10.3.1

Lesson 11

Introduction

In this lesson, students continue to read *The Immortal Life of Henrietta Lacks*, from "Nothing biological was considered patentable until a few years before Moore's lawsuit" to "We want everybody in the world to know about my mother" (pp. 201–206). This excerpt details the court hearings of John Moore and presents multiple perspectives on the issue of cell tissue ownership. As an assessment, students respond to a Quick Write that asks them to consider how the information in this excerpt impacts their developing understanding of tissue ownership.

For homework, students continue to search for sources, describe the authors' perspective (if apparent), and add to their vocabulary journal.

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.9-10.5.a	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze				
	their role in the text.				
L.9-10.4.a, c, d	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 9–10 reading and content</i> , choosing flexibly from a range of strategies. 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				
	 c. Consult general and specialized 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, its part of speech, or its etymology. 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). 				





Assessment

Assessment(s)

Student learning is assessed via a Quick Write at the end of the lesson. Students respond to the following prompt, citing textual evidence to support analysis and inferences drawn from the text.

- How does the new information presented in this excerpt impact your understanding of tissue ownership?
- ① **Differentiation Consideration:** Use the blank Perspective Tracking Tool during the lesson sequence for scaffolding towards this assessment.

High Performance Response(s)

A High Performance Response should:

- Describe the perspectives of the courts and many scientists (e.g., that requiring patient consent for cell line development would ultimately "put an end to medical progress"), as well as the perspectives of the Lacks family and Moore (e.g., that doctors need to acquire consent from their patients before developing marketable cell lines with their tissue).
- Discuss the complexity of tissue ownership (e.g., Slavin selling his blood for money, Moore being the first to "stake a claim to his own tissue," and the final statement on the issue: "When tissues are removed from your body, with or without your consent, any claim you might have had to owning them vanishes" (p. 205)).
- Explain how this information impacts one's understanding of the many facets of tissue ownership (e.g., patient consent, medical research progress, monetary incentives, etc.).

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- patent (n.) the exclusive right granted by a government to an inventor to manufacture, use, or sell an invention for a number of years
- pharmaceutical companies (n.) companies that manufacture and sell medicinal drugs
- legislation (n.) a law or body of laws enacted
- incentive (n.) something that encourages a person to do something or to work harder

Vocabulary to teach (may include direct word work and/or questions)

• smug (adj.) – contentedly confident of one's ability, superiority, or correctness



Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.2, L.9-10.5.a, L.9-10.4.a, c, d	
Text: The Immortal Life of Henrietta Lacks, pp. 201–206	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 10%
3. Reading and Discussion	3. 60%
4. Quick Write	4. 20%
5. Closing	5. 5%

Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Copies of the Perspective Tracking Tool for each student (Optional)
- Student copies of the Pre-Search Tool (refer to 10.3.1 Lesson 8)

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.			
	Plain text indicates teacher action.			
no symbol	Bold text indicates questions for the teacher to ask students.			
	Italicized text indicates a vocabulary word.			
•	Indicates student action(s).			
•	Indicates possible student response(s) to teacher questions.			
(i)	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 continue reading *The Immortal Life of Henrietta Lacks*, beginning on page 201 "Nothing





biological was considered patentable until," and ending on page 206 "We want everybody in the world to know about my mother." Students consider how the new information presented in this excerpt impacts their understanding of tissue ownership.

Students look at the agenda.

Activity 2: Homework Accountability

10%

Instruct students to Turn-and-Talk about the sources they found during their pre-searches for homework. Instruct students to explain the perspective(s) of one or two of the authors, if the perspective is apparent, and offer 2–3 pieces of evidence to support that perspective.

- ▶ Students Turn-and-Talk about the sources they found for homework, and the perspective(s) of the authors of those sources, if apparent.
- Student responses will vary based on their individual areas of investigation, as well as the different sources they have found.

Activity 3: Reading and Discussion

60%

Instruct students to form pairs. Post or project the questions below for students to discuss.

- ① Consider instructing students to continue to surface issues from the text to investigate during their research using the Surfacing Issues Tool, if students' areas of investigation are yielding inadequate research results or they are growing disinterested in their selected research topics/issues.
- ① **Differentiation Consideration:** Consider instructing students to use the Perspective Tracking Tool to note facets of the various perspectives emerging in this portion of text. This will help students keep track of all the information and details conveyed in this excerpt, and support their responses to the Quick Write assessment prompt.

Instruct student pairs to read from page 201 "Nothing biological was considered patentable until" to page 206 "We want everybody in the world to know about my mother."

Remind student pairs to annotate the text as they engage in the following evidence-based discussion.

- (i) If necessary to support comprehension and fluency, consider using a Masterful Reading of the focus excerpt for the lesson.
- ① Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading: *patent*, *pharmaceutical companies*, *legislation*, *incentive*.





Why was Ananda Mohan Chakrabarty's patent request first denied?

It was denied "on the grounds that no living organism could be considered an invention" (p. 201).

How did his lawyer argue for (and win) the patent?

■ They argued that Chakrabarty's bacteria "only existed because he'd altered them using 'human ingenuity'" (p. 201). In other words, they said he invented the bacteria using naturally occurring organisms.

Why would Moore have benefited from knowing the value of his cells before Golde patented them?

Moore's cells were valuable for creating vaccines and drugs to treat diseases, so pharmaceutical companies "were willing to pay enormous sums to work with his cells" (p. 202). If he had known, he could have sold them himself and made money. Instead, Golde did not tell him, so Golde himself made the money (p. 202).

How is the case of Slavin different from Moore's case?

"Slavin's doctor—unlike Moore's—told him his body was producing something extremely valuable" (p. 202). Slavin sold his blood cells to *pharmaceutical companies* himself and made the profit (p. 202).

Why could Moore not sell his own cells?

■ It "would have violated Golde's patent" (p. 203). It was against the law.

What was Moore "the first" to do?

■ Moore was "the first person to legally stake a claim to his own tissue" (p. 203) and bring a doctor to court to "sue for profits and damages" (p. 203).

Why did "scientists worldwide" panic (p. 203) when Moore filed a lawsuit against Golde?

■ They "worried that patients would block the progress of science by holding out for excessive profits" (p. 203). They thought patients would spend so much time negotiating that researchers would not be able to conduct research efficiently.

In your own words, describe the sides of this issue as presented in the paragraph on page 204 that begins "Scientists, lawyers, ethicists."

Some people wanted to make it illegal for doctors to patent patients' cells without telling the patients first and offering them money; others said that this would be so complicated that it would "put an end to medical progress" (p. 204).





What was "ironic" about the judge's citation of the HeLa cell line "as a precedent for what happened with the Mo cell line" (p. 204)?

- The judge said that since nobody sued over HeLa cells, it meant that they did not care, and Moore was "unusual in his objections" (p. 204). It is ironic because the judge's assumption was in sharp contrast to the reality: there was no lawsuit over HeLa because no one knew the cells were taken in the first place, not because they did not care.
- ① Consider providing students with the following definition (as the word is used in this context: *irony* means "unexpected").

What was the final verdict of the Supreme Court of California on Moore's case?

■ The Court decided that "When tissues are removed from your body, with or without your consent, any claim you might have had to owning them vanishes" (p. 205).

What did the court say "ruling in Moore's favor might" (p. 205) do? Explain this in your own words.

The court said that ruling in Moore's favor would "'destroy the economic incentive" (p. 205) to do research. This means that if Moore won, doctors would not be motivated to make money and do research that is good for people. And, that it might "'hinder research by restricting access to the necessary raw materials'" (p. 205).

How were scientists "smug" (p. 205) about the court ruling?

■ The dean of Stanford University School of Medicine said if patients objected to the use of their tissues, "'I guess you could sit there with your ruptured appendix and negotiate'" (p. 206).

What does *smug* mean in this context?

- Smug means "confident of one's superiority or correctness."
- **① Differentiation Consideration:** If students struggle with the meaning of the word *smug*, consider posing the following question:

Describe the tone of the statement, "I guess you could sit there with your ruptured appendix and negotiate" (p. 206).

The tone of the statement is sarcastic and condescending.

Lead a brief whole-class discussion of student responses.

Activity 4: Quick Write

20%

Instruct students to respond briefly in writing to the following prompt:





How does the new information presented in this excerpt impact your understanding of tissue ownership?

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

- ▶ Students listen and read the Quick Write prompt.
- ① Display the prompt for students to see, or provide the prompt in hard copy.

Transition 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 continue with their pre-searches. Ask students to find three more potential sources and record the following information on the Pre-Search Tool: author's name, topic, source, location, and general content/key ideas. Tell students to continue to consider an author's perspective and, when appropriate, summarize it in the margins of the Pre-Search Tool. Finally, instruct students to continue adding to their vocabulary journal when appropriate.

- Students follow along.
- ① Consider reminding students to use the vocabulary strategies in standards L.9-10.4.a, c, d when completing the vocabulary journal.
- (i) Consider distributing more Pre-Search Tools if necessary.

Homework

Continue with your pre-searches. Find three more potential sources and record the following information on your Pre-Search Tool: author's name, topic, source, location, and general content/key ideas. Also consider an author's perspective and, when appropriate, summarize it in the margins of the Pre-Search Tool. Continue adding to your vocabulary journal when appropriate.





Perspective Tracking Tool (Optional)

Name:	Class:	Date:	

Directions: As you discuss today's text excerpt, write down the various perspectives that are discussed. Then, write down who says/asserts this perspective and what related information or details they include when discussing the perspective.

Perspective	Who says/asserts this perspective?	What information or details are related to this perspective?



Model Perspective Tracking Tool (Optional)

Name:	Class:	Date:	

Directions: As you discuss today's text excerpt, write down the various perspectives that are discussed. Then, write down who says/asserts this perspective and what related information or details they include when discussing the perspective.

Perspective	Who says/asserts this perspective?	What information or details is related to this perspective?
"Chakrabarty's victory opened up the possibility of patenting" to "which didn't occur naturally outside the body." (p. 201)	Supreme Court	Biological items are now considered patentable.
"So in 1984, Moore sued Golde" to "his tissues and sued Golde for stealing them." (p. 203)	Moore	Moore is the "first person to legally stake a claim to his own tissue and sue for profits and damages."
"patients would block the progress of science" to "cells that weren't worth millions like Moore's." (p. 203)	Research Community	The research community's perspective is that allowing patients to profit from their cells will hinder scientific advancement.
"When tissues are removed from your body" to "you might have had to owning them vanishes." (p. 205)	Supreme Court	"When you leave tissues in a doctor's office" to "anyone can take your garbage and sell it." (p. 205) This is the "definitive statement" on the issue.

