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

I can conduct short research projects to answer a question (including a self-generated question). (W.8.7)

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can use my research to add to the Cascading Consequences chart for Michael Pollan’s hunter-gatherer food chain.</td>
<td>• Team Hunter-Gatherer Food Chain Cascading Consequences charts</td>
</tr>
<tr>
<td>• I can determine the stakeholders affected by the consequences of Michael Pollan’s hunter-gatherer food chain.</td>
<td>• Hunter-Gatherer Stakeholders charts</td>
</tr>
</tbody>
</table>

## Agenda

1. **Opening**
   - A. Unpacking Learning Targets (2 minutes)
2. **Work Time**
   - A. Creating a Team Cascading Consequences Chart (13 minutes)
   - B. Creating a Stakeholders Chart (18 minutes)
3. **Closing and Assessment**
   - A. Considering a Position (12 minutes)
4. **Homework**
   - A. Familiarize yourself with the Taking a Position graphic organizer and be ready to begin work on it in the next class period.

## Teaching Notes

- This is the final lesson in which teams create a Stakeholders chart, so students work on their own to complete their Hunter-Gatherer Stakeholders charts in this lesson.
- This is the last lesson in which students consider consequences and stakeholders of food chains. In the next three lessons, students will be writing a presentation speech to answer the question: Which of Michael Pollan’s four food chains would best feed the United States?
- Post: Learning targets.
## Lesson Vocabulary

- taking a position

## Materials

- Researcher’s notebook (one per student, distributed in Lesson 3)
- Team Hunter-Gatherer Food Chain Cascading Consequences chart (one per team, started in Lesson 12)
- Hunter-Gatherer Food Chain Cascading Consequences chart (for teacher reference, from Lesson 12)
- Stakeholders chart (new; one per student; see Lesson 4)
- Hunter-Gatherer Stakeholders chart (for teacher reference)
- All four of the Cascading Consequences charts and all four of the Stakeholders charts (from Lessons 1–14)
- Taking a Position graphic organizer (one per student)

## Opening

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

- Ask for volunteers to read the learning targets aloud:
  * “I can use my research to add to the Cascading Consequences chart for Michael Pollan’s hunter-gatherer food chain.”
  * “I can determine the stakeholders affected by the consequences of Michael Pollan’s hunter-gatherer food chain.”
- Remind students that a stakeholder is anyone who will be affected by the consequences of the hunter-gatherer food chain.
A. Creating a Team Cascading Consequences Chart (13 minutes)

- Invite students to reread the focus question and the research question. Remind students that the Cascading Consequences chart will help them to answer the essential question because it gives them a greater understanding of all of the consequences of a food chain, which they will need to consider when choosing which food chain they think will best feed the United States.

- Have the students take out their researcher’s notebooks. Explain that they will be sharing the new consequences that they recorded from their research to add to their team Hunter-Gatherer Food Chain Cascading Consequences charts, where possible.

- Remind students that they will take turns reading out new consequences from their reading and discuss with their research teams where to place them on the group chart. Make the suggestion that ALL students in the group read their information BEFORE anything gets added in marker. That way, they can make the best decisions about where things should go (as there will likely be some overlapping information).

- Circulate to support teams as they add to their Cascading Consequences charts. Refer to the Hunter-Gatherer Food Chain Cascading Consequences chart (for teacher reference, from Lesson 12) to guide students in the consequences of the hunter-gatherer food chain and how they are affected.

- Ask students:
  * “What new consequences did you find in your research?”
  * “Where are you going to add them on your team chart? Why?”

Meeting Students’ Needs

- Consider having students use sticky notes to flag evidence they share. Students can flag where evidence might be placed on the chart before actually adding it in marker.
B. Creating a Stakeholders Chart (18 minutes)

- Invite teams to look over the team Cascading Consequences chart to identify the stakeholders affected by the consequences listed. If the stakeholders are listed on the chart, they can underline or circle them; if they are not listed, they can note them next to the consequences.

- Distribute **Stakeholders charts** and invite students to fill out the charts for the hunter-gatherer food chain using their Cascading Consequences charts. They will be filling out their own charts, but can discuss ideas with the team as they work. Remind students that they won’t necessarily agree on all of the answers, so each person should record what they think.

- Circulate to assist students where they need it. Ask students questions to guide their thinking:
  * “What stakeholders are affected by this consequence?”
  * “How are they affected?”

- Refer to the **Hunter-Gatherer Stakeholders chart (for teacher reference)** to guide students in the stakeholders they could include on their chart. Remember that team Cascading Consequence charts may be different to the teacher reference version, so this may cause a difference in stakeholders.

- If time allows, have students pair up with a student from another research team to compare and discuss their Hunter-Gatherer Stakeholders charts. Invite students to adjust their own answers based on the conversation if they want to.
# Closing and Assessment

**A. Considering a Position (12 minutes)**

- Remind students of the question: Which of Michael Pollan’s four food chains would best feed the United States? Emphasize to students that this means they are no longer just thinking about feeding themselves or their family, they are thinking about feeding millions of people.

- Invite teams to get out all four of the Cascading Consequences charts and all four of the Stakeholders charts. Give students time to look over all of those materials and to begin thinking about which of the four chains they think would best feed all the people in the United States.

- Ask students guiding question as they look over their materials to discuss with their teams:
  - “Is it possible for each food chain to feed everyone in the United States?”
  - “Are there any food chains that just won’t work to feed that many people? Why?”

- Refocus students as a group. Ask students to discuss in teams and then to share with the whole group:
  - “What are the pros of the _______ food chain in feeding everyone in the United States?”
  - “What are the cons of the _______ food chain in feeding everyone in the United States?”

- Repeat questioning for each food chain.

- Introduce the “four corners” activity by pointing out the corners of your room and assigning each corner one of the four food chains from *Omnivore’s Dilemma*. Have the students get up and go to the corner of the room that is assigned the food chain they think would best feed the United States.

- Have the students at each corner discuss their number-one reason for choosing that food chain. If there is time, you can have a student from each food chain report out the top reasons why the group they are representing is standing where they are.

## Homework

- Familiarize yourself with the **Taking a Position graphic organizer** and be ready to begin work on it in the next class period.

## Meeting Students’ Needs

- As teams discuss pros and cons to each of the four chains, provide probing questions to have groups deeply consider each side.
**Hunter-Gatherer Stakeholders Chart**

For Teacher Reference

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>How will he/she/it be affected?</th>
<th>Is this a positive or negative consequence?</th>
<th>If the consequence is negative, do you feel it is offset by greater good elsewhere?</th>
<th>How important to you are the interests of this stakeholder?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter-Gatherer</td>
<td>Need to learn skills</td>
<td>Positive</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Have to be careful—can get hurt</td>
<td>Negative</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Animals</td>
<td>Live their lives in the wild</td>
<td>Positive</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Animals</td>
<td>Usually have a quick death</td>
<td>Positive</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hunter-Gatherer</td>
<td>Has a close experience with death of animal</td>
<td>Positive and negative</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. In my opinion, the “best” food chain for feeding the United States is:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. The top three reasons I made this decision are:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. One negative consequence of this food chain is:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evidence from the Cascading Consequences and Stakeholders Charts (to support B and C above):