

9.4.1

Lesson 21

Introduction

In this lesson, students read “Serfs and Sweetness” (pp. 114–118) and “The Sugar Genius” (p. 115), and analyze how the details from these sections of the text refine central ideas from *Sugar Changed the World*. These sections of text outline the impact of mechanized beet sugar production on the need for human labor, and the implications of that shift in production on the slave trade.

Students collaborate in groups as they closely read “Serfs and Sweetness” and “The Sugar Genius.” Then students examine the development and refinement of a central idea by reviewing how ideas woven throughout the book begin to come together in this section. This discussion prepares students for their lesson assessment, which asks them to craft a written response to the following prompt: How do details in this passage shape and refine a central idea of the text?

For homework, students read and answer questions about “The Lawyer” (pp. 118–121).

Standards

Assessed Standard(s)	
RI.9-10.2	Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
Addressed Standard(s)	
L.9-10.4.a, b	<p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases <i>based on grades 9–10 reading and content</i>, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p> <p>b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy).</p>

Assessment

Assessment(s)
<p>Student learning is assessed via a Quick Write activity at the end of the lesson. Students respond to the following prompt, citing textual evidence to support analysis and inferences drawn from the text.</p> <ul style="list-style-type: none"> • How do details in this passage shape and refine a central idea of the text?
High Performance Response(s)
<p>A High Performance Response should:</p> <ul style="list-style-type: none"> • Identify a central idea that emerges (e.g., beet sugar revolutionized sugar production by changing the reliance on slave labor). • Include details that relate to the central idea that was identified (e.g., details about Russia’s role in introducing beets to the sugar trade; the advent of beet sugar and modern farming technology changed Russia’s reliance on serfs as the primary means of farming). • Explain how these details shape and refine the central idea that was identified (e.g., the science and technological advancements that made beet sugar a viable alternative to cane sugar, along with growing abolitionist movements, ultimately rendered slave/plantation labor obsolete).

Vocabulary

Vocabulary to provide directly (will not include extended instruction)
<ul style="list-style-type: none"> • nobles (n.) – people belonging to a privileged social or political class • foster (v.) – to promote the growth or development of (something)
Vocabulary to teach (may include direct word work and/or questions)
<ul style="list-style-type: none"> • czar (n.) – an emperor or king; the ruler of Russia (until 1917) • refining (v.) – bringing to a pure state; freeing from impurities • serf (n.) – an unfree person, especially someone bound to the land of another • inefficient (adj.) – unable to produce desired results without wasting materials, time, or energy • foreshadowing (v.) – showing or indicating in advance

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
<p>Standards & Text:</p> <ul style="list-style-type: none"> Standards: RI.9-10.2, L.9-10.4.a, b Text: “Serfs and Sweetness” (pp. 114–118) and “The Sugar Genius” (p. 115) from <i>Sugar Changed the World</i> <p>Learning Sequence:</p> <ol style="list-style-type: none"> Introduction of Lesson Agenda Homework Accountability Reading and Discussion Quick Write Closing 	<ol style="list-style-type: none"> 5% 10% 70% 10% 5%

Materials

- Student copies of the Short Response Rubric and Checklist (refer to 9.4.1 Lesson 1)

Learning Sequence

How to Use the Learning Sequence	
Symbol	Type of Text & Interpretation of the Symbol
10%	Percentage indicates the percentage of lesson time each activity should take.
no symbol	Plain text indicates teacher action.
	Bold text indicates questions for the teacher to ask students.
	<i>Italicized text indicates a vocabulary word.</i>
▶	Indicates student action(s).
☞	Indicates possible student response(s) to teacher questions.
ⓘ	Indicates instructional notes for the teacher.

Activity 1: Introduction of Lesson Agenda

5%

Begin by reviewing the agenda and the assessed standard for this lesson: RI.9-10.2. In this lesson, students read “Serfs and Sweetness” (pp. 114–118), analyzing the role that beet sugar played in the global sugar trade through an exploration of how details in this passage develop to refine a central idea.

- ▶ Students look at the agenda.

Activity 2: Homework Accountability

10%

Instruct students to talk in pairs about how they applied the focus standard of their choice to their Accountable Independent Reading text. Lead a brief share out on the previous lesson's AIR homework assignment. Select several students (or student pairs) to explain how they applied their focus standard to their AIR text.

- ▶ Students (or student pairs) discuss how they applied their focus standard to their AIR text from the previous lesson's homework.

Activity 3: Reading and Discussion

70%

Instruct students to form groups. Post or project each set of questions below for students to discuss.

Instruct student groups to read from “In the 1800s, the Russian czars controlled the largest empire in the world” to “his freedom from figuring out how to color beet sugar” (pp. 114–117), and answer the following questions before sharing out with the class.

- ① If necessary to support comprehension and fluency, consider using a masterful reading of the focus excerpt for the lesson.
- ① Consider numbering paragraphs for ease of reference.

What comparison do the authors establish in the first paragraph of “Serfs and Sweetness” (pp. 114–116)? What details do the authors provide to support this comparison?

- 🗨 The authors compare the English and the Russians. The English were “organizing against the slave trade” and the Russians, who seemed to be in a “time warp,” were still using “serfs” for a kind of slave labor (p. 116). Although “the Russian czars controlled the largest empire in the world” (p. 114), the authors describe them as being far behind the English, who had progressive ideas about slavery and were using modern technology. Additionally, the authors compare Russia to America. The authors mention Russia did not end serfdom until 1861, only “two years before” Lincoln freed American slaves, and that serfs are described as being “very similar” (p. 116) to slaves.

- ① Consider providing students with the following definition: *serf* means “an unfree person, especially someone bound to the land of another.”
- ① **Differentiation Consideration:** Consider posing the following scaffolding question:

Which word or phrase in context helps you to make meaning of the word *czar*?

💬 “Russian czars controlled the largest empire in the world” suggests nobility and power; czars were political leaders.

① Consider providing students with the following definition: *czar* means “an emperor or king.”

Provide students with the following definition: *nobles* means “people belonging to a privileged social or political class.”

- ▶ Students write the definition of *nobles* on their copy of the text or in a vocabulary journal.

How do authors develop the comparison in paragraph 4 on page 116?

💬 Student responses may include:

- The fact that “the average English person was eating close to ninety pounds of sugar a year, the average Russian person used just eight pounds” indicates that Russian sugar consumption was not nearly as widespread as in Western Europe or the Americas. This propelled the Russian sugar industry to shift from “old-fashioned methods of farming” to “trying out new tools, new equipment, and new ideas about how to improve the soil” (p. 116).
- The Russian nobles lived like people did “in the Age of Honey—sugar was still a luxury taken out only when special guests came to visit” (p. 116).

What claim do the authors make in paragraph 4? What details do the authors provide to support this claim?

💬 The authors claim that “cane sugar had brought millions of Africans into slavery, then helped foster the movement to abolish the slave trade” (p. 116). The authors claim that in order to keep up with the world’s rapidly growing sugar demand, techniques for sugar production had to evolve and develop. The desire to use “modern technology” meant that slave, serf and manual human labor would no longer be needed. The success of beet sugar in Russia was “an example of modern farming that helped convince Russian nobles that it was time to free their millions of serfs” (p. 116). Technological advancements in the production of Russian beet sugar contributed to the end of slavery.

Provide students with the following definition: *foster* means “promoting the growth or development of (something).”

- ▶ Students write the definition of *foster* on their copy of the text or in a vocabulary journal.

Lead a brief whole-class discussion of student responses.

Instruct student groups to read “The Sugar Genius” (p. 115) in their groups and answer the following questions before sharing out with the class.

What familiar words can you identify in the word *refining* that can help you understand its meaning? What other words or phrases from the text can help you make meaning of this word?

☛ *Refining* contains the word *fine* and the prefix *re*, meaning again. The text describes *refining* as involving “one boiling vat after another” (p. 115), which describes a process. Refining cane syrup must mean engaging in a repetitive process in order to make the quality better or finer.

- ① Consider drawing students’ attention to their application of standard L.9-10.4.a, b through the process of using context and word parts to make meaning of a word.
- ① Consider providing students with the following definition: *refining* means “bringing to a pure state; freeing from impurities.”

How does the description of refining cane syrup help you understand the meaning of *inefficient*?

☛ Student responses should include:

- Refining cane sugar is described as a process that is “dangerous.” “Terribly” is an adverb used to qualify just how *inefficient* this process is, so it must be ineffective. *Inefficient* has a similar meaning to ineffective (p. 115).
- The second sentence describes a new way that was “safe” and “reliable” without as much labor. This must mean that the new way proposed a solution to the old, *inefficient* way.
- *Inefficient* is also the opposite of *efficient*. The *in* prefix means “not,” so *inefficient* means “not efficient.”

- ① Consider drawing students’ attention to their application of standard L.9-10.4.a, b through the process of using context and word parts to make meaning of a word.
- ① Consider providing students with the following definition: *inefficient* means “not capable of producing desired results without wasting materials, time, or energy.”

How do Norbert’s experiences reflect the complexities of the “Age of Sugar” (p. 70)?

☛ Norbert “is a perfect example of the changing world of sugar in the 1800s.” Norbert’s father was a wealthy white planter and engineer, and his mother was a free woman of color. Because slavery existed in the Americas but not France, Norbert’s father sent him there to study. Facing troubles in America and conflicts with others claiming his inventions as their own, Norbert “himself was free but had to struggle against prejudice throughout his life” (p. 115).

- ① **Differentiation Consideration:** If students struggle with the understandings above, consider providing the following question:

How do Norbert’s experiences connect to the transition from the Age of Sugar into a new “Age”?

- 🗨️ The shift the authors are making is represented in the new opportunities that were available to Norbert. He was able to attend college in France, permitted by his father and free mother (p. 115).

Why might the authors have placed the “The Sugar Genius” inset in this section of the text? What purpose does it serve?

- 🗨️ Student responses may include:
 - “The Sugar Genius” further supports the authors’ central idea in this section about technology’s role in shifting sugar away from labor-intensive production towards scientific innovation. Norbert Rillieux’s design called for “one person, instead of a team” to “oversee the operation” (p. 115).
 - The authors may have also wanted to highlight how ideas and innovation could potentially be overlooked because of slavery and racism. Rillieux was unable to pursue his innovation because he did not feel safe as a black man in Louisiana even though he was free; although the value of Norbert Rillieux’s discovery was noted “by planters,” the impact he could have, as a “product of a slave society” (p. 114) created by sugar, was limited.

Lead a brief whole-class discussion of student responses.

Instruct student groups to read from “In the 1890s, the price of cane sugar was declining” to “where an Indian lawyer was finally making a name for himself” (pp. 117–118) and answer the following questions before sharing out with the class.

- ① Students may continue numbering the paragraphs for ease of reference.

What other words or phrases in this paragraph can help you make meaning of *foreshadowing*?

- 🗨️ The words and phrases “hint,” “glimpse,” and “twist that comes about two thirds of the way through a movie” (p. 117) indicate that *foreshadowing* means “the suggestion of something that has not happened yet.”
- ① Consider drawing students’ attention to their application of standard L.9-10.4.a through the process of using context to make meaning of a word.
- ① Consider providing students with the following definition: *foreshadowing* means “showing or indicating in advance.” Students may be familiar with the concept of *foreshadowing* as a literary device.

What connection are the authors making between beet sugar and the “Age of Science” (p. 117)?

- Beet sugar foreshadowed the “Age of Science,” a time when slave labor in the sugar industry would come to an end, and sugar would be produced through “chemistry, not whips” (p. 117).

What relationship do the authors establish between the “Age of Sugar” (p. 70) and the “Age of Science” (p. 117)?

- The authors describe the “Age of Science” as replacing “The Age of Sugar” (p. 117), just as the “Age of Sugar” once replaced the “Age of Honey” (p. 7).

How does the introduction of the “Age of Science” develop and refine a central idea of the text?

- Student responses may include the following:
 - The introduction of the “Age of Science” (p. 117) develops and refines the central idea that the production of cane sugar required the brutality of slave labor, by demonstrating that when this production was replaced with chemistry, “you did not need slaves, you did not need plantations, in fact you did not even need cane” (p. 117).
 - The term “Age of Science” further develops the idea that sugar production and consumption was so important that it defined eras of human history—just as cane sugar revolutionized local ways of life in the “Age of Honey,” the introduction of beet sugar ushered in the “Age of Science,” which transformed the world because plantations and slave labor were no longer a necessity.

- Differentiation Consideration:** Consider briefly reviewing student understanding of how the authors use the designations “Age of Honey” (pp. 6–8) and the “Age of Sugar” (p. 70) throughout *Sugar Changed the World* to structure the text, and develop central ideas. If necessary, students may return to their notes from 9.4.1 Lesson 1, where they first explored the use of the term “age” in the text.

Lead a brief whole-class discussion of student responses.

Activity 4: Quick Write

10%

Instruct students to respond in writing to the following prompt:

How do details in this passage shape and refine a central idea of the text?

Instruct students to look at their annotations to answer the question. Remind students to use the Short Response Rubric and Checklist to guide their written responses. Ask students to use this lesson’s vocabulary wherever possible in their written responses.

- Students listen and read the Quick Write prompt.

① Display the prompt for students to see, or provide the prompt in a hard copy.

Transition students to the independent Quick Write.

- ▶ Students independently answer the prompt, using evidence from the text.
- 🗨 See the High Performance Response at the beginning of this lesson.

Activity 5: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to read “The Lawyer” (pp. 118–121) and answer the following questions:

How did Gandhi end up in South Africa?

What impact did Balasumdaram have on Gandhi?

How was life difficult for Indians in South Africa?

Ask students to use this lesson’s vocabulary wherever possible in their written responses.

- ▶ Students follow along and note down the prompts.

Homework

Read “The Lawyer” (pp. 118–121) and answer the following questions:

How did Gandhi end up in South Africa?

What impact did Balasumdaram have on Gandhi?

How was life difficult for Indians in South Africa?

Use this lesson’s vocabulary wherever possible in your written responses.