit, students will participate in a Fishbowl discussion to begin to articulate their evidence-based opinions about the central question: “Do the benefits of DDT outweigh its harmful consequences?” In Unit 2, students will read the remainder of the novel, focusing on the how the main character, Frightful, is affected by the actions of other people and her own interactions with the natural world. Students also will engage in a research project, continuing to explore the central question of the module. Students will read several complex texts, both print and digital, in order to collect relevant information in a structured researcher’s notebook. To help them grapple with this issue, students learn a decision-making process called “Stakeholder Consequences Decision-Making” (see the end of this document for details). This process will help students understand the implications of various choices, and will scaffold their ability to determine—based on evidence and their own values—what they believe can and should happen. Unit 2 culminates with students synthesizing all their reading thus far in order to make and present their own evidence-based claim about the use of DDT. In Unit 3, students choose the most compelling evidence and write a position paper in which they support the claim they made (at the end of Unit 2). As a mid-unit assessment, students will submit their best draft of this position paper. As an end of unit assessment, students will submit a published copy, as well as a reflection on the writing process. As the final performance task, students share their findings by creating a scientific poster and presenting that poster to peers during a hosted gallery. This task addresses NYSP12 ELA CCLS R.6.1, W.6.1, W.6.4, W.6.4, and L.6.6.
## Guiding Questions And Big Ideas

- Human actions have environmental consequences.
- Reading for research can lead to informed claims and powerful argument writing.
- Do the benefits of DDT outweigh its harmful consequences?
- How do human actions affect the natural world?
- How do different authors approach providing information and making an argument?
- How does reading for research help me to form an opinion and make an argument?

## Performance Task

This performance task gives students a chance to demonstrate the ideas and evidence from their position papers, in which they answered the question: “Do the benefits of DDT outweigh its harmful consequences?” Students will craft and share a scientific poster that serves as a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. Students then participate in a hosted Gallery Walk in which they present the scientific poster they have created. (Speaking and listening standards are not formally assessed in the performance task, as they were taught and assessed in Unit 2 of this module.) This hosted Gallery Walk is written with students’ peers as their intended audience; however, other interested members of the community could be invited as an extension. **This task addresses NYSP12 ELA Standards RI.6.1, W.6.1, W.6.4, W.6.5, and L.6.6.**
Content Connections

This module is designed to address English Language Arts standards as students read literature and informational text about the Second Sudanese Civil War. However, the module intentionally incorporates Social Studies Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

**Big ideas and guiding questions are informed by the New York State Common Core K–8 Social Studies Framework:**

**Unifying Themes (pages 6–7)**
- Theme 4: Geography, Humans, and the Environment: The relationship between human populations and the physical world (people, places, and environments); impact of human activities on the environment; interactions between regions, locations, places, people, and environments.
- Theme 9: Science, Technology, and Innovation: Applications of science and innovations in transportation, communication, military technology, navigation, agriculture, and industrialization.

**Social Studies Practices: Geographic Reasoning, Grades 5–8:**
- Descriptor 2: Describe the relationships between people and environments and the connections between people and places (page 58).
- Descriptor 3: Identify, analyze, and evaluate the relationship between the environment and human activities, how the physical environment is modified by human activities, and how human activities are also influenced by Earth’s physical features and processes.

**Social Studies Practices: Gathering, Using, and Interpreting Evidence, Grades 5–8:**
- Descriptor 1: Define and frame questions about events and the world in which we live and use evidence to answer these questions.
- Descriptor 2: Identify, describe, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions, and other primary and secondary sources).
- Descriptor 4: Describe and analyze arguments of others.
- Descriptor 6: Recognize an argument and identify evidence that supports the argument; examine arguments related to a specific social studies topic from multiple perspectives; deconstruct arguments, recognizing the perspective of the argument and identifying evidence used to support that perspective.
### CCSS Standards: Reading—Literature

| RL.6.1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | I can cite text-based evidence to support an analysis of literary text. |

### Standards: Reading—Information

| RI.6.1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. | I can cite text-based evidence to support an analysis of informational text. |
| RI.6.8. Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not. | I can identify the argument and specific claims in a text.  
I can evaluate the argument and specific claims for sufficient evidence. |
<p>| RI.6.9. Compare and contrast one author’s presentation of events with that of another (e.g., a memoir written by and a biography on the same person). | I can compare how different authors portray the same idea or event. |
| RI.6.9a. Use experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. | I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. |</p>
<table>
<thead>
<tr>
<th>Standards: Writing</th>
<th>Long-Term Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>• W.6.1. Write arguments to support claims with clear reasons and relevant evidence.</td>
<td>• I can write arguments to support claims with clear reasons and relevant evidence.</td>
</tr>
<tr>
<td>a. Introduce claim(s) and organize the reasons and evidence clearly.</td>
<td>a. I can create an introduction that states my main argument and foreshadows the organization of my piece.</td>
</tr>
<tr>
<td>b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.</td>
<td>b. I can support my claim(s) with clear reasons and relevant evidence.</td>
</tr>
<tr>
<td>c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.</td>
<td>d. I can use credible sources to support my claim(s)</td>
</tr>
<tr>
<td>d. Establish and maintain a formal style.</td>
<td>c. I can identify the relationship between my claim(s) and reasons by using linking words, phrases, and clauses.</td>
</tr>
<tr>
<td>e. Provide a concluding statement or section that follows from the argument presented.</td>
<td>d. I can maintain a formal style in my writing.</td>
</tr>
<tr>
<td></td>
<td>e. I can construct a concluding statement or section that reinforces my main argument.</td>
</tr>
<tr>
<td>• W.6.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</td>
<td>• I can produce clear and coherent writing that is appropriate to task, purpose, and audience.</td>
</tr>
<tr>
<td>• W.6.5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</td>
<td>• With support from peers and adults, I can use a writing process to produce clear and coherent writing.</td>
</tr>
<tr>
<td>• W.6.6. Use technology, including the Internet, to produce and publish writing, as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.</td>
<td>• I can use technology to publish a piece of writing.</td>
</tr>
<tr>
<td></td>
<td>• I can use technology to collaborate with others to produce a piece of writing.</td>
</tr>
<tr>
<td>• W.6.7. Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.</td>
<td>• I can conduct short research projects to answer a question.</td>
</tr>
<tr>
<td></td>
<td>• I can use several sources in my research.</td>
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<td></td>
<td>• I can refocus or refine my question when appropriate.</td>
</tr>
</tbody>
</table>
## Standards: Writing

<table>
<thead>
<tr>
<th>Long-Term Learning Targets</th>
<th>Standards: Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can gather relevant information from a variety of sources.</td>
<td>W.6.8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.</td>
</tr>
<tr>
<td>I can assess the credibility of each source I use.</td>
<td></td>
</tr>
<tr>
<td>I can quote or paraphrase what others say about my topic while avoiding plagiarism.</td>
<td></td>
</tr>
<tr>
<td>I can provide a list of sources I used to gather information in a bibliography.</td>
<td></td>
</tr>
<tr>
<td>I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research.</td>
<td>W.6.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.</td>
</tr>
<tr>
<td>I can apply grade 6 Reading standards to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not”).</td>
<td></td>
</tr>
<tr>
<td>I can adjust my writing practices for different time frames, tasks, purposes, and audiences.</td>
<td>W.6.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</td>
</tr>
</tbody>
</table>
## Standards: Speaking and Listening

<table>
<thead>
<tr>
<th>Standards</th>
<th>Long-Term Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SL.6.2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.</td>
<td>• I can interpret information presented in different media and formats.</td>
</tr>
<tr>
<td>• SL.6.2a. Use experience and knowledge of language and logic to address problems and advocate persuasively.</td>
<td>• I can explain how new information connects to a topic, text, or issue I am studying.</td>
</tr>
<tr>
<td>• SL.6.3. Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.</td>
<td>• I can outline a speaker’s argument and specific claims.</td>
</tr>
<tr>
<td>• SL.6.4. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.</td>
<td>• I can determine whether a speaker’s argument is supported by reasons and evidence or not.</td>
</tr>
<tr>
<td>• SL.6.4a. Use experience and knowledge of language and logic to address problems and advocate persuasively.</td>
<td>• I can present claims and findings in a logical order.</td>
</tr>
<tr>
<td>• SL.6.5. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.</td>
<td>• I can support my main points with descriptions, facts, and details.</td>
</tr>
<tr>
<td>• SL.6.6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</td>
<td>• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation).</td>
</tr>
<tr>
<td>• SL.6.6a. Use experience and knowledge of language and logic to address problems and advocate persuasively.</td>
<td>• I can include multimedia components and visual displays in a presentation to clarify information.</td>
</tr>
<tr>
<td>• SL.6.6b. Use experience and knowledge of language and logic to address problems and advocate persuasively.</td>
<td>• I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate.</td>
</tr>
</tbody>
</table>
## Standards: Language

<table>
<thead>
<tr>
<th>English Language Arts Outcomes</th>
<th>Long-Term Learning Targets</th>
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</thead>
</table>
| • L.6.1e. Recognize variations from standard English in their own and others’ writing and speaking, and identify and use strategies to improve expression in conventional language. | • I can identify when standard English is and isn’t being used.  
• I can convert language into standard English. |
| • L.6.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.  
  a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.  
  b. Use common, grade-appropriate Greek or Latin affixes (prefixes and suffixes) and roots as clues to the meaning of a word (e.g., audience, auditory, audible).  
  c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.  
  d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). | • I can use a variety of strategies to determine the meaning of unknown words and phrases.  
  a. I can use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) to determine the meaning of a word or phrase.  
  b. I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible).  
  c. I can use resource materials (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning, and part of speech of key words and phrases.  
  d. I can check the accuracy of my guess about the meaning of a word or phrase by using resource materials. |
| • L.6.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. | • I can accurately use sixth-grade academic vocabulary to express my ideas.  
• I can use resources to build my vocabulary. |
### English Language Arts Outcomes

#### Central Texts


3. "John Stossel—DDT” video, as found at [http://www.youtube.com/watch?v=kHwqandRTSQ](http://www.youtube.com/watch?v=kHwqandRTSQ).


# Calendared Curriculum Map: Week at a Glance

## Unit 1: Learning From Frightful’s Perspective

### Weeks 1–3

- Launch the novel *Frightful’s Mountain* and routines for reading the novel
- Build background knowledge about falcons.
- Build background knowledge about DDT.
- Begin to trace an argument in text and video.

### Long-Term Targets

- I can cite text-based evidence to support an analysis of literary text. (RL.6.1)
- I can identify the argument and specific claims in a text. (RI.6.8)
- I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8)
- I can outline a speaker’s argument and specific claims. (SL.6.3)
- I can determine whether a speaker’s argument is supported by reasons and evidence or not. (SL.6.3)
- I can use resources to build my vocabulary. (L.6.6)

- Continue to trace an argument in text and video.
- Look closely at how text features support an argument.
- Begin Cascading Consequences anchor chart using *Frightful’s Mountain*.
- Build Cascading Consequences anchor chart using informational texts.
- Begin to practice Fishbowl protocol.

### Assessments

- Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” and the Video about DDT (NYSP12 ELA CCLS RI.6.8 and SL.6.3)
<table>
<thead>
<tr>
<th>Week</th>
<th>Instructional Focus</th>
<th>Long-Term Targets (continued)</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1-3, continued</td>
<td>• Interpret information from charts and graphs.</td>
<td>• I can interpret information presented in different media and formats. (SL.6.2)</td>
<td>• End of Unit 1 Assessment: Fishbowl Discussion: DDT: Do the Benefits Outweigh the Harmful Consequences? (NYSP12 ELA CCLS SL.6.2 and SL.6.2a)</td>
</tr>
<tr>
<td></td>
<td>• Incorporate information from charts and graphs into understanding of DDT, human needs, and the natural world.</td>
<td>• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)</td>
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<td></td>
<td>• Share information, understanding, and evidence-based opinions in a Fishbowl discussion.</td>
<td>• I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RL.6.9a)</td>
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<tr>
<td></td>
<td>• Interpret information from charts and graphs.</td>
<td>• I can determine whether a speaker’s argument is supported by reasons and evidence or not. (SL.6.3)</td>
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<tr>
<td></td>
<td>• Incorporate information from charts and graphs into understanding of DDT, human needs, and the natural world.</td>
<td>• I can outline a speaker’s argument and specific claims. (SL.6.3)</td>
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<td></td>
<td>• Share information, understanding, and evidence-based opinions in a Fishbowl discussion.</td>
<td>• I can use resources to build my vocabulary. (L.6.6)</td>
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<tr>
<td>Week</td>
<td>Instructional Focus</td>
<td>Long-Term Targets</td>
<td>Assessments</td>
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<tr>
<td>Unit 2: Research: Do the benefits of DDT outweigh its harmful consequences?</td>
<td><strong>Weeks 4–6</strong></td>
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<td></td>
<td>• Analyze an author’s presentation of ideas and events.</td>
<td>• I can compare how different authors portray the same idea or event. (RI.6.9)</td>
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<td></td>
<td>• Compare and contrast two authors’ presentation of information, ideas, and events.</td>
<td>• I can conduct short research projects to answer a question. (W.6.7)</td>
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<td></td>
<td>• Begin to collect relevant information to answer the research question, as well as bibliographic information about sources in a researcher’s notebook.</td>
<td>• I can use several sources in my research. (W.6.7)</td>
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<td>• Assess the credibility of sources used for research.</td>
<td>• I can refocus or refine my question when appropriate. (W.6.7)</td>
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<td>• Learn and practice multiple strategies for determining word meaning.</td>
<td>• I can gather relevant information from a variety of sources. (W.6.8)</td>
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<td>• I can assess the credibility of each source I use. (W.6.8)</td>
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<td>• I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)</td>
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<td>• I can provide a list of sources I used to gather information in a bibliography. (W.6.8)</td>
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<td>• I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.4b)</td>
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<td>• I can use resource material (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning, and part of speech of key words and phrases. (L.6.4c)</td>
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<tr>
<td>Week</td>
<td>Instructional Focus</td>
<td>Long-Term Targets</td>
<td>Assessments</td>
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</tbody>
</table>
| Weeks 4-6, continued  | • Continue comparing and contrasting two authors’ presentation of information, ideas, and events.  
• Begin to research texts digitally in a guided Webquest.  
• Continue to collect and practice strategies for determining the meaning of unknown words. | • I can compare how different authors present the same idea or event. (RI.6.9)  
• I can conduct short research projects to answer a question. (W.6.7)  
• I can use several sources in my research. (W.6.7)  
• I can refocus or refine my question when appropriate. (W.6.7)  
• I can gather relevant information from a variety of sources. (W.6.8)  
• I can assess the credibility of each source I use. (W.6.8)  
• I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)  
• I can provide a list of sources I used to gather information in a bibliography. (W.6.8)  
• I can use a variety of strategies to determine the meaning of unknown words and phrases. (L.6.4)  
• I can use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) to determine the meaning of a word or phrase. (L.6.4a)  
• I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.5b) | • Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research (NYSP12 ELA CCLS RI.6.9, W.6.7, W.6.8, L.6.4b, L.6.4c, and L.6.4d) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Instructional Focus</th>
<th>Long-Term Targets (continued)</th>
<th>Assessments</th>
</tr>
</thead>
</table>
| **Weeks 4-6, continued** | | • I can use resource materials (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning, and part of speech of key words and phrases. (L.6.4c)  
• I can check the accuracy of my guess about the meaning of a word or phrase by using resource materials. (L.6.4d) | • End of Unit 2 Assessment: Making a Claim: Where Do You Stand on the Use of DDT? (NYSP12 ELA CCLA RI.6.9a, W.1, W.9, SL.6.4, SL.6.5, and SL.6.6) |
| | • Create a Stakeholders anchor chart about the use of DDT.  
• Complete the Cascading Consequences anchor chart about the use of DDT.  
• Make a research-based claim about the use of DDT.  
• Learn effective presentation techniques in preparation for sharing the research-based claim.  
• Create a visual that helps an audience understand the claim and evidence. | • I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively and advocate persuasively. (RI.6.9a)  
• I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9)  
• I can present claims and findings in a logical order. (SL.6.4)  
• I can support my main points with descriptions, facts, and details. (SL.6.4)  
• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)  
• I can include multimedia components and visual displays in a presentation to clarify information (SL.6.5)  
• I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6.6) | |
# GRADE 6: MODULE 4: OVERVIEW

**Calendared Curriculum Map:**

**Week at a Glance**

## Unit 3: Writing: Position Paper about the Use of DDT

### Weeks 7–8

<table>
<thead>
<tr>
<th>Instructional Focus</th>
<th>Long-Term Targets</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Analyze a model position paper that makes a claim and uses evidence to support that claim.</td>
<td>• I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)</td>
<td>• Mid Unit 3 Assessment: Draft of Position Paper: Do the Benefits of DDT Outweigh Its Harmful Consequences? (NYSP12 ELA CCLS RL.6.1, W.6.1, and W.6.9)</td>
</tr>
<tr>
<td>• Analyze the rubric that will be used to assess the position paper.</td>
<td>• I can create an introduction that states my main argument and foreshadows the organization of my piece. (W.6.1a)</td>
<td></td>
</tr>
<tr>
<td>• Review the steps for writing a position paper.</td>
<td>• I can identify the relationship between my claim(s) and reasons by using linking words, phrases, and clauses. (W.6.1c)</td>
<td></td>
</tr>
<tr>
<td>• Plan the claim and evidence that will be used in the position paper.</td>
<td>• I can construct a concluding statement or section that reinforces my main argument. (W.6.1e)</td>
<td></td>
</tr>
<tr>
<td>• Plan the body paragraphs of the position paper.</td>
<td>• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)</td>
<td></td>
</tr>
<tr>
<td>• Peer critique the reasons and evidence being used in the position paper.</td>
<td>• Peer critique of drafts of position paper.</td>
<td></td>
</tr>
<tr>
<td>• Draft the complete position paper.</td>
<td>• Incorporate teacher’s feedback in revision of position paper.</td>
<td></td>
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<tr>
<td>• Peer critique of drafts of position paper.</td>
<td>• Learn the distinction between informal and formal English in writing, and incorporate this into the revision of the position paper.</td>
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<tr>
<td>• Incorporate teacher’s feedback in revision of position paper.</td>
<td>• Revise for appropriate sixth-grade, domain-specific, and academic vocabulary.</td>
<td></td>
</tr>
<tr>
<td>• Learn the distinction between informal and formal English in writing, and incorporate this into the revision of the position paper.</td>
<td>• I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)</td>
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</tr>
<tr>
<td>• Revise for appropriate sixth-grade, domain-specific, and academic vocabulary.</td>
<td>• I can maintain a formal style in my writing. (W.6.1d)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)</td>
<td>• End of Unit 3 Assessment: Reflection on the Writing Process: Moving from Draft to Published Position Paper (NYSP12 ELA CCLS W.6.5, W.6.6, L.6.1e, and L.6.6)</td>
</tr>
<tr>
<td></td>
<td>• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)</td>
<td>• Performance Task: Scientific Poster and Hosted Gallery Walk (NYSP12 ELA Standards RL.6.1, W.6.1, W.6.4, W.6.5, and L.6.6)</td>
</tr>
<tr>
<td>Week</td>
<td>Instructional Focus (continued)</td>
<td>Long-Term Targets (continued)</td>
</tr>
<tr>
<td>----------------------------------</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Weeks 7-8, continued             | • Prepare a scientific poster showing the claim, evidence, and research that went into the position paper.  
• Host a Gallery Walk of scientific posters.                                                                                                                                                                                  | • I can identify when standard English is and isn’t being used. (L.6.1e)  
• I can convert language into standard English. (L.6.1e)  
• I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6)                                                                                           |                                                                                                                                                                                                                   |

**Preparation and Materials**

In advance: Read the article about the Stakeholder Consequences Decision-Making (SCDM) process to build your own background knowledge about it. You can download the article “Learning to Make Systematic Decisions” at: http://education.nationalgeographic.com/education/media/learning-make-systematicdecisions/?ar_a=1.  
This article is not used with students during the module, but it provides some examples of how students have used this process in a science curriculum. Also note that in this module, students are not using the entire SCDM process; they will be learning only the Cascading Consequences and Stakeholders charts.
Grade 6: Module 4: Assessment Overview
| Final Performance Task | **Scientific Poster and Hosted Gallery Walk**  
This performance task gives students a chance to demonstrate the ideas and evidence from their position papers, in which they answered the question: “Do the benefits of DDT outweigh its harmful consequences?” Students will craft and share a scientific poster that serves as a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. Students then participate in a hosted Gallery Walk in which they present the scientific poster they have created. (Speaking and listening standards are not formally assessed in the performance task, as they were taught and assessed in Unit 2 of this module.) This hosted Gallery Walk is written with students’ peers as their intended audience; however, other interested members of the community could be invited as an extension. **This task addresses NYSP12 ELA Standards RI.6.1, W.6.1, W.6.4, W.6.5, and L.6.6.** |
| Mid-Unit 1 Assessment | **Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” and the Video about DDT**  
This assessment centers on NYSP12 ELA CCLS RI.6.8 and SL.6.3. In this assessment, students read a new article and watch a new video about the debate over the use of DDT. For each, students trace and evaluate the argument and specific claims made by the author, or speaker, distinguishing claims that are supported by reasons and evidence, and those that are not. Students use a graphic organizer identical to the one they have been using in prior lessons to complete this assessment. |
| End of Unit 1 Assessment | **Fishbowl Discussion: DDT: Do the Benefits Outweigh the Harmful Consequences?**  
This assessment centers on NYSP12 ELA CCLS SL.6.2 and SL.6.2a. In this assessment, students use the knowledge gained through the reading of the novel *Frightful’s Mountain* and multiple informational articles to inform their discussion around the question: “Do the benefits of DDT outweigh the consequences?” Students participate in a “Fishbowl” discussion, in which part of the students are active participants in the discussion, while the other half are observing and coaching a partner. Then these roles are switched. Students participating in the discussion are expected to advocate their position, ask questions of other students, and respond to questions posed to them. Students are also expected to refer to visual aids, such as charts and graphs, about the use of DDT as they persuasively advocate their position. The teacher will use an observation-based criteria checklist to assess students’ performance. |
# Grade 6: Module 4: Assessment Overview

## Mid-Unit 2 Assessment

**Comparing and Contrasting Two Texts: Simulated Research**
This assessment centers on NYSP12 ELA CCLS RI.6.9, W.6.7, W.6.8, L.6.4b, L.6.4c, and L.6.4d.
In this assessment, students read two unfamiliar articles about the use of DDT. Students collect basic bibliographic information about each article in a research notebook page (which is identical to the one they have been using in their own research), paraphrase the information and conclusions of each author, and reflect on whether these articles affect the focus of their inquiry. Students then compare and contrast the authors’ presentations of similar ideas. Finally, students identify new vocabulary presented in these articles. They use context clues, affixes, and root words to make a preliminary determination of the meanings, and then verify their definitions using reference materials.

## End of Unit 2 Assessment

**Making a Claim: Where Do You Stand on the Use of DDT?**
This assessment centers on NYSP12 ELA CCLA RI.6.9a, W.1, W.9, SL.6.4, SL.6.5, and SL.6.6. In this assessment, students will present their claim and findings, outlining their position on the use of DDT. Using both information from their reading as well as multimedia components, such as charts and graphs, students are expected to advocate persuasively, sequence their ideas logically, and use pertinent facts and details to accentuate their main ideas.

## Mid-Unit 3 Assessment

**Draft of Position Paper: Do the Benefits of DDT Outweigh Its Harmful Consequences?**
This assessment centers on NYSP12 ELA CCLS RI.6.1, W.6.1, and W.6.9.
For this mid-unit assessment, students submit their best draft of their position paper. Students focus their writing on the drafting of an introduction in which they make their claim and foreshadow the organization of their paper. They support this claim with relevant evidence from their reading and research done in Units 1 and 2. Students draft a conclusion that follows logically from the claim and evidence presented in their paper.

## End of Unit 3 Assessment

**Reflection on the Writing Process: Moving from Draft to Published Position Paper**
This assessment centers on NYSP12 ELA CCLS W.6.5, W.6.6, L.6.1e, and L.6.6.
For this end of unit assessment, students revise their position paper based on teacher and peer feedback. They also revise based on focused revision mini lessons on the use of sixth-grade domain-specific and academic vocabulary as well as the use of standard English in writing. Students complete a reflection on the writing process, focusing specifically on how the steps of the process improve their writing.
Summary of Task

• This performance task gives students a chance to demonstrate the ideas and evidence from their position papers, in which they answered the question: “Do the benefits of DDT outweigh its harmful consequences?” Students will craft and share a scientific poster that serves as a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. Students then participate in a hosted Gallery Walk in which they present the scientific poster they have created. (Speaking and listening standards are not formally assessed in the performance task, as they were taught and assessed in Unit 2 of this module.) This hosted Gallery Walk is written with students’ peers as their intended audience; however, other interested members of the community could be invited as an extension. This task addresses NYSP12 ELA Standards RI.6.1, W.6.1, W.6.4, W.6.5, and L.6.6.

Format

A visual representation of position paper on large paper or poster board.
Students will include their claim, reasons, and evidence from their position paper.
Students will include visual aids that connect to their claims and evidence.
Students will “host” other students at their poster and explain the thinking behind their claims and evidence.

Standards Assessed through This Task

• RI.6.1. Cite textual evidence to support analysis of what the text says explicitly, as well as inferences drawn from the text.
• W.6.1. Write arguments to support claims with clear reasons and relevant evidence.
• W.6.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
• W.6.5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
• L.6.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Student-Friendly Writing Invitation/Task Description

- Your task is to create a visual representation of your argument from your position paper. To do so, you will use your claim and at least three of your key reasons and pieces of evidence. You will then select images that represent your key pieces of evidence and organize them on a page or poster, using either paper and markers or a computer. You will share your performance task with the rest of the class in a hosted Gallery Walk.

Key Criteria for Success (Aligned with NYSP12 ELA CCLS)

Below are key criteria students need to address when completing this task. Specific lessons during the module build in opportunities for students to understand the criteria, offer additional criteria, and work with their teacher to construct a rubric on which their work will be critiqued and formally assessed.

Your research-based scientific poster will include:
- Your claim that you made in your position paper
- The reasons you used to support your claim
- Evidence from your position paper that supports your reasons and claim
- Images to support your argument
- An organizational structure that is easy to read and makes it easy to follow your argument
- Domain-specific vocabulary
## Options for Students

- Students will create their posters individually. They will primarily base their visual representation on their position paper; however, they may also look back at their researcher’s notebooks, Cascading Consequences charts, and Stakeholder charts.
- Students might have a partner to assist as they work on their visual representations, but the final version will be an individual’s product.
- Student visual representations might be laid out differently.
- Students may draw their images rather than use existing images.

## Options for Teachers

- Students may share their visual representations with their own class, with other classes in the school, or with parents or other adults in a community center or public library.
- Students may create a digital visual representation. These could be posted on an internal school Web site or, with parental permission, on a publicly accessible Web site.
## Resources and Links

- [http://search.creativecommons.org/](http://search.creativecommons.org/) (a site to search for images with licenses to reuse)
- [http://www.cns.cornell.edu/documents/ScientificPosters.pdf](http://www.cns.cornell.edu/documents/ScientificPosters.pdf) (a site showing model scientific posters)

## Central Text and Informational Texts

**Note:** Informational texts students use to work toward this performance task are listed in the separate Unit 2 Overview document.
Grade 6: Module 4:
Recommended Texts
The list below includes texts with a range of Lexile® text measures about pesticides. It is imperative that students read a high volume of texts at their reading level in order to continue to build the academic vocabulary and fluency demanded by the CCLS. Note that districts and schools should consider their own community standards when reviewing this list. Some texts in particular units or modules address emotionally difficult content.

Where possible, texts in languages other than English are also provided. Texts are categorized into three Lexile measures that correspond to Common Core Bands: below grade band, within band, and above band. Note, however, that Lexile measures are just one indicator of text complexity, and teachers must use their professional judgment and consider qualitative factors as well. For more information, see Appendix 1 of the Common Core State Standards.

### Common Core Band Level Text Difficulty Ranges:
(As provided in the NYSED Passage Selection Guidelines for Assessing CCSS ELA)
- Grade 4–5: 740–1010L
- Grade 6–8: 925–1185L

<table>
<thead>
<tr>
<th>Title</th>
<th>Author And Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexile text measures in Grade 2–3 band level (below 740L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazing Champion of the Earth</td>
<td>Mary Dodson Wade (author)</td>
<td>Informational</td>
<td>440</td>
</tr>
<tr>
<td>Rachel Carson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Food, Good for Earth</td>
<td>Darlene R. Stille (author)</td>
<td>Informational</td>
<td>680*</td>
</tr>
<tr>
<td>Rachel Carson: Extraordinary Environmentalist</td>
<td>Jill C. Wheeler (author)</td>
<td>Informational</td>
<td>690</td>
</tr>
<tr>
<td>What Can We Do about Toxins in the Environment?</td>
<td>David J. Jakubiak (author)</td>
<td>Informational</td>
<td>730*</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level;
<table>
<thead>
<tr>
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<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexile text measures in Grade 4–5 band level (740–925L)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><em>Peregrine Falcons</em></td>
<td>Doug Wechsler (author)</td>
<td>Informational</td>
<td>770*</td>
</tr>
<tr>
<td><em>Flush</em></td>
<td>Carl Hiaasen (author)</td>
<td>Literature</td>
<td>830</td>
</tr>
<tr>
<td><em>Rachel Carson and Her Book That Changed the World</em></td>
<td>Laurie Lawlor (author)</td>
<td>Informational</td>
<td>890</td>
</tr>
<tr>
<td><em>Earth-Friendly Food</em></td>
<td>Gillian Gosman (author)</td>
<td>Informational</td>
<td>900*</td>
</tr>
<tr>
<td>Lexile text measures within Grade 6–8 band level (925–1185L)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><em>The Frog Scientist</em></td>
<td>Pamela S. Turner (author)</td>
<td>Informational</td>
<td>950</td>
</tr>
<tr>
<td><em>Rachel Carson: Fighting Pesticides and Other Chemical Pollutants</em></td>
<td>Patricia Lantier (author)</td>
<td>Informational</td>
<td>960</td>
</tr>
<tr>
<td><em>The Devil’s Breath</em></td>
<td>David Gilman (author)</td>
<td>Informational</td>
<td>970*</td>
</tr>
<tr>
<td><em>Thoreau at Walden</em></td>
<td>John Porcellino (author) (from the writings of Henry David Thoreau)</td>
<td>Literature</td>
<td>990*</td>
</tr>
<tr>
<td><em>An Inconvenient Truth: The Crisis of Global Warming</em></td>
<td>Al Gore (author)</td>
<td>Informational</td>
<td>1070</td>
</tr>
<tr>
<td><em>The Highest Tide</em></td>
<td>Jim Lynch (author)</td>
<td>Literature</td>
<td>1100* ‡</td>
</tr>
<tr>
<td><em>Pesticides and Your Body</em></td>
<td>Jennifer Landau (author)</td>
<td>Informational</td>
<td>1120*</td>
</tr>
<tr>
<td><em>Pesticides</em></td>
<td>Katherine Macfarlane (author)</td>
<td>Informational</td>
<td>1150*</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level;  
‡Book content may have higher-maturity-level text
### Title

<table>
<thead>
<tr>
<th>Title</th>
<th>Author And Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent Spring at 50: The False Crises of Rachel Carson</td>
<td>Roger Meiners, Pierre Desrochers and Andrew Morriss (editors)</td>
<td>Informational</td>
<td>No LXL ‡</td>
</tr>
<tr>
<td>The War on Bugs</td>
<td>Will Allen (author)</td>
<td>Informational</td>
<td>No LXL ‡</td>
</tr>
</tbody>
</table>

### Suggested Web Sites for Research

- [http://planetark.org/enviro-news/](http://planetark.org/enviro-news/)
- [http://ga.water.usgs.gov/edu/pesticidesgw.html](http://ga.water.usgs.gov/edu/pesticidesgw.html)
- [http://www.epa.gov/pesticides/factsheets/riskassess.htm](http://www.epa.gov/pesticides/factsheets/riskassess.htm)

### Suggested Articles for Research

- “You Think YOU Have It Tough?” in *Kayak: Canada’s History Magazine for Kids* (Issue 39), 2012.

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‡Book content may have higher-maturity-level text

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Unit 1: Building Background Knowledge: *Frightful’s Mountain* and DDT

In this first unit, students are introduced to the central theme of this module: the delicate balance between human needs and the needs of the natural world. Students launch their reading of *Frightful’s Mountain*, focusing their learning about the natural world by reading through the perspective of Frightful, a peregrine falcon. Students then begin to analyze informational texts and videos about DDT, a pesticide used widely throughout the world to fight malaria, but banned in the United States in 1972 due to its harmful environmental consequences. In these articles and videos, students learn to trace and evaluate an author’s argument, claims, and evidence. In the mid-unit assessment, students read a new informational article and watch a new video, completing a graphic organizer identical to the one they have been using to trace the author’s argument during lessons. In the second half of the unit, students grapple with the central question of this module: Do the benefits of DDT outweigh its harmful consequences? Students reflect on the novel, the articles they read, and the videos they watched as well as a variety of new visual information in the form of charts, graphs, and maps. For their end of unit assessment, students participate in a Fishbowl discussion in which they are expected to advocate their position in response to the central question, using their own visual aids to help them support their position. This unit uses science content to teach literacy standards, but is not intended to replace hands-on science instruction.

**Guiding Questions and Big Ideas**

- Do the benefits outweigh the harmful consequences of DDT?
- How do human actions affect the natural world?
- How do authors make claims and support their arguments with evidence?
- How can I use speaking and listening to advocate my own position persuasively?
- *Human actions have environmental consequences.*
- *Authors use claims and evidence to support an argument.*
## Mid-Unit 1 Assessment

**Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” and the Video about DDT**

This assessment centers on NYSP12 ELA CCLS RI.6.8 and SL.6.3. In this assessment, students read a new article and watch a new video about the debate over the use of DDT. For each, students trace and evaluate the argument and specific claims made by the author, or speaker, distinguishing claims that are supported by reasons and evidence, and those that are not. Students use a graphic organizer identical to the one they have been using in prior lessons to complete this assessment.

## End of Unit 1 Assessment

**Fishbowl Discussion: DDT: Do the Benefits Outweigh the Harmful Consequences?**

This assessment centers on NYSP12 ELA CCLS SL.6.2 and SL.6.2a. In this assessment, students use the knowledge gained through the reading of the novel *Frightful’s Mountain* and multiple informational articles to inform their discussion around the question: “Do the benefits of DDT outweigh the consequences?” Students participate in a “Fishbowl” discussion, in which part of the students are active participants in the discussion, while the other half are observing and coaching a partner. Then these roles are switched. Students participating in the discussion are expected to advocate their position, ask questions of other students, and respond to questions posed to them. Students are also expected to refer to visual aids, such as charts and graphs, about the use of DDT as they persuasively advocate their position. The teacher will use an observation-based criteria checklist to assess students’ performance.
This module is designed to address English Language Arts standards as students read literature and informational texts about DDT and the natural world. However, the module intentionally incorporates Social Studies practices and themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

### Big ideas and guiding questions are informed by the New York State Common Core K–8 Social Studies Framework:


### Unifying Themes (pages 6–7):

- **Theme 4: Geography, Humans, and the Environment:** The relationship between human populations and the physical world (people, places, and environments); impact of human activities on the environment; interactions between regions, locations, places, people, and environments.
- **Theme 9: Science, Technology, and Innovation:** Applications of science and innovations in transportation, communication, military technology, agriculture, and industrialization.

### Social Studies Practices, Geographic Reasoning, Grades 5–8:

- **Descriptor 2:** Describe the relationships between people and environments and the connections between people and places (page 58).
- **Descriptor 3:** Identify, analyze, and evaluate the relationship between the environment and human activities, how the physical environment is modified by human activities, and how human activities are also influenced by Earth’s physical features and processes.

### Social Studies Practices, Gathering, Using, and Interpreting Evidence, Grades 5–8:

- **Descriptor 1:** Define and frame questions about events and the world in which we live and use evidence to answer these questions.
- **Descriptor 2:** Identify, describe, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions, and other primary and secondary sources).
- ** Descriptor 4:** Describe and analyze arguments of others.
- **Descriptor 6:** Recognize an argument and identify evidence that supports the argument; examine arguments related to a specific social studies topic from multiple perspectives; deconstruct arguments, recognizing the perspective of the argument and identifying evidence used to support that perspective.
Central Texts


3. "John Stossel—DDT” video, as found at http://www.youtube.com/watch?v=kHwqandRTSQ.


This unit is approximately 2.5 weeks or 13 sessions of instruction.

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 1 | Launching *Frightful's Mountain*: Building Background Knowledge and Establishing Reading Routines | • I can cite text-based evidence to support an analysis of literary text. (RL.6.1) | • I can identify the relationships of the main character at the beginning of the novel *Frightful’s Mountain*.  
• I can use context clues to determine the meaning of unfamiliar vocabulary in *Frightful’s Mountain*.  
• I can use details from the text, *Frightful’s Mountain*, to answer text-dependent questions. | • Learning from Frightful’s Perspective: Chapter 1  
• Notice and Wonder: Response to Frightful’s Mountain by Jean Craighead George Video | • Think-Pair-Share protocol |
| Lesson 2 | Close Reading and Gathering Evidence from *Frightful’s Mountain* and “Welcome Back” | • I can identify the argument and specific claims in a text. (RI.6.8)  
• I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8) | • I can collect background information about peregrine falcons and pesticides.  
• I can use evidence from *Frightful’s Mountain* to collect and share information about peregrine falcons.  
• I can get the gist of the informational article “Welcome Back.” | • Learning from Frightful’s Perspective  
• Chapter 2: Frightful  
• Goes to Falcon School, Peregrine Falcon Facts  
• Learning from Frightful’s Perspective: Chapter 2  
• Sticky note: Making Connections between *Frightful’s Mountain* and “Welcome Back” | • Peregrine Falcon Facts  
• Jigsaw protocol |
| Lesson 3 | Tracing a Speaker’s Argument: John Stossel DDT Video | • I can outline a speaker’s argument and specific claims. (SL.6.3)  
• I can determine whether a speaker’s argument is supported by reasons and evidence or not. (SL.6.3) | • I can identify the argument and specific claims in a video about DDT.  
• I can determine the evidence used to support the argument and claims in a video about DDT. | • Learning from Frightful’s Perspective: Chapter 3 (from homework)  
• Frightful’s Relationships: Excerpts from Chapter 3  
• Tracing an Argument graphic organizer | • Peregrine Falcon Facts |
<table>
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</tr>
</thead>
</table>
| Lesson 4 | Citing Evidence and Building Vocabulary: “The Exterminator”                  | • I can cite text-based evidence to support an analysis of informational text. (RI.6.1)  
• I can use resources to build my vocabulary. (L.6.6) | • I can get the gist of the informational article “The Exterminator.”  
• I can collect scientific vocabulary by reading “The Exterminator.” | • Learning from Frightful’s Perspective: Chapter 4  
• Text Walk Scavenger Hunt recording form  
• Scientific vocabulary identified in “The Exterminator” | • Peregrine Falcon Facts  
Think-Pair-Share protocol |
| Lesson 5 | Annotating the Text and Identifying Argument, Claims, and Evidence: “Double Whammy” Excerpt from “The Exterminator” | • I can identify the argument and specific claims in a text. (RI.6.8)  
• I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8) | • I can get the gist of an excerpt from “The Exterminator.”  
• I can identify the argument, claims, and evidence in an excerpt from “The Exterminator.” | • Learning from Frightful’s Perspective: Chapter 5 (from homework)  
• Tracing an Argument graphic organizer  
• Exit Ticket: Argument, Claims, and Evidence | • Peregrine Falcon Facts |
| Lesson 6 | Identifying How Text Features Support Arguments: “The Exterminator”          | • I can cite text-based evidence to support an analysis of informational text. (RI.6.1)  
• I can identify the argument and specific claims in a text. (RI.6.8)  
• I can use resources to build my vocabulary. (L.6.6) | • I can identify the argument and specific claims in “The Exterminator.”  
• I can evaluate the evidence used to support the argument and claims in “The Exterminator.” | • Learning from Frightful’s Perspective: Chapter 6 (from homework)  
• Sidebar “Seriously Sick” glossary  
• Sidebar “Killer Gene” glossary  
• Sidebar task card | • Peregrine Falcon Facts  
• Back-to-Back, Face-to-Face protocol |
| Lesson 7 | Getting the Gist and Tracing an Argument: “Public Fear” Excerpt from “The Exterminator” | • I can cite text-based evidence to support an analysis of informational text. (RI.6.1)  
• I can identify the argument and specific claims in a text. (RI.6.8)  
• I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8) | • I can get the gist of an excerpt from “The Exterminator.”  
• I can identify the argument, claims, and evidence in an excerpt from “The Exterminator.” | • Learning from Frightful’s Perspective: Chapter 7 (from homework)  
• Peregrine Falcon Facts anchor chart  
• Tracing an Argument graphic organizer  
• Learning Target sticky notes | • Peregrine Falcon Facts |
<table>
<thead>
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</tr>
</thead>
</table>
| Lesson 8 | Mid-Unit Assessment: Tracing an Argument in an Article and a Video | • I can identify the argument and specific claims in a text. (RI.6.8)  
• I can evaluate the argument and specific claims for sufficient evidence. (SL.6.3) | • I can identify the argument and specific claims in a video about DDT.  
• I can evaluate the evidence used to support the argument and claims in a video about DDT.  
• I can identify the argument and specific claims in “Rachel Carson: Sounding the Alarm on Pollution.”  
• I can evaluate the evidence used to support the argument and claims in “Rachel Carson: Sounding the Alarm on Pollution.” | • Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT  
• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” | |
| Lesson 9 | Interpreting and Connecting Information: Creating a Cascading Consequence Chart Using Frightful’s Mountain | • I can interpret information presented in different media and formats. (SL.6.2)  
• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)  
• I can use my experience and knowledge of language and logic to address problems and advocate persuasively. (SL.6.2a)  
• I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9) | • I can create a Cascading Consequence chart about Sam and Frightful’s interaction.  
• I can describe the expectations for participating in a Fishbowl discussion group.  
• I can use my Cascading Consequence chart for Frightful’s Mountain to clarify the ideas I am presenting. | • Learning from Frightful’s Perspective: Chapter 8 (from homework)  
• Peregrine Falcon Facts anchor chart  
• Cascading Consequence chart for Frightful’s Mountain | • Peregrine Falcon Facts  
• Fishbowl Discussion protocol |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 10 | Using Multiple Resources of Information: Creating a Cascading Consequences Chart about DDT and Practicing a Fishbowl Discussion | • I can interpret information presented in different media and formats. (SL.6.2)  
• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)  
• I can use my experience knowledge of language and logic to address problems and advocate persuasively. (SL.6.2a)  
• I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9) | • I can use multiple resources to create a Cascading Consequences chart about the use of DDT.  
• I can practice the skills and expectations for a Fishbowl discussion. | • Learning from Frightful’s Perspective: Chapter 9 (from homework)  
• Peregrine Falcon Facts anchor chart  
• Benefits of DDT and Harmful Consequences Cascading Consequences charts  
• Fishbowl Feedback checklist  
• Exit Ticket: Fishbowl Successes and Fishbowl Goals | • Peregrine Falcon Facts |
| Lesson 11 | Interpreting, Integrating, and Sharing Information: Using Charts and Graphs about DDT | • I can interpret information presented in different media and formats. (SL.6.2)  
• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2) | • I can interpret information in charts and graphs about DDT.  
• I can integrate information from charts and graphs to grow my understanding of DDT.  
• I can share information I learned from charts and graphs in a small group discussion. | • Learning from Frightful’s Perspective: Chapter 10 (from homework)  
• Interpreting Charts and Graphs graphic organizer  
• Benefits of DDT Cascading Consequences chart (from Lesson 10); Harmful Consequences of DDT Cascading Consequences chart (from Lesson 10) | • Interpreting Charts and Graphs  
• Peregrine Falcon Facts |
| Lesson 12 | Interpreting, Integrating, and Sharing Information about DDT: Using Cascading Consequences and Fishbowl Protocol | • I can interpret information presented in different media and formats. (SL.6.2)  
• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2) | • I can interpret information from cascading consequences about the use of DDT.  
• I can integrate information from cascading consequences to grow my understanding of DDT.  
• I can describe the expectations for a Fishbowl discussion. | • Learning from Frightful’s Perspective: Chapter 11 (from homework)  
• Interpretation of Benefits of DDT and Harmful Effects of DDT Cascading Consequences charts  
• Fishbowl note-catcher | • Fishbowl Discussion protocol |
| Lesson 13 | End of Unit Assessment: Fishbowl Discussion | • I can interpret information presented in different media and formats. (SL.6.2)  
• I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)  
• I can use my experience, knowledge, and understanding of culture to think analytically, address problems creatively, and advocate persuasively. (SL.6.2a) | • I can interpret information about DDT presented by my peers orally and visually.  
• I can explain how new information contributes to my understanding of DDT.  
• I can use my knowledge of DDT to advocate persuasively for one side or another. | • End of Unit 1 Assessment: Fishbowl discussion: DDT: Do the Benefits Outweigh the Consequences?  
• Fishbowl Discussion Partner Scoring Log  
• Exit Ticket: Two Stars and One Step | • Fishbowl Discussion protocol |
Optional: Experts, Fieldwork, and Service

Experts:
• Invite a local expert on peregrine falcons to speak with your class.
• Invite an editorial writer or journalist to discuss the development of writing an argument.
• Invite a New York environmental lawyer and advocate for the natural world to discuss the balance of human needs and the natural world.
• Invite a representative from the Department of Health, or similar organization, to discuss the ways in which we control diseases, such as malaria, in our own area.

Fieldwork:
• Several areas around the state of New York have nesting falcons. Consider visiting a local falcon nest to make observations.

Service:
• Consider having students share their position papers.

Optional: Extensions

• Consider cooperating with a science teacher to help students develop a deeper understanding of the complex scientific content of this module.
• Consider cooperating with an art teacher to help students create more beautiful, polished visual displays.
This unit includes a couple of routines that involve stand-alone documents.

Throughout the unit (and into Unit 2), students read *Frightful's Mountain* for homework. Two documents were created to help promote student accountability, independence, and small group discussion. The first is a **Reading Calendar** and the second is the **Learning from Frightful's Perspective** accompanying each chapter.

### 1. Reading Calendar

- Students read *Frightful's Mountain* for homework in Units 1 and 2.
- Each night, they read a new chapter.
- Consider providing a reading calendar to help students, teachers, and families understand what is due and when.
- See stand-alone document.

### 2. Learning from Frightful’s Perspective

Students will read a new chapter of *Frightful’s Mountain* each night. The Learning from Frightful’s Perspective document is given to students at the end of each lesson to complete in conjunction with their reading. This serves multiple purposes: accountability, vocabulary, comprehension, and discussion. Each night, students have a different “focus question” that requires them to respond with both their own thinking as well as textual evidence to support their thinking. It also provides students with a glossary of some words that are content specific, while asking them to collect their own list of words with which they struggled. When students launch each lesson, this document serves as an anchor for discussion in their triads.

If you prefer, you can create a packet that includes the Reading Calendar and all of the Learning from Frightful’s Perspective documents and give it to students at the launch of this novel. This may help students with the organization of their papers as well as save class time at the end of each day.
The calendar below shows what is due on each day. Teachers can modify this document to include dates instead of lessons.

<table>
<thead>
<tr>
<th>Due at Lesson</th>
<th>Read and complete Learning from Frightful’s Perspective focus question and vocabulary for this chapter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Chapter 2: “Frightful Goes to Falcon School”</td>
</tr>
<tr>
<td>3</td>
<td>Chapter 3: “The Eyases Get on Wing”</td>
</tr>
<tr>
<td>4</td>
<td>Chapter 4: “The Wilderness Tests the Eyases”</td>
</tr>
<tr>
<td>5</td>
<td>Chapter 5: “Frightful Peregrinates”</td>
</tr>
<tr>
<td>6</td>
<td>Chapter 6: “Frightful Finds the Enemy”</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 7: “Disaster Leads to Survival”</td>
</tr>
<tr>
<td>8</td>
<td>No new chapter for this lesson</td>
</tr>
<tr>
<td>9</td>
<td>Chapter 8: “Hunger Is Frightful’s Teacher”</td>
</tr>
<tr>
<td>10</td>
<td>Chapter 9: “Frightful Finds Sam”</td>
</tr>
<tr>
<td>11</td>
<td>Chapter 10: “There Are Eggs and Trouble”</td>
</tr>
<tr>
<td>12</td>
<td>Chapter 11: “The Kids Are Heard”</td>
</tr>
<tr>
<td>13</td>
<td>No new chapter for this lesson</td>
</tr>
</tbody>
</table>
Launching *Frightful’s Mountain*: Building Background Knowledge and Establishing Reading Routines
# Launching *Frightful's Mountain:*

Building Background Knowledge and Establishing Reading Routines

<table>
<thead>
<tr>
<th>Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can cite text-based evidence to support an analysis of literary text. (RL.6.1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the relationships of the main character at the beginning of the novel <em>Frightful's Mountain.</em></td>
<td>• Learning from Frightful’s Perspective: Chapter 1</td>
</tr>
<tr>
<td>• I can use context clues to determine the meaning of unfamiliar vocabulary in <em>Frightful's Mountain.</em></td>
<td>• Notice and Wonder: Response to <em>Frightful’s Mountain</em> by Jean Craighead George Video</td>
</tr>
<tr>
<td>• I can use details from the text, <em>Frightful's Mountain,</em> to answer text-dependent questions.</td>
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</tbody>
</table>
# Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Opening Quote: Human Needs and the Natural World (5 minutes)</td>
<td>- This first lesson is designed to engage students in the novel Frightful’s Mountain and the broader issue of human needs and the natural world and provide feedback.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>- This text is one of the resources students use to explore and evaluate the balance of human needs and the natural world.</td>
</tr>
</tbody>
</table>

## 2. Work Time

<table>
<thead>
<tr>
<th>Task</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Launching the Novel: Read-aloud of Chapter 1 of <em>Frightful’s Mountain</em> (20 minutes)</td>
<td>- More specifically, throughout this module students will continually revisit the idea of the co-existence of people with the natural world, and how human needs affect the environment.</td>
</tr>
<tr>
<td>B. Notice and Wonders: “<em>Frightful’s Mountain</em> by Jean Craighead George” Video (8 minutes)</td>
<td>- In Opening Part A, students consider the meaning of the quote “In nature nothing exists alone.” This quote stimulates their thinking about the module’s focus.</td>
</tr>
<tr>
<td>C. Introducing Routines for Reading the Novel: Learning from Frightful’s Perspective (5 minutes)</td>
<td>- The lesson uses simple routines, or “protocols,” throughout the module to promote student engagement. Review the Think-Pair-Share protocol (Appendix).</td>
</tr>
</tbody>
</table>

## 3. Closing and Assessment

<table>
<thead>
<tr>
<th>Task</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Exit Ticket: (5 minutes)</td>
<td>- Note that time is spent deconstructing the learning targets with students at the beginning of this lesson, and most other lessons in this module. This gives them a clear vision of each lesson’s focus. This research-based strategy supports struggling learners most. Using learning targets is also a powerful way to teach academic vocabulary.</td>
</tr>
</tbody>
</table>

## 4. Homework

<table>
<thead>
<tr>
<th>Task</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Read Chapter 2, “Frightful Goes to Falcon School.” Complete the Learning from Frightful’s Perspective Chapter 2.</td>
<td>- This lesson introduces close reading practices that will be built on throughout this module. These include reading for the gist, recognizing unfamiliar vocabulary, and finding evidence in text. Students likely are familiar with many of these routines from previous modules; adjust pacing as needed.</td>
</tr>
</tbody>
</table>

### In advance:
- Preview the video (see link in supporting materials).
- Look closely at the cover of *Frightful’s Mountain* and the map; read Chapter 1, “Frightful Takes Off.”
- Prepare technology for showing video and modeling the Learning from Frightful’s Perspective.
- Prepare to display Rachel Carson’s quote using the document camera or on chart paper.
- Post: Learning targets.
Lesson Vocabulary

evidence; migrate, migration, instinct (video); sequel (cover), illustrated (title page); talons (5), perch (6), prey (7), jesses (9), culvert (11), predators (12), tiercel (19)

Materials

- Document camera
- Rachel Carson’s quote (one for display)
- Frightful’s Mountain (book; one per student)
- “Frightful's Mountain by Jean Craighead George” video from YouTube
- Learning from Frightful’s Perspective: Chapter 1 (one per student)
- Learning from Frightful’s Perspective: Chapter 2 (one per student)

Opening

A. Opening Quote: Human Needs and the Natural World (5 minutes)

- Using a document camera or chart paper, post Rachel Carson’s quote where all students can see it. (See supporting materials.)
- Do not explain the quote. Simply review that the quotation marks identify the exact words that had been spoken or written by someone else.
- Verbally review the Think-Pair-Share protocol with students:
  1. First, take a minute to think about the question or prompt.
     Invite students to read the quote and think about it for 1 minute:
     * “What do you think this quote means?”
  2. Pair up with someone next to you, a "next-door neighbor," not someone "around the block" from you, and take turns sharing your thinking about the question or prompt.
     After 1 minute of partner conversation, focus students whole group. Ask:
     * “What do you think this quote means?”
  3. Share with the whole class any thoughts you had, conclusions you came to, questions you still have, etc.

Meeting Students’ Needs

- Communicate with ELL and SPED staff to prepare for this module.
- An audio version of Frightful’s Mountain is available. Check with the school library or local library for availability.
- Provide nonlinguistic symbols to help students make connections with vocabulary. These symbols can be used throughout the module in directions and learning targets.
- Select students may find it helpful to determine the gist of smaller chunks of the text at a time.
- Some students may need more frequent checks for understanding and guided practice.
**Opening (continued)**

- Encourage students to be specific and to use examples of relationships in nature that they shared with one another.
- Probe with questions such as the following:
  * “What are some relationships in nature?”
  * “Can you think of any living thing that can exist without a relationship(s) with other things?”
  * “Are all relationships beneficial?”
  * “Based on this quote, what do you think we will be studying in the weeks to come?”
- Tell students that today they begin a new and important study about the challenges of finding a balance between human needs and the natural world.
- Introduce students to the word interdependence. Post it where all students can see. Ask:
  * “What words or word parts do you see inside this larger word that might help us understand its meaning?”
- Invite volunteer responses. Listen for: “inter” and “depend.” If students do not know, tell them that inter is a prefix that means “between” or “among” and depend is a verb that means “to rely on” or “to control.” Ask:
  * “Given those meanings, what do you think interdependence means?”
- Guide students toward the idea that interdependence means “a relationship between two things in which both parties need or are affected by the other.”
- Tell students that they will be thinking a lot about the interdependence between people and the natural world throughout this module.

**B. Unpacking Learning Targets (2 minutes)**

- Direct students’ attention to the learning targets for today’s lesson. Remind students that learning targets are helpful tools in understanding their own learning goals.
- Read aloud as students read along:
  * “I can identify the relationships of the main character at the beginning of the novel Frightful’s Mountain.”
  * “I can use context clues to determine the meaning of unfamiliar vocabulary in Frightful’s Mountain.”
<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Launching the Novel: Read-aloud of Chapter 1 of Frightful’s Mountain (20 minutes)</strong></td>
<td></td>
</tr>
<tr>
<td>• Distribute the novel, <em>Frightful’s Mountain</em>, to each student. Invite students to look at the cover and the author’s name. Explain that the author is also the illustrator, the artist who drew the cover and the pictures in the book. Draw attention to the two other novels listed below the title. Explain that the main characters and the setting were first introduced in those books. Tell the class that <em>Frightful’s Mountain</em> is a sequel, a book that follows the others and continues the story.</td>
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</tr>
<tr>
<td>• Invite students to open their books to the map on the second page (opposite the title page). Ask students what state this novel takes place in and invite them to find other places they may be familiar with or places that are close to where they live.</td>
<td></td>
</tr>
<tr>
<td>• Direct students’ attention to the smaller map and the dotted line. Ask what that line might represent.</td>
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<tr>
<td>• Before reading aloud, briefly review “getting the gist”: reading through quickly to get an initial sense of what the text is mostly about.</td>
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</tr>
<tr>
<td>• Tell students that you will read Chapter 1, “Frightful Takes Off,” aloud. Tell them that, as usual, they should follow along and read in their heads as you read aloud. Set a purpose for students: as you read, they should notice Frightful’s relationships.</td>
<td></td>
</tr>
<tr>
<td>• Read Chapter 1 slowly, fluently, and without interruption.</td>
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</tr>
<tr>
<td>• Invite students to think, then talk with a partner:</td>
<td></td>
</tr>
<tr>
<td>* “What was this chapter mostly about?”</td>
<td></td>
</tr>
<tr>
<td>* “What relationships did you notice Frightful has?”</td>
<td></td>
</tr>
</tbody>
</table>
B. Notice and Wonders: “Frightful’s Mountain by Jean Craighead George” Video (8 minutes)

- Tell students that this video introduces them to a bird of prey, the peregrine falcon, whose survival has been threatened due to changing relationships in its environment, such as the falcon’s relationship with humans. The video further introduces Frightful, a peregrine falcon, who is the main character of the novel they are reading.
- Explain that they are watching the video to help get the gist of the novel. Ask students to label a sheet of paper with two headings. Model if needed. Title the left-hand column with the word “Notice” and the right-hand column with the word “Wonder.”
- Tell students to write their notices and wonders on the labeled paper as they watch the video.
- Play the “Frightful’s Mountain by Jean Craighead George” video from YouTube (3:08 minutes).
  http://www.youtube.com/watch?v=8B7ZVxXYVRE
- Invite class members to share:
  * “What did you notice? What did you wonder?”
- Tell students they will continue to learn more about Frightful and peregrine falcons as they read the novel and other texts.

C. Introducing Routines for Reading the Novel: Learning from Frightful’s Perspective (5 minutes)

- Distribute the Learning from Frightful’s Perspective: Chapter 1. Tell students that they will use this to help answer a focusing question for each chapter and to look for evidence, details that support ideas and opinions. Explain that the new vocabulary, focus questions, finding evidence, and recording their thoughts will help deepen their understanding of each chapter and the novel.
- Use a document camera to display Learning from Frightful’s Perspective: Chapter 1. Direct students’ attention to the Chapter 1 focus question.
- Read through the question together and guide students through the layout of the document. Model the response to the question. Ask students to record the responses on their Learning from Frightful’s Perspective.
- Still using the document camera, direct students to the word-catcher part of Learning from Frightful’s Perspective. Explain that some of the new vocabulary will appear in the glossary section with definitions. The other section, “Words I Found Difficult”, is where they will add unfamiliar words they find in each chapter.
A. Exit Ticket: Using the Word-catcher (5 minutes)

- Ask a student to work with a partner to find definitions for the three words with page numbers from Chapter 1 (jesses, culvert, and tiercel). Tell students that each of these words can be defined using context clues in the sentences around the word.

- Be sure that each student records his or her definition on the word-catcher part of Learning from Frightful’s Perspective: Chapter 1.

Homework

- Read Chapter 2, “Frightful Goes to Falcon School.” Complete Learning from Frightful’s Perspective: Chapter 2. Add at least three unfamiliar words and definitions to the Words I Found Difficult part of the graphic organizer.
Rachel Carson’s Quote

“In nature nothing exists alone.”

—Rachel Carson, writer, scientist, and ecologist
### Focus Question:

**Identify one human relationship or one animal relationship that Frightful has in this chapter.**

**Do you think this relationship is helpful or harmful to Frightful’s survival? Explain your thoughts.**

<table>
<thead>
<tr>
<th>Evidence from the Text:</th>
<th>Human or Animal Relationship</th>
<th>My Thoughts:</th>
</tr>
</thead>
</table>

### Chapter 1: “Frightful Takes Off”

#### Words I Found Difficult:
- jesses (9)
- culvert (11)
- tiercel (19)

#### Glossary:
- **talon**—noun: the claw of the bird
- **perch**—noun: anything upon which a bird rests
- **prey**—noun: an animal hunted or killed for food by another animal
- **predator**—noun: an animal that hunts other animals for food
Focus Question: What is something that Frightful learns from her relationship with Chup?

<table>
<thead>
<tr>
<th>Evidence from the Text:</th>
<th>Things Frightful Learns from Chup</th>
<th>My Thoughts:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Glossary:
- **aerie** — noun: the nest of a bird on a cliff, mountaintop, or high place
- **eyases** — noun: undeveloped birds, not feathered or ready for flight, nestlings
Grade 6: Module 4: Unit 1: Lesson 2
Close Reading and Gathering Evidence from Frightful’s Mountain and “Welcome Back”
Close Reading and Gathering Evidence from *Frightful’s Mountain* and “Welcome Back”

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can identify the argument and specific claims in a text. (RI.6.8)
- I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I can collect background information about peregrine falcons and pesticides.</td>
<td>- Learning from Frightful’s Perspective</td>
</tr>
<tr>
<td>- I can use evidence from <em>Frightful’s Mountain</em> to collect and share information about peregrine falcons.</td>
<td>- Chapter 2: Frightful Goes to Falcon School, Peregrine Falcon Facts</td>
</tr>
<tr>
<td>- I can get the gist of the informational article “Welcome Back.”</td>
<td>- Learning from Frightful’s Perspective: Chapter 2</td>
</tr>
<tr>
<td></td>
<td>- Sticky note: Making Connections between <em>Frightful’s Mountain</em> and “Welcome Back”</td>
</tr>
</tbody>
</table>
### Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Jigsaw of “Learning from Frightful”: Excerpts from Chapter 2 (15 minutes)</td>
<td>• This lesson uses the Jigsaw protocol (see Appendix) that will be used throughout the module. Students collaborate with peers to promote student engagement and learn about peregrine falcons.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>• Divide students into heterogeneous groups of four. Each group member is responsible for part of the chapter to read and record the learning on peregrine falcons. Then each member shares the learning with the others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Work Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. First Read of “Welcome Back”: Read-aloud and Getting the Gist (10 minutes)</td>
<td>• In advance: Prepare a Peregrine Falcon Facts anchor chart so facts can be added to the chart when students share with the whole class. Post the Peregrine Falcon Facts anchor chart for students.</td>
</tr>
<tr>
<td>B. Second Read of “Welcome Back”: Understanding Author’s Focus and Finding Text-based Evidence about Peregrine Falcons and DDT (15 minutes)</td>
<td>• After the Jigsaw protocol, spend time deconstructing the learning targets with students. This gives them a clear vision for what learning will focus on for each lesson. This research-based strategy supports struggling learners the most. Using learning targets is also a powerful way to teach academic vocabulary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Closing and Assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Making Connections between Frightful’s Mountain, “Welcome Back,” and Rachel Carson’s Quote (3 minutes)</td>
<td>• This lesson reviews reading for the gist and gives students practice annotating informational texts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Homework</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Read Chapter 3, “The Eyases Get on Wing.” Complete Learning from Frightful’s Perspective Chapter 3.</td>
<td>• During the read-aloud, students should look at the text and actively read in their heads. The teacher reads aloud slowly, fluently, and without interruption or explanation. This read-aloud process promotes fluency for students, who hear a strong reader read the text aloud with accuracy and expression and are simultaneously looking at and thinking about the words on the printed page.</td>
</tr>
</tbody>
</table>

| A. Read Chapter 3, “The Eyases Get on Wing.” Complete Learning from Frightful’s Perspective Chapter 3. | • Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. Students annotate the text by circling these words, providing a formative assessment for the teacher. |

| A. Read Chapter 3, “The Eyases Get on Wing.” Complete Learning from Frightful’s Perspective Chapter 3. | • The lesson ends with making connections with the novel, informational text, and Rachel Carson’s quote: “In nature nothing exists alone.” This quote will be discussed in upcoming lessons. Consider displaying the quote in the room for all students to see. |

| A. Read Chapter 3, “The Eyases Get on Wing.” Complete Learning from Frightful’s Perspective Chapter 3. | • Read “Welcome Back” to identify the focus, main idea, and text-based evidence to support learning on peregrine falcons and DDT. |

| A. Read Chapter 3, “The Eyases Get on Wing.” Complete Learning from Frightful’s Perspective Chapter 3. | • Post: Learning targets. |
Lesson Vocabulary | Materials
--- | ---
gist, annotate, pesticides, evidence; DDT, captivity, Endangered Species Act, aerie (22), nestlings (22), eyases (22), morsel (23), brooded (24), preened (27) | • Frightful Goes to Falcon School, Peregrine Falcon Facts (one per student)
• Peregrine Falcon Facts anchor chart (new; teacher-created; see Teaching Notes)
• *Frightful's Mountain* (book; one per student)
• “Welcome Back” article (one per student)
• Document camera
• Rachel Carson’s quote (from Lesson 1; one to display)
• Sticky notes (one per student)
• Learning from Frightful’s Perspective: Chapter 3 (one per student)
A. Jigsaw of “Learning from Frightful”: Excerpts from Chapter 2 (15 minutes)

• Remind students that they are going to work in triads throughout the module. Review group expectations with students.
• Tell students they will work in groups of four. Ask them to count off by fours. Distribute Chapter 2: Frightful Goes to Falcon School, Peregrine Falcon Facts to each student.
• Read the directions aloud and address any clarifying questions.
• Tell students they will have 5 minutes to identify three facts about their topic. If they finish early, they should challenge themselves to find more than three.
• Students should also refer to their homework, Learning from Frightful’s Perspective: Chapter 2 to get additional information.
• Circulate and support students that may have questions or need help identifying information on their topic.
• Invite students to finish writing. Tell students they each will share what they learned about peregrine falcons with their other group members. As students present the new information, group members should add this information to their Chapter 2: Frightful Goes to Falcon School, Peregrine Falcon Facts.
• While building the Peregrine Falcon Facts anchor chart, discuss and define the vocabulary words aerie, nestlings, brooded, eyases, morsel, and preened.

Meeting Students’ Needs

• The Jigsaw of Frightful’s Mountain has domain-specific vocabulary that is important to understanding the text.
• Discussion is critical to helping struggling readers build this vocabulary.
• Consider assigning the topics on the fact sheet. Some students could be assigned the topic with more or less pages to read, depending on their readiness.
• Many students will benefit from seeing the Chapter 2: Frightful Goes to Falcon School, Peregrine Falcon Facts sheet posted on the board or via a document camera as directions are read.
• Consider pairing ELL students who speak the same home language when discussion of complex content is required. This can allow students to have more meaningful discussions and clarify points in their native language.
• Some students may need more frequent checks for understanding and guided practice when first annotating text for the gist.
### Opening (continued)

#### B. Unpacking Learning Targets (2 minutes)
- Direct students’ attention to the learning targets. Remind students that learning targets are helpful tools in understanding their own learning goals. Targets will be part of every lesson.
- Read aloud as students read along with today’s learning targets:
  * “I can collect background information about peregrine falcons and pesticides.”
  * “I can use evidence from Frightful’s Mountain to collect and share information about peregrine falcons.”
  * “I can get the gist of the informational article ‘Welcome Back.’”
- Ask:
  * “Now that you have seen the learning targets for this lesson, what do you think you will be doing today?”
- Listen for: “We will be learning more about peregrine falcons. We will be learning about pesticides.”
- Remind students that *Frightful’s Mountain* is literary text. Tell them today they will be reading informational text to learn about peregrine falcons and DDT. Tell them DDT is a chemical *pesticide*.
- Ask:
  * “What do you think a chemical pesticide is?”
- If students do not know, tell them the suffix -cide means to kill or the act of killing. Listen for: “A toxic substance used to kill insects or pests.” Tell students that something that specifically kills insects is called an *insecticide*.
- Invite students to think about how *Frightful’s Mountain* and DDT may be connected.

### Meeting Students’ Needs
- For students who struggle with grade-level text, consider chunking the text for them on separate sheets of paper. This makes the reading of complex text more manageable and allows them to focus on one small section at a time.
- Consider providing definitions of challenging vocabulary in students’ home languages to support ELL students. Resources such as Google Translate and bilingual translation dictionaries can assist with one-word translation.
A. First Read of “Welcome Back”: Read-aloud and Getting the Gist (10 minutes)

- Be sure students are now sitting with their regular triads. Distribute the “Welcome Back” article to students. Use a document camera to display the text.

- Tell students that they will read this article more than once. As usual, they will first read just to get the gist—to understand the basic sense of the text and to get an idea of where information is located for later use.

- Invite students to read the text silently in their heads as you read aloud. Read slowly and fluently. Do not stop at this point to explain anything.

- After the article is read, ask triads:
  * “What is the gist, the basic sense of what this text is mostly about?”

- Listen for: “The text is stating the peregrine falcon population almost disappeared because of DDT. To help the peregrine falcon population come back, scientists tried raising them in captivity. In 1974, the first peregrine falcons were released into the wild. Raising falcons in captivity had proved successful.”

- Ask triads to think, then discuss:
  * “What does the author tell us about DDT?” Give students one minute to review the text to find evidence in the text about DDT.

- Listen for: “DDT is a chemical that was used to kill insects destroying farmers’ crops in the 1950s and 1960s.”

- Remind students that when text is challenging, it is often helpful to read smaller sections and to annotate or take notes in the margin to explain the author’s ideas.
B. Second Read of “Welcome Back”: Understanding Author’s Focus and Finding Text-based Evidence about Peregrine Falcons and DDT (15 minutes)

- Invite students to follow along as you reread the first four paragraphs aloud. Tell students you will model how to annotate this section of the text.
- Use a document camera. As you read the text aloud, circle unfamiliar words such as “perched,” “starling,” “stoop,” and “agile.” Underline facts about the peregrine falcon’s vision, speed, and method of capturing prey. Examples of facts to underline could be: “keen vision,” “head pointed down, wings tucked, and feet tucked in,” “speeds up to 200 m.p.h.,” “black mustache and head and white cheeks,” “long pointed wings permit him to easily shift positions.”
- Ask triads to discuss the vocabulary underlined, and to write a phrase in the margin to summarize the facts about the peregrine’s dive. Remind the class to use context clues to determine word meaning. Pause to give students time.
- Invite students to share their definitions and phrases.
- Model writing phrases students share in the margin. Examples could be: “sharp vision and streamlined body when capturing prey,” “fly up to 200 m.p.h.,” “long, pointed wings to easily change positions in flight.”
- Next, ask triads to annotate Paragraphs 5 and 6 about DDT. Remind students to circle difficult vocabulary and underline informational facts about DDT. Ask them to write a sentence or phrase about the main idea of the two paragraphs in the margin. Pause to give students time.
- Circulate to encourage students, making sure students underline key points and not all text. If some students need support, ask them to read one paragraph and tell you what it was about. Encourage them to write a summarized sentence or phrase in the margin. Make a note of students needing support.
- Refocus the class whole group. Invite triads to share their unfamiliar words and their context clues that helped with definitions.
- Listen for: captivity and DDT. Captivity means not able to be free. DDT is a chemical pesticide used to kill insects.
- Invite triads to share information with their group members about peregrine falcons and DDT from Paragraphs 5 and 6. Pause to give time.
- Circulate and listen for responses. Provide support in finding the main point. Also, make note of students needing support in writing a summarized phrase or sentence.
- Bring the class back together. Cold call triads to share a sentence or a phrase they wrote to summarize the two paragraphs. Also, ask them to share difficult words and definitions.
**Work Time (continued)**

- Listen for: “In the 1950s and 1960s, farmers used DDT to kill insects destroying their crops. Birds ate insects with DDT on them, and peregrine falcons fed on these birds. DDT built up in the body and caused the eggs laid to have thinner shells. Thinner shells resulted in cracking and chicks could not hatch. Peregrine falcons were raised in captivity.”

- Use the document camera to model writing notes in the margin.

- Direct students to read and annotate the last two paragraphs independently. Pause and give students time.

- Circulate and support students who needed help from the previous annotating.

- Reconvene the class. Ask triads to share their unfamiliar words and facts about peregrine falcons and DDT with their group.

- Invite volunteers to share their words and definitions with the class. Also, ask students to share the notes they wrote in the margin.

- Listen for: banned and Endangered Species Act. Three things helped bring the population back: peregrines were raised in captivity; in 1972, DDT was banned; and the Endangered Species Act provided protection for these birds.

- Congratulate students for building knowledge on annotating challenging informational text and working cooperatively with their triads. Tell them in the weeks to come they will learn more about peregrine falcons and DDT.

- Display **Rachel Carson’s quote**: “In nature nothing exists alone.” Ask students to read it silently to themselves.
### Closing and Assessment

A. Making Connections between Frightful’s Mountain, “Welcome Back,” and Rachel Carson’s Quote (3 minutes)

- Distribute a **sticky note** to each student. Display Rachel Carson’s quote.
- Say, “Now that you have read *Frightful’s Mountain* Chapter 2, and the Rachel Carson quote, ‘In nature nothing exists alone,’ and the article ‘Welcome Back,’ think: What connections are there between the quote and the novel? What can you infer about what’s to come in the next weeks of study?”
- Invite students to write their thoughts on their sticky note, and to come up and post their ideas on the front board.
- Once students have posted their ideas, think aloud the connections you see.
- For example, you might say: “I see many students wrote about nature in their response. We are going to be reading, thinking, and talking a lot about the natural world in the weeks to come. I also see many of you have written about DDT. We will be reading, thinking, and talking about DDT and other ways humans affect the natural world. In the next several weeks, we are going to keep coming back to the idea of the delicate balance between humans and the many parts of our natural world.”
- Preview homework as needed; reinforce the routine of the structured notes. Remind students to do the following as they read:
  - Find at least three unfamiliar vocabulary words, and write the corresponding page number by each word.
  - Write your thoughts to the focus question, and find evidence, facts, or reasons from Chapter 3 to support your thinking.

### Homework

- Read Chapter 3. “The Eyases Get on Wing.” Complete **Learning from Frightful’s Perspective: Chapter 3**.
Directions:
1. Each member of your group should choose a different topic from the four listed below.
2. Then, read the text pages in the parentheses that correspond to your topic.
3. As you read the text, find at least three facts, evidence, that support the topic.
4. Record what you’ve learned about peregrine falcons in the space provided.
5. Also refer to your homework, Learning from Frightful’s Perspective: Chapter 2, to get additional information.

Physical description of Adults and Eyases (pages 21, 22, 29)

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Habitat (pages 21 and 22)

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- 
-
Mating (page 22)

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- 

Hunting and Eating (pages 23, 24, 27, 28)

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Welcome Back

Full speed ahead! The peregrine falcon perched high on a cliff ledge spots a soaring pigeon. His keen vision allows him to focus on the target. Head pointed down, wings and feet tucked in, he begins his dive.

A peregrine's dive or “stoop” can reach speeds of up to 200 miles an hour. No speeding ticket for this guy, though. Instead, success! He strikes the hovering pigeon and grabs it with his sharp talons. Mission accomplished.

Just as he’s catching his next meal, a fellow falcon streaks by at a level cruising speed of 55 miles per hour. Sunlight reflects off of his blue-gray back, a black moustache lines the sides of his face beneath a black head and white cheeks. Long pointed wings permit him to easily shift positions while in flight.

The peregrine falcon is a magnificent bird and we are fortunate to be able to enjoy these agile flyers today. Once one of the most widespread birds of prey, the peregrine almost completely disappeared from our skies.

In the 1950s and 1960s, farmers used DDT, dichlorodiphenyltrichloroethane, to kill insects that damaged their crops. Birds that the peregrine falcon fed on were eating the insects with DDT in them, which built up in the falcon’s body, causing the female falcons to lay thin-shelled eggs. When they sat on their eggs to keep them warm, the eggs broke before the chicks could hatch.

Hoping to help the falcons, scientists began raising chicks in captivity. Eggs were hatched in laboratories under the scientists’ watchful eyes. Hand puppets that looked like the mother falcons were used to feed the babies. That way, they remained wild because they thought “momm” was feeding them. In 1974, the first peregrine falcons raised in captivity were released into the wild.

Raising falcons in captivity, as well as other actions taken during the 1970s, helped to increase their numbers. The use of DDT was banned in 1972, and the following year the peregrine falcon became protected under the Endangered Species Act. Due to all of these efforts, these remarkable birds have made a comeback from 235 known nesting pairs in 1975, to an estimated 2,000 pairs in the United States and Canada today.

Thanks to the actions of scientists and others who cared enough to save the peregrine falcon, we are able, once again, to enjoy these aerial acrobats.

—Susan Nagle-Schwartz is a freelance writer interested in wildlife conservation, Pennsylvania.

Track the Falcon

The Falcon Research Group is an organization committed to saving birds of prey. One of their projects involves placing GPS transmitters on several tundra peregrine falcons to track their migration. Traveling between Chile and the Arctic, they cover between 6,000 and 8,000 miles on their journey. You can follow the travels of Sparrow King, La Serena, and all of their friends by visiting the web site: www.sfg.org. Click on the “Field Research” tab, and then, “Southern Cross Peregrine Project” to find out where they are in the world.

Cherry Blossom Spirit

Pink buds rain upon
People waking underneath
A petal shower
Air smelling sweet
Light and graceful on you’re feet
Dance, SAKURA-CHAN
Soft and round
Swirling, twirling to the ground
Looks, feels, smells like love
With the sunrise, she
Is blown away by the wind
In it’s smooth branches
Her blossoms still live.

—Cassie Lowell, 14, Maryland.
**Focus Question:** What are some of the physical and behavioral changes that occur as Drum, Lady, and Duchess become young peregrine falcons? Use evidence from the text to support your thoughts.

### Evidence from the Text:

### The Physical and Behavioral Changes

### My Thoughts:

### Words I Found Difficult:

| Glossary: | nictitating membrane—noun: A thin membrane found in many animals at the inner angle or beneath the lower lid of the eye and capable of extending across the eyeball. | fledgling—noun: A young bird. another |

### Name:

### Date:
Grade 6: Module 4: Unit 1: Lesson 3
Tracing a Speaker’s Argument: John Stossel DDT Video
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can outline a speaker’s argument and specific claims. (SL.6.3)
I can determine whether a speaker’s argument is supported by reasons and evidence or not. (SL.6.3)

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the argument and specific claims in a video about DDT.</td>
<td>• Learning from Frightful’s Perspective: Chapter 3 (from homework)</td>
</tr>
<tr>
<td>• I can determine the evidence used to support the argument and claims in a video about DDT.</td>
<td>• Frightful’s Relationships: Excerpts from Chapter 3</td>
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<td></td>
<td>• Tracing an Argument graphic organizer</td>
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<tr>
<td>Agenda</td>
<td>Teaching Notes</td>
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<tr>
<td>1. Opening</td>
<td>• This lesson is the first in a series of lessons in which students identify an author’s or speaker’s argument and claims they make that are supported with evidence. This lesson uses the Jigsaw protocol (see Appendix) that will be used throughout the module. Students collaborate with peers to promote student engagement and learn about peregrine falcons.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (10 minutes)</td>
<td>• In Opening Part A, students work in triads to discuss homework. Later, they transition to groups of four to explore how relationships affect survival.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (3 minutes)</td>
<td>• In triads, students routinely share responses to the daily focus question from Learning from Frightful’s Perspective. They also build new vocabulary by sharing and defining words added to the Words I Found Difficult section.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• As in previous modules, this lesson involves the total participation technique of “cold calling” on students. The teacher uses cold call for students to share responses to the focus question with the whole class.</td>
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<tr>
<td>A. Notice and Wonder: First Viewing of “John Stossel – DDT” Video (10 minutes)</td>
<td>• The lesson gives students an opportunity to practice tracing an argument first with partners and then independently. Collecting the graphic organizer provides a formative assessment of the understanding of the learning targets. These skills will be practiced in future lessons with an article.</td>
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<tr>
<td>B. Tracing an Argument: Second Viewing of “John Stossel – DDT” Video (15 minutes)</td>
<td>• Note that in the mid-unit assessment, students will watch a video and fill in a Tracing an Argument graphic organizer. Students need to practice these skills. If time permits, allow them more practice.</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>• This lesson is the first in a series of lessons in which students identify an author’s or speaker’s argument and claims they make that are supported with evidence. This lesson uses the Jigsaw protocol (see Appendix) that will be used throughout the module. Students collaborate with peers to promote student engagement and learn about peregrine falcons.</td>
</tr>
<tr>
<td>A. Exit Ticket: Independently Identifying a Claim and Evidence (7 minutes)</td>
<td>• In Opening Part A, students work in triads to discuss homework. Later, they transition to groups of four to explore how relationships affect survival.</td>
</tr>
<tr>
<td>4. Homework</td>
<td>• In triads, students routinely share responses to the daily focus question from Learning from Frightful’s Perspective. They also build new vocabulary by sharing and defining words added to the Words I Found Difficult section.</td>
</tr>
<tr>
<td>A. Read Chapter 4, “The Wilderness Tests the Eyases” Complete Learning from Frightful’s Perspective: Chapter 4.</td>
<td>• As in previous modules, this lesson involves the total participation technique of “cold calling” on students. The teacher uses cold call for students to share responses to the focus question with the whole class.</td>
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# Agenda

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<tr>
<th>Teaching Notes (continued)</th>
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<tr>
<td>• Consider how to put students in groups of four for the discussion of quotes activity in the opening, though a model of how to do this is provided in the lesson.</td>
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<tr>
<td>• Today’s lesson asks students to move from novel triads to groups of four. Careful attention should be given to preview with students what moving to groups of four looks like.</td>
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<tr>
<td>• Cut quotes into strips from Frightful’s Relationships: Excerpts from Chapter 3 (see supporting materials).</td>
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<tr>
<td>• Preview the “John Stossel—DDT” video to find the argument, claims, and evidence. Note that students watch this video twice. During the second viewing, be prepared to pause at the designated spots.</td>
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<tr>
<td>• Prepare necessary technology.</td>
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<tr>
<td>• Post: Learning targets.</td>
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<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
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</thead>
<tbody>
<tr>
<td>gist, argument, claim, evidence; DDT, malaria, typhus, leukemia, myth, residue, chemical, ban, environmentalist, insecticide, World Malaria Day (video)</td>
<td>• <em>Frightful's Mountain</em> (book; one per student)</td>
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<tr>
<td></td>
<td>• Peregrine Falcon Facts anchor chart (from Lesson 2)</td>
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<td></td>
<td>• Frightful’s Relationships: Excerpts from Chapter 3 (one per student)</td>
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<td></td>
<td>• Document camera</td>
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<tr>
<td></td>
<td>• Notice and Wonder graphic organizer (one per student)</td>
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<tr>
<td></td>
<td>• “John Stossel—DDT” video <a href="http://www.youtube.com/watch?v=kHwqandRTSQ">http://www.youtube.com/watch?v=kHwqandRTSQ</a></td>
</tr>
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<td></td>
<td>• Tracing an Argument graphic organizer (one per student)</td>
</tr>
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<td></td>
<td>• Learning from Frightful’s Perspective: Chapter 4 (one per student)</td>
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<tr>
<td>Opening</td>
<td>Meeting Students’ Needs</td>
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<tr>
<td><strong>A. Engaging the Reader: Learning from Frightful’s Perspective (10 minutes)</strong></td>
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<tr>
<td>• Be sure students have their text, <em>Frightful’s Mountain</em>.</td>
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<tr>
<td>• Invite students to join their triads and discuss their responses to the focus question from their homework, Learning from Frightful’s Perspective: Chapter 3. Each student should share one physical and behavioral change of Drum, Lady, and Duchess. Remind students to discuss specific evidence from the text.</td>
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<tr>
<td>• Invite students to share words they added to the Words I Found Difficult section with their triad members. Group members should collaborate to determine the definition or meaning of the words and add definitions to the document.</td>
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<td>• Circulate to observe students’ verbal and written responses. Make note of students who collaborate well with triad members, and those who may need more support in future activities. Check in with triads to make sure vocabulary words are defined. Where students have not determined meaning, encourage them to work together using context to determine meaning, or supply them with a resource material, such as a dictionary, to find the definition.</td>
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<td>• Read aloud the focus question for Chapter 3:</td>
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<td>* “Describe some of the physical and behavioral changes that happen with Drum, Lady, and Duchess as they become young peregrine falcons.”</td>
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<td>• Invite groups to share their responses with the whole class. Listen for: “The eyases are becoming more dangerous. Lady and Drum lowered their bodies horizontally and charged Frightful.” And: “Drum had watched his parents eat and now dragged what was left under the overhang. Taking a bite in his beak, he swallowed it. He plucked another bite.”</td>
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<tr>
<td>• Add peregrine falcon information to the Peregrine Falcon Facts anchor chart. Compliment students on building their knowledge of peregrine falcons.</td>
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<td>• Remind students that when launching Frightful’s Mountain, they read a quote by Rachel Carson: “In nature nothing exists alone.” As societies look at making changes, they continually need to be considering ways to balance human needs with needs of the natural world.</td>
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### Opening (continued)

- Share with students that in *Frightful’s Mountain* they will be reading about Frightful’s relationships. Tell them that in this activity and in future lessons, they will be thinking, talking, and writing about those relationships. These relationships are an example of interdependence within the natural world, as well as between people and the natural world. Therefore, students should pay particular attention to these relationships while reading the novel.

- Ask students to divide into groups of four by counting off one through four. Invite numbered groups to spread out around the room (e.g., ones to one corner, twos another corner, etc.). Distribute a different quote from the novel to each student from the graphic organizer **Frightful’s Relationships: Excerpts from Chapter 3**. Students should read the quote to group members and share the relationship the quote refers to and why the relationship is important.

- Model an example using this quote: “Chup came home. He brought no food to the eyases. Duchess charged him, feathers lifted. He sat still and panted in the sun. His feathers were rumpled and he held his head low. Chup had not eaten for a day and a half. He was weak.” The relationship is between Chup and the eyases. The eyases need a strong parent to feed them; they are dependent on Chup. Give students time to discuss.

- Invite students to begin discussing quotes in their groups. Circulate to encourage and support groups.

- After students have had time to discuss each quote, display quotes one at a time using a **document camera**. Cold call student groups to read the quote and share their responses about Frightful’s relationships in the quote. After all the quotes have been shared and discussed, transition students back into triads.

- Ask students if there is anything they learned about peregrine falcons by looking closely at these relationships. If so, add these to the Peregrine Falcon Facts anchor chart.

- Give students specific positive feedback on their focused work with adding to their understanding of character relationships in *Frightful’s Mountain* and building background knowledge on peregrine falcons.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary. A glossary of academic vocabulary may be useful throughout the module.
### B. Unpacking Learning Targets (3 minutes)

- Direct students’ attention to the learning targets for today’s lesson. Remind students that learning targets are helpful tools in understanding their own learning.
- Read aloud as students read along with today’s targets:
  * “I can identify the argument and specific claims in a video about DDT” and “I can evaluate the evidence used to support the argument and claims in a video about DDT.”
- Ask students to identify important words in the learning targets. Draw a box around argument. Remind students that argument means to take a position on an idea. Ask students to discuss with their triads:
  * “Did the author express a position on DDT in ‘Welcome Back’?”
- Invite volunteers to share their thoughts. Listen for: “The author feels DDT caused the peregrine population to decline. The author takes a position against DDT.”
- Next, circle the word claim. Explain that a claim is a statement that can be questioned. It’s not a fact. In “Welcome Back,” the author claimed DDT caused the peregrine falcon population to decline.
- Underline the word evidence in the target. Ask students:
  * “What evidence did the author use to support the claim the peregrine falcon population declined?”
- Give students time to discuss with their partner. Invite volunteers to share.

### Meeting Students’ Needs

- It may be helpful to think of examples of arguments, claims, and evidence students can relate to in their own lives. (Example: an argument could be “I want a later curfew.”)
### A. Notice and Wonder: First Viewing of “John Stossel—DDT” Video (10 minutes)

- Remind students that one of the issues of interdependence they will be thinking about while reading Frightful’s Mountain is the use of the pesticide DDT. Tell students that, while many people have strong feelings about the use of DDT due to its effects on the environment, specifically on falcons like Frightful, there are multiple arguments in this debate.
- Tell students they will continue to build their understanding of how to identify an author’s argument and find claims with supporting evidence. To practice, they will watch a John Stossel DDT video twice.
- Give basic background information without giving too much away. Mention that the video gives more information on the insecticide DDT and its use. John Stossel, an investigative journalist and reporter, and Richard Tren, author of Excellent Powder, detail how the DDT ban was a great victory for environmentalism. However, the ban has led to a multitude of deaths throughout the world.
- Distribute the **Notice and Wonder graphic organizer**. Ask students to record their notices and wonders as they listen to the video.
- Play the **“John Stossel—DDT” video** once through.
- Invite students to share their notices and wonders with an elbow partner.
- After students have shared, ask the whole class:
  * “What do you think was the message or purpose of John Stossel’s DDT video?”
- Listen for: “John Stossel believes DDT saves lives.” Remind students the purpose or general idea is the author’s **argument**.
### Work Time (continued)

<table>
<thead>
<tr>
<th>B. Tracing an Argument: Second Viewing of “John Stossel—DDT” Video (15 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Distribute the <strong>Tracing an Argument graphic</strong> organizer to each student. Tell students this graphic organizer provides a way to capture the argument, claims, and supporting evidence in an organized way.</td>
<td></td>
</tr>
<tr>
<td>- Read through the organizer with the students. Using a document camera, point out the area where students will write a claim and the area students will write supporting evidence. Model where to write the argument. Tell students that this time you will supply them with the argument so they know what kinds of claims and evidence they should be looking for.</td>
<td></td>
</tr>
<tr>
<td>- Post and allow time for students to write: “John Stossel believes DDT should be used to save lives.”</td>
<td></td>
</tr>
<tr>
<td>- Begin the video again, pausing at 1:10. Ask students to Think-Pair-Share:</td>
<td></td>
</tr>
<tr>
<td>* “What claim and supporting evidence was made about DDT?”</td>
<td></td>
</tr>
<tr>
<td>- Pause and allow students time to discuss. Invite volunteers to share. Listen for: “The claim is that DDT does not cause illness.” Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What is the evidence or reasons used to support this claim?”</td>
<td></td>
</tr>
<tr>
<td>* “The evidence is that DDT did not cause illness, did not cause cancer, did not cause death.”</td>
<td></td>
</tr>
<tr>
<td>- Model where to record the claim and evidence. Tell students once evidence is recorded, it is important to determine if there is sufficient evidence. Ask students:</td>
<td></td>
</tr>
<tr>
<td>* “Does this provide sufficient evidence for the claim?” Explain to students that in this video, two pieces of evidence would be sufficient.</td>
<td></td>
</tr>
<tr>
<td>- Continue playing the video. Stop at 2:09. Invite students to Think-Pair-Share:</td>
<td></td>
</tr>
<tr>
<td>* “What was another claim John Stossel made about Rachel Carson’s novel Silent Spring?”</td>
<td></td>
</tr>
<tr>
<td>- Pause and allow students time to discuss. Invite volunteers to share. Listen for: “A claim of John Stossel is that Rachel Carson’s book Silent Spring is not fact or supported by sufficient evidence.” Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What is the evidence or reasons given to support this claim?”</td>
<td></td>
</tr>
<tr>
<td>* “The evidence is that the video explains how the book suggests one woman got cancer but the woman got cancer two months after DDT was sprayed, real scientists laugh at the book, and real scientists don’t write best-sellers.”</td>
<td></td>
</tr>
</tbody>
</table>
Work Time (continued)

- Model where to record the claim and evidence. Again, ask students:
  * “Is this sufficient evidence to support the claim?”
- Listen for: “Two pieces of evidence or two reasons is sufficient, and this claim would be sufficient.”
- Applaud students for their focus, listening skills, and willingness to dive into difficult material. Remind them that future lessons provide an opportunity to continue practicing identifying an argument, finding claims, and supporting evidence.

Closing and Assessment

A. Exit Ticket: Independently Identifying a Claim and Evidence (7 minutes),
- Tell students they are going to watch one more segment of the video, and this time their work serves as their exit ticket. Students will continue working on their same Tracing an Argument graphic organizer. Share that it is important to do their very best because the information provides an assessment of their understanding of the learning targets. Let them know they will be working independently to write the claim and supporting evidence.
- Begin the video—stop it at 3:15. Ask students to work independently to write the claim and supporting evidence. Remind them to evaluate the claim. Look for students’ responses such as: “Claim: DDT Is Excellent Powder. Evidence: In 1944, allies used DDT in the Pacific and Europe to fight malaria and typhus, all of the studies on DDT are weak and do not prove cause and effect, and there is no evidence to prove harm or breast cancer.”
- As students work on the Tracing an Argument graphic organizer, it’s important to circulate and provide encouragement. Finding a claim with supporting evidence is a difficult task. Offer support to students who may need prompting.
- Preview homework and reinforce/clarify the structured notes routine as needed. Remind students that they need to find evidence in the chapter to support their responses. Also, they should add to the Words I Found Difficult section.

Homework

- Read Chapter 4, “The Wilderness Tests the Eyases.” Complete Learning from Frightful’s Perspective: Chapter 4.
Frightful’s Relationships:
Excerpts from Chapter 3

Directions for the teacher:

• Make a copy of this question set for each triad.
• Cut this into strips of individual excerpts.
• Place the excerpts in a basket or bowl.

“Frightful ate the rabbit while the eyases watched, twisting their heads from side to side and calling ‘psee’ when she swallowed” (32).

What relationship of Frightful’s does this excerpt refer to?

Why is this relationship important?

“Then he learned that she didn’t like groundhogs. She had tried one and abandoned it to him. She also didn’t like skunks or rats” (35).

What relationship of Frightful’s does this excerpt refer to?

Why is this relationship important?
“Frightful saw the food fall onto the blazing-star leaves and seedpods, then flew to a tall hemlock at the top of the cliff. Sitting among the lacy needles, the image of the one mountain among thousands, the one tree among millions ...” (39).

What relationship of Frightful’s does this excerpt refer to?

Why is this relationship important?

“Chup answered from above. He dove, scattered a flock of ducks, and brought one back to the aerie. He dropped it without slowing down, then flew over the cliff ...” (42).

What relationship of Frightful’s does this excerpt refer to?

Why is this relationship important?
Notice and Wonder
John Stossel Video

Name:

Date:

<table>
<thead>
<tr>
<th>Notice</th>
<th>Wonder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Tracing an Argument

Name: __________________________
Date: __________________________

SL.6.3 I can outline a speaker’s argument and specific claims.
I can determine whether a speaker’s argument is supported by reasons and evidence or not.

<table>
<thead>
<tr>
<th>Title of Article/Video:</th>
<th>Author/Speaker:</th>
</tr>
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<tbody>
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<thead>
<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
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<td></td>
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</table>

Is claim supported by sufficient evidence?
Yes   No

<table>
<thead>
<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
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</thead>
<tbody>
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</table>

Is claim supported by sufficient evidence?
Yes   No
## Tracing an Argument

<table>
<thead>
<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
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Is claim supported by sufficient evidence?
Yes      No

### After identifying the claims and evidence presented by this author, what argument do you think she/he is making?

- 
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-
Tracing an Argument

After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.
Focus Question: Peregrine falcons use their instincts to know when they should migrate south. What “signs in nature” signal the falcon that it is time to migrate? Use evidence from the text to support your thoughts. Include the page number(s) where you found your evidence.

<table>
<thead>
<tr>
<th>Words I Found Difficult:</th>
<th>Glossary:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The Wilderness Tests the Eyases”</td>
<td>instinct—noun: a natural ability or inclination</td>
</tr>
<tr>
<td>juvenile—adjective: showing incomplete development; immature, childish</td>
<td></td>
</tr>
<tr>
<td>pilgrimage—noun: a journey</td>
<td></td>
</tr>
</tbody>
</table>

Name:

Date:

Chapter 4: "The Wilderness Tests the Eyases"

<table>
<thead>
<tr>
<th>Evidence from the Text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs That It Is Time to Migrate</td>
</tr>
<tr>
<td>My Thoughts:</td>
</tr>
</tbody>
</table>
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can cite text-based evidence to support an analysis of informational text. (RI.6.1)
I can use resources to build my vocabulary. (L.6.6)

Supporting Learning Targets

- I can identify the argument and specific claims in a video about DDT.
- I can determine the evidence used to support the argument and claims in a video about DDT.

Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 4 (from homework)
- Text Walk Scavenger Hunt recording form
- Scientific vocabulary identified in “The Exterminator”
# Agenda

<table>
<thead>
<tr>
<th></th>
<th>Teaching Notes</th>
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</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td><strong>This lesson continues the routine for discussions and vocabulary development for <em>Frightful’s Mountain</em>. Build on existing norms and routines for collaborative work in your classroom. Discussion is vital while students work with text.</strong></td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (10 minutes)</td>
<td><strong>Students work in triads and share responses to the Chapter 4, “The Wilderness Tests the Eyases” focus question. Share new “Words I Found Difficult” and add to their vocabulary. Cold call students to share their Chapter 4 responses with the whole class. This routine helps students engage independently and immediately, and it also helps students develop understanding of the text.</strong></td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (3 minutes)</td>
<td><strong>Students are introduced to the article “The Exterminator” by focusing on the text features. This helps students get the gist of this article. The use of text features helps increase understanding of an author’s argument, which is particularly important as students become more independent in identifying arguments, claims, and evidence. These are skills the students will use in future lessons to make their own arguments and claims supported with evidence.</strong></td>
</tr>
<tr>
<td>2. Work Time</td>
<td><strong>This lesson includes a read-aloud first reading of “The Exterminator,” followed by a second reading. During the second reading, students read closely for scientific words.</strong></td>
</tr>
<tr>
<td>A. Exploring the Text: Side Bars and First Read of “The Exterminator” (15 minutes)</td>
<td><strong>In advance:</strong></td>
</tr>
<tr>
<td>B. Getting the Gist: Second Read of “The Exterminator” (10 minutes)</td>
<td>– Create a Scientific Word Wall for scientific words. Include category headings so students can add words to the Scientific Word Wall in future lessons. Categories include: Chemicals, Disease, Processes, Sciences/Scientists, Living Things, Other.</td>
</tr>
<tr>
<td>C. Vocabulary: Introduction to Scientific Terminology (5 minutes)</td>
<td><strong>Post: Learning targets.</strong></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td><strong>Post: Learning targets.</strong></td>
</tr>
<tr>
<td>A. Exit Ticket: Adding Scientific Terminology to the Scientific Word Wall (3 minutes)</td>
<td><strong>Post: Learning targets.</strong></td>
</tr>
<tr>
<td>4. Homework</td>
<td><strong>Post: Learning targets.</strong></td>
</tr>
<tr>
<td>A. Read Chapter 5, “Frightful Peregrinates.” Complete Learning from Frightful’s Perspective: Chapter 5.</td>
<td><strong>Post: Learning targets.</strong></td>
</tr>
<tr>
<td>Lesson Vocabulary</td>
<td>Materials</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>text feature; gist, scientific terminology, captions, sidebars; exterminator, pesticide, malaria, parasite, vector(s) (1); insecticide, ecologist, accumulated, resistant (3); toxic, agriculture, environment, eradicating (4)</td>
<td>• <em>Frightful’s Mountain</em> (book; one per student)&lt;br&gt;• Dictionaries (one per triad)&lt;br&gt;• Equity sticks&lt;br&gt;• “The Exterminator” article (one per student)&lt;br&gt;• Document camera&lt;br&gt;• Scientific Word Wall (new; teacher-created on chart paper)&lt;br&gt;• Sticky notes (four or five per student)&lt;br&gt;• Learning from Frightful’s Perspective: Chapter 5 (one per student)</td>
</tr>
</tbody>
</table>
### Meeting Students’ Needs

- Some students may benefit from teacher support to discuss signals for migration and provide evidence to support it.
- Posting sentence starters for class discussions gives students an entry point for clearly conveying their responses. Consider posting phrases such as: “One signal that peregrine falcons use is ...” and “On page #__, I noticed ...”
- Reviewing academic vocabulary words benefits all students developing academic language.

### Opening

**A. Engaging the Reader: Learning from Frightful’s Perspective (10 minutes)**

- Be sure students have their text, *Frightful’s Mountain*.
- Invite students to join their triads. They should share their responses to the focus question for Chapter 4, “The Wilderness Tests the Eyases.” Remind students of their focus question for the chapter:
  
  “What ‘signs in nature’ signal the falcon that it is time to migrate?”

- Each student should share one signal in nature that peregrine falcons use to know when it’s time to migrate and include evidence found in the text. Listen for: “The days become shorter,” “the temperatures are changing,” “their food is diminishing or become in short supply as they migrate.”

- After sharing these signals, direct students to share one of the words from Frightful’s Mountain that they added to their “Words I Found Difficult.” Members of triads should then collaborate to determine the meanings of the words. Both dictionaries and context clues may be used. Add definitions to the Chapter 4 “Words I Found Difficult.” Include page numbers where the words were found in Frightful’s Mountain.

- Circulate to observe students’ shared responses and written responses. Make note of students who begin work easily and collaborate with triad members and those who may need support.

- Ask students to stop where they are with their responses. Cold call students to share responses with evidence to the focus question with the whole group.

- Congratulate students for working collaboratively and practicing using evidence from the text.
**Opening (continued)**

**B. Unpacking Learning Targets (2 minutes) Direct students’ attention to the learning targets.**
- Use a total participation technique, such as equity sticks, to invite students to read today’s learning targets:
  * “I can get the gist of the informational article “The Exterminator.””
  * “I can collect scientific vocabulary by reading “The Exterminator.””
- Tell students that today they will practice close reading skills by reading for the gist and looking for scientific terminology in “The Exterminator.”

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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**Work Time**

**A. Exploring the Text: Side Bars and First Read of “The Exterminator” (15 minutes)**
- Tell students that they will take a “text walk” of the article. “The Exterminator” has one important text feature: **sidebars**, which are sections of the text set off from the body of the text. Students will read these in Lesson 6 and examine how information in the sidebars contributes to the author’s argument.
- Explain that authors use text features such as sidebars for specific purposes. These features often add to the author’s argument in a different way than the main article.
- Distribute **“The Exterminator”** to the students.
- Ask students to skim the article briefly, paying attention to the section headings, the first sentence of each section, and the sidebars. Invite students to turn and talk:
  * “Based on skimming the article, what is the article going to be teaching us about?”
- Listen for students to notice the consistent pattern that each section has something to do with malaria.
- Tell students you will read the article aloud, skipping the grey side bars, which you will return to in a future lesson.
- Read the article aloud as students read along.
### Work Time (continued)

<table>
<thead>
<tr>
<th>B. Getting the Gist: Second Read of &quot;The Exterminator&quot; (10 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Explain that because the article is about disease and the use of pesticides, it includes many scientific words. This type of reading requires effort and concentration.</td>
<td></td>
</tr>
<tr>
<td>• Building knowledge of science words makes reading easier and more engaging. It also provides a foundation for understanding important issues. “The Exterminator” has many vocabulary words particularly connected to life science. Tell students that they will dig into the scientific vocabulary in this article a little later in this lesson.</td>
<td></td>
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<tr>
<td>• Invite students to reread “The Exterminator” independently. As students reread, and annotate the article for the gist, invite students to look for words related to science. In each section of the article, ask students to identify scientific words. Students circle or highlight words in the article or record words on paper.</td>
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<tr>
<td>• While students are looking for scientific words, circulate to observe which students may need guided support.</td>
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<thead>
<tr>
<th>C. Vocabulary: Introduction to Scientific Terminology (5 minutes)</th>
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<tbody>
<tr>
<td>• Introduce the Scientific Word Wall. Explain that students will encounter scientific terminology not only in “The Exterminator,” but also in other informational texts, videos, and in Frightful’s Mountain. To increase scientific knowledge, words will be added to the Scientific Word Wall throughout the module.</td>
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<tr>
<td>• Distribute four or five sticky notes to each student. Ask students to share the scientific words they identified in the article with a partner. Partners should compare the words they circled, find common words, and write those words on the sticky notes. Students reread the words in context and try to determine the meaning of the word.</td>
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<tr>
<td>• Invite students to look at the word categories on the Scientific Word Wall. Introduce each of the categories: Chemicals, Disease, Processes, Science/Scientist, Living Things, Other.</td>
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<tr>
<td>• Model using the word categories by using words from the “The Exterminator.” For example a chemical is DDT, a disease is malaria, a process is accumulate, a scientist is ecologist, a living things is parasite.</td>
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<tr>
<td>• Ask partners to discuss under which category their words might fit</td>
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</table>
## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Exit Ticket: Adding Scientific Terminology to the Scientific Word Wall (3 minutes)</th>
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<tbody>
<tr>
<td>- Ask pairs to add at least three of their scientific words to the Scientific Word Wall, placing their sticky notes with the words under the category heading that they feel best fits each word.</td>
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<tr>
<td>- Preview homework.</td>
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</table>

## Homework

| - Read Chapter 5, “Frightful Peregrinates.” Complete Learning from Frightful’s Perspective: Chapter 5. |
Can an old pesticide that is banned in most countries defeat one of the world’s worst disease?

By Kirsten Weir

Few Americans ever give much thought to malaria. That wasn’t always so. Malaria once infected—and killed—many people in the United States. During the Civil War, more than a million soldiers fell ill with the disease.

By the middle of the 20th century, malaria had been wiped out in the United States, Canada and northern Europe. But it continues to be a serious health problem in many tropical countries. Malaria kills an estimated 2 million people every year, most of them children under age 5. Despite an international effort to control the disease, malaria rates in Africa have risen over the past few years. “It’s going in the wrong direction,” said Roger Bate, the director of Africa Fighting Malaria, a nonprofit research and advocacy group.

Bate is one of several health officials now pushing for broader use of DDT (dichlorodiphenyltrichloroethane), a chemical that played an important role in kicking malaria out of the United States. They argue that DDT is the best option available for saving lives. But DDT is a touchy subject because it has been banned in the United States and many other countries for decades.

BAD AIR

People once believed that breathing nasty swamp air caused malaria. In fact, the word malaria is Italian for “bad air.”

Toward the end of the 19th century, scientists identified the true cause: a single-celled parasite they named Plasmodium. About the same time, scientists also discovered that mosquitoes act as vectors for the parasite, passing it one when they bite people. A vector is an organism that spreads disease-causing agents from host to host without harm to itself. (See “A Parasite’s Circle of Life,” page 6).

The malaria parasites need warm temperatures to develop inside mosquitoes, and the balmy southeastern United States was once hit hard by the disease. Malaria existed nearly everywhere mosquitoes did. During steamy summers, the disease reached as far north as Montreal. Changes in living habits—a shift toward city living, better sanitation, and the use of window screens—were largely responsible for the eradication of malaria, but DDT also played a part. DDT is an
“The Exterminator”

insecticide, a chemical that kills insects. In the 1930s and 1940s, when the U.S. government made a serious effort to wipe out malaria, DDT was one of its preferred weapons. It was sprayed on swamps and other wet areas where mosquitoes bred. Small amounts were also applied to some household walls in rural communities.

By 1951, malaria was gone from the United States, but DDT was still used for other purposes. Huge quantities of it were sprayed by airplane on farmland to kill the insect pests that feasted on cotton and other crops. At first, no one worried about the possible effects of the chemical on the environments. Then in 1962, an ecologist named Rachel Carson captured the country’s attention with her book, *Silent Spring*, which detailed the dangers of DDT.

Carson described the damage done by DTT, which persisted in nature for years without breaking down. The chemical first built up in the tissues of fish. It then accumulated inside eagles and other birds of prey that ate the fish. It caused the birds’ eggshells to become thin and brittle. The eggs cracked under their own weight, sending bird populations into a nosedive. The U.S. government responded by banning DDT in 1972.

DOUBLE WHAMMY

Many other countries followed suit, including a number of nations that relied on DDT for malaria control. A handful of malaria-ridden countries have continued to use DDT to control the disease. But even in those countries, DDT is no longer dumped in mass quantities onto the land. It is applied only to the inside walls of houses. Because malaria mosquitoes bite after dusk, protecting people inside their homes

SERIOUSLY SICK

Malaria begins with flulike symptoms: fever, sweating, chills, headaches, muscle aches, and nausea. The symptoms come and go every 48-72 hours. Without treatment, the disease can get much worse. The parasites infect and destroy red blood cells, which can lead to severe anemia, a condition in which the concentration of red blood cells is too low to supply enough oxygen to the body’s tissues. Infected blood cells can also clump together and stick to the body’s blood vessels, blocking blood flow to the brain. The result is often blindness, brain damage, or death.

Drugs are available to treat malaria, though many are expensive. To be most effective, the drugs must be taken before the disease becomes severe. Poor families in places such as rural Africa often cannot afford the drugs, or they put off going for treatment until it’s too late.

Such prophylactic, or preventive, medications are also available. When given to uninfected people, they attack the parasite if it ever gets into the body. But the prophylactic drugs are expensive and hard on the body. Travelers can safely taken time for a few weeks or months, but the pills are too toxic for people living in malaria-affected countries to tolerate for long periods of time.
can be very effective. DDT packs a double whammy: It repels most mosquitoes and kills those that get too close. It is by far the cheapest insecticide available and lasts twice as long as the alternatives.

South Africa was one nation that continued to use DDT after the United States banned the chemical. By 1996, South Africa had fewer than 10,000 annual malaria deaths. That year, the country switched from DDT to other insecticides. The new insecticides were also widely used in farming, and the overexposed mosquitoes quickly became resistant to the chemicals. By 2000, the number of deaths from malaria had risen to more than 60,000. At that point, South Africa turned back to DDT. Within three years, malaria infections dropped nearly to 1996 levels. In other countries where DDT has been used, from Ecuador to Sri Lanka, it has had similar positive effects.

Today, only about 20 countries use DDT for malaria control, according to Roger Bate. Many more could benefit, he says.

PUBLIC FEAR

Why don’t more countries use the powerful insecticide? “DDT probably has more opponents than any other insecticide because of its historic use,” explained Bate. “But it's mistaking the point!
All of the problems associated with it in the past are down to the mess that was made of it in farming.”

Some wealthy countries worry about the double standard of supporting the use of a chemical abroad that they’ve banned at home. The memory of Silent Spring and dying bald eagles also lingers. Most of the money that tropical countries use to fight malaria comes from international donors. Many of those donors are reluctant to fund the use of a chemical that scares so many people.

“Why [DDT] can’t be dealt with rationally, as you’d deal with any other insecticide, I don’t know,” Janet Hemingway, the director of the Liverpool School of Tropical medicine, told The New York Times. “People get upset about DDT and merrily go and recommend an insecticide that is much more toxic.”

Bate and many of his colleagues argue that the public’s fear of DDT is unfounded. Billions of Americans were exposed to high amounts of DDT when it was used in agriculture, Bate said, without any harm to human health. And many scientists agree that the small amounts needed for malaria protection would likely have no significant effect on the environment.

Meanwhile, malaria is not going away. Some scientists estimate that malaria has killed half of all the people who have ever lived. Today, the disease claims two lives every minute. The most severely affected countries are in Africa, where the disease takes the life of one in every 20 children.

Some scientists worry that the situation could become
even worse. As global warming heats up the planet, mosquitoes are spreading into areas where they once could not survive. Hotter temperatures also allow the *Plasmodium* parasite to develop faster inside the mosquito, infecting more people in a short amount of time.

Most scientists now think that eradicating malaria is impossible, given the complicated life cycle of the parasite. But chipping away at the disease is possible, and DDT has proved itself to be a valuable tool.

“The big picture is bad, but there are examples out there of what works,” Bate said. “We need every tool in the arsenal!”
### Learning from Frightful’s Perspective: Chapter 5

**Theme:** How leaders help their people  
**Focus:** Leaders help people to make change

#### Focus Question:
As the weather changes, many other changes occur in Frightful’s environment. These changes and the need to survive pull her in two different directions. What two directions is Frightful pulled in? Which direction does Frightful choose? Use evidence from the text to support your thoughts.

<table>
<thead>
<tr>
<th>Evidence from the Text:</th>
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<tbody>
<tr>
<td>Name the two directions and Frightful’s choice.</td>
</tr>
<tr>
<td>My Thoughts:</td>
</tr>
</tbody>
</table>

#### Words I Found Difficult:
- **current**—noun: air or water moving continuously in a certain direction  
- **migration**—noun: movement from one place, region, or climate to another

#### Glossary:
- **current**—noun: air or water moving continuously in a certain direction  
- **migration**—noun: movement from one place, region, or climate to another
Grade 6: Module 4: Unit 1: Lesson 5
Annotating the Text and Identifying Argument, Claims, and Evidence: “Double Whammy” Excerpt from “The Exterminator”
## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can identify the argument and specific claims in a text. (RI.6.8)
I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8)

### Supporting Learning Targets

- I can get the gist of an excerpt from “The Exterminator.”
- I can identify the argument, claims, and evidence in an excerpt from “The Exterminator.”

### Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 5 (from homework)
- Tracing an Argument graphic organizer
- Exit Ticket: Argument, Claims, and Evidence
## Agenda

1. **Opening**
   - A. Studying Peregrine Falcon Migration Map (15 minutes)
   - B. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. Getting the Gist: “Double Whammy” Excerpt from “The Exterminator” (10 minutes)
   - B. Identifying the Argument, Claims, and Evidence in “Double Whammy” Excerpt from “The Exterminator” (15 minutes)

3. **Closing and Assessment**
   - A. Exit Ticket: Finding the Claim and Supporting Evidence in an Excerpt from “The Exterminator” (3 minutes)

4. **Homework**

## Teaching Notes

- This lesson continues to build routines for discussion of Frightful’s Mountain. Students begin by discussing the focus question regarding Frightful’s decision to migrate or stay near Sam. Consider having the New York map and migration insert, opposite the title page, projected as students discuss this lesson.
- In advance:
  - Find a globe or world map so that students can point to the migration routes to make connections.
  - Do an internet search for the words “peregrine falcon” and “migration map.” Migration maps showing specific routes may continue to build student engagement with *Frightful’s Mountain*.
- In this lesson, students read for the gist of an excerpt from “The Exterminator.” In Lesson 4, students read the whole text of the “The Exterminator.” They should be familiar with the author’s argument. Be sure students have copies of this article.
- Students will continue to practice annotating informational text and identifying the author’s argument, claims, and evidence. Students will work in partners and then independently. They will also practice filling in the Tracing an Argument graphic organizer. This graphic organizer was used in Lesson 3 with the “John Stossel—DDT” video.
- Use a document camera to model how to fill in the graphic organizer. Careful attention should be given to writing an argument, claim, and supporting evidence to prepare students for the mid-unit assessment in Lesson 8, which asks students to fill in the Tracing an Argument graphic organizer first with a video and then using informational text.
- Identifying an argument, claim, and evidence will also be practiced in Lessons 6 and 7.
- Read the paragraph preceding “Double Whammy” to determine the argument, claims, and evidence.
- Consider pairing off students to work together in Tracing an Argument with “Double Whammy.”
- This lesson uses the Think-Pair-Share protocol (Appendix 1).
- Post: Learning targets
### Grade 6: Module 4: Unit 1: Lesson 5

**Annotating the Text and Identifying Argument, Claims, and Evidence: “Double Whammy” Excerpt from “The Exterminator”**

#### Lesson Vocabulary
- annotate, argument, claim, evidence;
- excerpt, followed suit, alternatives,
- banned, silo (51); pummeled, culvert (52); undulating (53); deluge (57)

#### Materials
- *Frightful’s Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart (begun in Lesson 2)
- “The Exterminator” (from Lesson 4)
- Document camera
- Tracing an Argument graphic organizer (one per student)
- Exit Ticket: Argument, Claim, and Evidence (one per student)
- Learning from Frightful’s Perspective: Chapter 6 (one per student)
## Opening

### A. Studying Peregrine Falcon Migration Map (15 minutes)

- Be sure students have their text, *Frightful’s Mountain*.
- Students sit in triads to discuss the focus question for Chapter 5 and new vocabulary.
- Remind students they are working hard to find supporting evidence for Frightful’s difficult decision in Chapter 5.
- Point out specific growth you are noticing. For example, evidence is cited for focus questions. Also, point out the “Words I Found Difficult” is building their vocabulary. Ask students to define: *silo (51), pummeled (52), culvert (52), undulating (53), deluge (57)*.
- Circulate to support triads that have questions about word definitions. Watch for students citing evidence. Show appreciation for their effort.
- After 5 minutes, ask for volunteers to share their responses to the focus question:
  - “What two directions is Frightful pulled in?”
  - “Which direction does Frightful choose?”
- Listen for: “The two directions Frightful is being pulled in are whether to migrate or stay. Frightful stays because she spotted the ‘one mountain among thousands of mountains, the one tree among millions of trees, and somewhere there, the one boy,’ Sam. She cannot leave Sam.”
- Tell students the fall migration window is open to peregrine falcons for only a few months. In order to make this journey, the body of the falcon needs to be fit, the environment right, and the atmosphere chilled. Once the migration window closes, messages from the falcon’s body and environment shut off, and it is too late to migrate.
- Finally, ask students to share with their table partners:
  - “Based on information in the novel, has the window of migration closed for Frightful?”
  - “What evidence from Frightful’s Mountain supports your thinking?”
- Listen for evidence of signs of fall, atmospheric changes, and sun’s angle.

### Meeting Students’ Needs

- Consider partnering ELLs who speak the same home language when discussion of complex content is required.
Opening (continued)

- Direct students’ attention to the projected map. Ask students to find where they would be located on the map. Then, point out the migration route insert. If a world map or globe is available, show students where this route would be located.

- If time permits, do an internet search for “peregrine falcon” and “migration maps.” Display relevant maps for students.

- Ask:
  * “What other information can we get from the map?”
  * “What peregrine falcon facts should be added to the Peregrine Falcon Facts anchor chart?”

- Add students’ comments to the chart.

Meeting Students’ Needs

- Post the learning targets where all students can see them.

- Careful attention to the targets throughout the lesson engages, supports, and holds students accountable for their learning.
## B. Unpacking Learning Targets (2 minutes)

- Invite students to read the learning targets aloud with you.
  - *I can get the gist of an excerpt from “The Exterminator.”*
  - *I can identify the argument, claims, and evidence in an excerpt from “The Exterminator.”*
- As the targets are read underline these words: *gist, argument, claim, and evidence.* Circle *excerpt.*
- Remind students that these targets should sound familiar. In Lesson 3, they were identifying the argument, claims, and evidence in the article “Welcome Back.”
- Invite students to Think-Pair-Share:
  - *“What was the author’s position on DDT in ‘Welcome Back’?”*
- Listen for: “The use of DDT caused the peregrine falcon population to decline.”
- Review with students that when an author takes a position on something, it is called an argument.
- Remind them when an author makes an argument, he/she will often have claims with supporting evidence. The claims and evidence are meant to persuade the audience.
- Next, ask students to Think-Pair-Share:
  - *“What was a claim and supporting evidence in ‘Welcome Back’?”*
- Listen for: “The author claimed that DDT got into the tissue of peregrine falcons. Supporting evidence was the DDT got into the tissues of peregrine falcons and caused the peregrine falcon’s eggs to have thinner shells. The thinner shells were easily broken when the female sat on the eggs to brood or keep them warm, and the chicks were not able to hatch.”
- Tell them that in today’s lesson they will read an excerpt, or passage, from “The Exterminator” called “Double Whammy.” They will first read the excerpt for the gist. Then, they will reread it to identify the argument, claim, and evidence.
## Work Time

**A. Getting the Gist: “Double Whammy” Excerpt from “The Exterminator” (10 minutes) (15 minutes)**

- Ask students to locate their text, “The Exterminator.” Have them turn to page 2 and point to the paragraph before “Double Whammy.”

- Tell students we are now going to read this paragraph and “Double Whammy” to get the gist or to get a sense of the general meaning of the text. Ask students to read along silently as you read it aloud. As with other read-alouds, remember that the purpose is to read the text slowly, fluently, and without interruption. Don’t stop to address comprehension or vocabulary issues as these will be addressed later, and it will interrupt the flow of the text.

- Ask students to Think-Pair Share:
  
  * “After listening to the first read, what is the main purpose of this excerpt of the informational text?” Remind students the gist is the author’s argument.

- Use a **document camera** to model annotating your text. Write the argument, or gist, in the margin at the top of the page.

- Invite students to do the same.

- Invite students to annotate this excerpt. Remind them to circle unfamiliar words, and after each paragraph is read, to summarize the main idea in the side margins. Ask them to stop when they get to “Public Fear” on page 6.

- Circulate and support students as they read. For students who may need more support, ask them to read and practice telling you what the paragraph was about.

- Invite students to share the main ideas of each paragraph with their table groups. Also, ask them to share circled words and definitions.

- Reconvene the entire class. Cold call groups to share meanings of followed suit, alternatives, and banned. Be sure to address other unfamiliar words before moving on in the lesson.

## Meeting Students’ Needs

- Some students may benefit from a text that has been enlarged starting with the paragraph preceding “Double Whammy” and the excerpt “Double Whammy.” This could provide more space for annotating this excerpt.
B. Identifying the Argument, Claims, and Evidence in “Double Whammy” Excerpt from “The Exterminator” (15 minutes)

- Distribute Tracing and Argument graphic organizer to each student. Using a document camera, model where to write the title, “The Exterminator” “Double Whammy” excerpt, and author’s name, Kirsten Weir.
- Ask students to write in pencil and fill in the title and author.
- Pair students to read the paragraph before “Double Whammy.” Ask students to find the claim of the paragraph and three pieces of evidence supporting the claim.
- Ask students to annotate their paragraph by putting a “C” by the first word of the claim and by putting an “E” by the first word of each piece of supporting evidence.
- Circulate, encouraging students to identify this information, and listen for how students organize their thinking.
- Reconvene the class. Invite pairs to share some of their thinking about the claim. Using the document camera, model where to write the claim. Ask students to write the claim.
- Invite pairs to share the three pieces of evidence supporting the claim. Using the document camera, again model where to write the three pieces of evidence. Ask students to write the three pieces of evidence.
- Congratulate students on working cooperatively to analyze this excerpt. Remind them identifying an argument, claims, and supporting evidence can be challenging when interpreting scientific, informational text.
- Tell students you would like them to try finding a claim with supporting evidence independently.
- Direct students to the second paragraph of “Double Whammy.” Tell them it begins, “Because malaria mosquitoes bite …” Ask them to read this paragraph to identify the author’s claim and three pieces of evidence that support the claim. Ask them to annotate the paragraph by putting a “C” by the claim and an “E” by each piece of supporting evidence.
- Circulate to support students. Ask groups probing questions such as:
  * “What do you think the author means in the first statement?”
  * “What do you think she means by ‘Double Whammy’?”
- Make note of students who need support and meet with them at another time.
- Reconvene the class. Ask students to share their claim and supporting evidence with their triad groups.
- Invite groups to share their claim. Ask them to make corrections or additions to their claim in pen.

Meeting Students’ Needs

- Identifying an argument, claim, and supporting evidence in informational text can be challenging. Consider pairing ELLs with native English speakers and students strong in analytical reading skills with students who may struggle with this type of thinking.
- Asking students to identify challenging vocabulary helps to provide understanding of text. You may want to give consideration to pairings.
- Consider having some students read fewer sections of the text to allow time to use close reading strategies.
- Consider giving some students a list of scientific vocabulary to look for as they read sections of the text.
**Work Time (continued)**

- Next, invite groups to share their evidence. Ask students to make corrections or additions to their evidence in pen.
- Direct students to look at the evidence the author has made about each claim. Tell students if at least two pieces of evidence support the claim, they should circle “yes”; there is sufficient evidence.
- Next, ask students:
  * “After identifying the claim and evidence presented by this author, what argument do you think she/he is making?”
- Model where to write the argument. Ask students to write the argument on their graphic organizer.
- Ask partners to discuss:
  * “After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.”
- Ask for volunteers to share their answers. Model where to write the answer on the graphic organizer. Students should write the answer in the appropriate area.
- Applaud the class for their continued willingness to understand an author’s argument, claims, and supporting evidence. Tell them they will have two more lessons to practice these skills. Share that you are noticing more confidence in their thinking and filling in the graphic organizer.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td>A. Exit Ticket: Finding the Claim and Supporting Evidence in an Excerpt from “The Exterminator” (3 minutes)</td>
</tr>
<tr>
<td>• Distribute the Exit Ticket: Argument, Claims, and Evidence. Ask students to think about their learning and define the three words listed: argument, claim, and evidence, as best they can. Tell them this exit ticket will allow them to self-assess and also guide their learning in the next two lessons.</td>
</tr>
<tr>
<td>• Preview the homework.</td>
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</tbody>
</table>

**Closing and Assessment**

- Asking students to reflect on their learning gives students an opportunity to self-assess to see how far they have come in their learning.
### Homework

<table>
<thead>
<tr>
<th>Homework</th>
<th>Meeting Students' Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Read Chapter 6, “Frightful Finds the Enemy.” Complete Learning from Frightful’s Perspective: Chapter 6.</td>
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</tr>
<tr>
<td>• Teaching Note: Preview the video that is used in the mid-unit assessment. <a href="http://www.science.gc.ca/default.asp?lang=en&amp;n=730d78b4-1">http://www.science.gc.ca/default.asp?lang=en&amp;n=730d78b4-1</a></td>
<td></td>
</tr>
<tr>
<td>• Read the article “Rachel Carson: Sounding the Alarm on Pollution.”</td>
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</tr>
</tbody>
</table>
RI.6.8 I can identify the argument and specific claims in a text.
I can evaluate the argument and specific claims for sufficient evidence.

<table>
<thead>
<tr>
<th>Title of Article/Video:</th>
<th>Author/Speaker:</th>
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<table>
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<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
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Is claim supported by sufficient evidence?
Yes  No

<table>
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<th>Author’s Claim:</th>
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Is claim supported by sufficient evidence?
Yes  No
**Tracing an Argument**

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<thead>
<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
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<tbody>
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</table>

Is claim supported by sufficient evidence?
Yes  No

After identifying the claims and evidence presented by this author, what argument do you think she/he is making?

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Tracing an Argument

After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.
Exit Ticket:
Argument, Claims and Evidence

Name:

Date:

Define the following.

1. Author’s Argument:

2. Claim:

3. Evidence
### Focus Question:
Who is the enemy that Frightful encounters? Why do they want to capture Frightful? Use evidence from the text to explain your answer.

### Evidence:

<table>
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<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

### Words I Found Difficult:
- hemlock tree: evergreen coniferous trees of the pine family
- preened: verb; to smooth or clean (feathers) with the beak or bill
- offense: noun; a crime

Chapter 6: “Frightful Finds the Enemy”

### Glossary:
- hemlock tree—noun: evergreen coniferous trees of the pine family
- preened—verb: To smooth or clean (feathers) with the beak or bill
- offense—noun: a crime
Grade 6: Module 4: Unit 1: Lesson 6
Identifying How Text Features Support Arguments: “The Exterminator”
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can cite text-based evidence to support an analysis of informational text. (RI.6.1)
- I can identify the argument and specific claims in a text. (RI.6.8)
- I can use resources to build my vocabulary. (L.6.6)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the argument and specific claims in “The Exterminator.”</td>
<td>• Learning from Frightful’s Perspective: Chapter 6 (from homework)</td>
</tr>
<tr>
<td>• I can evaluate the evidence used to support the argument and claims in “The Exterminator.”</td>
<td>• Sidebar “Seriously Sick” glossary</td>
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<td></td>
<td>• Sidebar task card</td>
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<tr>
<td>Agenda</td>
<td>Teaching Notes</td>
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</tr>
<tr>
<td>1. Opening</td>
<td>• In previous lessons, students learned to determine an author’s argument when reading informational text. They identified claims the author makes and found evidence that supports those claims. They identified the author’s argument in the “John Stossel—DDT” video and the main text of “The Exterminator.” Students have also been introduced to text features and to the idea that they contribute to the author’s argument in a different way.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</td>
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</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>In this lesson, students read closely some of the text features to locate additional evidence that adds to the author’s argument and claims in “The Exterminator.”</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>Students also continue to identify and define scientific vocabulary in the text features. This is important as students get the gist and determine how the text features add to the author’s argument.</td>
</tr>
<tr>
<td>A. Jigsaw Groups: How Do Text Features Contribute to an Argument? (15 minutes)</td>
<td>In advance:</td>
</tr>
<tr>
<td>B. Vocabulary: Categorizing Words in the Text Features of “The Exterminator” (5 minutes)</td>
<td>• Read closely the text features. Prepare a task card to model finding evidence that contributes to the author’s argument and identifying and defining scientific vocabulary.</td>
</tr>
<tr>
<td>C. Triad Discussion: Presenting Jigsaw Findings (5 minutes)Closing and Assessment</td>
<td>• Review Back-to-Back, Face-to-Face protocol and Fist to Five in Checking for Understanding Techniques (Appendix).</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>• Post: Learning targets</td>
</tr>
<tr>
<td>A. Reflecting on Learning Targets: Back-to-Back, Face-to-Face (5 minutes)</td>
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<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read Chapter 7, “Disaster Leads to Survival.” Complete Learning from Frightful’s Perspective: Chapter 7.</td>
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</tr>
</tbody>
</table>
### Lesson Vocabulary
- argument, claims, evidence, sidebars; symptoms, parasite, anemia, effective, prophylactic, preventive, toxic, tolerate, vaccine, species, life cycle, researchers, biotechnology, genes, genomes, genetic, organism, immune system

### Materials
- *Frightful’s Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart (begun in Lesson 2)
- Document camera
- Map from *Frightful’s Mountain* (in the book itself; one for display)
- Projector
- Website with Hudson River Bridges (http://en.wikipedia.org/wiki/Category:Bridges_over_the_Hudson_River)
- “The Exterminator” article (from Lesson 4)
- Sidebar task card (one per student)
- Sidebar “Seriously Sick” Glossary (one per student using this sidebar)
- Sidebar “Seriously Sick” Glossary: Word Wall placement (for teacher reference)
- Sidebar “Killer Genes” Glossary (one per student using this sidebar)
- Sidebar “Killer Genes” Glossary: Word Wall placement (for teacher reference)
- Highlighters (one per student)
- Sticky notes (two per triad)
- Scientific Word Wall
- Learning from Frightful’s Perspective: Chapter 7 (one per student)
### Opening

#### A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)

- Be sure students have their text, *Frightful’s Mountain*.
- Commend students for joining their triads when they came into the room. Invite them to share their responses to the focus question for Chapter 6, “Frightful Finds the Enemy.” Remind students of the focus question:
  
  “Who is the enemy that Frightful encounters? Why do they want to capture Frightful?”

- Students should include evidence from the text as they share who Frightful’s enemies are and why they want to capture her.

- As students share with their groups, listen for responses such as: “The enemies are poachers, Bate and Bud, who are trying to catch Frightful to sell her. On page 65, it says, ‘He pointed to Frightful and said “twenty-five and twenty-five makes fifty thousand. Let’s get her.’”

- Ask students to share terminology they have added to “Words I Found Difficult.” Triad members should collaborate to determine the meaning of the words and add definitions to the list.

- Circulate to observe students’ verbal and written responses. Acknowledge triads who are collaborating well to share evidence-based responses and determining the meaning of new words. Interact with students who need support. Model strategies for sharing responses and defining words.

- Refocus students as a whole group. Invite triads to share their responses to the focus question with the class. Ask students what information about enemies or threats to the peregrine falcon could be added to the Peregrine Falcon Facts anchor chart.

- Use a document camera to share the map from *Frightful’s Mountain*. Explain that in the early 1970s, the peregrine falcon was nearly extinct in the eastern part of the United States. By 2008, there were more than 67 nesting pairs of peregrine falcons in the state of New York. Nearly all the bridges on the Hudson River now have nests. Use the map to point out the Hudson River.

- Using a projector, introduce the Website with Hudson River Bridges that shows many of the bridges on the Hudson River: http://en.wikipedia.org/wiki/Category:Bridges_over_the_Hudson_River

- By clicking on the name of any of the bridges, a photo and the location of the bridge is shared. Encourage students to help you mark a bridge location closest to where you live in the state and/or a place they have visited or have relatives.

- Remind students that they will continue working on identifying argument, claims, and evidence in “The Exterminator.” Invite students to think and wonder how maps could provide evidence that may contribute to an argument.

### Meeting Students’ Needs

- Some students may need help reading and understanding *Frightful’s Mountain*. Consider pulling these students into small groups for guided practice with the focus questions and adding vocabulary to “Words I Found Difficult.”

- Some students may need help with the independent reading of the chapters in *Frightful’s Mountain*. Consider providing a listening station with an audio version of the novel or guided reading support.

- Adding visuals or graphics to the Peregrine Falcon Facts anchor chart can help students remember or understand key information. Examples could include illustrations of a peregrine falcon with labeled features, eyases, perches, a migration map, or a hemlock tree. These visuals or graphics could be added throughout the reading of the novel.

- Using visuals or graphics to respond to focus questions and help define new terminology can also help students remember and understand.
### Opening (continued)

<table>
<thead>
<tr>
<th>B. Unpacking Learning Targets (2 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
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<tbody>
<tr>
<td>• Students should be seated with their triads. Invite a triad to volunteer to read aloud the learning targets while the class silently reads along:</td>
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<tr>
<td>* “I can identify the argument and specific claims in &quot;The Exterminator.&quot;”</td>
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<tr>
<td>* “I can evaluate the evidence used to support the argument and claims in &quot;The Exterminator.&quot;”</td>
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<tr>
<td>• Tell students that the learning targets should be familiar targets to them. Today they will meet this target by using text features in &quot;The Exterminator.&quot;</td>
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</tr>
</tbody>
</table>
A. Jigsaw Groups: How Do Text Features Contribute to an Argument? (20 minutes)

- Be sure students have their article, “The Exterminator.” Tell students that they will work with the text features called sidebars in the article.
- Remind students that they identified the sidebars and their titles in the Text Feature Scavenger Hunt (in Lesson 4). Tell students that they will now read closely the sidebars to see how they add to the author’s argument.
- Explain that half of the triads will closely read the sidebar titled “Seriously Sick.” The other half of the triads will read closely the sidebar titled “Killer Genes.”

Give directions:
1. Each group will read the sidebar twice.
2. During the first read, look for difficult vocabulary.
3. During the second read, look for claims and evidence that supports the author’s argument.
- Ask students in each group to take turns reading aloud as the other group members read along. Each student should read a paragraph. After each paragraph, the reader should pause so the triad can circle or, using a highlighter, highlight difficult vocabulary words.
- Invite students to begin.
- When students have finished reading the sidebar and highlighting the vocabulary, refocus the class whole group. Tell students to look at their Sidebar Glossary sheets to find definitions for words they circled.
- Ask students to reread the sidebar independently for deeper understanding and to identify claims and evidence to support the author’s argument.
- Invite student to share the claims and evidence they found with their triad, using the sidebar task card to guide their work.
- Tell students to evaluate the evidence and record if they felt it was sufficient.
- Circulate to listen in and support students in their discussion.

Meeting Students’ Needs

- Some students may need help identifying claims and evidence. Consider providing claim and evidence starters to help them frame their thinking.
- Some students may need additional time to identify a claim and evidence. Consider providing just one paragraph from a sidebar for them to use.
- Some students may benefit from having a claim identified on their task card and then looking for evidence to support that within the sidebar or using the caption of specific photograph. For example: A claim from the sidebar “Seriously Sick” could be that “Drugs to treat malaria are expensive.” Those students could use the photo and the caption on page 4 of the children in the Kenya slum as evidence that supports that claim.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>Other students may be able to identify claims and evidence to support the argument easily. Encourage these students to apply the same skills to another sidebar or to look closely at the photos and captions to add more evidence to their task cards.</td>
</tr>
</tbody>
</table>

### B. Vocabulary: Categorizing Words in the Text Features of “The Exterminator” (5 minutes)

- After about 13 to 15 minutes, stop students in their work. Tell them you would like to spend a couple of minutes looking at the vocabulary they identified in the sidebars.
- Ask the students to think:
  - “Which categories on the Scientific Word Wall might the words might fit in?”
- Ask the groups to share their thinking about the words within their groups.
- Invite each triad to add at least two words to the categories on the Scientific Word Wall using **sticky notes**. Students may add the same words to **Scientific Word Wall**.
- Clear up any confusion with categories as students add the words. Congratulate students as they correctly categorize new scientific terminology. Encourage them to refer to the Scientific Word Wall to help them understand other texts they will be reading and to build their vocabulary skills.
C. Triad Discussion: Presenting Jigsaw Findings (5 minutes)

- Use a document camera to show the sidebar task card. Invite each triad to share a claim and evidence they found in their sidebar. Model filling out the sidebar task card as students share the claims and evidence they have identified. The claims and evidence students found in the sidebars should be similar to what other triads have found. Explain that the wording may be different, but the meaning is the same.

- In “Seriously Sick,” listen for claims such as: “If malaria isn’t treated it can get worse,” and evidence such as: “When malaria is untreated it can lead to anemia,” or “It can cause blindness, brain damage, or death.” Other claims in this sidebar could be: “Drugs are expensive,” or “Preventive drugs are available.”

- In the sidebar, “Killer Genes,” listen for claims and evidence such as: “Scientists have not found a vaccine to prevent malaria” (claim). Listen for evidence such as: “There are many different kinds of mosquitoes and parasites that cause malaria,” or “So many different species make it hard to find a vaccine.” Other claims in this sidebar could include: “Researchers are still looking for vaccines or solutions.”

- Ask students to share if they felt this was sufficient to support the author’s argument. Explore how the claims and evidence in the sidebars contribute to making the author’s argument in the main text strong. Ask if this information contributes to their own thoughts or position about DDT and malaria.
### Closing and Assessment

**A. Reflecting on Learning Targets: Back-to-Back, Face-to-Face (5 minutes)**

- Bring students back to the whole group. Spend a couple of minutes reflecting on their learning targets for the day. They will talk with a partner using the Back-to-Back, Face-to-Face protocol.

- Invite students to stand up and place themselves back-to-back with the person next to them. Say: “One of today’s learning targets was ‘I can evaluate the evidence used to support the argument and claims in the article “The Exterminator.”’” Ask students:
  * “What was difficult about this target?”

- Give them a few seconds to think.

- Tell students that when you say, “Face-to-face,” they should face each other and share their thoughts.

- After students have shared, say “Back-to-back” again to get students ready for a new question. Ask:
  * “What part of this learning target did you feel successful with?” Again have students think and the turn face-to-face.

- Circulate to sense what students struggle with and what they feel successful with.

- Refocus the students whole group. Use the Fist to Five protocol, checking for understanding technique for students to assess themselves.

- Make note of students who may benefit from small group work to reach these targets. Additional practice using an excerpt from “The Exterminator” will occur in Lesson 7. Students will be assessed on these targets in Lesson 8.

- Preview homework.

### Homework

- Read Chapter 7, “Disaster Leads to Survival.” Complete **Learning from Frightful’s Perspective: Chapter 7**.
Sidebar Task Card

Argument: DDT is the best option available for saving lives from malaria.

<table>
<thead>
<tr>
<th>Claim</th>
<th>Evidence</th>
<th>Is evidence sufficient?</th>
<th>Why or why not?</th>
</tr>
</thead>
</table>

Name:

Date:
### Sidebar “Seriously Sick”

#### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>symptoms</td>
<td><em>n.</em> changes in the body or mind which indicates that a disease is present</td>
</tr>
<tr>
<td>parasites</td>
<td><em>n.</em> animals or plants that lives in or on other animals or plants and get food or protection from it</td>
</tr>
<tr>
<td>anemia</td>
<td><em>n.</em> a condition in which a person has fewer red blood cells than normal and feels very weak and tired</td>
</tr>
<tr>
<td>effective</td>
<td><em>adj.</em> producing a result that is wanted</td>
</tr>
<tr>
<td>prophylactic</td>
<td><em>adj.</em> designed to prevent disease</td>
</tr>
<tr>
<td>preventive</td>
<td><em>adj.</em> used to stop something bad from happening</td>
</tr>
<tr>
<td>uninfected</td>
<td><em>adj.</em> not containing germs that cause disease</td>
</tr>
<tr>
<td>toxic</td>
<td><em>adj.</em> containing poisonous substances; poisonous</td>
</tr>
<tr>
<td>tolerate</td>
<td><em>v.</em> to experience (something harmful or unpleasant) without being harmed</td>
</tr>
</tbody>
</table>
Sidebar “Seriously Sick” Glossary: Word Wall Placement
For Teacher Reference

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>symptoms</td>
<td><em>n.</em> changes in the body or mind which indicates that a disease is present (Health/disease)</td>
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<tr>
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<td><em>v.</em> to experience (something harmful or unpleasant) without being harmed (Processes)</td>
</tr>
</tbody>
</table>
### Sidebar “Killer Genes”

**Glossary**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
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</table>

<table>
<thead>
<tr>
<th><strong>genes</strong></th>
<th><em>n.</em> the instructions inside every cell of a plant or animal on what the plant or animal is, what it looks like, how it is to survive, and how it will interact with its surrounding environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>genomes</strong></td>
<td><em>n.</em> all the genetic materials of an organism</td>
</tr>
<tr>
<td><strong>genetic</strong></td>
<td><em>adj.</em> of, relating to, or involving genes</td>
</tr>
<tr>
<td><strong>vaccine</strong></td>
<td><em>n.</em> a substance that is usually injected into a person or animal to protect against a particular disease</td>
</tr>
<tr>
<td><strong>species</strong></td>
<td><em>n.</em> a group of animals or plants that are similar and can produce young animals or plants</td>
</tr>
<tr>
<td><strong>Plasmodium</strong></td>
<td><em>n.</em> a parasite that causes malaria</td>
</tr>
<tr>
<td><strong>life cycle</strong></td>
<td><em>n.</em> the series of stages through which a living thing passes from the beginning of its life until its death</td>
</tr>
<tr>
<td><strong>biotechnology</strong></td>
<td><em>n.</em> the use of living cells, bacteria, etc. to make useful products (such as new kinds of medicine)</td>
</tr>
<tr>
<td><strong>organism</strong></td>
<td><em>n.</em> an individual living thing</td>
</tr>
<tr>
<td><strong>theoretically</strong></td>
<td><em>adv.</em> relating to what is possible or imagined rather than to what is known to be true or real</td>
</tr>
<tr>
<td><strong>immune system</strong></td>
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</tr>
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<td><strong>immune system</strong></td>
<td><em>n.</em> the system that protects your body from diseases and infections (Health/disease)</td>
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</tbody>
</table>
**Focus Question:** In this chapter, Frightful survives a near-death experience thanks to a person named Jon. However, many peregrine falcons have not survived and the birds have become an endangered species. What are two things that have caused the death of many peregrine falcons? Use evidence from the text to support your answer.

<table>
<thead>
<tr>
<th>Evidence from the Text:</th>
<th>My Thoughts:</th>
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</tbody>
</table>

**Chapter 7: “Disaster Leads to Survival”**

**Words I Found Difficult:**

<table>
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<tr>
<th>Glossary:</th>
</tr>
</thead>
<tbody>
<tr>
<td>pesticides—noun: chemicals used for killing pests, especially insects and rodents</td>
</tr>
<tr>
<td>mews—noun: enclosures for trained hawks</td>
</tr>
<tr>
<td>destiny—noun: something that is to happen or has happened to a particular person or thing; lot or fortune</td>
</tr>
</tbody>
</table>

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Grade 6: Module 4: Unit 1: Lesson 7
Getting the Gist and Tracing an Argument: “Public Fear” Excerpt from “The Exterminator”
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can cite text-based evidence to support an analysis of informational text. (RI.6.1)
I can identify the argument and specific claims in a text. (RI.6.8)
I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8)

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can get the gist of an excerpt from “The Exterminator.”</td>
<td>• Learning from Frightful’s Perspective: Chapter 7 (from homework)</td>
</tr>
<tr>
<td>• I can identify the argument, claims, and evidence in an excerpt from “The Exterminator.”</td>
<td>• Peregrine Falcon Facts anchor chart</td>
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<td>• Tracing an Argument graphic organizer</td>
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<td></td>
<td>• Learning Target sticky notes</td>
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</tbody>
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### Agenda

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<tr>
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<tbody>
<tr>
<td><strong>1. Opening</strong></td>
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<tr>
<td>A. <strong>Thinking about Big Ideas:</strong> <em>Frightful’s Mountain</em> and Rachel Carson (8 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. <strong>Unpacking Learning Targets</strong> (2 minutes)</td>
<td></td>
</tr>
<tr>
<td><strong>2. Work Time</strong></td>
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<tr>
<td>A. <strong>Getting the Gist:</strong> “Public Fear” Excerpt from “The Exterminator” (10 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. <strong>Independent Reading:</strong> Identifying Argument, Claims, and Evidence: “Public Fear” Excerpt from “The Exterminator” (15 minutes)</td>
<td></td>
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<tr>
<td><strong>3. Closing and Assessment</strong></td>
<td></td>
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<tr>
<td>A. <strong>Tracing an Argument:</strong> Mix and Mingle (10 minutes)</td>
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<tr>
<td><strong>4. Homework</strong></td>
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<tr>
<td>A. <strong>Reread “Double Whammy” and “Public Fear” excerpts from “The Exterminator”</strong> to review your claim and evidence annotations. Then review the Tracing an Argument graphic organizers for the “Double Whammy” and “Public Fear” excerpts.</td>
<td></td>
</tr>
<tr>
<td>B. <strong>Review vocabulary</strong> (academic and domain specific)</td>
<td></td>
</tr>
</tbody>
</table>

### Teaching Notes

- This lesson begins with students discussing in triads the focus question for Chapter 7. Students share reasons for the decline in the peregrine falcon population. Help students make connections between human impact and the falcon’s population decline.

- Be sure to give enough time to unpack the learning targets to reinforce academic vocabulary definitions. Providing students with examples of argument claims, and evidence from previous lessons reinforces their understanding of the domain-specific vocabulary.

- Use a document camera to review and model how to write an argument, claims, and supporting evidence on the Tracing an Argument graphic organizer. Consider filling out a Tracing an Argument graphic organizer to display using a document camera during the closing and assessment.

- Students then fill in additional information on their own.

- Consider grouping students based on their mastery of the learning targets. Use the Lesson 5 exit ticket, as well as the Lesson 6 task cards, as data to identify students who are struggling.

- In advance:
  - View live webcams of peregrine falcon nests, and locate a nest near your town or city that the class can follow throughout Unit 1. (For example, a pair of nesting falcons can be viewed in Rochester on the Times Square building at www.rfalconcam.com.)
  - Reread the “Public Fear” section of the article “The Exterminator” to identify the argument, claims, and evidence.
  - If you feel your students may need more structure than these protocols provide, number students in each triad: 1, 2, and 3. First announce 1’s should move clockwise to the next table group, and 2’s should move counterclockwise to the next table group; 3’s stay at the table. After 2 minutes of sharing, 1’s and 2’s continue moving as previously stated. Students share. After 2 more minutes, 1’s and 2’s move again to another table group. Students share. For the final discussion, ask 3’s to move clockwise to the next table group while 1’s and 2’s stay at the same table. Students share. This is the last rotation.
  - Post: Rachel Carson’s quote, learning targets.
Lesson Vocabulary | Materials
--- | ---
argument, claims, evidence; opponents, double standard, international donors, reluctant, unfounded, significant effect, Plasmodium parasite, eradicating, hacking (71), mews (71) | • *Frightful’s Mountain* (book; one per student)
• Rachel Carson’s quote (from Lesson 1)
• Peregrine Falcon Facts anchor chart (begun in Lesson 2)
• Projector (optional)
• “The Exterminator” (from Lesson 4)
• Tracing an Argument graphic organizer (one per student)
### Opening

**A. Thinking about Big Ideas: Frightful’s Mountain and Rachel Carson (8 minutes)**

- Be sure students have their text, *Frightful’s Mountain*. Invite students to sit in triads to discuss their Learning from Frightful’s Perspective: Chapter 7.

- Circulate to listen to students’ thinking about two reasons for the decline of the peregrine falcon population. Provide support to triads needing help to define unfamiliar words. Check in with triads on the definition of vocabulary words *hacking* and *mews*.

- Reconvene the class and ask students:
  * “What two things did we learn about in Chapter 7 that have had an impact on the peregrine falcon population?”

- Listen for: “Two things that have harmed the peregrine falcon population are DDT and wire placement on transformers.”

- Focus students on Rachel Carson’s quote: “Nothing exists in nature alone.”

- Invite students to think about the quote again. Ask students to think and then share with their triads:
  * “How do the events of this chapter relate to the quote ‘Nothing exists in nature alone’?”

- Consider probing with other questions to get students to reflect on their learning from “Welcome Back,” “The Exterminator,” and *Frightful’s Mountain*. For example, ask:
  * “Can you think of living things that can exist without a relationship(s) with other things?”
  * “Are all relationships beneficial?”
  * “How have human needs affected our environment?”

- Finally, ask students to help you add any new learning to the *Peregrine Falcon Facts anchor chart*.

- If time and technology permits, view a live webcam of a peregrine falcon in a city near your school on a projector. (For example, a pair of nesting falcons can be viewed in Rochester on the Times Square building at www.rfalconcam.com.)

### Meeting Students’ Needs

- Consider partnering ELLs who speak the same home language when discussion of complex content is required.
### Opening

**B. Unpacking Learning Targets (2 minutes)**

- Invite two student volunteers to read aloud each target, one at a time, as the other students read along:
  - “I can get the gist of an excerpt from ‘The Exterminator.’”
  - “I can identify the argument, claims, and evidence in an excerpt from ‘The Exterminator.’”

- Tell students that the learning targets should be familiar targets to them. Today they will meet this target by using text features in “The Exterminator.”

- Underline academic vocabulary: *argument, claims, evidence* as students read the targets

- Pair students. Ask pairs to Think-Pair-Share:
  - “What is an author’s *argument*?”
  - “What is an author’s *claim*?”
  - “What is supporting *evidence*?”

- Tell students that today they will reread the excerpt “Public Fear” for gist. Tell them they will also have another opportunity to identify the argument, claims, and supporting evidence in this informational text in preparation for their mid-unit assessment.

### Meeting Students’ Needs

- Unpacking the learning targets continues to build academic vocabulary and helps clarify understanding.

- Post the learning targets where all students can see them. Careful attention to the targets throughout the lesson engages, supports, and holds students accountable for their learning.
**A. Getting the Gist: “Public Fear” Excerpt from “The Exterminator” (10 minutes)**

- Invite students to take out their copy of “The Exterminator.” Direct students to use the text features to skim and find “Public Fear” (on page 3).
- Ask students to read along silently as you read the section aloud. As with other read-alouds, remember that the purpose is to read the text slowly, fluently, and without interruption.
- Ask students to Ink-Pair-Share:
  * “After listening to the first read, what is the gist of this excerpt of the informational text?”
- Remind student that in an “Ink-Pair-Share,” they jot down their ideas before they share with a partner; they can do this somewhere at the top of the text.
- Invite whole class to share the gist for this section of text. Listen for shares such as: “The author is arguing for the use of DDT because it saves lives.”
- Invite students to read and annotate this excerpt independently for smaller chunks of the gist and for vocabulary. Remind them to circle unfamiliar words, and jot the gist of each paragraph in the side margins.
- Circulate and support students as they read, or work with a small group of students needing extra support.
- Invite students to share the gist of each paragraph with their triads. Also ask them to share circled words and definitions.
- Invite groups to help each other use context clues to define difficult words.
- Bring the class back together. Discuss domain-specific (science) vocabulary to check for understanding. These words include: opponents, double standard, international donors, reluctant, unfounded, significant effect, Plasmodium parasite, and eradicating.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
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<tbody>
<tr>
<td>Consider partnering ELLs who speak the same home language when discussion of complex content is required.</td>
</tr>
<tr>
<td>Asking students to identify challenging vocabulary helps to provide understanding of text. You may want to give consideration to pairings</td>
</tr>
</tbody>
</table>
# Work Time

## B. Independent Reading: Identifying Argument, Claims, and Evidence: “Public Fear” Excerpt from “The Exterminator” (15 minutes)

- Distribute the **Tracing an Argument graphic organizer**. Using a document camera, model where to write the title of the article, “The Exterminator” excerpt “Public Fear,” and the author’s name, Kirsten Weir.
- Tell students today they will work independently to identify the claims and evidence in “Public Fear” and will then have a chance to discuss their ideas with their peers.
- Ask them to record the claim and its supporting evidence on the Tracing an Argument graphic organizer. Work with students needing extra support at a table.
- Circulate and support if students are able to work independently. Give students 5 minutes to work.
- Circulate and support if students are able to work independently. Give students 5 minutes to work.
- Pause and refocus whole class. Check for understanding by saying:
  - “Give a thumbs-up if you found at least one claim and one piece of supporting evidence so far.”
  - “Give a thumbs-sideways if you found a claim but are still searching for evidence.”
  - “Give a thumbs-down if you are feeling completely stuck.” Scan the group to get a general idea of understanding in identifying claims and evidence and which students might need additional support.
- Ask students to share a claim and evidence with their group before continuing to find more.

## Meeting Students’ Needs

- Some students may benefit from a text that has been enlarged when reading “Public Fear.” This could provide more space for annotating this excerpt.
- Identifying an argument, claim, and supporting evidence in informational text can be challenging. You may want to consider pairing ELLs with native English speakers and students strong in analytical reading skills with students who may struggle with this type of thinking.
A. Tracing an Argument: Mix and Mingle (10 minutes)

- Refocus the class whole group. Tell students they will “Mix and Mingle” to share their claims and evidence with other students. Review the class expectations and guidelines for this activity.
  - Remind students of the purposes of the activity:
  - To share claims and supporting evidence with two other students
  - To decide if there is sufficient evidence for each claim
  - To evaluate the argument by determining if there is enough evidence to support the overall argument
- Invite them to add to their claims and supporting evidence on their Tracing an Argument graphic organizer in pen.
- Begin the Mix and Mingle. Circulate and notice where students are encountering difficulty. This task closely aligns with the assessment students will be completing in Lesson 8, so this is a great opportunity to check for students’ understanding.
- After 7 to 8 minutes, reconvene the class. Invite groups to share claims and supporting evidence from “Public Fear.” Ask students:
  * “Was there sufficient evidence (at least two pieces) for each claim?”
  * “In evaluating the argument, was there enough evidence to support the overall argument?”
  (Does most of the evidence support the argument?)
- Congratulate students on all of their hard work since the beginning of this module. Tell them in the next lesson they will meet their learning targets and show all the learning they have accomplished.

Homework

- Reread “Double Whammy” and “Public Fear” excerpts from “The Exterminator” to review claims and evidence annotations. Then review the Tracing an Argument graphic organizers for the “Double Whammy” and “Public Fear” excerpts.
- Review vocabulary (academic and domain specific).

Note: Preview the mid-unit assessment video, http://www.science.gc.ca/default.asp?lang=en&n=730d78b4-1, and read the article “Rachel Carson: Sounding the Alarm on Pollution.”
I can identify the argument and specific claims in a text.
I can evaluate the argument and specific claims for sufficient evidence. (RI.6.8)

<table>
<thead>
<tr>
<th>Title of Article/Video:</th>
<th>Author/Speaker:</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Author’s Claim:</th>
<th>Evidence to Support Claim:</th>
</tr>
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<td></td>
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Is claim supported by sufficient evidence?
Yes  No

<table>
<thead>
<tr>
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<th>Evidence to Support Claim:</th>
</tr>
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Is claim supported by sufficient evidence?
Yes  No
# Tracing an Argument

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Is claim supported by sufficient evidence?  
Yes  No

After identifying the claims and evidence presented by this author, what argument do you think she/he is making?

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</table>
After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.

<table>
<thead>
<tr>
<th>Evidence supporting the claim</th>
<th>Evidence against the claim</th>
<th>Conclusion</th>
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Grade 6: Module 4: Unit 1: Lesson 8
Mid-Unit Assessment: Tracing an Argument in an Article and a Video
# Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can identify the argument and specific claims in a text. (RI.6.8)
I can evaluate the argument and specific claims for sufficient evidence. (SL.6.3)

## Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
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</thead>
<tbody>
<tr>
<td>• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT</td>
</tr>
<tr>
<td>• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution”</td>
</tr>
</tbody>
</table>

- I can identify the argument and specific claims in a video about DDT.
- I can evaluate the evidence used to support the argument and claims in a video about DDT.
- I can identify the argument and specific claims in “Rachel Carson: Sounding the Alarm on Pollution.”
- I can evaluate the evidence used to support the argument and claims in “Rachel Carson: Sounding the Alarm on Pollution.”
## Agenda

<p>| | |</p>
<table>
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<tr>
<td><strong>1.</strong> Opening</td>
<td><strong>Teaching Notes</strong></td>
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<td></td>
<td>A. Unpacking Learning Targets and Assessment Prompt (5 minutes)</td>
</tr>
<tr>
<td><strong>2.</strong> Work Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT (17 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” (20 minutes)</td>
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<tr>
<td><strong>3.</strong> Closing and Assessment</td>
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<td></td>
<td>A. Vocabulary: Adding Words to the Scientific Word Wall (3 minutes)</td>
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<tr>
<td><strong>4.</strong> Homework</td>
<td></td>
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<tr>
<td></td>
<td>A. Read Chapter 8, “Hunger Is Frightful’s Teacher.” Complete Learning from Frightful’s Perspective: Chapter 8.</td>
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</tbody>
</table>

## Teaching Notes

- The Mid-Unit 1 Assessment spans multiple standards and uses both a text and a video. If necessary, or beneficial, consider spreading this assessment across two lessons.
- The questions and graphic organizers in this assessment closely parallel the types of questions and graphic organizers that students worked on in earlier lessons.
- If students receive accommodations for assessment, communicate with the cooperating services providers regarding the practices of instruction in use during this study as well as the goals of the assessment. Consider students who need testing accommodations: extra time, separate location, scribe, etc.
- If students finish their Mid-Unit 1 Assessment early, ask them to catch up on their reading in *Frightful’s Mountain* or work on their vocabulary.
- In advance:
  - Prepare a computer and projector, or multiple computers, for the video component of this assessment.
  - Post: Learning targets.
# Mid-Unit Assessment: Tracing an Argument in an Article and a Video

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument, claims, evidence; biomagnification, bio-accumulation (video); pollution, conservation, synthetic, aerial (article)</td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Mid-Unit 1 Assessment Glossary sheet (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Video about DDT: <a href="http://www.science.gc.ca/default.asp?lang=en&amp;n=730d78b4-1">http://www.science.gc.ca/default.asp?lang=en&amp;n=730d78b4-1</a></td>
</tr>
<tr>
<td></td>
<td>• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” (one per student)</td>
</tr>
<tr>
<td></td>
<td>• “Rachel Carson: Sounding the Alarm on Pollution” (assessment text; one per student)</td>
</tr>
<tr>
<td></td>
<td>• Sticky notes (a few per student)</td>
</tr>
<tr>
<td></td>
<td>• Scientific Word Wall (begun in Lesson 4)</td>
</tr>
<tr>
<td></td>
<td>• <em>Frightful’s Mountain</em> (book; one per student)</td>
</tr>
<tr>
<td></td>
<td>• Mid-Unit 1 Assessment: Tracing and Evaluating an Argument (answers, for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>• Learning from Frightful’s Perspective: Chapter 8 (one per student)</td>
</tr>
</tbody>
</table>
# Opening

A. Unpacking Learning Targets and Assessment Prompt (5 minutes)

- Post the learning targets.
- Invite student volunteers to read aloud each target, one at a time, as the other students read along. After each target is read, ask the students:
  * “What are the important words in this target?”
- Look for responses that identify the words: *argument*, *claims*, and *evidence*. Use a highlighter to emphasize those important words as the students identify them.
- Write the number 1 by the word *argument*, 2 by the word *claims*, and 3 by the word *evidence*.
- Tell students that you will share a definition for each of those words. When they hear and see the definition, they should raise one finger if the definition is for an argument, two fingers for claims, and three fingers for evidence.
- Use the *document camera* to show the definitions as you read them aloud.
- Explain that ________ is information that helps show that something is true or helps prove something. (*evidence*)
- Explain that a ________ states that something is true or is a fact. (*claim*)
- Explain an ________ is a statement or series of statements for or against something. (*argument*)
- As students see and hear the definitions, ask them to raise one, two, or three fingers to match the definition with the important words from the targets they’ll use in their assessment today.
- Remind students that they have been working for several lessons on identify arguments and claims, and evaluating the evidence that supports them. Today is a chance for them to use those skills as they watch and listen to a new video and to read a new article.

# Meeting Students’ Needs

- Consider partnering ELLs who speak the same home language when discussion of complex content is required.
## Work Time

### A. Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT (17 minutes)

- Distribute the **Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: Video about DDT** as well as the **Mid-Unit 1 Assessment Glossary**. Tell students that the video they are about to watch and the article they are about to read contain some new vocabulary they may find difficult, and this glossary should be used as a tool to help them understand these materials.

- Tell students that the assessment is similar to the work they have been doing using the Tracing an Argument graphic organizer. Today, they will identify arguments in both a video and an article. They will also identify claims and evidence that supports the claims in both.

- Explain that the video about DDT (http://www.science.gc.ca/default.asp?lang=en&n=730d78b4-1, Used with permission from Government of Canada) lasts about 4 minutes.

- Tell students they will watch the video twice: once to get the gist and to identify the argument. Explain that they will have a couple of minutes after watching the video to write down the speaker’s argument if they are ready to do that.

- They will watch the video a second time more closely for specific claims and evaluate the evidence used to support the argument and claims. Explain that they will have about 5 minutes to write one of the speaker’s claims, evidence that supports the claim, and explain if the evidence is sufficient.

- Tell the students that there are also two multiple-choice questions that they will answer. Invite students to read the questions before watching the video the second time.

- Circulate and support students as they work on their assessments.

- Collect this portion of the assessment.

### Meeting Students’ Needs

- For students who struggle with reading grade-level text, consider chunking the text or identifying a section of the “Rachel Carson: Sounding the Alarm on Pollution” article that states a claim and has supporting evidence. The Lexile measure of this article is 840. The “Deadly Chemicals” section and the “Thousands of Dead Fish” section contain claims and evidence.

- To support ELL students, consider providing definitions of challenging vocabulary in the students’ home language. Translate; bilingual transition digital and textual dictionaries can assist with one-word translation.

- Some students may benefit from extra time to complete the mid-unit assessment.

- Some students may benefit from pausing the video to write responses on the mid-unit assessment.

- Some students may benefit from listening to the video more than twice.
### Work Time

B. Mid-Unit Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution” (20 minutes)

- Distribute the assessment text “Rachel Carson: Sounding the Alarm on Pollution” and the Mid-Unit 1 Assessment: Tracing and Evaluating an Argument: “Rachel Carson: Sounding the Alarm on Pollution.”
- Tell students they will read the article for the gist and identify the argument.
- Explain that they do not need to read the entire article. Tell students they may stop reading when they get to the heading “A Writer at Age 10.”
- Tell students they will also identify a claim and evidence that supports the claims.
- Explain that rereading helps identify claims and find evidence.
- Give students the list of scientific words that are used in the article and their definitions. They may use this to help with understanding.
- Circulate and support students as they work on their assessments.
- Invite those who finish the assessment to write the scientific words on sticky notes to add to the Scientific Word Wall during closing time. They should identify which category the words would best fit with.
- Students may also read *Frightful’s Mountain* if they are finished.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</table>
### Closing and Assessment

**A. Vocabulary: Adding Words to the Scientific Word Wall (3 minutes)**

- Invite students to share under which categories on the Scientific Word Wall the new vocabulary words used in the assessment would fit.

- Call on students who finished their assessment and had time to add the words to sticky notes. Invite those students to place those words in the category under which they fit.

- Commend students for their hard work on the mid-unit assessment. Explain that independently using the skills of identifying arguments, claims, and supporting evidence is an important step in the work they will be starting.

- Distribute and review Learning from Frightful’s Perspective: Chapter 8.

### Meeting Students’ Needs

<table>
<thead>
<tr>
<th>MEETING STUDENTS’ NEEDS</th>
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<tbody>
<tr>
<td>Consider giving some students filled-in Tracing an Argument graphic organizers from “Double Whammy” and “Public Fear” to review for the mid-unit assessment.</td>
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</table>

### Homework

**Note:** In Lesson 9, students will need their Learning from Frightful’s Perspective: Chapters 1–8 Focus Question Responses (specifically for Chapters 2, 4, 5, and 7). Help students locate these materials in advance, or assign this organization of their materials to be part of their homework task.
I can identify the speaker's argument and specific claims in a video about DDT. (RI.6.8)
I can determine whether the speaker’s argument and claims are supported by evidence. (SL.6.3)

<table>
<thead>
<tr>
<th>Name of the Video: “DDT—Dichloro-diphenyl-trichloroethane”</th>
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<tbody>
<tr>
<td><strong>DIRECTIONS:</strong> Watch the following video. Listen for the argument of the video. After you have watched it once, write down what you have identified as the argument of the video. When you watch it the second time, write down a specific claim or claims in the video. Then complete the rest of the graphic organizer.</td>
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<tr>
<th>Speaker's Argument:</th>
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<tr>
<th>Speaker's Claim:</th>
<th>Evidence to Support Claim:</th>
</tr>
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</table>

| Is the claim supported by sufficient evidence? |
| Yes | No |
After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.

**Multiple Choice: Circle the best answer for each question below.**

The evidence used by the speaker in this video helps support the position that birds at the top of the food chain have been harmed the most by DDT. The speaker does this by:

1. Sharing a story about DDT and how it affected animals, particularly birds
2. Stating claims about birds and their environment and using evidence to support the claims
3. Explaining the build-up of DDT in the environment

The speaker states that bio-magnification, also called bio-accumulation, caused DDT to build up in the food chain. How does the video help the viewer understand this process?

1. Gives facts and statistics
2. Shows drawings of smaller fish to larger fish and birds
3. Tells a true story
### Video about DDT

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>bio-magnification</strong></td>
<td><em>n.</em> making something greater (as a pesticide) in a living organism</td>
</tr>
<tr>
<td><strong>bio-accumulation</strong></td>
<td><em>n.</em> the gradual increasing of a substance (as a pesticide) in a living organism</td>
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</table>

### "Rachel Carson: Sounding the Alarm on Pollution" article

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>pollution</strong></td>
<td><em>n.</em> the action or process of making land, water, air, etc. dirty and not safe or suitable to use</td>
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<tr>
<td><strong>conservation</strong></td>
<td><em>n.</em> the protection of animals, plants, and natural resources</td>
</tr>
<tr>
<td><strong>synthetic</strong></td>
<td><em>adj.</em> made by combining different substances; not natural</td>
</tr>
<tr>
<td><strong>aerial</strong></td>
<td><em>adj.</em> performed in the air or by using an airplane</td>
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Mid-Unit 1 Assessment: Tracing and Evaluating an Argument
“Rachel Carson: Sound the Alarm on Pollution”

I can identify the author’s argument and specific claims in a text. (RI.6.8)
I can determine whether the author’s argument and claims are supported by evidence. (RI.6.8)

Name:

Date:

Name of the Article: “Rachel Carson: Sounding the Alarm on Pollution”

DIRECTIONS:
Read the article.
After you have read it, write down what you have identified as the argument in the text. Write down a specific claim from the article. Then write what evidence was given to support the claim. Decide if the evidence did a good job supporting the claim.

Author’s Argument:

Author’s Claim:

Evidence to Support Claim:

Is the claim supported by sufficient evidence?
Yes           No
Mid-Unit 1 Assessment: Tracing and Evaluating an Argument
“Rachel Carson: Sound the Alarm on Pollution”

After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.
Rachel Carson: Sounding the Alarm on Pollution

Eighth in a Series

Carson at a Glance

BORN: May 27, 1907, at Springdale, Pa.; died April 14, 1964.

LEGACY FOR THE EARTH: She put a spotlight on environmental pollution.

For Further Reading:
"Sea and Earth: The Life of Rachel Carson," by Philip Sterling; "Rachel Carson," by Carol B. CARTNER.

“Future historians may well be amazed by our distorted sense of proportion. How could intelligent beings seek to control a few unwanted species by a method that contaminated the entire environment and brought the threat of disease and death even to their own kind? Yet this is what we have done.” —Rachel Carson’s warning in “Silent Spring.”

Robert W. Peterson

Rachel Carson was a small, soft-spoken scientist.
She also was one of the towering Green Giants of the 20th century.

Her Book Changed Our World
Her 1962 book, “Silent Spring,” was probably the most influential work on conservation ever written. It made Americans think hard about pollution of the environment. It led to strict controls on synthetic pesticides.

Rachel Carson was a marine biologist. She already had published three excellent books about the sea and its creatures. All were best sellers. They combined sound science with good writing.

Deadly Chemicals
The purpose of “Silent Spring” was to raise public alarm about chemical pesticides, especially one called DDT, which was introduced in 1939.

In the 1940s, the chemical industry developed many related pesticides. The pesticides saved farmers and gardeners time and money because they made it easier to control insects and weeds. By the mid-1950s, half a billion pounds of pesticides were being spread over fields and gardens each year.

The trouble was that some chemicals hurt not only insects and weeds but also birds, mammals and fish. Some scientists said the chemicals hurt people too. Others had written about the danger before Rachel Carson wrote “Silent Spring,” but few people paid attention.

Thousands of dead fish
By 1960, though, the evidence was clear. Fish had died by the tens of thousands when orchards near lakes were sprayed with pesticides. Thousands of birds had been doomed by aerial spraying of woodlands.

Rachel Carson’s “Silent Spring” fairly shouted: “Whoa! Look what we’re doing!” She did not oppose the use of all pesticides. But she wrote, “We have allowed these chemicals to be used with little or no advance investigation of their effect on soil, water, wildlife, and man himself.”

Parts of the book began appearing in The New Yorker magazine in 1962. Rachel’s message made for a noisy summer. It was attacked by the chemical industry, food companies, and some government agencies. They said the book was scientifically unsound. They dismissed her as a “nature nut,” “food fascist,” and “just a bird watcher.”

Mild-Mannered but Tough
Rachel was quiet and mild-mannered, but she was also tough-minded. She stood up to all the criticism and enjoyed the praise that came from many scientists who knew about pesticides.

In following years, DDT and 11 other chemical pesticides Rachel had warned about were banned or tightly restricted. By the time of her death in 1964, her name was a household word.

A Writer at Age 10
Rachel Carson had come a long way from her childhood in a small town near Pittsburgh, Pa.

She had learned to love nature as a young girl. Her mother could not bear to kill a living thing, and so Rachel had to catch insects that got into the house and release them outside.

Rachel’s first published story appeared in St. Nicholas, a children’s magazine, when she was only 10 years old. She decided to become a writer; but in college she had to take a science course. She chose biology—and liked it. That was the start of a career that joined science with literature.

By the time she had published her third best seller on the sea, Rachel Carson was famous. People were ready to listen to her scary message in “Silent Spring.” It changed how they thought about the earth—and also how they treated it.

—Robert W. Peterson
Rachel Carson: Sounding the Alarm on Pollution
Mid-Unit 1 Assessment: Tracing and Evaluating an Argument
Video about DDT
(Answers, for Teacher Reference)

I can identify the speaker’s argument and specific claims in a video about DDT. (RI.6.8)
I can determine whether the speaker’s argument and claims are supported by evidence. (SL.6.3)

Name of the Video: “DDT—Dichloro-diphenyl-trichloroethane”

DIRECTIONS:
Watch the following video. Listen for the argument of the video. After you have watched it once, write down what you have identified as the argument of the video.

When you watch it the second time, write down a specific claim or claims in the video. Then complete the rest of the graphic organizer.

Speaker’s Argument: (Answers may vary)

**DDT is harmful for the environment.**

Speaker’s Claim: (Answers may vary)

1. DDT had a big impact on birds.
2. DDT is a persistent chemical
3. The ban on DDT has been effective.

Evidence to Support Claim: (Answers may vary)

1. DDT made eggshells thinner, so when they sat on them they broke, and no young were produced.
2. DDT can remain in water for up to 150 years.
3. Levels of DDT in herring gull eggs are 10% of what they were 25 years ago.

Is the claim supported by sufficient evidence?
Yes  No
After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.

(Answers may vary)

The overall argument, that DDT is harmful for the environment is supported by sufficient evidence. The video gives three claims to support the argument: DDT made eggshells thinner and harmed the bird population, DDT remains in the environment as a persistent chemical, and the ban on DDT has been beneficial for the environment. The video provides evidence to support each of these claims.

Multiple Choice: Circle the best answer for each question below.

The evidence used by the speaker in this video helps support the position that birds at the top of the food chain have been harmed the most by DDT. The speaker does this by:

1. Sharing a story about DDT and how it affected animals, particularly birds
2. Stating claims about birds and their environment and using evidence to
   a. support the claims
3. **Explaining the build-up of DDT in the environment**

The speaker states that bio-magnification, also called bio-accumulation, caused DDT to build up in the food chain. How does the video help the viewer understand this process?

1. Gives facts and statistics
2. **Shows drawings of smaller fish to larger fish and birds**
3. Tells a true story
I can identify the author’s argument and specific claims in a text. (RI.6.8)
I can determine whether the author’s argument and claims are supported by evidence. (RI.6.8)

Name of the Article: “Rachel Carson: Sounding the Alarm on Pollution”

DIRECTIONS:
Read the article.
After you have read it, write down what you have identified as the argument in the text. Write down a specific claim from the article. Then write what evidence was given to support the claim. Decide if the evidence did a good job supporting the claim.

Author’s Argument: (Answers may vary)

DDT is a harmful chemical for the environment, and Rachel Carson helped to spread the word about how harmful it is.

Author’s Claim:

1. Chemicals hurt not only insects, but also birds, fish, and mammals.
2. Rachel Carson’s book led to strict controls on pesticides.

Evidence to Support Claim:

1. Fish died by the tens of thousands when orchards near lakes were sprayed with pesticides.
2. DDT and 11 other chemicals were banned after she wrote her book. By the time of her death, her name was a household word.

Is the claim supported by sufficient evidence?
Yes No
After evaluating the evidence that supports each claim, is the overall argument supported by sufficient evidence? Explain why or why not.

(Answers may vary – look for students to justify their response by discussing the evidence the text offers.)

The overall argument is not supported by sufficient evidence. The author makes two claims: Rachel Carson was very influential in banning DDT and DDT is harmful for the environment. For each claim, the author only offers one piece of supporting evidence.
Focus Question: What does Jon teach Frightful? How does he teach her this lesson?

Use evidence from this chapter to support your thoughts.

<table>
<thead>
<tr>
<th>What and how does Jon teach Frightful?</th>
<th>My Thoughts:</th>
</tr>
</thead>
</table>

Evidence from the Text:

Chapter 8: “Hunger Is Frightful’s Teacher”

Words I Found Difficult:

cote—noun: a small shed or coop for small animals

transformer—noun: a device that transfers electric energy from one alternating-circuit current to one or more other circuits, either increasing (stepping up) or reducing (stepping down) the voltage

raptors—noun: any bird of prey; examples of raptors include owls, eagles, falcons, hawks, and vultures

Glossary:

- cote
- transformer
- raptors
Grade 6: Module 4: Unit 1: Lesson 9
Interpreting and Connecting Information: Creating a Cascading Consequence Chart Using *Frightful’s Mountain*
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can interpret information presented in different media and formats. (SL.6.2)  
I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)  
I can use my experience and knowledge of language and logic to address problems and advocate persuasively. (SL.6.2a)  
I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can create a Cascading Consequence chart about Sam and Frightful’s interaction.</td>
<td>• Learning from Frightful’s Perspective: Chapter 8 (from homework)</td>
</tr>
<tr>
<td>• I can describe the expectations for participating in a Fishbowl discussion group.</td>
<td>• Peregrine Falcon Facts anchor chart</td>
</tr>
<tr>
<td>• I can use my Cascading Consequence chart for <em>Frightful’s Mountain</em> to clarify the ideas I am presenting.</td>
<td>• Cascading Consequence chart for <em>Frightful’s Mountain</em></td>
</tr>
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</table>
## Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
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</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• In the second half of this unit, students build on work previously done with argument, claims, and evidence.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</td>
<td>• This module focuses on two of the steps in the Stakeholders Consequences Decision-Making process. In this lesson, students are introduced to the Cascading Consequences chart. It is a way for students to create a visual “map” of the consequences of a particular choice or course of action. They use this in order to take information from the text and begin to make sense of it. Students will continue to add to this chart over the course of the unit—including consequences that they learn about from the central text as well as those they learn about through their independent research. They will refer to this chart throughout the module for several important reasons, including to determine who the stakeholders are for the issue they are learning about and to use as a reference for writing about their position on the issue.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>• This Cascading Consequence chart will help students prepare for their Fishbowl discussion during their End of Unit 1 Assessment. Students will get more practice with the Cascading Consequences chart in Lessons 10 and 11, when they apply the decision-making strategy to the topic of DDT. The DDT Cascading Consequences chart will be the visual assessed at the End of Unit 1 Assessment.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• With partners, students use their knowledge from Frightful’s Mountain to help clarify Sam’s interactions with Frightful. Thus, students first work on the Cascading Consequence chart with a familiar topic. The chart also serves as a way to continue to engage with the novel.</td>
</tr>
<tr>
<td>A. Introducing Cascading Consequences Chart: Should Sam Interact with Frightful? (20 minutes)</td>
<td>• In this lesson, the teacher reads aloud part of Chapter 9. Reading part of Chapter 9 in class makes the homework assignment more manageable.</td>
</tr>
<tr>
<td>C. Preparing for a Fishbowl Discussion: Understanding Expectations and Practicing (12 minutes)</td>
<td>• In advance:</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>– Partner students. Arrange desks in groups of four for the Fishbowl discussion.</td>
</tr>
<tr>
<td>A. Exit Ticket: Reflection on Learning Targets (3 minutes)</td>
<td>– Read the article “Learning to Make Systematic Decisions,” listed as a central text in the module overview. Note that this article is for teacher reference only, and is not used with students.</td>
</tr>
<tr>
<td>4. Homework</td>
<td>– Preview the Cascading Consequences chart (teacher examples) to gain background knowledge of the decision-making strategy.</td>
</tr>
</tbody>
</table>
Interpreting and Connecting Information: Creating a Cascading Consequence Chart Using *Frightful’s Mountain*

### Agenda

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Preview: Fishbowl protocol video (<a href="http://vimeo.com/54871334">http://vimeo.com/54871334</a>)</td>
</tr>
<tr>
<td></td>
<td>- Post: learning targets.</td>
</tr>
</tbody>
</table>

### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascading Consequences chart, interaction, expectations, clarify; bowstring trusses (97), aerie (100), macadam (101), brooding (102), aerial (103), tandem (103), cupola (102), accumulate (106)</td>
<td>- <em>Frightful’s Mountain</em> (book; one per student)</td>
</tr>
<tr>
<td></td>
<td>- Peregrine Falcon Facts anchor chart (begun in Lesson 2)</td>
</tr>
<tr>
<td></td>
<td>- Sam Interacts with Frightful Cascading Consequences chart (one per student; distribute just to one student in each pair)</td>
</tr>
<tr>
<td></td>
<td>- Sam Does Not Interact with Frightful Cascading Consequences chart (one per student; distribute just to one student in each pair)</td>
</tr>
<tr>
<td></td>
<td>- Learning from Frightful’s Perspective: Chapters 2, 4, 5, and 7</td>
</tr>
<tr>
<td></td>
<td>- Document camera</td>
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<tr>
<td></td>
<td>- Fishbowl Video: Notice and Wonder graphic organizer (one per student)</td>
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<td></td>
<td>- Fishbowl Assessment (one per student)</td>
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<tr>
<td></td>
<td>- Fishbowl Discussion Partner Scoring Log (one per student)</td>
</tr>
<tr>
<td></td>
<td>- Exit Ticket: Cascading Consequences Chart and Fishbowl Discussion (one per student)</td>
</tr>
<tr>
<td></td>
<td>- Learning from Frightful’s Perspective: Chapter 9 (from previous lessons)</td>
</tr>
<tr>
<td></td>
<td>- Sam Interacts with Frightful Cascading Consequences chart (for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>- Sam Does Not Interact with Frightful Cascading Consequences chart (for teacher reference)</td>
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</tbody>
</table>
### Opening

#### A. Engaging the Reader: Learning from Frightful Perspective (10 minutes)
- Begin students in their *Frightful’s Mountain* triads.
- Be sure they have their text, *Frightful’s Mountain*. Ask students to share their responses to the homework focus question on Learning from Frightful’s Perspective: Chapter 8.
- Circulate during this discussion time to listen for students’ discussions about the human impact on the peregrine falcon population. Give students specific positive praise for when they cite and analyze text during their discussions.
- Bring the class back together. Invite groups to share their responses to the focus question.
- Listen for several ideas to emerge from the reading of this chapter:
  - One human impact is utility companies. The wire placement on utility poles is such that peregrines and other raptors can be potentially electrocuted.
  - As a result of this design, the peregrine population has declined. If one wire could be lowered, peregrines would not be able to complete the circuit, causing their death.
  - In this chapter, Jon and Susan educate schools about this issue, and students decide to write letters to utility companies.
  - Another human impact involves Jon adding to Frightful’s diet. Jon teaches Frightful to eat rats
  - With this diet change, Frightful can now help control the rat population of New York.
- If students do not bring up these points, point them out as examples of the interaction between humans and the natural world.
- Tell students they will discuss “Words I Found Difficult” later in the lesson.
- Invite students to turn to Chapter 9, “Frightful Finds Sam,” on page 92. Explain that because of the chapter’s length, some of the chapter will be read aloud in class. Ask students to be ready to read along.
- Begin reading on page 92 and stop on page 100, when Sam says “This might work ... Both of us free.” Consider pausing to discuss the following vocabulary: bowstring trusses (97) (note the picture on page 98).
- Invite students to share whole class. Add facts from Chapter 8 and the first part of Chapter 9 to the *Peregrine Falcon Facts anchor chart*. Guide students to consider how the vocabulary words might provide ideas for facts to add to the chart.

#### Meeting Students’ Needs
- Set clear expectations that students read along with you. Hearing the text read and reading the learning targets will build fluency.
### Opening

**A. Unpacking Learning Targets (2 minutes)**

- Invite the class to read the learning targets with you:
  - “I can create a Cascading Consequences chart about Sam and Frightful’s interaction.”
  - “I can describe the expectations for participating in a Fishbowl discussion group.”
  - “I can use my Cascading Consequences chart from *Frightful’s Mountain* to clarify the ideas I am presenting.”
- Underline the phrase “Cascading Consequences chart.”
- Tell students that a Cascading Consequences chart is a chart that shows series of outcomes or results that move toward different conclusions. Tell students they will create one of these charts about Sam and Frightful’s interaction.
- Underline the word *interaction*. Tell students that the prefix *inter-* means “between” or “among.” Ask:
  - “If *inter-* means ‘between’ or ‘among,’ what do you think *interaction* means?”
- Invite students to share their ideas for a definition whole class. Confirm or correct the definition of *interaction* as “the action or influence of people, groups, or things on one another.” For example, Sam and Frightful have many interactions. When they hunt, they interact or share their food.
- Circle *expectations* and *Fishbowl*. Tell students that they will practice a Fishbowl protocol, which is a specific discussion protocol. Tell them the protocol will give expectations, or guidelines, to be successful in the discussion.
- Underline the word *clarify* twice. Ask,
  - “What is another word that you think *clarify* is related to?” Listen for students to share “clear” or “*clarity*.” Share that *clarify* means to make clear. Tell students the Cascading Consequences chart will be their visual aid, which will help them organize their information and make their ideas clearer in preparation for their Fishbowl discussion.
A. Introducing Cascading Consequences Chart: Should Sam Interact with Frightful? (20 minutes)

- Share with students that in a modern society, people are always making decisions that deal with the needs of a growing population. For example, people are looking for ways to manage limited resources like land, energy, and water. Societies continually have to think about and discuss important issues. A question often considered with each issue is, “How does one balance the needs of humans against the needs of nature and its ecosystems?” Using a strategy such as a Cascading Consequence chart can provide an organized way to help people make wise decisions about important issues.

- Explain to students that they will have a chance to practice this decision-making strategy using Frightful’s Mountain. Share that in Chapters 1–8, two of the main characters struggle with decisions. One character, Frightful, is torn between staying with Sam or migrating with other peregrine falcons. Another character, Sam, is also torn between two decisions: should he interact with Frightful and build a friendship or should he not interact with Frightful and let her live free like other peregrine falcons?

- Tell students they will get an opportunity to build a Cascading Consequences chart about the decision Sam must consider.

- Partner students (if you have an uneven number of students, one group can be a triad). Tell students that in each pair, one person will consider one decision Sam might make, and the other person will consider a different decision.

- Give one person in each pair the Sam Interacts with Frightful Cascading Consequences chart. Give the other person in each pair the Sam Does Not Interact with Frightful Cascading Consequences chart.

- Invite students to locate their Learning from Frightful’s Perspective: Chapters 2, 4, 5, and 7. Explain that the responses to the focus questions for these chapters will help them think about Sam and Frightful’s interactions and Frightful’s interactions with other characters. These responses will help generate ideas to use for their Cascading Consequences chart. For example, in Chapter 2, Frightful forms a relationship with Chup. Ask students:
  * “Why is this relationship important to Frightful?” Listen for: “Frightful learns to feed and brood Chup’s eyases and becomes a caring mother.”

- Ask students to Think-Pair-Share:
  * “How does Sam’s interaction with Frightful affect her instincts of being a mother?”

- Listen for: “If Sam does not interact with Frightful, Frightful develops the mothering instincts of peregrine falcons, or if Sam does interact with Frightful, Frightful does not develop the mothering instincts of peregrine falcons.”
### Work Time (continued)

- Direct students to their *Frightful’s Mountain* Cascading Consequences chart. Use a document camera or a board to model how to write the consequence or outcome on their graphic organizer.
- For the half of the class that has “Sam Interacts with Frightful,” model drawing a line with an arrow and writing “Frightful Does Not Develop Peregrine Falcon Mothering Instincts.” Then, for the other half of the class that has “Sam Does Not Interact with Frightful,” model drawing a line with an arrow and writing, “Frightful Does Develop Peregrine Falcon Mothering Instincts.”
- Ask all students to draw a rectangle around their new consequence.
- Ask students to Think-Pair-Share:
  * “What would be a result of the consequence, or outcome, we just wrote?”
- If students need more help, probe:
  * “What would be the result or outcome of Frightful developing peregrine falcon mothering instincts or not developing those instincts?”
- From the “Sam Interacts with Frightful” group, listen for: “Frightful will not learn other peregrine falcon habits such as mating and caring for eyases.”
- From the “Sam Does Not Interact with Frightful” group, listen for: “Frightful will learn other peregrine falcon habits such as mating and caring for eyases.”
- Point out to students how one consequence leads to another consequence that leads to another consequence. This is what makes it cascading, like dominoes cascading as they run into one another.
- Circulate to listen for students’ understanding of the connecting consequences or the cause/effect relationship.
- Reconvene the class. Invite groups to share their responses.
- Use a document camera to model drawing a line with an arrow and writing the next consequence, or result, with each group. Share with students that each consequence will likely have another line with an arrow drawn, connecting another consequence or outcome. Direct students to draw a rectangle around each consequence or outcome they add.
- Ask partners to read the focus question and their responses to Chapters 4, 5, and 7. Invite them to try to find another consequence or outcome to add to their chart.
Interpreting and Connecting Information:
Creating a Cascading Consequence Chart Using *Frightful’s Mountain*

### Work Time (continued)

- Circulate to support students. Provide other examples, if needed, to select groups. Topics could include migration and human impact on the peregrine’s population. Notice students who are working cooperatively on this new skill and students who may need additional, small-group support.
- After students have worked for 10–12 minutes, refocus students whole group. Use a document camera or a board to display an example of each Cascading Consequences chart (see example for teacher reference in supporting materials). Read through each chart with the class. Remind students that this is one possible example, but they should add to their own chart if they see new possibilities.
- Congratulate students on their first practice of this decision-making strategy. Tell them they will get more practice in Lesson 10.

### Meeting Students’ Needs

- Circulate to support students. Provide other examples, if needed, to select groups. Topics could include migration and human impact on the peregrine’s population. Notice students who are working cooperatively on this new skill and students who may need additional, small-group support.
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- Congratulate students on their first practice of this decision-making strategy. Tell them they will get more practice in Lesson 10.

### B. Preparing for a Fishbowl Discussion: Understanding Expectations and Practicing (12 minutes)

- Remind students that they will be using their Cascading Consequences chart in a Fishbowl discussion. Tell students that in order to understand the Fishbowl discussion, they will watch a short video.

  - Distribute the **Fishbowl Video: Notice and Wonder graphic organizer** to students. Tell students they will be watching a video that models something called a Fishbowl discussion. Tell them they will be expected to record their notices and wonders as they watch this video. Watch 3 minutes of the video (http://vimeo.com/4871334).

  - Refocus the class whole group. Ask students to Think-Pair-Share:
    - “What did you notice about what the students in the inner and outer circles were doing in the Fishbowl protocol?”
    - Cold call partners for responses. Listen for: “Some students were discussing and some students were watching,” or “Students were using notes and citing evidence from informational text to move discussion,” or “Students were responding to a question.”

- Ask students:
  - “What do you think students did to prepare for the Fishbowl discussion?”
  - Listen for: “Students organized their notes and came prepared with information to share.”

  - Distribute the **Fishbowl Assessment**. Tell students this will be the recording form that you will use to assess them when they participate in a Fishbowl discussion in a future lesson. Read through the criteria on which students will be assessed.
**Work Time (continued)**

- Choose a group of four students to try out this Fishbowl. This group will serve as a model to help the other students better understand the expectations of this activity. Be purposeful in choosing which students will be a part of this, as it will take a certain level of confidence to be the first to try this out in front of their peers.

- Share that during the Fishbowl, the inner circle (the four students) will be evaluated by the other students on four criteria: 1) asking questions to understand different perspectives, 2) referencing text and referring to evidence, 3) advocating persuasively about their topic, and 4) responding to questions with details that contribute to their topic.

- Tell the fours students in the Fishbowl that they are going to get a chance to practice their Fishbowl protocol with the Cascading Consequences chart they filled out on Sam and Frightful’s interaction. Explain the Fishbowl protocol will be used as an end of unit assessment, and that all students will get another chance to practice this type of discussion in Lesson 10.

- Remind them today is practice and the Fishbowl discussion will not be assessed. Instead, the assessment criteria can be used as a guide to help them prepare for the End of Unit 1 Assessment.

- Next, distribute the **Fishbowl Discussion Partner Scoring Log**. Tell students the outer circle (the rest of the class) will be there to support the inner circle partner. Read through the scoring log to clarify the outer circle’s role in supporting the inner circle.

- Tell outer circle students that, since this is practice, they do not have to complete the Fishbowl Discussion Partner Scoring Log, but they should use this as a reference for preparing for the End of Unit 1 Assessment.

- Invite students in the Fishbowl to read through their Cascading Consequences chart and think about the consequences of Sam interacting with Frightful and Sam not interacting with Frightful.

- Invite the inner circle partners to begin sharing their thoughts about the question:
  - “Should Sam interact with Frightful?”

- Remind students to refer to their chart, consequences, and outcomes, for supporting or not supporting Sam and Frightful’s interaction. Remind them to ask clarifying questions and to give details, or evidence, from the text to support their thinking.

- Also, ask outer circle students to be prepared to provide feedback after their discussion. Remind students in the outer circle to refer to their scoring log to be able to provide the inner circle with feedback.

- Ask the inner circle probing questions, such as “If Sam interacts with Frightful, will she migrate?” or “If Sam does not interact with Frightful, will she migrate?”
### Work Time (continued)

- After one minute, ask students in the outer circle to have a discussion with their partner about successes and challenges of the Fishbowl discussion. Outer circle partners provide a success and a goal for their partner.
- Commend the four inner circle students for their willingness to participate in the Fishbowl discussion. Tell them this discussion strategy provides an organized way to share consequences or outcomes.
- Share that Sam’s difficult decision of whether to interact or not interact has a series of consequences he needs to consider. These consequences contribute to helping him make this important decision of whether to interact with Frightful or not interact with Frightful.
- Remind students they will get more practice with the Fishbowl protocol in Lesson 10. Their topic or issue will be the benefits of DDT and its harmful consequences.

### Closing and Assessment

#### A. Exit Ticket: Reflection on Learning Targets (3 minutes)

- Distribute the **Exit Ticket: Cascading Consequences Chart and Fishbowl Discussion**.
- Ask students to be reflective and honest. Share that thinking back on our learning is a process successful students do.
- Ask students to think about today’s learning targets and complete a 3-2-1. Share that this feedback will provide information to guide Lesson 10.
- Tell them this is their “ticket” to leave today’s lesson.

### Homework

- Finish reading Chapter 9, “Frightful Finds Sam.” Complete **Learning from Frightful’s Perspective: Chapter 9**.
Sam Interacts with Frightful
Cascading Consequences Chart

Name:

Date:
Sam Does Not Interact with Frightful
Cascading Consequences Chart

Name:

Date:
### Fishbowl Video:
**Notice and Wonder**

<table>
<thead>
<tr>
<th>Notice</th>
<th>Wonder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are students in the inner circle doing?</td>
<td></td>
</tr>
<tr>
<td>2. What are students in the outer circle doing</td>
<td></td>
</tr>
<tr>
<td>3. What do you think the students did to prepare for this discussion?</td>
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</tbody>
</table>
### Fishbowl Assessment

<table>
<thead>
<tr>
<th>Scoring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistently Demonstrated</td>
<td>2 points</td>
</tr>
<tr>
<td>Somewhat Demonstrated</td>
<td>1 point</td>
</tr>
<tr>
<td>Not Demonstrated</td>
<td>0 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment</th>
<th>1 Asks Questions to Understand Different Perspectives</th>
<th>2 References Text and Refers to Evidence</th>
<th>3 Advocates Persuasively</th>
<th>4 Responds to Questions with Detail That Contributes to the Topic</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
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</table>

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Fishbowl Discussion
Partner Scoring Log

Name:

Partner’s Name:

Date:

Effective Fishbowl Participants:

• Come well prepared with Cascading Consequences charts.
• Say things that show they understand the information from the resources.
• Say things that connect with what other participants are saying.
• Use claims and evidence from the resources to support ideas.
• Use good eye contact, appropriate voice level, and body language.
• Listen actively and avoid side conversations.
• Encourage others to speak.
• Ask questions to understand others’ perspectives.

*Identify one success and one goal for your partner.*

1. Number of Questions/Comments Made (Tally)

2. Number of Claims and Evidence from the Resources (Tally)

3. How was the quality of his/her questions or comments? (Do they know their stuff?)

   Excellent  Good  Fair  Poor  Unacceptable
4. How was his/her eye contact, voice level, and body language?

   Excellent  Good  Fair  Poor  Unacceptable

5. Did he/she follow good partnership manners? (Respect other’s comments; listen attentively, no side conversations.)

   All the time  Most of the time  Some of the time  Not at all

6. Did your partner meet his/her goals for the Fishbowl discussion?

   All the time  Most of the time  Some of the time  Not at all

Reflection

Two successes: _____________________________________________________________

___________________________________________________________

One goal: ______________________________________________________________
Exit Ticket:
Cascading Consequences Chart and Fishbowl Discussion

Name:

Date:

Share three things students need to do to be successful in a Fishbowl discussion.

1.

2.

3.

Share two important things to remember about sharing information on the Cascading Consequences chart.

1.

2.

Share one question you have about the Fishbowl discussion or the Cascading Consequences chart.

1.
# Learning from Frightful’s Perspective:
## Chapter 9

**Focus Question:**
Where does Frightful build her nest?
What two important events happen at Frightful’s nest?
How do these events show the consequences of human interaction and the natural world?

**Use evidence from the text to support your thinking.**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
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</table>

<table>
<thead>
<tr>
<th>Chapter 9: “Frightful Finds Sam”</th>
<th>Words I Found Difficult</th>
<th>Glossary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Question: Where does Frightful build her nest? What two important events happen at Frightful’s nest? How do these events show the consequences of human interaction and the natural world? Use evidence from the text to support your thinking.</td>
<td></td>
<td><strong>girder</strong> — noun: a strong beam used to build buildings, bridges, etc. <strong>imprint</strong> — verb: to cause (something) to stay in your mind or memory <strong>incubate</strong> — verb: to sit on eggs so that they will be kept warm and will hatch <strong>scrape</strong> — noun: the nest of a bird consisting of a usually shallow depression in the ground mottled — adj: marked with colored spots or areas <strong>pores</strong> — noun: tiny openings especially in an animal or plant; one by which matter passes through a membrane</td>
</tr>
</tbody>
</table>
Sam Interacts with Frightful Cascading Consequences Chart
(For Teacher Reference)

- Sam Interacts with Frightful
- Frightful May Not Mate
- Frightful Is Not Electrocuted
- Frightful Is Not Captured by Poachers
- Frightful Is Not Free
- Sam Educates Others
- People Become Advocates for Peregrine Falcons
- Frightful Does Not Learn Hunting Skills
- Frightful Only Hunts with Sam
- Frightful May Not be Able to Eat When She Is Hungry
- Frightful Is Not with Other Peregrines
- Frightful Will Not Have Eyases
Sam Does Not Interact with Frightful Cascading Consequences Chart
(For Teacher Reference)
# Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can interpret information presented in different media and formats. (SL.6.2)
I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)
I can use my experience knowledge of language and logic to address problems and advocate persuasively. (SL.6.2a)
I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9)

## Supporting Learning Targets

- I can use multiple resources to create a Cascading Consequences chart about the use of DDT.
- I can practice the skills and expectations for a Fishbowl discussion.

## Ongoing Assessment

- Learning from Frightful's Perspective: Chapter 9 (from homework)
- Peregrine Falcon Facts anchor chart
- Benefits of DDT and Harmful Consequences Cascading Consequences charts
- Fishbowl Feedback checklist
- Exit Ticket: Fishbowl Successes and Fishbowl Goals
Using Multiple Resources of Information:
Creating a Cascading Consequences Chart about DDT and Practicing a Fishbowl Discussion

### Agenda

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td><strong>1. Opening</strong></td>
<td></td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning From Frightful’s Perspective</td>
<td>8 minutes</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets</td>
<td>2 minutes</td>
</tr>
<tr>
<td><strong>2. Work Time</strong></td>
<td></td>
</tr>
<tr>
<td>A. Creating Cascading Consequences Charts: Using Multiple Resources about DDT</td>
<td>20 minutes</td>
</tr>
<tr>
<td>B. Fishbowl Discussion: Cascading Consequences Chart about DDT</td>
<td>10 minutes</td>
</tr>
<tr>
<td><strong>3. Closing and Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>A. Exit Ticket</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>4. Homework</strong></td>
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</tr>
</tbody>
</table>

### Teaching Notes

- As students work with their triads to respond to the Learning from Frightful’s Perspective: Chapter 9 focus question and increase vocabulary knowledge, it is also an opportunity for students to focus on the setting in New York.

- The increase of peregrine falcons in the state has occurred for reasons that include the banning of DDT in the U.S. and the interaction between people and the birds. Adding things such as maps, illustrations of birds, photos, and/or illustrations of bowstring bridges to expand the Peregrine Falcon Facts anchor chart provides an opportunity of connecting the book with the environment in which students live.

- If a variety of resources and images are added to the anchor chart, encourage students to label images with glossary words and difficult words they have identified. Visual contributions to the anchor chart can increase participation, creativity, and understanding.

- In Lesson 9, students were introduced to creating Cascading Consequences chart using information from *Frightful’s Mountain*. In this lesson, students create Cascading Consequences charts about two different opinions concerning the use of DDT.

- Students use information from the various sources they used in identifying arguments, claims, and evidence about the use of DDT. Students use this information to create one Cascading Consequences chart that explores the benefits of DDT and one that explores the harmful consequences of DDT.

- Since students will continue to add to both of their Cascading Consequences charts in future lessons, it may be beneficial to have students use larger paper to create their charts.

- To prepare for this lesson, students should have their copies of the articles they read, the graphic organizers for “Tracing an Argument,” and the task cards they developed for identifying argument, claims, and evidence. These materials should be organized into the two categories: the Benefits of DDT and Harmful Consequences of DDT. This organization helps them use multiple sources to develop their ideas.

- Today’s Fishbowl discussion provides the opportunity for students to interpret and share the claims and evidence they have identified and documented. Teacher observation, student feedback, and self-reflection all provide opportunities to recognize success and identify areas to strengthen.

- Post: Learning targets
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>resources, cascading, consequences, fishbowl, discussion</td>
<td>• <em>Frightful’s Mountain</em> (book; one per student)</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Map of <em>Frightful’s Mountain</em> setting area (one for display)</td>
</tr>
<tr>
<td></td>
<td>• Peregrine Falcon Facts anchor chart</td>
</tr>
<tr>
<td></td>
<td>• Harmful Consequences of DDT Cascading Consequences chart (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Benefits of DDT Cascading Consequences chart (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Copies of articles: “Welcome Back,” “The Exterminator,” and “Rachel Carson: Sounding the Alarm on Pollution” (from previous lessons; one per student)</td>
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<td></td>
<td>• Tracing an Argument graphic organizers for John Stossel video (from Lesson 3; students’ completed copies)</td>
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<td>• Tracing an Argument graphic organizers for “Double Whammy” from “The Exterminator” (from Lesson 5; students’ completed copies)</td>
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<td>• Tracing an Argument graphic organizers for “Public Fear” from “The Exterminator” (from Lesson 7; students’ completed copies)</td>
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<td>• Sidebar task cards for “ Seriously Sick” from “The Exterminator” (from Lesson 6; students’ completed copies)</td>
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<td>• Sidebar task cards for “ Killer Genes” from “The Exterminator” (from Lesson 6; students’ completed copies).</td>
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<td></td>
<td>• Fishbowl Assessment (from Lesson 9; one per student)</td>
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<td>• Fishbowl Feedback sheets (one per student)</td>
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<td>• Exit Ticket: Fishbowl Successes and Fishbowl Goals (one per student)</td>
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<td></td>
<td>• Learning from Frightful’s Perspective: Chapter 10 (one per student)</td>
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<tr>
<td>Opening</td>
<td>Meeting Students’ Needs</td>
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<tr>
<td><strong>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</strong></td>
<td>• Set clear expectations that students read along with you. Hearing the text read and reading the learning targets will build fluency.</td>
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<tr>
<td>• Be sure students have their text, <em>Frightful’s Mountain</em>. Invite students to join their triads to share their responses to the focus question for Chapter 9.</td>
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<tr>
<td>• As students share where Frightful built her aerie, ask students to consider:</td>
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<tr>
<td>* “Where might that decision fit on your Cascading Consequences chart about Sam and Frightful?”</td>
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<tr>
<td>• The second part of the focus question asks students to identify two things that are happening at Frightful’s new home. One is that Frightful has just laid an egg. The other is that workers are about to begin repair on the bridge where Frightful is nesting. Tell students to use evidence from the last part of the chapter as they each share what they identified. Ask them to consider where those events might fit on their Cascading Consequences chart.</td>
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<tr>
<td>• Encourage students to consider Frightful’s survival and the interactions with people.</td>
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<tr>
<td>• Ask students to share one of the words they added to their “Words I Found Difficult” with their triad (including the page number where the word is in the text). Encourage triads to collaborate and use context clues to determine the meaning of the words, and then add definitions to the Chapter 9 “Words I Found Difficult.”</td>
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<tr>
<td>• Circulate to observe students’ shared responses and written responses. Make note of students who begin work easily and collaborate with triad members and those who may need support.</td>
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<tr>
<td>• Ask students to stop where they are with their responses. Cold call on a few students to share responses with evidence to the focus question with the whole group. Use the document camera to show students a map of Frightful Mountain’s setting area in New York State where Sam and Frightful live. Point out the West Delaware River where Frightful has built her aerie. Point out the Schoharie River where Chup nests. Show the connection of those rivers to the Hudson River where several nesting peregrine falcons have built their aeries on the bridges of that river.</td>
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<tr>
<td>• Ask students to think about the interaction of those birds with the people of New York. Invite students to consider if there are benefits to the birds, people, and the environment.</td>
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<tr>
<td>• As students continue with <em>Frightful’s Mountain</em>, the challenges of balancing human needs and the needs of living things in the natural environment become evident. These same issues are important as students begin looking more closely at the use of DDT. Using Cascading Consequence charts are valuable ways to use new information to help with making decisions.</td>
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<tr>
<td>• Consider adding a copy of the map to the Peregrine Falcon Facts anchor chart.</td>
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</table>
B. Unpacking Learning Targets (2 minutes)

- Read the learning targets aloud as the students read aloud with you:
  * “I can use multiple resources to create a Cascading Consequences chart about the use of DDT.”
  * “I can practice the skills and expectations for a Fishbowl discussion.”

- Ask students to Think-Pair-Share:
  * “What words seem most important in these targets?”

- Ask a few students to share. Focus on the words:
  - discussion—the act of talking about something with another person or a group of people: a conversation about something
  - fishbowl—a place or condition in which there is no privacy
  - resources—places or things that provide something useful
  - cascading—things that happen in a series or in stages and they affect the outcome or result
  - consequences—things that happen as a result of particular actions or set of conditions

- Explain that they have been using different resources including videos, articles, and maps to learn about both benefits and consequences of DDT. Tell students as they use the information they have learned, it is helpful to organize and sort that knowledge to see what the results or consequences might be. Using a Cascading Consequences chart is a good way to assess the use of DDT.
A. Creating Cascading Consequences Charts: Using Multiple Resources about DDT (20 minutes)

• Tell students that today they will begin creating a Cascading Consequences chart about the use of DDT.

• Distribute or instruct students to take out their materials from previous lessons:
  – “Welcome Back”
  – “The Exterminator”
  – “Rachel Carson: Sounding the Alarm on Pollution”
  – Tracing the Argument graphic organizers for the John Stossel video, as well as for “Double Whammy” and “Public Fear” (both from “The Exterminator”)
  – Sidebar task cards for “Seriously Sick” from “The Exterminator”
  – Sidebar task cards for “Killer Genes” from “The Exterminator”

• Distribute two charts to each student: Benefits of DDT Cascading Consequences chart and the Harmful Consequences of DDT Cascading Consequences chart.

• Explain that students should sort the articles, graphic organizers, and sidebar task cards so that some will go with the “Benefits of DDT” and others will go with the “Harmful Consequences of DDT.” Each Cascading Consequence chart lists the appropriate documents.

• Tell students that the video “DDT—dichloro-diphenyl-trichloroethane” (which they watched as part of the mid-unit 1 assessment) has information that can be added to the Harmful Consequences of DDT Cascading Consequences chart.

• Ask students to add to their chart as you model how to create a Cascading Consequences chart.

• Use a document camera or a board to model how to add information to the Harmful Consequences of DDT Cascading Consequences chart.

• Tell students you will use the video, “DDT—dichloro-diphenyl-trichloroethane,” that the students watched and used in the mid-unit assessment to identify claims and evidence. Begin to show the video: http://www.science.gc.ca/default.asp?lang=en&n=730d78b4-1
**Work Time (continued)**

- Pause the video at the end of a claim supported by evidence. (For example, the speaker expresses a claim that DDT is “harmful to all kinds of creatures”). Then he adds evidence such as: “Birds at the top of the food chain are harmed the most,” “DDT makes their eggshells thinner,” and “no young are produced.”

- Tell students to watch carefully as you continue the video. Pause after another claim and evidence. Ask students what claim and evidence they noticed. For example, the speaker explains (or “claims”) that “DDT stays in the environment for a long time.”

- Demonstrate how to add this cascading information to the Cascading Consequences chart. Tell students to add a claim to their chart as you model. Draw an arrow from the “Harmful Consequences of DDT” square and add this to a new square. Then draw an arrow from this new square to add evidence such as “stays in water for 150 years” and it “builds up in the tissue of animals,” and this is “called “bio-accumulation or bio-magnification.” Demonstrate how to add arrows from the claim to the evidence and from that evidence to the next evidence that supports that claim.

- Invite students to work in their triads to find and add additional information to the “Harmful Consequences of DDT” chart.

- Explain that they will use other resources, the “Welcome Back” and “Rachel Carson: Sounding the Alarm on Pollution” articles, to look for additional information. Tell students that they should have at least three claims that support the position that using DDT has harmful consequences. Explain that they should have at least two pieces of evidence that cascades from or supports each claim. Allow students about 5 minutes to develop the Harmful Consequences of DDT Cascading Consequences chart.

- Ask students to switch to the Benefits of DDT Cascading Consequences chart. Ask them to locate the articles, graphic organizers, and task cards that are listed on that chart. Explain that they will use those resources to look for and add claims and evidence that supports the use of DDT. Tell students that information should be placed on the diagram in a way that shows cascading information, or claims and evidence that happens in stages to cause an outcome.

- Instruct students to include at least three different claims with at least two pieces of evidence to support each claim.

- Remind students to label each square with the resources the information came from. This documentation will be important for the Fishbowl discussion that will take place as their end of unit 1 assessment.

- Circulate and support students as they look for claims and evidence that supports the use of DDT. Watch for students to see if they are using circles, squares, and arrows that indicate a series or stages of related evidence that cascades toward an outcome or consequence. Look for patterns or diagrams that may need to be clarified.

**Meeting Students’ Needs**
### Work Time (continued)

- Ask students to stop their work on the Cascading Consequences chart. Explain that they will now use the information they have diagrammed on their charts to discuss the benefits and harmful consequences of DDT.

### B. Fishbowl Discussion: Cascading Consequences Chart about DDT (10 minutes)

- Tell students that in a moment, each triad will partner with another triad in order to have a brief Fishbowl discussion. Ask them to be sure to bring all of their materials with them: their Benefits of DDT Cascading Consequence chart plus the resources they used to develop that, as well as the Harmful Consequences of DDT Cascading Consequences chart and the resources they use to develop that.

- Invite each triad to join another triad. Ask one triad to begin as “1’s” in the inner circle; the other triad will be “2’s” in the outer circle. Explain that students in the inner circle and students in the outer circle have important roles.

- Distribute the Fishbowl Assessment (from Lesson 9.) Invite students to look at the checklist. Explain that the students starting in the inner circle will discuss a question. They will use specific claims and evidence from their Cascading Consequences chart and they will refer to the resources in their discussion. The outer circle will listen, observe, and give feedback to their partners. The checklist will help students in both the inner and outer circle develop skills for good discussions with shared evidence.

- Explain that everyone will participate in both the inner and outer circle. The “1’s” who are starting in the inner circle will discuss the benefits of DDT. Later, the “2’s” will be in the inner circle to discuss the harmful consequences of DDT. Each group will use their Cascading Consequences chart and the other resources. The goal or purpose of the discussion is to learn how to participate in a Fishbowl discussion and to increase their understanding about DDT and its benefits and consequences.

- Explain that each group will have 3 minutes to discuss and 1 minute to receive feedback from their outer circle partner. The outer circle partner will help the inner circle partner set two goals to work on. Tell students that the first guided question is: “What are the benefits of DDT?”

- Direct students to change places so the outer circle students will become the inner circle. Tell students the next guided question is: “What are harmful consequences caused by using DDT?” Invite the inner circle students to begin their discussion while the outer circle students will listen and record feedback for their partners on Fishbowl feedback sheets.

- Circulate and observe as Fishbowl groups discuss. Watch for strengths and areas to work on.
### Work Time (continued)

<table>
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<tr>
<td>• Compliment students on their successes. Offer suggestions for goals to work on.</td>
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<tr>
<td>• Invite students to organize their Cascading Consequences charts and resources into the benefits group and the harmful consequences group. Explain that they will be using new resources to add more information to the Cascading Consequences charts in the next lesson.</td>
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### Closing and Assessment

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<tr>
<td><strong>A. Exit Ticket (5 minutes)</strong></td>
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<tr>
<td>• Distribute the <strong>Exit Ticket: Fishbowl Successes and Fishbowl Goals</strong>. Ask students to write two things they did well and two things they would like to become stronger at in their discussion.</td>
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<td>• Collect students’ exit tickets to help you gauge which students might need more support during future discussions.</td>
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### Homework

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<tr>
<td>• Read Chapter 10: “There Are Eggs and Trouble.” Complete <strong>Learning from Frightful’s Perspective: Chapter 10</strong>.</td>
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</table>
Harmful Consequences of DDT Cascading Consequences Chart

Name:
Date:

Resources:
Articles: “Welcome Back” (EX)
Videos: “DDT”

Harmful consequences of DDT

DDT makes their eggshells thinner (V-DDT)

Harmful to all kinds of creatures (V-DDT)
Benefits of DDT Cascading Consequences Chart

Name:

Date:

Resources:
Article: “The Exterminator” (EX)
Video: John Stossel video (V-JS)
Fishbowl Feedback

Name: ____________________________
Partner’s Name: ____________________
Date: ______________________________

_____ Well prepared with Cascading Consequences charts and resources

_____ Made comments using claims and evidence from the resources

_____ Used good eye contact and good voice level

_____ Asked questions or encouraged others to speak
Exit Ticket:
Fishbowl Successes and Fishbowl Goals

Name: 

Date: 

Think about what you did well in the Fishbowl discussion. Write two things that were successful.

Think about what you would like to improve for your participation in the Fishbowl discussion. Write two goals that you would like to work on.
**Focus Question:** Frightful lays three eggs in her nest on the Delhi bridge. Explain how she and 426 care for their eggs. Later, in Chapter 10, human impact threatens Frightful and her eggs. Describe what threatens Frightful’s eggs and how Sam helps Frightful through this challenge.

### My Thoughts:

### Evidence from the Text:

- **Chapter 10:** “There Are Eggs and Trouble”

### Words I Found Difficult:

- *chalazas*: noun: either of two spiral bands in the white of a bird’s egg that extend from the yolk and attach to opposite ends of the lining membrane
- *albumen*: noun: the white of an egg
- *clutch*: noun: the act of grasping, holding, or restraining
- *trance*: noun: the state of being lost in thought
- *conservation*: noun: careful preservation and protection of something; especially planned management of a natural resource to prevent exploitation, destruction, or neglect
Grade 6: Module 4: Unit 1: Lesson 11
Interpreting, Integrating, and Sharing Information: Using Charts and Graphs about DDT
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can interpret information presented in different media and formats. (SL.6.2)
I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)

### Supporting Learning Targets

- I can interpret information in charts and graphs about DDT.
- I can integrate information from charts and graphs to grow my understanding of DDT.
- I can share information I learned from charts and graphs in a small group discussion.

### Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 10 (from homework)
- Interpreting Charts and Graphs graphic organizer
- Benefits of DDT Cascading Consequences chart (from Lesson 10)
- Harmful Consequences of DDT Cascading Consequences chart (from Lesson 10)
## Agenda

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<th>Teaching Notes</th>
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| 1. Opening | - This lesson builds on Lesson 10. Students integrate information from different media and formats. They will interpret charts, graphs, tables, and diagrams and add to their DDT Cascading Consequences charts.  
- In advance: Prepare two Interpreting Charts and Graphs anchor charts. These anchor charts should look identical to the Interpreting Charts and Graphs graphic organizer (see supporting materials.) Be prepared to fill out this anchor chart during the lesson for students to see the thinking behind and the process of completing this organizer.  
- Set up six stations for graphs, charts, tables, and diagrams. At each station, place four copies of each text. This allows students the freedom to choose from multiple materials in a limited amount of time. See supporting materials and Work Time B for details.  
- Post: Learning targets. |
|   |   |
| 2. Work Time |   |
| A. Interpreting Charts and Graphs to Grow Understanding: Mini Lesson (10 minutes) |   |
| B. Jigsaw: Interpreting Charts and Graphs to Grow |   |
| 3. Closing and Assessment |   |
| A. Debrief: How Did the Graphic Organizer Help You Understand and Share the Information on the Charts, Graphs, Tables, and Maps? (3 minutes) |   |
| 4. Homework |   |
| A. Read Chapter 11, “The Kids Are Heard.” Complete Learning from Frightful’s Perspective: Chapter 11 |   |
### Lesson Vocabulary
- interpret, integrate, chart, graph, diagram, table

### Materials
- *Frightful’s Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart
- Interpreting Charts and Graphs graphic organizer (four per student)
- Interpreting Charts and Graphs anchor chart (two models; teacher-created)
- Increases in Malaria for Countries in South America, 1993–1995 (bar graph) (24 copies total; four copies at each of the six stations)
- DDT in Human Body Fat in United States (table) (24 copies total; four copies at each of the six stations)
- Document camera
- Harmful Consequences of DDT Cascading Consequences chart (from Lesson 10)
- Benefits of DDT Cascading Consequences chart (from Lesson 10)
- DDT Bad, Malaria Much Worse (World Map) (24 copies total; four copies at each of the six stations)
- Malaria Trends in South Africa (bar graph) (24 copies total; four copies at each of the six stations)
- DDT and Malaria in Ceylon (graph) (24 copies total; four copies at each of the six stations)
- Bio Magnification in Lake Kariba, Africa (diagram) (24 copies total; four copies at each of the six stations)
- Changes in the Thickness of Eggshells (graph) (24 copies total; four copies at each of the six stations)
- DDT in Breast Milk (line graph) (24 copies total; four copies at each of the six stations)
- Learning from Frightful’s Perspective: Chapter 11 (one per student)
### Opening

**A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)**

- Make sure students have their texts, *Frightful’s Mountain*. Compliment students for quickly getting into their triads as they come into the room. Invite them to share their responses to the focus question for Chapter 10: “There Are Eggs and Trouble.” Students should cite evidence from the text as they share how Frightful and 426 care for their eggs and how Sam helps Frightful.

- Ask students to share terminology they found and added to “Words I Found Difficult.” Triad members should collaborate to determine the meaning of the words and add definitions to “Words I Found Difficult.”

- Circulate to observe students’ verbal and written responses. Compliment triads who are collaborating with each other sharing evidence-based responses and determining meaning of new words. Interact with students who need support. Model strategies for sharing responses and defining words.

- Invite triads to share their responses to the focus question. Ask students what information about how Frightful and 426 care for their eggs could be added to the *Peregrine Falcon Facts anchor chart*. Suggest that students look at the glossary on Learning from Frightful’s Perspective if they need ideas.

**B. Unpacking Learning Targets (2 minutes)**

- Invite students to read the learning targets aloud with you:
  - “I can interpret information in charts and graphs about DDT.”
  - “I can integrate information from charts and graph to grow my understanding of DDT.”
  - “I can share information I learned from charts and graphs in a small group discussion.”

- Ask:
  - “After reading the learning targets, what do you think we will be doing in class today?”

- Listen for: “We will be interpreting charts and graphs and integrating the information.”

- Share that *interpreting* means to explain or tell the meaning of something, and in today’s lesson they will explain the meaning of charts and graphs. Share that *integrating* means blending into a larger unit. Explain that students will add or blend the new information learned from the charts and graphs to their two Cascading Consequences charts.

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A. Interpreting Charts and Graphs to Grow Understanding: Mini Lesson (10 minutes)

- Distribute four *Interpreting Charts and Graphs graphic organizers* to each student. Post both models of the *Interpreting Charts and Graphs anchor chart* for the entire class to see. Also, distribute to each student one bar graph titled *Increases in Malaria for Countries in South America, 1993–1995* and one table titled *DDT in Human Body Fat in United States*.

- Invite students to title one of their graphic organizers “Human Body Fat in United States” (table). Model writing the title on the Interpreting Charts and Graphs anchor chart.

- Ask students to read the information in the rows and columns of the *table*. Ask them to interpret the information with their triads. Say:
  * “What is the graph telling the reader?”

- Listen for: “DDT levels in human body fat appear to be increasing from 1942 to 1970. DDT levels increased from 0 to 11.6 PPM, mg/g fat. After this date, the DDT levels decrease from 9.2 PPM, mg/g fat in 1972 to 4.8 PPM, mg/g fat in 1978.”

- Use a *document camera* or board to model writing this response on the anchor chart. Tell students to write responses on their graphic organizer.

- Ask students to discuss:
  * “Where does it take place? Who is affected? When did it happen?”

- Circulate and support students. Encourage some students to reread information on the graph. Provide questions to guide their responses.

- Listen for: “It takes place in the United States. Americans are affected. DDT increased from 1942 to 1970. DDT decreased from 1970 to 1978.”

- Use a document camera to model writing these responses on the anchor chart. Students should also write responses on their graphic organizer.

- Ask students to consider the last two questions with their triads:
  * “Using DDT caused what to happen?”
  * “Not using DDT caused what to happen?”

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Meeting Students’ Needs

- Consider posting directions where all students can see them to support students who have difficulty tracking multistep directions.

- Consider giving some students a modified version of the *Interpreting Charts and Graphs graphic organizer*. This allows students more time to interpret the charts, graphs, maps, and diagrams.
### Work Time (continued)

- Listen for: “Using DDT caused levels of insecticide to build up in human body fat. DDT levels were 0 in 1942 and steadily increased to 11.6 PPM, mg/g fat in 1972. Not using DDT caused no buildup of the DDT insecticide in human body fat.”

- Explain to students that only one of the next two questions—“What are the benefits?” and “What are the harmful consequences?”—should be completed.

- Cold call students:
  * “Which question represents information from the graph and should be completed?”

- Listen for: “The harmful consequences question should be completed. DDT levels appeared in human body fat when used in the United States. In 1942, DDT did not appear, however, after DDT was sprayed, it increased to 11.6 PPM, mg/g fat in 1972.”

- Use a document camera to model writing the response on the anchor chart. Ask students to write responses on their graphic organizer.

- Explain to students the responses just written can now be transferred to their **Harmful Consequences of DDT Cascading Consequences chart** as evidence. Remind them to cite that the evidence was taken from a table. Pause to give students time.

- Next, tell students they will interpret a graph and complete another Interpreting Graphs and Charts graphic organizer in their triads.

- Invite students to write the title “Increases in Malaria for Countries in South America, 1993–1995 (bar graph)” on another graphic organizer.

- Ask triads to interpret the information on the bar graph, and write their responses to the four questions in the rectangles. Remind them to read all titles carefully, to look at the numbering on the y-axis, and to read the titles of the categories on the y-axis. Give students time to work together.

- Circulate and encourage some students to carefully read all of the information on the bar graph. Provide guided questions to help students with their thinking.

- Reconvene the class. Cold call triads for responses to the four questions.
## Work Time (continued)

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<td>• Listen for: “The graph is showing malaria increased from 1993 to 1995 because DDT was not used. In Guyana, it increased 78%; in Bolivia, Paraguay, and Peru, it increased 92%; and in Brazil, Colombia, and Venezuela it increased 35% because of some spraying in homes. In Ecuador, there was a decrease of 0% as a result of increased use of DDT after 1993. This takes place in South America. People living in Guyana, Bolivia, Paraguay, Peru, Brazil, Colombia, Venezuela, and Ecuador were affected. It happened from 1993 to 1995.”</td>
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<tr>
<td>• Use a document camera to model writing the responses to these four questions on the anchor chart. Ask students to complete their graphic organizer as you fill in the anchor chart.</td>
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<tr>
<td>• Cold call students, asking which one of the next two questions “What are the benefits?” and “What are the harmful consequences?” should be completed.</td>
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<tr>
<td>• Listen for: “We should add this information to ‘What are the benefits?’”</td>
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<tr>
<td>• Use a document camera to model writing: “Malaria increased in South American countries from 1993 to 1995. It increased from 35% to 78% in some countries.”</td>
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<td>• Explain to students the evidence or new information just written can be transferred to their <strong>Benefits of DDT Cascading Consequences chart.</strong></td>
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<tr>
<td>• Use a document camera to model drawing an arrow from the center rectangle “Benefits of DDT.” Write “Increases in Malaria occurred in South America from 1993 to 1995 when DDT was not used. Malaria increased from 33% to 78% in some countries.” Draw a rectangle around this added information. Cite evidence as bar graph.</td>
</tr>
<tr>
<td>• Congratulate students for their focus and hard work interpreting tables and bar graphs. Explain as information is added to the Cascading Consequences charts, it provides evidence to help make informed decisions about the use of DDT in countries around the world.</td>
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**B. Jigsaw: Interpreting Charts and Graphs to Grow Understanding about DDT (22 minutes)**

- Tell student triads they will now be given two opportunities to interpret information from a graph, a world map, or a diagram. Ask them to first complete an Interpreting Charts and Graphs graphic organizer for each. Second, remind them to integrate, or add, the new information, or evidence to their Cascading Consequences charts. Third, remind them to cite their evidence as a graph, diagram, or world map. Finally, say they will share the new evidence with their triads.

- Explain to students they will have 10 minutes to fill out the organizer and transfer the evidence to the appropriate Cascading Consequence chart.

- Number students in the triads 1, 2, and 3. Point out the six stations where the **charts and graphs** are located. Tell 1’s they will go to Stations A and B. Tell students numbered 2’s they will go to Stations C and D. Tell 3’s they will go to Stations E and F. Give students 10 minutes to work at the stations.

- Circulate to listen in and support students that need help interpreting. Ask some students to read the titles to you. Ask clarifying questions about the topic. Remind students to integrate this information in one of their Cascading Consequences charts and cite evidence.

- Reconvene the triads after 10 minutes.

- Invite students to jigsaw the information with their group members. Direct 1’s to begin by reading one of the consequences, or pieces of evidence, integrated into one of the Cascading Consequences charts and share where the evidence was found.

- Tell group members to add the evidence, or new information, to their Cascading Consequences charts. Evidence should be cited as world map, chart, diagram, or graph. When everyone has shared one, ask students to each share their second consequence. Again, as students share, group members add the evidence or new information to the appropriate Cascading Consequence chart and cite where the evidence was found.

- Ask the students to do a final check that each consequence has an arrow joining it to another consequence or joining it to the center rectangle. Remind them to draw a rectangle around the new evidence. Ask them to check that evidence was cited for each consequence via a bar graph, line graph, diagram, table, or world map.

- Congratulate students for working together cooperatively and for their focus. Eight consequences with new information from charts and graphs should have been added to their Cascading Consequences charts. Each piece of evidence should document where the information was found.
## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Understand and Share Information on Charts, Graphs, Tables, and Maps? (3 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ask triads to share:</td>
</tr>
<tr>
<td>* “How did the graphic organizer help you interpret and integrate information in the Cascading Consequences charts?”</td>
</tr>
<tr>
<td>* “When sharing new information from charts and graphs, what is important to remember?”</td>
</tr>
<tr>
<td>* “What was the greatest challenge of interpreting, integrating, and sharing the evidence”</td>
</tr>
</tbody>
</table>

## Meeting Students’ Needs

### Closing and Assessment

- Ask triads to share:
  - “How did the graphic organizer help you interpret and integrate information in the Cascading Consequences charts?”
  - “When sharing new information from charts and graphs, what is important to remember?”
  - “What was the greatest challenge of interpreting, integrating, and sharing the evidence”

### Homework

- Read Chapter 11, “The Kids Are Heard.” Complete *Learning from Frightful’s Perspective: Chapter 11.*
**Issue: Do the Benefits of DDT Outweigh the Consequences?**

**Graph/Chart/Map Title:**

<table>
<thead>
<tr>
<th>What is the graph telling the reader?</th>
<th>Where does it take place?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who is affected?</th>
<th>When did it happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Interpreting Charts and Graphs

Using DDT caused

Not using DDT caused

<table>
<thead>
<tr>
<th>What are the benefits?:</th>
<th>What are the harmful consequences?:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DDT in Human Body Fat in United States

Table 25.2. Average levels of DDT in human body fat for individuals living in the United States, 1942–1978 (PPM, mg/g fat).

<table>
<thead>
<tr>
<th>Year</th>
<th>DDT level</th>
<th>Year</th>
<th>DDT level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1942</td>
<td>0</td>
<td>1970</td>
<td>11.6</td>
</tr>
<tr>
<td>1950</td>
<td>5.3</td>
<td>1972</td>
<td>9.2</td>
</tr>
<tr>
<td>1961–62</td>
<td>12.6</td>
<td>1976</td>
<td>5.5</td>
</tr>
<tr>
<td>1962–63</td>
<td>10.3</td>
<td>1978</td>
<td>4.8</td>
</tr>
<tr>
<td>1968</td>
<td>12.5</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

FIGURE 1
Increases in Malaria for Countries in South America, 1993-1995
(Percent Increase in Numbers of Malaria Cases)

Source: Adapted from D. Roberts et al., Emerging Infectious Diseases, July-September 1997, p. 300.
DDT Bad, Malaria much worse
Monday, September 24, 2007

Malaria Trends in South Africa

http://origin-ars.els-cdn.com/content/image/1-s2.0-S0048969712004767-gr1.jpg
Bio magnification in Lake Kariba, Africa

Figure 25.5. Changes in the thickness of eggshells of the peregrine falcon in Britain. The arrow shows when DDT first came into widespread use.
Sweden has excellent data from breast milk monitoring studies spanning more than 30 years. DDT levels in breast milk continuously declined from 1967 through 1997. The use of DDT was severely restricted in Sweden in 1970 and completely banned in 1975. **Figure 1** shows the marked decrease in the average concentrations of DDT found in Swedish women’s breast milk.

**Figure 1**

![Graph showing the decrease in DDT levels in breast milk from 1965 to 2000 in Sweden.](image)
Germany has also witnessed a rapid decline in average concentrations of DDT in breast milk. Between 1969 and 1995, detectable residue levels decreased 81 percent. DDT was banned in Germany in 1972. However, trend data in Germany is difficult to assess on a national basis because East and West Germany had different use patterns before reunification. Figure 2 shows the declining trend of DDT residues in the former West Germany. The decline has been similar in the former eastern state, but the data are far less complete. In addition, the average concentrations in East Germany were much higher during the 1970s, with the highest detected residue levels (~11,500 µg/kg DDT in milk fat) recorded in Greifswald, East Germany, in 1971.

**Figure 2**

Focus Question: Efforts are being made by the kids in Delhi to stop bridge construction while Frightful and 426’s eggs hatch. Use evidence from Chapter 11 to describe at least three things the kids are doing to get people’s attention to help Frightful and 426.

Evidence from the Text:

My Thoughts:

Words I Found Difficult:

Glossary:

- embryos—noun: humans or animals in the early stages of development before they are born or hatched
- protesters—noun: people who show or express strong disagreement with or disapproval of something
- detour—noun: the act of going or traveling to a place along a way that is different from the usual or planned way
- hatching—verb: coming out of an egg; being born by coming out of an egg
Grade 6: Module 4: Unit 1: Lesson 12
Interpreting, Integrating, and Sharing Information about DDT: Using Cascading Consequences and Fishbowl Protocol
## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can interpret information presented in different media and formats. (SL.6.2)  
I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)

## Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can interpret information from cascading consequences about the use of DDT.</td>
<td></td>
</tr>
<tr>
<td>• I can integrate information from cascading consequences to grow my understanding of DDT.</td>
<td></td>
</tr>
<tr>
<td>• I can describe the expectations for a Fishbowl discussion.</td>
<td>• Learning from Frightful’s Perspective: Chapter 11 (from homework)</td>
</tr>
<tr>
<td></td>
<td>• Interpretation of Benefits of DDT and Harmful Effects of DDT Cascading Consequences charts</td>
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<tr>
<td></td>
<td>• Fishbowl note-catcher</td>
</tr>
</tbody>
</table>
# Agenda

<table>
<thead>
<tr>
<th>Teaching Notes</th>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• At the end of the opening, collect students’ Learning from Frightful’s Perspective graphic organizers. Review students’ responses to the focus questions and the vocabulary terms they have provided as an opportunity to notice what students are doing well and where they need support. Responding to the focus questions by using evidence becomes increasingly important as students do research in Unit 2.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</td>
<td>• This lesson continues the series of lessons scaffolding students toward using arguments, claims, and evidence found in different resources to develop Cascading Consequences charts and sharing their knowledge in a Fishbowl discussion.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>• This lesson helps students refine and interpret their Cascading Consequences charts as they prepare to discuss and advocate persuasively the benefits and harmful effects of DDT using the Fishbowl protocol.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• This lesson also gives students a chance to observe a Fishbowl protocol and to prepare for their participation in a Fishbowl discussion.</td>
</tr>
<tr>
<td>A. Interpreting Cascading Consequences Charts (15 minutes)</td>
<td>• Students work with many materials during the Fishbowl. Consider options for organizing Cascading Consequences charts, resources, and materials: folders, binders, etc.</td>
</tr>
<tr>
<td>B. Preparing for a Fishbowl Discussion (15 minutes)</td>
<td>• Because this is the first time students are engaging in this type of assessment, consider posting a Fishbowl protocol anchor chart (see supporting materials). This helps students follow the process.</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>• During this lesson, students revisit the same video of a Fishbowl discussion that they watched in Lesson 9. In Lesson 9, the purpose was simply to get oriented to the structure of a Fishbowl discussion. Now students watch the video again to focus on specific standards, such as use of materials, eye contact, voice level, etc.</td>
</tr>
<tr>
<td>A. Organizing Materials (5 minutes)</td>
<td>• Post: Learning targets.</td>
</tr>
<tr>
<td>4. Homework</td>
<td>-</td>
</tr>
</tbody>
</table>
Lesson Vocabulary | Materials
--- | ---
interpret, integrate; embryos (125), protesters (132), detour (134), hatching (135) | • *Frightful’s Mountain* (book; one per student)
• Equity sticks
• Document camera
• Links to images of bowstring bridges
• Benefits of DDT Cascading Consequences chart (from previous lessons)
• Harmful Effects of DDT Cascading Consequences chart (from previous lessons)
• Resource Reference sheet: Benefits of DDT Cascading Consequences chart (one per student)
• Resource Reference sheet: Harmful Effects of DDT Cascading Consequences chart (one per student)
• Fishbowl note-catcher (one per student)
• Fishbowl Assessment (one per student)
• Fishbowl Discussion Partner Scoring Log (from Lesson 9; one new blank copy per student)
• Fishbowl Discussion Protocol anchor chart (new; teacher-created; for teacher reference)
• Articles; Tracing an Argument graphic organizers; sidebar task cards; Interpreting Charts and Graphs graphic organizer (students’ copies from previous lessons)
**Opening**

A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)

- Be sure students have their text, Frightful’s Mountain. Invite students to join their triads to share their responses to the focus question for Chapter 11: “The Kids Are Heard.” Remind students that earlier in the book, the school kids learned about peregrine falcons when Jon and Susan brought Frightful and other birds to their school. At that time, Frightful was called Destiny. Many students wrote letters to the utility companies asking for changes to protect birds from electric shock. The kids are now in a position to protect Frightful as she nests on the iron bowstring bridge. Those students use their knowledge to protest the construction work.

- Invite triad partners to discuss, with evidence from the chapter, how the kids protested to help Frightful.

- Tell students to share one of the words they added to “Words I Found Difficult” with their triads, and then add the words, page numbers, and definitions they determined using context clues, prefixes or suffixes, or resources to their “Words I Found Difficult.”

- Circulate and listen in to gauge students’ understanding as they share their evidence-based responses and their vocabulary. Ask probing questions and offer support as needed.

- Use equity sticks to call on students to share:
  * “Where did Frightful build her aerie?”
  * “Is that decision helpful for Frightful’s survival?”
  * “How does that decision relate to the Cascading Consequences chart ideas about Sam and Frightful?”

- Use a document camera to share images of bowstring bridges:
  - [http://farm4.staticflickr.com/3229/2658472524_06f5ba041d_b.jpg](http://farm4.staticflickr.com/3229/2658472524_06f5ba041d_b.jpg)

- Ask students to identify parts of the bridge that have been described in the book. Invite students to point out parts of the bridge like the horizontal girder, the bowstring, and the vertical web.

- Collect students’ Learning from Frightful’s Perspective: Chapter 11, which they completed for homework. Explain that this will be an opportunity to look closely at their responses to the focus questions and their vocabulary while they are preparing for the Fishbowl discussion.

---

**Meeting Students’ Needs**

- Some students may benefit from identifying one claim and the evidence that supports that claim from each of the Cascading Consequences charts.

- Some students may benefit from having sentence starters to help contribute to discussion, share claims and evidence, and refer to resources.

- Consider partnering ELL students with other students who speak the same language for discussion. This allows them to have more meaningful discussions in their native language.
### Opening (continued)

**B. Unpacking Learning Targets (2 minutes)**

- Focus students’ attention on the learning targets. Read the targets aloud as students quietly read along:
  - “I can interpret information from cascading consequences about the use of DDT.”
  - “I can integrate information from cascading consequences to grow my understanding of DDT.”
  - “I can describe the expectations for a Fishbowl discussion.”
- Ask the students to identify important words in the learning targets. Circle the words *interpret*, *integrate*, and *describe*.
- Explain that this lesson will focus on using information about DDT that they have identified and written on their two Cascading Consequences charts.
- Explain that today they will use that information more deeply. They will *interpret* or explain the information they found in different resources and use it to *integrate* or combine different pieces of information to help form opinions or take positions on a topic. They will *describe* or share what they have learned.

Define *interpret* (v) as a way “to explain the meaning of something.”

Define *integrate* (v) as a way “to combine (two or more things) to form or create something.”

Define *describe* (v) as a way to represent or give an account of something in words.

- Tell students that this is important as they use the knowledge they have acquired about the use of DDT in our world. This helps them decide how to address the issue and persuade others to consider their thoughts as they participate in a Fishbowl discussion.
A. Interpreting Cascading Consequences Charts (15 minutes)

- Focus students on their two charts: Benefits of DDT Cascading Consequences Chart and Harmful Effects of DDT Cascading Consequences chart.

- Explain that the information on the Cascading Consequences charts can be useful for interpreting and integrating claims and evidence for their discussion. Tell students that this information is helpful in developing opinions or ways to speak out about an important viewpoint.

- Use a document camera to model ways to determine if claims, evidence, and resources are cited on each of the Cascading Consequences charts.

- Identify the main topic on each Cascading Consequences chart: Benefits of DDT and Harmful Effects of DDT.

- Ask students to look for claims on each of their charts.

- Use equity sticks to ask students to identify and share a claim they have written. Demonstrate how an arrow should be drawn from the main topic to a claim.

- Invite students to now look for evidence that supports that claim. Continue to use equity sticks, asking students to share evidence they have included and how an arrow should be used to connect that evidence to the claim it supports.

- Encourage students to look at evidence from different resources. Ask if that evidence supports claims from other resources. Tell students to draw arrows to show how evidence from one resource may support a claim from another resource.

- Explain that the resources they have used to find both claims and evidence should be identified on the Cascading Consequences charts.

- Distribute a Resource Reference Sheet: Benefits of DDT Cascading Consequences Chart and Resource Reference Sheet: Harmful Effects of DDT Cascading Consequences chart to each student.

- Continue to use the document camera to demonstrate how the resources can be abbreviated. Briefly model how to identify each claim and evidence with a resource abbreviation. Explain that referring to the resources where information came from is an important part of determining if information is credible.

- Explain that students will now have time to look closely at both of their Benefits of DDT and the Harmful Effects of DDT Cascading Consequences charts. Tell them to look at the claims and evidence they have documented and to add arrows to connect evidence with the claims it supports.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>In addition to drawing arrows, tell students to add resource abbreviations to the claims and evidence expressed in those resources.</td>
</tr>
<tr>
<td>Invite students to work with the person next to them. Explain that they can help each other identify ways to improve their Cascading Consequences charts and practice sharing the information with their partners.</td>
</tr>
<tr>
<td>Circulate and support students as they interpret and document the relationships between the claims and evidence and identify the resources that the information came from. Ask probing questions:</td>
</tr>
<tr>
<td>* “Is this information a claim or evidence?”</td>
</tr>
<tr>
<td>* “Which claim does that evidence support?”</td>
</tr>
<tr>
<td>* “Which resource did you use to find this information?”</td>
</tr>
<tr>
<td>* “How could you share or describe this information?”</td>
</tr>
<tr>
<td>Commend students for their efforts to interpret and integrate the information they have used on their Cascading Consequences charts.</td>
</tr>
<tr>
<td>Remind students that they will use their Cascading Consequences charts to participate in the Fishbowl discussion.</td>
</tr>
</tbody>
</table>
### Work Time (continued)

**B. Interpreting Cascading Consequences Charts (15 minutes)**

1. Tell students that watching a Fishbowl discussion is helpful as they prepare for their participation in both the inner and outer circles of a Fishbowl discussion.

2. Explain that they will watch a video ([http://vimeo.com/54871334](http://vimeo.com/54871334)) of 10th-grade students who use a Fishbowl protocol to discuss a guided question. They will cite evidence from a text they have read and refer to resources where they have found that evidence.

3. Distribute the Fishbowl note-catcher to each student.

4. Use the document camera to model using the Fishbowl note-catcher. Explain that one column is to note the process, or things students do, in both the inner and outer circle. The other column is to note the purpose, or why, they do those things.

5. Tell students to observe what both the inner circle and outer circle students are doing.

6. Pause the video after the first 2 minutes. Direct students to note what materials both the inner- and outer-circle students use. In the purpose section, ask students to explain why those materials were important.

7. Ask students to write notes about the eye contact and voice levels they observed. Tell them to explain how that contributed to the discussion in the purpose section.

8. Explain that the teacher paused the discussion, shared some successes she observed, but she also identified goals that should be worked on.

9. Ask students to reflect on the claims and evidence and share a success they noticed and a goal. Encourage students to note the importance of providing evidence and citing the resources in a Fishbowl discussion.

10. Invite students to observe closely and add notes to the Fishbowl note-catcher as they watch the video. Explain that this helps them prepare for their own participation in the Fishbowl discussion.

11. After the video, distribute copies of the Fishbowl Assessment and the Fishbowl Discussion Partner Scoring Log to each student. Explain that the Fishbowl Assessment is one way the teacher will evaluate their discussion in the inner circle. Encourage students to look carefully at that as they review their materials and prepare for the Fishbowl discussion.

12. Tell students that during the Fishbowl discussion, they will complete the Fishbowl Discussion Partner Scoring Log while they are in the outer circle. They will use this to recognize and share feedback with their inner circle partners. They will also be assessed for the feedback they have recorded.
### Work Time (continued)

- Point out to students the **Fishbowl Discussion Protocol Anchor Chart**. Review the roles of members of the inner and outer circle participants in a fishbowl discussion. Tell them you will leave this chart here to help support them during the assessment.

- Tell students they will now organize the materials they will use for the Fishbowl discussion and include both the Fishbowl Assessment and the Fishbowl Discussion Partner Scoring logs.

### Closing and Assessment

#### A Organizing Materials (5 minutes)

- Explain that the Cascading Consequences charts and materials will be organized into two groups. One group will include the Benefits of DDT Cascading Consequences chart and the resources used to create that chart. The other group will include the Harmful Effects of DDT Cascading Consequences chart and the resources used to create that chart.

- Tell students the resources for each Cascading Consequence chart includes articles, **Tracing an Argument graphic organizers**, **sidebar task cards**, and the **Interpreting Charts and Graphs graphic organizer**.

- Invite students to use the Resource Reference sheets to help determine which resources go with which Cascading Consequences chart. The resources for each Cascading Consequences chart can also be displayed on the document camera as they organize their materials and prepare for their homework review and Fishbowl discussion.

- Tell students that if they are behind on their reading, part of their homework is to finish reading Frightful’s Mountain through Chapter 11 and respond to the focus questions in Learning from Frightful’s Perspective: Chapter 11.

### Homework

- Review materials and prepare for tomorrow’s Fishbowl discussion.

- Make-up opportunity: Read *Frightful’s Mountain* through Chapter 11.
Resource Reference Sheet:
Benefits of DDT Cascading Consequences Chart

Name:

Date:

Resources

Article: “The Exterminator” (EX)
  “Double Whammy” (EX/D.W.)
  “Public Fear” (EX/P.F)
  “Seriously Sick” (EX/S.S.)
  “Killer Genes” (EX/K.G.)

Video:
John Stossel DDT (V-J.S. DDT)

Graphs and Charts (G&C):
  “DDT Bad, Malaria Much Worse”—(world map)
  “Malaria Trends in South Africa”—(graph)
  “Increases in Malaria for South American Countries”—(graph)
  “DDT and Malaria in Ceylon”—(graph)
Resource Reference Sheet:
Harmful Effects of DDT Cascading Consequences Chart

Name: 
Date: 

Resources

Article: “Welcome Back” (W.B.)
  “Rachel Carson: Sounding the Alarm on Pollution” (R.C.)

Video:
“DDT dichloro-diphenyl-trichloroethane” (V-DDT)

Graphs, Tables, Charts, Diagrams, Maps (G&C):
  “Lake Kariba, Africa DDT Levels” (diagram)
  “DDT in Human Body Fat in U.S.” (table)
  “DDT in Breast Milk” (graph)
  “Changes in Thickness of Egg Shells” (graph)
# Fishbowl Note-catcher

**Name:**  

**Date:**  

<table>
<thead>
<tr>
<th>Process</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Identify what inner and outer circle students do.)</td>
<td>(Why is this done?)</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Inner circle:**  

**Outer circle:**  

| Claims and evidence: |  

| Resources: |  

| Voice and eye contact: |  

| Discussion and questions: |  

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NYS Common Core ELA Curriculum • G6:M4:U1:L12 • November 2013 • 13
## Fishbowl Assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asks Questions to Understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Different Perspectives</td>
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<tr>
<td>References Text and Refers to</td>
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<tr>
<td>Evidence</td>
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<tr>
<td>Advocates Persuasively</td>
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<tr>
<td>Responds to Questions with Detail</td>
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<tr>
<td>That Contributes to the Topic</td>
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<table>
<thead>
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### Scoring

- **Consistently Demonstrated**: 2 points
- **Somewhat Demonstrated**: 1 point
- **Not Demonstrated**: 0 points

**Asks Questions to Understand Different Perspectives**

**References Text and Refers to Evidence**

**Advocates Persuasively**

**Responds to Questions with Detail That Contributes to the Topic**

**Total Points**
Fishbowl Discussion Protocol Anchor Chart
For Teacher Reference

Inner-circle students:

1. Think about the focus question of the discussion.
2. Use evidence from your materials to help clarify or support your ideas.
3. Ask questions to understand other students’ perspectives.
4. Respond to questions posed by other students, using evidence and concrete details.

Outer-circle students:

1. Continually pay attention to your discussion partner.
2. Take notes on the questions they ask and the comments they make.
3. Make tally marks for their comments and questions.
4. Give them specific and helpful feedback when appropriate to help them perform better in the discussion.
End of Unit Assessment: Fishbowl Discussion
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can interpret information presented in different media and formats. (SL.6.2)
I can explain how new information connects to a topic, text, or issue I am studying. (SL.6.2)
I can use my experience, knowledge, and understanding of culture to think analytically, address problems creatively, and advocate persuasively. (SL.6.2a)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can interpret information about DDT presented by my peers orally and visually.</td>
<td>• End of Unit 1 Assessment: Fishbowl discussion: DDT: Do the Benefits Outweigh the Consequences?</td>
</tr>
<tr>
<td>• I can explain how new information contributes to my understanding of DDT.</td>
<td>• Fishbowl Discussion Partner Scoring Log</td>
</tr>
<tr>
<td>• I can use my knowledge of DDT to advocate persuasively for one side or another.</td>
<td>• Exit Ticket: Two Stars and One Step</td>
</tr>
</tbody>
</table>
## Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Unpacking Learning Targets (2 minutes)</td>
<td>• For this assessment, smaller groups of students are in the inner circle at any given time, as their classmates observe.</td>
</tr>
<tr>
<td>B. Preparing for the Assessment: Select Inner and Outer Circle Students for Round 1(2 minutes)</td>
<td>• The interactive roles of both the inner and outer circle participants are important in students’ ability to achieve goals and experience success with this assessment. After the first 4 minutes of each Fishbowl discussion, pause for 1 minute so the outer circle partners can share observations, feedback, and goals with their inner circle partners. After the next 4 minutes of the Fishbowl discussion, allow 1 minute for the outer circle partners to give feedback to give closure on the inner circle participant’s contribution to the discussion.</td>
</tr>
<tr>
<td>Work Time</td>
<td></td>
</tr>
<tr>
<td>A. End of Unit 1 Assessment: Fishbowl Discussion: Do the Benefits of DDT Outweigh the Consequences? (36 minutes: 10 minutes for each inner-circle discussion, 2 minutes for each transition)</td>
<td>• In between each round, allow 2 minutes for inner circle students and outer circle students to exchange places.</td>
</tr>
<tr>
<td>C. Exit Ticket: Two Stars and One Step (5 minutes)</td>
<td>• Keep students on their toes! In order for outer circle students not to know which discussion group will go next, consider selecting the students who were counted off as number 3 to be the second inner circle group.</td>
</tr>
<tr>
<td>Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read Chapter 12: “There are Three.” Complete Learning from Frightful’s Perspective: Chapter 12.</td>
<td>• As inner circle students are determined, add those names to the Fishbowl Assessments.</td>
</tr>
<tr>
<td></td>
<td>• Review: Fishbowl Discussion protocol (Appendix).</td>
</tr>
<tr>
<td></td>
<td>• Post: Learning targets.</td>
</tr>
</tbody>
</table>
# Lesson Vocabulary

- interpret, advocate, persuasively, peers, orally, visually

# Materials

- Document camera
- *Frightful's Mountain* (book; one per student)
- Resource Reference sheet (from Lesson 12)
- Benefits of DDT Cascading Consequences chart and Harmful Effects of DDT Cascading Consequences chart (from previous lessons)
- Articles; Tracing an Argument graphic organizers; sidebar task cards; Interpreting Charts and Graphs graphic organizer (students’ copies from previous lessons)
- Fishbowl Discussion Partner Scoring Log (from Lesson 9; two new blank copies per student)
- End of Unit 1 Assessment—Fishbowl Discussion: DDT: Do the Benefits Outweigh the Consequences? (three copies for the teacher; one for each inner circle group)
- Exit Ticket: Two Stars and One Step (one per student)
- Learning from Frightful’s Perspective: Chapter 12 (one per student)
### Opening

**A. Unpacking Learning Targets (2 minutes)**

- “I can interpret information about DDT presented by my peers orally and visually.”
- “I can explain how new information contributes to my understanding of DDT.”
- “I can use my knowledge of DDT to advocate persuasively for one side or another.”

- Ask students to stand in a circle as they unpack the learning targets.
- Use a **document camera** to display the learning targets. Read aloud while students quietly read along.
- Make sure students have their text, *Frightful’s Mountain*.
- Remind students that they have been on a journey to learn about DDT and to use that knowledge to contemplate if the benefits of DDT outweigh the harmful consequences.
- Invite students to think about Rachel Carson’s quote:
  
  “In nature nothing exists alone.”

- Encourage students to consider living things such as peregrine falcons, children battling malaria, people struggling with poverty, insects, farmers. As all living things in the world move forward, it is important to learn, discuss, and question.

### Meeting Students’ Needs

- Some students may benefit from different assessment opportunities to share the claims and evidence they have documented on their Cascading Consequences charts.
- When Fishbowl discussion is required, consider partnering ELL students who speak the same home language. This allows students to have more meaningful discussions and clarify points in their native language.
### B. Preparing for the Assessment: Select Inner and Outer Circle Students for Round 1 (2 minutes)

- While students are standing in the circle, ask them to count off as 1’s, 2’s and 3’s. Inform 1’s that they will be in the inner circle; 2’s and 3’s will be the outer circle for the first Fishbowl discussion.

- Direct 1’s to take a seat in the inner circle. Ask 2’s and 3’s to sit in the outer circle in the order of 2, 3, 2, 3 ... When the outer circle students are seated, ask them to move two seats to the left or the right. Explain that each inner circle student will be partnered with both a 2 and a 3 outer circle student.

- Explain that there will be three Fishbowl discussions. All students will have the opportunity to discuss in the inner circle. All students will also participate in the outer circle and have the opportunity to listen, learn, and provide feedback to their inner circle partners.

- Tell students that each Fishbowl discussion will take 10 minutes. Explain the discussion will pause midway so outer circle partners can provide feedback to their inner circle partner for 1 minute. That feedback will include recognition of something that is being done well and steps to take in the next part of the discussion. When the discussion in finished, outer circle partners will share their final feedback that includes both successes and steps for future discussions.

- Tell students the next inner circle group will be selected at the end of the first round of the Fishbowl discussion.
### Work Time

**A. End of Unit 1 Assessment: Fishbowl Discussion: Do the Benefits of DDT Outweigh the Consequences? (36 minutes: 10 minutes for each inner-circle discussion, 2 minutes for each transition)**

- Distribute two copies of the Fishbowl Discussion Partner Scoring Log to each student.
- Explain that feedback and reflection will take place twice. The first time will be midway through the Fishbowl discussion; the second time will be at the end of the Fishbowl discussion. Outer circle partners will share their observations.
- Ask the outer circle students to put their names and their inner circle partner’s name on the scoring log. Explain that all of the completed Fishbowl Discussion Partner Scoring Logs will be collected at the end of the Fishbowl discussion.
- Remind students that the guided question they will be discussing is:
  
  * “Do the benefits of DDT outweigh the harmful consequences?”

- Refer to the End of Unit 1 Assessment—Fishbowl Discussion: DDT: Do the Benefits Outweigh the Consequences?

- Invite students to begin.

- See Teaching Notes for guidance regarding pacing. After 4 minutes, pause for feedback. After 10 minutes, stop, and commend students for their participation in the Fishbowl discussion. Share that their interaction as speakers and listeners is an important contribution to learning, interpreting, and advocating with informed thoughts.

- Remind students it is valuable to reflect on their role in the discussion. Tell students that in Unit 2, they will have another opportunity to communicate their knowledge and opinions.

### Meeting Students’ Needs
### Closing and Assessment

<table>
<thead>
<tr>
<th>A Exit Ticket: Two Stars and One Step (5 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Distribute the Exit Ticket: Two Stars and One Step.</td>
</tr>
<tr>
<td>• Ask students to reflect on their Fishbowl discussion participation as both an inner circle and outer circle participant, and then write two successes they had and one goal for improving.</td>
</tr>
<tr>
<td>• Collect students’ exit tickets to enhance your assessment of students’ participation in the discussions.</td>
</tr>
</tbody>
</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Read Chapter 12: “There are Three.” Complete Learning from Frightful’s Perspective: Chapter 12.</td>
</tr>
</tbody>
</table>
End of Unit 1 Assessment: Fishbowl Discussion:
DDT: Do the Benefits Outweigh the Consequences?

Teacher directions: At the start of each Fishbowl, pose this question:
• “Do the benefits of DDT outweigh the consequences?”

Students in the inner circle discuss.

<table>
<thead>
<tr>
<th>Scoring</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Consistently Demonstrated</td>
<td>2 points</td>
</tr>
<tr>
<td>Somewhat Demonstrated</td>
<td>1 point</td>
</tr>
<tr>
<td>Not Demonstrated</td>
<td>0 points</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment</th>
<th>1 Asks Questions to Understand Different Perspectives</th>
<th>2 References Text and Refers to Evidence</th>
<th>3 Advocates Persuasively</th>
<th>4 Responds to Questions with Detail That Contributes to the Topic</th>
<th>Total Points</th>
</tr>
</thead>
</table>

Name
Exit Ticket:
Two Stars and One Step

Name:

Date:

Stars:

Step:
Focus Question:
When Flip Pearson and Dr. Werner take the eyases, Molly wants a chance to see them. What does Molly notice when Flip allows her to look in the bag?

<table>
<thead>
<tr>
<th>What does Molly see?</th>
<th>Evidence from the Text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Thoughts:</td>
<td></td>
</tr>
</tbody>
</table>

Glossary:
- horizontal—adj.: positioned from side to side rather than up and down; parallel to the ground
- vertical—adj.: positioned up and down rather than from side to side; going straight up
- torrents—n.: large amounts of water that move very quickly in one direction
- morsel—n.: a small piece of food
Unit 2: Research: Do the Benefits of DDT Outweigh Its Harmful Consequences?

In this unit, students grapple with the question “Do the benefits of DDT outweigh its harmful consequences?” In the first half of the unit, students use a guided researcher’s notebook, research folder, and a WebQuest to research informational texts about DDT’s benefits and harmful consequences. The researcher’s notebook requires students to cite their sources, assess the credibility of each source, paraphrase the information relevant to their research question, and decide if the evidence from their research changes the focus of their inquiry. Students also analyze an author’s presentation of information and ideas, and then compare and contrast that presentation of information and ideas with the presentation by another author. Additionally, students revisit strategies they have learned throughout the year to address new vocabulary: context clues, affixes, and resource materials such as dictionaries and thesauruses. In their mid-unit assessment, students read two unfamiliar informational articles about DDT. They complete a page identical to their researcher’s notebook for one article, as well as a graphic organizer in which they compare and contrast the presentation of ideas in these two articles. In the second half of the unit, students work toward making a claim based on the evidence of their research, a similar skill to the work of Module 2 in which students made a claim on which they built a literary argument. Students learn the important skill of sifting through all the materials they have thus far encountered, deciding what is relevant to their research question and what is not. They use a Cascading Consequences chart, visually tracking the chain reaction of a decision, and a Stakeholders chart, tracking who is affected by a decision, as integral tools in making their claim. After reviewing research, considering a particular decision’s consequences, and who it affects, students draft and revise a claim about the use of DDT. In their end of unit assessment, students are asked to orally present their final claim to an audience and include the use of multimedia components such as charts and graphs. This claim will launch students in their argument writing of Unit 3.

Guiding Questions and Big Ideas

- How do we balance the needs of people and the condition of the natural world?
- Do the benefits of DDT outweigh its harmful consequences?
- How do I integrate ideas from multiple sources to help me make a claim?
- Research includes close reading of multiple sources, evaluation of those sources, and collecting relevant information.
- Thorough research of multiple perspectives of an issue builds toward an informed decision and claim.
Comparing and Contrasting Two Texts: Simulated Research
This assessment centers on NYSP12 ELA CCLS RI.6.9, W.6.7, W.6.8, L.6.4b, L.6.4c, and L.6.4d. In this assessment, students read two unfamiliar articles about the use of DDT. Students collect basic bibliographic information about each article in a research notebook page (which is identical to the one they have been using in their own research), paraphrase the information and conclusions of each author, and reflect on whether these articles affect the focus of their inquiry. Students then compare and contrast the authors’ presentations of similar ideas. Finally, students identify new vocabulary presented in these articles. They use context clues, affixes, and root words to make a preliminary determination of the meanings, and then verify their definitions using reference materials.

Making a Claim: Where Do You Stand on the Use of DDT?
This assessment centers on NYSP12 ELA CCLA RI.6.9a, W.1, W.9, SL.6.4, SL.6.5, and SL.6.6. In this assessment, students will present their claim and findings, outlining their position on the use of DDT. Using both information from their reading as well as multimedia components, such as charts and graphs, students are expected to advocate persuasively, sequence their ideas logically, and use pertinent facts and details to accentuate their main ideas.
**Content Connections**

This module is designed to address English Language Arts standards as students read literature and informational text about the use of DDT. However, the module intentionally incorporates Social Studies Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

**Big ideas and guiding questions are informed by the New York State Common Core K–8 Social Studies Framework:**

**Unifying Themes (pages 6–7)**
- Theme 4: Geography, Humans, and the Environment: The relationship between human populations and the physical world (people, places, and environments); impact of human activities on the environment; interactions between regions, locations, places, people, and environments.
- Theme 9: Science, Technology, and Innovation: Applications of science and innovations in transportation, communication, military, technology, navigation, agriculture, and industrialization.

**Social Studies Practices, Geographic Reasoning, Grades 5–8:**
- Descriptor 2: Describe the relationships between people and environments and the connections between people and places (page 58).
- Descriptor 3: Identify, analyze, and evaluate the relationship between the environment and human activities, how the physical environment is modified by human activities, and how human activities are also influenced by Earth’s physical features and processes.

**Social Studies Practices, Gathering, Using, and Interpreting Evidence, Grades 5–8:**
- Descriptor 1: Define and frame questions about events and the world in which we live and use evidence to answer these questions.
- Descriptor 2: Identify, describe, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions, and other primary and secondary sources).
- Descriptor 4: Describe and analyze arguments of others.
- Descriptor 6: Recognize an argument and identify evidence that supports the argument; examine arguments related to a specific social studies topic from multiple perspectives; deconstruct arguments, recognizing the perspective of the argument and identifying evidence used to support that perspective.
### Central Texts


This unit is approximately 3 weeks or 15 sessions of instruction.

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<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 1 | Getting the Gist and Paraphrasing: “Rachel Carson: Environmentalist and Writer” | • I can conduct short research projects to answer a question. (W.6.7)  
• I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)  
• I can gather relevant information from a variety of sources. (W.6.8) | • I can set a purpose to guide me in my research.  
• I can get the gist of the informational article “Rachel Carson: Environmentalist and Writer.”  
• I can paraphrase information from my reading to answer a question. | • Learning from Frightful’s Perspective: Chapter 12 (from homework)  
• Researcher’s notebook  
• Exit Ticket: Paraphrasing Information from “Rachel Carson: Environmentalist and Writer” | • Peregrine Falcon Facts |
| Lesson 2 | Applying Research Skills: “Rachel Carson: Environmentalist and Writer” | • I can compare how different authors portray the same idea or event. (RI.6.9)  
• I can provide a list of sources I used to gather information in a bibliography. (W.6.8)  
• I can assess the credibility of each source I use. (W.6.8) | • I can record bibliographic information for the sources I read in my research.  
• I can assess the credibility of the article “Rachel Carson: Environmentalist and Writer.”  
• I can analyze the author’s presentation of information and ideas in “Rachel Carson: Environmentalist and Writer.” | • Learning from Frightful’s Perspective: Chapter 13 (from homework)  
• Researcher’s notebook  
• Comparing and Contrasting Authors’ Presentation graphic organizer | • Peregrine Falcon Facts |
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</thead>
<tbody>
<tr>
<td>Lesson 3</td>
<td>Comparing an Author’s Presentation of Ideas: “Rachel Carson: Sounding the Alarm on Pollution”</td>
<td>• I can compare how different authors portray the same idea or event. (RI.6.9)</td>
<td>• I can analyze the author’s presentation of ideas in “Rachel Carson: Sounding the Alarm on Pollution.” • I can compare and contrast the authors’ presentation of ideas for “Rachel Carson: Environmentalist and Writer” and “Rachel Carson: Sounding the Alarm on Pollution.”</td>
<td>• Learning from Frightful’s Perspective: Chapter 14 (from homework) • Comparing and Contrasting Authors’ Presentation graphic organizer</td>
<td>• Authors’ Presentation of Ideas • Peregrine Falcon Facts</td>
</tr>
<tr>
<td>Lesson 4</td>
<td>Research Tasks: New Words, Relevant Information, Revision</td>
<td>• I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.4b) • I can conduct short research projects to answer a question. (W.6.7) • I can use several sources in my research. (W.6.7) • I can refocus or refine my question when appropriate. (W.6.7) • I can gather relevant information from a variety of sources. (W.6.8) • I can assess the credibility of each source I use. (W.6.8) • I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8) • I can provide a list of sources I used to gather information in a bibliography. (W.6.8)</td>
<td>• I can use affixes to help me determine the meaning of unfamiliar words. • I can gather relevant information from my research materials. • I can revise my research question if necessary.</td>
<td>• Learning from Frightful’s Perspective: Chapter 15 (from homework) • Research vocabulary • Researcher’s notebook, Source 2</td>
<td>• Things Close Readers Do</td>
</tr>
<tr>
<td>Lesson</td>
<td>Lesson Title</td>
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<td>Supporting Targets</td>
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| Lesson 5 | Resource Materials and Gathering Information: Reading Another “Choice” Text from the Research Folder | • I can use resource material (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning of key words and phrases, and parts of speech. (L.6.4c)  
• I can conduct short research projects to answer a question. (W.6.7)  
• I can use several sources in my research. (W.6.7)  
• I can refocus or refine my question when appropriate. (W.6.7)  
• I can gather relevant information from a variety of sources. (W.6.8)  
• I can assess the credibility of each source I use. (W.6.8)  
• I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)  
• I can provide a list of sources I used to gather information in a bibliography. (W.6.8) | • I can use resource materials to determine the meaning of unfamiliar words.  
• I can gather relevant information from my research | Learning from Frightful’s Perspective: Chapter 16 (from homework)  
Researcher’s notebook | Peregrine Falcon Facts |
| Lesson 6 | Presentation of Events: Comparing Two Authors | • I can use context (e.g., the overall meaning of a sentence or paragraph: a word’s position or function in a sentence) to determine meaning of a word or phrase. (L.6.4a)  
• I can compare and contrast one author’s presentation of events with that of another (e.g., a memoir written by and a biography on the same person). (RI.6.9) | • I can use context clues to determine the meaning of unfamiliar words.  
• I can compare and contrast two authors’ presentation of events. | Learning from Frightful’s Perspective: Chapter 17 (from homework)  
Research Vocabulary using context clues  
Comparing and Contrasting Authors’ Presentation | Authors’ Presentation of Ideas  
Authors’ Presentation of Events |
### Lesson 7: Researching Digital Sources, Part 1: Guided WebQuest

- I can conduct short research projects to answer a question. (W.6.7)
- I can use several sources in my research. (W.6.7)
- I can refocus or refine my question when appropriate. (W.6.7)
- I can gather relevant information from a variety of sources. (W.6.8)
- I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
- I can provide a list of sources I used to gather information in a bibliography. (W.6.8)

**Supporting Targets**
- I can choose digital resources that will help me answer my research question.
- I can gather relevant information from digital resources about my research question.

**Ongoing Assessment**
- Learning from Frightful’s Perspective: Chapter 18 (from homework)
- Researcher’s notebooks
- Exit Ticket: Using Digital Resources

**Anchor Charts & Protocols**
- Learning from Frightful’s Perspective: Chapter 18 (from homework)
- Researcher’s notebooks
- Exit Ticket: Using Digital Resources

### Lesson 8: Researching Digital Sources, Part 2: Guided WebQuest

- I can conduct short research projects to answer a question. (W.6.7)
- I can use several sources in my research. (W.6.7)
- I can refocus or refine my question when appropriate. (W.6.7)
- I can gather relevant information from a variety of sources. (W.6.8)
- I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
- I can provide a list of sources I used to gather information in a bibliography. (W.6.8)

**Supporting Targets**
- I can choose digital resources that will help me answer my research question.
- I can gather relevant information from digital resources about my research question.

**Ongoing Assessment**
- Learning from Frightful’s Perspective: Chapter 19 (from homework)
- Researcher’s notebook

**Anchor Charts & Protocols**
- Learning from Frightful’s Perspective: Chapter 19 (from homework)
- Researcher’s notebook
<table>
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<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 9 | Mid-Unit Assessment Comparing and Contrasting Two Texts: Simulated Research | • I can compare how different authors present the same idea or event. (RI.6.9)  
• I can conduct short research projects to answer a question. (W.6.7)  
• I can use several sources in my research. (W.6.7)  
• I can refocus or refine my question when appropriate. (W.6.7)  
• I can gather relevant information from a variety of sources. (W.6.8)  
• I can assess the credibility of each source I use. (W.6.8)  
• I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)  
• I can provide a list of sources I used to gather information in a bibliography. (W.6.8)  
• I can use a variety of strategies to determine the meaning of unknown words and phrases. (L.6.4)  
• I can use context to determine the meaning of a word or phrase.  
• I can use common Greek and Latin affixes (prefixes) and roots as clues to help me determine the meaning of a word.  
• I can use resource materials (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning of key words and phrases, and parts of speech.  
• I can check the accuracy of my guess about the meaning of a word or phrase by using resource materials. | • I can gather relevant information from research materials.  
• I can assess the credibility of the article “DDT Spray Scares Mosquitoes Away, Study Finds.”  
• I can compare and contrast the authors’ presentation of ideas for “DDT Spray Scares Mosquitoes Away, Study Finds” and “You Think You Have It Tough?”  
• I can use multiple strategies help me determine the meaning of a word. | • Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 10 | Forming a Research-Based Claim: Cascading Consequences Chart | • I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RI.6.9a)                                                                                                                                                                                                                                                                                                                                 | • I can think analytically about my research in order to determine what evidence is important to me.  
• I can use evidence from my research to add to my Cascading Consequences chart. | • Researcher’s notebook  
• Harmful Consequences Cascading Consequences chart  
• Benefits of DDT Cascading Consequences chart  
• Exit Ticket: Reflecting on My Beliefs about DDT  
• Goldilocks Rule for Choosing Books  
• Who Are Stakeholders?  
• Stakeholders Impacts chart  
• Exit Ticket: Four Corners note card | • Anchor Charts & Protocols |
| Lesson 11 | Forming a Research-Based Claim: Creating Stakeholders Charts | • I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RI.6.9a)  
• I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9)  
• I can present claims and findings in a logical order. (SL.6.4)  
• I can support my main points with description, facts, and details. (SL.6.4) | • I can describe the criteria on which I will be assessed for the end of unit assessment.  
• I can create a Stakeholders Impacts chart using evidence from my research.  
• I can explain my position on DDT to my peers using evidence from my research. | | \- Goldilocks Rule for Choosing Books  
• Who Are Stakeholders?  
• Stakeholders Impacts chart  
• Exit Ticket: Four Corners note card | |
| Lesson 12 | Forming a Research-Based Claim: Cascading Consequences Chart | • I can present claims and findings in a logical order. (SL.6.4)  
• I can support my main points with descriptions, facts, and details. (SL.6.4) | • I can draft a claim based on my research of DDT.  
• I can choose evidence from my research that supports my claim.  
• I can revise my claim based on evidence from my research. | • Forming Evidence-Based Claims graphic organizer  
• Types of Claims and Evidence | |
<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| **Lesson 13** | Presenting a Research-Based Claim: Effective Speaking Techniques | • I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)  
• I can present claims and findings in a logical order. (SL.6.4)  
• I can support my main points with description, facts, and details. (SL.6.4)  
• I can include multimedia components and visual displays in a presentation to clarify information. (SL.6.5) | • I can choose a visual aid that supports my claim and findings.  
• I can identify the qualities of good speaking.  
• I can use feedback from my teacher and peers to revise my claim and findings. | • Visual Aid selected to support personal claim  
• Claim and Findings revision  
• Video Critique | Anchor Charts & Protocols |
| **Lesson 14** | Presenting a Research-Based Claim Visual Aid and Peer Critique | • I can include multimedia components and visual displays in a presentation to clarify information. (SL.6.5)  
• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4) | • I can create a visual that clarifies information in my presentation.  
• I can participate in a peer critique of my presentation. | Visual aid for presentation  
Presentation notecards  
Presenting a Claim and Findings Peer Critique form | |
| **Lesson 15** | End of Unit 2 Assessment: A Hosted Gallery Walk | • I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively and advocate persuasively. (RL.6.9a)  
• I can present claims and findings in a logical order. (SL.6.4)  
• I can support my main points with descriptions, facts, and details. (SL.6.4)  
• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)  
• I can include multimedia components and visual displays in a presentation to clarify information (SL.6.5)  
• I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6.6) | • I can advocate persuasively my position on the use of DDT to an audience.  
• I can use my visual to clarify my presentation. | Presentation Checklist for the Gallery Walk  
End of Unit 2 Assessment: Presenting a Claim and Findings | |

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Optional: Experts, Fieldwork, and Service

**Experts:**
- Invite a research librarian in to teach students about best practices in the field of research, including evaluating sources for credibility, finding the most current information on a topic, and contacting experts in the field.
- Invite a guest speaker from a country affected by the ban on DDT.
- Invite a local environmentalist to talk about Rachel Carson or the use of pesticides in their local area.

**Fieldwork:**
- Arrange for a visit to a local research library for students to have hands on experience in an authentic research setting.

**Service:**
- Collaborate with local environmental agencies to educate the community about the risks of pesticides or the need to protect wildlife.
- Organize a service project to support countries where malaria continues to be a public health challenge.

Optional: Extensions

- Some students may benefit from a more independent research process in which they search for sources relevant to their own lingering questions about the use of DDT.
- A study of other pesticides and their advantages and disadvantages.
- A study of a particular species of animal that has been affected by the use of DDT.
This unit includes a number of routines, some of which involve stand-alone documents.

In this unit, students are engaged in research in which they dig deeper into the guiding question: “Do the benefits of DDT outweigh its harmful consequences?” In order to guide students through the research process, while still instilling a degree of independence, this unit relies on multiple structures of organization and note-taking. In the first half of this unit, students continue to read the novel *Frightful’s Mountain*, primarily as homework and then as a basis for discussion at the beginning of lessons.

1. Guided Research

This unit is designed as a guided research project for students. The inquiry question regarding the benefits and consequences of DDT springs from students’ reading of *Frightful’s Mountain*. Note that the novel was used as a high-interest entry point for students into this issue. By Unit 2, the novel moves into the “background” of students’ reading, and their research (using short informational texts) becomes the foreground.

- Note that this research is intentionally guided, with quite a bit of scaffolding from the teacher. This meets the sixth-grade demands for W.7: students “conduct short research projects, drawing on several sources” (W.6.7). This guided research also serves as a scaffold to move students toward the more rigorous seventh-grade standard, which requires that students not only conduct short research projects drawing on several sources, but also generate additional related, focused questions for further research and investigation” (W.7.7). Seventh grade is when the CCLS explicitly expects students to conduct their own additional research.

- During their research, students use a “Credibility Checklist” as they learn to check the credibility of sources. For additional ideas about how to approach this important skill with students, see also the sample checklists for evaluating a website: http://kathyschrock.net/abceval/5ws.pdf or http://www.library.illinois.edu/ugl/howdoi/webeval.html.

- Because the texts used for students’ guided research are authentic, not all of them have complete citations. Help students find all the information they can on the source information handouts, but know that for certain sources, the original document did not include all the categories on this handout.

2. Research Folder

The Research Folder is a tool used to help keep students organized. This research folder should be prepared prior to Lesson 1 with several research articles as well as the Researcher’s Notebook. All the articles students are provided for this unit are found as supporting materials in Lesson 1.

Create the Research Folder prior to Lesson 1 so it is ready for students to use during this lesson. The Research Folder should contain:

- All the articles found as supporting materials in Lesson 1 of this unit as well as any articles students have from Unit 1
- The Researcher’s Notebook (see Lesson 1 supporting materials)
- The Credibility Checklist (see Lesson 1 supporting materials)
- Assessing Sources (see Lesson 1 supporting materials)
### 3. Researcher’s Notebook

The Researcher’s Notebook (see Lesson 1 supporting materials) is a tool students use to collect bibliographical information and evidence from the several articles they read throughout this unit. Each day students add a new source to the Researcher’s Notebook. The evidence they collect in this resource should be specific to the questions they refine throughout the course of their research.

### 4. Research Texts

- The texts for students’ guided research were chosen based on the accuracy of the information, the reliability of the source, and the accessibility of the text for sixth-graders. Note that as with all science in society topics, research is ongoing, which often results in changes in viewpoints and then changes in policies.
- Encourage your students to do additional independent research on this topic.
- Collaborate with your school librarian or media specialist to reinforce proper research skills and support additional research on any late-breaking studies on this topic.

### 5. Reading Calendar

- Students read *Frightful’s Mountain* daily during the first half of this unit.
- Each night, they read a new chapter and complete the **Learning from Frightful’s Perspective graphic organizer**.
- Consider providing a reading calendar to help students, teachers, and families understand what is due and when.
- See stand-alone document.
The calendar below shows what is due on each day. Teachers can modify this document to include dates instead of lessons.

<table>
<thead>
<tr>
<th>Due at Lesson</th>
<th>Read chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Chapter 13, “Sam Takes Charge”</td>
</tr>
<tr>
<td>3</td>
<td>Chapter 14, “Sam Battles Bird Instincts”</td>
</tr>
<tr>
<td>4</td>
<td>Chapter 15, “A Pal Finds a Pal”</td>
</tr>
<tr>
<td>5</td>
<td>Chapter 16, “Frightful and Oksi Run the Show”</td>
</tr>
<tr>
<td>6</td>
<td>Chapter 17, “Frightful Feels the Call to the Sky”</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 18, “The Earth Calls Frightful”</td>
</tr>
<tr>
<td>8</td>
<td>Chapter 19, “Destiny is on the Wing”</td>
</tr>
</tbody>
</table>
Getting the Gist and Paraphrasing: “Rachel Carson: Environmentalist and Writer”
## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can conduct short research projects to answer a question. (W.6.7)
I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
I can gather relevant information from a variety of sources. (W.6.8)

## Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can set a purpose to guide me in my research.</td>
<td>• Learning from Frightful’s Perspective: Chapter 12 (from homework)</td>
</tr>
<tr>
<td>• I can get the gist of the informational article “Rachel Carson: Environmentalist and Writer.”</td>
<td>• Researcher’s notebook</td>
</tr>
<tr>
<td>• I can paraphrase information from my reading to answer a question.</td>
<td>• Exit Ticket: Paraphrasing Information from “Rachel Carson: Environmentalist and Writer”</td>
</tr>
</tbody>
</table>
### Agenda

1. **Opening**
   - A. Learning from Frightful’s Perspective: Chapter 12 (8 minutes)
   - B. Unpacking Learning Targets (2 minutes)
2. **Work Time**
   - A. Introducing the Research Folder (10 minutes)
   - B. Read-aloud and Getting the Gist of an Excerpt from “Rachel Carson: Environmentalist and Writer” article (10 minutes)
   - C. Using Paraphrasing to Respond to Text-Dependent Questions about “Rachel Carson: Environmentalist and Writer” (10 minutes)
3. **Closing and Assessment**
   - A. Exit Ticket: Paraphrasing Information from “Rachel Carson: Environmentalist and Writer” (5 minutes)
4. **Homework**
   - A. Read Chapter 13, “Sam Takes Charge” and complete Learning from Frightful’s Perspective: Chapter 13.

### Teaching Notes

- As students launch Unit 2, their work with the novel *Frightful’s Mountain* becomes increasingly independent. This follows a similar pattern to students’ work in Module 1 (with *The Lightning Thief*), Module 2A (with *Bud, Not Buddy*), and Module 3A (with *Dragonwing*). *Frightful’s Mountain* is used both to reinforce students’ previous work with literature, and as an entry point into their deeper research of the benefits and consequences of DDT. In Unit 2, the novel moves to the background while students’ guided research becomes the central focus of instruction.

- In Unit 1, students built background knowledge about the benefits of DDT and its harmful consequences by reading several articles, viewing two videos, and analyzing charts and graphs. This unit builds on that background knowledge as students do further research. Students are given a research folder. See the Unit 2 overview “Preparation and Materials” for details.

- Note this research is intentionally guided with scaffolding from the teacher. This meets the sixth-grade demands for W.7: students “conduct short research projects, drawing on several sources” (W.6.7). This guided research also moves students toward the more rigorous seventh-grade standard, which requires that students not only conduct short research projects, drawing on several sources, but also “generate additional related, focused questions for further research and investigation” (W.7.7). The CCLS explicitly expects students to conduct their own additional research in seventh grade.

- While researching, students use a Credibility Checklist as they learn to check the credibility of sources. For additional ideas about how to approach this important skill with students, sample the checklists for evaluating a Web site: [http://kathyschrock.net/abceval/5ws.pdf](http://kathyschrock.net/abceval/5ws.pdf) or [http://www.library.illinois.edu/ugl/howdoi/webeval.html](http://www.library.illinois.edu/ugl/howdoi/webeval.html).

- Because the texts used for students’ guided research are authentic, not all of them have complete citations. Help students with the source information handouts, but know that for certain sources, the original document did not include all the categories on this handout.

- Throughout this unit, students encounter a variety of articles in the range of credibility written by experts in public health and also concerned citizens, as well as sources ranging from well-known periodicals to unfamiliar Web sites. This intentionally allows students to evaluate the credibility of sources. Discuss this variety of credibility in the sources contained within students’ research folders so that they can develop the skills to independently evaluate credible sources in their future research.
### Agenda

<table>
<thead>
<tr>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Six specific articles are provided in the supporting materials of this lesson; prepare this for students’ research folders before the lesson. Please note that the article “DDT use should be last resort in malaria-plagued areas, scientists say,” by Marla Cone, is provided as a “stretch” text for stronger students. It likely will be too challenging for some students to read closely in its entirety. We strongly recommend that you mark paragraphs 1-11, 18-20, and 31-33 for students to read and use in their research, or considerexcerpting this article to include these paragraphs only in students’ research folders.</td>
</tr>
<tr>
<td>• In today’s lesson, students are introduced to page 1 of the researcher’s notebook, which focuses on setting a purpose for their research. Students complete page 1 of the notebook and define key vocabulary in the research question. They also reflect on their learning about the benefits of DDT and its harmful consequences from Unit 1. On this page, students write what they still wonder about DDT. After a discussion, students write a paragraph describing a purpose for their research.</td>
</tr>
<tr>
<td>• Students will use the researcher’s notebook in Lessons 2, 4, 5, 7, and 8. Remind students at the end of an activity to place the notebook in the research folder.</td>
</tr>
<tr>
<td>• In advance: Consider forming partnerships; prepare the research folder with resources (see above).</td>
</tr>
<tr>
<td>• Post: Learning targets.</td>
</tr>
</tbody>
</table>
## Lesson Vocabulary

- purpose, research, paraphrase, benefit, harmful consequence; environmentalist, revolutionary

## Materials

- *Frightful’s Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart (from Unit 1)
- Research Folder (with articles and other materials) (one per student)
- Credibility Checklist (five copies per student; for research folder)
- Assessing Sources (five copies per student; for research folder)
- “Sounding the Alarm on Pollution” (one per student; for research folder)
- “Rachel Carson: Environmentalist and Writer” article (one per student; for research folder)
- “Malaria Carrying Mosquito Crash Lands Due to His Insecticide” (one per student; for research folder)
- “How DDT Harmed Hawks and Eagles” (one per student; for research folder)
- “Biological Energy—Here, Let Me Fix It!” (one per student; for research folder)
- “A New Home for DDT” excerpt (one per student; for research folder)
- “DDT use should be last resort in malaria-plagued areas, scientists say” excerpts (one per student; for research folder)
- Researcher’s notebook (one per student)
- Document camera
- Exit Ticket: “Rachel Carson: Environmentalist and Writer,” Paraphrasing an Excerpt from the Text (one per student)
- Learning from Frightful’s Perspective: Chapter 13 (one per student)
## Opening

**A. Learning from Frightful’s Perspective: Chapter 12 (8 minutes)**

- As students enter, invite them to sit in their *Frightful’s Mountain* triad groups. Be sure students have their text, *Frightful’s Mountain*. Remind them to discuss the focus question from Learning from Frightful’s Perspective: Chapter 12 and add notes to their graphic organizer. The focus question asks students to recall what Molly sees in the bag when Flip Pearson and Dr. Werner open it.

- Direct students to share their unfamiliar words with group members. If the group is unsure of the word’s meaning, members should refer to the page number in the novel and read the sentence containing the word to find meaning using context clues. If this sentence is not helpful, ask students to read a sentence before and after to help them determine meaning.

- Circulate as students discuss. Provide support to select students needing help with finding meaning using context clues. If students are not able to determine meaning, give them the meaning and ask them to write it on their graphic organizer.

- Invite students to volunteer facts to add to the *Peregrine Falcon Facts anchor chart*.

- Compliment triads that are working cooperatively adding notes in their response to the focus question and adding meanings to their unfamiliar words.

### Meeting Students’ Needs

- Learning targets are a researched-based strategy that helps all students, especially challenged learners.
- Discussing and clarifying the language of learning targets helps build academic vocabulary.

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**B. Unpacking Learning Targets (2 minutes)**

- Ask for two volunteers to lead the class in reading the learning targets. Invite the rest of the class to read along with them:
  * “I can set a purpose to guide me in my research.”
  * “I can get the gist of the informational article ‘Rachel Carson: Environmentalist and Writer.”
  * “I can paraphrase information from my reading to answer a question.”

- As students read the learning targets, underline the words *purpose, research, and paraphrase*.

- Invite them to Think-Pair-Share in their triads:
  * “Given these learning targets, what do you think we are going to be doing in this lesson?”

- Cold call students to share their thoughts with the class. Listen for students to explain that they are going to determine a purpose for research and learn to paraphrase information in articles.
## Work Time

### A. Introducing the Research Folder (10 minutes)

- Tell students today they will begin to set a *purpose*, or goal, for their *research* to answer the research question: “Do the benefits of DDT outweigh the harmful consequences?” Explain in today’s lesson and in upcoming lessons, they will *research*, or study, DDT to learn more about this topic. Tell students they will also learn how to *paraphrase* or restate an author’s text to avoid plagiarism. Ask:
  
  * “What does it mean to plagiarize?”

- Select a volunteer to share the meaning of this word. If needed, tell students that to plagiarize means to “take the work of someone else and pass it off as your own.” Therefore, plagiarism is “the act of copying someone else’s work and taking credit for it.” Remind students that it is always important to give people credit for their hard work and thoughts.

- Distribute the *research folder*. Tell students the contents inside the folder will be used throughout Unit 2. Ask them to keep the folder neat and intact. Encourage students to quickly look over the resources in their folder:
  
  - [Credibility Checklist](five copies)
  - [Assessing Sources](five copies)
  - Research texts: “Sounding the Alarm on Pollution”; “Rachel Carson: Environmentalist and Writer”; “Malaria Carrying Mosquito Crash Lands Due to His Insecticide”; “Biological Energy—Here, Let Me Fix It!”; “How DDT Harmed Hawks and Eagles”; “A New Home for DDT” *excerpt*; and “DDT use should be last resort in malaria-plagued areas, scientists say” *excerpts*.

- Invite students to find the *researcher’s notebook*. Use a *document camera* to display page 1 of the notebook. Tell students to record information for their research in the notebook. In today’s lesson, they will focus only on page 1, which will help them plan and set a purpose for learning more about DDT today and in future lessons. Ask students to read the research question: “Do the benefits of DDT outweigh its harmful consequences?”

- Tell students they will work in partners and complete page 1 of the notebook. Share partnerships with students. Give students time to regroup.

- Ask students to Think-Pair-Share:
  
  * “What is a *benefit*?”

- Circulate and listen for: “Something that promotes well being, an advantage, or an asset.”

- Cold call partners to share their thoughts with the class.

### Meeting Students’ Needs

- Consider partnering ELLs who speak the same home language when discussing complex content. This allows them to have more meaningful discussions and clarify points in their native language.

- Asking students to provide feedback to their peers helps clarify their learning and develop speaking skills.
Work Time (continued)

• Ask students to write their responses to Question 1 in the researcher’s notebook. Model writing the response using the document camera.

• Ask students to Think-Pair-Share:
  * “What is a harmful consequence?”

• Circulate and listen for: “A damaging effect or conclusion, an adverse result, a bad result.”

• Cold call partners to share their thoughts with the class.

• Ask students to write their responses to Question 2 in the researcher’s notebook. Model writing a response for students using the document camera.

• Invite students to think about their learning from Unit 1 and discuss Question 3. Remind students about the articles they read, such as “Welcome Back,” “The Exterminator,” and “Rachel Carson: Sounding the Alarm.” Remind them of the videos they have viewed, such as the John Stossel DDT video and the video on bioaccumulation. Ask them to also think about the information gathered from analyzing charts, graphs, and maps.

• Give students time to discuss and write their responses to Question 3.

• Circulate to support students needing help in remembering information from these sources. Prompt them with questions like:
  * “In ‘Welcome Back,’ what did we learn about the peregrine falcon population?”
  * “In ‘The Exterminator,’ what did we learn about malaria, and what did we learn about DDT?”

• Cold call to hear responses to the learning from Unit 1. Model writing a response to each question using the document camera.

• Listen for: “The benefits of DDT include it helps fight malaria, it helps farmers control insects which cause damage to crop production; the harmful consequences would include DDT gets into the tissues of birds and can cause death, DDT can get into breast milk, DDT causes the egg shells of birds to thin and young cannot hatch, DDT can get into our water, killing fish and other organisms.”

• Using the document camera, model writing these responses on page 1.

• Invite students to independently answer Question 4. Pause to give time.

• Ask students to turn and talk with their partner to share what they still wonder about DDT.

• Invite volunteers to share their “wonders.” Model writing Question 4 responses using a document camera.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Direct students’ attention to the next section of the graphic organizer, where they will write a short paragraph describing the purpose for their research. Ask students to incorporate the notes from the first section into a paragraph describing their goal.</td>
</tr>
<tr>
<td>• Tell them to develop a topic sentence using ideas from Questions 1 and 2. Pause to give students time to write.</td>
</tr>
<tr>
<td>• Circulate to support students needing sentence writing prompts. An example topic sentence could be: “DDT has both benefits and harmful consequences” or “The benefits of DDT never outweigh its harmful consequences.”</td>
</tr>
<tr>
<td>• Invite students to share their topic sentences. Using a document camera, model writing several example topic sentences.</td>
</tr>
<tr>
<td>• Next, tell students to read what they wrote in response to Questions 3 and 4 on page 1.</td>
</tr>
<tr>
<td>• Ask them to write three to four sentences about things they want to learn about DDT and/or what they still wonder about DDT. Remind them that their last sentence of their paragraph should be a concluding statement restating the main idea of the paragraph. Pause to give students time.</td>
</tr>
<tr>
<td>• Circulate to support students. If some students find this challenging, ask them to read what they wrote in Questions 3 and 4. Then invite them to write this information in a sentence form. Also, check in to see if students understand how to write a concluding sentence.</td>
</tr>
<tr>
<td>• Invite students to share their paragraphs describing the purpose for their research. Model writing several details the students share using the document camera, and model an example of a concluding sentence.</td>
</tr>
<tr>
<td>• Commend students for reflecting on Unit 1 learning and setting a purpose for Unit 2 and their further study of DDT</td>
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</tbody>
</table>
### B. Read-aloud and Getting the Gist of an Excerpt from “Rachel Carson: Environmentalist and Writer” (10 minutes)

- Ask students to find the “Rachel Carson: Environmentalist and Writer” article in their research folder. Remind students they read an article about Rachel Carson in Unit 1, and this new article will provide more background knowledge about her and the book she wrote called *Silent Spring*. Tell students not only was Rachel Carson an author, but she was also an environmentalist.

- Ask students to Think-Pair-Share:
  - “What is an environmentalist?”
  - Invite students to share their thoughts with the class. Listen for: “An *environmentalist* is a person who cares about polluting land, air, and water or polluting our environment.”

- Ask students to write the title only of this article on page 2 of the researcher’s notebook. Tell them the title should be written on the line titled “Source Title.” Explain the rest of the page will be completed in Lesson 2 when “Rachel Carson: Environmentalist and Writer” will be analyzed for claims and evidence.

- Ask students to follow along as you read “Rachel Carson: Environmentalist and Writer” for the gist. Remind students about the importance of reading an article to determine what it is mostly about. Ask them to read along silently as you read the article to help them improve their fluency and comprehension.

- After you finish the article, ask students to Think-Pair-Share:
  - “What is this article mostly about?”
  - “What is the gist of each section?”

- Listen for: “The article says Rachel Carson was one of the first people to recognize that we need to take care of our world. She was a *revolutionary*, a person wanting to bring change and help create environmental awareness. As an environmentalist she states, ‘We need to come to terms with nature.’ She feels using chemicals, like DDT, should be clearly explored before using them in order to be able to make informed decisions regarding our natural world.”

- Briefly have student volunteers share a gist statement for smaller sections of the article to aid comprehension.
Getting the Gist and Paraphrasing:
“Rachel Carson: Environmentalist and Writer”

Work Time (continued)

• Next ask partners to Think-Pair-Share:
  * “What does the article say about the benefits of DDT?”
  * Listen for: “The article does not cite any benefits.”
• Share with students an author may choose to present only one side of an issue or topic. As a reader, it is important to think critically about the texts one reads, and to evaluate a topic from multiple perspectives.

C. Using Paraphrasing to Respond to Text-Dependent Questions about “Rachel Carson: Environmentalist and Writer” (10 minutes)

• Tell students in the next few lessons they will read articles to gain more knowledge about their research question. They will use the researcher’s notebook to record relevant information.
• Explain as writers they will read articles and record information in response to their research question. Tell them they will paraphrase the author’s text. To paraphrase means to capture the idea of a text, but putting it into different words. Share they will also need to let the reader know the source of the information. Explain that if only a few words and phrases are changed and the source is not cited, it’s plagiarism. Inform them plagiarism is illegal. Tell students it’s possible to use the exact words of an author; however, they need to use quotation marks to begin and end the quote.
• Invite students to independently reread the last two paragraphs on page 1 of “Rachel Carson: Environmentalist and Writer.” Ask them to annotate the text as they read by underlining the main ideas and circling unfamiliar vocabulary. Remind them to write phrases or sentences in their own words summarizing these two paragraphs in the margins. Pause to give students time.
• Circulate to support students.
• Next, ask partners to discuss:
  * “Did Rachel Carson make a claim in this excerpt? If so, what was her claim?”
• Ask partners to share their thinking. Listen for: “Rachel Carson made a claim that pesticides had caused the death of or was hurting animals and humans.” Using a document camera, model writing the statement.
• Ask partners to Think-Pair-Share:
  * “Is this information paraphrased or is it the author’s exact words and therefore should it be quoted?”
• Invite partners to share their thoughts. Listen for: “This statement is paraphrased and would not need quotation marks.”

Meeting Students’ Needs

• Consider preparing more examples of paraphrasing and examples of when to use quotation marks.
Next, ask partners to Think-Pair-Share:

* “Did Rachel Carson provide the reader with supporting evidence for her claim?”

Invite students to share their ideas.

Using a document camera model writing student’s responses. As each one is written, ask students to decide if quotation marks would be needed. Remind them quotation marks should be used if the writer copies the exact words of the author and also if only a few words are changed.

Using a document camera, write this example of supporting evidence with students: Sickness and death appeared everywhere: among flowers and trees, cattle and sheep, even humans.

Ask students to Think-Pair-Share:

* “Would quotation marks be needed in this example?”

Invite partners to share their thoughts. Listen for: “Quotation marks are needed because these are the exact words the author used in the article.” If students share a paraphrased example, such as “Plants, animals, and even people began to get sick,” confirm that as paraphrasing, and therefore not in need of quotation marks.

Using a document camera, write another example of supporting evidence: Chemicals had washed into streams, had gotten into the air, and were absorbed by the soil contaminating the natural world.

Ask students to Think-Pair-Share:

* “Would quotation marks be needed in this example? Why or why not?”

Listen for: “Quotation marks would not be needed. However, the source would need to be cited.” (Share as many examples as time permits. Analyze each sentence or phrase to determine if it is paraphrased or if it should have quotation marks around it.)

Invite students to turn to page 3 of the article. Ask students to follow along as you reread Paragraph 3 and 4 on this page. Remind them to keep in mind our research question: “Do the benefits of DDT outweigh the harmful consequences?”

Read the paragraph. Using the document camera, model how to paraphrase and use quotation marks when using the author’s exact words. An example could be: In the past pesticides have had ingredients that have been linked to causing cancer. Because of this finding 68 pesticide ingredients are not being used. In 1993, *The New York Times* reported farmers using pesticides are six times more likely to get certain cancers, children in homes where pesticides are used are seven times more likely to get leukemia, and wells containing drinking water have shown traces of pesticides. In fact, one in every ten wells tested showed evidence of pesticides. Rachel Carson poses this thought: “man’s way is not always best.”
### Closing and Assessment

**A. Exit Ticket: Paraphrasing Information from “Rachel Carson: Environmentalist and Writer” (5 minutes)**

- Distribute the Exit Ticket: “Rachel Carson: Environmentalist and Writer,” Paraphrasing an Excerpt from the Text. Tell students you would like them to try to paraphrase their own excerpt from the article. Ask them to read the excerpt and put the information in their own words.
- Circulate to support students. If there is too much information for some students, ask them to chunk their reading. After they have read part of the text, ask them to tell you about what they read. Have them record their paraphrased sentences on the lines provided. Then, ask them to finish reading the rest of the text. Ask them to write another paraphrased sentence(s).

### Meeting Students’ Needs

- Using exit tickets allows a quick check for understanding of the learning target so that instruction can be adjusted or tailored to students’ needs before the next lesson.

### Homework

- Read Chapter 13, “Sam Takes Charge” and complete Learning from Frightful’s Perspective: Chapter 13.
# Credibility Checklist

Name: 

Date: 

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<th>Least Credible</th>
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<td>Educated on topic</td>
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<td>Publisher’s relationship to the topic is balanced or neutral</td>
<td>Publisher is sponsored by a trusted source</td>
<td>Clearly biased or favoring a position for a purpose</td>
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</tbody>
</table>
When you find a text you might use for research, assess it first by asking these questions.

1. **Assess the Text’s Accessibility**
   - ☐ Am I able to read and comprehend the text easily?
   - ☐ Do I have adequate background knowledge to understand the terminology, information, and ideas in the text?

2. **Assess the Text’s Credibility**
   - ☐ Is the author an expert on the topic?
   - ☐ Is the purpose to inform?
   - ☐ Is the purpose to persuade?
   - ☐ Is the purpose to sell?
   - ☐ Is the tone convincing?
   - ☐ Does the text have specific facts and details to support the ideas?

3. **Assess the Text’s Relevance**
   - ☐ Does the text have information that helps me answer my research question? Is it information that I don’t have already?
   - ☐ How does the information in the text relate to other sources I have found?

Informed by “Assessing Sources,” designed by Odell Education
Rachel Carson: Sounding the Alarm on Pollution

Rachel Carson was a small, soft-spoken scientist. She also was one of the towering Green Giants of the 20th century.

Her Book Changed Our World
Her 1962 book, “Silent Spring,” was probably the most influential work on conservation ever written. It made Americans think hard about pollution of the environment. It led to strict controls on synthetic pesticides.

Rachel Carson was a marine biologist. She already had published three excellent books about the sea and its creatures. All were best sellers. They combined sound science with good writing.

Deadly Chemicals
The purpose of “Silent Spring” was to raise public alarm about chemical pesticides, especially one called DDT, which was introduced in 1939.

In the 1940s, the chemical industry developed many related pesticides. The pesticides saved farmers and gardeners time and money because they made it easier to control insects and weeds. By the mid-1950s, half a billion pounds of pesticides were being spread over fields and gardens each year.

The trouble was that some chemicals hurt not only insects and weeds but also birds, mammals and fish. Some scientists said the chemicals hurt people too. Others had written about the danger before Rachel Carson wrote “Silent Spring,” but few people paid attention.

Thousands of Dead Fish
By 1960, though, the evidence was clear. Fish had died by the tons of thousands when orchards near lakes were sprayed with pesticides. Thousands of birds had been doomed by aerial spraying of woodlands.

Rachel Carson’s “Silent Spring” fairly shouted: “Whoa! Look what we’re doing!” She did not oppose the use of all pesticides. But she wrote, “We have allowed these chemicals to be used with little or no advance investigation of their effect on soil, water, wildlife, and man himself.”

Parts of the book began appearing in The New Yorker magazine in 1962. Rachel’s message made for a noisy summer. It was attacked by the chemical industry, food companies, and some government agencies. They said the book was scientifically unsound. They dismissed her as a “nature nut,” “fool-faddist,” and “just a bird watcher.”

Mild-Mannered but Tough
Rachel was quiet and mild-mannered, but she was also tough-minded. She stood up to all the criticism and enjoyed the praise that came from many scientists who knew about pesticides.

In following years, DDT and 11 other chemical pesticides Rachel had warned about were banned or tightly restricted. By the time of her death in 1964, her name was a household word.

A Writer at Age 10
Rachel Carson had come a long way from her childhood in a small town near Pittsburgh, Pa.

She had learned to love nature as a young girl. Her mother could not bear to kill a living thing, and so Rachel had to catch insects that got into the house and release them outside.

Rachel’s first published story appeared in St. Nicholas, a children’s magazine, when she was only 10 years old. She decided to become a writer, and in college she had to take a science course. She chose biology—and liked it. That was the start of a career that joined science with literature.

By the time she had published her third best seller on the sea, Rachel Carson was famous. People were ready to listen to her scary message in “Silent Spring.” It changed how they thought about the earth—and also how they treated it.

—Robert W. Peterson

Rachel Carson: Environmentalist and Writer

“Man’s way is not always best”
by Kathy Wilmore

(for research folder)

When you hear the world “revolutionary,” what image comes to mind? An angry, wild-eyed man toting a machine gun, perhaps? Or do you look back in history to see someone like George Washington or Paul Revere? How about the environmentalist and writer Rachel Carson? She may not look the part, but Rachel Carson was a true revolutionary. Her work as a writer and scientist stirred people up and helped launch a new age of environmental awareness in the United States.

In 1962, Carson published *Silent Spring*, her fourth book on nature. It had an almost fairy-tale beginning: “There once was a town in the heart of America where all life seemed to live in harmony with its surroundings.”

However, something in that town went horribly wrong. Sickness and death appeared everywhere: among flowers and trees, cattle and sheep, even humans. “There was a strange stillness,” wrote Carson. “The birds, for example—where had they gone?... The few birds seen anywhere... trembled violently and could not fly. It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of... (many) bird voices there was now no sound: only silence lay over the fields and woods and marsh.”

Carson went on to explain the cause of that eerie silence: “Pesticides” (insect-killing chemicals) had gotten into the water, air, and soil and were killing or sickening all sorts of creatures—including humans. “Can anyone believe,” she wrote, “it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not called “insecticides” [insect killers] but biocides [life killers].”

If we are not more careful with the chemicals we use, warned Carson, the nightmarish silence described in *Silent Spring* could come true.
Anything but Silence

The reaction to Carson’s book was anything but silence. It caused such an uproar that a New York Times headline declared: SILENT SPRING IS NOW NOISY SUMMER. Chemical manufacturers were furious with Carson. They ran ads telling Americans to ignore Silent Spring. They questioned Carson’s abilities as a scientist, calling her a hysterical fanatic. Pesticides, they said are perfectly safe—don’t worry about a thing.

But Americans did worry. The White House and the Congress were flooded with letters from anxious citizens demanding that something be done. President John F. Kennedy called for a special committee of scientists to investigate Carson’s claims. Congress also formed an investigation committee.

The soft-spoken Carson would rather have spent her days on the rocky coast of Maine, where she did much of her research as a marine biologist (scientist who studies sea life). But the storm of debate surrounding her book and its critics pulled her into the limelight.

Coming to Terms with Nature

In defending her research, Carson told Americans to think for themselves. Who had the most to win or lose if she turned out to be correct? “As you listen to the present controversy about pesticides,” said Carson, “I recommend that you ask yourself: Who speaks? And why?”

The main thing to consider, she said, is our future. What kind of world do we want to leave our children? “I deeply believe,” Carson told Congress, “that we in this generation must come to terms with nature.”

Carson’s ideas may not seem revolutionary today. But back in 1962, few people were familiar with such terms as pollution and ecology and environmental awareness. U.S. industries were constantly coming out with useful and exciting new products, but few people stopped to think if there could be negative side effects to any of them. Humans did what was convenient for them. Nature to most people was something that just took care of itself.

A Message to Remember

President Kennedy’s commission supported Carson’s warnings. So did other government studies. Armed with such new data and the public outcry, Congress began passing laws to ban or control the use of potentially dangerous pesticides. It also called for more careful testing of chemicals’ side effects. In 1970, Congress established the Environmental Protection Agency (EPA) to reduce and control pollution of water, air, and soil. Rachel Carson did not live to see all of this happen. She died of cancer in 1964.
Rachel Carson: Environmentalist and Writer

What about us? Can we avoid the “silent spring” that Carson predicted? In the 31 years since *Silent Spring* first appeared, people have grown far more aware of our impact on the environment. But we still use many potentially deadly chemicals.

A 1993 *New York Times* article says that “68 pesticide ingredients [not in use] have been determined to cause cancer. One out of every 10 community drinking-water wells contains pesticides…. Farmers exposed to “herbicides” [weed killers] have a six times greater risk than others of contracting certain cancers. Children in homes using pesticides are seven times as likely to develop childhood leukemia [a form of cancer].”

“There remains, in this space-age universe,” wrote Rachel Carson, “the possibility that man’s way is not always best.” We would do well to remember her warning.

Malaria Carrying Mosquito Crash Lands Due to His Insecticide

*Expeditionary Learning is seeking permission for this material. We will post an updated version of the lesson once permission is granted.*
How DDT Harmed Hawks and Eagles (excerpt)

Pesticide DDT is a chemical compound that was a major factor in reducing the eagle and hawk populations around the world. Raptors were also hurt by other problems such as hunting and deforestation. The 1972 ban of DDT certainly contributed to the birds of prey’s revival in the United States. It is important to understand how people have tracked and identified their progress. The modern day explosion of nesting pairs makes us realize the disastrous effects of synthetic pesticides.

The United States used DDT during the mid-1900s. During and after World War II (1939–1945), DDT was widely used as a synthetic pesticide to prevent insects from killing agricultural crops. It was popular with farmers, foresters, and domestic gardeners. The compound reached a global peak of 386 million pounds (175 million kilograms) in 1970. In 1959, the United States sprayed 79 million pounds (36 million kilograms) of DDT chemical compound.

The dangerous consequences of spraying synthetic pesticides were not realized until 1962. An American biologist, Rachel Carson, published *Silent Spring*. The public learned DDT caused cancer in people. The synthetic pesticide harmed eagles and other birds of prey populations. Bald eagles were threatened with extinction in the lower 48 states. Finally, in June 1972, the U.S. Environmental Protection Agency (EPA) banned DDT use in the United States. Recently as May 23, 2001, DDT pesticide use was limited worldwide at the Stockholm Convention.

Birds of prey species badly affected by synthetic pesticide use included: peregrine falcons, sharp-shinned hawks, Cooper’s hawks, Eurasian sparrow hawks, osprey, bald eagles, white-tailed eagles, brown pelicans, and herons.

The eagle needs rich soil and its fertility. Grass cannot grow on deteriorated soil. A diminishing rabbit population hurts eagle populations. DDT contaminated many soils and plants. Mice stored the poisonous particles in their fatty tissues. Hawks consumed numerous mice, and their numbers declined because of DDT poisoning.

Bald eagle populations decreased as low as 500 nesting pairs in the lower 48 states. Some bald eagles were poisoned because their fish ingested synthetic pesticides. The 1972 DDT ban and the 1973 Endangered Species Act, helped reverse a dismal trend. The lower 48 states noticed an increase of over 5,000 nesting pairs. 70,000 bald eagles inhabit North America.
How DDT Harmed Hawks and Eagles (excerpt)

In 2007, the American bald eagle was taken off the endangered species list in Wisconsin. In 1973, the bald eagle inhabited 108 territories in the state. Those territories rose to 1,150 breeding pairs in 2010. Half of the eagle population nest on privately owned land. It makes it important for Wisconsin citizens to understand the importance of protecting eagles.

Author: Gil Valo (Interested Citizen)

Date: July 26, 2007


Publisher: www.helium.com

Biological Energy—Here, Let Me Fix It!
The Effects of Humans on a Specific Food Web

Expeditionary Learning is seeking permission for this material. We will post an updated version of the lesson once permission is granted.
A New Home for DDT (excerpt)

By Donald Roberts
Bethesda, Md.

DDT, the miracle insecticide turned environmental bogeyman, is once again playing an important role in public health. In the malaria-plagued regions of Africa, where mosquitoes are becoming resistant to other chemicals, DDT is now being used as an indoor repellent. Research that I and my colleagues recently conducted shows that DDT is the most effective pesticide for spraying on walls, because it can keep mosquitoes from even entering the room.

The news may seem surprising, as some mosquitoes worldwide are already resistant to DDT. But we’ve learned that even mosquitoes that have developed an immunity to being directly poisoned by DDT are still repelled by it.

Malaria accounts for nearly 90 percent of all deaths from vector-borne disease globally. And it is surging in Africa, surpassing AIDS as the biggest killer of African children under age 5.

From the 1940s onward, DDT was used to kill agricultural pests and disease-carrying insects because it was cheap and lasted longer than other insecticides. DDT helped much of the developed world, including the United States and Europe, eradicate malaria. Then in the 1970s, after the publication of Rachel Carson’s Silent Spring, which raised concern over DDT’s effects on wildlife and people, the chemical was banned in many countries. Birds, especially, were said to be vulnerable, and the chemical was blamed for reduced populations of bald eagles, falcons, and pelicans. Scientific scrutiny has failed to find conclusive evidence that DDT causes cancer or other health problems in humans.

Today, indoor DDT spraying to control malaria in Africa is supported by the World Health Organization; the Global Fund to Fight AIDS, Tuberculosis and Malaria; and the United States Agency for International Development.

It would be a mistake to think we could rely on DDT alone to fight mosquitoes in Africa. Fortunately, research aimed at developing new and better insecticides continues—thanks especially to the work of the international Innovative Vector Control Consortium. Until a suitable alternative is found, however, DDT remains the cheapest and most effective long-term malaria fighter we have.
A New Home for DDT (excerpt)

Author: Donald Roberts, professor emeritus of tropical medicine and board member of nonprofit Africa Fighting Malaria


DDT use should be last resort in malaria-plagued areas, scientists say (excerpts)

By Marla Cone and Environmental Health News Monday, May 4, 2009

A panel of scientists recommended today that the spraying of DDT in malaria-plagued Africa and Asia should be greatly reduced because people are exposed in their homes to high levels that may cause serious health effects.

The scientists from the United States and South Africa said the insecticide, banned decades ago in most of the world, should only be used as a last resort in combating malaria.

The stance of the panel, led by a University of California epidemiologist, is likely to be controversial with public health officials. Use of DDT to fight malaria has been increasing since it was endorsed in 2006 by the World Health Organization and the President's Malaria Initiative, a U.S. aid program launched by former President Bush.

In many African countries, as well as India and North Korea, the pesticide is sprayed inside homes and buildings to kill mosquitoes that carry malaria.

Malaria is one of the world's most deadly diseases, each year killing about 880,000 people, mostly children in sub-Saharan Africa, according to the World Health Organization.

The 15 environmental health experts, who reviewed almost 500 health studies, concluded that DDT "should be used with caution, only when needed, and when no other effective, safe and affordable alternatives are locally available."

We cannot allow people to die from malaria, but we also cannot continue using DDT if we know about the health risks," said Tiaan de Jager, a member of the panel who is a professor at the School of Health Systems & Public Health at the University of Pretoria in South Africa. "Safer alternatives should be tested first and if successful, DDT should be phased out without putting people at risk."

The scientists reported that DDT may have a variety of human health effects, including reduced fertility, genital birth defects, breast cancer, diabetes and damage to developing brains. Its metabolite, DDE, can block male hormones.

"Based on recent studies, we conclude that humans are exposed to DDT and DDE, that indoor residual spraying can result in substantial exposure and that DDT may pose a risk for human populations," the scientists wrote in their consensus statement, published online today in the journal Environmental Health Perspectives.

"We are concerned about the health of children and adults given the persistence of DDT and its active metabolites in the environment and in the body, and we are particularly concerned about the potential effects of continued DDT use on future generations."

In 2007, at least 3,950 tons of DDT were sprayed for mosquito control in Africa and Asia, according to a report by the United Nations Environment Programme.
DDT use should be last resort in malaria-plagued areas, scientists say (excerpts)

"The volume is increasing slowly," said Hindrik Bouwman, a professor in the School of Environmental Sciences and Development at North-West University in Potchefstroom, South Africa, who also served on the panel.

In South Africa, about 60 to 80 grams is sprayed in each household per year, Bouwman said.

Brenda Eskenazi, a University of California at Berkeley School of Public Health professor and lead author of the consensus statement, is concerned because the health of people inside the homes is not being monitored.

A 2007 study on male fertility is the only published research so far. Conducted in Limpopo, South Africa by de Jager and his colleagues, the study found men in the sprayed homes had extremely high levels of DDT in their blood and that their semen volume and sperm counts were low.

"Clearly, more research is needed...but in the meantime, DDT should really be the last resort against malaria, rather than the first line of defense," Eskenazi said.

The pesticide accumulates in body tissues, particularly breast milk, and lingers in the environment for decades.

In the United States, beginning in the 1940s, large volumes of DDT were sprayed outdoors to kill mosquitoes and pests on crops. It was banned in 1972, after it built up in food chains, nearly wiping out bald eagles, pelicans and other birds.

Today's use differs greatly. In Africa, it is sprayed in much smaller quantities but people are directly exposed because it is sprayed on walls inside homes and other buildings.

Many health studies have been conducted in the United States, but on people who carry small traces of DDT in their bodies, not the high levels found in people in Africa.

"DDT is now used in countries where many of the people are malnourished, extremely poor and possibly suffering from immune-compromising diseases such as AIDS, which may increase their susceptibility to chemical exposures," said panel member Jonathan Chevrier, a University of California at Berkeley post-doctoral researcher in epidemiology and in environmental health sciences.

In 2001, more than 100 countries signed the Stockholm Convention, a United Nations treaty which sought to eliminate use of 12 persistent, toxic compounds, including DDT. Under the pact, use of the pesticide is allowed only for controlling malaria.

Since then, nine nations—Ethiopia, South Africa, India, Mauritius, Myanmar, Yemen, Uganda, Mozambique and Swaziland—notified the treaty’s secretariat that they are using DDT. Five others—Zimbabwe, North Korea, Eritrea, Gambia, Namibia and Zambia—also reportedly are using it, and six others, including China, have reserved the right to begin using it, according to a January Stockholm Convention report.
DDT use should be last resort in malaria-plagued areas, scientists say (excerpts)

"This is a global issue," Eskenazi said. "We need to enforce the Stockholm Convention and to have a plan for each country to phase out DDT, and if they feel they can't, good reason why other options cannot work."

Mexico, the rest of Central America and parts of Africa have combated malaria without DDT by using alternative methods, such as controlling stagnant ponds where mosquitoes breed and using bed nets treated with pyrethroid insecticides. But such efforts have been less successful in other places, particularly South Africa.

"We have a whole host of mosquito species and more than one parasite. The biology of the vectors is different and there is therefore no one-method-fits-all strategy, as is the case in Central America," Bouwman said.

For example, he said, some types of mosquitoes in South Africa breed in running water, which cannot be easily controlled.

"The area to be covered is also vast, and infrastructure in most areas is too little to allow environmental management on a sustainable basis," he said.

When a mosquito strain that had previously been eliminated returned to South Africa, it was resistant to the pyrethroid insecticides that had replaced DDT.

"The resulting increase in malaria cases and deaths was epidemic," Bouwman said. Cases soared from 4,117 in 1995 to 64,622 in 2000. "South Africa had to fall back on DDT, and still uses it in areas where other chemicals would have a risk of failure," he said.

The scientists also recommended study of possible health effects of pyrethroids and other alternatives for DDT. "The general thoughts are that if chemicals have a shorter half-life, like pyrethroids, they are less dangerous," Eskenazi said. "This may be true, but there are virtually no studies on the health effects in humans of the alternatives."

The panel convened in March, 2008, at Alma College in Michigan, near a Superfund site where DDT was produced at a chemical plant. Their goal was "to address the current and legacy implications of DDT production and use," according to their report.

Acknowledging that some areas remain dependent on DDT, they recommended monitoring of the spraying to ensure that usage guidelines are followed and improved application techniques.

"It is definitely not a matter of letting people die from malaria," de Jager said.
DDT use should be last resort in malaria-plagued areas, scientists say (excerpts)

**Author:** Marla Cone (Editor in Chief Environmental Health News)

**Source:** www.environmentalhealthnews.org/ehs/news/ddt-only-as-last-resort

**Published:** Environmental Health News. May 4, 2009

Research Question: Do the benefits of DDT outweigh its harmful consequences?

To plan for your research, think, talk, and write about the following questions:

1. What is a benefit?

2. What is a harmful consequence?

3. What important benefits of DDT do you already know about?

4. What important harmful consequences of DDT do you already know about?

5. What do you still wonder about DDT?

In this section, write a short, well-written paragraph describing the purpose for your research:
Research Question: Do the benefits of DDT outweigh its harmful consequences?

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Does this source help you refocus or refine your research question in any way? How?

What are new questions you would like answered before making your claim about DDT?
Research Question: Do the benefits of DDT outweigh its harmful consequences?

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What are new questions you would like answered before making your claim about DDT?
Exit Ticket: “Rachel Carson: Environmentalist and Writer,”
Paraphrasing an Excerpt from the Text

Paraphrase the quote from “Rachel Carson: Environmentalist and Writer.”

“All but Silence”
The reaction to Carson’s book was anything but silence. It caused such an uproar that a New York Times headline declared: SILENT SPRING IS NOW NOISY SUMMER.

Chemical manufacturers were furious with Carson. They ran ads telling Americans to ignore Silent Spring. They questioned Carson’s abilities as a scientist, calling her a hysterical fanatic. Pesticides, they said are perfectly safe—don’t worry about a thing.”
**Focus Question:**
Flip Pearson and Dr. Werner took two of the eyases from the bridge for a reason. Why did the two men take the eyases?

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<th>My thoughts about why two of the eyases were taken:</th>
<th>Evidence from the Text:</th>
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**Words I Found Difficult:**

**Glossary:**
- **poachers** — *n.* people who kill or take wild animals (as game or fish) illegally
- **bivouac** — *n.* a temporary or casual shelter or lodging
- **deluge** — *n.* a large amount of rain that suddenly falls in an area
- **rivulets** — *n.* small streams of water or liquid
- **endangered** — *adj.* used to describe a type of animal or plant that has become very rare and that could die out completely
Applying Research Skills: “Rachel Carson: Environmentalist and Writer”
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Target</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>I can compare how different authors portray the same idea or event.</td>
<td>(RI.6.9)</td>
</tr>
<tr>
<td>I can provide a list of sources I used to gather information in a</td>
<td>(W.6.8)</td>
</tr>
<tr>
<td>bibliography.</td>
<td></td>
</tr>
<tr>
<td>I can assess the credibility of each source I use.</td>
<td>(W.6.8)</td>
</tr>
</tbody>
</table>

### Supporting Learning Targets

- I can record bibliographic information for the sources I read in my research.
- I can assess the credibility of the article “Rachel Carson: Environmentalist and Writer.”
- I can analyze the author’s presentation of information and ideas in “Rachel Carson: Environmentalist and Writer.”

### Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 13 (from homework)
- Researcher’s notebook
- Comparing and Contrasting Authors’ Presentation graphic organizer
### Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engaging the Reader: “Learning from Frightful’s Perspective” (8 minutes)</td>
<td>- As students collect basic bibliographic information, they must understand how to give credit to the source providing the information. Discuss the importance of giving credit where credit is due. See the Unit 3 overview for additional resources on this topic for teacher reference.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>- In this lesson, students begin recording the authors, titles, sources, and dates of the sources they use to collect information. They also begin to assess the credibility of research texts. It is important to consider several factors: who published the text, when it was published, who wrote it, why was it written, and what evidence, facts, and details were used to support the author’s claims or ideas.</td>
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<table>
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<tr>
<th>2. Work Time</th>
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<tbody>
<tr>
<td>A. Citing Our Sources (20 minutes)</td>
<td>- Guiding students through the process of evaluating sources is an important part of their learning, as well as a model for developing and expressing relevant information and opinions.</td>
</tr>
<tr>
<td>B. Authors’ Presentation of Ideas and Information: “Rachel Carson: Environmentalist and Writer” (10 minutes)</td>
<td>- Students will again use the “Rachel Carson: Environmentalist and Writer” article they read for gist and paraphrasing information about the benefits or consequences of DDT in Lesson 1. They will now add both bibliographic and credibility source information to the researcher’s notebook. Refer to Assessing Sources (see supporting materials) as a guide for assessing the credibility of a source text.</td>
</tr>
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</table>

<table>
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<tr>
<th>3. Closing and Assessment</th>
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<tbody>
<tr>
<td>A. Revisiting the “Big Idea” of the Module (5 minutes)</td>
<td>- Students reread “Rachel Carson: Environmentalist and Writer” and answer text-dependent questions to guide them toward understanding and identifying how an author presents information and ideas. Evaluating this information helps students compare and contrast one article with another.</td>
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<tr>
<th>4. Homework</th>
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<tbody>
<tr>
<td>A. Read Chapter 14, “Sam Battles Bird Instincts” and complete Learning from Frightful’s Perspective: Chapter 14.</td>
<td>- In this lesson and Lesson 3, different authors wrote the articles about Rachel Carson and a similar topic. This helps students move toward mastery of RI.6.9, in which students compare and contrast one author’s presentation of ideas with that of another. In future lessons, and in other articles in the research folder, students read texts with varied viewpoints about the issue of DDT, in order to be exposed to a more balanced analysis.</td>
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<tr>
<td></td>
<td>- In advance: Review the Assessing Sources graphic organizer. Reread the article “Rachel Carson: Environmentalist and Writer” to identify how the author presents the article, what type of evidence is used, and how text features are used.</td>
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<td></td>
<td>- In advance: Preview and prepare to display the video (see Opening Part A).</td>
</tr>
<tr>
<td></td>
<td>- Post: Learning targets.</td>
</tr>
</tbody>
</table>
### Lesson Vocabulary

- bibliographic, assess, credibility, analyze; poachers (153) pesticides, insecticides, biocides, herbicides

### Materials

- *Frightful’s Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart (from Unit 1)
- Research folder (from Lesson 1)
- Researcher’s notebook (from Lesson 1; in research folder)
- Credibility Checklist (from Lesson 1; in research folder)
- “Rachel Carson: Environmentalist and Writer” (from Lesson 1; in research folder)
- Document camera
- Equity sticks
- Comparing and Contrasting Authors’ Presentation graphic organizer (one per student)
- Learning from Frightful’s Perspective: Chapter 14 (one per student)
A. Engaging the Reader: “Learning from Frightful’s Perspective” (8 minutes)

- Be sure students have their text, *Frightful’s Mountain*. Ask students to join their triad partners to share their responses to the “Learning from Frightful’s Perspective” focus question for Chapter 13, “Sam Takes Charge.” Remind students to include evidence supporting their thoughts about why the men took two of Frightful’s eyases. Encourage students to use and explain the glossary term *poachers* as they discuss their responses.

- Ask students to share terminology they found in the chapter and added to “Words I Found Difficult.” Tell students to look for context clues and use those as they collaborate to determine the meaning of difficult words. Remind students to write the words, page numbers they were found on, and a brief definition as they record new vocabulary.

- Circulate to observe students’ verbal and written responses. Acknowledge triads working as a team to share evidence-based responses and determine meanings of new words. Interact with those who need support to develop response skills and identify and define new vocabulary words.

- Refocus students whole group. Invite students to share their responses to the focus question. Ask students what information about enemies or threats to peregrine falcons could be added to the Peregrine Falcon Facts anchor chart.

- As students identify the poachers who stole two of Frightful’s eyases, invite them to share why the poachers took the eyases. Ask them if they know of other living things that are captured or killed for similar reasons.

- To build student interest, show a brief video: “2010 time lapse feeding 4/8/10 to 5/24/10; SCPBRG Falcons.”

- Remind students that in today’s lesson they will continue to learn how to collect information about research. Explain that the steps they’ll take will help them as they gather credible information and develop their own thoughts about how we try to balance the needs of people and the natural world.

- As students respond, circle words on the posted learning target and annotate words for meaning. Emphasize and review the words *bibliographic*, *assess*, *credibility*, and *analyze*.

Meeting Students’ Needs

- Some students may need support for responding to the Learning from Frightful’s Perspective focus question. Consider pulling these students into small groups for guided practice with the focus question and adding vocabulary to “Words I Found Difficult.”

- Some students may need help independently reading chapters in *Frightful’s Mountain*. Consider providing a listening station with an audio version of the novel or guided reading support.

- Adding visuals or graphics to the Peregrine Falcon Facts anchor chart can help students remember or understand key information. These visuals or graphics could be added throughout the reading of the novel.

- Using visuals or graphics to respond to focus questions and help define new terminology can also help students remember and understand.
B. Unpacking Learning Targets (2 minutes)

• Focus students’ attention on the learning targets. Invite students to read the learning targets with you:
  * “I can record bibliographic information for the sources I read in my research.”
  * “I can assess the credibility of the article ‘Rachel Carson: Environmentalist and Writer.’”
  * “I can analyze the author’s presentation of information and ideas in ‘Rachel Carson: Environmentalist and Writer.’”
• Ask students to identify what words in the learning targets they think are most important.

A. Citing Our Sources (20 minutes)

• Explain that information used from an outside source must be documented. Some of the source information is called bibliographic information because it identifies the book, magazine, article, Web site, etc. that a particular subject was written in. Tell students that part of the documentation includes the organization or source that published it, how it was shared, and when it was published. Let students know that giving credit to the author or writer of sources they use for their writing and speaking is important. It acknowledges sources they use as credible and contributes to the credibility of their own information that they share as writers and speakers. Make sure students have their research folder.
• Distribute or ask students to take the researcher’s notebook out of their research folder.
• Distribute or ask students to take the Credibility Checklist out of their research folder.
• Distribute or ask students to take “Rachel Carson: Environmentalist and Writer” out of their research folder.
• Remind students that they have written the title in the “Source Information” section of the researcher’s notebook. Explain that they’ll use the article to complete other source information.
• Use a document camera to model recording source information as students find and add it to their researcher’s notebook.
• Use equity sticks to call on students. Ask where the author’s name is located and what it is. Tell students to write the author’s name in the researcher’s notebook. Use a document camera to model where the author’s name should be located.
• Tell students to complete the rest of the “Source Information” section. Invite them to look for information with an elbow partner.

Meeting Students’ Needs

• As students collect, assess, and analyze research information, they’ll use a variety of materials. Teachers may remind students of strategies for keeping materials such as graphic organizers, articles, references, and vocabulary organized and maintained in their research folder.
• During transitions or after work completion, allow time for students to add or return materials to their research folders.
### Work Time (continued)

- Have students use equity sticks to share the date and the source type of the article. Model writing this information on the researcher’s notebook displayed with the document camera.

- Invite students to use the Credibility Checklist to guide them as they decide if the “Rachel Carson: Environmentalist and Writer” article was credible or able to be believed. Ask them to respond to the questions to help them decide if this source seems believable. Tell students to assess credibility and share their responses with an elbow partner.

- Refocus students whole class. Call on students to share their credibility ratings. Explain that finding source information is an important part of choosing what they might use for research. Tell students to consider that as they respond to the questions:
  * “Does this source help you refocus or refine your research question in any way? How?”
  * “What are new questions you would like answered before making your claim about DDT?”

- Inform students that looking for answers to the research question “Do the benefits of DDT outweigh its harmful consequences?” involves looking closely at authors’ claims and evidence.

- Read aloud the first paragraph of the article as students read along. Ask what claim or central idea students can find. Model paraphrasing to record the central idea in that paragraph. For example: “Rachel Carson was a revolutionary.” Ask what detail or evidence supports that idea. Model by writing a quote that supports the idea: “Her work ... helped launch a new age of environmental awareness in the Untied States.”

- Read aloud the rest of the excerpt as students read along. Ask students to think about what went wrong in nature. Ask what they feel is the claim or central idea. Model by paraphrasing a claim or central idea such as
  * “Pesticides caused silence in nature.”

- Invite students to share a quote that has evidence to support the claim. Write a quote such as:
  * “Pesticides had gotten into the water, air, and soil and were killing or sickening all sorts of creatures—including humans.”

- Ask students to look at the subtitle of the next excerpt, “Anything but Silence.” Encourage students to listen for or identify a claim or central idea presented in this excerpt. Read aloud as students read along.

- Ask students what happened when people read Rachel Carson’s book *Silent Spring*. Listen for: “an uproar,” “furious,” “don’t worry ...” or “worry.” Explain that those responses suggest a claim or idea that many people reacted strongly to Rachel Carson’s book. Model paraphrasing the claim or idea by writing:
  * “Many people reacted to Rachel Carson’s book.”
### Work Time (continued)

- Invite students to quote evidence that supports the claim or idea. Listen for quotes such as: “It caused such an uproar”; “Chemical manufactures were furious with Carson”; “But Americans did worry.” Model documenting evidence by using a quote that supports a claim.

- Read aloud as students read along in the next excerpt, “Coming to Terms with Nature.” Invite students to listen for a claim and evidence as they read.

- Call on students to share the claim or central idea expressed in the excerpt. Listen for responses suggesting that people are encouraged to think for themselves. Model paraphrasing by writing a statement such as: “Rachel Carson thought people should think for themselves about the use of pesticides.”

- Ask students to quote evidence in the text that supports the claim that was paraphrased. Model by recording quotes such as:
  - “As you listen to the present controversy about pesticides, I recommend that you ask yourself: Who speaks? And why?”
  - “I deeply believe that we in this generation must come to terms with nature.”

- Compliment students for using their close reading skills, and paraphrasing and quoting evidence to look closely or analyze how an author presents information.

- Tell students this is an important part of choosing what they might use for research in their argument. Tell students to consider that as they respond to the questions:
  - “Does this source help you to refocus or refine your research question in any way? How?”
  - “What are new questions you would like answered before making your claim about DDT?”

- Ask students to put their researcher’s notebook and their Credibility Checklist in their research folder. Explain they will read other articles and add information to the researcher’s notebook.

### Meeting Students’ Needs

- Compliment students for using their close reading skills, and paraphrasing and quoting evidence to look closely or analyze how an author presents information.

- Tell students this is an important part of choosing what they might use for research in their argument. Tell students to consider that as they respond to the questions:
  - “Does this source help you to refocus or refine your research question in any way? How?”
  - “What are new questions you would like answered before making your claim about DDT?”

- Ask students to put their researcher’s notebook and their Credibility Checklist in their research folder. Explain they will read other articles and add information to the researcher’s notebook.
## Work Time (continued)

### B. Authors’ Presentation of Information and Ideas: “Rachel Carson: Environmentalist and Writer” (10 minutes)

- Explain to students that different authors sometimes write about the same information, idea, or events. Those authors may portray their information differently.

- Tell students that in another lesson, they will read an article about Rachel Carson written by a different author. Explain that they will compare that article to “Rachel Carson: Environmentalist and Writer.” To do that, it is important to look at how each author presents their information.

- Distribute the Comparing and Contrasting Authors’ Presentation graphic organizer and display using a document camera. Invite students to write the title of the article, “Rachel Carson: Environmentalist and Writer,” under Text 1. Model as students write.

- Tell students they will reread “Rachel Carson: Environmentalist and Writer.” During this close read, students should consider information to help them record responses to the following questions:
  - “How does the author introduce the article?”
  - “What type of evidence does the author include?”
  - “How does the author use text features?”

- Inform students that authors use different writing techniques to introduce their topic with quotes, anecdotes, questions, facts and statistics.

- Invite students to reread the first paragraph with an elbow partner. Tell students to pay attention to how the author, Kathy Wilmore, introduces her article.

- Invite elbow partners to share what style they thought the author used to introduce the article. Listen for responses that include asking questions or sharing background knowledge. Use the document camera to model a response to the question using a complete sentence such as: “The author introduces the article by asking questions about what a revolutionary might be like.” Tell students to write the response on their graphic organizers.

- Tell students you will read the next part of the article aloud as they read along. Encourage students to search for different types of evidence used in each excerpt. Explain that authors can present evidence in different ways such as facts, statistics, quotes, explanations, and stories.

### Meeting Students’ Needs

- When introducing the Comparing and Contrasting Author’s Presentation graphic organizers or recording forms, consider using a document camera to visually display the document for students who struggle with auditory processing.

- Providing models of expected work supports all learners but especially challenged learners.

- Some students may benefit from identifying and adding only one or two types of evidence to the Comparing and Contrasting Author’s Presentation graphic organizer.

- Using a document camera to model how the author introduces an article, what evidence is used, and how text features are used provides a visual cue to students as they learn how to identify and record this information.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
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<tbody>
<tr>
<td>• At the end of the first excerpt, pause and ask students:</td>
<td></td>
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<tr>
<td>*  “What type of evidence was used to support the idea that something had gone wrong in an American town?</td>
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<tr>
<td>• Listen for responses such as: “The author used facts about sickness and death”; “The author explained how pesticides were killing or sickening different creatures”; or “The author used a question to ask where had the birds gone.”</td>
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<tr>
<td>• Use the document camera again to model writing responses that explain the type of evidence an author includes in his/her writing. Ask students to write responses to identify some of the types of evidence Kathy Wilmore uses in “Rachel Carson: Environmentalist and Writer.”</td>
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<tr>
<td>• Tell students that looking at types of evidence can help them <strong>analyze</strong> or study closely and carefully what an author is saying.</td>
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<tr>
<td>• Explain that authors also use text features, such as photos, illustrations, graphs and charts, diagrams, quotes, captions, etc. to present information. Invite students to look closely at the article “Rachel Carson: Environmentalist and Writer” to see what text features were used.</td>
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<tr>
<td>• Call on students to identify text features they noticed. Listen for responses such as: “The author used a photo of Rachel Carson” and “The author used a quote.” Ask students to explain what text features were used on the Comparing and Contrasting Authors’ Presentation graphic organizer. Model as students record their responses.</td>
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<tr>
<td>• Ask students to place their graphic organizer in their research folder for future lessons.</td>
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<tr>
<td>• Compliment students for their investigation of how authors present information and for placing their work in their research folders.</td>
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<tr>
<td>• Tell students they will now think in a broader way about the research question: “Do the benefits of DDT outweigh its harmful consequences?”</td>
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</table>
A. Revisiting the “Big Idea” of the Module (5 minutes)
• Tell students that considering the research question “Do the benefits of DDT outweigh its harmful consequences?” can involve more than two positions. Explain that claims and evidence they have identified can expand their thinking. Tell them they will have the opportunity to consider different positions/possibilities about the use of DDT.
• Introduce Four Corners. Post four pieces of chart paper with different DDT choices in different corners or parts of the room. Explain each of the choices.
  – DDT is beneficial and can be used for many reasons.
  – DDT is beneficial only for preventing health problems like malaria and Lyme disease.
  – DDT is harmful only when used incorrectly.
  – DDT is harmful and should not be used.
• Ask students to consider each of the statements for one minute. Tell students to stand near the statement that reflects mostly their thoughts.
• Invite students to share with others in their corner why they chose that position. Include evidence in the sharing.
• Congratulate students for sharing their different perspectives. Explain that it is important to consider different ways of thinking and to share those thoughts as they learn how to develop their own position.

Meeting Students’ Needs
• Using Four Corners helps students expand their thinking and consider various possibilities about the use and effects of DDT.

Homework
• Read Chapter 14, “Sam Battles Bird Instincts” and complete Learning from Frightful’s Perspective: Chapter 14.
## Comparing and Contrasting Authors’ Presentation Graphic Organizer

<table>
<thead>
<tr>
<th>Text 1: Title: “DDT Spray Scares Mosquitoes Away, Study Finds”</th>
<th>Compare and Contrast the Authors’ Presentations</th>
<th>Text 2: Title: “You Think You Have It Tough?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the author <strong>introduce</strong> the article?</td>
<td>How are they similar? How are they different?</td>
<td>How does the author <strong>introduce</strong> the article?</td>
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<tr>
<td>What claim does the author make?</td>
<td>How are they similar? How are they different?</td>
<td>What claim does the author make?</td>
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<td></td>
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<tr>
<td>What type of <strong>evidence</strong> does the author include?</td>
<td>How are they similar? How are they different?</td>
<td>What type of <strong>evidence</strong> does the author include?</td>
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<tr>
<td>How does the author use <strong>text features</strong> (photographs, graphs, diagrams, etc.)?</td>
<td>How are they similar? How are they different?</td>
<td>How does the author use <strong>text features</strong> (photographs, graphs, diagrams, etc.)?</td>
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</table>
Comparing and Contrasting Authors’ Presentation Graphic Organizer

Which article is more effective in its argument? Why?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Learning from Frightful’s Perspective: Chapter 14

| Focus Question: In what ways has Frightful changed from the beginning of the novel until now? |
| Evidence from the Text: |
| My thoughts about how Frightful has changed: |

Chapter 14: “Sam Battles Bird Instincts”

Words I Found Difficult:

Glossary:
- eddy—n., a circular current
- cupola—n., a small structure built on top of a roof
- imprinted—v., something caused to stay in your mind permanently (as in memory)
Grade 6: Module 4: Unit 2: Lesson 3
Comparing an Author’s Presentation of Ideas:
“Rachel Carson: Sounding the Alarm on Pollution”
**Comparing an Author’s Presentation of Ideas:**
“Rachel Carson: Sounding the Alarm on Pollution”

### Long-Term Target Addressed (Based on NYSP12 ELA CCLS)

I can compare how different authors portray the same idea or event. (RI.6.9)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
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<tbody>
<tr>
<td>I can analyze the author’s presentation of ideas in “Rachel Carson: Sounding the Alarm on Pollution.”</td>
</tr>
<tr>
<td>I can compare and contrast the authors’ presentation of ideas for “Rachel Carson: Environmentalist and Writer” and “Rachel Carson: Sounding the Alarm on Pollution.”</td>
</tr>
<tr>
<td>Learning from Frightful’s Perspective: Chapter 14 (from homework)</td>
</tr>
<tr>
<td>Comparing and Contrasting Authors’ Presentation graphic organizer</td>
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</tbody>
</table>
# Agenda

1. Opening
   A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)
   B. Unpacking Learning Targets (2 minutes)
2. Work Time
   A. Author’s Presentation of an Idea: “Sounding the Alarm on Pollution” (20 minutes)
   B. Comparing and Contrasting Authors’ Presentations of an Idea: “Banning DDT” (10 minutes)
3. Closing and Assessment
   A. Reflecting on Learning: Group Discussion (5 minutes)
4. Homework
   A. Read Chapter 15, “A Pal Finds a Pal” and complete Learning from Frightful’s Perspective: Chapter 15.

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<tr>
<th>Teaching Notes</th>
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| - In Lesson 2, students identified claims and supporting evidence and completed Source 1 in their researcher’s notebook using the article “Rachel Carson: Environmentalist and Writer.” They also used this article to complete “Text 1” on the Comparing and Contrasting Authors’ Presentation graphic organizer. Now, in Lesson 3, students build their comparing and contrasting skills by analyzing two different authors portraying the same information or event. Students will complete “Text 2” information on the Comparing and Contrasting Authors’ Presentation graphic organizer using “Rachel Carson: Sounding the Alarm on Pollution.” (Students should have this article from Unit 1 or their research folder.)
- When students record information for Text 1 and Text 2, they then compare and contrast the two articles. They note the articles’ similarities and differences by looking at how the authors introduce the event, use various types of evidence, and use text features.
- In Lesson 6, students will get more practice with comparing and contrasting authors’ presentations using two other articles from the research folder.
- This skill will be assessed in Lesson 9 on the mid-unit assessment. Students will use this same graphic organizer to compare and contrast authors’ presentations in two articles.
- In advance: Form partnerships.
- In advance: Create the Authors’ Presentation of Ideas anchor chart (see supporting materials).
- Post: Learning targets; Authors’ Presentation of Ideas anchor chart. |
Comparing an Author’s Presentation of Ideas: “Rachel Carson: Sounding the Alarm on Pollution”

Lesson Vocabulary

- analyze, compare, contrast, authors’ presentation of ideas;
- from “Rachel Carson: Sounding the Alarm”: Green Giants, influential, conservation, synthetic, sound science

Materials

- *Frightful’s Mountain* (book; one per student)
- Research folder (from Lesson 1)
- “Rachel Carson: Sounding the Alarm on Pollution” article (one per student) (in research folder; also from Unit 1)
- Comparing and Contrasting Authors’ Presentation graphic organizer (from Lesson 2)
- Authors’ Presentation of Ideas anchor chart (new; teacher-created)
- Document camera
- Learning from Frightful’s Perspective: Chapter 15 (one per student)

Opening

**A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)**

- Be sure students have their book, *Frightful’s Mountain*.
- Invite students to take out their Learning from Frightful’s Perspective: Chapter 14 homework.
- Remind students that their task for this assignment was to consider ways in which Frightful has changed as a character from the beginning of the novel until now.
- Ask students to discuss this question with their triads, emphasizing that they should be referencing evidence from the chapter as they talk. This means they should be guiding their peers to specific page numbers and lines of text that support their thinking.
- Also remind students to review any words they included in their “Words I Found Difficult” list, assisting one another in determining the word meaning.
- Circulate and support students in their conversations. Specifically, look for student to notice that Frightful has become more reliant on her falcon instincts than she had in the beginning of novel, and it is not as easy for Sam to interact with her.
## B. Unpacking Learning Targets (2 minutes)

- Invite two volunteers to read the learning targets. The class should read along silently as each target is read aloud.
  
  * "I can analyze the author's presentation of ideas in “Rachel Carson: Sounding the Alarm on Pollution.”
  
  * “I can compare and contrast the authors' presentation of ideas for “Rachel Carson: Environmentalist and Writer” and “Rachel Carson: Sounding the Alarm on Pollution.”

- As students read aloud the targets, circle analyze, authors' presentation of ideas, and compare and contrast.

- Tell students analyze means to study to determine the relationship of something. Ask triads to discuss:
  
  * "What is something you have had to analyze?"

- Invite triads to share their examples.

- Listen for examples such as analyzing the data in a math problem, analyzing the bacteria in a culture, or analyzing the word choice in a poem.

- Share with students that authors often write about similar subjects because they share similar interests. When authors present or write about their ideas, they look for a variety of ways to engage the reader. Some examples of engagement would include sharing an anecdote or story, using statistics, using a graph to depict information, or sharing a photograph.

- Tell students in today's lesson they'll analyze articles and identify techniques the authors use to present their information.

- Next, ask triads to discuss:
  
  * "What does it mean to compare and contrast?"
  
  * "What is something you have had to compare and contrast?"

- Remind students they have discussed the meaning of compare and contrast in previous lessons. Invite triads to share their meanings and examples of something they compared and contrasted with the class. Listen for: "Comparing means noticing similarities and differences, while contrasting means noticing differences."

## Meeting Students' Needs

- Posting learning targets for students to view throughout the lesson allows them to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
# A. Author’s Presentation of an Idea: “Rachel Carson: Sounding the Alarm on Pollution” (20 minutes)

- Invite students to find their research folder.
- Ask them to locate the article “Rachel Carson: Sounding the Alarm on Pollution” article and their Comparing and Contrasting Authors’ Presentation graphic organizer.
- Tell students they will be reading this article and analyzing how the author presents information.
- Go over the Authors’ Presentation of Ideas anchor chart with students. Remind students these ideas were introduced and discussed in Lesson 2, and now they can reference this anchor chart as they analyze this text.
- Read through the ways authors engage the reader in an introduction, make claims, use types of evidence to inform or persuade the reader, and use text features to call attention to important information.
- Form student partnerships. Ask partners to independently read the first section, Paragraphs 1 through 4, of the article. Tell students to stop when they get to “Deadly Chemicals.” When they finish reading, students should discuss how the author introduces the event or topic, and write their response in phrase form. Remind them to refer to the anchor chart’s introduction section to guide their discussion. They will have 4 minutes to read, discuss, and write their response.
- Circulate to provide encouragement. Applaud students for reading carefully and referring to the anchor chart.
- Reconvene the class. Cold call partners to share how the article is introduced. Listen for: “The author gives facts and background information to introduce Rachel Carson. For example, the author said Rachel Carson was a soft-spoken scientist but compared her to a towering Green Giant. The author feels her work was influential, and as a result, it caused change. She also wrote three books.”
- Use a document camera to model writing the students’ responses in the appropriate box. Use bullets to identify points.
- Ask students to Think-Pair-Share:
  - “What claim is the author Robert W. Peterson making when he compares Rachel Carson to a ‘towering green giant’?”
  - Cold call partners to share their ideas. Listen for: “He claims that she was a person who cared about conservation, or protecting our natural world. She was a hero to our environment.”

# Meeting Students’ Needs

- Research indicates that cold calling improves student engagement and critical thinking. Prepare students for this strategy ahead of time by discussing the purpose, giving appropriate think time and being intentional by indicating that this strategy will be used before you begin asking questions.
- Consider providing select students with a partially completed graphic organizer. This will allow them to focus their time and attention on the most important thinking.
- Creating norms for conversation helps to establish a positive group dynamic and make clear the expectations for collaboration.
**Work Time (continued)**

- Ask partners to independently read the next three sections, Paragraphs 5 through 12 of the article. Tell students to stop when they get to “A Writer at Age 10.” Share that when they finish reading they should discuss what types of evidence the author used to inform or persuade the reader. Ask them to write their responses in phrase form. Remind them to refer to the types of evidence section of the anchor chart to guide their discussion. Tell students they will have 8 minutes to read, discuss, and write their response.

- Circulate to support students. Encourage reluctant readers to read aloud one paragraph and share the main idea. Then, invite them to read the next paragraph.

- After about 8 minutes, reconvene the class. Cold call partners to share the types of evidence the author used to support his claim. Listen for: “The author presented data or statistics on harmful consequences and amount of chemical spread; the author also presented information from experts claiming some scientists say pesticides caused harm to people and shared a quote; the author used facts from businesses, government agencies, and manufacturers claiming the book was unsound; and the author used a quote from Silent Spring to identify harmful consequences.”

- Using a document camera, model writing their responses. Use bullets to identify points.

- Direct students to the last section on their graphic organizer asking about text features Robert W. Peterson used to support his claim. Tell students they have 2 minutes to discuss and write their responses. Remind them to use the anchor chart as a reference.

- Circulate to support students. Notice partners who are collaborating to determine text features.

- Cold call partners to share their text features. Listen for: “The author uses section headings or subtitles to highlight main ideas, uses a center bar to point out further articles and quote something from Silent Spring that appeals to the emotion, uses drawings/graphics to call attention to the natural world, and uses different fonts to make an idea/quote stand out.”

- Using a document camera, model writing their responses. Use bullets to identify points.

- Give students specific positive feedback of things you saw or heard related to the focus of analyzing the authors’ presentation of ideas and/or their collaboration skills with their peers.

**Meeting Students’ Needs**

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- Using a document camera, model writing their responses. Use bullets to identify points.

- Give students specific positive feedback of things you saw or heard related to the focus of analyzing the authors’ presentation of ideas and/or their collaboration skills with their peers.
B. Comparing and Contrasting Authors’ Presentations of an Idea: “Banning DDT” (10 minutes)

- Invite students to look at the middle column of the Comparing and Contrasting Authors’ Presentation graphic organizer. Tell students this section is for comparing and contrasting the authors’ presentations of an idea in the two Rachel Carson articles.

- Ask students to discuss and write their responses to the first section comparing the similarities and differences of the two articles’ introductions. Remind them to simply read what was written in the Text 1 and Text 2 introduction section of their graphic organizer. Ask them to notice what was similar and what was different. Tell students they will have 2 minutes to discuss and write their response. Tell students to write their response in bullets or short notes, as their space is limited.

- Circulate to support students. Check to see that students are writing complete sentences.

- Cold call partners to share their thoughts. Model writing their responses. Encourage sentence writing.

- Listen for: “Both articles were similar because they introduced Rachel Carson to the reader by giving facts and background information, and they were different because in ‘Rachel Carson: Environmentalist and Writer,’ the author used a questioning technique and in ‘Rachel Carson: Sounding the Alarm on Pollution,’ the author used statements.”

- Invite students to discuss the middle section of the middle column. Ask them to compare and contrast by looking at the types of evidence the authors used to support their claim in Text 1 and Text 2 columns. Ask them to notice what was similar and what was different. Tell students they will have 4 minutes to discuss and write their response in complete sentences. Pause to give students time.

- Circulate and support students. Check their understanding of responding to both similarities and differences.

- Check students are writing their response in complete sentences.

- Cold call partners to share their thinking. Model writing their responses using the document camera.

- In comparing and contrasting types of evidence, listen for: “Both articles were similar and had data on harmful consequences, such as they mentioned pesticides had caused the death of mammals and birds and hurt people. Both articles were similar and gave facts from businesses, government agencies, and manufacturers. Both articles were similar and gave quotes on harmful consequences. There were also differences. In ‘Rachel Carson: Environmentalist and Writer,’ the article concludes with asking the reader questions and using quotes from The New York Times and Rachel Carson. In ‘Rachel Carson: Sounding the Alarm on Pollution,’ the author concludes the article with background information on the early years of Rachel Carson.”
## Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ask students to compare and contrast the text features of both articles. Tell them they will have 2 minutes to discuss and write their response in complete sentence form.</td>
</tr>
<tr>
<td>• Circulate and support select partners. Again, remind students to read the text feature section of Text 1 and Text 2 to provide information to use to fill out this section. Remind students to write their responses in complete sentences.</td>
</tr>
<tr>
<td>• Reconvene the class. Cold call partners to share their thinking and responses. Model writing their answers using a document camera.</td>
</tr>
<tr>
<td>• In comparing and contrasting the text features, listen for: “Both were similar because each article divided the text into sections with subtitles, both used quotes from her book, <em>Silent Spring</em>, and both used fonts to make titles stand out. There were also differences. In ‘Rachel Carson: Environmentalist and Writer,’ a photo of Rachel Carson was used. In ‘Rachel Carson: Sounding the Alarm on Pollution,’ a caricature of her was used as well as other drawings of the natural world, and a center bar was used to call attention to further reading.”</td>
</tr>
<tr>
<td>• Invite students to discuss the final question:</td>
</tr>
<tr>
<td>* “Which article is more effective in its argument and why?”</td>
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<tr>
<td>• Cold call partners to share their thinking. Remind students there is no right answer to this question. Tell them it’s important to support their thinking by citing evidence from the article.</td>
</tr>
<tr>
<td>• Give students specific positive feedback on comparing and contrasting the two articles. Share that the authors, Robert W. Peterson and Kathy Wilmore, had similarities and differences in their presentations of the idea.</td>
</tr>
<tr>
<td>• Ask students to hand in their graphic organizers. Tell them you would like to read their responses to check for their understanding. Reviewing their responses will help guide future lessons.</td>
</tr>
</tbody>
</table>
## Closing and Assessment

### A. Reflecting on Learning: Group Discussion (5 minutes)

- Partners join another partner group to make a group of four. Ask groups:
  - “Which article was more effective in its argument and why?” Tell students their answers may vary depending on their research question.
  - “What have you learned about how authors introduce a claim, the types of evidence they use to inform or persuade the reader, and how authors use text features to inform or persuade the reader?”
  - “Is there one standout feature you feel engages the reader the most?”

- Circulate to listen to students’ responses. Compliment groups that discuss effectively and reflect on their learning.
- Cold call a few pairs of students to share their thoughts with the class.
- Remind students that when they are introduced to a new skill, the work can be challenging and require a lot of focus. Let them know they will have another opportunity to practice this important skill in Lesson 6.

## Homework

- Read Chapter 15, “A Pal Finds a Pal” and complete Learning from Frightful’s Perspective: Chapter 15.
### How do authors introduce (or begin) their presentation of ideas?

- With a story
- With facts or statistics
- With questions that get the reader thinking
- With some background information on the topic or idea

### What types of evidence do authors use to inform or persuade the reader about a claim they are making?

- Facts about a particular topic
- Statistics to support an idea or claim
- Statistics to inform
- Quotes from experts
- Stories to give meaning or examples

### How do authors use text features to inform or persuade the reader about a claim they are making?

- Photographs to make the reader see
- Photographs to make the reader feel
- Sidebars to explain some important concept
- Large fonts to make an idea or quote stand out
Learning from Frightful's Perspective: Chapter 15

<table>
<thead>
<tr>
<th>Focus Question: Several characters in this chapter face challenges, including Frightful, Sam, and Mole. What challenges do characters in this chapter encounter, and how do they overcome them?</th>
<th>Evidence from the Text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>My thoughts about challenges faced in Chapter 15:</td>
<td></td>
</tr>
</tbody>
</table>

**Words I Found Difficult:**

<table>
<thead>
<tr>
<th>Glossary:</th>
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<tbody>
<tr>
<td>falconer — <em>n.</em> a person who hunts with falcons or hawks and trains them for hunting</td>
</tr>
<tr>
<td>incognito — <em>adv.</em> keeping one’s true identity secret (as by using a different name or a disguise)</td>
</tr>
<tr>
<td>thicket — <em>n.</em> a group of bushes or small trees that grow close together</td>
</tr>
<tr>
<td>pellet — <em>n.</em> a wad of indigestible material (as of bones and fur) regurgitated by a bird of prey</td>
</tr>
</tbody>
</table>

**Chapter 15: “A Pal Finds a Pal”**

<table>
<thead>
<tr>
<th>Name:</th>
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<tr>
<td>Date:</td>
</tr>
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Grade 6: Module 4: Unit 2: Lesson 4
Research Tasks: New Words, Relevant Information, Revision
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.4b)
I can conduct short research projects to answer a question. (W.6.7)
I can use several sources in my research. (W.6.7)
I can refocus or refine my question when appropriate. (W.6.7)
I can gather relevant information from a variety of sources. (W.6.8)
I can assess the credibility of each source I use. (W.6.8)
I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
I can provide a list of sources I used to gather information in a bibliography. (W.6.8)

### Supporting Learning Targets

- I can use affixes to help me determine the meaning of unfamiliar words.
- I can gather relevant information from my research materials.
- I can revise my research question if necessary.

### Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 15 (from homework)
- Research vocabulary
- Researcher’s notebook, Source 2
<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes</th>
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<tbody>
<tr>
<td>1. Opening</td>
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<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td></td>
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<tr>
<td>2. Work Time</td>
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<tr>
<td>A. Affixes: Using Prefixes and Suffixes to Determine Word Meaning (10 minutes)</td>
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<tr>
<td>B. Reading Second Research Text (20 minutes)</td>
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<tr>
<td>3. Closing and Assessment</td>
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<tr>
<td>A. Refocusing Our Research Question: How Might a Text Change the Direction of Our Research? (5 minutes)</td>
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<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read Chapter 16, “Frightful and Oksi Run the Show” and complete Learning From Frightful’s Perspective: Chapter 16.</td>
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</tbody>
</table>

- Students’ ability to successfully read source text is affected by how well students understand the text and whether they are interested in the text. In this lesson, time is dedicated to be sure students understand the terminology, with a particular focus on using Greek and Latin affixes, or prefixes and suffixes. Identifying and using prefixes and suffixes to determine word meaning offers students a guide for understanding text (in the Paul Müller article, students focus particularly on words with common affixes).

- In previous lessons, students used the researcher’s notebook to gather notes while thinking about the research question: “Do the benefits of DDT outweigh its harmful consequences?” They read “Rachel Carson: Environmentalist and Writer” and recorded source information, claims, or central ideas and details or evidence. After recording information from the articles, the credibility of the source was evaluated. Students weighed whether the article helped them consider the research question and think of new questions relevant to their claim about DDT. In this lesson, students apply those skills as they read a new article, “Malaria Carrying Mosquito Crash Lands Due to His Insecticide,” about Paul Müller.

- Students also have had practice completing the researcher’s notebook; in Lesson 2, they filled in Source 1 for the “Rachel Carson: Environmentalist and Writer” article, with you modeling for them. Now they must apply those sourcing skills with increased independence: they work in triads to identify source information, claims or ideas, and details or evidence from the article about Paul Müller.

- In this lesson, challenge students to read closely for information on both sides of the argument about the use of DDT. Continue to emphasize that different perspectives or ideas help develop thinking.

- In advance: Review the Affixes Resource. Read “Malaria Carrying Mosquito Crash Lands Due to His Insecticide” for the gist, source information, claims or ideas, and evidence.

- Post: Learning targets.
## Research Tasks:
New Words, Relevant Information, Revision

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>affixes, relevant, revise; prefixes, suffixes; ecology, environmentalist, chemist, pesticide, typhus, plague, disinfectant</td>
<td>• <em>Frightful’s Mountain</em> (book; one per student)</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Affixes Resource (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Research Vocabulary graphic organizer (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Research folder (from Lesson 1)</td>
</tr>
<tr>
<td></td>
<td>• “Malaria Carrying Mosquito Crash Lands Due to His Insecticide” (from Lesson 1; in research folder)</td>
</tr>
<tr>
<td></td>
<td>• Researcher’s notebook, Source 2 (from Lesson 1; one per student; in research folder)</td>
</tr>
<tr>
<td></td>
<td>• Learning from Frightful’s Perspective: Chapter 16 (one per student)</td>
</tr>
</tbody>
</table>
### Opening

**C. A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)**

- Be sure students have their text, *Frightful’s Mountain*.
- Compliment students for joining their triads to share their responses to the Learning from Frightful’s Perspective focus question for Chapter 15, “A Pal Finds a Pal.” Encourage students to use evidence that explains what challenges characters in this chapter faced, and how they faced those challenges.
- Ask students to share with their triad a word they added to their “Words I Found Difficult” list. Remind students to include the page number it was found on and a brief definition of the word on the list. As usual, encourage group members to collaborate and use context clues to determine the words’ meanings.
- Circulate to observe students’ shared and written responses. Make note of students who begin work easily and collaborate with triad members and those who may need support.
- Refocus students whole group. Cold call them to share their evidence-based responses to the focus question. Listen for responses that include evidence such as: Sam was not a licensed falconer; the two little eyases were registered in Albany and under protection of the U.S. government; they will be raised by a registered falconer.
- Emphasize that using evidence to answer questions and share information can be an important part of raising new thoughts.

### Meeting Students’ Needs

- Direct students to the last five pages of Chapter 15 to help find evidence for the focus question response.

### D. B. Unpacking Learning Targets (2 minutes)

- Read aloud, or invite a student to read aloud, today’s learning targets.
  * “I can use affixes to help me determine the meaning of unfamiliar words.”
  * “I can gather relevant information from my research materials.”
  * “I can revise my research question if necessary.”
- Ask students to identify what words in the learning targets they think are most important. Listen for “affixes,” “relevant,” and “revise.” Circle or highlight those words.
- Ask:
  * “Looking at words that might be unfamiliar or not known—how do you think you find the meaning of new words?”
- Listen for responses that include using context clues, dictionaries, or parts of words like prefixes. Tell students that part of the work time involves using parts of words to help figure out what they mean.
### Work Time

**A. Affixes: Using Prefixes and Suffixes to Determine Word Meaning (10 minutes)**

- Display (using a document camera) and distribute the Affixes Resource.
- Invite students to look at the title of the chart. Point out that “Prefixes and Suffixes” is a subtitle below the title. Explain that affixes are letters or syllables attached to a word. They are added to change the word’s function or meaning.
- Call on students to identify each of the column titles and what they notice in each column.
- Tell students they will use the Affixes Resource to help them determine the meaning of new words. Explain that the chart has many commonly used affixes but not all. The meaning of other affixes can also be found in dictionaries. Encourage students to add new prefixes and suffixes when they notice them in their reading.
- Explain that reading articles for research often includes new words. Learning how to pronounce new words and learning the meanings helps understand text. Many new words have been introduced in the articles they have read as they continue with research about the benefits and harmful consequences of DDT.
- Distribute the Research Vocabulary graphic organizers to each student.
- Use the document camera to display the words *ecology, environmentalist, chemist,* and *pesticide.* Tell students that these are words they have read in the Rachel Carson articles or may read today in a new article. Tell them that each of these words has important root words, prefixes, and/or suffixes.
- Model writing the word *ecology* on the Research Vocabulary graphic organizer. Ask students to add the word to their graphic organizer and circle what part of the word they think is a prefix or suffix. Ask students to look at the Affixes Resource to find what they circled.
- Ask students to think about what the word means and then share their meaning with their partner. Tell students to write what they think the word means on their graphic organizer. Call on students to share their definition with the class. Listen for responses like: “a study of the environment” or “a science that studies living things and the environment.”
- Use the document camera to write the words *environmentalist, chemist,* and *pesticide* on the Research Vocabulary graphic organizer. Ask partners to identify prefixes and/or suffixes and root words. Use the Affixes Resource to find the affixes and their meanings to help them determine the word’s meaning.
- Students should then record meanings on the graphic organizer as well as which strategy helped them determine the meaning.

### Meeting Students’ Needs

- This lesson builds familiarity with the structure of words or parts of words. Learning prefixes and suffixes helps students determine what a word means or how the function of a word changes.
- Consider partnering ELL students who speak the same language. This can allow them to have more meaningful discussion as they work to determine meaning.
- For some students, consider providing words that are frequently used in the research articles and/or share the same affix. For example, words like “pesticide,” “insecticide,” and “herbicide” have the same suffix and a root word. This may contribute to identifying meaning and practicing the skill of using affixes to determine meaning.
## Work Time

- Call on students or partners to share their meanings they thought of. Listen for responses like:
  - Ecologist: “a person who studies the environment”
  - Chemist: “someone who studies or works with chemicals”
  - Pesticide: “something that kills pests”
- Encourage students to use that strategy to help them understand new words more easily; other strategies will be used in the next lesson. Tell students that having multiple strategies for understanding new words allows them to understand complex texts, which leads to a deeper understanding of important topics.
- Ask students to put their Research Vocabulary graphic organizers in the research folder. Encourage them to keep their Affixes Resource to use for Work Time B.

### Meeting Students’ Needs

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
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</table>
| • Call on students or partners to share their meanings they thought of. Listen for responses like:  
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  - Chemist: “someone who studies or works with chemicals”  
  - Pesticide: “something that kills pests”  

- Encourage students to use that strategy to help them understand new words more easily; other strategies will be used in the next lesson. Tell students that having multiple strategies for understanding new words allows them to understand complex texts, which leads to a deeper understanding of important topics.  
- Ask students to put their Research Vocabulary graphic organizers in the research folder. Encourage them to keep their Affixes Resource to use for Work Time B.  
- When reviewing the Research Vocabulary graphic organizer, consider using a document camera for display and to model how to record source information.  
- Providing models of expected work supports all students, especially challenged learners.  
- During Work Time B, you may want to support a small group of students in finding claims and evidence in the article. Some students will need more guided practice before they are ready for independent work.  

| B.  Reading Second Research Text (20 minutes)  
- Distribute or ask students to take the article “Malaria Carrying Mosquito Crash Lands Due to His Insecticide” and their researcher’s notebook from their research folder.  
- Ask students to turn and talk:  
  * “How did we use this research notebook when we read about Rachel Carson?” Listen for students to make connections to the research question: “Do the benefits of DDT outweigh the consequence?” and to point out that they read articles about Rachel Carson and recorded source information, claims or central ideas, and details or evidence. After recording information from the articles, the credibility of the source was evaluated. Students considered if the article was helpful for considering the research question and thinking of new questions as they considered their claim about DDT.  
  
  • Tell students they will read a new article that offers more information about DDT. Invite students to look carefully at the article to locate and record source information on the Source 2 page. Ask students to discuss and compare what each of them recorded. Encourage students to edit and change as they learn from each other.  
  
  • Before reading, introduce students to new scientific words: *typhus*, *plague*, and *disinfectant*. Do not define the words yet. Simply ask students to listen for context clues and consider affixes to determine meaning.  
  
  • Ask students to read along as you read aloud. |
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• At the end of the first paragraph, call on students:</td>
</tr>
<tr>
<td>* “What does <em>typhus</em> mean? How did you figure it out?”</td>
</tr>
<tr>
<td>* “What does <em>plague</em> mean? How did you figure it out?”</td>
</tr>
<tr>
<td>• Note that students likely are relying on the familiar strategy of using context clues, which is fine: not every vocabulary word has a clear prefix or suffix. Ask which category the words should be added to on the <em>Scientific Word Wall</em>. Post those words on the Word Wall in the disease/health category.</td>
</tr>
<tr>
<td>• Tell students now they have considered some of the key vocabulary in this article, it is time to go deeper with understanding the article as a whole. Invite students to get into triads. Tell students to reread the article. Remind them that a close read helps them identify claims or central ideas and find evidence that supports those claims.</td>
</tr>
<tr>
<td>• Tell students to identify at least three claims. Each claim should be supported by at least one detail or piece of evidence. Challenge students to read closely for information on both sides of the argument about the use of DDT. Explain that different perspectives or ideas are helpful in developing their own thinking.</td>
</tr>
<tr>
<td>• Encourage students to pause at the end of each paragraph to consider what claims or ideas and supporting evidence were in that passage. Remind them to paraphrase the claims or ideas and to quote evidence for support.</td>
</tr>
<tr>
<td>• Circulate to listen and ensure that all students participate in the reading. Support triads in their discussions. Guide students as they identify and record claims by paraphrasing and evidence by writing quotes. Ask probing questions such as:</td>
</tr>
<tr>
<td>* “What claim or central idea is presented in the first paragraph?”</td>
</tr>
<tr>
<td>* “What evidence can you quote to support the claim?”</td>
</tr>
<tr>
<td>• Refocus students as a whole group. Call on triads to share a claim or idea that they paraphrased and quote a detail or evidence that offers support.</td>
</tr>
<tr>
<td>• Use a document camera to visually share responses with the whole class. Model ways to improve responses.</td>
</tr>
<tr>
<td>• Probe students’ thinking about any new ideas or questions this article stimulated. Invite them to share.</td>
</tr>
<tr>
<td>• Give specific positive praise for behaviors you saw students using that promote effective close reading (if appropriate, connect this back to the Things Close Readers Do anchor chart from Module 1). Continue to emphasize that rereading closely can help generate new thinking about a topic. This is essential when conducting research.</td>
</tr>
</tbody>
</table>
### Closing and Assessment

| A. Refocusing Our Research Question: How Might a Text Change the Direction of Our Research? (5 minutes) |
|---|---|
| • Focus students on their researcher’s notebook. Ask students to write responses to the two questions at the end of Source 2: |
|   • “Does this source help you to refocus or refine your research question?” |
|   • “What are new questions you would like answered before you make your own claim about DDT?” |
| • As time permits, invite students to share out. |

### Homework

<p>| • Read Chapter 16, “Frightful and Oksi Run the Show” and complete <strong>Learning From Frightful’s Perspective: Chapter 16</strong>. |</p>
<table>
<thead>
<tr>
<th>Prefixes</th>
<th>Meaning</th>
<th>Example</th>
<th>New Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>anti-</td>
<td>against</td>
<td>antifrost</td>
<td></td>
</tr>
<tr>
<td>bio, bi</td>
<td>life</td>
<td>biology</td>
<td></td>
</tr>
<tr>
<td>de-</td>
<td>opposite</td>
<td>defrost</td>
<td></td>
</tr>
<tr>
<td>dis-</td>
<td>not, opposite of</td>
<td>disagree</td>
<td></td>
</tr>
<tr>
<td>eco-</td>
<td>environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>en-, em-</td>
<td>cause of</td>
<td>encode, embrace</td>
<td></td>
</tr>
<tr>
<td>fore-</td>
<td>before</td>
<td>forecast</td>
<td></td>
</tr>
<tr>
<td>in-, im-</td>
<td>in</td>
<td>infield, inside</td>
<td></td>
</tr>
<tr>
<td>in-, im-, il-, ir</td>
<td>not</td>
<td>incorrect, impossible</td>
<td></td>
</tr>
<tr>
<td>inter</td>
<td>between</td>
<td>interact</td>
<td></td>
</tr>
<tr>
<td>intro</td>
<td>into, with, inward</td>
<td>introduce</td>
<td></td>
</tr>
<tr>
<td>man, manu</td>
<td>hand, make, do</td>
<td>manicure, manual</td>
<td></td>
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<tr>
<td>mid</td>
<td>middle</td>
<td>midway</td>
<td></td>
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<tr>
<td>mis</td>
<td>wrongly</td>
<td>misfire</td>
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<tr>
<td>non-</td>
<td>not</td>
<td>nonsense</td>
<td></td>
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<tr>
<td>over-</td>
<td>beyond</td>
<td>overlook</td>
<td></td>
</tr>
<tr>
<td>pre-</td>
<td>before</td>
<td>prefix</td>
<td></td>
</tr>
<tr>
<td>Prefixes, cont.</td>
<td>Meaning</td>
<td>Example</td>
<td>New Word</td>
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<td>----------------</td>
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<tr>
<td>pro-</td>
<td>for, forward</td>
<td>propel</td>
<td></td>
</tr>
<tr>
<td>pre-</td>
<td>before</td>
<td>prefix</td>
<td></td>
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<tr>
<td>pro-</td>
<td>for, forward</td>
<td>propel</td>
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<td>re-</td>
<td>again</td>
<td>return</td>
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<tr>
<td>sem-, semi</td>
<td>half</td>
<td>semicircle</td>
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<tr>
<td>sub-</td>
<td>under</td>
<td>submarine</td>
<td></td>
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<tr>
<td>super</td>
<td>over or above</td>
<td>superstar</td>
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<tr>
<td>trans-</td>
<td>across</td>
<td>transport</td>
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<td>un-</td>
<td>not</td>
<td>unfriendly</td>
<td></td>
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<tr>
<td>under-</td>
<td>below</td>
<td>undersea</td>
<td></td>
</tr>
<tr>
<td>Suffixes</td>
<td>Meaning</td>
<td>Example</td>
<td>New Word</td>
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<tr>
<td>----------</td>
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<tr>
<td>-able, -ible</td>
<td>can be done</td>
<td>comfortable</td>
<td></td>
</tr>
<tr>
<td>-al, -ial</td>
<td>having characteristics of</td>
<td>personal</td>
<td></td>
</tr>
<tr>
<td>-cide, -cides</td>
<td>to kill</td>
<td>pesticide</td>
<td></td>
</tr>
<tr>
<td>-ed</td>
<td>past-tense verbs</td>
<td>hopped</td>
<td></td>
</tr>
<tr>
<td>-en</td>
<td>made of</td>
<td>wooden</td>
<td></td>
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<tr>
<td>-er</td>
<td>comparative</td>
<td>higher</td>
<td></td>
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<tr>
<td>-er, -or</td>
<td>one who</td>
<td>worker, actor</td>
<td></td>
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<tr>
<td>-est</td>
<td>comparative</td>
<td>biggest</td>
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<tr>
<td>-ful</td>
<td>full of</td>
<td>careful</td>
<td></td>
</tr>
<tr>
<td>-ic</td>
<td>having characteristics of</td>
<td>electronic</td>
<td></td>
</tr>
<tr>
<td>-ing</td>
<td>action or process</td>
<td>running</td>
<td></td>
</tr>
<tr>
<td>-ion, -tion</td>
<td>act, process</td>
<td>promotion</td>
<td></td>
</tr>
<tr>
<td>-ist</td>
<td>one that performs an action</td>
<td>cyclist</td>
<td></td>
</tr>
<tr>
<td>-ity, -ty</td>
<td>state of</td>
<td>beauty</td>
<td></td>
</tr>
<tr>
<td>-ive, -ative,</td>
<td>performs an action</td>
<td>active</td>
<td></td>
</tr>
<tr>
<td>Suffixes, cont.</td>
<td>Meaning</td>
<td>Example</td>
<td>New Word</td>
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<tr>
<td>----------------</td>
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<tr>
<td>-less</td>
<td>without</td>
<td>fearless</td>
<td></td>
</tr>
<tr>
<td>-ly</td>
<td>in a certain manner</td>
<td>quickly</td>
<td></td>
</tr>
<tr>
<td>-ment</td>
<td>action or process</td>
<td>enjoyment</td>
<td></td>
</tr>
<tr>
<td>-ness</td>
<td>state of, condition of</td>
<td>kindness</td>
<td></td>
</tr>
<tr>
<td>-ology</td>
<td>study</td>
<td>zoology</td>
<td></td>
</tr>
<tr>
<td>-ory</td>
<td>relating to, characterized by</td>
<td>memory</td>
<td></td>
</tr>
<tr>
<td>-ous, -eous, -ious</td>
<td>possessing the qualities of</td>
<td>joyous</td>
<td></td>
</tr>
<tr>
<td>-s, -es</td>
<td>more than one</td>
<td>books, boxes</td>
<td></td>
</tr>
<tr>
<td>Word from the text</td>
<td>What do you think it means?</td>
<td>What strategy helped you determine the meaning?</td>
<td>What is the dictionary’s definition of this word?</td>
</tr>
<tr>
<td>--------------------</td>
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<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
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<tr>
<td></td>
<td></td>
<td>(CC = Context Clues, A+R = Affixes + Root Words, RM = Resource Material)</td>
<td></td>
</tr>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
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</tbody>
</table>
Learning from Frightful’s Perspective: Chapter 16

Name: 
Date: 

Focus Question: We see several moments in this chapter that show the strong relationships between the characters. What relationships are written about? How do we know they are strong relationships?

Evidence from the Text:

My thoughts about the relationships between characters in Chapter 16:

Chapter 16: “Frightful and Oksi Run the Show”

Words I Found Difficult:

Glossary:

- thermal – n. a rising body of warm air
- hacking porch – n. a board on which a hawk is fed

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Grade 6: Module 4: Unit 2: Lesson 5
Resource Materials and Gathering Information: Reading Another “Choice” Text from the Research Folder
<table>
<thead>
<tr>
<th><strong>Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)</strong></th>
<th><strong>Ongoing Assessment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>I can use resource material (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning of key words and phrases, and parts of speech. (L.6.4c)</td>
<td></td>
</tr>
<tr>
<td>I can conduct short research projects to answer a question. (W.6.7)</td>
<td></td>
</tr>
<tr>
<td>I can use several sources in my research. (W.6.7)</td>
<td></td>
</tr>
<tr>
<td>I can refocus or refine my question when appropriate. (W.6.7)</td>
<td></td>
</tr>
<tr>
<td>I can gather relevant information from a variety of sources. (W.6.8)</td>
<td></td>
</tr>
<tr>
<td>I can assess the credibility of each source I use. (W.6.8)</td>
<td></td>
</tr>
<tr>
<td>I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)</td>
<td></td>
</tr>
<tr>
<td>I can provide a list of sources I used to gather information in a bibliography. (W.6.8)</td>
<td></td>
</tr>
</tbody>
</table>

**Supporting Learning Targets**

- I can use resource materials to determine the meaning of unfamiliar words.
- I can gather relevant information from my research materials.
- I can revise my research question if necessary.

**Ongoing Assessment**

- Learning from Frightful’s Perspective: Chapter 16 (from homework)
- Researcher’s notebook
<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• In this lesson, students continue to build ways to determine word meaning. They use resource materials such as dictionaries and thesauruses to determine meaning of unfamiliar words. Based on your students’ background knowledge with these reference materials, consider modifying Work Time A.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)</td>
<td>• At this point, students have completed two sources in their researcher’s notebook, Source 1 and Source 2. Students have paraphrased claims or the central idea of articles, and they have cited evidence using direct quotations from authors. In this lesson, students choose another article from their research folder and continue to develop paraphrasing skills and identify the author’s claim or central idea. They also determine supporting evidence for each claim or central idea and use quotation marks to quote the author’s exact words. Students also identify and record source information to give credit to the author of the article.</td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td>• In Lessons 7 and 8, students will have an opportunity to use Web sites to gather more information on their research question. They will complete Source 4 and 5 in their researcher’s notebook using internet articles.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• In Lesson 9, students will complete the Mid-Unit 2 Assessment, on which they will apply these same skills: read an article and identify source information, paraphrase claims, and cite supporting evidence. Preview this assessment in advance to have a sense of how these lessons scaffold students toward success.</td>
</tr>
<tr>
<td>A. Resources: Using Dictionaries and Thesauruses to Determine Word Meaning (10 minutes)</td>
<td>• Post: Learning targets.</td>
</tr>
<tr>
<td>B. Reading Third Research Text (20 minutes)</td>
<td></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td>A. Debrief: Revising the Big Idea (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read Chapter 17: “Frightful Feels the Call of the Sky” and complete Learning from Frightful’s Perspective: Chapter 17.</td>
<td></td>
</tr>
</tbody>
</table>
## Lesson Vocabulary

- relevant, revise, guide words, entry words, synonyms, antonyms; environment, chemist

## Materials

- *Frightful's Mountain* (book; one per student)
- Peregrine Falcon Facts anchor chart (from Unit 1)
- Dictionary (one per partner group)
- Thesaurus (one per partner group)
- Research Vocabulary graphic organizer (one per student; from Lesson 4; in research folder)
- Research folder (from Lesson 1)
- Sticky note (one per partner group)
- Document camera
- Researcher’s notebook (from Lesson 1; in research folder)
- Credibility Checklist (from Lesson 1; in research folder)
- Assessing Sources (from Lesson 1; in research folder)
- Learning from Frightful’s Perspective: Chapter 17 (one per student)
### Opening

**A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)**

- As students enter the room, invite them to sit in their triad groups with their book, *Frightful’s Mountain*. Invite them to discuss the focus question from Learning from Frightful’s Perspective: Chapter 16 about the important relationships highlighted in this chapter. Remind students to cite evidence from the novel to support their thinking.

- After students share their responses, they should share their vocabulary from the “Words I Found Difficult” list. Ask each group member to share words and meanings. If a meaning is unclear, remind them to refer to the page number where the word was found and use context clues to try to determine the meaning.

- Circulate to listen to how in-depth students’ responses are. Recognize students citing evidence to support their thinking and compliment students for looking in the text to use context clues to determine word meaning.

- Provide support to students who may find using context clues challenging when determining word meaning. Give definitions to students if words cannot be defined using context clues.

- After students have finished their discussions, invite volunteers to share facts to add to the *Peregrine Falcon Facts anchor chart*.

- Cold call triads to share their definitions. Listen for: to make a new, updated, or amended version of the research question.

### Meeting Students’ Needs

- Cold call triads to share their definitions.

### B. Unpacking Learning Targets (2 minutes)

- Invite students to read the learning targets with you:

  * “I can use resource materials to determine the meaning of unfamiliar words.”
  * “I can gather relevant information from my research materials.”
  * “I can revise my research question if necessary.”

- Point out that these learning targets are similar to those in Lesson 4 because this lesson follows a similar structure.

- Remind them they did a lot of work gathering relevant information from research materials in previous lessons.

- Invite triads to discuss the meaning of the word *relevant*.

- Cold call triads to share their definitions. Listen for: “Information that directly addresses or is important in answering the research question.”

- Invite triads to discuss the meaning of the word *revise*. 
### A. Resources: Using Dictionaries and Thesauruses to Determine Word Meaning (10 minutes)
- Tell students that successful readers and writers use a variety of resource materials to develop their skills. Share in this lesson they will be introduced to (or review, based on your class’s skills) two resources: a dictionary and a thesaurus. Explain these resources will help build vocabulary, develop reading comprehension, and develop spelling accuracy.
- Inform students they will verify the definitions they wrote on the Researcher’s Vocabulary graphic organizer in Lesson 4. Share they will find each word in the dictionary to check for meaning and then find that word’s synonym in the thesaurus.
- Form student partnerships. Distribute a dictionary and a thesaurus to each partner group.
- Ask students to find their Research Vocabulary graphic organizer in their research folder.
- Invite partners to open up to a page in the dictionary. Point out the guide words found on the top of each page. Explain how guide words make the dictionary much easier to use. Tell students the guide word on the left is the first entry word on the page, and the guide word on the right is the last entry word on the page. Remind students how each entry word is in alphabetical order on the page. Choose an entry word to model how it was alphabetized on the page.
- Ask students to Think-Pair-Share:
  * “What information is included with each entry word?”
- Cold call partners to share their thoughts. Listen for: the spelling of the word, its pronunciation, how it is divided into syllables, and its parts of speech.
- Ask students to Think-Pair-Share:
  * “What is a thesaurus?”
- Cold call partners. Listen for: “a book that lists words with their synonyms and related concepts.” Clarify as needed. Point out that antonyms (a word’s “opposite”) also are usually listed.
- Next, ask partners to quickly skim and locate the word environment. Reiterate that words are listed alphabetically. Remind them to use the guide words at the top of the page to speed up the search.
- After students have located the word environment, invite them to read through the words underneath this word. Ask them to select a word that closely matches the meaning of environment as they have been using it in this module.
- Circulate to provide support to select students needing help locating the word “environment” or choosing a synonym. Compliment students who work cooperatively.

### Meeting Students’ Needs
- Using dictionaries provides another way to build vocabulary, reading comprehension, and spelling accuracy.
**Resource Materials and Gathering Information:**

Reading Another “Choice” Text from the Research Folder

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Distribute a <strong>sticky note</strong> to each partner group. Ask partners to write a synonym for “environment” on the sticky note and post it on the board.</td>
<td></td>
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<tr>
<td>• After partners have posted their synonyms, collect the sticky notes and read their synonyms to the class. Some examples students could have shared: <em>habitat, nature, setting, surrounding, terrain.</em></td>
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<tr>
<td>• Ask partners to Think-Pair-Share:</td>
<td></td>
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<tr>
<td>* “When and why would you want to use a thesaurus?”</td>
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<tr>
<td>• Listen for: “to learn other words that mean sort of the same thing as a word I found in a text I am reading” or “to look up a replacement word that might be more appropriate to use in my writing.” Emphasize that building one’s vocabulary is an incredibly powerful way to become a better reader, and that learning synonyms often helps you clarify a word’s meaning or understand the subtle differences between words.</td>
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</tr>
<tr>
<td>• Focus students on their Researcher’s Vocabulary graphic organizer, specifically the left-hand column. Ask students to do the following with their partner:</td>
<td></td>
</tr>
<tr>
<td>1. Look up the definition of each word in the dictionary, and write the definition in the appropriate box on the far right.</td>
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<tr>
<td>2. Look up the word in the thesaurus to find its synonym. Write the synonym on the line in the same box.</td>
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<tr>
<td>3. Tell students if the word does not have a synonym they should write “none” on the line.</td>
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<tr>
<td>• Using a <strong>document camera</strong>, model with the word <em>chemist</em>. Invite students to read what they wrote in Lesson 4. Explain to students they will use a dictionary to compare the definition they wrote with the definition written in the dictionary. Also, challenge them to find a synonym for <em>chemist</em>.</td>
<td></td>
</tr>
<tr>
<td>• Next, ask one partner to look up “chemist” in the dictionary. Ask the other partner to look up “chemist” in the thesaurus.</td>
<td></td>
</tr>
<tr>
<td>• Cold call partners to share the definition and a synonym if chemist has one. Model writing the definition in the box and its synonym on the line. Listen for: “The definition is a person who looks at the structure and transformation of substances, and a synonym could be <em>scientist</em>.”</td>
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</tr>
<tr>
<td>• Give students time to work together to look up the other words. Ask students to exchange resources after each word’s definition and synonym is complete. Students will then get practice using both resources.</td>
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</tbody>
</table>
### Work Time (continued)

- Circulate and provide support to students needing help looking up words.
- Continue to give specific positive feedback on students’ developing skills to use these resources to effectively grow their vocabulary. Help link this work to the bigger picture: Building one’s vocabulary is one of the most powerful strategies to become a stronger reader and learn more about the world. These tools will help.

### B. Reading Third Research Text (20 minutes)

- Invite students to open their research folder and find their **researcher’s notebook**. Ask them to turn to page 4, Source 3.
- Direct students’ attention to the first box on the top of the page. Tell them their research question should be written in this box. Remind students that a researcher continually revisits the research question to determine if revisions on the question are needed.
- Ask students to read through the questions and ideas they wrote in response to the two questions at the bottom of pages 2 and 3. Pause to give students time.
- After reading through their information, invite students to either copy the original research question or revise their question based on their thinking from Source 1 and Source 2. Allow students time to write their research question. Circulate to support students questioning and revising their research question.
- Invite students who changed their research question to share it with the class.
- Ask students to open their research folder and choose an article they haven’t read. Tell them to take 3 minutes to skim the articles they haven’t read to find the one that best provides answers to their research question.
- Circulate to provide support to students needing help making their choice selection.
- Next, direct students’ attention to the Source Information section of the graphic organizer. Remind students this information is critical for giving authors credit and to avoid plagiarism. Invite students to fill out this section of the graphic organizer. Tell students to set a goal of 2 minutes.
- Remind them to use the **Credibility Checklist** in their research folder and to use **Assessing Sources** to determine credibility.
- After students have completed the Source Information section, ask them to independently skim their article for the gist. Tell them they will have 3 minutes to read their article.
- Circulate to support students with vocabulary words.

### Meeting Students’ Needs

- During Work Time B, you may want to pull a small group of students to support in finding evidence from the novel. Some students will need more guided practice before they are ready for independent work.
Resource Materials and Gathering Information: Reading Another “Choice” Text from the Research Folder

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• After 3 to 4 minutes, reconvene the class. Direct students’ attention to the section titled Claims/Central Ideas. Tell students in this area, they should paraphrase the author’s claim/s or central idea. Remind students a claim should be written in their own words or paraphrased, and quotation marks are not needed.</td>
<td></td>
</tr>
<tr>
<td>• Next, direct students’ attention to the section titled Details/Evidence. Tell students in this area they should cite supporting evidence. Remind them to copy the author’s words exactly and to use quotation marks where the quote begins and ends. Tell students they will have 10 minutes to complete their claims and supporting evidence. Remind students each claim may have more than one piece of supporting evidence.</td>
<td></td>
</tr>
<tr>
<td>• Pause to give work time. Circulate to support students as needed. Notice students writing claims in their own words and quoting evidence. Notice students writing in complete sentences.</td>
<td></td>
</tr>
<tr>
<td>• After 10 minutes, reconvene the class. Ask students to find a partner that read the same article. Explain they should compare source information and also compare claims and supporting evidence.</td>
<td></td>
</tr>
<tr>
<td>• After 2 minutes, invite the class to take their seats. Congratulate students on their independent work. Share that you would like to collect Source 3 to read and check for understanding. Tell them in Lessons 7 and 8 they will be using this same graphic organizer with an article from the internet. Explain the information collected today will help guide future lessons.</td>
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</tbody>
</table>
### Closing and Assessment

**A. Debrief: Revising the Big Idea (5 minutes)**
- Remind students in Lesson 2 they participated in a Four Corners activity. Ask them to remember which corner they went to and reflect on their new learning from the articles they read in Lessons 3 and 4.
- Tell students that considering the research question “Do the benefits of DDT outweigh its harmful consequences?” can involve more than two positions. Explain that claims and evidence they identified can expand their thinking. Tell students they will have the opportunity to change their thinking about the use of DDT.
- Introduce Four Corners again. Post four pieces of chart paper with different DDT choices in different corners or parts of the room. Explain each of the choices.
  - DDT is beneficial and can be used for many reasons/purposes.
  - DDT is beneficial but only for preventing health problems such as malaria and Lyme disease.
  - DDT is harmful only when used incorrectly.
  - DDT is harmful and should not be used.
- Ask students to consider each of the statements. Tell students to stand near the statement that most reflects their thinking/position on the use of DDT. Invite students who went to a different corner to share why they chose that comment—in other words, how did their new research change their position? Encourage students to cite evidence.
- Congratulate students for sharing their different perspectives. Reiterate that it is important to consider different perspectives on their topic and to share that thinking as they learn to develop their own position.

### Homework

- Read Chapter 17, “Frightful Feels the Call of the Sky” and complete Learning from Frightful’s Perspective: Chapter 17.
Focus Question: When migration time was getting close, what changes started happening that told the birds it was time to go south or west?

Evidence from the Text:

My thoughts about migration time:

<table>
<thead>
<tr>
<th>Chapter 17: “Frightful Feels the Call of the Sky”</th>
<th>Words I Found Difficult:</th>
<th>Glossary:</th>
</tr>
</thead>
<tbody>
<tr>
<td>nesting — n. a young bird that has not left the nest</td>
<td>ravenously — adv. very eagerly or greedily wanting food, satisfaction, or gratification</td>
<td>paternalism — adv. acting like a father</td>
</tr>
<tr>
<td>cupola — n. a small structure built on top of a roof</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can use context (e.g., the overall meaning of a sentence or paragraph: a word’s position or function in a sentence) to determine meaning of a word or phrase. (L.6.4a)  
I can compare and contrast one author’s presentation of events with that of another (e.g., a memoir written by and a biography on the same person). (RI.6.9)

### Supporting Learning Targets

- I can use context clues to determine the meaning of unfamiliar words.  
- I can compare and contrast two authors’ presentation of events.

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
</tr>
</thead>
</table>
| Learning from Frightful’s Perspective: Chapter 17 (from homework)  
| Research Vocabulary using context clues  
| Comparing and Contrasting Authors’ Presentation |
### Agenda

1. **Opening**
   - A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)
   - B. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. Context Clues: Reviewing Using Context Clues to Determine Word Meaning (10 minutes)
   - B. Comparing Two Authors’ Presentation of Events (20 minutes)

3. **Closing and Assessment**
   - A. Last Words: Any New/Interesting Ideas on Benefits and/or Consequences of Using DDT (5 minutes)

4. **Homework**
   - A. Read Chapter 18: “The Earth Calls Frightful” and complete Learning from Frightful’s Perspective: Chapter 18.

### Teaching Notes

- In previous lessons, students used affixes, dictionaries, and thesauruses to determine word meaning. In today’s lesson, students learn context clue strategies to increase knowledge and skills for expanding vocabulary and improving understanding of texts they read.

- Using context clues is a great way to figure out the meaning of a word. Learning basic strategies helps to find and use clues.

- In today’s lesson, students read two articles from different authors that provide additional information about DDT. Students look closely at how the authors introduce their positions and use evidence and text features to support ideas. Students must compare and contrast different authors’ presentation of information.

- The article “A New Home for DDT” is at a challenging Lexile measure for sixth graders. If necessary to support your students, consider excerpting this article further, keeping in mind that students are looking for how the author introduces the article, what evidence the author includes, and if there are any text features employed to support the argument.

- After reading and comparing and contrasting two articles, students must reflect on any new information presented and how that affects their own thoughts about the benefits and consequences of DDT.

- In advance: Read the articles for comparing and contrasting two different authors’ presentation of information about DDT: “Biological Energy—Here, Let Me Fix It!” and “A New Home for DDT.”

- After this lesson, encourage students to add these two texts to their research folders.

- Post: Learning targets.
### Lesson Vocabulary
- context, compare, contrast

### Materials
- Research folder (begun in Lesson 1)
- Research Vocabulary graphic organizer (from Lesson 4; in research folder)
- Context Clues resource (one per student)
- Document camera
- Using Context Clues practice sheet (one per student)
- Comparing and Contrasting Authors’ Presentations graphic organizer (one per student)
- “Biological Energy—Here, Let Me Fix It!” article (one per student; in research folder)
- “A New Home for DDT” article (one per student; in research folder)
- Authors’ Presentation of Ideas anchor chart (begun in Lesson 3)
- Learning from Frightful’s Perspective: Chapter 18 (one per student)
### Opening

**A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)**

- Invite students to join their triads and share their responses to the Learning from Frightful’s Perspective focus question for Chapter 18: “The Earth Calls Frightful.”
  
  * “Who were the people on Hook Mountain? Why did they cheer when Frightful flew over?”

- Encourage students to use details or evidence that supports their response.

- Tell students to share vocabulary words they added to their “Words I Found Difficult” list with their triad partners. Remind each group member to share words they have selected and the meaning. Add the page number it was found on and a brief definition of the word. Encourage triad members to collaborate to determine the meaning of the words.

- Circulate and listen to gauge students’ responses to the focus question. Commend students for using details and evidence to support their focus question responses. Recognize students for determining meaning of new words.

- Guide students needing support in responding to focus questions and defining words.

- Refocus triads whole group. Call on students to share their triad’s responses to the focus question. Listen for ideas and details or evidence such as:
  
  - “The people on Hook Mountain were men and women who came in the fall to count birds of prey when they were flying on their migration route. The people came every year to see if the birds were surviving.”

  - “The people on Hook Mountain counted migrating birds of prey each year. This helped them learn if banning pesticides and laws that protected the birds were working.”

  - “The people on Hook Mountain cheered because they saw Frightful fly over. It was a thrill to see a peregrine falcon because they are a rare sight.”

  Recognize students for using details or evidence to express their answers.

### Meeting Students’ Needs

- In advance, consider selecting students who benefit from reading or participation support to circle or highlight the important words on today’s learning targets.
# Presentation of Ideas: Comparing Two Authors

## Opening

**B. Unpacking Learning Targets (2 minutes)**

- Invite two students to each lead the class as they all read the learning targets aloud:
  - “I can use context clues to determine the meaning of unfamiliar words.”
  - “I can compare and contrast two authors’ presentation of events.”
- Ask students to look closely at the posted learning targets to identify three important words. Listen for responses that include: context, compare, and contrast. Invite students to circle those words on the posted learning targets. Share the meaning of each of the words:
  - “Context—other words and sentences that are around a new word.”
  - “Compare—to say that (something) is similar to something else.”
  - “Contrast—to compare two things to show how they are different.”
- Thank students for leading the reading of the targets and identifying the important words.
- Explain that using context clues to learn word meanings is an important part of understanding what they read. Tell students today they’ll work with context clues to solve the mystery of unknown words.
- Inform students they will also compare and contrast the DDT article they read in the last lesson with a new article.

## Work Time

**A. Context Clues: Reviewing Using Context Clues to Determine Word Meaning (10 minutes)**

- Remind students that in the past few lessons they’ve been learning and using different strategies to determine word meaning. To do this, they have been using affixes, which include both prefixes and suffixes, and resources such as dictionaries and thesauruses.
- Today they will add to those strategies by using context clues to figure out the meaning of a word.
- Explain that context is other words and sentences that are around or near the new word. These are hints or clues that help you determine the meaning of an unknown word. When you use context clues you are making an informed guess.
- Authors provide clues in different ways. Those strategies include definitions, synonyms, and antonyms.
- Inform students they will use those strategies to find context clues and determine the meaning of a word.

### Meeting Students’ Needs

- Some students may benefit from using definitions and synonyms to find the meaning of new words.
- Students may benefit from rereading to increase understanding and find context clues.
### Work Time (continued)

- Form student partnerships.
- Ask students to go into their research folder and bring out their Research Vocabulary graphic organizer.
- Ask students to also find their Context Clues Resource in their research folder. Use a document camera to display the Context Clues Resource.
- Introduce context clue strategies that help determine the meaning of a word. Distribute the Using Context Clues practice sheet, using the document camera to display the practice sheet and introduce instructions.
- Tell students to think-pair-share as they identify a different context clue used in each passage. Ask them to read each passage to themselves. Tell students to look carefully for different types of clues. Ask students to share the clues they identified with their partner and the definitions for the words. Record the clues and meanings of the highlighted words.
- Circulate to observe and support students needing help identifying clues and using them to determine word meanings.
- Refocus students whole group. Ask them to look at the word environmentalist on their Research Vocabulary graphic organizer. Tell student to compare the meaning of environmentalist they identified using context clues with the definition they found in the dictionary and by using affixes.
- Call on students to share the meaning/meanings they found using different strategies.
- Ask students to look at the question on third column: “What strategy helped you determine meaning?” Ask students to write which of the strategies were helpful. Suggest they record all of the strategies that were helpful.
- Commend students for using different types of context clues to search for word meaning. Explain that all of the strategies are helpful in building their vocabulary skills and strengthening their reading for claims and evidence. Tell students they can practice these vocabulary strategies as they compare and contrast how two different authors present their information.

### B. Comparing Two Authors’ Presentation of Events (20 minutes)

- Direct students to open the research folders to their Comparing and Contrasting Authors’ Presentation graphic organizers.
- Ask students to also take two articles from their research folder titled “Biological Energy—Here, Let Me Fix It!” and “A New Home for DDT.”

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider supporting a small group of students in reading the articles and identifying how authors presented their information.</td>
</tr>
</tbody>
</table>
Work Time (continued)

- Use a document camera. Focus students’ attention on the columns on the Comparing and Contrasting Authors’ Presentation graphic organizer called Text 1 and Text 2.
- Remind students that they selected one of the articles to read in the last lesson. The title of that article should be written under Text 1. The other title, which they will read today, should be written under Text 2.
- Explain that in this lesson, first they will reread the article they have already read to identify how the author presented information.
- Use the document camera to point out three different ways authors present information that students will identify as they read. Those include:
  * “How does the author introduce the article?”
  * “What type of evidence does the author include?”
  * “How does the author use text features (photographs, graphs, diagrams, etc.)?”
- Use the document camera to review strategies authors use to introduce and use evidence and text features with the Authors’ Presentation of Ideas anchor chart (from Lesson 3).
- Tell students they will have about 8 minutes to read and respond to the questions for each article. Suggest that students complete reading in about 3 minutes to allow time to find and record the information that identifies the way the authors present information.
- When students have finished reading both articles and documenting how the authors presented information, they should compare how the articles were similar and how they were different. Allow students 4 minutes to compare and contrast the presentation strategies.
- Circulate and observe to gauge how well students are doing with reading and identifying the authors’ presentation.
- Remind students when it is time to begin reading and assessing the other article.
- Give students specific positive praise on at least two strengths. Suggest one goal for strengthening.

Meeting Students’ Needs

- Some students may need more guided practice with comparing and contrasting authors’ presentations of ideas and information before they are ready for independent work.
- Consider providing alternative articles to some students.
- Students may benefit from reviewing the Authors’ Presentation of Events anchor chart before reading the articles and completing the Comparing and Contrasting Authors’ Presentation graphic organizer.
- Some students may benefit from using the Authors’ Presentation of Events anchor chart as they read the articles and compare and contrast.
## Closing and Assessment

**A. Last Words: Any New/Interesting Ideas on Benefits and/or Consequences of Using DDT (5 minutes)**
- Ask students to turn and talk with a partner to share which article they thought was more effective in presenting information and why.
- Tell students to identify at least one new or interesting idea they learned on the benefits and/or consequences of using DDT and write that idea at the bottom of the Comparing and Contrasting Authors’ Presentation graphic organizer.
- Remind students to put their graphic organizer and the two articles in their research folders.

## Meeting Students’ Needs

<table>
<thead>
<tr>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Read Chapter 18: “The Earth Calls Frightful” and complete <strong>Learning from Frightful’s Perspective: Chapter 18</strong>.</td>
</tr>
</tbody>
</table>
The first way to figure out the meaning of a new word is from its context. The context is the other words or sentences that are around the new word. Here are some strategies, or clues, for unlocking the meaning of a new word.

Clue 1: Search for a definition, a statement giving the meaning of a word.
Clue 2: Search for a synonym, a word or words that mean almost the same thing.
Clue 3: Search for an antonym, a word or words that mean the opposite of a word.
Clue 4: Reread the sentence and substitute a word that seems to make sense in the context.

If the word still does not make sense after using context clues, check a dictionary.
Read the following statements. Use a context clue to find the meaning of the bold word in each statement.

Rachel Carson’s work as a writer and scientist advocating for the needs of the environment captured people’s attention. Her book, *Silent Spring*, began a new age of awareness about pollution and other threats in the natural world. Because Rachel Carson spoke out about the silence of birds and worked to protect the natural world, she became known as an **environmentalist**.

Search for a definition for **environmentalist** in the sentences around the word. What definition does the text provide?

Rachel Carson wrote about an American town where all life used to live in harmony with its surroundings. She told people that **environment** changed when pesticides were used in that setting.

Search for a synonym for **environment** in the sentences around it. What synonym does the text provide?
Chemical manufacturers were furious with Rachel Carson. They disagreed with her message as an environmentalist and called her a hysterical fanatic. They claimed that pesticides were perfectly benign, not harmful as Carson claimed, and there was no need to protect the natural world.

Search for an antonym for benign. What antonym does the text provide? What does benign mean?
## Comparing and Contrasting Authors’ Presentations Graphic Organizer

<table>
<thead>
<tr>
<th>Text 1: Title: “Biology—Here, Let Me Fix It!”</th>
<th>Compare and Contrast the Authors’ Presentations</th>
<th>Text 2: Title: “How DDT Harmed Hawks and Eagles”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How does the author introduce the article?</strong></td>
<td><strong>How are they similar?</strong></td>
<td><strong>How does the author introduce the article?</strong></td>
</tr>
<tr>
<td><strong>What claim does the author make?</strong></td>
<td><strong>How are they similar?</strong></td>
<td><strong>What claim does the author make?</strong></td>
</tr>
<tr>
<td><strong>What type of evidence does the author include?</strong></td>
<td><strong>How are they similar?</strong></td>
<td><strong>What type of evidence does the author include?</strong></td>
</tr>
<tr>
<td><strong>How does the author use text features (photographs, graphs, diagrams, etc.)?</strong></td>
<td><strong>How are they similar?</strong></td>
<td><strong>How does the author use text features (photographs, graphs, diagrams, etc.)?</strong></td>
</tr>
</tbody>
</table>
Comparing and Contrasting Authors’ Presentations Graphic Organizer

Which article is more effective in its argument? Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
### Learning from Frightful’s Perspective: Chapter 18

<table>
<thead>
<tr>
<th>Focus Question:</th>
<th>Evidence from the Text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What can you infer (or figure out based on evidence in text) about the people on Hook Mountain? What traits would you use to describe these people?</td>
<td>My thoughts about the people who the people were on Hook Mountain:</td>
</tr>
</tbody>
</table>

#### Chapter 18: “The Earth Calls Frightful”

#### Words I Found Difficult:

- **Galapagos Islands**—n. the volcanic islands off the coast of Ecuador (to which they belong) in the eastern Pacific Ocean
- **winter solstice**—n. the time at which the sun appears at noon at its lowest altitude above the horizon; in the Northern Hemisphere it is usually around December 22
- **magnetic pull**—n. the earth has two magnet-like pulls made by swirling motions of molten iron, one at the North Pole and one at the South Pole

#### Glossary:

- **Galapagos Islands**: n. the volcanic islands off the coast of Ecuador (to which they belong) in the eastern Pacific Ocean.
- **winter solstice**: n. the time at which the sun appears at noon at its lowest altitude above the horizon; in the Northern Hemisphere it is usually around December 22.
- **magnetic pull**: n. the earth has two magnet-like pulls made by swirling motions of molten iron, one at the North Pole and one at the South Pole.

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Name: 

Date: 

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Researching Digital Sources, Part 1: Guided WebQuest
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can conduct short research projects to answer a question. (W.6.7)
I can use several sources in my research. (W.6.7)
I can refocus or refine my question when appropriate. (W.6.7)
I can gather relevant information from a variety of sources. (W.6.8)
I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
I can provide a list of sources I used to gather information in a bibliography. (W.6.8)

Supporting Learning Targets

- I can choose digital resources that will help me answer my research question.
- I can gather relevant information from digital resources about my research question.

Ongoing Assessment

- Learning from Frightful’s Perspective: Chapter 18 (from homework)
- Researcher’s notebooks
- Exit Ticket: Using Digital Resources
### Agenda

1. **Opening**
   - A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)
   - B. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. Researching Digital Texts: Mini Lesson (10 minutes)
   - B. Researching Digital Texts: WebQuest (20 minutes)

3. **Closing and Assessment**
   - A. Exit Ticket: Using Digital Resources (5 minutes)

4. **Homework**
   - A. Read Chapter 19, “Destiny is On Wing” and complete Learning From Frightful’s Perspective: Chapter 19.

### Teaching Notes

- At this point in the research process, students have gathered information relevant to their central research question using resources provided in their research folders. They have learned to collect basic bibliographic information, paraphrase central claims and ideas from the text, and collect important evidence related to those claims and ideas.

- Students have been collecting this information about sources in their researcher’s notebooks. They have also collected additional questions they have about their topic, and revised their research question when necessary.

- In this lesson, students research digital resources. This process continues in Lesson 8. This research will take the form of a guided WebQuest. Students receive a list of internet resources on the topic of DDT (see supporting materials). Using a similar process to that of choosing print material (determining which source is most relevant to their questions), students will choose what to read from this menu of resources.

- If you have access to a class web page, consider posting the links provided to that page, making it easier for students to follow the links rather than typing them in themselves.

- In order to successfully complete the next two lessons, students will each need access to a computer. If technology is limited, consider pairing students at computers.

- Students collect information in a way identical to the print resources in their researcher’s notebooks. What differs in this process, however, is the assessment of credibility. In this lesson, you must demonstrate multiple strategies for assessing the credibility of an internet resource.

- In advance: Set up technology allowing you to model the internet research process for students. For example, connect a laptop to a projector or use an interactive whiteboard.

- After students have completed this lesson, collect their exit tickets as a formative assessment. These will help you to form small groups or set individual appointments with students to assist them in this digital research in Lesson 8.

- Post: Learning targets.
## Lesson Vocabulary

<table>
<thead>
<tr>
<th>digital</th>
</tr>
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</table>

## Materials

- *Frightful’s Mountain* (book; one per student)
- Digital Resources on DDT (one per student; one to display)
- Document camera
- Researcher’s notebook (begun in Lesson 1)
- Exit Ticket: Using Digital Resources (one per student)
- Learning from Frightful’s Perspective: Chapter 19 (one per student)
## Opening

### A. Engaging the Reader: Learning from Frightful’s Perspective (8 minutes)

- Be sure students have their text, *Frightful’s Mountain*.
- Invite students to sit in triads to discuss Learning from Frightful’s Perspective: Chapter 18.
- Compliment students for promptly sitting in their triads and discussing the focus question from last night’s homework:
  * “What can you infer about the people standing on the top of the mountain? What traits would you use to describe these people?“
- Circulate to listen to responses shared about what character traits they could infer about the people standing on the mountain. Also, provide support to triads trying to define unfamiliar words.
- Reconvene the class and ask students to share out.
- Listen for, “These must be very dedicated people to the environment. They know about peregrine falcons and the danger they face, and they waited on a mountain top just for the sight of one.”
- Remind students of Rachel Carson’s quote, “Nothing exists in nature alone,” discussed in Lesson 1. Invite students to think about the quote again. Ask:
  * “How do the events of this chapter relate to the quote ‘Nothing exists in nature alone’?”
- Ask students to share their thinking with their triads, then cold call a few students to share their group’s thinking. Guide students toward the idea that this chapter brings up multiple connections: Sam, as a human, had a positive effect on nature by recognizing Frightful’s need to leave and live in nature. But this chapter also brings up how rare the peregrine sighting was as a result of harm to the peregrine falcon population caused by DDT.
Opening (continued)

B. Unpacking Learning Targets (2 minutes)

- Invite students to read the learning targets with you:
  * “I can choose digital resources that will help me answer my research question.”
  * “I can gather relevant information from digital resources about my research question.”

- Invite students to Think-Pair-Share:
  * “What does digital mean?”
  * “How is digital different from print?”

- Listen for: “Digital means electronic or on the computer. It’s different from the paper resources we have been reading.”
  Clarify as needed.

- Ask:
  * “Now that you have seen the learning targets for this lesson, what do you think you will be doing today? Why?”

Work Time

A. Researching Digital Texts: Mini Lesson (10 minutes)

- Distribute the Digital Resources on DDT to each student and display using a document camera. Tell students that this is a list of Web sites that represents a variety of opinions and sources of information about DDT. Point out the two columns on this list. Ask students to Think-Pair-Share:
  * “What does the left-hand column of this list represent?” Listen for students to respond with something like: “These are the Web sites that we can visit about DDT” or “These are the actual URLs that we can follow to read about DDT.”

- Give students a few seconds to scan the right-hand column. Ask students to Think-Pair-Share:
  * “How do you think this right-hand column will be helpful?” Guide students toward the idea that the Web site descriptions can help if they are looking for answers to specific questions, or if there is one area of DDT they want to read more about. They don’t have to visit every single Web site to find what they’re looking for.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remind students that when deciding which resource to read next, whether it be print or digital, they need to ask themselves a couple of key questions:</td>
<td></td>
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<tr>
<td>– What is the source information for this? (author, Web site, date, etc.)</td>
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<tr>
<td>– Is it a credible source? (If not, students should skip it and move on to other sources.)</td>
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<tr>
<td>– What information am I missing in my research?</td>
<td></td>
</tr>
<tr>
<td>– What questions do I need answered before I can take a position on this issue?</td>
<td></td>
</tr>
<tr>
<td>• Ask students to Think-Pair-Share:</td>
<td></td>
</tr>
<tr>
<td>* “If one of my research questions is ‘Are there other solutions to the problem of malaria?, which Web site might I start with?”</td>
<td></td>
</tr>
<tr>
<td>• Remind students to look at both columns of the Digital Resources on DDT to help guide their thinking. Cold call a partnership to share their thinking. Listen for: “We would go to the Web site for the Pesticide Action Network because it says the Web site discusses why DDT is not the only solution for malaria.”</td>
<td></td>
</tr>
<tr>
<td>• Ask students to take out their researcher’s notebook. Remind students that before deciding which Web site to read, they should go back and review the notes they have already taken. They should also be sure to reread the questions they recorded in the bottom portion of each page. And then they should ask themselves the two key questions:</td>
<td></td>
</tr>
<tr>
<td>– What information am I missing in my research?</td>
<td></td>
</tr>
<tr>
<td>– What questions do I need answered before I can take a position on this issue?</td>
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<tr>
<td>• Tell students that many online forums have reader responses included. These readers are not necessarily experts in the field, and are not required to use evidence to back up their thinking. Therefore, students should avoid reading reader responses, as it may skew their opinions unnecessarily.</td>
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<tr>
<td>• Give students 3 to 4 minutes to review their notes in their researcher’s notebooks. Then, ask students to turn to an elbow partner and share their thinking about which Web site they may begin with and why.</td>
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</tr>
<tr>
<td>Work Time (continued)</td>
<td>Meeting Students’ Needs</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>B. Researching Digital Texts: WebQuest (20 minutes)</strong></td>
<td>• During Work Time B, you may want to pull a small group of students to support in finding evidence from the Web sites. Some students will need more guided practice before they are ready for independent work.</td>
</tr>
<tr>
<td>• Remind students that reading a Web site is like reading any other complex text. They should read through the site first to understand the general structure and to get the gist.</td>
<td>• Consider printing Web site materials for those students who need the support of “pencil and paper” work where they can highlight, annotate, or chunk text.</td>
</tr>
<tr>
<td>• Remind students they should be on the lookout for new and difficult vocabulary, using the many strategies they have learned to determine the meaning of new words.</td>
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</tr>
<tr>
<td>• On their second reading of the Web site, they should go back and collect and paraphrase the important claims and specific evidence to record in their researcher’s notebooks.</td>
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<tr>
<td>• Remind students that the Web site they choose to explore should be Source 4 in their researcher’s notebook.</td>
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<tr>
<td>• Give students the next 20 minutes to read one of the digital sources available to them and fill in the Source 4 page of their researcher’s notebook.</td>
<td></td>
</tr>
<tr>
<td>• Circulate and support students in their work. Specifically, some students may need additional guidance in choosing the Web site that will best serve their individual research.</td>
<td></td>
</tr>
<tr>
<td><strong>Closing and Assessment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Exit Ticket: Using Digital Resources (5 minutes)</strong></td>
<td></td>
</tr>
<tr>
<td>• Distribute the Exit Ticket: Using Digital Resources to each student. Tell students that its purpose is for you to gauge their comfort level with using digital resources, their need for a greater variety of resources, and any struggles they may have had in using the internet as a research tool. Tell students you will read these exit tickets to help prepare for Day 2 of using digital resources.</td>
<td></td>
</tr>
<tr>
<td>• Give students 3 to 4 minutes to complete the exit ticket. Circulate and support students as they work.</td>
<td></td>
</tr>
<tr>
<td>• Collect exit tickets and use them to make any accommodations or create small group instruction that may help in Lesson 8.</td>
<td></td>
</tr>
<tr>
<td><strong>Homework</strong></td>
<td></td>
</tr>
<tr>
<td>• Read Chapter 19 of Frightful’s Mountain, “Destiny is On Wing” and complete Learning From Frightful’s Perspective: Chapter 19.</td>
<td></td>
</tr>
</tbody>
</table>
### Digital Resources on DDT

<table>
<thead>
<tr>
<th>Web Site URL</th>
<th>Description of Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.discoveriesinmedicine.com/Com-En/DDT.html#bDDT">http://www.discoveriesinmedicine.com/Com-En/DDT.html#bDDT</a></td>
<td>This Web site is a general information Web site. It defines what DDT is, how it is used, its benefits, and its dangers.</td>
</tr>
<tr>
<td><a href="http://www.panna.org/issues/persistent-poisons/the-ddt-story">http://www.panna.org/issues/persistent-poisons/the-ddt-story</a></td>
<td>This is the Web site for the Pesticide Action Network. It gives breakdowns on what foods and where in our bodies DDT can still be found. It also discusses why DDT is not the only solution for malaria.</td>
</tr>
<tr>
<td><a href="http://www.nothingbutnets.net">http://www.nothingbutnets.net</a></td>
<td>This is the Web site of a nonprofit organization, Nothing But Nets, committed to helping end the malaria epidemic. This Web site informs about malaria, preventative measures against malaria, and the treatment of malaria in developing countries.</td>
</tr>
<tr>
<td><a href="http://animals.nationalgeographic.com/animals/birds/peregrine-falcon/">http://animals.nationalgeographic.com/animals/birds/peregrine-falcon/</a></td>
<td>This is a National Geographic’s Web site with general information about the peregrine falcon.</td>
</tr>
</tbody>
</table>
Exit Ticket: Using Digital Resources

Name: __________________________

Date: __________________________

On a scale from 1 to 5, how comfortable were you finding information from digital resources?

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel lost</td>
<td>OK, but need some help</td>
<td>Totally confident</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Were you able to find the information you need with the digital resources given, or do you need more sources?

☐ I’m OK with what we have  ☐ I need more sources

What, if anything, was difficult about researching with digital resources?

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
### Chapter 19: “Destiny Is on Wing”

#### Focus Question:
Where did Frightful decide to nest? Who was the tiercel that would be her mate?

<table>
<thead>
<tr>
<th>My thoughts about Frightful’s nesting:</th>
<th>Evidence from the Text:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Glossary:
- **contentment** — *n.* the state of being happy and satisfied
- **accumulated** — *v.* gathered or acquired (something) gradually as time passes
- **biological clock** — *n.* a system in the body that controls the occurrence of natural processes
- **conservation** — *n.* the protection of animals, plants, and natural resources another
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Target</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can conduct short research projects to answer a question. (W.6.7)</td>
<td>W.6.7</td>
</tr>
<tr>
<td>I can use several sources in my research. (W.6.7)</td>
<td>W.6.7</td>
</tr>
<tr>
<td>I can refocus or refine my question when appropriate. (W.6.7)</td>
<td>W.6.7</td>
</tr>
<tr>
<td>I can gather relevant information from a variety of sources. (W.6.8)</td>
<td>W.6.8</td>
</tr>
<tr>
<td>I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)</td>
<td>W.6.8</td>
</tr>
<tr>
<td>I can provide a list of sources I used to gather information in a bibliography. (W.6.8)</td>
<td>W.6.8</td>
</tr>
</tbody>
</table>

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Learning Target</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can choose digital resources that will help me answer my research question.</td>
<td>W.6.7</td>
</tr>
<tr>
<td>I can gather relevant information from digital resources about my research question.</td>
<td>W.6.8</td>
</tr>
</tbody>
</table>

### Ongoing Assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning from Frightful’s Perspective: Chapter 19 (from homework)</td>
<td>W.6.7</td>
</tr>
<tr>
<td>Researcher’s notebook</td>
<td>W.6.8</td>
</tr>
</tbody>
</table>
### Agenda

1. **Opening**
   - A. Unpacking Learning Targets (2 minutes)
2. **Work Time**
   - A. Researching Digital Texts: WebQuest (30 minutes)
   - B. Mix and Mingle: Sharing Our Digital Learning (8 minutes)
3. **Closing and Assessment**
   - A. Preparing for the Mid-Unit 2 Assessment (5 minutes)
4. **Homework**
   - A. Review your researcher’s notebook and the Comparing and Contrasting Authors’ Presentation graphic organizer to prepare for the tasks of the Mid-Unit 2 Assessment.

### Teaching Notes

- This lesson is the second part of a two-part lesson in which students continue to research the question “Do the benefits of DDT outweigh its harmful consequences?”
- In Lesson 7, students were introduced to a menu of Web sites from which they could choose. They were guided through the process of choosing which Web site might be best in helping them find information they need, fill gaps in their research, or answer questions before they take a personal position about the use of DDT.
- In this lesson, students continue researching digital sources. For some students, this may mean returning to the same Web site they visited in Lesson 7 because they did not finish the process of filling in their researcher’s notebook. For other students, this means visiting a new Web site to complete the Source 5 section of their researcher’s notebook.
- In advance: In order to successfully complete this lesson, students will each need access to a computer. If technology is limited, consider pairing students at computers.
- In advance: Review Mix and Mingle, used in Work Time B. (See Appendix.)
- Post: Learning targets.

### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Researcher’s notebook (begun in Lesson 1)</td>
</tr>
<tr>
<td>• Digital Resources on DDT (from Lesson 7)</td>
</tr>
</tbody>
</table>
A. Unpacking Learning Targets (2 minutes)

- Invite students to read the learning targets with you:
  * “I can choose digital resources that will help me answer my research question.”
  * “I can gather relevant information from digital resources about my research question.”

- Because students focused on the first learning target in Lesson 7, tell them that today you would like to concentrate on the second learning target.

- Invite students to Think-Pair-Share:
  * “What does relevant mean?”
  * “Why is it important to find relevant information?”

- Listen for: “Relevant means that the information is related to my research question, or is helpful in answering questions I still have. It’s important to find relevant information because the purpose of this research is to answer questions that I have.” Clarify as needed.
  * “Now that you have seen the learning targets for this lesson, what do you think you will be doing today? Why?”

- Listen for: “We are going to continue reading articles on the internet, and searching for answers to our research question.”

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning targets are a research-based strategy that helps all students, but helps challenged learners the most.</td>
</tr>
<tr>
<td>Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
<tr>
<td>Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.</td>
</tr>
</tbody>
</table>
## A. Researching Digital Texts: WebQuest (30 minutes)

- Congratulate students on the great progress they made yesterday in transitioning from print to digital resources. Tell them that it’s sometimes difficult to use the internet as a research tool, given the vast amount of information found there. That’s why it’s so important to have a targeted and specific question you are trying to answer.

- Invite students to take out their **researcher’s notebook** and refer to Source 4, where they collected information from digital sources in Lesson 7. Ask students to Think-Pair-Share:
  * “What is something new you learned in your WebQuest yesterday?”

- Invite pairs to share a new piece of learning that they recorded in their notebooks. Ask students to Think-Pair-Share:
  * “What is a question you were left with that you would like to pursue today?”

- Invite individual students to share a question to which they would like to find an answer. After a student has shared a question, ask the class to take out their **Digital Resources on DDT** from Lesson 7. Ask students to Think-Pair-Share:
  * “Given the question we just heard, which Web site would be best to visit in search of an answer?”

- Allow students to talk with a partner about which Web site on the list might have the answer. Invite volunteers to share which Web sites might be a good start, and what evidence from the Digital Resources on DDT page led them to this conclusion.

- Tell students they will have the next 25 minutes to continue searching for answers to their questions about DDT. They should be writing in their researcher’s notebook for Source 5.

- Circulate and assist students with reading and technology, as well as with completing their writing in their researcher’s notebook for Source 5.

## Meeting Students’ Needs

- During Work Time A, you may want to pull a small group of students to support in finding evidence from the Web sites. Some students will need more guided practice before they are ready for independent work.

- Consider printing Web site materials for those students who need the support of “pencil and paper” work where they can highlight, annotate, or chunk text.
B. Mix and Mingle: Sharing Our Digital Learning (8 minutes)

- Tell students they will now do an activity called Mix and Mingle to share their learning and insights from their digital resources.
- Remind students that this is especially important because they did not all read the same articles, as they pursued answers to their own individual questions. This means that information they hold in their researcher’s notebooks may be helpful to their peers, who chose to read different resources. Similarly, someone may be hanging on to a piece of evidence that will be very helpful to students, so it’s important to listen carefully as others share.
- Tell students that before they mix and mingle they should place a star next to two or three pieces of information that they found especially interesting and helpful in answering their questions. They will share these pieces of evidence with their peers.
- Give students 1 minute to identify the learning they’ll share with their peers.
- Give students 5 minutes to mix and mingle and share.
- Invite students to return to their seats. Cold call a few students, as time permits, to share a new fact they learned by listening.
- Give students specific positive feedback on their cooperative learning and active listening.
## Closing and Assessment

### A. Preparing for the Mid-Unit 2 Assessment (5 minutes)
- Once students are seated, remind them that in the next lesson they will complete their mid-unit assessment.
- Remind students that they will be reading two new articles about DDT for the mid-unit assessment. They will then complete a research page identical to a page from their researcher's notebook to show they understand how to collect information about sources, paraphrase information in answer to their research question, and collect important facts and details. They will also show how they can compare and contrast two authors' presentations of ideas and information. To do this, they will complete a Comparing and Contrasting Authors' Presentations graphic organizer, identical to the ones they used during previous lessons.
- Ask students to Think-Pair-Share:
  * “What questions or worries do you still have about our assessment in the next lesson?”
- Invite students to share, as needed, their questions. Clarify any and all points, ensuring students feel confident about participating in this assessment.

## Meeting Students' Needs

### A. Meeting Students' Needs
- Consider displaying for students the page from the researcher's notebook and the Comparing and Contrasting Authors' Presentation graphic organizer. Seeing this document will allow students to mentally prepare for the task they complete in the mid-unit assessment.

### Homework

- Review your researcher's notebook and the Comparing and Contrasting Authors' Presentation graphic organizer to prepare for the tasks of the Mid-Unit 2 Assessment.

There are no new supporting materials for this lesson.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can compare how different authors present the same idea or event. (RI.6.9)
I can conduct short research projects to answer a question. (W.6.7)
I can use several sources in my research. (W.6.7)
I can refocus or refine my question when appropriate. (W.6.7)
I can gather relevant information from a variety of sources. (W.6.8)
I can assess the credibility of each source I use. (W.6.8)
I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
I can provide a list of sources I used to gather information in a bibliography. (W.6.8)
I can use a variety of strategies to determine the meaning of unknown words and phrases. (L.6.4)
  
  a. I can use context to determine the meaning of a word or phrase.
  
  b. I can use common Greek and Latin affixes (prefixes) and roots as clues to help me determine the meaning of a word.
  
  c. I can use resource materials (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning of key words and phrases, and parts of speech.
  
  d. I can check the accuracy of my guess about the meaning of a word or phrase by using resource materials.

### Supporting Learning Targets

- I can gather relevant information from research materials.
- I can assess the credibility of the article “DDT Spray Scares Mosquitoes Away, Study Finds.”
- I can compare and contrast the authors’ presentation of ideas for “DDT Spray Scares Mosquitoes Away, Study Finds” and “You Think You Have It Tough?”
- I can use multiple strategies help me determine the meaning of a word.

### Ongoing Assessment

- Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research
GRADE 6: MODULE 4: UNIT 2: LESSON 9
Mid-Unit Assessment:
Comparing and Contrasting Two Texts: Simulated Research

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• At this point, students have completed their research from several sources, both print and digital. They have also been comparing and contrasting authors’ presentations of ideas, specifically how the author introduces the idea, the claim, what type of evidence the author uses, and how the author uses other text features.</td>
</tr>
<tr>
<td>A. Unpacking Learning Targets and Assessment</td>
<td>• Thus, in this mid-unit assessment, students are asked to read two informational articles: “DDT Spray Scares Mosquitoes Away, Study Finds” and “You Think You Have It Tough?” After reading “DDT Spray Scares Mosquitoes Away, Study Finds,” students are asked to complete a “simulated research” page identical to a page in their researcher’s notebooks.</td>
</tr>
<tr>
<td>Prompt</td>
<td>• This on-demand assessment is meant to assess students’ ability to do independent research. However, students’ researcher’s notebooks should be referenced when assessing students’ ability to conduct an ongoing research project.</td>
</tr>
<tr>
<td>(5 minutes)</td>
<td>• After reading “You Think You Have It Tough?” students are asked to compare and contrast these two authors’ presentations of malaria and the use of DDT. Students will use the Comparing and Contrasting Authors’ Presentation graphic organizer identical to the one they have been using throughout this unit.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• Finally, students will complete a Research Vocabulary graphic organizer identical to the one they’ve used since the beginning of this unit. Students are invited to complete the process of giving an initial idea for a word’s definition using context clues and/or root words and affixes, then confirming or revising their definition using resource materials such as a dictionary.</td>
</tr>
<tr>
<td>A. Mid-Unit 2 Assessment: Simulated Research</td>
<td>• Although the author of “You Think You Have It Tough?” does not specifically mention the use of DDT in the article, at this point in the module, students should be able to make the connection between mosquitoes and malaria and the use of DDT.</td>
</tr>
<tr>
<td>Task: “DDT Spray Scares Mosquitoes Away, Study Finds”</td>
<td>• The article “DDT Spray Scares Mosquitoes Away, Study Finds” is a high Lexile in qualitative measures. However, it is appropriate to this task because by now students should be familiar with much of the vocabulary that makes this a complex text.</td>
</tr>
<tr>
<td>(15 minutes)</td>
<td>• Sample student responses are provided in the supporting materials. These responses are just examples; actual student responses will vary.</td>
</tr>
<tr>
<td>B. Mid-Unit 2 Assessment: Comparing and Contrasting Authors’ Presentation (15 minutes)</td>
<td>• After reading “You Think You Have It Tough?” students are asked to compare and contrast these two authors’ presentations of malaria and the use of DDT. Students will use the Comparing and Contrasting Authors’ Presentation graphic organizer identical to the one they have been using throughout this unit.</td>
</tr>
<tr>
<td>C. Mid-Unit 2 Assessment: Research Vocabulary (5 minutes)</td>
<td>• Finally, students will complete a Research Vocabulary graphic organizer identical to the one they’ve used since the beginning of this unit. Students are invited to complete the process of giving an initial idea for a word’s definition using context clues and/or root words and affixes, then confirming or revising their definition using resource materials such as a dictionary.</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>• Although the author of “You Think You Have It Tough?” does not specifically mention the use of DDT in the article, at this point in the module, students should be able to make the connection between mosquitoes and malaria and the use of DDT.</td>
</tr>
<tr>
<td>A. Reflecting on Learning Targets (5 minutes)</td>
<td>• The article “DDT Spray Scares Mosquitoes Away, Study Finds” is a high Lexile in qualitative measures. However, it is appropriate to this task because by now students should be familiar with much of the vocabulary that makes this a complex text.</td>
</tr>
<tr>
<td>4. Homework</td>
<td>• Sample student responses are provided in the supporting materials. These responses are just examples; actual student responses will vary.</td>
</tr>
</tbody>
</table>
### Agenda

<table>
<thead>
<tr>
<th>Teaching Notes (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In advance: Read the articles used in this mid-unit assessment (see supporting materials). Also read the sample student response for the simulated research page and comparing authors’ presentations to familiarize yourself with the expectations for students.</td>
</tr>
<tr>
<td>• Be sure students have access to their Credibility Checklist, which they have been using throughout their research. This will be necessary for completing the simulated research page.</td>
</tr>
<tr>
<td>• Be sure students have access to a resource material, such as a print or online dictionary, to determine word meanings.</td>
</tr>
<tr>
<td>• Post: Learning targets; Mid-Unit 2 Assessment prompt.</td>
</tr>
</tbody>
</table>

### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research (one per student and one to display)</td>
</tr>
<tr>
<td>• “DDT Spray Scares Mosquitoes Away, Study Finds” (assessment text; one per student)</td>
</tr>
<tr>
<td>• “You Think You Have It Tough?” (assessment text; one per student)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research graphic organizer (one per student)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research graphic organizer, sample student response (for teacher reference)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment: Comparing and Contrasting Authors’ Presentations graphic organizer (one new blank per student)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment: Comparing and Contrasting Authors’ Presentations graphic organizer: sample student response (for teacher reference)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment: Research Vocabulary: Using Multiple Strategies to Determine the Meaning of Words graphic organizer (one new blank per student)</td>
</tr>
<tr>
<td>• Dictionaries (one per student)</td>
</tr>
<tr>
<td>• Credibility Checklist (one new blank per student)</td>
</tr>
</tbody>
</table>
### Opening

A. Unpacking Learning Targets and Assessment Prompt (5 minutes)

- In advance, display and distribute the **Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research**. Tell students:
  - “Today you will be reading two articles: ‘DDT Spray Scares Mosquitoes Away, Study Finds’ and ‘You Think You Have It Tough?’ Both of these are informational articles about mosquitoes, malaria, and DDT.
  - “After reading the first article, ‘DDT Spray Scares Mosquitoes Away, Study Finds,’ complete a **Simulated Research graphic organizer** identical to the ones you have been completing in your researcher’s notebooks.
  - “After reading the second article, ‘You Think You Have It Tough?’, complete a **Comparing and Contrasting Authors’ Presentations graphic organizer** identical to the one you have used in previous lessons.”
  - “Finally, for each word on the **Research Vocabulary: Using Multiple Strategies to Determine the Meaning of Words graphic organizer**, use a strategy such as context clues or root words and affixes to make an initial determination for the word’s meaning. Then use a resource material, such as a **dictionary**, to confirm or revise that meaning.”

- Invite students to read along as you read aloud the mid-unit assessment prompt. Ask students to Think-Pair-Share:
  - “Based on this prompt, describe to a partner, in your own words, what you think you will be doing in your assessment today.”

- Confirm for students that they will be reading two articles today. They will be completing graphic organizers and note-taking tools identical to the ones they have been using throughout their research process.

- Ask:
  - “Are there any clarifying questions about this prompt?”

- Give students the opportunity to ask any questions about the prompt or the assessment.

- Tell students the purpose of this assessment is to give them the opportunity to show their mastery of learning targets that they have been working on for the last couple of weeks. Tell students that you would like to review those learning targets now.
### Opening (continued)

- Read aloud, or invite a student to read aloud, today’s learning targets:
  
  * “I can gather relevant information from research materials.”
  * “I can assess the credibility of the article ‘DDT Spray Scares Mosquitoes Away, Study Finds.’”
  * “I can compare and contrast the authors’ presentation of ideas for ‘DDT Spray Scares Mosquitoes Away, Study Finds’ and ‘You Think You Have It Tough?’”
  * “I can use multiple strategies help me determine the meaning of a word.”

- Ask:
  
  * “Looking at these learning targets, and the assessment prompt, how do you think you will be showing your mastery of the learning targets?”
  
  * Listen for example such as: “We’ll read the article and pretend like we’re doing it for research, so we’ll fill in our researcher’s notebook” and “We’ll have to decide if the article we read is credible using our Credibility Checklist” and “We’ll have figure out the meaning of new words using the strategies we have learned.”
### Work Time

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Mid-Unit 2 Assessment: Simulated Research Task: “DDT Spray Scares Mosquitoes Away, Study Finds”</strong> (15 minutes)</td>
<td></td>
</tr>
<tr>
<td>• Distribute the informational article “DDT Spray Scares Mosquitoes Away, Study Finds” and the Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research graphic organizer to each student.</td>
<td></td>
</tr>
<tr>
<td>• Remind students that, as always, they will need to read all, or parts of, this article multiple times to truly find meaning in it. The first time they’ll read to get the overall flow; the second time they should begin to collect the necessary information and evidence they need to complete the graphic organizer.</td>
<td></td>
</tr>
<tr>
<td>• Point out that students will use a Credibility Checklist exactly like the one they’ve used in previous lessons.</td>
<td></td>
</tr>
<tr>
<td>• Tell students they will return to this article once more for the second part of this assessment in which they compare and contrast authors’ presentations. They can start thinking about how this article is introduced, what claim is made, what kinds of evidence the author includes, and how the author uses (or does not use) additional text features.</td>
<td></td>
</tr>
<tr>
<td>• Give students 15 minutes to read this article and complete the graphic organizer. Circulate and support students as they work, specifically refocusing students who may become distracted and asking prompting questions of students who get stuck.</td>
<td></td>
</tr>
</tbody>
</table>
### Work Time (continued)

<table>
<thead>
<tr>
<th>B. Mid-Unit 2 Assessment: Comparing and Contrasting Authors’ Presentations (15 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 15 minutes, begin to distribute the article “You Think You Have It Tough?” and the Comparing and Contrasting Authors’ Presentations graphic organizer.</td>
<td></td>
</tr>
<tr>
<td>Once these are distributed, pause students in their work. Assure them that they will have additional time to complete what they are working on, but you would like to introduce them to the second part of their task.</td>
<td></td>
</tr>
<tr>
<td>Tell them that in the second part of this assessment, they will be reading a new article. Students will not have to complete the simulated research task, however. Their focus will be on comparing this author’s presentation of ideas (malaria, mosquitoes, and DDT) with that of the article they just completed.</td>
<td></td>
</tr>
<tr>
<td>Remind students of the different ways they learned to analyze an author’s presentation: by thinking about how the author introduces the ideas, what types of evidence the author uses, and how (or if) the author uses additional text features.</td>
<td></td>
</tr>
<tr>
<td>Remind students that by thinking of each of these things individually, they can describe “overall” how the author has presented the event.</td>
<td></td>
</tr>
<tr>
<td>Finally, remind students that they have practiced the skill of thinking about which author is more effective in presenting information or arguing their side of something. Today, they will continue to show their mastery of that skill.</td>
<td></td>
</tr>
<tr>
<td>Tell students they will have the next 15 minutes to read this second article, and then complete the Comparing Authors’ Presentation graphic organizer.</td>
<td></td>
</tr>
<tr>
<td>Circulate and support students as they work. Specifically, some students will be helped by prompting questions and the ability to “verbally rehearse” their answer with you before writing it down.</td>
<td></td>
</tr>
</tbody>
</table>
### C. Mid-Unit 2 Assessment: Research Vocabulary (5 minutes)

- After 15 minutes, begin to distribute the Research Vocabulary: Using Multiple Strategies to Determine the Meaning of Words graphic organizer.

- Pause students in their work. Again, tell them that if they need additional time, it will be provided to them, but you would like to introduce them to the final piece of this assessment.

- Review the graphic organizer with students. Tell them that this graphic organizer is identical to the one they have been using in their own research, and they should use it in the exact same way they have been practicing.

- Point out to students that for the purposes of this assessment, the words they’ll work with have been chosen for them. Point out that all of the words come from their reading, specifically the article “DDT Spray Scares Mosquitoes Away, Study Finds.”

- Remind students of the multiple strategies they have been practicing: using context clues, using root words and affixes, and using resource materials such as a dictionary. Tell students they should look closely at the word, and its context, to determine their strategy.

- Point out to students that dictionaries have been made available to them. These dictionaries can be used to help them confirm or revise their initial determination of the words’ meanings.

- Give students 5 minutes to complete the vocabulary section of the assessment.
<table>
<thead>
<tr>
<th>Closing and Assessment</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Reflecting on Learning Targets (5 minutes)</strong></td>
<td></td>
</tr>
<tr>
<td>• Ask students to turn and talk:</td>
<td></td>
</tr>
<tr>
<td>* “Look back at today’s learning targets. What is one area that you feel is a ‘star’ for you? What is one area that you’d call a ‘step,’ or an area in which you need more work?”</td>
<td></td>
</tr>
<tr>
<td>• As time permits, invite volunteers to share their thoughts whole group.</td>
<td></td>
</tr>
<tr>
<td><strong>Homework</strong></td>
<td>Meeting Students’ Needs</td>
</tr>
<tr>
<td>• None.</td>
<td></td>
</tr>
</tbody>
</table>

NYS Common Core ELA Curriculum • G6:M4:U2:L9 • November 2013 • 9
Learning Targets

- I can compare how different authors portray the same idea or event. (RI.6.9)
- I can conduct short research projects to answer a question. (W.6.7)
- I can use several sources in my research. (W.6.7)
- I can refocus or refine my question when appropriate. (W.6.7)
- I can gather relevant information from a variety of sources. (W.6.8)
- I can assess the credibility of each source I use. (W.6.8)
- I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)
- I can use common Greek and Latin affixes (prefixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.4b)
- I can use resource materials (glossaries, dictionaries, thesauruses) to help me determine or clarify the pronunciation, meaning of key words and phrases, and parts of speech. (L.6.4c)
- I can check the accuracy of my guess about the meaning of a word or phrase by using resource materials. (L.6.4d)

Directions:

- Today you will be reading two articles: “DDT Spray Scares Mosquitoes Away, Study Finds” and “You Think You Have It Tough?” Both are informational articles about mosquitoes, malaria, and DDT.
- After reading the first article, “DDT Spray Scares Mosquitoes Away, Study Finds,” complete the simulated research page identical to the pages you have been completing in your researcher’s notebook.
- After reading the second article, “You Think You Have It Tough?”, complete the Comparing and Contrasting Authors’ Presentation graphic organizer identical to the one from previous lessons.
DDT Spray Scares Mosquitoes Away, Study Finds
(Assessment Text)

Reuters, UK Edition
Washington
Date: August 9, 2007

(Reuters)—Mosquitoes that carry malaria, dengue fever and yellow fever avoid homes that have been sprayed with DDT, researchers reported on Wednesday.

The chemical not only repels the disease-carrying insects physically, but its irritant and toxic properties helps keep them away, the researchers reported in the Public Library of Science journal PLoS ONE.

They estimate that DDT spray reduced the risk of disease transmission by nearly three-quarters.

Malaria affects more than 40 percent of the world’s population, killing more than a million people every year, most of them young children.

DDT use has been discontinued in most countries because of fears the pesticide may cause cancer and because of its potential effects on animals such as birds.

But the World Health Organization last year recommended the use of DDT in places like Africa where malaria is still common, saying the benefits outweighed the risks.

In the study, Dr. Donald Roberts of the Uniformed Services University of the Health Sciences in Bethesda, Maryland and colleagues tested DDT against Aedes aegypti mosquitoes in Thailand.

This species of mosquito does not carry malaria but it can transmit dengue and yellow fever.

“In huts sprayed with DDT, 59 of the 100 mosquitoes would not enter. Of the 41 that enter, 2 would die and fall to the floor,” the researchers wrote.

Only 27 mosquitoes could theoretically bite and survive.

They said over a 24-hour period, DDT use would reduce the risk of a mosquito bite by 73 percent.

The researchers said the effects should hold for other species of mosquitoes, including Anopheles mosquitoes, which do transmit malaria.
DDT Spray Scares Mosquitoes Away, Study Finds
(Assessment Text)

“The historical record of malaria control operations show that DDT is the most cost-effective chemical for malaria control. Even now DDT is still considered to be the cheapest and most effective chemical for use in house spray operations,” the researchers wrote.

Two other chemicals were also effective, the researchers found. “In huts sprayed with alphacypermethrin, all 100 mosquitoes would enter the house. Of the 100 that entered, 15 would die. Of the remaining 85, 46 would exit prematurely and 9 of those would die,” they wrote.

This translated to 61 percent effectiveness.

“In huts sprayed with dieldrin, all 100 mosquitoes would enter the house,” they wrote. Just eight mosquitoes that could take a blood meal and survive for a 92 percent protection, but it was likely the mosquitoes could develop resistance to this chemical, they said.

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Here

The sun has just set and you’re trying to enjoy a bonfire with friends, but clouds of mosquitoes buzz and bite and drive you crazy. Or maybe you’re out for a hike, swatting away stingers. Or trying to get to sleep while that one obnoxious mosquito whines around your head.

Mosquitoes are incredibly irritating, but except in very rare cases, the worst thing that happens to kids here is an itchy bump after a bite. Occasionally, Canadians are bitten by a mosquito carrying West Nile virus, which makes you feel like you have the flu. Older people or those who are already sick can be more seriously affected or even die. But mostly, mosquito bites in Canada aren’t much more than a nuisance.

Malaria was wiped out in Canada about 60 years ago. In Africa, a child dies from malaria every 45 seconds.

What comes next is very different for you and for someone your age in other countries.

There

Some species of mosquito have a parasite — another tiny creature living off of them — that moves into humans’ blood stream when that mosquito bites. The result is malaria, a disease that kills close to one million people every year, mostly children. An infected child who doesn’t die may still be left paralyzed, brain damaged or blind.

Poorer people are more likely to live in conditions where mosquitoes breed. That means they are also more likely to get bitten and more likely to get malaria and other diseases. Malaria occurs in parts of the Caribbean, Asia, Africa, the Middle East and South America. It can be treated with drugs if it’s discovered right away, but many people can’t afford those treatments.

$10

There’s an easy way to fight malaria and other diseases carried by mosquitoes: bed nets. These long-lasting nets keep bugs from biting kids in the night. One $10 donation buys a net that’s been treated with insecticide. It can protect up to five children. The Canadian charity Spread the Net has sent more than half a million bed nets to the African countries where malaria problems are the worst.
Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research Graphic Organizer

Name: 

Date: 

<table>
<thead>
<tr>
<th>Source Information</th>
<th>Claims/Central Ideas (Paraphrase the Benefits or Harmful Consequences)</th>
<th>Details/Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Title:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source Type (newspaper article, book, Web site, video, etc.):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credible? Yes / No (Use your Credibility Checklist to guide you.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Does this source help you refocus or refine your research question in any way? How?

What new questions you would like answered before making your claim about DDT?
## Comparing and Contrasting Authors’ Presentations Graphic Organizer

**Name:**

**Date:**

<table>
<thead>
<tr>
<th><strong>Text 1:</strong> Title: “DDT Spray Scares Mosquitoes Away, Study Finds”</th>
<th><strong>Compare and Contrast the Authors’ Presentations</strong></th>
<th><strong>Text 2:</strong> Title: “You Think You Have It Tough?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the author introduce the article?</td>
<td>How are they similar? How are they different?</td>
<td>How does the author introduce the article?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What claim does the author make?</td>
<td>How are they similar? How are they different?</td>
<td>What claim does the author make?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What type of evidence does the author include?</td>
<td>How are they similar? How are they different?</td>
<td>What type of evidence does the author include?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does the author use text features (photographs, graphs, diagrams, etc.)?</td>
<td>How are they similar? How are they different?</td>
<td>How does the author use text features (photographs, graphs, diagrams, etc.)?</td>
</tr>
</tbody>
</table>
Comparing and Contrasting Authors’ Presentations Graphic Organizer

Which article is more effective in providing information or in building an argument? Why?
Research Vocabulary: Using Multiple Strategies to Determine the Meaning of Words

Name:  

Date:  

- Each of these words comes from the article “DDT Spray Scares Mosquitoes Away, Study Finds.”
- Refer to the article in order to use context clues to determine word meaning.
- Refer to your affixes list in order to use affixes + root words to determine word meaning.
- Refer to a resource material to confirm or revise your initial meaning.

<table>
<thead>
<tr>
<th>Word from the Text</th>
<th>What do you think it means?</th>
<th>What strategy helped you determine the meaning? (CC = Context Clues, A+R = Affixes + Root Words, RM = Resource Material)</th>
<th>What is the dictionary’s definition of this word?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. transmission</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. discontinued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. colleagues</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Credibility Checklist

<table>
<thead>
<tr>
<th>Source Information</th>
<th>Most Credible</th>
<th>Fairly Credible</th>
<th>Least Credible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author</strong></td>
<td>Expert in the field</td>
<td>Educated on topic</td>
<td>Little or no information about author</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>Recently published or revised</td>
<td>Outdated</td>
<td>No date listed</td>
</tr>
<tr>
<td><strong>Source Type</strong></td>
<td>Official Web sites, institutional sites, academic journals, reputable news sources</td>
<td>Published material</td>
<td>Unfamiliar Web sites</td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td>Publisher’s relationship to the topic is balanced or neutral</td>
<td>Publisher is sponsored by a trusted source</td>
<td>Clearly biased or favoring a position for a purpose</td>
</tr>
</tbody>
</table>
Mid-Unit 2 Assessment: Comparing and Contrasting Two Texts: Simulated Research Graphic Organizer
Sample Student Response
(for Teacher Reference)

<table>
<thead>
<tr>
<th>Source Information</th>
<th>Claims/Central Ideas (Paraphrase the Benefits or Harmful Consequences)</th>
<th>Details/Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Title:</td>
<td>• DDT is a very effective in fighting off malaria.</td>
<td>“They estimate that DDT spray reduced the risk of disease transmission by nearly three-quarters.”</td>
</tr>
<tr>
<td></td>
<td>• Malaria affects a huge number of people in the world.</td>
<td>“Malaria affects more than 40 percent of the world’s population, killing more than a million people every year, most of them young children.”</td>
</tr>
<tr>
<td></td>
<td>• DDT should work on several different types of mosquitoes that carry diseases.</td>
<td>“In huts sprayed with dieldrin, all 100 mosquitoes would enter the house.”</td>
</tr>
<tr>
<td></td>
<td>• There are other pesticides that work, but not as well as DDT.</td>
<td>“But it was likely the mosquitoes could develop resistance to this chemical, they said.”</td>
</tr>
<tr>
<td>Author: N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date: August 9, 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source Type (newspaper article, book, Web site, video, etc.):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Article</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credible? Yes / No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use your Credibility Checklist to guide you.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does this source help you refocus or refine your research question in any way? How?

What new questions you would like answered before making your claim about DDT?

(Answers will vary in this section. The important thing to look for is students include evidence to support their thinking.)
### Comparing and Contrasting Authors’ Presentations: Sample Student Response

**Text 1:**
Title: “DDT Spray Scares Mosquitoes Away, Study Finds”

| How does the author introduce the article? | Compare and Contrast the Authors’ Presentations | **Text 2:**
Title: “You Think You Have It Tough?” |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The author introduces the article by immediately providing information about DDT and malaria.</td>
<td>They are similar because they are both talking about mosquitoes. They are different because one is more personal and talking to the reader, while the other is more informational.</td>
<td>The author introduces the article by asking me to imagine a situation in which I am being bitten by mosquitoes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What claim does the author make?</th>
<th>How are they similar? How are they different?</th>
<th>What claim does the author make?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The author includes lots of statistics about malaria.</td>
<td>They are similar because they both include statistics and facts. One difference is that the author of “DDT Spray Scares Mosquitoes Away, Study Finds” provides many more statistics and the names of scientists who have studied it.</td>
<td>The author gives facts about mosquitoes in Canada. The author gives facts about mosquitoes in other parts of the world. The author provides facts about malaria and how many people die.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What type of evidence does the author include?</th>
<th>How are they similar? How are they different?</th>
<th>What type of evidence does the author include?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The author includes lots of statistics about DDT and its effect on mosquitoes. The author gives evidence from scientists.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparing and Contrasting Authors’ Presentations: Sample Student Response
(Answers, for Teacher Reference)

<table>
<thead>
<tr>
<th>How does the author use text features (photographs, graphs, diagrams, etc.)?</th>
<th>How are they similar?</th>
<th>How does the author use text features (photographs, graphs, diagrams, etc.)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This author does not include any text features.</td>
<td>They are not similar because only one of the articles uses text features. They are different because the author of “You Think You Have It Tough” uses photographs of children and mosquitoes.</td>
<td>The author shows pictures of kids from different parts of the world. This helps me to imagine the real people struggling with malaria. The author uses sidebars with facts to show important information. The author uses large text for important questions or ideas.</td>
</tr>
</tbody>
</table>

Which article is more effective in providing information or in building an argument? Why?
(Answers will vary in this section. The important thing to look for is students include evidence to support their thinking. Consider referring to the NYS 2-point short response rubric for scoring guidance.)
Grade 6: Module 4: Unit 2: Lesson 10
Forming a Research-Based Claim: Cascading Consequences Chart
Long-Term Target Addressed (Based on NYSP12 ELA CCLS)

I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RL.6.9a)

Supporting Learning Targets

- I can think analytically about my research in order to determine what evidence is important to me.
- I can use evidence from my research to add to my Cascading Consequences chart.

Ongoing Assessment

- Researcher’s notebook
- Harmful Consequences Cascading Consequences chart
- Benefits of DDT Cascading Consequences chart
- Exit Ticket: Reflecting on My Beliefs about DDT

Agenda

1. Opening
   A. Book Frenzy: Launching an Independent Reading Book (8 minutes)
   B. Unpacking Learning Targets (2 minutes)
2. Work Time
   A. Reflecting on Research: Synthesizing My Learning (12 minutes)
   B. Cascading Consequences (18 minutes)
3. Closing and Assessment
   A. Exit Ticket: Share a Persuasive Piece of Evidence You Found (5 minutes)
4. Homework
   B. Begin your independent reading book at home. Read for 30 minutes.

Teaching Notes

- This lesson introduces students to a new independent reading book. Students will be introduced to several book titles. If they enjoyed Frightful’s Mountain by Jean Craighead George, they may want to consider reading My Side of the Mountain (a Newberry Honor Book) or On the Far Side of the Mountain. Consider inviting the school librarian or a local librarian to join the class to present some current titles to students.

- This lesson launches the End of Unit 2 assessment in which students present their claim and findings, outlining their position on the use of DDT. Students will use information from articles, videos, and multimedia such as charts, graphs, and tables to present their position to an audience and advocate persuasively during a hosted Gallery Walk.

- In the first half of Unit 2, students read new information about the use of DDT. Using a researcher’s notebook, they collected bibliographic information about each article and paraphrased the author’s claims. Supporting evidence was quoted from the articles. After each article was completed, students addressed whether they needed to refocus or refine their research question. Students then compared and contrasted two authors’ presentations of events, looking at how each author introduced the article and used types of supporting evidence text features. Students built vocabulary by using context clues, affixes, and root words to help define unfamiliar words. Reference materials such as dictionaries and thesauruses were used to verify initial definitions.
In this lesson, students think analytically about the research they collected in their researcher’s notebook. They code relevant information into two categories: Benefits of DDT or Harmful Consequences of DDT. The coded information will be added to either of the Cascading Consequences charts from Unit 1. This process allows students to think analytically and begin to determine what evidence is important to them.

Students use part of their Cascading Consequences chart as a visual to support their claim and findings in the End of Unit 2 Assessment.

In Lesson 11, students will be introduced to a Stakeholders Impacts chart, the next step in the decision-making process. Students will weigh the impacts of the use of DDT on stakeholders and apply personal values to each stakeholder affected. The Stakeholders Impacts chart can also be used as a visual to support students’ claim in the End of Unit 2 Assessment.

In advance: Locate students’ Cascading Consequences charts from Unit 1 so that new information can be added in today’s lesson.

Students may not have enough room to add new research to the Unit 1 charts and may need to tape blank sheets of paper onto their charts.

In Lessons 10–14, students may need to reference articles from Unit 1 and Unit 2 to clarify and verify information. Use the routines of your classroom to help students organize and keep these resources.

Read “Learning to Make Systematic Decisions” by Edelson, Tarnoff, Schwille, Bruozas, and Switzer to become familiar with this decision-making process and prepare for Lesson 11.

Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>claim, evidence, analytically, analyze, relevant</td>
<td>• Researcher’s notebook (one per student; in research folder)</td>
</tr>
<tr>
<td></td>
<td>• Research folder</td>
</tr>
<tr>
<td></td>
<td>• Colored pencils (two different colors per student)</td>
</tr>
<tr>
<td></td>
<td>• Benefits of DDT Cascading Consequences chart (from Unit 1; in research folder)</td>
</tr>
<tr>
<td></td>
<td>• Harmful Consequences of DDT Cascading Consequences chart (from Unit 1; in research folder)</td>
</tr>
<tr>
<td></td>
<td>• Cascading Consequences Codes for Text References (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Tape (one per partner group)</td>
</tr>
<tr>
<td></td>
<td>• Blank sheets of paper (8½” by 11”; three sheets per student)</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Harmful Consequences of DDT Cascading Consequences chart example (one for display)</td>
</tr>
<tr>
<td></td>
<td>• Exit Ticket: Reflecting on My Beliefs about DDT (one per student)</td>
</tr>
</tbody>
</table>
### Opening

**A. Book Frenzy: Launching an Independent Reading Book (8 minutes)**

- Have selected books in specific areas around the classroom. Walk around the room giving short introductions to several books to pique students’ interest. If possible, have copies of *My Side of the Mountain* and *On the Far Side of the Mountain* and other novels written by Jean Craighead George for students who enjoyed *Frightful’s Mountain*. Remind students how to self-select books at their appropriate level of challenge for their interests and reading ability.

- Give students time to select their book.

- Invite students to set a goal for their reading. To do this, ask students to begin reading their book. Share that after 1 minute you will ask them to stop. Tell them this is the amount of reading for 1 minute and ask them to set a goal for 30 minutes of reading for their homework.

**B. Unpacking Learning Targets (2 minutes)**

- Read aloud the learning targets for today:
  - “I can think analytically about my research in order to determine what evidence is important to me.”
  - “I can use evidence from my research to add to my Cascading Consequences chart.”

- Ask triads to think back to Unit 1. Say:
  - “What was an example of an author’s *claim* about DDT and an example of supporting *evidence*?”

- Invite triads to share. Listen for examples such as Rachel Carson’s book *Silent Spring*, which made a claim that DDT was killing birds. Supporting evidence was: “There was a strange stillness ... On the mornings that had once throbbed with the dawn chorus of ... (many) bird voices there was now no sound....”

- Ask students to discuss in their triads:
  - “What does it mean to think *analytically*?”
  - *Discuss a time of when you had to analyze something. Share with your triad what you had to do.”

- Invite triads to share. Listen for: Sometimes science or math data needs to be analyzed. To analyze, we read through the material, identified criteria, and separated or grouped the criteria into areas or categories.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide book choices from a variety of genres and Lexile ranges.</td>
</tr>
<tr>
<td>• Learning targets are a research-based strategy that helps all students, especially challenged learners.</td>
</tr>
<tr>
<td>• Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.</td>
</tr>
<tr>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
</tbody>
</table>
### Opening (continued)

- Share an example of analyzing with students and say:
  
  * “In Unit 1, you read articles about malaria and DDT. You identified the authors’ claims and supporting evidence and then made decisions about where to place this information on a Cascading Consequences chart. You had a choice of either putting the new information on a Benefits of DDT Cascading Consequences chart or on a Harmful Consequences Cascading chart.”

- Ask triads:
  
  * “After reading the learning targets, what do you think we will be doing today?”

- Invite volunteers to share. Listen for: “We will be reading our research, identifying criteria or consequences, and adding to our Cascading Consequences charts.”
### Work Time

**A. Reflecting on Research: Synthesizing My Learning (12 minutes)**

- Invite students to find their **researcher’s notebook** in their **research folder**. Ask them to find Source 1 and read through the claims and/or central ideas and the evidence and/or details sections to think about what is **relevant** information. Explain that information is considered relevant if it identifies a benefit or a harmful consequence of DDT. Pause to give students time to read.

- Reconvene the class after students have read their information.

- Explain that you would like them to analyze and code their Source 1 research. Ask them to choose two different **colored pencils**. Invite students to reread to find relevant information. Share that if a claim supports the use of DDT or is a benefit of DDT, they should make a plus sign in front of the sentence with one of their colored pencils. Explain they should make a minus sign with the other colored pencil in front of a sentence identifying information that would not support the use of DDT and would be a harmful consequence.

- Pause to give students time.

- Circulate to support those who help identifying “relevant” information.

- Refocus the class. Invite volunteers to share something coded with a minus sign identifying a harmful consequence.

- Listen for examples such as: “Pesticides had gotten into the water, air, and soil and were killing or sickening all sorts of creatures—including humans.”

- Share that students will have 10 minutes to read Sources 2 through 4 and code each claim and supporting evidence with a plus or minus sign. Suggest students make a key on the cover to help remind them which colors represent benefits and harmful consequences.

- Circulate and support students in analyzing and coding their research. Encourage and appreciate students for coding their information correctly. Consider using a document camera to model more student examples for struggling students.

- Refocus the class and invite students to share information. Say:
  * “Who can share an example of research, coded with a plus sign, supporting the use of DDT and is a benefit of using DDT?”
  * “Who can share an example of research, coded with a minus sign, not supporting the use of DDT and is a harmful consequence of DDT?”

- Praise students for thinking analytically and coding their research. Tell them that reading and coding relevant information is **analyzing**. Explain that organizing their information is an important step and will help them think about what evidence is most important and meaningful to them.

### Meeting Students’ Needs

- Consider partnering ELLs who speak the same home language when discussion of complex content or multistep directions is required. This lets students follow the lesson and have more meaningful discussions and clarify points in their native language.

- Many students will benefit from seeing questions or examples posted on an interactive whiteboard or via a document camera.
### B. Cascading Consequences (18 minutes)

- Form student partnerships.
- Ask students to retrieve their **Benefits of DDT Cascading Consequences chart** and **Harmful Consequences of DDT Cascading Consequences chart** from their research folders. Distribute the **Cascading Consequences Codes for Text References** handout. Share that students will be adding to their charts, and ask if they need to tape some blank sheets of paper to their charts to add new research.
- Ask students to read through the consequences on each chart. Point out that claims can be identified in ovals and supporting evidence can be identified in boxes. Pause to give students time to read through their research.
- Next, invite partners to think of possible claims and supporting evidence to add to their charts from *Frightful’s Mountain*. Ask them to Think-Pair Share:
  
  * “Did you read about any benefits of DDT or any harmful consequences of DDT in *Frightful’s Mountain*?”

- Ask partners to share their thinking. Listen for: Drum’s mate was affected by bioaccumulation. Because the falcon migrated to areas of the world where DDT was sprayed, DDT had built up in her tissues, causing her death. Page 246, Paragraph 2 in *Frightful’s Mountain* supports this claim with evidence.
- Using a **document camera**, model how to add new information and display the **Harmful Consequences of DDT Cascading Consequences chart example**. Point out that as new information is added, the source should also be cited. Remind students to refer to the Cascading Consequences Codes for Text References handout to code their text source. When adding new information, remind students first to check for a claim, an oval, saying DDT builds up in the tissues of peregrine falcons. If they do not have this as a claim, ask them to add this claim.
- Ask students to add as evidence that Drum’s mate died because DDT had built up in her tissues. Explain bioaccumulation had occurred over several years of migration. Tell students they could add new evidence stating that DDT caused eggshells to thin and crack under the falcon’s weight, resulting in no new births. Another piece of evidence could be without new chicks being born, the population of the peregrine falcons would be affected. Ask students to add this new information to their chart, pausing to give them time and circulating to support students.
- Tell partners they will now add more information to their charts using research from their researcher’s notebook Sources 1 through 4. Remind them if the information has a plus sign, it will be added to the Benefits of DDT Cascading Consequences chart, and if the information has a minus sign, it will be added to the Harmful Consequences of DDT chart. Remind students to first determine if the new information is a claim or a new piece of evidence.

### Meeting Students’ Needs

- When reviewing the graphic organizers or recording forms, consider using a document camera to display the document for students who struggle with auditory processing.
- Providing models of expected work supports all students, especially challenged learners.
- During Work Time B, you may want to pull a small group of students to support in finding claims and evidence. Some students will need more guided practice before they are ready for independent work.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</thead>
</table>

- Invite partners to find a claim and a supporting piece of evidence from Source 1, “Rachel Carson: Environmentalist and Writer.” Pause to give partners time.

- Cold call partners to share a claim and supporting evidence.

- Listen for an example such as a claim is that pesticides had gotten into the soil, water, and air. Supporting evidence would be this pollution resulted in sickness and death in plants, sickness and death in animals, and sickness and death in birds.

- Using a document camera, model writing the claim and its supporting evidence, and display the Harmful Consequences Cascading Consequences chart example.

- Ask students to finish adding claims and evidence to their charts from Source 1. Remind students to add only relevant information. After all of the information from Source 1 is added, explain they have 10 minutes to should continue with this same process, adding information from Sources 2, 3, and 4.

- Circulate to support students in determining how to add information to their charts. Encourage students to use the time to add all of their research to the appropriate chart.

- Commend partnerships for supporting each other in identifying claims and evidence and in determining if the information was relevant.
## Closing and Assessment

**A. Exit Ticket: Share a Persuasive Piece of Evidence You Found (5 minutes)**

- Invite students to think about the claims and evidence they added to their Cascading Consequences charts. Give students time to remember a particularly persuasive piece of evidence that affected them.
- Ask them to briefly share with their partner the piece of evidence that caused them to pause and think more deeply about the use of DDT.
- Distribute the **Exit Ticket: Reflecting on My Beliefs about DDT**.
- Refocus the group.
- Give students 1 minute to read the questions on the exit ticket. Then invite them to record their thoughts on the exit ticket.

## Meeting Students’ Needs

- Using an exit ticket allows students to reflect on their values and beliefs about DDT and provide you with a quick check for understanding of the learning target about evidence that is personally important to them.

## Homework

- Begin your independent reading book at home. Read for 30 minutes.
Cascading Consequences Codes for Text References

Please refer to the codes in parentheses to reference the article, video, graph, chart, table, diagram, or world map. Add this code to the Cascading Consequences chart to cite the source of the evidence.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Benefits of DDT Cascading Consequences Chart</th>
<th>Harmful Consequences of DDT Cascading Consequences Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article:</td>
<td>“The Exterminator” (EX)</td>
<td>“Welcome Back” (WB)</td>
</tr>
<tr>
<td></td>
<td>“Double Whammy” (EX/D.W.)</td>
<td>“Rachel Carson: Sounding the Alarm on Pollution” (R.C.)</td>
</tr>
<tr>
<td></td>
<td>“Public Fear” (EX/P.F)</td>
<td></td>
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<td></td>
<td>“ Seriously Sick” (EX/S.S.)</td>
<td></td>
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<tr>
<td></td>
<td>“Killer Genes” (EX/K.G.)</td>
<td></td>
</tr>
<tr>
<td>Video:</td>
<td>John Stossel DDT (V- J.S. DDT)</td>
<td>DDT dichlorodiphenyl-trichloroethane (V-DDT)</td>
</tr>
<tr>
<td>Graphs and Charts: (G&amp;C)</td>
<td>DDT Bad, Malaria Much Worse—       (world map)</td>
<td>Lake Kariba, Africa DDT Levels (diagram)</td>
</tr>
<tr>
<td></td>
<td>Malaria Trends in South Africa—(graph)</td>
<td>DDT in Human Body Fat in U.S. (table)</td>
</tr>
<tr>
<td></td>
<td>Increases in Malaria for South American Countries—(graph)</td>
<td>DDT in Breast Milk (graph)</td>
</tr>
<tr>
<td></td>
<td>DDT and Malaria in Ceylon—(graph)</td>
<td>Changes in Thickness of Egg Shells (graph)</td>
</tr>
</tbody>
</table>
Harmful Consequences of DDT Cascading Consequences Chart Example

Name: 
Date: 

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Welcome Back” (WB)</td>
<td>“Rachel Carson: Environmentalist and Writer” (R.C. E&amp;W)</td>
</tr>
<tr>
<td>“Rachel Carson: Sounding the Alarm on Pollution” (R.C. SA)</td>
<td>Paul Müller (PM)</td>
</tr>
<tr>
<td></td>
<td>“Biological Energy—Here, Let Me Fix It!” (BE)</td>
</tr>
<tr>
<td></td>
<td>“How DDT Harmed Hawks and Eagles” (DDTH&amp;E)</td>
</tr>
</tbody>
</table>

Pesticides had gotten into the soil, water, and air (R.C. E&W)

Death of animals (R.C. E&W)
Death of plants (R.C. E&W)
Death of birds (R.C. E&W)

Harmful Consequences of DDT

DDT gets into the tissues of peregrine falcons (WB)

DDT built up in the tissues of Drum’s mate after migrating (FMt.)
Egg shells too thin and crack (WB)

Fewer young causes population to decline

Stays in the environment for a long time (chart)
Exit Ticket: Reflecting on My Beliefs about DDT

Name:

Date:

1. What was a particularly persuasive piece of evidence you reflected on today? This evidence probably caused you to pause and think more deeply about what you were reading about and the impact it may have on our environment or people. Share your thoughts about this piece of evidence.

2. Should the world rethink the ban on DDT? Explain why or why not.
Grade 6: Module 4: Unit 2: Lesson 11

Forming a Research-Based Claim: Creating Stakeholders Charts
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RI.6.9a)
I can use evidence from a variety of grade-appropriate texts to support analysis, reflection, and research. (W.6.9)
I can present claims and findings in a logical order. (SL.6.4)
I can support my main points with description, facts, and details. (SL.6.4)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can describe the criteria on which I will be assessed for the end of unit assessment.</td>
<td>• Goldilocks Rule for Choosing Books</td>
</tr>
<tr>
<td>• I can create a Stakeholders Impacts chart using evidence from my research.</td>
<td>• Who Are Stakeholders?</td>
</tr>
<tr>
<td>• I can explain my position on DDT to my peers using evidence from my research.</td>
<td>• Stakeholders Impacts chart</td>
</tr>
<tr>
<td></td>
<td>• Exit Ticket: Four Corners notecard</td>
</tr>
</tbody>
</table>
### Agenda

1. **Opening**
   - A. Independent Reading (6 minutes)
   - B. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. Where Are We Going? (5 minutes)
   - B. Mini Lesson: Who Are Stakeholders? (10 minutes)
   - C. Creating a Stakeholders Impacts Chart: Who’s Affected by DDT? (15 minutes)

3. **Closing and Assessment**
   - A. Where Do You Stand? Four Corners Activity (5 minutes)
   - B. Exit Ticket: Four Corners Notecard (2 minutes)

4. **Homework**
   - A. Read to achieve your reading goal and complete the Reading Tracker and Reviewer’s Notes.

### Teaching Notes

- In today’s lesson, students consider if they selected an appropriate book for their independent reading. A good book selection contributes to achieving several reading purposes, including:
  - Engages and motivates students in learning things they care about
  - Promotes students’ love of reading
  - Builds students’ vocabulary
  - Builds students’ knowledge about the world
  - Builds students’ ability to read more challenging texts for longer periods of time
- When unpacking the learning targets, read aloud and model effective speaking techniques as students prepare for their presentations at the end of the unit.
- As students prepare for their End of Unit 2 Assessment: Presenting a Claim and Findings, inform them of the criteria guiding them as they prepare during the next few lessons.
- Throughout Unit 2, students have worked on several stages of the research process, including:
  - Reading a variety of texts
  - Identifying source information
  - Identifying claims or central ideas and evidence that support those claims
  - Comparing and contrasting different authors’ presentation of information
  - Using different strategies to determine the meaning of research vocabulary
  - Developing Cascading Consequences charts for different perspectives of the research question, “Do the benefits of DDT outweigh its harmful consequences?”
- In this next stage of the research process, students identify the effects of DDT on stakeholders, which can be people, other organisms, or other components of the environment. This requires students to look closely at their understanding of their research. As students examine the impacts of DDT on stakeholders, they are challenged to bring in their values and consider different decisions.
- At the end of this lesson, students consider their feelings about DDT as they prepare to write their own claim. Participating in the Four Corners activity again provides an opportunity for student to make a choice from a more personal perspective following this lesson’s work.
### Agenda

- In advance: Review the End of Unit 2 Assessment and the criteria that students will be evaluated on for their formal presentation of their research-based claims to an audience.
- In advance: Prepare to introduce the Stakeholders Impacts chart and model the process of assessing the impacts of DDT on stakeholders. Remind students that the impacts can be either positive or negative.
- Review claims and evidence that students listed on their Cascading Consequences charts to consider different stakeholders and both the beneficial and harmful effects of DDT on those stakeholders in each situation they used.
- Post: Learning targets.

### Lesson Vocabulary

- criteria, stakeholder, impact, position; logical, academic vocabulary, domain-specific vocabulary, redundancy

### Materials

- Goldilocks’ Rule for Choosing Books (one per student)
- Reading Tracker and Reviewer’s Notes graphic organizer (one per student and one for display)
- Document camera
- Research folder
- Presenting a Claim and Findings Criteria graphic organizer (one per student)
- Equity sticks
- Who Are Stakeholders? chart (one per student)
- Who Are Stakeholders? chart (for teacher reference)
- Stakeholders Impacts chart (one per student)
- Stakeholders Impacts Chart Assessment Rubric (teacher resource; one per student)
- Notecards (one per student)
### Opening

<table>
<thead>
<tr>
<th>A. <strong>Independent Reading (6 minutes)</strong></th>
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<tbody>
<tr>
<td>• Entrance ticket: Goldilocks’ Rule for Choosing Books.</td>
</tr>
<tr>
<td>• Tell students that selecting a new book that feels just right is important. Explain that when they are reading a “just right” book, there are lots of benefits, such as building reading skills and learning about new perspectives.</td>
</tr>
<tr>
<td>• Ask students to take a couple of minutes to do a Goldilocks self-check to see if they feel the book they picked out is “just right” for them.</td>
</tr>
<tr>
<td>• For students who feel this way, tell them to join their triad partners who are available to briefly share reviews and opinions. If time allows, invite students to partner read if they are reading the same book or to continue reading on their own.</td>
</tr>
<tr>
<td>• For students who would like to select a different book, provide guidance as they look for their “just right” book.</td>
</tr>
<tr>
<td>• Distribute the Reading Tracker and Reviewer’s Notes graphic organizer.</td>
</tr>
<tr>
<td>• Display the graphic organizer with the document camera as it is explained. Inform students they will use the Reading Tracker and Reviewer’s Notes for a few purposes:</td>
</tr>
<tr>
<td>1. To keep track of their reading goals</td>
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<tr>
<td>2. To explain what is happening in the book</td>
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<tr>
<td>3. To respond to a question that interests them and share with their reading partners</td>
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<tr>
<td>• Explain that using the Reading Tracker and Reviewer’s Notes is helpful for achieving their goals, having engaging discussions with their triad partners, and enjoying the independent reading.</td>
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<tr>
<td>• Have students continue sitting with their triads as they unpack today’s learning targets.</td>
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### Meeting Students’ Needs

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<tbody>
<tr>
<td>• For students continuing to look for their “just right” book, suggest titles they might find interesting.</td>
</tr>
<tr>
<td>• Focus on students who appear to have looked at inappropriate reading levels.</td>
</tr>
<tr>
<td>• Some students may benefit from reading a paragraph or two aloud to determine if a book is right for them.</td>
</tr>
</tbody>
</table>
A. Where Are We Going? (5 minutes)

- Acknowledge the strong work students did on their Cascading Consequences charts. Explain the claims and evidence they documented will help them prepare for their presentations for the End of Unit 2 Assessment.
- Direct students to their research folders and the Presenting a Claim and Findings Criteria graphic organizers.
- Use a document camera to display the Presenting a Claim and Findings Criteria graphic organizer as it is introduced. Ask students to refer to their own copy.
- Tell students that as they prepare for the End of Unit 2 Assessment, they will consider what they’ve learned about benefits and harmful consequences of DDT. Explain that they will review research-based claims and supporting evidence to develop their own claim and present it to an audience.
- Explain that they’ll use a visual display as part of their presentation. Remind students that authors use a variety of strategies, including styles of introduction, ways of sharing information, and using text features to engage and inform readers about ideas. When speakers present information, using different strategies helps convey ideas to the audience.
- Use equity sticks to call on students to read each of the criteria.
- Define unfamiliar and learning target words to assure that students understand the criteria on which they’ll be assessed. Include:
  - criteria—things that are used as a reason for making a judgment or decision
  - logical—sensible or reasonable process for sharing information
  - academic vocabulary—words relating to school or educational work (e.g., Cascading Consequences chart)
  - domain-specific vocabulary—words relating to a certain sphere of knowledge (e.g., words related to DDT, such as pesticides)
  - redundancy—the act of using a word, phrase, etc. that repeats something already said and is therefore unnecessary

Meeting Students’ Needs

- Displaying the Presenting a Claim and Findings Criteria graphic organizer benefits all students as they begin to develop their own claim and prepare to present for their End of Unit 2 Assessment.
### Work Time (continued)

- Explain that as students prepare for their presentations, working with partners helps develop their skills. As presenters, they practice and improve the criteria on which they are assessed. As listeners, they expand their understanding of the criteria, develop their own presentations, and help each other achieve.
- Tell students they will have two ways to display important information visually: their Cascading Consequences chart, and a Stakeholders Impacts chart that presents important information in a different way. They will create the latter chart in this lesson.

### Meeting Students’ Needs

- When reviewing the graphic organizers or recording forms, consider using a document camera to display the document for students who struggle with auditory processing.
- Some students may benefit from selecting fewer stakeholders to allow appropriate time to consider their own thoughts about DDT.

### B. Mini Lesson: Who Are Stakeholders? (10 minutes)

- Post the word *stakeholder*. Ask students what they think the word *stakeholder* means. Listen for responses that help define the word such as:
  - Someone who has something to win or lose
  - Someone who is affected by something happening—maybe it’s good or bad
- Compliment students on their ideas. Share the definition:
  - *stakeholder*—someone or something that is involved in or affected by a course of action
- Explain that the use of DDT involves and affects other people and things in both positive and negative ways. Stakeholders can be people, other organisms or living things, or components or parts of the environment.
- Distribute a *Who Are Stakeholders? chart* to each student.
- Use a document camera to display the Who Are Stakeholders? chart. Ask students to share who they think stakeholders are when it comes to DDT. Model and add their responses to the appropriate column. Students should write the stakeholders on their chart.
- Refer to the *Who Are Stakeholders? chart (for teacher reference)* to guide students as they consider who or what are stakeholders and how they are affected.
- Congratulate students for their efforts in identifying various stakeholders. Explain that identifying who or what is affected by the use of DDT is an important step to considering how these stakeholders are affected by DDT.
- Tell students they must now select some of the stakeholders they learned about in their research and look closely at how these stakeholders are affected. Remind them that the affects of DDT can be beneficial or harmful.
### Work Time (continued)

<table>
<thead>
<tr>
<th>C. Creating a Stakeholders Impacts Chart: Who’s Affected by DDT? (15 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Direct students to work with partners.</td>
<td></td>
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<tr>
<td>• Distribute the <strong>Stakeholders Impacts chart</strong> to each student.</td>
<td></td>
</tr>
<tr>
<td>• Use the document camera to display the Stakeholders Impacts chart and model how to complete it. Use the following example that describes something that happened in the novel <em>Frightful’s Mountain</em>: Near the end of the book, Frightful migrates back to her home near Sam with another peregrine falcon named Drum. The year before, Drum’s mate laid eggs that broke under her weight. Later the mate died from pesticide chemicals that had accumulated in her body.</td>
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<tr>
<td>• Ask students who the stakeholders are in this example. Confirm that Drum and his mate are stakeholders, which are living things.</td>
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</tr>
<tr>
<td>• Call on students to identify how DDT or pesticides affected these two peregrine falcons. Model a response such as: “They were unable to hatch their eggs. The mother peregrine falcon died from accumulated pesticides.”</td>
<td></td>
</tr>
<tr>
<td>• Ask students if DDT or pesticides had positive or negative affects. Use a “+” or a “-” to record the response. Confirm that the affect was negative for the peregrine falcons.</td>
<td></td>
</tr>
<tr>
<td>• Ask student to consider if this negative effect might have a different effect for other stakeholders. Ask them to consider stakeholders such as children living in certain areas of Africa. Guide students to consider benefits and consequences they have found in their research and what effects seem most important as they consider each stakeholder and respond to the questions.</td>
<td></td>
</tr>
<tr>
<td>• Tell partners the first step is to select five stakeholders. Choose at least one stakeholder from each of the three columns on the Stakeholders Impacts chart. They should also choose stakeholders presented in articles and other sources they used to identify claims and evidence on both of the Cascading Consequences charts, benefits and harmful consequences.</td>
<td></td>
</tr>
<tr>
<td>• Direct partners to consider the impact in each column and record their responses.</td>
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<tr>
<td>• Remind students that the last two columns ask them to consider their own values. Ask them to consider how important the impact of DDT on the stakeholder they are looking at is compared to the effects of DDT on stakeholders somewhere else.</td>
<td></td>
</tr>
<tr>
<td>• Encourage students to decide how important that stakeholder is to their own thoughts about DDT as they compare benefits and harmful consequences.</td>
<td></td>
</tr>
<tr>
<td>• Recognize students for their work to identify stakeholders. Commend them for considering their own ideas about the use of DDT.</td>
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</tbody>
</table>
### Closing and Assessment

**A. Where Do You Stand? Four Corners Activity (5 minutes)**

- Tell students they will now have an opportunity to consider again where they stand on this issue. They will participate in the Four Corners activity again. Point out that today’s work is important as they develop their own claims or ideas about DDT. Considering the stakeholders, or those affected in some way by the use of DDT, contributes to clarifying their own thoughts about DDT.
- Post or point out the four pieces of chart paper with the different DDT choices located in different parts of the room.
- Quickly review guidelines for participating in Four Corners.
- Cold call or use equity sticks to select students to read each of the Four Corner choices:
  - DDT is beneficial and can be used for many reasons.
  - DDT is beneficial for preventing health problems and helping agriculture by killing pests.
  - DDT is only beneficial for preventing health problems like malaria and Lyme disease.
  - DDT is harmful and should not be used.
- Direct students to stand near the choice they feel is closest to their personal thoughts and understandings from their research about DDT.
- Invite a student from each corner to share their choice and an evidence-based reason that supports their thinking.
- Ask all students to return to their seats. Distribute **notecards**.

**B. Exit Ticket: Four Corners Notecard (2 minutes)**

- Ask students to write the position they selected and their evidence-based reason on their notecard. Tell students to write their name on their card.
Collect notecards to review students’ thoughts.

### Meeting Students’ Needs

- Observe students’ participation in the Four Corners activity and their written responses to identify students needing support in developing their claims and findings and begin preparing for their End of Unit 2 Assessment.
- Review students’ positions about DDT to help pair students with writing partners. Consider pairing students with similar claims so they can act as “thought partners.”

### Homework

- Read to achieve your reading goal and complete the Reading Tracker and Reviewer’s Notes.
Goldilocks’ Rule for Choosing Books

**Five-Finger Rule:** Read the first two pages. Every time you come to a word that you don’t know or can’t define, put one finger up. If you get to five fingers before the end of the first page, STOP! This is probably not a good book to read on your own.

How many words did you not know on the first two pages? ________________________________

**The Page 2 Check:** Read the first two pages. At the end of the second page, stop and check for understanding. First try to summarize what you read so far. Does it make sense? If not, STOP!

Summarize:

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Did it make sense? ____________________

**The Page 5 Check:** Read the first five pages. At the end of the fifth page, stop and ask yourself: “Is this book making me think?” If you have not had to stop and think or clarify, STOP!

Are you thinking? ____________________

Did you have to clarify? ____________________

When you did clarify, how did you do it?

____________________________________________________________________________________

____________________________________________________________________________________

So, is this a good book for you?

_______ No, because it’s too hard ________ Yes, because it’s just right

_______ No, because it’s too easy ________ No, because it’s just right, but I’m not interested
Reading Tracker and Reviewer’s Notes Graphic Organizer

Name: ____________________________  Date: ____________________________

Book Title: ____________________________

Please complete one entry for each reading check-in.

Choices for Reviewer’s Notes: Choose one idea to respond to for each entry.
• The most interesting/funniest/scariest scene was . . . because . . .
• A connection between this part of the book and what we are studying at school is . . . which helps me understand that . . .
• This part of the book reminds me of (other text, movie) because . . . which helps me understand that . . .
• A character I identify with/don’t understand is . . . because . . .
• Something I learned about the world by reading this part of the book is . . . which seems important because . . .

<table>
<thead>
<tr>
<th>Chapter title/s and pages</th>
<th>Reading Tracker</th>
<th>Reviewer’s Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Briefly explain what happened in this part of the book.</td>
<td>Use one of the questions above.</td>
</tr>
</tbody>
</table>

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| Chapter title/s and pages | **Reading Tracker**  
*Briefly explain what happened in this part of the book.* | **Reviewer’s Notes**  
*Use one of the questions above.* |
<table>
<thead>
<tr>
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<tbody>
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</tr>
</tbody>
</table>
Presenting a Claim and Findings Criteria Graphic Organizer

Name: 
Date: 

When preparing for and practicing your presentation, keep the criteria below in mind.

<table>
<thead>
<tr>
<th>Presenter’s Criteria</th>
<th>Partner Feedback (Include 1 Star and 1 Wish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I present my claim clearly.</td>
<td></td>
</tr>
<tr>
<td>I present my findings in logical order.</td>
<td></td>
</tr>
<tr>
<td>I use descriptions, facts, and details to support my claim.</td>
<td></td>
</tr>
<tr>
<td>I make eye contact with my audience.</td>
<td></td>
</tr>
<tr>
<td>I use appropriate volume.</td>
<td></td>
</tr>
<tr>
<td>I clearly pronounce my words.</td>
<td></td>
</tr>
<tr>
<td>I include a visual display that clarifies information in my presentation.</td>
<td></td>
</tr>
<tr>
<td>I use formal English.</td>
<td></td>
</tr>
<tr>
<td>• Academic and domain-specific vocabulary.</td>
<td></td>
</tr>
<tr>
<td>• Language that expresses ideas precisely, eliminating wordiness and redundancy.</td>
<td></td>
</tr>
</tbody>
</table>
**stakeholder**—*n.* someone or something involved in or affected by a course of action

<table>
<thead>
<tr>
<th>People</th>
<th>Living Things</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
**stakeholder—** *n.* someone or something involved in or affected by a course of action

<table>
<thead>
<tr>
<th>People</th>
<th>Living Things</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>People where malaria is a problem</td>
<td>Birds of prey like the peregrine falcon</td>
<td>Tropical countries in places like Africa and South America</td>
</tr>
<tr>
<td>Farmers or people who grow food</td>
<td>Mosquitoes</td>
<td>Water, air, soil</td>
</tr>
<tr>
<td>Scientists who study chemistry or the environment</td>
<td>Animals in the food web— insects, fish, birds</td>
<td>Homes</td>
</tr>
<tr>
<td>People who live in poverty and can’t afford health care</td>
<td>Crops or plants grown for food</td>
<td>Farms</td>
</tr>
<tr>
<td>People who businesses or jobs are affected</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Stakeholders Impacts Chart

Name:  
Date:  

### What happens when DDT is used?

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>How is the stakeholder affected by DDT?</th>
<th>Is this positive (+) or negative(-)?</th>
<th>If the consequence is negative, do you feel it is offset by greater good elsewhere?</th>
<th>How important is the stakeholder to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 = very; 2 = somewhat; 3 = not much</td>
<td></td>
<td>1 = very; 2 = somewhat; 3 = not much</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders</td>
<td>Five or more stakeholders listed.</td>
<td>Three or four stakeholders listed.</td>
<td>Two stakeholders listed.</td>
<td>One stakeholder listed.</td>
</tr>
<tr>
<td>How affected?</td>
<td>Explains how five or more stakeholders are affected by the position/option chosen.</td>
<td>Explains how three or four stakeholders are affected by the position/option chosen.</td>
<td>Explains how two stakeholders are affected by the position/option chosen.</td>
<td>Explains how one stakeholder is affected by the position/option chosen.</td>
</tr>
<tr>
<td>Intention</td>
<td>Indicates whether the effect for each of the five or more stakeholders was intentional or a side effect.</td>
<td>Indicates whether the effect for each of three or four stakeholders was intentional or a side effect.</td>
<td>Indicates whether the effect for each of two stakeholders was intentional or a side effect.</td>
<td>Indicates whether the effect for the stakeholder was intentional or a side effect.</td>
</tr>
</tbody>
</table>
Grade 6: Module 4: Unit 2: Lesson 12
Forming a Research-Based Claim: Cascading Consequences Chart

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## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can present claims and findings in a logical order. (SL.6.4) |
| I can support my main points with descriptions, facts, and details. (SL.6.4) |

## Supporting Learning Targets

- I can draft a claim based on my research of DDT.
- I can choose evidence from my research that supports my claim.
- I can revise my claim based on evidence from my research.

## Ongoing Assessment

- Forming Evidence-Based Claims graphic organizer

## Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Independent Reading (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Unpacking Learning Targets (2 minutes)</td>
<td></td>
</tr>
<tr>
<td>2. Work Time</td>
<td></td>
</tr>
<tr>
<td>A. Mini Lesson: Writing a Claim and Findings (10 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Drafting a Claim and Findings (20 minutes)</td>
<td></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td>A. Sharing and Revising Your Claim (8 minutes)</td>
<td></td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.</td>
<td></td>
</tr>
</tbody>
</table>

## Teaching Notes

- This lesson represents a shift for students from building background knowledge and analyzing information about DDT to drafting their own claim and identifying evidence to support their claim.
- Students are making connections about DDT by reviewing the informational articles, videos, charts, graphs, and tables and reflecting on their literary text, *Frightful’s Mountain*. Students are reintroduced to the Forming Evidence-Based Claims task worksheet used throughout Module 2. This graphic organizer provides a structure for students’ claims and supporting evidence and also asks them to think about the evidence chosen to support their claims. This reflection helps lead students to realize what information is most meaningful to them.
- Students are partnered and asked to draft a claim. After they write their claim, partners search for details and supporting evidence from their Cascading Consequences charts and/or their Stakeholders Impacts chart. Supporting evidence can also be taken from the articles they have read and the data on the graphs, charts, and tables.
- Later in the lesson, students draft their own personal claim and find supporting evidence. Students are reminded to find relevant supporting evidence.
- In this lesson, students will also get an opportunity to share their claim and evidence with peers in a Concentric Circle activity.
- In advance: Post these two guiding questions for all students to see:
### Agenda

<table>
<thead>
<tr>
<th>Teaching Notes (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Do the benefits of DDT outweigh its harmful consequences?</td>
</tr>
<tr>
<td>– How do we balance the needs of people and the condition of the natural world?</td>
</tr>
<tr>
<td>• Form student partnerships for working together on the Forming Evidence-Based Claims graphic organizer.</td>
</tr>
<tr>
<td>• Consider preparing a resource area for students. This should include the articles and charts and graphs students have read and analyzed throughout Units 1 and 2. Also, consider having a listening station for review of the two videos from Unit 1.</td>
</tr>
<tr>
<td>– <strong>Articles:</strong></td>
</tr>
<tr>
<td>• “Welcome Back”</td>
</tr>
<tr>
<td>• “The Exterminator”</td>
</tr>
<tr>
<td>• “Rachel Carson: Sounding the Alarm on Pollution”</td>
</tr>
<tr>
<td>• “Rachel Carson: Writer and Environmentalist”</td>
</tr>
<tr>
<td>• “Biological Energy—Here, Let Me Fix It!”</td>
</tr>
<tr>
<td>• “How DDT Harmed Hawks and Eagles”</td>
</tr>
<tr>
<td>• “Malaria Carrying Mosquito Crash Lands Due to His Insecticide”</td>
</tr>
<tr>
<td>• “You Think You Have It Tough?”</td>
</tr>
<tr>
<td>• “DDT Spray Scares Mosquitoes Away, Study Finds”</td>
</tr>
<tr>
<td>• “DDT use should be last resort in malaria-plagued areas, scientists say”</td>
</tr>
</tbody>
</table>
### Agenda

<table>
<thead>
<tr>
<th>Teaching Notes (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charts, Graphs and Tables:</strong></td>
</tr>
<tr>
<td>• “DDT and Malaria in Ceylon”</td>
</tr>
<tr>
<td>• “DDT Bad, Malaria Much Worse”</td>
</tr>
<tr>
<td>• “DDT in Breast Milk”</td>
</tr>
<tr>
<td>• “DDT in Human Body Fat in the United States”</td>
</tr>
<tr>
<td>• “Changes in Thickness of Eggshells”</td>
</tr>
<tr>
<td>• “Increase in Malaria for Countries in South America”</td>
</tr>
<tr>
<td>• “Lake Kariba, Africa DDT Levels”</td>
</tr>
<tr>
<td>• “Malaria Trends in South Africa”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Videos:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• John Stossel DDT Video</td>
</tr>
<tr>
<td>• DDT Video on Bioaccumulation</td>
</tr>
</tbody>
</table>

### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>claim, research, evidence, relevant, revise</td>
</tr>
<tr>
<td>• Forming Evidence-Based Claims graphic organizer (one per student)</td>
</tr>
<tr>
<td>• Document camera</td>
</tr>
<tr>
<td>• Benefits of DDT Cascading Consequence chart (from Unit 1; in research folder)</td>
</tr>
<tr>
<td>• Harmful Consequences of DDT Cascading Consequence chart (from Unit 1; in research folder)</td>
</tr>
<tr>
<td>• Stakeholders Impacts chart (in research folder)</td>
</tr>
<tr>
<td>• Research folder</td>
</tr>
<tr>
<td>• Types of Claims and Evidence anchor chart (one per student or use as an anchor chart)</td>
</tr>
<tr>
<td>• Checklist for Forming an Evidence-Based Claim (one per student)</td>
</tr>
</tbody>
</table>
### Opening

**A. Independent Reading (5 minutes)**
- Ask students to sit in book groups.
- Invite students to discuss their notes from their Reading Tracker and Reviewer’s Notes.
- Circulate and listen to determine students who may need reading support. Consider meeting with them later to discuss ways to build student engagement.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students who cannot yet read independently at any level will benefit from hearing books read to them either by partner reading or through audio recordings. Hearing books/texts can be an ongoing assignment for these students.</td>
</tr>
<tr>
<td>• Posting learning targets for students allows them to reference the targets throughout the lesson to check their understanding. The targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.</td>
</tr>
<tr>
<td>• Asking students to make connections from previous lessons points out how their skills build and as a result their learning grows.</td>
</tr>
</tbody>
</table>
### Opening (continued)

<table>
<thead>
<tr>
<th>B. Unpacking Learning Targets (2 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invite two volunteers to lead the class in reading the learning targets:</td>
</tr>
<tr>
<td>* “I can draft a claim based on my research of DDT.”</td>
</tr>
<tr>
<td>* “I can choose evidence from my research that supports my claim.”</td>
</tr>
<tr>
<td>* “I can revise my claim based on evidence from my research.”</td>
</tr>
<tr>
<td>Say to students:</td>
</tr>
<tr>
<td>* “As you can see, our three targets have familiar vocabulary terms: <em>claim</em>, <em>research</em>, <em>evidence</em>, and <em>relevant</em>. In Unit 1 and the first half of Unit 2, we have been identifying an author’s claim and supporting evidence by reading articles, viewing videos, and analyzing graphs, charts, and tables about DDT. What do we already know about the meaning of these words: <em>claim</em>, <em>evidence</em>, <em>research</em>, and <em>relevant</em>?”</td>
</tr>
<tr>
<td>Invite volunteers to share their responses. Listen for responses like: “We know a claim means to say something is true when some people may believe it’s not true,” “We know evidence is the details that support a particular claim,” “We know researchers gather information or research about a topic to become more knowledgeable,” and “If information is relevant, it proves or disproves a claim.”</td>
</tr>
<tr>
<td>Ask students:</td>
</tr>
<tr>
<td>* “After reading the targets, what do you think we will focus on in this lesson?”</td>
</tr>
<tr>
<td>Select volunteers to share their responses. Listen for students to explain in this lesson they will write their own claim and provide evidence to support their position on DDT.</td>
</tr>
<tr>
<td>Ask:</td>
</tr>
<tr>
<td>* “What do you think <em>revise</em> our claim means?”</td>
</tr>
<tr>
<td>Listen for: “We will look at our claim and make changes as needed.”</td>
</tr>
</tbody>
</table>
## A. Mini Lesson: Writing a Claim and Findings (10 minutes)

- Tell students today’s lesson brings a shift in their learning. In previous lessons, they researched DDT to build background knowledge and analyze their information. Remind them that throughout Unit 1 and the first half of Unit 2 they have considered the guiding questions, “Do the benefits of DDT outweigh its harmful consequences?” and “How do we balance the needs of people and the condition of the natural world?” Explain that, as researchers, their position on this topic has probably changed over time as they gained more knowledge.

- Tell students the world is filled with controversies about how best to act on certain issues. Share that successful researchers spend time studying both sides of an issue or argument to understand different perspectives. Explain that some knowledge gained about DDT has been documented in their Cascading Consequences charts. Also explain that completing their Stakeholders Impacts chart provided time to reflect on the stakeholders affected and personalize their understanding of the DDT controversy.

- Pose these questions for students to think about:
  * “How do you feel about this issue today?”
  * “Do the benefits of DDT outweigh its harmful consequences?”
  * “How do we balance the needs of people and the condition of the natural world?”

- Remind students that in Lesson 11, they ended class by taking a “stand” and going to one of the four corners that best represented their position on this issue, “Do the benefits of DDT outweigh the harmful consequences?” Share that in this lesson, they’ll be able to voice their position or claim in writing. They will advocate persuasively for their position to peers in a hosted Gallery Walk as their End of Unit 2 Assessment.

- To prepare for the assessment, they will first write a practice claim about DDT with a partner. Then, they will review information from their Cascading Consequences charts, the Stakeholders Impacts chart, articles, charts, and graphs to find three pieces of supporting evidence.

- Form student partnerships.

- Distribute the **Forming Evidence-Based Claims graphic organizer** and display it using a **document camera**. Remind students that they used this claim and evidence form throughout Module 2.

- Point out the two guiding questions posted in the room, and invite students to write them neatly in the space underneath their name and task.

---

### Meeting Students’ Needs

- Anchor charts provide a visual cue to students about what to do when you ask them to work independently. They also serve as a reference when the class is working in partnerships.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Using a document camera, model writing the two questions for students.</td>
<td></td>
</tr>
<tr>
<td>• Next, ask students to find their <strong>Benefits of DDT Cascading Consequences chart</strong> and <strong>Harmful Consequences of DDT Cascading Consequences chart</strong> and their <strong>Stakeholders Impacts chart</strong> from their research folder. Direct students to read the Cascading Consequences charts and think about the claims or pieces of evidence that caused them to have strong feelings about DDT. Then ask them to read their Stakeholders Impacts chart and think about the stakeholders. How have they been impacted by the decisions people have made regarding DDT?</td>
<td></td>
</tr>
<tr>
<td>• Ask partners to Think-Pair-Share:</td>
<td></td>
</tr>
<tr>
<td>* “What pieces of evidence on the Cascading Consequences charts seem the most important to you?” Give students time to share their thoughts with each other.</td>
<td></td>
</tr>
<tr>
<td>• Direct students’ attention to the <strong>Types of Claims and Evidence anchor chart</strong>, which defines how to write a claim that is clear. Tell students they now are going to write a claim with their partner. Tell them a claim is a single sentence that presents the issue, is specific and clear, is something you believe, and something you can build a solid argument about. Read the Types of Claims and Evidence anchor chart to the students. Point out the example claims.</td>
<td></td>
</tr>
<tr>
<td>• Using a document camera, model for students how they can use the claim examples on the anchor chart to frame their own claim.</td>
<td></td>
</tr>
<tr>
<td>For example: DDT is ........................................ and can provide ........................................</td>
<td></td>
</tr>
<tr>
<td>Using DDT has caused ........................................................</td>
<td></td>
</tr>
<tr>
<td>.......... is the most pressing challenge facing the world today.</td>
<td></td>
</tr>
<tr>
<td>Instead of ............. we should be focusing on ..........................</td>
<td></td>
</tr>
<tr>
<td>• Invite partners to draft an initial claim on the back of their graphic organizer. Tell them the claim does not have to represent their own personal belief but rather the goal is to have an opportunity to practice writing a claim with a partner. Give them 3 minutes to write their claim. Pause to give partners time.</td>
<td></td>
</tr>
<tr>
<td>• Circulate and support students needing help with writing their claim.</td>
<td></td>
</tr>
<tr>
<td>• Refocus the whole class.</td>
<td></td>
</tr>
</tbody>
</table>
Work Time (continued)

- Next, ask partners to identify one piece of evidence either from their Cascading Consequences charts, from their researcher’s notebook, or from their articles, charts, and graphs that would support this claim. Explain the evidence should be relevant to their claim and prove or disprove their position. Tell students they have 2 minutes to find supporting information and write it by their claim. Pause to give partners time.

- Circulate to support partnerships. Remind students to use the anchor chart examples of evidence to begin their thinking. Encourage partners to work together. Show appreciation to partners who are collaborating.

- Distribute the Checklist for Forming an Evidence-Based Claim. Ask partners to review their claim and evidence with the checklist.

- Invite volunteers to share their claim and supporting evidence with the class. Consider writing the example to provide a model for select students.

- Congratulate students on their partnership work.

B. Drafting a Claim and Findings (20 minutes)

- Direct students to turn their graphic organizer over to the front side.

- Explain to students they will write their own claim and three pieces of supporting evidence. Using the document camera, point to the area where students write their initial claim on the top of their paper above their name. Then point to the first row of boxes, telling students this is where supporting evidence or details is recorded, and the next row of boxes is where they make personal connections about each specific detail. The box titled “How I connect the details” is done when the other information is completed. Explain to students this question is asking them to consider how all of the details are connected. For example, are the details facts and ideas from authors, are the details specific words or language of the authors, or are the details authors’ opinions? Tell students that the claim section at the bottom of the page should be left blank. Inform students this is where they will write their final, revised claim at the end of the lesson.

- Remind students that there are expectations for quiet writing time. Talking is a great way to learn and share ideas; however, quiet, focused writing is also valuable. Today’s focus is on working independently to draft their own claim and identify three pieces of evidence supporting their claim.

- When reviewing the graphic organizers or recording forms, consider using a document camera to visually display the document for students who struggle with auditory processing.

- Providing models of expected work supports all learners, but especially challenged learners.

- During this work time, you may want to pull a small group of students to support in finding evidence. Some students will need more guided practice before they are ready for independent work.
Work Time (continued)  | Meeting Students’ Needs
--- | ---
• Tell students they will have 18 minutes to write.  |  
• Ask:  |  
* “How are you feeling, Fist to Five, about your readiness to start writing on your own today? A five means you are ready and excited; a three means you might need help getting started; and a one means please confer with me first.”  |  
• Make note of students who have a one, two, or three and circulate to those students first. Then continue conferring with students during this work time. Focus on the first two learning targets: “I can draft a claim based on my research of DDT” and “I can choose evidence from my research that supports my claim.” Check in with students to see how they are using the graphic organizer to support their writing.  |  
• Refocus the class after 18 minutes. Thank them for their cooperation in providing a quiet classroom for all students to write.  |
A. Sharing and Revising Your Claim (8 minutes)

- Tell students they will use Concentric Circles to share their claim and evidence with their peers and also to get feedback. Explain that after they present their claim and evidence, their partner will share a “star,” something that was really clear, and a “step,” something they have a question about or a suggestion.

- Give students a minute to look over their claim and evidence. Invite students to bring their graphic organizer, a folder/text to use as a writing surface, and a pencil to the activity.

- Concentric Circles:
  1. Divide the group in half.
  2. Have half make a circle.
  3. Have the other half make a circle around them.
  4. Tell the inside circle to face the students in the outside circle.
  5. Give students 2 minutes each to share their claim and evidence with the person facing them. Invite each partner to share a star and a step.
  6. Invite students to thank each other and then tell the inside circle to move two people to the right.
  7. Give students 1 minute to each share their claim and evidence with the person facing them. Invite each partner to share a star and a step.
  8. Invite students to thank each other.

- Invite students to consider their stars and step feedback and write a revised claim at the bottom of their graphic organizer in the claim section. Explain if they are not making changes to their claim, they should rewrite their initial claim in the box.

- Pause to give students time to write their claim.

- Congratulate students on writing their position and finding relevant evidence to support their claim.

Meeting Students’ Needs

- Use of protocols allows for total participation of students. It encourages critical thinking, collaboration, and social construction of knowledge. It also helps students to practice their speaking and listening skills.

Homework

- Read your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
## Forming Evidence-Based Claim Graphic Organizer

**Name:**

**Date:**

<table>
<thead>
<tr>
<th>Finding Details</th>
<th>Detail 1 (Reference: )</th>
<th>Detail 2 (Reference: )</th>
<th>Detail 3 (Reference: )</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find interesting details that are related and that stand out to me from reading the text closely.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connecting the Details</th>
<th>What I think about detail 1:</th>
<th>What I think about detail 2:</th>
<th>What I think about detail 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I reread and think about the details, and explain the connections I find among them.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How I connect the details:

<table>
<thead>
<tr>
<th>Making a Claim</th>
<th>My claim about the text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I state a conclusion that I have come to and can support with evidence from the text after reading and thinking about it closely.</td>
<td></td>
</tr>
</tbody>
</table>

From Odell Education. Used by permission.
A **claim** is a sentence that:
- presents an issue.
- is a statement that can be argued.
- is specific and clear.
- is something you believe.
- is something you can support with evidence.

### Four Types of Claims

<table>
<thead>
<tr>
<th>Four Types of Claims</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Claims of Fact or Definition:</strong> This claim gives facts or defines the issue.</td>
<td>What some people refer to as global warming is actually nothing more than normal, long-term cycles of climate change.</td>
</tr>
<tr>
<td><strong>Claims of Cause and Effect:</strong> This claim argues one person, thing, or event caused another thing or event to occur.</td>
<td>The popularity of SUVs in America has caused pollution to increase.</td>
</tr>
<tr>
<td><strong>Claims of Value:</strong> This claim is made based on our personal values; it is how we personally rate or categorize something.</td>
<td>Global warming is the most pressing challenge facing the world today.</td>
</tr>
<tr>
<td><strong>Claims about Solutions or Policies:</strong> This claim argues for or against a certain solution or policy approach to a problem.</td>
<td>Instead of drilling for oil in Alaska, we should be focusing on ways to reduce all consumption, such as researching renewable energy sources.</td>
</tr>
</tbody>
</table>

### Types of evidence can be:
- concrete details.
- relevant facts.
- quotations from text.
- examples from text.
- an anecdote.
- an expert’s opinion.

http://owl.english.purdue.edu/owl/resource/588/01
Checklist for Forming an Evidence-Based Claim

**Claim:**
- The claim is a sentence that presents an issue.
- The claim is clear and specific.
- The claim gives the author’s point of view or belief.
- The claim is something you can support with a solid argument.
- The claim uses domain-specific vocabulary.

**Evidence:**
- The evidence is relevant.
- The evidence is factual and descriptive.
- The evidence is in a logical order.
- The evidence uses domain-specific vocabulary.
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)
I can present claims and findings in a logical order. (SL.6.4)
I can support my main points with description, facts, and details. (SL.6.4)
I can include multimedia components and visual displays in a presentation to clarify information. (SL.6.5)

Supporting Learning Targets

- I can choose a visual aid that supports my claim and findings.
- I can identify the qualities of good speaking.
- I can use feedback from my teacher and peers to revise my claim and findings.

Ongoing Assessment

- Visual Aid selected to support personal claim
- Claim and Findings revision
- Video Critique
## Agenda

1. Opening
   - A. Unpacking Learning Targets (5 minutes)
   - B. Choosing a Visual: What Part of My Cascading Consequences Charts or Stakeholders Impacts Chart Best Represents My Claims? (10 minutes)

2. Work Time
   - A. Revising the Claim and Findings (15 minutes)
   - B. Effective Speaking Techniques: Video Presentation and Critique (10 minutes)

3. Closing and Assessment
   - A. Exit Ticket: Share Listener Feedback Back-to-Back, Face-to-Face (5 minutes)

4. Homework
   - A. Read your independent book for 30 minutes. Add to the Reading Tracker and Reviewer’s Notes.

## Teaching Notes

- At this point, students have completed the drafts of their personal claims or positions. Students’ personal thoughts about the effects of DDT in our environment are influenced by their research and the claims and evidence that different authors shared. Students have selected evidence such as descriptions, facts, and details from other authors to support their personal position in their drafts. Students have identified their personal claim and are now ready to prepare for their presentation.

- In advance: Create a target image to use as they unpack today’s learning targets. Prepare quarter- or half-size pieces of paper for goal setting, sharing, and tossing.

- In this lesson, students work with partners to revise their drafts. With specific guidelines on editing and critiquing, students use partner interaction to help achieve clear, logical, descriptive claims. Before partners begin, provide feedback from your review of students’ drafts. Guide students with detailed revision critique suggestions.

- In advance: Review student drafts to identify criteria they can strengthen. Look for:
  - At least three details that can be turned into personal positions,
  - Position is expressed in the form of a personal position or “I believe ...” statement.
  - Each detail relates to and supports the claim.

- In this lesson, students observe a model of good speaking techniques by watching a video of a 12-year-old girl speaking to the United Nations Conference about concerns that some children who participate in ECO, the Environmental Children’s Organization, have about the environment and the development of children.

- In advance: Watch the video, The Best Speech—Severn Suzuki, [http://www.youtube.com/watch?v=xPxF5c5AyWC](http://www.youtube.com/watch?v=xPxF5c5AyWC). Look for speaking techniques such as eye contact, volume, word pronunciation, appropriate vocabulary, and visual aids used by the presenter. Listen for the speaker’s possible position and information used to support that idea.
Presenting a Research-Based Claim: Effective Speaking Techniques

Lesson Vocabulary

- visual aid, critique, academic and domain-specific vocabulary, formal English

Materials

- Pencils (one per student)
- Half- or quarter-size sheets of paper (one per student)
- Image of a target (one copy, large enough to see clearly and serve as a target to toss at)
- Benefits of DDT Cascading Consequences chart (from Unit 1; in research folder)
- Harmful Consequences of DDT Cascading Consequences chart (from Unit 1; in research folder)
- Stakeholders Impacts chart (from Lesson 11; in research folder)
- Forming Evidence-Based Claims graphic organizer (from Lesson 12)
- Self and Peer Critique graphic organizer (one per student; to place in research folder)
- Checklist for Forming an Evidence-Based Claim (from Lesson 12)
- Document camera
- Notecards (four per student)
- Video—“The Best Speech—Severn Suzuki” [link](http://www.youtube.com/watch?v=xPx5r35Aymc)
- Tune in to Good Speaking: Video Critique graphic organizer (one per student and one for display; in research folder)
# Opening

<table>
<thead>
<tr>
<th>Activity</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Unpacking Learning Targets (5 minutes)</strong></td>
<td>Some students may benefit from working in small groups as they select an appropriate chart that supports their claim and can be used to develop a visual aid.</td>
</tr>
<tr>
<td>• Have the learning targets posted where all students can see them.</td>
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<tr>
<td>• Direct students to stand in a circle.</td>
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<tr>
<td>• Tell students to pick up a <strong>pencil</strong> and <strong>half- or quarter-size piece of paper</strong> as they take a place in the circle.</td>
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<tr>
<td>• Have an <strong>image of a target</strong> placed on the floor in the center of the circle. The image could be on paper, a dry-erase board, poster board, or cardboard.</td>
<td></td>
</tr>
<tr>
<td>• Invite students to look at and read the learning targets aloud with you.</td>
<td></td>
</tr>
<tr>
<td>* “I can choose a visual aid that supports my claim and findings.”</td>
<td></td>
</tr>
<tr>
<td>* “I can identify the qualities of good speaking.”</td>
<td></td>
</tr>
<tr>
<td>* “I can use feedback from my teacher and peers to revise my claim and findings.”</td>
<td></td>
</tr>
<tr>
<td>• Explain that these targets are important goals as they prepare to share their personal claims and findings—along with a visual aid—about the use of DDT with a listening audience for their End of Unit 2 Assessment.</td>
<td></td>
</tr>
<tr>
<td>• Tell students to look closely at the targets and choose one or all of the targets toward which they would like to aim.</td>
<td></td>
</tr>
<tr>
<td>• Ask students to write key words, or main words, they notice in those targets that identify their goals or what they feel is important to work on. Explain that key words include “visual aid,” “good speaking,” and/or “revise my claim and findings.”</td>
<td></td>
</tr>
<tr>
<td>• Tell students to write their key word or words on their paper and fold the paper into a small square to be tossed at the target.</td>
<td></td>
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<tr>
<td>• Ask for a volunteer to be the first to share their target goal as they make their toss at the target. Go around the circle and have each student share their goal and toss.</td>
<td></td>
</tr>
<tr>
<td>• Remind students that when you know where you are headed and you follow that path, you can reach your destination successfully.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>B. Choosing a Visual: What Part of My Cascading Consequences Charts or Stakeholders Impacts Chart Best Represents My Claims? (10 minutes)</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Tell students that a <strong>visual aid</strong> is something the audience can look at to understand something. The visual aid is part of the presentation they will make to share their personal claim and the findings that support it. The visual aid helps explain their research-based claim to their audience.</td>
<td></td>
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</tbody>
</table>
Opening (continued)

• Explain that the Cascading Consequences chart that supports their claim (either the **Benefits of DDT Cascading Consequences chart** or the **Harmful Consequences of DDT Cascading Consequences chart** and/or the **Stakeholders Impacts chart** can be used to develop their visual display).

• Tell students they will select the chart that has information that best supports their personal claim.

• Ask students to gather the following items from their research folder:
  * Cascading Consequences chart that supports their claim (either the “Benefits of DDT” or the “Harmful Consequences of DDT”)
  * Stakeholders Impacts chart

• Distribute the **Forming Evidence-Based Claims graphic organizer** drafts from the last lesson to each student or ask students to retrieve them from their research folder.

• Use a Think-Pair-Share to help students select the chart and information they will use to create their visual aid in the next lesson.

• Ask students to take 1 minute to reread the draft they wrote on their own of their personal claim and findings.

• When they finish reading, students should look at their selected Cascading Consequences chart and their Stakeholders Impacts chart and choose information that helps explain information in their presentation to their audience. Encourage students to look closely for information that relates well to their personal claim and can help listeners understand their message.

• Tell students to share both their claim and the visual they selected with their partner. Ask partners to explain their reason for choosing their visual. Their explanation should include information on the chart and how it relates to their personal claim. Invite listening partners to provide feedback.

• Circulate to support students as they make their selections.

• Refocus the whole class and cold call a few partners to share whole group the visual and the reason for choosing it.

• Commend students for selecting a chart and information that relates to their claim. Explain that they will use that to create their visual aid in the next lesson.
A. Revising the Claim and Findings (15 minutes)

- Remind students that in the last lesson, they drafted their personal claim and findings in their Forming Evidence-Based Claims graphic organizer. They shared their claims and findings or evidence with their peers in a Concentric Circle and then revised and wrote their claim at the bottom of the graphic organizer in the Making a Claim section.

- Tell students that today they will review and revise their claim and findings again. As they work towards achieving their best work, point out the following steps they will take:
  1. Review and revise their own personal claim and findings.
  2. Critique their writing partner’s personal claim and findings.
  3. Document their personal claim and findings on notecards to use for their presentation.

- Ask students to get their Forming Evidence-Based Claims graphic organizer from their research folder.

- Distribute the Self and Peer Critique graphic organizer to each student. Ask students to also get their Checklist for Forming an Evidence-Based Claim (from Lesson 12) from their research folder.

- Use the document camera to introduce the Self and Peer Critique graphic organizer. Point out the writer’s claim and findings components on the graphic organizer that students should look for as they critique, or evaluate carefully, to give feedback. Recommend that students also refer to the Checklist for Forming an Evidence-Based Claim to help them critique and revise their own work. This will also help when they critique their partner’s work.

- Determine writing partners.

- Tell students they have 2 minutes to review their drafts and make changes.

- Students then exchange drafts with their writing partners. Give students the next 6 minutes to carefully read their partner’s claim and provide helpful feedback on the Self and Peer Critique graphic organizer.

- Circulate and support students as they work. Provide support and directions as needed.

- Refocus class whole group. Thank students for their close look at their own writing and their partner’s writing. Explain that they will now use their revised claims and finding to create notecards to use when they present their personal claim and supporting findings.
Work Time (continued)

- Distribute four notecards to each student. Explain that they will now write their claim on a notecard and each of the three pieces of evidence on separate notecards. Tell students they may use their notecards for reference when they present to their audience.

- Instruct students that the first notecard expresses their personal claim. That can be written as a sentence that clearly presents their issue and point of view. The other three notecards can be notes that they can refer to as they present and refer to their visual aid.

- Allow students the next 8 minutes to work independently to create their notecards.

- Refocus the group. Explain that their well-written claims and findings is an important part of sharing their position with an audience. Tell students another important part of a presentation is speaking.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
</table>

**B. Effective Speaking Techniques: Video Presentation and Critique (10 minutes)**

- Tell students they are now going to watch a Video—“The Best Speech—Severn Suzuki” in which a 12-year-old girl named Severn Suzuki gives a presentation. She is a member of the Environmental Children’s Organization speaking to a group of adults at the United Nations Conference on the environment and development. Explain that she expresses her concerns about children losing important things in the environment and how that will affect their futures (her claim).

- Before starting the video, ask students to look at the criteria in the left column of the Tune in to Good Speaking: Video Critique graphic organizer in their research folder.

- Use a document camera to display the graphic organizer and point out the criteria, or standards that a presentation may be judged on.

- Inform students that these are the same criteria they will strive for in their presentations.
Presenting a Research-Based Claim: Effective Speaking Techniques

Work Time (continued)

- Review the first five criteria listed as students follow along:
  * “The speaker makes eye contact with the audience.”
  * “The speaker uses appropriate volume.”
  * “The speaker clearly pronounces and expresses words.”
  * “The speaker includes visual aids or displays that clarify information in the presentation.”
  * “The speaker uses formal English: *Academic and domain-specific vocabulary*; language that expresses ideas precisely, eliminating wordiness and redundancy.”
- Ask students to watch and listen for those speaking techniques. Explain that it is helpful to hear and observe others when preparing to speak to an audience.
- As they watch, tell students to write their critique or feedback comments in the right-hand column by the criteria that they notice on the graphic organizer. Feedback should be specific.
- Play the first 2 to 3 minutes of the video. Pause and ask students to share what they noticed. Probe for responses that address the presentation criteria such as:
  * “What did you notice about the girl’s voice?”
  * “How would you describe her eye contact with her audience?”
  * “What *formal English* did you notice?”
  * “How did she pronounce her words?”
  * “What visual aids did you notice? How were they helpful?”
- Remind students to write their feedback on the *Tune in to Good Speaking: Video Critique* graphic organizer.
- Before watching the rest of the video, ask students to also watch for how information is presented. Listen to see if information is clearly presented in a logical order and includes descriptions, facts, and details.
- Ask students to refer to their *Tune in to Good Speaking: Video Critique* graphic organizer to critique the girl’s presentation.
- At the end of the video, recognize students’ attentive listening and critique work. Explain that they will now share their observations with others.
### Closing and Assessment

**A. Exit Ticket: Share Listener Feedback Back-to-Back, Face-to-Face (5 minutes)**

- Direct students to take their Video Critiques and form two equal lines and stand across from each other.
- Explain that their partner is the person standing across from them. Instruct students to turn around so they are facing away from each other. As they are facing away, ask students to select two critique comments they included in their listener feedback to share with their partner. Ask students to also think of one goal they have for their own presentation. Allow 1 minute to think of what they would like to share.
- Invite students to turn around, face their partner, and share their critique comments and their goal.
- Collect students’ Video Critiques as their exit ticket.

### Homework

- Read your independent book for 30 minutes. Add to the Reading Tracker and Reviewer’s Notes.
Self and Peer Critique

**Writer:**

**Critique Partner:**

**Date:**

<table>
<thead>
<tr>
<th>Claim</th>
<th>Yes or No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The claim presents an issue.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The claim is expressed as the writer’s belief or point of view.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The first detail relates to the text or videos. The detail supports the claim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The second detail relates to the text or videos. The detail supports the claim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The third detail relates to the text or videos. The detail supports the claim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The claim is restated in a different way at the end.</td>
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</tbody>
</table>
### Tune in to Good Speaking: Video Critique

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Listener Feedback (Include Stars and Steps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The speaker made eye contact with the audience.</td>
<td></td>
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<tr>
<td>The speaker used appropriate volume and pace.</td>
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<tr>
<td>The speaker clearly pronounced and expressed words.</td>
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<tr>
<td>The speaker included visual aids or displays that clarified information in the presentation.</td>
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</tr>
<tr>
<td>The speaker used formal English. Academic and domain-specific vocabulary Language expresses ideas clearly, without redundancy</td>
<td></td>
</tr>
<tr>
<td>The speaker presented the claim/s clearly.</td>
<td></td>
</tr>
<tr>
<td>The speaker presented information in a logical order or way that made sense and was easy to understand.</td>
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<tr>
<td>The speaker used descriptions, facts, and details to support the claim.</td>
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</tbody>
</table>
Presenting a Research-Based Claim: Visual Aid and Peer Critique
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can include multimedia components and visual displays in a presentation to clarify information. (SL.6.5)
- I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)
- I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6.6)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can create a visual that clarifies information in my presentation.</td>
<td>• Visual aid for presentation</td>
</tr>
<tr>
<td>• I can participate in a peer critique of my presentation.</td>
<td>• Presentation notecards</td>
</tr>
<tr>
<td></td>
<td>• Presenting a Claim and Findings Peer Critique form</td>
</tr>
</tbody>
</table>
# Presenting a Research-Based Claim: Visual Aid and Peer Critique

## Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Unpacking Learning Targets (2 minutes)</td>
<td>- In Lesson 13, students started to prepare for their End of Unit 2 Assessment. They were asked to consider each of their visuals, the Cascading Consequences chart or the Stakeholders Impacts chart and select one that would help clarify their claim and best represent their position. Students also participated in a Peer Critique of their claim and findings. After the critique, time was given to make revisions. To model how to advocate persuasively, students observed good speaking techniques by analyzing a video of a 12-year-old student of ECO, the Environmental Children’s Organization. Together, students identified criteria of good speaking techniques and developed a checklist of criteria.</td>
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<table>
<thead>
<tr>
<th>Work Time</th>
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<tbody>
<tr>
<td>A. Creating a Visual (20 minutes)</td>
<td>- In today’s lesson, students continue preparing for their presentations. This lesson focuses on creating a visual aid to support the claim and findings, preparing their notecards for the presentation, and practicing their presentation with a peer.</td>
</tr>
<tr>
<td>B. Good Speaking Techniques: Partner Practice (20 minutes)</td>
<td>- Viewing the video and creating their visual aid will help students understand how the use of their visual aid, coupled with good speaking skills, work hand-in-hand to create an effective presentation.</td>
</tr>
<tr>
<td></td>
<td>- In this lesson, students continue to work on notecards that include their claim, three pieces of relevant and supporting evidence, and information about their reasoning and point of view for their presentations. Students will be asked to put their evidence in a logical order, considering each piece of evidence so that they can advocate persuasively their position on DDT.</td>
</tr>
<tr>
<td></td>
<td>- Students partner with a peer to practice presentations and effective speaking techniques. Working with peers helps develop their skills. As presenters, they practice and improve the criteria they are being assessed on. As listeners, they build on their understanding of the criteria, allowing them to improve their own presentation.</td>
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<tr>
<td></td>
<td>- In Lesson 15, students will present their positions on DDT and the balance of human needs and the condition of the natural world. They will share their claim and supporting evidence to peers in a hosted Gallery Walk as an End of Unit 2 Assessment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closing and Assessment</th>
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</thead>
<tbody>
<tr>
<td>A. Exit Ticket: Preparing for My Presentation (3 minutes)</td>
<td>- In advance: Form student partnerships. Students will present their position to a peer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Homework</th>
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</thead>
<tbody>
<tr>
<td>A. Prepare for the End of Unit 2 Assessment. Finish the visual and practice the presentation.</td>
<td>- Post: Learning targets and the two guiding questions: “Do the benefits of DDT outweigh its harmful consequences?” and “How do we balance the needs of humans with the conditions of the natural world?”</td>
</tr>
</tbody>
</table>
## Presenting a Research-Based Claim:
Visual Aid and Peer Critique

### Lesson Vocabulary
- visual, clarify, peer critique, logical

### Materials
- Stakeholders Impacts Chart (from Lesson 11; in research folder)
- Benefits of DDT Cascading Consequences chart (from Unit 1; in research folder)
- Harmful Consequences of DDT Cascading Consequences chart (from Unit 1; in research folder)
- Research folder
- Task Card for Creating a Visual Aid (one per student)
- Plain white paper (one piece per student)
- Document camera
- A Visual to Support My Claim (one per student and one to display)
- Black fine-tip marker (one per student)
- Ruler (one per student)
- Compass (one per student)
- Box of colored pencils (one per student)
- Criteria for the Cascading Consequences Chart Visual (one per student)
- Criteria for the Stakeholders Impacts Chart Visual (one per student)
- Notecards (four per student)
- Forming Evidence-Based Claims graphic organizer (from Lesson 12; in research folder)
- Presenting a Claim and Findings Criteria Peer Critique (one per student)
- Exit Ticket: Preparing for My Presentation (one per student; one for display)
Opening

<table>
<thead>
<tr>
<th><strong>A. Unpacking Learning Targets (2 minutes)</strong></th>
<th><strong>Meeting Students’ Needs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to read along with you as you read the learning targets aloud:</td>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
<tr>
<td>* “I can create a visual that clarifies information in my presentation.”</td>
<td>• Posting learning targets allows students to reference them throughout the lesson to check students’ understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.</td>
</tr>
<tr>
<td>* “I can participate in a peer critique of my presentation.”</td>
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<tr>
<td>• Ask triads to discuss:</td>
<td></td>
</tr>
<tr>
<td>* “What is a visual, and how can a visual help clarify information?”</td>
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</tr>
<tr>
<td>* “Can you think of visuals you have created in Units 1 and Unit 2?”</td>
<td></td>
</tr>
<tr>
<td>• Pause to give students time.</td>
<td></td>
</tr>
<tr>
<td>• Cold call triads and listen for: A visual is something that enhances a presentation; it creates an image for the audience to view. A visual helps explain information in a different manner and highlights the content of the presentation. The Cascading Consequences charts and the Stakeholders Impacts chart are examples of visuals created in Unit 1 and Unit 2.</td>
<td></td>
</tr>
<tr>
<td>• Explain that in this lesson, students will create their own visual for their presentation.</td>
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</tr>
<tr>
<td>• Ask triads to discuss:</td>
<td></td>
</tr>
<tr>
<td>* “What is a peer critique?”</td>
<td></td>
</tr>
<tr>
<td>* “Why is this an important step in the process of preparing for a presentation?”</td>
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</tr>
<tr>
<td>• Pause to give triads time to discuss.</td>
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</tr>
<tr>
<td>• Cold call and listen for: A peer critique is when a peer or classmate provides feedback on something. This step is important because it gives the presenter an opportunity to make changes and improve his/her presentation.</td>
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</tr>
<tr>
<td>• Remind students that working with peers will help develop both the presenter’s and the listener’s skills. Tell students their primary audience for this activity will be their peers. Therefore, this is a really great chance to practice before their assessment. As presenters, they practice and improve criteria they are being assessed on. As listeners, they build on their understanding of the criteria allowing them to make changes improve their own presentations.</td>
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</table>
### A. Creating a Visual (20 minutes)

- Explain that effective presentations have visuals to clarify information. Share that a visual provides an image and will increase the audience's level of understanding of the material. When visuals are used, it encourages the presenter to use gestures and movement during the presentation. As a result, visuals are mutually beneficial to both the audience and the presenter.

- Invite students to find their Stakeholders Impacts chart, Benefits of DDT Cascading Consequences chart, and Harmful Consequences of DDT Cascading Consequences chart in their research folder.

- Distribute the Task Card for Creating a Visual Aid and plain white paper. Read through the instructions on the task card for creating each visual.

- Using a document camera, display and/or distribute the model: A Visual to Support My Claim. Share with students they will choose either their Cascading Consequences chart as their visual or their Stakeholders Impacts chart. If they choose to use their Cascading Consequences chart as the visual, they need to select one aspect that will best highlight and support their claim. Explain the example could serve as a model. Tell them if they choose the Stakeholders Impacts chart, they need to select the part that best represents their position and draw that part of the chart and include text headings for clarity.

- Distribute other supplies as needed to each student such as a black fine-tip marker to highlight all pencil marks, a ruler to construct draft lines, a compass for the claim circle, and a box of colored pencils to lightly shade the background of text to draw attention to important information. Tell students they will have 20 minutes to work on their visuals.

- Circulate and support students needing help with choosing the best visual to clarify their claim.

- Refocus the class.

- Distribute either the Criteria for the Cascading Consequences Chart Visual or the Criteria for the Stakeholders Impacts Chart Visual. Ask students to use the Checklist Criteria to help determine their next steps.

- Commend students for all they accomplished in the time given. Point out highlights of their visuals such as neat writing, using draft lines, and the spacing of images for page layout.
### B. Good Speaking Techniques: Partner Practice (20 minutes)

- Form student partnerships.
- Point out an effective presentation has visual aids and establishes an objective or an end goal. Ask partners to Think-Pair-Share:
  * “What is the objective or end goal of your presentation?”
- Call on volunteers. Listen for: Our goal is to inform our audience about DDT issues by sharing facts and details.
- Explain that they are also asking the audience to consider adopting a new perspective on the use of DDT after hearing their facts and listening to their supporting details. Remind students they are using their research to advocate persuasively on their position.
- Invite students to take out the **notecards** from Lesson 13. They will now have time to complete any they may have left unfinished. Ask students to find the **Forming Evidence-Based Claims graphic organizer** in their research folder.
- Remind students to think about the two questions written at the top of this organizer: “Do the benefits of DDT outweigh its harmful consequences?” and “How do we balance the needs of humans with the condition of the natural world?” Ask them to carefully consider how to advocate persuasively as they complete their four notecards. Remind students that the first notecard will state their claim, and each of the other three notecards should have a supporting piece of evidence and their reasoning about the supporting information. Explain students should also cite the source of their evidence.
- Tell students they have 5 minutes to complete their notecards, and then they will have their first opportunity to share their position and get partner feedback.
- Circulate and support students needing help with transferring their claim and evidence onto notecards. Compliment students for being productive.
- Refocus the class after 5 minutes. Distribute **Presenting a Claim and Findings Criteria Peer Critique form** to students.
- Using a document camera, display the Peer Critique form. Invite students to read along as you read the criteria list aloud.
- Explain each of the criteria so students understand how they will be assessed. Invite students to think about the order in which they present their evidence. Ask them to think about a *logical* order, an order that seems reasonable. Explain sometimes it’s best to put the most important piece of evidence last.
- Give students a few minutes to prepare. Circulate to support.

### Meeting Students’ Needs

- When reviewing graphic organizers or recording forms, consider using a document camera to display the document for students who struggle with auditory processing.
- Providing models of expected work supports all students, especially challenged learners.
### Work Time (continued)

- Ask the partners to determine who should present first. Remind listeners to be supportive and provide stars and a wish or next step to the presenter.
- As students present, circulate and take notes on the criteria students are meeting successfully and on the criteria needing attention.
- Reconvene the class after partners have finished. Ask partners to finish completing the peer critique and give it to their partner.
- Using the document camera, display the Presenting a Claim and Findings Criteria Peer Critique form. Point out criteria you observed students doing successfully and criteria students may want to focus on for their hosted Gallery Walk.
- Commend students for their focused work preparing for their End of Unit 2 Assessment. Share that it will be exciting to see all of their research presented in the hosted Gallery Walk.

### Closing and Assessment

**A. Exit Ticket: Preparing for My Presentation (3 minutes)**

- Read the two guiding questions to the class: “Do the benefits of DDT outweigh its harmful consequences?” and “How do we balance the needs humans with the conditions of the natural world?” Ask students to think about these questions and the goal of their presentation.
- Distribute the **Exit Ticket: Preparing for My Presentation**. Invite students to think about the learning targets and about presenting their position persuasively to peers. Ask them what they need to accomplish to be prepared for the Gallery Walk.

### Homework

- Prepare for the End of Unit 2 Assessment. Finish the visual and notecards, and practice the presentation.
Task Card for Creating a Visual Aid

Creating the Cascading Consequences Chart Visual

1. Using a ruler, construct a draft line lightly in pencil for the title of the visual.
2. Write the title lightly in pencil using capital letters for the first word and last word and every important word in between.
3. Using a ruler, construct two draft lines lightly in pencil for the subtitles: Claim and Supporting Evidence.
4. Write the two subtitles lightly in pencil.
5. Using a ruler, construct draft lines lightly in pencil in the upper half of the paper for the claim.
6. Write the claim lightly in pencil.
7. Construct a circle around the claim using a compass or another larger object.
8. Using a ruler, construct draft lines lightly in pencil in the lower half of the paper for the three supporting pieces of evidence.
9. Neatly write the three supporting pieces of evidence lightly in pencil.
10. Use a ruler to construct three boxes around each piece of supporting evidence.
11. Go over the text, circle, and boxes with a black fine-tip marker.
12. Neatly erase all pencil marks.
13. Consider choosing four different colored pencils to shade the background of the text.

Creating the Stakeholders Impacts Chart Visual

1. Using a ruler, construct a draft line lightly in pencil for the title of the visual.
2. Write the title lightly in pencil using capital letters for the first word and last word and every important word in between.
3. Using a ruler and pencil, construct the stakeholders chart that best highlights your claim. Include the text headings as part of the visual.
4. Using a ruler, construct draft lines for text. Neatly copy the text from the stakeholders draft.
5. Outline all pencil marks with a black fine-tip marker.
6. Neatly erase all pencil marks.
7. Consider choosing different colored pencils to shade the background of the text.
A Visual to Support My Claim

Claim:

Supporting Evidence:

1

2

3
# A Visual to Support My Claim

**What happens when DDT is used?**

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>How is the stakeholder affected by DDT?</th>
<th>Is this positive (+) or negative(-)?</th>
<th>If the consequence is negative, do you feel it is offset by greater good elsewhere?</th>
<th>How important is the stakeholder to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 = very; 2 = somewhat; 3 = not much</td>
</tr>
</tbody>
</table>

Name:

Date:
## Criteria for Cascading Consequences Chart Visual

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Content:</th>
<th>Yes</th>
<th>Not Yet</th>
</tr>
</thead>
<tbody>
<tr>
<td>The claim is a sentence that states the issue and presents my belief or point of view.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three pieces of evidence provide descriptions, facts, and details that support my claim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic and domain-specific vocabulary are used.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual appeal:</th>
<th>Yes</th>
<th>Not Yet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text is free of spelling errors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text is free of mechanical and grammar errors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color adds to the interest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draft lines were used to guide text writing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A ruler was used to construct three boxes for supporting evidence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A compass was used to construct a circle for the claim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All draft lines were neatly erased.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Criteria for Stakeholders Impacts Chart Visual

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
<th>Yes</th>
<th>Not Yet</th>
</tr>
</thead>
</table>

#### Content:
- Four stakeholders are identified.  
- An explanation defines how each stakeholder is affected by the position or option chosen.  
- The effect for each stakeholder is indicated as intentional or a side effect.  
- Academic and domain-specific vocabulary is used (10 words).

#### Visual appeal:
- Text is free of spelling errors.  
- Text is free of mechanical and grammar errors.  
- Color adds to the interest.  
- Draft lines were used to guide text writing.  
- A ruler was used to construct three boxes for supporting evidence.  
- All draft lines were neatly erased.
Presenting a Claim and Findings Criteria Peer Critique Form

<table>
<thead>
<tr>
<th>Speaker’s Criteria</th>
<th>Partner Feedback—(Including 1 star and 1 wish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The claim was clearly presented, stating the issue and speaker’s point of view.</td>
<td></td>
</tr>
<tr>
<td>Findings were presented in logical order.</td>
<td></td>
</tr>
<tr>
<td>Descriptions, facts, and details supported the claim.</td>
<td></td>
</tr>
<tr>
<td>Eye contact was made with the audience.</td>
<td></td>
</tr>
<tr>
<td>Appropriate volume made it easy to hear.</td>
<td></td>
</tr>
<tr>
<td>Words were pronounced clearly.</td>
<td></td>
</tr>
<tr>
<td>A visual display was used and clarified information in the presentation.</td>
<td></td>
</tr>
<tr>
<td>Formal English enhanced the presentation.</td>
<td></td>
</tr>
<tr>
<td>Academic and domain-specific vocabulary (at least 10).</td>
<td></td>
</tr>
<tr>
<td>Language that expressed ideas precisely, eliminating wordiness and redundancy.</td>
<td></td>
</tr>
</tbody>
</table>
Exit Ticket: Preparing for My Presentation

Name:

Date:

1. What do I need to do to prepare for the End of Unit 2 Assessment on my:
   a. Visual aid?
   
   
   
   
   
   
   
   
   
   b. Note cards?
   
   
   
   
   
   
   c. Speaking techniques?
   
   
   
   
   

2. What are my priorities in order to be prepared?

   
   
   
   
   
   

3. What do I feel most confident about?

   
   
   
   
   
   

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Grade 6: Module 4: Unit 2: Lesson 15
End of Unit 2 Assessment: A Hosted Gallery Walk
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively and advocate persuasively. (RI.6.9a)
I can present claims and findings in a logical order. (SL.6.4)
I can support my main points with descriptions, facts, and details. (SL.6.4)
I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)
I can include multimedia components and visual displays in a presentation to clarify information (SL.6.5)
I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6.6)

Supporting Learning Targets

- I can advocate persuasively my position on the use of DDT to an audience.
- I can use my visual to clarify my presentation.

Ongoing Assessment

- Presentation Checklist for the Gallery Walk
- End of Unit 2 Assessment: Presenting a Claim and Findings
# Agenda

1. **Opening**
   - A. Prepare for the Unit 2 Assessment (5 minutes)

2. **Work Time**
   - A. End of Unit 2 Assessment: Hosted Gallery Walk (37 minutes)

3. **Closing and Assessment**
   - A. Self-Assessing Using the Criteria List (3 minutes)

4. **Homework**
   - A. Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

## Teaching Notes

- In Lessons 12 through 14, students prepared for the End of Unit 2 Assessment. They wrote a research-based claim, created a visual aid, and practiced their presentation advocating persuasively for their position on the use of DDT to their peers.

- In this lesson, students participate in a hosted Gallery Walk. Students formally present their research-based claim during the class to their audience using their visual aid (a part of their Cascading Consequences chart or their Stakeholders Impacts chart) to answer the overarching research question: “Do the benefits of DDT outweigh its harmful consequences?” Students must provide relevant and sufficient evidence and use sound reasoning to support their claim.

- In advance: Prepare the room for student presentations (as many “stations” as you need when students are grouped into triads). Provide a way for students to display their visual aid at these areas. Because their visual aid will become part of a larger visual aid or poster in Unit 3, it is important to ask students to be careful when posting it for the audience to view. Possible suggestions to display the visual would be to either use a bulletin board or possibly paper clip the visual to an object that would stand on a desk or table.

- Form student triads and number each member 1, 2, and 3. Consider the group that you may want to join for the Gallery Walk.

- Post: Learning targets; a list of materials for students to use during class.

- This is built as a one-day lesson; however, if you have a large class, this hosted Gallery Walk may take two days of instruction. If this is the case, you could pair this assessment with an independent reading review.
### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Visual aid (homework from Lesson 14)</td>
</tr>
<tr>
<td>• Four notecards (homework from Lesson 14)</td>
</tr>
<tr>
<td>• Pencil (one per student)</td>
</tr>
<tr>
<td>• Hard surface to write on (one per student)</td>
</tr>
<tr>
<td>• Document camera</td>
</tr>
<tr>
<td>• Presenting a Claim and Findings Criteria (one per student and one to display)</td>
</tr>
<tr>
<td>• Presentation Checklist for the Gallery Walk (one per student)</td>
</tr>
<tr>
<td>• End of Unit 2 Assessment: Presenting a Claim and Findings (one per student)</td>
</tr>
</tbody>
</table>
### Opening

**A. Prepare for the Unit 2 Assessment (5 minutes)**

- Welcome students to the hosted Gallery Walk. Share your excitement for them to present their hard work to an audience in a formal presentation.
- Check in with students to see if they have all their needed materials: their visual aid and their four notecards for their presentations, a pencil, and a hard surface to write on during the Gallery Walk.
- Using a document camera, display and/or distribute the Presenting a Claim and Findings Criteria for all students to see. Read through the criteria to remind students of how they will be assessed.
- Distribute the Presentation Checklist for the Gallery Walk.
- Using the document camera, display the checklist. Invite a volunteer to read the text in the boxes at the top of the sheet. Explain to students that as listeners, they will write the name of the speaker presenting and check the speaker’s successful criteria boxes. Then, ask listeners to share a “star,” or something the speaker did well.
- Share that students will be grouped in triads for the Gallery Walk, and each member of the triad will be numbered 1, 2, or 3. Point out the different areas in the room where students will present. Explain students numbered 1 will present first, and students’ numbered 2 and 3 will be the audience, standing or sitting, facing the presenter.
- Explain that when triads get assigned to their presentation area, they need to quickly prepare for the presentation. Tell the speaker to display his/her visual and organize the four notecards. Tell listeners while the speaker is posting their visual for viewing and organizing their notecards, they should write the name of student number 1 in the first box under “speaker” on the Presentation Checklist for the Gallery Walk. This is a good time to remind students to be careful with their visual because this will be used as part of a poster in Unit 3.
- Share that when the speaker has finished presenting, listeners should finish completing the checklist and write a star. Then, students’ numbered 2 and 3 move to the right to the next speaker.
- Remind students the importance of being a good audience for the speaker.

### Meeting Students’ Needs

- Some students may need an alternative presentation opportunity, such as a smaller group setting.
- Set up peer critiquing very carefully to ensure students feel safe giving and receiving feedback. Students must be given a set of clear guidelines for behavior, and consider modeling the Gallery Walk successfully.
- Asking students to provide feedback to their peers based on explicit criteria benefits both students. They can learn from both strengths and weaknesses that they notice in the work of peers.

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## Work Time

**A. End of Unit 2 Assessment: Hosted Gallery Walk (37 minutes)**

- When students appear ready for the first presentation, tell them they should stay in their triad group until you signal them to move.

- Invite the first speaker to present. Ask the audience, or listeners, to be courteous and watch for success criteria.

- After the first presenter has finished in all triads, ask students numbered 2 and 3 to move to the right to the next speaker. Then, the students numbered 1 present again to a different audience.

- Follow this pattern or routine until you have heard every student numbered 1 present.

- After all students numbered 1 have presented, ask them to carefully take down their visual and put it on their desk with their notecards. Then, ask them to get a pencil, a hard surface to write on, and their Presentation Checklist for the Gallery Walk and become a listener. Ask students numbered 2 to put their pencil, folder, and Presentation Checklist for the Gallery Walk on their desk. Ask them to get their visual and four notecards and prepare to present. Students numbered 3 should patiently wait for the next presentation.

- When students are prepared, invite students numbered 2 to present. Again, ask the audience, or listeners, to be courteous and watch for success criteria.

- After all students numbered 2 have finished presenting, ask the audience or listeners to move to the right to the next speaker. Then, the students numbered 2 present again to a different audience.

- Again, follow this pattern or routine until you have heard every student numbered 2 present.

- Continue this pattern and routine until all students numbered 3 have presented.

- When everyone has finished presenting, ask students to be seated.

- Tell students to take a minute to finish their Presentation Checklist for the Gallery Walk for all students.

- Circulate and notice successful criteria students have checked.

- Congratulate students for being a supportive triad member and a courteous audience.
### Closing and Assessment

**A. Self-Assessing Using the Criteria List (3 minutes)**
- Invite each student to add his/her name to the bottom of their Presentation Checklist for the Gallery Walk. Ask them to self-assess using the criteria listed. Also ask them to share a star, something they were proud of, or a highlight.
- Collect students’ visuals and their Presentation Checklists for the Gallery Walk.
- Circulate and encourage students to share their successes.

[Based on the End of Unit 2 Assessment in the supporting materials section, I suggest replacing the top three bullets with those below. I assume this is the intent of that End of Unit 2 Assessment. If I’ve got this wrong, that’s fine. Just delete the assessment from the mats list and the supporting mats because it’s not referenced anywhere else in the lesson.]
- Invite each student to fill out the **End of Unit 2 Assessment: Presenting a Claim and Findings** self-assessment form. Ask them to self-assess using the criteria listed.
- Circulate and encourage students to share their successes.
- Collect students’ visuals, Presentation Checklists for the Gallery Walk, and End of Unit 2 Assessments: Presenting a Claim and Findings.

### Homework

- Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
Presenting a Claim and Findings Criteria

Name:

Date:

When preparing for and practicing your presentation, keep the criteria below in mind.

<table>
<thead>
<tr>
<th>Presenter’s Criteria</th>
<th>Partner Feedback (Including 1 star and 1 wish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I present my claim clearly.</td>
<td></td>
</tr>
<tr>
<td>I present my findings in logical order.</td>
<td></td>
</tr>
<tr>
<td>I use descriptions, facts, and details to support my claim.</td>
<td></td>
</tr>
<tr>
<td>I make eye contact with my audience.</td>
<td></td>
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<tr>
<td>I use appropriate volume.</td>
<td></td>
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<tr>
<td>I clearly pronounce my words.</td>
<td></td>
</tr>
<tr>
<td>I include a visual display that clarifies information in my presentation.</td>
<td></td>
</tr>
<tr>
<td>I use formal English. Academic and domain-specific vocabulary Language that expresses ideas precisely, eliminating wordiness and redundancy.</td>
<td></td>
</tr>
</tbody>
</table>
Presentation Checklist for the Gallery Walk

Listener’s Name: 

Date: 

<table>
<thead>
<tr>
<th>Speaker’s Name</th>
<th>Had a claim and three pieces of evidence</th>
<th>Made eye contact and used clear pronunciation</th>
<th>Had a clarifying visual and used it</th>
<th>Share a STAR!</th>
</tr>
</thead>
<tbody>
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</table>
Presentation Checklist for the Gallery Walk

<table>
<thead>
<tr>
<th>Speaker’s Name</th>
<th>Had a claim and three pieces of evidence</th>
<th>Made eye contact and used clear pronunciation</th>
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<th>Share a STAR!</th>
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</thead>
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</tbody>
</table>
End of Unit 2 Assessment: Presenting a Claim and Findings

Name: 

Date: 

Long-Term Learning Targets
– I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RI.6.9a)
– I can present claims and findings in a logical order. (SL.6.4)
– I can support my main points with descriptions, facts, and details. (SL.6.4)
– I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.6.4)
– I can include multimedia components and visual displays in a presentation to clarify information. (SL.6.5)
– I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6.6)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>I presented my claim clearly.</td>
<td></td>
</tr>
<tr>
<td>I presented my findings in a logical order.</td>
<td></td>
</tr>
<tr>
<td>I used descriptions, facts, and details to support my claim.</td>
<td></td>
</tr>
<tr>
<td>I made eye contact with my audience.</td>
<td></td>
</tr>
<tr>
<td>I used appropriate volume.</td>
<td></td>
</tr>
<tr>
<td>I clearly pronounced my words.</td>
<td></td>
</tr>
<tr>
<td>I included a visual display that clarifies information in my presentation.</td>
<td></td>
</tr>
</tbody>
</table>
End of Unit 2 Assessment: Presenting a Claim and Findings

<table>
<thead>
<tr>
<th>Criteria</th>
<th>✓</th>
</tr>
</thead>
</table>
| I used formal English.  
  Academic and domain-specific vocabulary  
  Language that expresses ideas precisely, eliminating wordiness and redundancy |   |
| I persuasively advocated my position about DDT by using all of the criteria. |   |
Unit 3: Writing: Position Paper about the Use of DDT

Building on the research and decision-making process that students completed in Unit 2, Unit 3 is an extended writing process during which students draft, revise, edit, and publish their research-based position papers. In the first half of the unit, students analyze a model position paper and plan their own, with several opportunities to talk through their ideas as well as get feedback to improve their plans. The mid-unit assessment is students’ best draft of their position paper.

In the second half of the unit, students revise their position papers based on teacher feedback. They also receive lessons on the use of grade-level-appropriate vocabulary and formal English in writing. The end of unit assessment is students’ published position paper as well as a student reflection on the process of writing the paper, using evidence from the students’ own work. Finally, students engage in the performance task: creating a scientific poster based on their position paper. They share this poster with their classmates in a hosted Gallery Walk.

Guiding Questions And Big Ideas

- How do we balance the needs of people and the condition of the natural world?
- Do the benefits of DDT outweigh its harmful consequences?
- How do I integrate evidence from multiple sources to help support a claim in a position paper?
  
  - Research includes the close reading of multiple sources, evaluation of those sources, and collecting of relevant information.
  
  - Thorough research of multiple perspectives of an issue builds toward an informed decision and claim.
  
  - Position papers are well supported by carefully chosen evidence from credible sources.
# Writing: Position Paper about the Use of DDT

## Mid-Unit 3 Assessment

**Draft of Position Paper: Do the Benefits of DDT Outweigh Its Harmful Consequences?**

This assessment centers on NYSP12 ELA CCLS RI.6.1, W.6.1, and W.6.9.

For this mid-unit assessment, students submit their best draft of their position paper. Students focus their writing on the drafting of an introduction in which they make their claim and foreshadow the organization of their paper. They support this claim with relevant evidence from their reading and research done in Units 1 and 2. Students draft a conclusion that follows logically from the claim and evidence presented in their paper.

## End of Unit 3 Assessment

**Reflection on the Writing Process: Moving from Draft to Published Position Paper**

This assessment centers on NYSP12 ELA CCLS W.6.5, W.6.6, L.6.1e, and L.6.6.

For this end of unit assessment, students revise their position paper based on teacher and peer feedback. They also revise based on focused revision mini lessons on the use of sixth-grade domain-specific and academic vocabulary as well as the use of standard English in writing. Students complete a reflection on the writing process, focusing specifically on how the steps of the process improve their writing.

## Final Performance Task

**Scientific Poster and Hosted Gallery Walk**

This performance task gives students a chance to demonstrate the ideas and evidence from their position papers, in which they answered the question: “Do the benefits of DDT outweigh its harmful consequences?” Students will craft and share a scientific poster that serves as a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. Students then participate in a hosted Gallery Walk in which they present the scientific poster they have created. (Speaking and listening standards are not formally assessed in the performance task, as they were taught and assessed in Unit 2 of this module.) This hosted Gallery Walk is written with students’ peers as their intended audience; however, other interested members of the community could be invited as an extension. This task addresses NYSP12 ELA Standards RI.6.1, W.6.1, W.6.4, W.6.5, and L.6.6.
Introduction to the Use of DDT

This module is designed to address English Language Arts standards as students read literature and informational text about the use of DDT. However, the module intentionally incorporates Social Studies Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

Unifying Themes (pages 6–7)
- Theme 4: Geography, Humans, and the Environment: The relationship between human populations and the physical world (people, places, and environments); impact of human activities on the environment; interactions between regions, locations, places, people, and environments.
- Theme 9: Science, Technology, and Innovation: Applications of science and innovations in transportation, communication, military technology, agriculture, and industrialization.

Social Studies Practices, Geographic Reasoning, Grades 5–8:
- Descriptor 2: Describe the relationships between people and environments and the connections between people and places (page 58).
- Descriptor 3: Identify, analyze, and evaluate the relationship between the environment and human activities, how the physical environment is modified by human activities, and how human activities are also influenced by Earth’s physical features and processes.

Social Studies Practices, Gathering, Using, and Interpreting Evidence, Grades 5-8:
- Descriptor 1: Define and frame questions about events and the world in which we live and use evidence to answer these questions.
- Descriptor 2: Identify, describe, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions, and other primary and secondary sources).
- Descriptor 4: Describe and analyze arguments of others.
- Descriptor 6: Recognize an argument and identify evidence that supports the argument; examine arguments related to a specific social studies topic from multiple perspectives; deconstruct arguments, recognizing the perspective of the argument and identifying evidence used to support that perspective.
This unit is approximately 2 weeks or 10 sessions of instruction.

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 1 | Analyze Model Position Paper with Rubric | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) | • I can analyze a model position paper for topic and argument.  
• I can analyze the argument rubric to understand expectations of a position paper. | • Author's Presentation of Events graphic organizer  
• Assessing model position paper with rubric | |
| Lesson 2 | Planning the Argument: Writing the Claim and Reasons | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can support my claims(s) with clear reasons and relevant evidence. (W.6.1b)  
• I can use credible sources to support my claims(s). (W.6.1b) | • I can identify the steps to writing a position paper.  
• I can plan my claim and evidence for my position paper. | • Planning My Argument graphic organizer | • Types of Claims and Evidence |
| Lesson 3 | Claim, Reasons, and Evidence: Planning the Body Paragraphs | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)  
• I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6) | • I can give and receive feedback with my peers on claims, reasons, and evidence.  
• I can analyze a body paragraph of the model position paper.  
• I can plan the body paragraphs of my position paper.  
• I can use appropriate vocabulary to express my ideas. | • Planning My Body Paragraphs graphic organizer | |
<table>
<thead>
<tr>
<th>Lesson</th>
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<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 4 | Actions for a Position Paper: Identify, Discuss, Write | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can identify the relationship between my claim(s) and reasons by using linking words, phrases, and clauses. (W.6.1c)  
• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) | • I can identify the parts of a strong position paper.  
• I can discuss my ideas for my position paper with a peer.  
• I can write drafts of my body paragraphs. | • Planning My Body Paragraphs graphic organizer (from homework)  
• Written drafts of body paragraphs | • Parts of a Position Paper  
• Transitions |
| Lesson 5 | Mid-Unit Assessment: Completing My Draft Position Paper | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can create an introduction that states my main argument and foreshadows the organization of my piece. (W.6.1a)  
• I can construct a concluding statement or section that reinforces my main argument. (W.6.1e) | • I can identify the qualities of a strong introduction and conclusion for a position paper.  
• I can draft the introduction of my position paper.  
• I can draft the conclusion of my position paper. | • Mid-Unit 3 Assessment: Draft of Position Paper: “Do the Benefits of DDT Outweigh Its Harmful Consequences?”  
• Reflecting on My Writing So Far | • Parts of a Position Paper |
| Lesson 6 | Peer Critique and Revising: Formal English        | • I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
• I can maintain a formal style in my writing. (W.6.1d)  
• I can identify when standard English is and isn’t used. (L.6.1e)  
• I can convert language into standard English. (L.6.1e) | • I can recognize the differences between formal and informal English.  
• I can give and receive feedback on formal and informal English in a position paper. | • Identifying and revising formal English and transitions | • Transitions |
<table>
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<tr>
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</tr>
</thead>
</table>
| Lesson 7| End of Unit Assessment: Revising and Publishing   | • With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)  
• I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6)  
• I can use resources to build my vocabulary. (L.6.6) | • I can revise my position paper to include appropriate vocabulary.  
• I can publish my position paper.  
• I can self-assess my position paper against the Position Paper Argument Rubric. | • End of Unit 3 Assessment: Final draft of the position paper |                                       |
| Lesson 8| Completing Reflection: Preparing a Poster for Presentation | • I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)  
• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) | • I can reflect on the writing process to show how it helps me grow as a writer.  
• I can choose evidence and visuals to use in my scientific poster. | • Writing Process Reflection  
• Scientific poster |                                       |
| Lesson 9| Finishing Poster and Preparing for Gallery Walk   | • I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)  
• With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) | • I can complete a scientific poster for the hosted Gallery Walk.  
• I can practice using formal English to present my research. | • Scientific poster |                                       |
| Lesson 10| Performance Task: Hosted Gallery Walk of Scientific Posters | • I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)  
• I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6) | • I can use a scientific poster to share my research with my peers. | • Scientific posters |                                       |
Writing:
Position Paper about the Use of DDT

Optional: Experts, Fieldwork, and Service

**Experts:**
- Invite writers of editorials or opinion pieces to speak to students about their process for writing and the most important aspects of writing position papers.

**Fieldwork:**
- N/A

**Service:**
- Consider having students submit their position papers to a local newspaper as a way to contribute to their community’s dialogue about the use of pesticides.

Optional: Extensions

- A presentation of students’ scientific posters to stakeholders in the community: scientists, farmers, policy makers, etc.

Preparation and Materials

This unit follows a routine familiar to students from Modules 1–3.
In the first half of the unit, students study a model position paper about the use of hydraulic fracturing. They collect the necessary evidence to support the claim they formed in Unit 2. Students use familiar graphic organizers to plan the body paragraphs of their writing, and then study the model for writing their introduction and conclusion. Students turn in their best drafts of their position papers in Lesson 5, and will need teacher feedback to complete Lesson 7.

1. Independent Reading

- Students should be reading their independent reading book throughout this unit.
- Be sure students have an independent reading book, or one carried over from Unit 2, as multiple lessons ask students to share their reading and reflect on their experience with the book.
Grade 6: Module 4: Unit 3: Lesson 1
Analyze Model Position Paper with Rubric
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)  
With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
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<tbody>
<tr>
<td>• I can analyze a model position paper for topic and argument.</td>
<td>• Author’s Presentation of Events graphic organizer</td>
</tr>
<tr>
<td>• I can analyze the argument rubric to understand expectations of a position paper.</td>
<td>• Assessing model position paper with rubric</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes</th>
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</thead>
</table>
| 1. Opening  
   A. Check in on Independent Reading (8 minutes)  
   B. Unpacking Learning Targets (2 minutes) | • As students start Unit 3, consider how to communicate with families about the students’ independent reading goals, as well as the Reading Tracker and Reviewer’s Notes. Their support is important. Consider how to routinely follow up with students’ families or other adults who can support this reading work. |
| 2. Work Time  
   A. Reading a Model Position Paper for Understanding (15 minutes)  
   B. Understanding Expectations: Reading the Rubric (15 minutes) | • In advance: Prepare a sample letter for parents about students’ reading goals and accountability for reading progress. |
| 3. Closing and Assessment  
   A. Exit Ticket: What Do You Think You Will Find Most Challenging in Writing a Paper Like This? (5 minutes) | • Although this is the first official lesson of Unit 3, students began preparing for the writing portion of this module in the last unit when they determined their claim or position on the question: “Do the benefits of DDT outweigh its harmful consequences?” |
| 4. Homework  
   A. Read to meet the 30-minute reading goal in your independent reading book. Complete the Reading Tracker and Reviewer’s Notes. | • Students have the research folder that they have been using to keep the materials for this module. The Author’s Presentation Events graphic organizer has already been used, but another copy is included in the supporting materials for ease of use. |
| | • Before writing a position paper, it is important that students know the expectations and study a well-written example of this kind of writing. To develop understanding, students will read a model position paper to identify the topic and the argument. |
| | • Students are introduced to the Position Paper Argument Rubric, which is very similar to the expository rubric students have used previously. In this lesson, the focus is on introducing a topic, and using claim, reasons, and evidence along with academic and domain-specific vocabulary. |
| | • Students will work with a partner to use the rubric to assess the model essay as a way to increase their understanding of the expectations for writing a position paper. |
| | • In advance: Determine appropriate student partners for assessing the model position paper using the rubric. |
| | • Post: Learning targets. |
## Lesson Vocabulary

- analyze, content, argument, rubric, expectations

## Materials

- Reading Tracker and Reviewer’s Notes (one per student and one to display)
- Document camera
- Model position paper: “Hydraulic Fracturing” (one per student)
- Equity sticks
- Author’s Presentation of Events graphic organizer (one per student and one to display)
- Position Paper Argument Rubric (one per student in research folder; one to display)
- Exit ticket (one per student)
### Opening

**A. Check in on Independent Reading (8 minutes)**
- Check in with students:
  * “Are you meeting your reading goal? If so, how are you doing it? If not, what is getting in the way?”
- Compliment successes. Encourage accomplishing daily steps for achievement and asking for support.
- Display the **Reading Tracker and Reviewer’s Notes** using a **document camera**. Ask students to assess their own entries.
- Invite students to join their reading groups and share an interesting scene or favorite character from their book.
- Circulate and listen as students share. Observe to see where support is needed for setting and achieving goals.

**Meeting Students’ Needs**
- Provide support for students who need help achieving their reading goals.
- Select students may benefit from teacher participation in small reading groups to discuss their Reading Tracker and Reviewer’s Notes.

### B. Unpacking Learning Targets (2 minutes)
- Invite students to read the learning targets with you.
  * “I can analyze a model position paper for topic and argument.”
  * “I can analyze the argument rubric to understand expectations of a position paper.”
- Ask students:
  * “What words in the learning target do you think are most important? Why?”
- As students respond, circle words on the posted learning targets and annotate words for meaning or associations. Guide students to the words **analyze, argument, rubric, and expectations**.

**Meeting Students’ Needs**
- Learning targets are a research-based strategy that helps all students, especially challenged learners.
- Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
## Work Time

### A. Reading a Model Position Paper for Understanding (15 minutes)

- Tell students that all strong pieces of writing have a focus and a purpose. For writers to accomplish this, they need to know what the *content* should be, or what topic to explore. Writers also need to know what writing process they should use to clearly express the position or claim that they want their readers to understand.
- Tell the class that now they will have a chance to read a model position paper to see what the content of the paper is, or what topic was addressed.
- Distribute the **model position paper: “Hydraulic Fracturing”** to students.
- Invite students to closely read along as you read aloud.
- Remind students that they are reading this position paper to determine:
  - “What is the content, or topic, of the position paper?”
- Use **equity sticks** to call on students to respond to that question. Listen for responses that explain:
  - The article is about the use of hydraulic fracturing, or fracking, to collect natural gas from the earth.
  - Hydraulic fracturing, or fracking, is a process that is used to get natural gas from the earth so it can be used for energy.
- Recognize students for their ability to accurately determine the topic of the essay. Tell students that they will now have the opportunity to reread the model position paper. In this reading, the goal is to read closely for the *argument* the author presents.
- Before rereading, invite students to Think-Pair-Share:
  - “What is an *argument* that’s presented in writing?”
- Call on pairs to share their definition of an author’s argument. Listen for responses that explain that an argument is the set of reasons an author uses to persuade readers about his/her claim or position.
- Distribute the **Author’s Presentation of Events graphic organizer**.
- Use the document camera to introduce students to the graphic organizer.

## Meeting Students’ Needs

- The first read-aloud/read-along of the model position paper introduces students to what the topic of essay is and helps prepare them to determine what argument or position the author presents.
- When reviewing the graphic organizers or recording forms, consider using a document camera to display the document for students who struggle with auditory processing.
- Providing models of expected work supports all students, especially supports challenged learners.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students' Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Using a rubric to understand the expectations of writing a position paper helps students know what should be included and how information should be organized and expressed. It also helps students recognize what they understand and are prepared for and supports them in determining where they will need support in order to achieve proficiency with the learning targets.</td>
</tr>
<tr>
<td>• Encourage students to highlight or circle words and/or phrases that are not clear. Provide dictionaries or resources to define unknown words.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>• Tell students to now reread the model position paper to determine the argument with their Think-Pair-Share partners. Ask students to use the graphic organizer as they determine the writer’s argument with their partners.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Circulate and listen as students read and determine the argument. Provide support as needed.</td>
</tr>
<tr>
<td>• Refocus the students as a whole class to share the author’s argument they have identified. Listen for responses such as:</td>
</tr>
<tr>
<td>• “Hydraulic fracturing should be used to collect natural gas if it’s done safely because it benefits the environment and it’s good for people.”</td>
</tr>
<tr>
<td>• Compliment students for using both the author’s claim and reasons to determine the argument. Explain that the close reading they did will help them understand the expectations writers have to produce well-written position papers.</td>
</tr>
</tbody>
</table>

### B. Understanding Expectations: Reading the Rubric (15 minutes)

<table>
<thead>
<tr>
<th>• Tell students that now that they have gotten a sense of the author’s topic or content and the argument, they will look closely at the expectations for writing a strong position paper.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use the document camera to display the <strong>Position Paper Argument Rubric</strong>. Explain that this rubric is very similar to ones they used in another module.</td>
</tr>
<tr>
<td>• Remind students that a <strong>rubric</strong> is a guide that lists specific criteria for writing and evaluating academic papers, projects, or assessments.</td>
</tr>
<tr>
<td>• Focus students on the Criteria column. Explain that the criteria listed in first three sections of that column are important for the work in today’s lesson.</td>
</tr>
<tr>
<td>• Call on a student to read the text under the heading “Claims and Reasons.”</td>
</tr>
<tr>
<td>• Point out that academic vocabulary is used in this explanation of how claims and reasons should be expressed or conveyed to readers. Explain that Levels 4 and 3 will help with understanding what that criteria means and how it is accomplished.</td>
</tr>
<tr>
<td>• To increase understanding, invite students to look at the description of what well-written claims and reasons accomplish in the Level 4 column. Ask students to read along as you read aloud.</td>
</tr>
<tr>
<td>• Circle or highlight on the displayed rubric: “compelling and follows logically from the task and purpose.”</td>
</tr>
<tr>
<td>• Invite students to highlight or circle the phrase “compelling and follows logically from the task and purpose” on their rubric as well.</td>
</tr>
</tbody>
</table>
Analyze Model Position Paper with Rubric

Work Time (continued)

- Circle or highlight on the displayed rubric: “insightful analysis of the topic.” Invite students to highlight or circle those words as well.

- Remind students that the word *analyze* is a learning target word. Call on a student to define this word. Listen for a response that makes clear *analyze* involves taking apart a topic to understand it.

- Ask students to discuss with their elbow partner the following questions:
  * “What does ‘introducing a topic and claim in a compelling way’ mean?”
  * “What does ‘follow logically from the task and purpose’ mean?”

- Refocus students as a whole class. Cold call elbow partners to share their explanations. Listen for responses that clarify, such as:
  * “A topic and claim should be introduced in a way that really interests the reader and is easy to make sense of.”
  * “When authors introduce a topic and claim, they should hook the readers in and interest them in their point of view or position.”

- Ask students to look closely at the descriptors for writing in Levels 4 and 3 with their elbow partners. Ask them to find two differences in the two levels and discuss what guidance that gives to writers. Call on volunteer partners to share. Responses should explain that Level 4 writing is compelling and convincing, which means that it gets the readers’ attention, and Level 4 writing is insightful, which means it explains the topic and claim well.

- Tell students that each of the criteria uses important academic vocabulary. Understanding the vocabulary is important for understanding how the rubric guides authors.

- Refocus students as a whole class. Explain that they will now read along as you read aloud the “Command of Evidence” criteria and the “Coherence, Organization, and Style” criteria along with the descriptors for how to meet the criteria described in Levels 4 and 3. Encourage students to highlight or circle words and/or phrases that need defining. Ask them to notice differences between Levels 4 and 3.

- Ask for volunteers to share what differences they noticed. For the “Command of Evidence” criteria, listen for responses that include well-chosen facts, concrete details, and varied evidence. For the “Coherence, Organization, and Style” criteria, listen for responses that include varied transitions, grade-appropriate vocabulary, stylistically sophisticated language, and a notable voice.

Meeting Students’ Needs

- Select students may benefit from having a word bank with definitions, or an alternative rubric written in more general terms.

- Select students may benefit from working in a supported small group to assess the model position paper using the rubric.

- When reading aloud the rubric criteria, it may be beneficial to rephrase using general vocabulary to help clarify the expectations.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Commend students for their hard work and partnerships to analyze the rubric.</td>
<td></td>
</tr>
<tr>
<td>• Explain that earlier in the lesson they read the “Hydraulic Fracturing” model</td>
<td></td>
</tr>
<tr>
<td>position paper and determined the topic, the author’s claim and reasons, and the</td>
<td></td>
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<tr>
<td>argument. Now they will look at the article again with a partner to assess the writing</td>
<td></td>
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<tr>
<td>by using the rubric.</td>
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<tr>
<td>• Tell students who their pre-determined partners are.</td>
<td></td>
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<tr>
<td>• Direct students to gather their “Hydraulic Fracturing” model position paper,</td>
<td></td>
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<tr>
<td>Author’s Presentation of Events graphic organizer, and Position Paper Argument</td>
<td></td>
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<tr>
<td>Rubric.</td>
<td></td>
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<tr>
<td>• Tell students that they will use the three criteria sections of the rubric that</td>
<td></td>
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<tr>
<td>were read—“Claims and Reasons,” “Command and Evidence” and “Coherence, Organization,</td>
<td></td>
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<tr>
<td>and Style”—to assess the model position paper.</td>
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<tr>
<td>• Ask partners to reread the model position paper together. Tell them to pause at</td>
<td></td>
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<tr>
<td>the end of each paragraph and use the rubric to assess what they have read. Explain</td>
<td></td>
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<tr>
<td>that the Author’s Presentation of Events graphic organizer is a resource they can use</td>
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<tr>
<td>to guide them as they evaluate.</td>
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<tr>
<td>• Provide directions for students to use:</td>
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<tr>
<td>– Use the “Claim and Reasons” criteria to assess the first paragraph.</td>
<td></td>
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<tr>
<td>– Use the “Command of Evidence” criteria to assess Paragraphs 2, 3, and 4.</td>
<td></td>
</tr>
<tr>
<td>– Finally, use the “Coherence, Organization, and Style” criteria to assess how</td>
<td></td>
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<tr>
<td>the essay was organized and how language and vocabulary were used.</td>
<td></td>
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<tr>
<td>• Ask partners to determine if the essay met Level 4 or Level 3 for each of the</td>
<td></td>
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<tr>
<td>criteria they use. Tell students to provide at least two reasons that explain why</td>
<td></td>
</tr>
<tr>
<td>or why not for each criterion, using the language of the rubric.</td>
<td></td>
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<tr>
<td>• Refocus students as a whole class. Call on volunteer partners to share their</td>
<td></td>
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<tr>
<td>assessment of the writing. Discuss any disagreements in student assessments.</td>
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<tr>
<td>• Reward hard work; offer encouragement to keep these criteria in mind as students</td>
<td></td>
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<tr>
<td>move forward with their own position paper writing.</td>
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</table>
### Closing and Assessment

**A. Exit Ticket: What Do You Think You Will Find Most Challenging in Writing a Paper Like This? (5 minutes)**
- Distribute an **exit ticket** to each student.
- Tell students that as they prepare to use their research and personal claims, they should consider what is important in writing this type of paper. Remind them that today they have read a model position paper and looked closely at the rubric in order to understand what is involved with writing a paper like this. Now you want them to think about what they feel will be the most challenging in writing their own paper.
- Give students a minute to consider what they feel will be most challenging in writing a paper like this. Ask students to clearly explain or convey in writing their challenge.

### Meeting Students’ Needs
- Students’ responses to the exit ticket may help with grouping or partnering students for upcoming lessons. The responses might also help with planning support, modifications, or adaptations for select students.

### Homework

- Read to meet the 30-minute reading goal in your independent reading book. Complete the Reading Tracker and Reviewer’s Notes.
# Reading Tracker and Reviewer’s Notes

**Name:**

**Date:**

---

**Book Title:**

Please complete one entry for each reading check-in.

**Choices for Reviewer’s Notes:** Choose one idea to respond to for each entry.

- The most interesting/funniest/scariest scene was ... because ...
- A connection between this part of the book and what we are studying at school is ... which helps me understand that ...
- This part of the book reminds me of [other text, movie] because ... which helps me understand that ...
- A character I identify with/don’t understand is ... because ...
- Something I learned about the world by reading this part of the book is ... which seems important because ...

<table>
<thead>
<tr>
<th>Chapter title/s and pages</th>
<th>Reading Tracker</th>
<th>Reviewer’s Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briefly explain what happened in this part of the book.</td>
<td>Respond to one of the ideas above.</td>
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</table>
## Reading Tracker and Reviewer’s Notes

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<tr>
<th>Chapter title/s and pages</th>
<th>Reading Tracker</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Briefly explain what happened in this part of the book.</td>
<td>Respond to one of the ideas above.</td>
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</tbody>
</table>
Question: Should New York State use hydraulic fracturing to collect natural gas?

Hydraulic fracturing, or “fracking,” is a drilling process used to collect natural gas. Like oil and coal, natural gas is an important source of energy in the world. However, finding a good way to extract it from the earth has been a challenge. Based on research, my position is that hydraulic fracturing is a process that should be used to collect natural gas, but only if it is done safely and with enforced regulations. Hydraulic fracturing has significant benefits to both the environment and to people. However, there are dangers in using it too much or going too fast.

One important reason that hydraulic fracturing should be used is that it is better for the environment than other forms of energy we use. In the article “Good Gas, Bad Gas” in National Geographic, it says, “Natural gas burns much cleaner than coal. In part because American power plants have been switching from coal to cheap gas, U.S. emissions of CO₂ from fossil fuels fell last year, even as the world set another record.” This means that by switching from coal to natural gas collected by hydraulic fracturing, we can make the air cleaner and do less damage to the ozone layer.

Another strong reason that hydraulic fracturing should be used is that it can really help people. According to Business Insider, “With the advances in drilling and hydraulic fracturing, the U.S. shale boom could add as much as $690 billion a year to the GDP and create up to 1.7 million jobs.” This is important because there are people in New York who would apply for these jobs, and this could help them support their families.

However, there are some risks, and hydraulic fracturing needs to be done safely and with clear regulations. This is important because hydraulic fracturing could do great harm to our water supply. The article “Fracking Fuels Energy Debate” in Science News for Kids states, “... scientists found that the water from wells within 1 kilometer of fracking sites had much higher levels of dissolved methane than water from wells farther away.” This quote clearly shows that fracking, or hydraulic fracturing, has the potential to do environmental damage, and maybe even damage the people who drink the water.

This is a very complicated issue to decide, and could have many benefits as well as harmful consequences. However, if hydraulic fracturing is done safely and is regulated, the benefits for the environment and for people would make it worth it.
Model Position Paper: “Hydraulic Fracturing”

Sources:

http://ngm.nationalgeographic.com/2012/12/methane/lavelle-text
Author's Presentation of Events Graphic Organizer

Name: ____________________________  
Date: ____________________________

How does the author introduce (or begin) his/her presentation of events?

_______ With a story

_______ With facts or statistics

_______ With questions that get the reader thinking

_______ With some background information on the topic or event

What is the author’s claim, or position?

What are the reasons the author chose this position?

•

•

•

How could the author’s claim and reasons be written as an argument?


Author's Presentation of Events Graphic Organizer

What transitional words or phrases does the author use to move from one reason to another?

- 
- 
- 

What types of evidence does the author use to inform or persuade the reader?

- Facts about a particular topic
- Statistics to support an idea or claim
- Statistics to inform
- Quotes from experts
- Stories to give meaning or examples

Which text features does the author use to inform or persuade the reader?

- Photographs to make the reader see
- Photographs to make the reader feel
- Sidebars to explain some important concept
- Large fonts to make an idea or quote stand out
### Position Paper Argument Rubric

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<tr>
<th>Criteria</th>
<th>CCLS</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
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</thead>
<tbody>
<tr>
<td><strong>CLAIM AND REASONS:</strong> the extent to which the essay conveys complex ideas and information clearly and accurately in order to logically support the author's argument.</td>
<td>W.2 R.1-9</td>
<td>— clearly introduce the text and the claim in a manner that is compelling and follows logically from the task and purpose</td>
<td>— clearly introduce the text and the claim in a manner that follows from the task and purpose</td>
<td>— introduce the text and the claim in a manner that follows generally from the task and purpose</td>
<td>— introduce the text and the claim in a manner that does not logically follow from the task and purpose</td>
<td>— claim and reasons demonstrate a lack of comprehension of the text(s) or task</td>
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<tr>
<td></td>
<td></td>
<td>— claim and reasons demonstrate insightful analysis of the text(s)</td>
<td>— claim and reasons demonstrate grade-appropriate analysis of the text(s)</td>
<td>— claim and reasons demonstrate a literal comprehension of the text(s)</td>
<td>— claim and reasons demonstrate little understanding of the text(s)</td>
<td>—does not acknowledge counterclaim(s)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— acknowledges counterclaim(s) skillfully and smoothly</td>
<td>— acknowledges counterclaim(s) appropriately and clearly</td>
<td>— acknowledges counterclaim(s) awkwardly</td>
<td>— does not acknowledge counterclaim(s)</td>
<td>— provide no evidence or provide evidence that is completely irrelevant</td>
</tr>
<tr>
<td><strong>COMMAND OF EVIDENCE:</strong> the extent to which the essay presents evidence from the provided texts to support argument</td>
<td>W.9 R.1-9</td>
<td>— develop the argument with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples from the text(s)</td>
<td>— develop the argument with relevant facts, definitions, details, quotations, or other information and examples from the text(s)</td>
<td>— partially develop the argument of the essay with the use of some textual evidence, some of which may be irrelevant</td>
<td>— demonstrate an attempt to use evidence, but only develop ideas with minimal, ocasional evidence that is generally invalid or irrelevant</td>
<td>—does not explain how evidence supports ideas</td>
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<td></td>
<td>— sustain the use of varied, relevant evidence</td>
<td>— sustain the use of relevant evidence, with some lack of variety</td>
<td>— use relevant evidence inconsistently</td>
<td>— attempt to explain how evidence supports ideas</td>
<td>—provide no evidence or provide evidence that is completely irrelevant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— skillfully and logically explain how evidence supports ideas</td>
<td>— logically explain how evidence supports ideas</td>
<td>— sometimes logically explain how evidence supports ideas</td>
<td>— attempt to explain how evidence supports ideas</td>
<td>—does not explain how evidence supports ideas</td>
</tr>
<tr>
<td>COHERENCE, ORGANIZATION, AND STYLE: the extent to which the essay logically organizes complex ideas, concepts, and information using formal style and precise language</td>
<td>W.2 L.3 L.6</td>
<td>—exhibit clear organization, with the skillful use of appropriate and varied transitions to create a unified whole and enhance meaning —establish and maintain a formal style, using grade-appropriate, stylistically sophisticated language and domain-specific vocabulary with a notable sense of voice —provide a concluding statement or section that is compelling and follows clearly from the claim and reasons presented</td>
<td>—exhibit clear organization, with the use of appropriate transitions to create a unified whole —establish and maintain a formal style using precise language and domain-specific vocabulary —provide a concluding statement or section that follows from the claim and reasons presented</td>
<td>—exhibit some attempt at organization, with inconsistent use of transitions —establish but fail to maintain a formal style, with inconsistent use of language and domain-specific vocabulary —provide a concluding statement or section that follows generally the claim and reasons presented</td>
<td>—exhibit little attempt at organization, or attempts to organize are irrelevant to the task —lack a formal style, using language that is imprecise or inappropriate for the text(s) and task —provide a concluding statement or section that is illogical or unrelated to the claim and reasons presented</td>
<td>—exhibit no evidence of organization —use language that is predominantly incoherent or copied directly from the text(s) —do not provide a concluding statement or section</td>
</tr>
<tr>
<td>CONTROL OF CONVENTIONS: the extent to which the essay demonstrates command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling</td>
<td>W.2 L.1 L.2</td>
<td>—demonstrate grade-appropriate command of conventions, with few errors</td>
<td>—demonstrate grade-appropriate command of conventions, with occasional errors that do not hinder comprehension</td>
<td>—demonstrate emerging command of conventions, with some errors that may hinder comprehension</td>
<td>—demonstrate a lack of command of conventions, with frequent errors that hinder comprehension</td>
<td>—are minimal, making assessment of conventions unreliable</td>
</tr>
</tbody>
</table>
Exit Ticket

What do you think you will find most challenging in writing a paper like this?
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
I can support my claims(s) with clear reasons and relevant evidence. (W.6.1b)
I can use credible sources to support my claims(s). (W.6.1b)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the steps to writing a position paper.</td>
<td>• Planning My Argument graphic organizer</td>
</tr>
<tr>
<td>• I can plan my claim and evidence for my position paper.</td>
<td></td>
</tr>
</tbody>
</table>

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## Agenda

1. **Opening**
   - A. Independent Reading Check-in (8 minutes)
   - B. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. How Will We Get There? Introducing Steps to Writing a Position Paper (10 minutes)
   - B. Planning Our Argument: Claim and Evidence (20 minutes)

3. **Closing and Assessment**
   - A. Reflecting on the Learning Targets: Fist to Five (5 minutes)

4. **Homework**
   - A. Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

## Teaching Notes

- In the first part of Lesson 1, students were introduced to a model position paper. The first read was to understand its content, and then students read the model again to analyze the argument. In the second part of Lesson 1, students were introduced to the Position Paper Argument Rubric. Students were asked to focus on the “Claim and Reasons” section of the rubric and interpret these expectations, which include:
  - The position paper clearly introduces the topic and the claim in a logical manner that is compelling and follows logically from the task and purpose.
  - The claim and reasons demonstrate an insightful analysis of the topic.

- In Lesson 2, students are introduced to the six Steps to Writing a Position Paper. They work in partners to identify the tasks within each step. After the tasks have been determined, students are able to see that the prewriting step has been completed and they are currently in the planning stage.

- Students begin their Planning My Argument graphic organizer in this lesson. Note that they do not complete the “reasons” section until Lesson 3; see Work Time B for details.

- Also in Lesson 2, students reflect on the End of Unit 2 Assessment: The Hosted Gallery Walk and their claim and supporting evidence. Students consider making final revisions to their claims and supporting evidence based on their reflection of presentations from the Gallery Walk and teacher feedback from the End of Unit 2 Assessment. Students are reminded to cite the source of their supporting evidence. To do this, students may need to refer to the researcher’s folder with all the sources/articles and their researcher’s notebook.

- In advance: Determine two groupings: Groups of four to identify tasks in the Steps to Writing a Position Paper, and groups of two for partnering during the planning of the argument.

- On the board or chart paper, write the six Steps to Writing the Position Paper, but do not list the tasks under each step.

- Create the full Steps to Writing a Position Paper for Work Time A (a filled in version; see supporting materials).

- Post: Learning targets; Types of Claims and Evidence anchor chart.
### Lesson Vocabulary

<table>
<thead>
<tr>
<th><strong>Materials</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Steps to Writing a Position Paper (blank; one to display; see Teaching Note)</td>
</tr>
<tr>
<td>- Sticky notes (two per group)</td>
</tr>
<tr>
<td>- Steps to Writing a Position Paper (with the tasks for each step; one per student and one to display)</td>
</tr>
<tr>
<td>- Research folder (from previous lessons)</td>
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<tr>
<td>- Forming Evidence-Based Claims graphic organizer (in research folder)</td>
</tr>
<tr>
<td>- Four notecards from hosted Gallery Walk (in research folder)</td>
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<tr>
<td>- End of Unit 2 Assessment: Presenting a Claim and Findings teacher feedback (in research folder)</td>
</tr>
<tr>
<td>- Planning My Argument graphic organizer (one per student and one to display)</td>
</tr>
<tr>
<td>- Document camera</td>
</tr>
<tr>
<td>- Checklist for Forming an Evidence-Based Claim (one to display)</td>
</tr>
<tr>
<td>- Types of Claims and Evidence anchor chart (from Unit 2, Lesson 12)</td>
</tr>
</tbody>
</table>
### Opening

#### A. Independent Reading Check-in (8 minutes)
- Invite students to sit in their reading groups.
- Remind them that in Lesson 1 they were asked to describe the problem, or conflict, of the main character.
- Circulate and listen to students share the problems of their main characters. Note students who are not able to share; meet with them later to inquire about their reading goals and book choice.
- Invite volunteers to briefly summarize their main character’s problem with the class. Record the problems shared on the board.
- Ask students:
  - “What are some common problems authors develop for their main characters?”
  - Listen for examples such as the main character struggles with people and nature.
- Ask:
  - “Why is it important that authors give their main characters a problem?”
  - Listen for responses such as: “Authors want to build interest and plot so their readers will want to continue reading.”

#### B. Unpacking Learning Targets (2 minutes)
- Ask for two student volunteers to lead reading the learning targets aloud with the class:
  - “I can identify the steps to writing a position paper.”
  - “I can plan my claim and evidence for my position paper.”
- Tell students that today they will identify the tasks in the steps to writing a position paper. Also, emphasize that they will have an opportunity to reflect on both teacher feedback and the presentations from the Gallery Walk they did at the end of Unit 2. This planning step of the position paper includes providing time to make final revisions. Students will check their claim, or position, for clarity and author’s point of view, and their supporting evidence, or documentation or proof, for relevant facts and concrete details.

### Meeting Students’ Needs

- Discussing independent reading continues to build student engagement and provides information about struggling readers.
- Learning targets are a research-based strategy that helps all students, especially challenged learners.
- Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
A. How Will We Get There? Introducing Steps to Writing a Position Paper (10 minutes)

- Ask students to get into the pre-determined groups of four.

- Ask for a volunteer to read aloud the **Steps to Writing a Position Paper (blank)** written on the board. Explain that each step has tasks that help define the step. Assign each group a different step. Invite each group of four to come up with the tasks that define the step. Distribute two **sticky notes** to each group. Tell the groups to write the name of their step on each sticky note and list the tasks the writer needs to accomplish in their assigned step. Remind students that the writer may need to do several tasks to complete each step. Give students 3 minutes to write the tasks.

- Circulate to support groups in identifying tasks.

- Invite students to post their sticky notes on the board under the step their group was assigned.

- Refocus the class.

- Read aloud the information students posted identifying the tasks for the prewriting step. After the tasks have been read aloud to the class, ask students:
  
  * “Have we identified all of the prewriting tasks?” Add new information students provide to the sticky notes on the board.

- Display the first step of the **Steps to Writing a Position Paper (with the tasks for each step)**. Read aloud the tasks listed under the Prewrite step. Compare the list to the one students made on the board. Explain that the prewriting step for their position paper was completed in Units 1 and 2.

- Next, ask a student to read aloud the sticky note information identifying the tasks for the Plan step. After the information is read, invite volunteers to add their ideas about missing tasks. Add these ideas to the sticky notes.

- Display the second step of the Steps to Writing a Position Paper (with the tasks for each step). Ask students to compare what was on their sticky notes to what is listed on the completed handout. Discuss the Plan step, making sure students understand that this step was started at the end of Unit 2. Tell them that they will continue to plan for their position paper in this lesson.

- Continue with this routine until all steps have been defined.

- Distribute Steps for Writing a Position Paper (with the tasks for each step) to each student. Point out where students’ definitions of the steps are similar to those listed. Also point out any tasks that students did not come up with on their own.

- Commend students for their thinking about the writing process and the steps writers take to become accomplished.

Meeting Students’ Needs

- Allow students to grapple with the **Steps to Writing a Position Paper** before displaying the completed handout to help them monitor their understanding of the writing process.

- Anchor charts serve as note-catchers and provide students with a reference for the writing process.
## Work Time (continued)

### B. Planning Our Argument: Claim and Evidence (20 minutes)
- Form student partnerships based on students’ End of Unit 2 Assessment.
- Ask students to take out their research folder. Invite them to find their Forming Evidence-Based Claims graphic organizer from Unit 2 and/or their four notecards from hosted Gallery Walk. Also ask students to locate the End of Unit 2 Assessment: Presenting a Claim and Findings teacher feedback from the hosted Gallery Walk.
- After students have retrieved these materials, ask them to read through the claim and evidence they used in Unit 2 for the hosted Gallery Walk.
- Distribute the Planning My Argument graphic organizer. Remind students of the learning targets and how successful writers plan and organize their writing.
- Using a document camera, display the Planning My Argument graphic organizer. Read aloud the questions on the graphic organizer. Ask students to read their End of Unit 2 Assessment: Presenting a Claim and Findings with teacher feedback and reflect on a Star and a Next Step in their writing of a claim and supporting evidence. Pause to give students time to reflect and write.
- Circulate and support students who need help reflecting on the graphic organizer, the notecards, and teacher feedback. Help them to see a Star and Next Step in their writing.
- Invite volunteers to share their Star and Next Step with their partner.
- Show appreciation for this reflection time and their willingness to become successful writers by following the Steps to Writing a Position Paper.
- Ask students to complete the rest of the graphic organizer by writing their claim and supporting pieces of evidence in complete sentences. Explain to students that this is an opportunity to review articles, charts, and graphs one last time as they plan their claim and supporting evidence. Remind students to also cite the sources of their evidence.
- Tell students they are intentionally leaving the “reasons” section blank, since they will address this part of the graphic organizer in Lesson 3.
- Using a document camera, display the Checklist for Forming an Evidence-Based Claim. Read over the checklist to remind students of the criteria for a claim and supporting evidence.

### Meeting Students’ Needs
- Graphic organizers and recording forms engage students more actively and provide the scaffolding that is especially critical for students with lower levels of language proficiency and/or learning.
### Work Time (continued)

- Circulate and support students as they work. Explicitly praise students as they write complete sentences. Remind them also to refer to the *Types of Claims and Evidence anchor chart* posted to help with sentence starters for claim and evidence.

- Congratulate students for their focused planning of their position paper. Also, applaud their efforts for referring to the checklist and anchor chart to revise and improve their claim and their three pieces of supporting evidence. Remind them that the Plan step is instrumental in preparing to write their own position paper.

### Closing and Assessment

**A. Reflecting on the Learning Targets: Fist to Five (5 minutes)**

- Tell students you are going to read each of today’s learning targets. They should respond with a Fist to Five on how accomplished they feel with the learning target. Explain that you want to gather information about how to plan for the next lesson. Share that it is important that all students are personally connected to their claim and supporting evidence, and the information they provide will help you support them in this planning stage.

- Read each learning target:
  - “I can identify the steps to writing a position paper.”
  - “I can plan my claim and evidence for my position paper.”

- Next, ask students to give you specific information on their claim and supporting evidence by using a Fist to Five in response to the following statements:
  - “I have written a clear and specific claim that supports my point of view about hydraulic fracturing.”
  - “I have written three supporting pieces of evidence that are factual, relevant, and logical.”
  - “I have cited the sources for each piece of supporting evidence.”

- Note students who say they need support in writing their claim, supporting evidence, or citing their resources.

### Homework

- Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
Steps to Writing a Position Paper (Blank)

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<th>Pre-write</th>
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Steps to Writing a Position Paper (Blank)

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### Steps to Writing a Position Paper

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#### Pre-write

**Think before writing.**
Understand your purpose, audience, and format.
Study the issue using available resources.
Record evidence from credible sources.

#### Plan

**Organize your ideas before writing.**
Create a prewriting plan.
Support your claims with clear reasons and relevant evidence.

#### Draft

**Write your ideas in sentences and paragraphs.**
Follow your prewriting plan.
Write the first draft of your paper.

#### Revise

**Improve your ideas.**
Add a hook, transition words, and domain-specific vocabulary.
Change the order of your reasons and evidence.
Add, change, clarify, and delete evidence.
## Steps to Writing a Position Paper

<table>
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<tr>
<th>Edit And Proofread</th>
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<tbody>
<tr>
<td>Focus on editing and proofreading.</td>
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<td>Check for errors in grammar, spelling, and capitalization.</td>
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<th>Share</th>
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<tr>
<td>Present your work.</td>
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<tr>
<td>Show your work to an audience.</td>
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</table>
Planning My Argument Graphic Organizer

Name:

Date:

Read and reflect on your Forming Evidence-Based Claims graphic organizer, your four notecards from the Gallery Walk, and the End of Unit 2 Assessment: Presenting a Claim and Findings teacher feedback.

What is a Star in writing your claim and supporting evidence?

What is a Next Step in writing your claim and supporting evidence?

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<tr>
<th>Claim:</th>
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<th>Reason:</th>
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<tr>
<th>Supporting Evidence:</th>
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Planning My Argument Graphic Organizer

Reason:

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<th>Supporting Evidence:</th>
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Reason:

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<th>Supporting Evidence:</th>
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Checklist for Forming an Evidence-Based Claim

Claim:
1. The claim is a sentence that presents an issue.
2. The claim is clear and specific.
3. The claim gives the author’s point of view, or belief.
4. The claim is something you can build a solid argument about.
5. The claim uses domain-specific vocabulary.

Evidence:
1. The evidence is relevant.
2. The evidence is factual and descriptive.
3. The evidence is in a logical order.
4. The evidence uses domain-specific vocabulary.
Grade 6: Module 4: Unit 3: Lesson 3
Claim, Reasons, and Evidence: Planning the Body Paragraphs
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1) |
| With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) |
| I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6) |

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
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<tbody>
<tr>
<td>Planning My Body Paragraphs graphic organizer</td>
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</table>

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can give and receive feedback with my peers on claims, reasons, and evidence.</td>
</tr>
<tr>
<td>I can analyze a body paragraph of the model position paper.</td>
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<tr>
<td>I can plan the body paragraphs of my position paper.</td>
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<tr>
<td>I can use appropriate vocabulary to express my ideas.</td>
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### Agenda

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<tbody>
<tr>
<td>1. Opening</td>
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<tr>
<td>A. Unpacking Learning Targets (2 minutes)</td>
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<tr>
<td>B. How Are My Ideas? (8 minutes)</td>
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<tr>
<td>2. Work Time</td>
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<tr>
<td>A. Writing a Body Paragraph: Studying the Model (10 minutes)</td>
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<tr>
<td>B. Planning My Body Paragraphs: Quote Sandwich (20 minutes)</td>
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<tr>
<td>3. Closing and Assessment</td>
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<tr>
<td>A. What Words Should I Be Using? (5 minutes)</td>
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<tr>
<td>4. Homework</td>
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</tr>
<tr>
<td>A. Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.</td>
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</table>

### Teaching Notes

- In the previous two lessons, students analyzed a model position paper for content and argument and made final revisions to their claim and supporting evidence after reflecting on teacher feedback from the Unit 2 hosted Gallery Walk.
- In this lesson, students add reasons to their Planning My Argument graphic organizer. The reasons will connect the claim and supporting evidence.
- Students also analyze a body paragraph of the model position paper identifying the author’s reason, supporting evidence, and the author’s explanation of how the evidence supports the claim.
- Using a document camera, this information is written on a graphic organizer similar to the sandwich graphic organizer used in other modules. The graphic organizer provides a visual image of how the body paragraphs are organized and the statements are connected. The graphic organizer also scaffolds the writing of the three body paragraphs that students will write in Lesson 4.
- Students may need to refer to their resources from previous lessons found in the research folder.
- In advance: Form student partnerships for a peer critique of the “big picture” plan for the position paper. Consider pairing students who have different claims, as it might “push the thinking” of students further. Remind students that their partner’s argument should state a claim that is clear and represent the author’s point of view. The author’s reasons should also be clear and connect relevant evidence.
- Consider preparing a resource area in the room where students can have access to articles and other resources from Units 1 and 2 if needed.
- Post: Learning targets.
GRADE 6: MODULE 4: UNIT 3: LESSON 3
Claim, Reasons, and Evidence: Planning the Body Paragraphs

Lesson Vocabulary
reasons, analyze, appropriate, domain specific vocabulary

Materials
• Research folder (from previous lessons)
• Planning My Argument graphic organizer (from Lesson 2; one per student and one to display)
• Document camera
• Model position paper: “Hydraulic Fracturing” (from Lesson 1)
• Planning My Body Paragraphs graphic organizer (one per student and one to display)
• Domain-Specific Vocabulary and Transitions graphic organizer (one per student)

Opening

A. Unpacking Learning Targets (2 minutes)
• Invite a student to read today’s learning targets:
  * “I can give and receive feedback with my peers on claims, reasons, and evidence.”
  * “I can analyze a body paragraph of the model position paper.”
  * “I can plan the body paragraphs of my position paper.”
  * “I can use appropriate vocabulary to express my ideas.”
• Ask:
  * “How do an author’s claim, reasons, and evidence connect? Think back to Lesson 1 when you were analyzing the model position paper. Show a thumbs-up when you have an answer in your head.”
• Cold call a few students. Listen for them to say that the claim in the model paper was the author’s point of view that hydraulic fracturing should be used to collect natural gas. The author gave three reasons for this position: It is better for the environment, it benefits people, but it should be done safely with regulations. These three reasons gave the readers supporting explanations for the claim. Share that the author also cited evidence from a resource supporting each reason.

Meeting Students’ Needs
• Posting the learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
• Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Opening (continued)

- **Ask:**
  * “What does it mean to analyze and plan the body paragraphs? Think back to previous lessons when you were asked to analyze. Show a thumbs-up when you have an answer in your head.”

- Cold call a few students. Listen for them to say that to analyze is to break the body paragraph down or to deconstruct the paragraph.

- **Ask:**
  * “What is meant by using ‘appropriate vocabulary to express my ideas’? Think about academic and domain-specific vocabulary from Units 1 and 2 and how these might relate to ‘appropriate’ vocabulary. Show a thumbs-up when you have an answer in your head.”

- Cold call a few students. Listen for them to say that appropriate vocabulary is using vocabulary we learned from our resource materials when researching DDT, such as “malaria,” “bioaccumulation,” and “pesticide.”

- Share with students that the targets highlight our tasks in the planning step of our position paper. Explain that in this lesson students will share a “big picture” plan for their position paper, analyze a body paragraph of the model, and plan their body paragraphs using domain-specific vocabulary learned from their research.

### B. How Are My Ideas? (8 minutes)

- Tell students who their partner will be.

- Invite students to open their research folder and retrieve the Planning My Argument graphic organizer. Ask students to read what they wrote for their claim and supporting pieces of evidence.

- Using a document camera, display the Planning My Argument graphic organizer. Remind students of the claim in the model position paper: that hydraulic fracturing should be used to collect natural gas. Model writing this claim on the graphic organizer.

- Next, ask students to remember the three reasons the author identified to support the claim or position.

- Cold call students. Listen for: “The author feels it is better for the environment; it helps people; and if done safely and is regulated, it has many benefits.”

- Model writing the author’s three reasons in the left margin in front of each box of supporting evidence.
• Tell students they are now going to write three reasons for their own claim in the left margin of their graphic organizer. Remind students that reasons are the explanations for why the author has a particular point of view or claim. Explain that it may be helpful to think of the stakeholders that are affected by their claim. Pause and give students time to write their three reasons for their claim.

• Circulate and support students as needed. Ask questions such as: “Who would your claim help?” and “After reading the evidence, what are the benefits?”

• Refocus the class. Explain to students that they will share with their partner the “big picture” plan for their position paper. Tell students they should start by stating their claim or position. After their claim is presented, they will share Reason 1 and their supporting evidence for that reason. Next, they will share Reason 2 and their supporting evidence for that reason. Then Reason 3 will be stated along with its supporting evidence.

• Pause and give students time to present their ideas to their partner.

• Invite partners to give feedback to each other. Remind students they do not have to agree with their partner’s claim, but they should make sure the claim is clear; the reasons and supporting evidence are relevant and logical; and the claim, reasons, and evidence connect.

• Pause to give students time to give feedback to each other.

• Circulate and notice partners giving constructive feedback to improve their argument.

• Congratulate students for their efforts in supporting their partners in this planning step of their position paper. Explain to students that successful writers take time to carefully plan and get peer feedback before they write a draft.
### Work Time

**A. Writing a Body Paragraph: Studying the Model (10 minutes)**

- Direct students to their research folder and the **model position paper: “Hydraulic Fracturing.”** Using the document camera, display the model essay. Explain that the first paragraph is the introduction, the next three paragraphs in the middle are the body paragraphs, and the fifth paragraph is the conclusion. Invite students to skim the first paragraph of the model to find the author’s claim. Pause to give time.

- Ask partners to Think-Pair-Share:
  - “What is the author’s claim?”

- Listen for: “The claim is that hydraulic fracturing is a process that should be used to collect natural gas.”

- Now use the document camera to display the **Planning My Body Paragraphs graphic organizer.** Model writing the claim in the top margin. Explain to students that this graphic organizer is a version of the sandwich graphic organizer used in other modules. Share that this is the structure they will use to write their own body paragraphs.

- Share with students that they are going to work with their partner to analyze, or deconstruct, the second paragraph. Read over the graphic organizer with the students. Ask partners to identify the statement giving the reason, the statement citing the evidence that supports the reason, and the statement that connects the evidence to the claim. Tell them to put an “R” by the first word beginning the reason statement. Tell them to put an “E” by the first word beginning the evidence statement and to put a “C” by the first word beginning the connect statement.

- Pause to give partners time to identify these three statements.

- Circulate to support struggling students.

- Cold call partners to share out. Listen for: “The reason for the second paragraph is that hydraulic fracturing should be used because it is better for the environment. This led to the supporting evidence from **National Geographic,** ‘Natural gas burns much cleaner than coal. In part because American power plants have been switching from coal to cheap gas, U.S. emissions of CO₂ from fossil fuels fell last year, even as the world set another record.’ The connect is, ‘This means that by switching from coal to natural gas collected by hydraulic fracturing, we can make the air cleaner and do less damage to the ozone layer.’ The connect box is for a statement that links the evidence to the claim.”

### Meeting Students’ Needs

- Providing models of expected work supports all students, especially challenged learners.

- Allowing students to discuss their thinking with peers before writing helps to scaffold their comprehension and also assists in language acquisition for ELLs.
### Work Time

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<th>Meeting Students’ Needs</th>
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</table>
| • Using the document camera, explain to students that you want to fill in the graphic organizer to show them how this paragraph might have looked in its planning stages. Tell students this graphic organizer is one that they will use to write their own position paper. Model filling out the reason, evidence, and connect of the Planning My Body Paragraphs graphic organizer using the model position paper.  

Next, ask partners to follow the same routine, marking the statements with an “R,” “E,” and “C” for Paragraphs 3 and 4.  

Pause to give students time to read and annotate their text.  

Circulate and support struggling students. Compliment partners sharing their ideas.  

Ask students to turn and talk with each other:  

* “What is included in each body paragraph in this model?”  

After students have had a chance to discuss, refocus the whole group. Cold call a pair and listen for: “Each body paragraph provides a reason for the claim, cites evidence that supports the reason, and explains how the evidence connects to the claim.”  

Congratulate students for their efforts to deconstruct the model position paper. Explain that analyzing an example paragraph from the model essay will help them plan their own body paragraphs.  

### B. Planning My Body Paragraphs: Quote Sandwich (20 minutes)

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<th>Meeting Students’ Needs</th>
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</table>
| • Distribute the Planning My Body Paragraphs graphic organizer to each student. Ask students to retrieve their Planning My Argument graphic organizer, which they used earlier in the lesson.  

Invite students to focus on today’s third and fourth learning targets as they complete their body paragraphs plan:  

* “I can plan the body paragraphs of my position paper.”  

* “I can use appropriate vocabulary to express my ideas.”  

Remind students they are planning three body paragraphs and that much of their planning has been completed. Ask them to use appropriate vocabulary. Suggest they reference the Word Wall and their articles for domain-specific vocabulary. Share that in this lesson they will not need to write anything in the transition boxes and that transitions will be introduced in another lesson.  

During this Work Time, you may want to pull a small group of students to help them find evidence. Some students will need more guided practice before they are ready for independent work.  

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### Work Time (continued)

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<td>• Invite students to write their first reason in sentence form in the appropriate box. Then ask them to write the evidence that supports their first reason. Remind them to write a sentence and to use quotations where the quote begins and where the quote ends. Both reasons and evidence can be copied from their Planning My Argument graphic organizer. Explain that they will need to write a sentence that links the evidence to their claim. This statement should be written in the connect box. Ask students to use the model essay as a guide to help them understand how the author makes this connection.</td>
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<tr>
<td>• Circulate and support students as they plan their paragraphs. Notice focused students and students writing complete sentences.</td>
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<tr>
<td>• Refocus the whole group.</td>
</tr>
<tr>
<td>• Praise students for their detailed paragraph plans. Explain that tomorrow they will use the paragraph “sandwiches” to write their body paragraphs.</td>
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</table>
### Body Paragraph 1

<table>
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<tr>
<th>Transition:</th>
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**First reason** to support your claim.  
(Use your own words.)

| Evidence to support your reason.  
(Cite evidence from research materials.) |
|--------------------------------------|

**Connect** evidence to your claim.  
(Use your own words.)
## Planning My Body Paragraphs Graphic Organizer

### Body Paragraph 2

**Transition:**

**First reason** to support your claim.
(Use your own words.)

**Evidence** to support your reason.
(Cite evidence from research materials.)

**Connect** evidence to your claim.
(Use your own words.)
<table>
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<tr>
<th>Body Paragraph 3</th>
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<tbody>
<tr>
<td><strong>Transition:</strong></td>
</tr>
<tr>
<td><strong>First reason</strong> to support your claim.</td>
</tr>
<tr>
<td>(Use your own words.)</td>
</tr>
<tr>
<td><strong>Evidence</strong> to support your reason.</td>
</tr>
<tr>
<td>(Cite evidence from research materials.)</td>
</tr>
<tr>
<td><strong>Connect</strong> evidence to your claim.</td>
</tr>
<tr>
<td>(Use your own words.)</td>
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</tbody>
</table>
## Domain-Specific Vocabulary and Transitions Graphic Organizer

<table>
<thead>
<tr>
<th>Domain-Specific Vocabulary</th>
<th>Transitions</th>
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### Domain-Specific Vocabulary

### Transitions
Grade 6: Module 4: Unit 3: Lesson 4
Actions for a Position Paper: Identify, Discuss, Write
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
I can identify the relationship between my claim(s) and reasons by using linking words, phrases, and clauses. (W.6.1c)
With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)

Supporting Learning Targets
- I can identify the parts of a strong position paper.
- I can discuss my ideas for my position paper with a peer.
- I can write drafts of my body paragraphs.

Ongoing Assessment
- Planning My Body Paragraphs graphic organizer (from homework)
- Written drafts of body paragraphs

Agenda
1. Opening
   A. Unpacking Learning Targets (2 minutes)
   B. Parts of a Position Paper Anchor Chart (3 minutes)
2. Work Time
   A. Peer Discussion: Articulating My Ideas (10 minutes)
   B. Writing: Moving from a Plan to a Draft (25 minutes)
3. Closing and Assessment
   A. Noticing Transition Words and Phrases (5 minutes)
4. Homework
   A. Read to meet 30-minute reading goal in independent reading book. Complete the Reading Tracker and Reviewer’s Notes.

Teaching Notes
- At this point, students have looked closely at how a position paper is constructed and used reasons and evidence to plan their body paragraphs on the Planning My Body Paragraphs graphic organizer. They are now ready to apply their skills as they write a draft of their body paragraphs.
- Students are introduced to the Parts of a Position Paper anchor chart. This will help them focus on what components make a strong body paragraph. Students will share their plan for their body paragraphs with a partner. The Parts of a Position Paper anchor chart will help guide students in listening to one another’s ideas for what a strong paragraph should sound like.
- The students’ verbal explanations of their body paragraphs are a way for them to “warm up” and prewrite without extraneous writing. This is not a time for peer feedback. The goal is for students to solidify their plan by expressing it. As students use their plan to help construct their drafts, they can make revisions where they had difficulty articulating their ideas.
<table>
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<tr>
<th>Agenda</th>
<th>Teaching Notes (continued)</th>
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<tbody>
<tr>
<td>• Identifying transitional words used in the model will help students consider how to introduce their paragraphs and connect their ideas and paragraphs. Transitions will be formally assessed on the End of Unit 3 Assessment in students’ published paper. Reviewing the Planning My Body Paragraphs graphic organizer will help students identify domain-specific vocabulary and make revisions if specific terminology should be added.</td>
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<tr>
<td>• It is helpful to have students write on every other line as they write their drafts. This allows space for revisions in future lessons.</td>
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<tr>
<td>• By the end of this lesson, students should have finished their body paragraph drafts by writing the introductory and concluding paragraphs so that they are prepared for the mid-unit assessment of completing their draft. Students who have not finished their body paragraph drafts would benefit from arranging time after school to complete them.</td>
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<tr>
<td>• Be prepared to provide students with feedback in Lesson 7. Provide specific positive feedback for at least one thing each student did well (star) and at least one specific area of focus for each student to revise (step).</td>
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<td>• Determine whether you need to acquire colored pens or pencils for students to make revisions.</td>
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<tr>
<td>• In advance: prepare the new Transitions anchor chart. Make headings for Introduction, First Body Paragraph, Second Body Paragraph, Third Body Paragraph, and Conclusion. You will use this anchor chart with students during the Closing.</td>
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<tr>
<td>• Post: Learning targets.</td>
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</table>
### Lesson Vocabulary
- identify, discuss, write

### Materials
- Planning My Body Paragraphs graphic organizer (from Lesson 3)
- Research folder (from previous lessons)
- Parts of a Position Paper anchor chart (one per student and one to display)
- Document camera
- Model position paper: “Hydraulic Fracturing” (from Lesson 1)
- Domain-Specific Vocabulary and Transitions graphic organizer (from Lesson 3)
- Different colored pens or pencils for making revisions
- Lined paper
- Pencils
- Sticky notes (four per student)
- Transitions anchor chart (new; co-created with students during Closing Part A; see Teaching Note)
### Opening

<table>
<thead>
<tr>
<th>A. Unpacking Learning Targets (2 minutes)</th>
<th>Meeting Students’ Needs</th>
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</table>
| • Invite students to all read the learning targets aloud with you:  
  * “I can identify the parts of a strong position paper.”  
  * “I can discuss my ideas for my position paper with a peer.”  
  * “I can write drafts of my body paragraphs.”  
• Tell students that all of the targets have action verbs. Call on students to identify those words.  
• As students say the words identify, discuss, and write, circle or highlight the verbs on the posted targets.  
• Invite students to use hand gestures to describe what the verbs tell us we can do. For example, use fingers or hands to form spectacles or binocular shapes held in front of your eyes for the word identify.  
• Point out that the targets each mention the position paper or parts of the paper. Tell students they will be actively involved as they begin the process of writing a draft of the body paragraphs in their own position paper. | • For select students, consider a practice read ahead of time of Body Paragraph bullet points for 1, 2, or 3 from the Parts of a Position Paper anchor chart. |

<table>
<thead>
<tr>
<th>B. Parts of a Position Paper Anchor Chart (3 minutes)</th>
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</table>
| • Ask students to locate their Planning My Body Paragraphs graphic organizers, which they completed in Lesson 3.  
• Distribute or ask students to locate their research folder. Direct them to get out the Parts of a Position Paper anchor chart from the folder.  
• Use a document camera to display the anchor chart.  
• Introduce the Parts of a Position Paper anchor chart to the students. Explain that this anchor chart includes the components, or parts, of each paragraph in the position paper. Tell students that parts are in the order that they should write them.  
• Explain that in today’s lesson they will use this information as a guide for sharing their body paragraph plans with a listening partner and as a guide for writing their body paragraph drafts.  
• Direct students to the Body Paragraph sections. Cold call a student to read the three bullet points for Body Paragraph 1. Cold call students to read the bullet points for Body Paragraphs 2 and 3. Ask students what they notice and wonder. Listen for notices that include: “exactly the same,” “same order,” and “all list transitions, evidence, and links.” |  |

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<table>
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<tr>
<th>Opening (continued)</th>
<th>Meeting Students’ Needs</th>
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<tr>
<td>• Listen for wonders such as:</td>
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<tr>
<td>* “What are transitions?”</td>
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<tr>
<td>* “What’s a link?”</td>
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<tr>
<td>* “How do you write a link?”</td>
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<tr>
<td>* Encourage students to refer to the <strong>model position paper: “Hydraulic Fracturing”</strong> to see how the author begins each paragraph with transitions and how the evidence is connected to the claim.</td>
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</tbody>
</table>
A. Peer Discussion: Articulating My Ideas (10 minutes)

- Tell students that before writing their body paragraph drafts, they will work with a partner to explain their plan. Explain that they will use their Planning My Body Paragraph graphic organizers, Parts of a Position Paper anchor chart, and their Domain-Specific Vocabulary and Transitions graphic organizers as a guide.

- Pair students up to explain their plan to their partners.

- Distribute pens or pencils that are a different color from those students used on their Planning My Body Paragraph graphic organizer. Ask students to use them for the revisions they make to their drafts during this sharing time.

- Explain that this is not a time for giving feedback to their partners. It is a time to review and revise their own work by both speaking and listening.

- Tell students if they have difficulty with parts of their plan while they are sharing, this is an opportunity to make changes and solidify their ideas. The goal is to be able to write their plan in a way that readers can easily understand.

- Advise students to refer to the Parts of a Position Paper anchor chart to see if they have included all the parts in the correct order.

- Advise students to refer to their Domain-Specific Vocabulary and Transitions graphic organizer to ensure that they have domain-specific words in each paragraph plan.

- Remind students to refer to the model position paper, “Hydraulic Fracturing,” to see what words the author used to introduce the body paragraphs and move from one paragraph to another. Suggest that using similar words or phrases to begin their body paragraphs is helpful for presenting their body paragraphs in a logical order.

- Circulate and support students as they share with their partners. Direct students to parts of the anchor chart or essay that may be helpful.

- Refocus students as a whole class. Check to see if students are prepared to write their body paragraph drafts by asking for a thumbs-up, thumbs-sideways, or thumbs-down. Encourage students to look over their plan and make any final changes before writing.
### Work Time (continued)

<table>
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<tr>
<th>B. Writing: Moving from a Plan to a Draft (25 minutes)</th>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Direct students to have lined paper, a pencil, their Planning My Body Paragraph graphic organizer (from Lesson 3), and the Parts of a Position Paper anchor chart out on their desks/tables.</td>
<td>• During this Work Time, you may want to pull a small group of students to support in writing their body paragraphs. Some students may need more guided instruction as they begin writing their draft.</td>
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<tr>
<td>• Remind students of the expectations for quiet writing time. Explain that working together and sharing has been helpful to learn and prepare. Quiet, focused writing is also an important part of learning to write well. The focus now is to work independently.</td>
<td>• Students who have not finished their drafts will benefit from arranging other time after school to complete their writing.</td>
</tr>
<tr>
<td>• Explain that students will write the three body paragraphs of their position papers as the first part of their mid-unit assessment. In the next lesson, they will write the introductory and concluding paragraphs.</td>
<td>• Suggest that students mark every other line to remind them to skip lines as they write.</td>
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<tr>
<td>• Direct students to write on every other line to allow space to edit and make revisions in Lessons 6 and 7.</td>
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<tr>
<td>• Circulate to assist students as they draft their body paragraphs. Ask questions such as:</td>
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<tr>
<td>* “Do you have a reason that supports your claim?”</td>
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<tr>
<td>* “How does your paragraph begin? Does it help put your information in order?”</td>
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<tr>
<td>* “Did you include evidence that supports your reason?”</td>
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<tr>
<td>* “What are you explaining in your own words?”</td>
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<tr>
<td>* “Did you use domain-specific vocabulary in each paragraph?”</td>
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<tr>
<td>* “Did you cite your source?”</td>
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<tr>
<td>• At the end of the writing time, commend students for their quiet, focused work writing the first drafts of their body paragraphs.</td>
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</table>
### Closing and Assessment

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<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td><strong>A. Noticing Transition Words and Phrases (5 minutes)</strong></td>
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- Ask students to retrieve their Domain-Specific Vocabulary and Transitions graphic organizer.
- Distribute four *sticky notes* to the students. Point out the *Transitions anchor chart*, which includes headings for Introduction, First Body Paragraph, Second Body Paragraph, Third Body Paragraph, and Conclusion.
- Explain that transitions are words that help put information in order and connect ideas.
- Ask students: “What words are you using to introduce and connect your ideas and paragraphs in your body paragraph drafts?” As students respond, ask them to write their words or phrases on sticky notes and add them to the anchor chart display. Encourage students to place their transition words under the heading where they feel they belong.
- As transitions are added to the display, invite students to also write words or phrases on their graphic organizers. Encourage students to include one from each heading.
- Tell students they will be taking a closer look at transitions after they revise their position paper drafts. Encourage students to think about how they are already introducing and connecting their ideas by using words like this.
- Collect students’ first body paragraph drafts.

### Homework

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<td><strong>Homework</strong></td>
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- Read to meet 30-minute reading goal in independent reading book. Complete the Reading Tracker and Reviewer’s Notes.
### Introductory Paragraph
- Engages reader: Introduces the topic with a strong opening statement; a hook or attention-grabber
- Connector: Links the reader from your opening statement to your claim
- States claim: Gives your point of view
- Refers to three supporting reasons: Lets readers know what you will present by using key words from the claim, but not the whole reasons.

### Body Paragraph 1
- Transition to reason: Begins the paragraph, puts information in logical order
- Evidence: Facts, statistics, quotes, stories
- Link: Explains how your evidence supports your claim

### Body Paragraph 2
- Transition to reason: Begins the paragraph, puts information in logical order
- Evidence: Facts, statistics, quotes, stories
- Link: Explains how your evidence supports your claim

### Body Paragraph 3
- Transition to reason: Begins the paragraph, puts information in logical order
- Evidence: Facts, statistics, quotes, stories
- Link: Explains how your evidence supports your claim
### Parts of a Position Paper Anchor Chart

**Conclusion**

- Restates claim: Repeats your point of view in a different way
- Synthesizes: Combines the three reasons
- Analysis of topic and logical conclusion: Points out the relationship
- Clincher: A final, decisive argument or remark that answers, “So what is the point of raising this issue?”

**Formal English**

- Not casual language
- Language appropriate for official or important writing and speaking

**Vocabulary**

- Domain-specific
- Transition words/phrases

**Writing Conventions**

- Usage
- Grammar
- Mechanics
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
I can create an introduction that states my main argument and foreshadows the organization of my piece. (W.6.1a)
I can construct a concluding statement or section that reinforces my main argument. (W.6.1e)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the qualities of a strong introduction and conclusion for a position paper.</td>
<td>• Mid-Unit 3 Assessment: Draft of Position Paper: “Do the Benefits of DDT Outweigh Its Harmful Consequences?”</td>
</tr>
<tr>
<td>• I can draft the introduction of my position paper.</td>
<td>• Reflecting on My Writing So Far</td>
</tr>
<tr>
<td>• I can draft the conclusion of my position paper.</td>
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</tbody>
</table>

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## Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
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<tbody>
<tr>
<td>A. Unpacking Learning Targets (2 minutes)</td>
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</table>

<table>
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<tr>
<th>2. Work Time</th>
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<tbody>
<tr>
<td>A. Drafting an Introductory Paragraph (20 minutes)</td>
<td></td>
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<tr>
<td>B. Drafting a Concluding Paragraph (18 minutes)</td>
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<tr>
<th>3. Closing and Assessment</th>
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<tbody>
<tr>
<td>A. Reflecting on My Writing So Far (5 minutes)</td>
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</table>

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<tr>
<th>4. Homework</th>
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<tbody>
<tr>
<td>A. Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes</td>
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</tbody>
</table>

## Teaching Notes

- At this point, students have taken several sequential steps toward writing position papers. At the end of Unit 2, students used their research to determine their position. Through self-review and teacher feedback, students decided if their position still fit for them or if they needed to revise their position.

- In preparing for their draft writing, students read and assessed a model essay; reviewed the Position Paper Argument Rubric; planned their claim, reasons, and evidence; partnered to share feedback; and developed and wrote their body paragraph drafts.

- In this lesson, students are introduced to the criteria for writing introductory and concluding paragraphs. To build their understanding, students look at the similarities and differences of an introduction and conclusion.

- Make clear to students that in an introductory paragraph you are foreshadowing the structure of an argument. By doing this, you are helping the readers prepare their mind for where you, as the writer, are going, which makes your argument easier to follow.

- Students use the model essay and the Parts of a Position Paper anchor chart as references to plan their introductory and concluding paragraphs. Before writing, students verbally rehearse their paragraphs with partners to strengthen their plans.

- Students then draft their introductory and concluding paragraphs and complete their draft position paper, which is the mid-unit assessment. Consider asking students to write on every other line to allow space for revisions in future lessons or to use technology, if available.

- By the end of this lesson, students should have finished their draft position papers for their mid-unit assessment. Those students who have not finished by the end of the lesson would benefit from arranging school time to complete their draft.

- At the close of the lesson, students reflect on their writing at this mid-unit point by reading their completed draft to consider what they have done well, what challenges they had during the writing process, and what help they may need to improve their writing.

- Be prepared to provide students with feedback in Lessons 6 and 7 using Rows 2, 3, and 4 of the Position Paper Argument Rubric, included in the supporting materials of Lesson 1. Provide specific, positive feedback for at least one thing each student did well (star) and at least one specific area of focus for each student to revise (step).
Grade 6: Module 4: Unit 3: Lesson 5

Mid-Unit Assessment:
Completing My Draft Position Paper

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes (continued)</th>
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<tbody>
<tr>
<td></td>
<td>• In advance:</td>
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<tr>
<td></td>
<td>– Have students’ body paragraphs available for them to read with their introductory and concluding paragraphs.</td>
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<tr>
<td></td>
<td>– Consider starting to prepare teacher feedback on the completed body paragraphs. Students will use that feedback in Lesson 7.</td>
</tr>
<tr>
<td></td>
<td>– Consider and determine partners for verbally sharing their introductory paragraphs.</td>
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<td></td>
<td>• Post: Learning targets.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>introduction, conclusion</td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Model position paper: “Hydraulic Fracturing” (from Lesson 1)</td>
</tr>
<tr>
<td></td>
<td>• Equity sticks</td>
</tr>
<tr>
<td></td>
<td>• Parts of a Position Paper anchor chart (from Lesson 4)</td>
</tr>
<tr>
<td></td>
<td>• Mid-Unit 3 Assessment: Position Paper Prompt (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Lined paper</td>
</tr>
<tr>
<td></td>
<td>• Writing Reflections graphic organizer (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Position Paper Argument rubric (from Lesson 1; for teacher use to score students’ draft position papers)</td>
</tr>
</tbody>
</table>
### Opening

<table>
<thead>
<tr>
<th>A. Unpacking Learning Targets (2 minutes)</th>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td>- Read aloud as students read the learning targets silently in their heads.</td>
<td></td>
</tr>
<tr>
<td>* “I can identify the qualities of a strong introduction and conclusion for a position paper.”</td>
<td></td>
</tr>
<tr>
<td>* “I can draft the introduction of my position paper.”</td>
<td></td>
</tr>
<tr>
<td>* “I can draft the conclusion of my position paper.”</td>
<td></td>
</tr>
<tr>
<td>- Invite students to Think-Pair-Share:</td>
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<tr>
<td>* “How are introductions and conclusions similar types of writing?”</td>
<td></td>
</tr>
<tr>
<td>- Listen for responses, or guide students toward responses, such as: “They are both writing about the whole essay in some way,” or “They are both ‘big idea’ writing and are not about details.”</td>
<td></td>
</tr>
<tr>
<td>- Again invite students to Think-Pair-Share:</td>
<td></td>
</tr>
<tr>
<td>* “How are introductions and conclusions different?”</td>
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<tr>
<td>- Listen for responses such as: “The introduction should introduce the topic and get the reader interested, while the conclusion should reinforce the main argument and wrap up the author’s point of view on the topic.”</td>
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</tbody>
</table>
**Work Time**

### A. Drafting an Introductory Paragraph (20 minutes)

- Using a **document camera**, display the **model position paper:** “Hydraulic Fracturing.” Tell students that now that they have written a first draft of the body paragraphs of the argument essay, they are going to finish their mid-unit assessments by completing the first draft of their introductory and concluding paragraphs.

- Invite students to read along silently as you read the introduction of the model position paper.

- Ask students to Think-Pair-Share:
  * “What is the topic?”
  * “What is the claim?”
  * “What reasons will be talked about?”
  * “How does the author capture the reader’s interest?”

- Use **equity sticks** to select students to share their responses. Record student responses in the margin by the introductory paragraph. Listen for and ensure the following are included:
  - The topic is: Should hydraulic fracturing be used to collect natural gas?
  - The claim is: Hydraulic fracturing is a process that should be used to collect natural gas.
  - The three reasons include: Hydraulic fracturing is better for the environment; it benefits the people; and if done safely and with regulations, it would prove beneficial.
  - To capture the reader’s interest, the author explains what hydraulic fracturing is and explains how it could be an important process used to collect natural gas, which is a cleaner source of energy than coal and oil.

- Point out the **Parts of a Position Paper anchor chart**. Read the criteria listed on the chart. Explain to students that the author introduces the topic in a strong opening statement. Next, a connector statement is used, transitioning the reader from the opening statement to the author’s claim. After that, the author gives his/her point of view, or the claim, and the three supporting reasons foreshadowing the essay.

- Display the **Mid-Unit 3 Assessment: Position Paper Prompt**. Point out to students that they have been working on this task for a few days now; today is their opportunity to actually complete their draft.

### Meeting Students’ Needs

- Consider providing models of expected work to support all students, especially select learners.

- Allowing students to verbally share their introductory and concluding paragraphs before writing helps students recognize what strong introductions and conclusions should include and what revisions they should make before writing their draft.

- Consider placing students in homogeneous pairs.

- Provide direct support to students who need it the most.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B. Drafting a Concluding Paragraph (18 minutes)</strong></td>
</tr>
<tr>
<td><strong>•</strong> Using the document camera, again display the model position paper: “Hydraulic Fracturing.”</td>
</tr>
<tr>
<td><strong>•</strong> Read aloud the introductory and concluding paragraphs and ask students to Think-Pair-Share:</td>
</tr>
<tr>
<td>* “What are the similarities between the introduction and conclusion?”</td>
</tr>
<tr>
<td><strong>•</strong> Cold call partners. Listen for responses such as: “Both give the claim,” “Both refer to the three reasons,” and “Both engage the reader.” Remind students that the introduction engages the reader by introducing and defining the topic, and the conclusion engages the reader by bringing closure to the topic and/or possibly ending the paragraph with a clincher.</td>
</tr>
<tr>
<td><strong>•</strong> Invite students to read along silently as you read the concluding paragraph of the position paper.</td>
</tr>
<tr>
<td><strong>•</strong> Ask students:</td>
</tr>
<tr>
<td>* “What does the author tell us in the concluding paragraph?”</td>
</tr>
</tbody>
</table>
Use equity sticks to select students to share their responses. Record student responses in the margin on the model essay. Ensure that the following are included:

- The conclusion restates the claim in a different way.
- The three reasons are combined.
- The conclusion points out the relationship of the topic to the position, or points to a logical conclusion.
- The ending statement is a clincher, or final remark giving a decisive fact.

Invite students to take time to think about their concluding paragraph. Explain that they will verbally rehearse their concluding paragraph with their partners. Remind students to refer to the notes on the anchor chart and in the margin of the model position paper to guide their thinking.

Ask partners to begin sharing. Circulate to assist as they verbally rehearse their concluding paragraphs. Ask:

* “How can you restate your claim?”
* “How did the author conclude the model essay?”

Invite students to draft their concluding paragraph using their verbal rehearsal and the notes on the Parts of a Position Paper anchor chart. Remind students to skip every other line to allow space for revisions.

Again circulate to assist students in drafting their concluding paragraphs. Ask:

* “How can you restate your claim?”
* “How did the author conclude the model essay?”
* “What are you going to give the reader to think about at the end?”

Congratulations to students for their focused thinking and writing and the completion of the Mid-Unit 3 Assessment. Explain that all their effort and hard work has enabled them to create a draft of their position paper.
## Closing and Assessment

### A. Reflecting on My Writing So Far (5 minutes)
- Commend students for the steps they have taken so far to write a draft of their position about the benefits or harmful consequences of the use of DDT.
- Tell students as they complete this part of the writing process and begin the next, it is helpful to look at what they have just completed and give some thought to how they are doing so far. Ask students to listen closely as you read the following reflection questions:
  * “What did I do well?”
  * “What challenges did I have?”
  * “What help do I need to make it better?”
- Distribute the **Writing Reflections graphic organizer** and their body paragraph drafts.
- Ask students to put the introductory, body, and concluding paragraphs together and read their complete position paper draft with the reflection questions in mind.
- Tell students to write their thoughts or reflections on the Writing Reflections graphic organizer. Explain that this marks the first half of their reflections on this writing journey.
- Collect students’ position paper drafts and Writing Reflections graphic organizer.

### Meeting Students’ Needs
- Consider allowing students who need additional time to continue writing their introductory and concluding paragraphs.

## Homework

- Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

*Note: Be prepared to provide students with feedback in Lessons 6 and 7 using Rows 2, 3, and 4 of the Position Paper Argument Rubric, included in the supporting materials of Lesson 1. Students will need access to their drafts during the following lesson, however, so be aware that some students may get drafts with feedback in the next lesson and others in Lesson 7. Students will not need to revise based on teacher feedback in Lesson 6.*
Learning Targets:
• I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
• I can create an introduction that states my main argument and foreshadows the organization of my piece. (W.6.1a)
• I can construct a concluding statement or section that reinforces my main argument. (W.6.1e)

Directions:
• Write a position paper in which you respond to the question below.
• Support your claim with relevant evidence from your research.
• Conclude your paper in a way that follows logically from your claim and evidence.

Prompt:
• Do you believe DDT should be used despite its potentially harmful consequences in the natural world?
• Do the benefits of DDT outweigh its harmful consequences?
Read your position paper with these reflection questions in mind.

What did I do well?

What challenges did I have?

What help do I need to make it better?
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can write arguments to support claims with clear reasons and relevant evidence. (W.6.1)
- I can maintain a formal style in my writing. (W.6.1d)
- I can identify when standard English is and isn’t used. (L.6.1e)
- I can convert language into standard English. (L.6.1e)

### Supporting Learning Targets

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<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
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<tbody>
<tr>
<td>• I can recognize the differences between formal and informal English.</td>
<td>• Identifying and revising formal English and transitions</td>
</tr>
<tr>
<td>• I can give and receive feedback on formal and informal English in a position paper.</td>
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</tr>
</tbody>
</table>
### Agenda

1. **Opening**
   - A. Unpacking Learning Targets (2 minutes)
   - B. Connecting with Transitions (8 minutes)

2. **Work Time**
   - A. Mini Lesson: Recognizing Formal vs. Informal English (10 minutes)
   - B. Peer Critique: Identifying and Revising for Formal vs. Informal English and Transition Words (20 minutes)

3. **Closing and Assessment**
   - A. Message Translation Using Slang, Casual, and Formal Language (5 minutes)

4. **Homework**
   - A. Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

### Teaching Notes

- At this point, students have completed the first drafts of their position papers. As students prepare to review and revise their writing, they now focus on using formal English and transition words in their position papers.
- Students need their position paper drafts for this lesson. However, teacher feedback on the drafts is not required until Lesson 7. If some students already have feedback and others don’t, be sure to tell students that they do not need teacher feedback to revise in this lesson. They will all have teacher feedback to use in the following lesson.
- This lesson is an opportunity for students to review and revise their use of formal English and use of transition words to meet the criteria of the Position Paper Argument Rubric.
- Students review what transitions are and are introduced to a variety of transitional words and phrases they can use to introduce their reasons, connect ideas, and organize information logically.
- Students compare informal and formal English to recognize the difference and distinguish what is appropriate for expressing their information in their position paper.
- They revise their first drafts to meet the criteria for formal English and appropriate transitions. Peers provide feedback on one another’s writing in these areas using a revision checklist.
- If students used computers in Lessons 4 and 5 to write their first draft, allow them to use computers to revise.
- Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
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<tbody>
<tr>
<td>transitions, formal English, informal</td>
<td>• Transitions anchor chart (from Lesson 4)</td>
</tr>
<tr>
<td>English, author, editor</td>
<td>• Transitions—Words That Connect Ideas reference sheet (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Domain-Specific Vocabulary and Transitions graphic organizer (from Lesson 3)</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Slang, Casual, Formal Messages (one for display)</td>
</tr>
<tr>
<td></td>
<td>• Revision Checklist (one per student and one for display)</td>
</tr>
<tr>
<td></td>
<td>• Formal or Informal—Can You Guess? (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Position Paper Argument Rubric (from Lesson 1; students’ own copies)</td>
</tr>
<tr>
<td></td>
<td>• Different color of pencil for revisions</td>
</tr>
</tbody>
</table>
## Opening

### A. Unpacking Learning Targets (2 minutes)
- Invite students to read today’s learning targets with you:
  - “I can recognize the differences between formal and informal English.”
  - “I can give and receive feedback on formal and informal English in a position paper.”
- Ask students to Think-Pair-Share:
  - “What does *formal English* mean?”
  - “What does *informal English* mean?”
  - “When is it appropriate to use formal English?”
- Call on students. Suggest they try sharing their responses in either informal or formal English.
- Explain that as they begin to review and revise the drafts of their position papers, the language they use plays an important role in conveying their argument and position well to their readers. Learning what informal and formal English is and using it effectively will help achieve that goal. Learning and using *transitions* to connect is also important.

### B. Connecting with Transitions (8 minutes)
- Remind students that transition words and phrases are important for introducing a paragraph and putting information in a logical order that helps your information make sense to the reader.
- Tell students that by knowing a variety of transitions, writers can connect the ideas in their paragraphs in a way that is more interesting to readers.
- Direct students’ attention to the *Transitions anchor chart* that they started in Lesson 4. Share some of the connecting words and phrases they used to write the first drafts of their body paragraphs.
- Tell students they will now look at other transitions to see if they can find other ways to say the same things.
- Distribute the *Transitions—Words That Connect Ideas reference sheet*.
- Direct students to also retrieve their *Domain-Specific Vocabulary and Transitions graphic organizer* from Lesson 3.
Meeting Students’ Needs

• Invite students to read the four headings on the Transitions—Words That Connect Ideas reference sheet: First, Second, Third or Final, and Conclusion. Explain that the transitions under the First, Second, and Third or Final headings are examples that might be appropriate to begin their body paragraphs. The transitions used under the Conclusion heading are appropriate for the end of an essay. Some work well for starting the clincher, or last sentence.

• Tell students to look at the “First” transitions to see if any of the examples would work for the beginning of their first body paragraph. Call on students to share how one of the examples could be used to introduce their first reason.

• Ask students to look at the “First” list again to select an example that could be stated a little differently to introduce their first reason. For instance, “One example that stands out” could be changed to state, “One reason that stands out.” Call on students to share an example they could change and use as an appropriate introduction for their first body paragraph.

• Tell students to look at the transitions listed under the other three headings on their own and choose one from each list they feel could be used to introduce their reasons in their second and third body paragraphs. Invite students to pair up and share transitions that grabbed their attention and might strengthen their body and concluding paragraphs.

• Ask students to list new transitions on their Domain-Specific Vocabulary and Transitions graphic organizer. Let them know they will have a chance to change and improve transitions when they revise for vocabulary in the next lesson.

<table>
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<th>Opening (continued)</th>
<th>Meeting Students’ Needs</th>
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Work Time

A. Mini Lesson: Recognizing Formal vs. Informal English (10 minutes)
- Remind students that *formal English* is language that is appropriate for important or official writing or speaking. It is not casual language (*informal English*).
- Explain that formal language is geared to the audience, the people you want to communicate with. The language you use affects how the listener or reader perceives or sees you.
- Use a document camera to display the *Slang, Casual, Formal Messages* document and guide students through it.
- The following are possible text, email and letter messages:
  * “whuz up, bud”
  * “Hey, buddy! Just checking to see what you’re up to.”
  * “Dear Son, You have been in my thoughts. I’m wondering what activities you are involved with. Please write or call.”
- Invite students to Think-Pair-Share:
  * “Decide which message would most likely be sent as a text message, an email message, or as a formal message.”
  * “Decide which message would be considered slang, casual, or formal English.”
- Call on partners to share their decisions. Then ask students to consider what relationship or connection the writer might have with the receiver or audience. Listen for responses that suggest friendly, comfortable, casual, proper, rigid. Remind students that language used can affect how the receiver relates to you.
- Encourage students to consider how the use of formal language in their position papers affects the reader’s perception or viewpoint of their position.
- Distribute the *Revision Checklist*. Use the document camera to display the checklist as you introduce it.
- Tell students that they will use this checklist as they read and revise their position papers. However, before using it to check their own papers, they will practice using parts of it on two short passages about Rachel Carson, the scientist and author of *Silent Spring*, the woman featured in two of their research articles.
- Distribute *Formal or Informal—Can You Guess?*
- Students continue to work with partners to read both of the passages and decide which passage is formal and which is informal. Then they reread and refer to the Revision Checklist to find criteria to confirm their decision.

Meeting Students’ Needs

- Video and audio examples such as video clips from familiar kids movies, speeches and protests could enhance students understanding of informal and formal English.
Work Time (continued)

• Refocus students as a group. Call on partners to share:
  * “Which paragraph was formal, and which was informal?”
  * “What did you notice that helped you make that decision?”
  * “What criteria were used to write the passage in a formal way?”

• Listen for responses that include: “use domain-specific words (not casual or slang),” “use facts and details,” and “quote Rachel Carson.”

• Ask students what transitions were used to begin the paragraphs and to put the information in order. Responses should include: “In the 1940s,” “By 1960,” “Over time,” “It was then,” “After a while,” and “Then.”

• Point out that referring to dates and time is a way to transition or show a shift in what’s happening over time.

• Add those transitions to the Transitions anchor chart.

B. Peer Critique: Identifying and Revising for Formal vs. Informal English and Transition Words
(20 minutes)

• Tell students they will now have the opportunity to reread the first drafts of their position papers. Explain that the work they just did with transitions and informal and formal English will help them notice ways to make changes with transitions and formal English to strengthen their paper.

• Distribute and display the Revision Checklist as you introduce it.

• Point out that there is a checklist for two reviewers. Ask students what role they are. Explain that author and editor are academic terms that are appropriate for the position paper work they are doing. Ask students what else they notice about those words. Listen for students to say both words have the same ending or suffix, “or.” Explain that “or” is often used at the end of a word that describes the professional role of a person. Ask for other examples with that ending. Possible responses could be doctor, professor, and actor.

• During this Work Time, you may want to pull a small group of students who would benefit from direct editing feedback and instruction.
Work Time (continued)

- Explain that in Lesson 1 they looked at the same four revision categories on the **Position Paper Argument Rubric**.

- Tell students that when they read, critique, and revise their own paper and a peer’s paper, they will look for criteria listed in the last two categories, “Coherence, Organization, and Style” and “Writing Conventions.”

- Call on a student volunteer to read the criteria listed under “Coherence, Organization, and Style” and “Writing Conventions.” Tell students that criteria include formal English and transition words. Remind students to look for at least two domain-specific words in each paragraph.

- Explain that whenever they look for ways to improve writing, they should make writing convention corrections such as spelling and capitalization.

- Tell students that authors should read their drafts first and then complete the checklist indicating criteria that are strong and criteria that should be revised. Authors should also make those revisions on their drafts using a **different colored pencil** than the one with which they wrote their first draft.

- When authors finish their revisions, they should exchange their drafts with their peer editors. Editors will read and critique using the checklist. Editors do not make changes on the draft. However, editors are encouraged to lightly circle words needing spelling corrections.

- Remind students that this is quiet work time for concentrating on their revisions and providing quality editing to their peers.

- Circulate and provide support. Ask probing questions about their use of transitions, formal English, and writing conventions.

---

<table>
<thead>
<tr>
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</table>
Closing and Assessment

A. Message Translation Using Slang, Casual, and Formal Language (5 minutes)

- Invite students to sit in triads.
- Tell students that after comparing informal and formal English, looking at a variety of transitions, and using those skills to make revisions to their drafts, they will now have an opportunity to create their own informal and formal messages.
- Explain that when we interact with people in different settings, we use different ways to greet people and say goodbye, sometimes informally, sometimes formally.
- Ask triad partners to:
  * “Create an informal way and a formal way to greet someone.”
  * “Create an informal way and a formal way to say goodbye.”
  * “Decide what setting the greetings and goodbyes would be appropriate most for.”
- As triad partners, have students demonstrate how to express their informal and formal messages.
- Encourage students to use transitions as they move through their demonstrations.

Homework

- Read your independent reading book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

Meeting Students’ Needs

- Consider grouping ELL students or students with similar cultural or ethnic backgrounds to partner and model greetings and goodbyes.
## Transitions—Words that Connect Ideas Reference Sheet

<table>
<thead>
<tr>
<th>First</th>
<th>Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>One piece of evidence that points to this is</td>
<td>Another good example is</td>
</tr>
<tr>
<td>To begin</td>
<td>Secondly</td>
</tr>
<tr>
<td>Initially</td>
<td>Furthermore</td>
</tr>
<tr>
<td>One good example is</td>
<td>Another way to look at this is through</td>
</tr>
<tr>
<td>One reason is</td>
<td>Another example</td>
</tr>
<tr>
<td>One way this is true</td>
<td>Another example that helps support this is</td>
</tr>
<tr>
<td>It is important to note that</td>
<td>Another indication of this is</td>
</tr>
<tr>
<td>One way to look at this is through</td>
<td>Still</td>
</tr>
<tr>
<td>One notable example is</td>
<td>Even so</td>
</tr>
<tr>
<td>One way this is true</td>
<td>In the same way</td>
</tr>
<tr>
<td>One reason this is important</td>
<td>Next</td>
</tr>
<tr>
<td>A great example is</td>
<td>On the other hand</td>
</tr>
<tr>
<td>One example that stands out is</td>
<td>Even more compelling is</td>
</tr>
<tr>
<td>The best place to start is with</td>
<td>Another example that stands out is</td>
</tr>
<tr>
<td>This can first be seen when</td>
<td>Similarly</td>
</tr>
<tr>
<td>For example</td>
<td>Likewise</td>
</tr>
<tr>
<td>For instance</td>
<td>Along with that, there is</td>
</tr>
<tr>
<td>This can be clearly seen first of all when</td>
<td>Moreover</td>
</tr>
<tr>
<td></td>
<td>In addition</td>
</tr>
<tr>
<td></td>
<td>Also</td>
</tr>
<tr>
<td></td>
<td>In the same light</td>
</tr>
<tr>
<td></td>
<td>Even more interesting is</td>
</tr>
<tr>
<td></td>
<td>An even better example of this is</td>
</tr>
<tr>
<td></td>
<td>An additional fact is</td>
</tr>
<tr>
<td></td>
<td>Another strong indication was when</td>
</tr>
</tbody>
</table>
### Transitions—Words that Connect Ideas Reference Sheet

<table>
<thead>
<tr>
<th>Third or Final</th>
<th>In Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lastly</td>
<td>So, it is clear to see that</td>
</tr>
<tr>
<td>A final great example</td>
<td>Accordingly</td>
</tr>
<tr>
<td>The final piece of evidence is</td>
<td>In summary</td>
</tr>
<tr>
<td>The last example that suggests this is</td>
<td>Consequently</td>
</tr>
<tr>
<td>Yet the best reason is</td>
<td>Thus</td>
</tr>
<tr>
<td>The final indication of this is</td>
<td>As a result</td>
</tr>
<tr>
<td>Most compelling is</td>
<td>In short</td>
</tr>
<tr>
<td>Even so</td>
<td>Therefore</td>
</tr>
<tr>
<td>The best and final reason is</td>
<td>When looking at the facts, it is evident that</td>
</tr>
<tr>
<td>The most important reason is</td>
<td>The evidence clearly points</td>
</tr>
<tr>
<td>On top of all that</td>
<td>All of this together means</td>
</tr>
<tr>
<td>The final example to note</td>
<td>With all of this</td>
</tr>
<tr>
<td>The last example that stands out is</td>
<td>The three examples, … , prove that</td>
</tr>
<tr>
<td>Most importantly</td>
<td>And so therefore</td>
</tr>
<tr>
<td>Accordingly</td>
<td>For all of these reasons, one can see that</td>
</tr>
<tr>
<td>Moreover</td>
<td>With all of this in mind</td>
</tr>
<tr>
<td>Adding to those</td>
<td>Due to all of these reasons</td>
</tr>
<tr>
<td>In addition to those</td>
<td>Together</td>
</tr>
<tr>
<td>Of course</td>
<td>One can see that</td>
</tr>
<tr>
<td>But most conclusive is</td>
<td>The evidence is clear</td>
</tr>
<tr>
<td>In the same light</td>
<td>And so it is</td>
</tr>
<tr>
<td>An even better example of this is</td>
<td>Truly</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Text, Email, or Letter?

<table>
<thead>
<tr>
<th>Message</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>whuz up, bud</td>
<td></td>
</tr>
<tr>
<td>□ Text</td>
<td></td>
</tr>
<tr>
<td>□ Email</td>
<td></td>
</tr>
<tr>
<td>□ Letter</td>
<td></td>
</tr>
<tr>
<td>Hey, Buddy! Just checking to see what you’re up to.</td>
<td></td>
</tr>
<tr>
<td>□ Text</td>
<td></td>
</tr>
<tr>
<td>□ Email</td>
<td></td>
</tr>
<tr>
<td>□ Letter</td>
<td></td>
</tr>
<tr>
<td>Dear Son,</td>
<td></td>
</tr>
<tr>
<td>You have been in my thoughts. I’m wondering what activities you are</td>
<td></td>
</tr>
<tr>
<td>involved with. Please write or call.</td>
<td></td>
</tr>
<tr>
<td>□ Text</td>
<td></td>
</tr>
<tr>
<td>□ Email</td>
<td></td>
</tr>
<tr>
<td>□ Letter</td>
<td></td>
</tr>
</tbody>
</table>
## Revision Checklist

**Author:**

**Peer Editor:**

**Date:**

| Title: |  |

| Claim and Reasons |  |
| Introduces topic |  |
| States claim |  |
| Supporting reasons |  |

| Command of Evidence |  |
| Develops argument with evidence |  |
| Varied evidence (different kinds) |  |
| Evidence supports reasons |  |

| Coherence, Organization, and Style |  |
| Includes transitions |  |
| In logical order |  |
| Uses formal language |  |
| Uses domain-specific language |  |

| Writing Conventions |  |
| Spelling |  |
| Capitalization |  |
| Complete sentences |  |
| Correct word choice (usage) |  |

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Passage 1
In the 1940s, the chemical industry developed pesticides that killed harmful insects and saved farmers and gardeners time and money. Over time, however, some of these chemicals hurt not only insects but also birds, mammals, and fish. Some scientists wrote about the dangers of pesticides, but few people paid attention.

By 1960, tens of thousands of fish, birds, and mammals had died. It was then that Rachel Carson, a marine biologist who was interested in nature, wrote Silent Spring. She did not oppose the use of all pesticides. But she wrote, “We have allowed these chemicals to be used with little or no advance investigation of their effect on the soil, water, wildlife, and man himself.”

Passage 2
In the 1940s, some businesses made chemicals that helped farmers and gardeners. After a while, some of these chemicals hurt not only insects, but some other animals too. Some scientists wrote about the dangers of the chemicals, but not a lot of people paid attention.

By 1960, lots of animals died. Then a scientist named Rachel Carson, who was a nature nut, wrote Silent Spring. She wasn’t totally against using all the chemicals. But she was pretty bent out of shape about them and thought people should check it out more before using them.

Which passage was formal? Passage 1 _____ Passage 2 _____

Reasons why:
Formal or Informal—Can You Guess?

Reasons why, cont.:
End of Unit Assessment: 
Revising and Publishing

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)
I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6)
I can use resources to build my vocabulary. (L.6.6)

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can revise my position paper to include appropriate vocabulary.</td>
<td>• End of Unit 3 Assessment: Final draft of the position paper</td>
</tr>
<tr>
<td>• I can publish my position paper.</td>
<td></td>
</tr>
<tr>
<td>• I can self-assess my position paper against the Position Paper Argument Rubric.</td>
<td></td>
</tr>
</tbody>
</table>
## Agenda

1. Opening  
   A. Independent Reading Review (8 minutes)  
   B. Unpacking Learning Targets (2 minutes)  
2. Work Time  
   A. Peer Critique: Revision for Vocabulary (10 minutes)  
   B. Completing Revisions and Publishing (20 minutes)  
3. Closing and Assessment  
   A. Self-Assessing against the Position Paper Argument Rubric (5 minutes)  
4. Homework  
   A. Read in your independent book for 30 minutes.  
      Complete the Reading Tracker and Reviewer’s Notes.

## Teaching Notes

- In Lessons 5 and 6, students completed the first draft of their position paper and received peer and teacher feedback.  
- In this lesson, students review the third row of the Position Paper Argument Rubric, focusing on vocabulary. Students define stylistically sophisticated language, domain-specific vocabulary, and a notable sense of voice to gain an understanding of the rubric. Students are asked to compare the difference between a 3 and a 4 on the rubric.  
- After students gain understanding of the rubric, they give partner feedback on the use of vocabulary.  
- Students have time to revise their vocabulary and use supporting resources such as their articles from the research folder, the Word Wall, a dictionary, and a thesaurus.  
- Students then write their final, best version of their drafts and self-assess them against the Position Paper Argument Rubric.  
- If technology is available, students could be given the option to word process their position paper.  
- In advance:  
  - Place the Entrance Ticket: Plot Development on students’ desks or table area.  
  - Gather dictionaries and thesauruses.  
  - Consider and determine student partnerships for a vocabulary peer critique.  
- Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>revise, appropriate vocabulary, publish, grade-appropriate, stylistically</td>
<td>• Entrance Ticket: Plot Development (one per student)</td>
</tr>
<tr>
<td>sophisticated language, domain-specific vocabulary, voice</td>
<td>• Equity sticks</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Position Paper Argument Rubric (from Lesson 1; two per student, one to display)</td>
</tr>
<tr>
<td></td>
<td>• Research folder (from previous lessons)</td>
</tr>
<tr>
<td></td>
<td>• Dictionaries (one per partner group)</td>
</tr>
<tr>
<td></td>
<td>• Thesauruses (one per partner group)</td>
</tr>
<tr>
<td></td>
<td>• Position Paper Vocabulary Criteria (one to display)</td>
</tr>
<tr>
<td></td>
<td>• Vocabulary Feedback (one per student)</td>
</tr>
<tr>
<td></td>
<td>• End of Unit 3 Assessment: Position Paper Prompt (same as for the Mid-Unit 3 Assessment in</td>
</tr>
<tr>
<td></td>
<td>Lesson 5; one for display)</td>
</tr>
<tr>
<td></td>
<td>• Lined paper</td>
</tr>
</tbody>
</table>
### Opening

**A. Independent Reading Review (8 minutes)**
- Greet students at the door. Ask them to sit in their reading groups. Explain that they should take a few minutes to fill out the Entrance Ticket: Plot Development and prepare to share their book with group members.
- Circulate to help students who are struggling to understand the plot in their book.
- Refocus the class.
- Invite students to share the plot development of their book with their reading group members.
- Reconvene the class. Tell students that plot develops out of conflict, either external, such as a person or an event that starts a series of actions the main character undertakes, or internal, driven by another character’s wants and/or needs. How that character, and others, makes choices and responds to situations determines the course of events or the plot.
- Commend students for participating in sharing the plot of their book.

**B. Unpacking Learning Targets (2 minutes)**
- Invite students to read the learning targets with you:
  * “I can revise my position paper to include appropriate vocabulary.”
  * “I can publish my position paper.”
  * “I can self-assess my position paper against the Position Paper Argument Rubric.”
- As the targets are read, underline revise, appropriate vocabulary, and publish.
- Invite reading groups to discuss what each of the three underlined terms means.
- Cold call students using equity sticks to share their responses.
- Listen for them to say things such as: “To revise means to review and make changes in our draft,” “Appropriate vocabulary means words that are domain-specific and that provide clarity to our topic,” and “To publish means to release a piece of writing for others to read.”
- Ask students to Think-Pair-Share:
  * “What do you think our tasks will be for this lesson?”

### Meeting Students’ Needs
- Independent reading reviews hold all students accountable for doing their independent reading homework.
- Learning targets are a research-based strategy that helps all students, especially challenged learners.
- Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
### Opening

- Listen for students to say things such as: “Our tasks will be to revise our first draft, specifically looking at vocabulary. Peers will provide feedback on vocabulary on our first draft. We will want to include domain-specific vocabulary and look at word choice throughout our five paragraphs. Also, our task is to complete a best version of our position paper and to self-assess using the Position Paper Argument Rubric.”

### Meeting Students’ Needs

### Work Time

#### A. Peer Critique: Revision for Vocabulary (10 minutes)

- Form student partnerships.
- Using a **document camera**, display the **Position Paper Argument Rubric**. Point to Row 3: “Coherence, Organization, and Style.” Explain to students that they will be providing vocabulary feedback on the position paper to a peer. Read the criterion for this category: “The extent to which the essay logically organizes complex ideas, concepts, and information using formal style and precise language.”
- Invite students to read the rubric criteria for vocabulary. This would be the second item in this row in the 4 and 3 columns.
- Ask students to consider the difference between a 3 and 4 with regard to vocabulary. Ask them to read silently in their heads as you read the 3: “Establish and maintain a formal style using precise language and domain-specific vocabulary.” Then read the 4: “Establish and maintain grade-appropriate, stylistically sophisticated language, and domain-specific vocabulary with a notable sense of voice.” Underline “grade-appropriate, stylistically sophisticated language, and domain-specific vocabulary with a notable sense of voice” on the rubric.
- Invite students to Think-Pair-Share:
  * “What does ‘grade-appropriate’ language mean?”
  * “What does ‘stylistically sophisticated’ language mean?”
  * “What does ‘notable sense of voice’ mean?”
- Asking students to identify challenging vocabulary helps them to monitor their understanding of a complex text.
- To further support ELLs, consider providing definitions of challenging vocabulary in students’ home language. Resources such as Google Translate and bilingual translation dictionaries can assist with one-word translation.
Work Time (continued)

- Using equity sticks, call on students. Listen for: “Grade-appropriate language means we want to use vocabulary we learned when researching our topic—the domain-specific vocabulary,” “Stylistically sophisticated language means we want to use vocabulary that is intellectually appealing to our reader,” and “A notable sense of voice means the writing is written with emotion. The words take a stand and speak for themselves. The writing moves the reader.”

- Ask students to Think-Pair-Share:
  * “What resources do we have that could help us revise our vocabulary?”

- Use equity sticks to call on students. Listen for: “The Word Wall and our research folder articles can be used to add domain-specific vocabulary. Dictionaries and thesauruses can be used to help with word choice.” Distribute a dictionary and thesaurus to each partner group.

- Using the document camera, display the **Position Paper Vocabulary Criteria**. Read aloud the criteria to students. Ask students to reference these criteria as they consider revisions.

- Hand back students’ draft papers. Ask them to look over the comments to make sure they understand them. Invite students to raise their hands if they have questions.

- Remind students of the guidelines for a peer critique: Be kind, be specific, be helpful, and participate.

- Distribute the **Vocabulary Feedback** form. Invite students to notice a “star” and a “next step” for their partner in revising vocabulary.

- Ask students to exchange position papers. Explain that writers will have time to make revisions after the peer critique.

- Pause to give partners time to look at vocabulary and complete the Vocabulary Feedback form.

- Circulate to support students with questions on critiquing vocabulary.

- Refocus the class.

- Invite partners to give the position paper and Vocabulary Feedback form to the writer.

- Pause to give writers time to read the feedback and make changes to their draft writing.

- Praise writers for their willingness to improve their vocabulary by receiving partner feedback and acknowledge partners for using the criteria to guide their stars and next steps.
Work Time (continued)

B. Completing Revisions and Publishing (20 minutes)

- Display the **End of Unit 3 Assessment prompt** where all students can see it. Read this prompt as students read along.
- Point out that the actual writing prompt is exactly the same as for their Mid-Unit 3 Assessment. Tell students that you are showing this End of Unit 3 Assessment prompt again simply to clarify the expectations.
- Ask students if they have any clarifying questions about what is expected of them in this published position paper.
- Give students specific positive praise on actions you have observed throughout the writing process: “I have been so pleased to see many of you revising your claim and supporting evidence, planning your transitions for each paragraph, and improving your vocabulary for clarity and voice.” Tell them that they are now at the end of the writing process and are going to write a final, best version of their position paper.
- Remind students that because this is an assessment, they will write their final draft version of their position paper independently. Inform them that they can use their resources and peer and teacher feedback forms as they prepare their final draft. Distribute **lined paper** and ask them to begin. Circulate to observe.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consider using a timer to help students set goals during this Work Time.</td>
</tr>
</tbody>
</table>

Closing and Assessment

A. Self-Assessing against the Position Paper Argument Rubric (5 minutes)

- Distribute a new Position Paper Argument Rubric to students for self-assessing their position paper. Invite them to “think like the teacher” and to go through each row of the rubric highlighting/underlining in the column where they think their position paper fits best.
- Collect students’ final position papers, self-assessments, drafts, and various forms on which peers have provided critique.
- Congratulate and celebrate students’ work.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If students need more time to finish their final draft, consider allowing them to finish at home and turn it in in the following lesson.</td>
</tr>
</tbody>
</table>

Homework

- Read in your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
Entrance Ticket: Plot Development

Plot: a series of events in the story that serve to move the story from its beginning through its climax, or turning point, and to a resolution of its conflicts. Plot is why the story happens and why the main character learns or grows, or begins or chooses something.

Explain the plot development of your novel thus far. Choose three to five events in the story that move the story toward the climax.
Position Paper Vocabulary Criteria

1. Grade-appropriate vocabulary
2. Stylistically sophisticated language (intellectually appealing)
3. Domain-specific (10+ vocabulary words)
4. Vocabulary with a notable sense of voice (words take a stand and speak for themselves)
Vocabulary Feedback

Name: ____________________________

Partner’s Name: ____________________

Date: ________________________________

1. Grade-appropriate vocabulary
   Star: ____________________________
   Next Step: _______________________

2. Stylistically sophisticated language (intellectually appealing)
   Star: ____________________________
   Next Step: _______________________

3. Domain-specific (10+ vocabulary words)
   Star: ____________________________
   Next Step: _______________________

4. Vocabulary with a notable sense of voice (words take a stand and speak for themselves)
   Star: ____________________________
   Next Step: _______________________

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NYS Common Core ELA Curriculum • G6:M4:U3:L7 • November 2013 • 11
End of Unit 3 Assessment: Position Paper Prompt

**Learning Targets:**
- With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5)
- I can identify when Standard English is and isn’t used. (L.6.1e)
- I can convert language into Standard English. (L.6.1e)
- I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6)
- I can use resources to build my vocabulary. (L.6.6)

**Directions:**
- Using the feedback you have received from both your teacher and peers, as well as the lesson you received on the use of Standard English in writing, revise your position paper to create a final published version.
- This should also include intentional use of the vocabulary you have acquired throughout the course of your research and study of DDT, its benefits, and its harmful consequences in the natural world.

**Prompt:**
- Do you believe DDT should be used despite its potentially harmful consequences in the natural world?
- Do the benefits of DDT outweigh its harmful consequences?
Completing Reflection: Preparing a Poster for Presentation

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4) |
| With support from peers and adults, I can use a writing process to produce clear and coherent writing. (W.6.5) |

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Process Reflection</td>
</tr>
<tr>
<td>Scientific poster</td>
</tr>
</tbody>
</table>

- I can reflect on the writing process to show how it helps me grow as a writer.
- I can choose evidence and visuals to use in my scientific poster.
## Agenda

1. **Opening**
   - A. Unpacking Learning Targets (2 minutes)

2. **Work Time**
   - A. Reflection on the Writing Process: How Did the Process Improve My Writing? (10 minutes)
   - B. Studying the Model Poster (5 minutes)
   - C. Preparing Poster for Presentation (25 minutes)

3. **Closing and Assessment**
   - A. Reviewing the Scientific Poster Criteria List (3 minutes)

4. **Homework**
   - A. Consider printing and cutting text features for your poster. Read in your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.

## Teaching Notes

- In Lessons 6 and 7, students revised the first draft of their position paper, specifically focusing on formal and informal English, transitions, and appropriate vocabulary. Then a final draft, a best version of their paper, was completed. Students then self-assessed using the Position Paper Argument Rubric. The final paper and self-assessment rubric were collected along with first drafts, peer feedback, and teacher feedback forms.

- In this lesson, students reflect on how following the six steps of the writing process helped improve their writing. They consider “stars” and “next steps” in the writing process and set a goal.

- Also in this lesson, students draft a plan for their scientific poster for a hosted Gallery Walk in Lesson 10. Students look at a model and criteria list and consider what to include on their poster. Possible criteria include: their claim and three reasons with three pieces of supporting evidence, and text features such as photographs, graphics, charts, tables, part of their Cascading Consequences chart from Unit 2, and part of their Stakeholders chart from Unit 2.

- Students need to see the poster board size that they will use. Consider what size makes the most sense to display your students’ ideas, as well as the dimensions of your classroom walls.

- Students are given time at the end of the lesson to use the Scientific Poster Criteria Checklist to consider what they may want to do at home to prepare for poster work time in Lesson 9.

- In advance: Consider providing other layout and format models of science posters for students to use.

- Post: Learning targets.
<table>
<thead>
<tr>
<th><strong>Lesson Vocabulary</strong></th>
<th><strong>Materials</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>writing process, visuals, scientific poster</td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Writing Process Reflection (one per student, one to display)</td>
</tr>
<tr>
<td></td>
<td>• Scientific poster model (see Teaching Note; one per student, one to display)</td>
</tr>
<tr>
<td></td>
<td>• Scientific Poster Criteria Checklist (one per student, one to display)</td>
</tr>
<tr>
<td></td>
<td>• Blank poster (one for display)</td>
</tr>
<tr>
<td></td>
<td>• Typing paper or graph paper (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Poster board (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Ruler (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Pencil (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Fine-tip black marker (one per student)</td>
</tr>
</tbody>
</table>
### Opening

**A. Unpacking Learning Targets (2 minutes)**

- Invite two students to read aloud the learning targets as the class reads along.
  - “I can reflect on the writing process to show how it helps me grow as a writer.”
  - “I can choose evidence and visuals to use in my scientific poster.”
- Ask students to Think-Pair-Share:
  - “What are the six steps of the writing process?”
- Cold call students. Listen for: “prewrite, plan, draft, revise, edit and proofread, and share.” Explain to students that they will get a chance to reflect on the six steps in this lesson.
- Ask students to Think-Pair-Share:
  - “What are visuals, and how would they enhance a scientific poster?”
- Cold call students. Listen for: “Visuals are text features that produce mental images of ideas. They would enhance a scientific poster by clarifying the meaning of a science concept and would help create emotion about the topic.”

### Meeting Students’ Needs

- Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity.
- Discussing and clarifying the language of the learning targets helps build academic vocabulary.
### Work Time

#### A. Reflection on the Writing Process: How Did the Process Improve My Writing? (10 minutes)

- Remind students that successful writers read great writing and ask for feedback from people who read a lot. Share that writers also use the writing process to improve their work. Tell students they will be given an opportunity today to reflect on the writing process used to write their position paper.

- Using a **document camera**, display the **Writing Process Reflection**. Also, distribute the reflection to students.

- Ask students to think about each of the six steps of the writing process. Call attention to Questions 7 and 8. Explain these two questions. Ask students to think about one step of the writing process that helped them improve their position paper, and also to think about a next step and setting a goal for the next time they write.

- Pause to give students time to reflect and write down their thoughts.

- Circulate to support students who need help identifying their stars and next steps.

- Refocus the whole class.

- Commend students for taking this time to reflect and look for ways to improve not only their writing but their writing process as well. Explain that to become a better writer, it is important to persevere. Writing is a skill, and to get better one must practice.

### Meeting Students’ Needs

- Reflecting on the six steps of the writing process helps all students to think about their next steps to improve their writing.
### B. Studying the Model Poster (5 minutes)

- Using a document camera, display the **scientific poster model**. Explain to students that their performance task for Unit 3 is a scientific poster. Tell students the model is a possible option to consider. Distribute a copy of the poster model to students. Let them know that the scientific poster they create during the next two lessons will be shared with an audience in Lesson 10.

- Tell students posters are a key component of communicating science and can be an important element of a scientific career. Posters offer a different medium from that of an oral presentation or published paper. A scientific poster provides a snapshot of the researcher's work.

- Explain that there are several points to keep in mind when designing a scientific poster. You need to:
  - Define the poster’s purpose. The purpose of the poster is to share a summary of your work with an audience and engage the viewer to have a dialogue or encourage the viewer to want to learn more about the issue or topic.
  - Sell your work. Your work or research has focused on a question. The focus of your poster is on answering the question in a “snapshot.”
  - Create an important title. It should be short, sharp, and compelling.
  - Follow good writing rules.
  - Plan the layout and format. Know the amount of space for sharing your work.
  - Share concise content. Include text and text features.
  - Give the poster your personality.

- Using the document camera, display the **Scientific Poster Criteria Checklist**. Read aloud the criteria as students read along silently.

- Tell students they first want to decide what to include on their poster. Then they need to plan the format and layout. Show students a **blank poster** so they can see the amount of space they must fill.

### Meeting Students’ Needs

- When reviewing the graphic organizers or recording forms, consider using a document camera to visually display the document for students who struggle with auditory processing.

- Providing models of expected work supports all learners but especially supports challenged learners.
### Work Time (continued)

**C. Preparing Poster for Presentation (25 minutes)**

- Distribute a copy of the [Scientific Poster Criteria Checklist](#) and a blank sheet of **typing paper or graph paper**. Inform students that the blank paper should be used to draft a plan of the layout of their scientific poster. Ask them to reference the checklist as they consider their poster design. This will provide information that should be included.

- Tell students to show you their plan as they finish. Give suggestions, if needed, and hand them a **poster board** to begin their title. Before they write the title, remind them to use a **ruler** to create a draft line in **pencil** and then write the title. After the title is finished, ask them to use a **fine-tip black marker** to outline the letters. After the title has been outlined, tell students to carefully erase the draft line.

- Circulate and support students who need help with content and formatting their science poster.

- Refocus whole group.

- Tell students this is an opportunity for them to be creative and share their knowledge and position on a world issue.

- Commend them on their planning effort, and ask them to be prepared for their work in Lesson 9.

### Meeting Students’ Needs

- Many students may benefit from having the time available for the Work Time via a timer or stopwatch.

### Closing and Assessment

**A. Reviewing the Scientific Poster Criteria Checklist (3 minutes)**

- Invite students to use the Scientific Poster Criteria Checklist to plan for Work Time in Lesson 9. Explain they will have 35 minutes to prepare a final poster in that lesson. Ask them to check off criteria they completed today.

- Suggest that students print and cut out their photos at home to be able to maximize their time in the next lesson.

### Homework

- Consider printing and cutting text features for your poster. Read in your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
Read the six steps of the writing process. Identify the steps that are STARS and the steps that are NEXT STEPS. Write STAR or NEXT STEP with a reason on the line provided.

1. Prewrite (understand the purpose, study the issue, record evidence from credible sources)

2. Plan (organize ideas, create a prewriting plan, support claim with clear reasons and evidence)

3. Draft (write ideas in sentences/paragraphs, write first draft)

4. Revise (improve ideas, add hook, transitions, domain-specific vocabulary, change order of reasons and evidence, clarify or delete evidence)

5. Edit and proofread (check for errors in grammar, spelling, punctuation, and capitalization)

6. Share (present your work, show your work to an audience)
Other Thoughts:
7. How has following the steps in the writing process helped you improve your writing?

8. Share an important next step that you want to take as a writer. Explain how you will accomplish this.
Do the Benefits of DDT Outweigh Its Harmful Consequences?

Claim is stated.

- Reason
- Reason
- Reason

- Picture

- Evidence
- Evidence
- Evidence

- Picture
- Picture
Scientific Poster Criteria Checklist

Guiding question as basis for title

- “Do the benefits of DDT outweigh its harmful consequences?”

Introduction

- Claim or position.

Three reasons

- Arranged below the claim
- Placed in same order as body paragraphs
- Arrows or lines to connect reasons to claim
- Words or phrases, not complete sentences

Evidence—facts, statistics, quotes, story

- Aligned with each reason it supports
- Linked or connected with lines or arrows
- Facts and statistics not in complete sentence
- Quotes—use quotation marks at beginning and end of quote
- Story—summarized in complete sentences

Conclusion

- Claim restated in a different way
- Complete sentence
- Could be expressed as clincher
Scientific Poster Criteria Checklist

Possible text features to use as visuals

- Photographs
- Graphs, charts, tables
- Drawings
- Part of your Cascading Consequences chart
- Part of your Stakeholders chart
- Sidebar
- Large font
- Captions
Grade 6: Module 4: Unit 3: Lesson 9
Finishing Poster and Preparing for Gallery Walk
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)
With support from peers and adults, I can use a writing process to produce clear and coherent writing (W.6.5)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can complete a scientific poster for the hosted Gallery Walk.</td>
<td>• Scientific poster</td>
</tr>
<tr>
<td>• I can practice using formal English to present my research.</td>
<td></td>
</tr>
</tbody>
</table>

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### Agenda

1. **Opening**  
   A. Unpacking Learning Targets (2 minutes)
2. **Work Time**  
   A. Completing Poster for Presentation (33 minutes)  
   B. Partner Practice: Preparing for the Hosted Gallery Walk (5 minutes)
3. **Closing and Assessment**  
   A. Checklist (5 minutes)
4. **Homework**  
   A. Read in your independent book for 30 minutes.  
   Complete the Reading Tracker and Reviewer’s Notes.  
   Complete your scientific poster for the hosted Gallery Walk in the next lesson.

### Teaching Notes

- In Lesson 8, students prepared drafts for their scientific poster. They have determined how their position will be introduced, how the reasons and evidence will be expressed and displayed, and how the conclusion will be expressed. Students have also selected visuals to support their claim.
- In this lesson, students use their poster drafts, prepared text, and selected graphics to complete their final scientific poster for the hosted Gallery Walk in Lesson 10.
- Have students choose the most valuable information first and place it on the poster. Graphics or text features can be added next.
- If students copy or cut text features (e.g., photographs) from an article, they should cite sources at the bottom. Remind students that it is important to give credit where credit is due.
- In advance:
  - Have poster materials gathered and set out for distribution.
  - It may be beneficial to prepare pre-cut or pre-draw shapes—rectangles, squares, circles, and ovals—for the text students will use.
  - If technology is available, make arrangements for access and prepare directions.
  - Determine the hosted Gallery Walk area and the poster display arrangement. Have materials available for displaying finished scientific posters.
- Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>scientific poster</td>
<td>• Research folder (from previous lessons)</td>
</tr>
<tr>
<td></td>
<td>• Scientific Poster Criteria Checklist (from Lesson 8; students’ own copies)</td>
</tr>
<tr>
<td></td>
<td>• Drafts of poster (completed in class or for homework)</td>
</tr>
<tr>
<td></td>
<td>• Pictures, images, text features</td>
</tr>
<tr>
<td></td>
<td>• 11” x 17” paper or poster board (one per student, extra for possible replacement)</td>
</tr>
<tr>
<td></td>
<td>• Rulers (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Glue sticks (one per student)</td>
</tr>
<tr>
<td></td>
<td>• Colored pencils and/or markers</td>
</tr>
<tr>
<td></td>
<td>• Scissors</td>
</tr>
<tr>
<td></td>
<td>• Pencils</td>
</tr>
<tr>
<td></td>
<td>• Fine-tip black marker</td>
</tr>
</tbody>
</table>
### Opening

#### A. Unpacking Learning Targets (2 minutes)
- Invite students to read the learning targets along with you:
  - “I can complete a scientific poster for the hosted Gallery Walk.”
  - “I can practice using formal English to present my research.”
- Tell students that the scientific posters they will create today are important for expressing their position on the guiding question: “Do the benefits of DDT outweigh its harmful consequences?” Displaying their posters and formally presenting their research is an opportunity to convey their position in a way that captures the attention and interest of those who look and listen.
- Explain that the hosted Gallery Walk is an opportunity for the entire class to create a formal, official event as both presenters and viewers/listeners.

### Meeting Students’ Needs
### Work Time

#### A. Completing Poster for Presentation (33 minutes)

- Tell students to gather the following materials:
  - Research folder
  - Scientific Poster Criteria Checklist
  - Draft of poster
  - Pictures, images, text features

- Explain that they will have 35 minutes to create their scientific poster. This is independent work time in which they will use the draft they created as a guide for the layout of their poster.

- Tell students they should also use the Scientific Poster Criteria Checklist as a guide for arranging their title, introduction, reasons, evidence, and conclusion in logical order and for making sure all the features of the poster have been included.

- Advise students to write text with a **pencil** first. They should use a **fine-tip black marker** after they have reviewed their writing.

- Suggest that students lay out all features first before attaching with the use of **glue sticks**.

- Suggest that students use **rulers** and lightly drawn guidelines to help align work neatly. They should erase light pencil lines when they are finished attaching the pieces of their display.

- Ask students to have the following materials as they begin:
  - 11" x 17" paper or poster board
  - Rulers
  - Glue sticks
  - Colored pencils and/or markers
  - Scissors
  - Pencils
  - Fine-tip black marker

- Circulate and offer support.

### Meeting Students’ Needs

- Students may benefit from pre-cut or pre-drawn shapes such as rectangles, squares, circles, and ovals for adding text they will use.
### Work Time (continued)

#### B. Partner Practice: Preparing for the Hosted Gallery Walk (5 minutes)
- Direct students to work with a partner to display and share their poster with each other.
- Tell students to practice by using clear voices and direct eye contact.
- Tell students to stand next to their poster as they present.
- Ask them to use formal language as they:
  - Welcome their listener/viewer
  - Share their claim
  - Explain a reason and some evidence that brought them to their position
  - Point out illustrations, graphs or charts, or other text features used.
  - Ask if their listener/viewer has any questions
  - Thank their listener/viewer
- Encourage students to practice their presentation at home.

### Meeting Students' Needs
- Select students may benefit from sharing their poster and presentation with the teacher.

### Closing and Assessment

#### A. Checklist (5 minutes)
- Compliment students on the work they have done to create their scientific poster.
- Tell students to use their Scientific Poster Criteria Checklist to review their poster: Check off what is completed; what they have not done, they should complete at home.

### Homework
- Read in your independent book for 30 minutes. Complete the Reading Tracker and Reviewer’s Notes.
- Complete your scientific poster for the hosted Gallery Walk in the next lesson.

There are no new supporting materials for this lesson.
Performance Task: Hosted Gallery Walk of Scientific Posters
Performance Task: Hosted Gallery Walk of Scientific Posters

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.6.4)
I can accurately use sixth-grade academic vocabulary to express my ideas. (L.6.6)

Supporting Learning Target

• I can use a scientific poster to share my research with my peers.

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Scientific posters</td>
</tr>
</tbody>
</table>

Agenda

1. Opening
   A. Unpacking the Learning Target (2 minutes)
   B. Preparing for Hosted Gallery Walk (5 minutes)
2. Work Time
   A. Hosted Gallery Walk: Sharing Our Scientific Posters (35 minutes)
3. Closing and Assessment
   A. One-Word Go-around (3 minutes)
4. Homework
   A. Keep reading your independent reading book.

Teaching Notes

• Today is a celebration of all the hard work students have put into their research, their position papers, and their scientific posters.
• Ahead of time, divide your students into two groups. One group will “host” their scientific posters while the other students walk around the “gallery” providing positive feedback. Then they will switch so all students have the opportunity to both host and observe the work of their peers.
• Before students arrive, hang their scientific posters around the room. Consider hanging the posters of students who are not presenting at the same time next to one another. This will allow for students who are presenting to be staggered around the room.
• Post: Learning targets.
Lesson Vocabulary | Materials
--- | ---
 | • Sticky notes (10–15 per student)
 | • Scientific poster (one per student)

Opening

A. Unpacking the Learning Target (2 minutes)
• Read aloud as students read along the learning target:
  * “I can use a scientific poster to share my research with my peers.”
• Ask students to turn and talk about what they are most curious to hear about from their peers’ poster presentations.

Meeting Students’ Needs

B. Preparing for Hosted Gallery Walk (5 minutes)
• Tell students that today they will be “hosts” and “travelers” in a hosted Gallery Walk. Cold call a student to respond to the question:
  * “What does it mean to be a host?”
• Listen for: “It means to have guests at your home or in your class.”
• Tell students that today they will be hosting traveling groups of students at their scientific posters. It will be their job as hosts to tell the travelers their claim, explain some of the evidence that brought them to this claim, and then walk them through the components of their scientific posters, including the charts, diagrams, or illustrations.
A. Hosted Gallery Walk: Sharing Our Scientific Posters (35 minutes)

- Distribute **sticky notes** to each student. Explain that students will use the sticky notes to give positive feedback on one another’s scientific posters; the sticky notes are to be placed on the wall near the poster that the feedback is focused on. Remind students that the Gallery Walk is meant to celebrate all the hard work that they’ve done. Emphasize the importance of giving feedback based on the criteria that students used to create their posters.

- Ask the students who will be “hosting” first to stand next to their **scientific posters**. Remind these students to use clear voices and make eye contact as they present the contents of their posters.

- Consider dividing those students who are observing into small groups. This will reduce the number of times the presenting students must present.

- Remind the students who are “traveling” that when they are at a poster, they should be listening respectfully and considering what positive feedback they will give the presenter. Also remind those students who are “traveling” that they should walk around the room until they have seen the presentations of all their peer’s posters.

- Give students the next 17 to 18 minutes to complete the first round of the hosted Gallery Walk.

- After 17 to 18 minutes, reconvene the whole group. Affirm the positive behaviors you observed during this first half of the Gallery Walk and give any feedback on what behaviors you would like improvement on in the second half.

- Ask the students who were “traveling” to report to their scientific posters.

- Those students who were presenting will now travel around the room individually or in small groups, looking at posters, hearing presentations, and giving positive feedback using their sticky notes.

- Give students the next 17 or 18 minutes to complete the second round of the hosted Gallery Walk.
### Closing and Assessment

**A. One-Word Go-around (3 minutes)**

- Refocus the whole class. Invite students to return to their seats with their posters and the feedback they received on sticky notes, and read over the feedback for 1 minute.
- Ask students to think of one word that represents some aspect of all the work they and their classmates have done during Unit 3.
- Call on one student to start and then go around the room having each student share one word. Feel free to add a word yourself.
- Celebrate!

### Homework

- Keep reading your independent reading book.

There are no new supporting materials for this lesson.