10.3.1 Unit Overview

"Using Seed Texts as Springboards to Research"

Text	Skloot, Rebecca. The Immortal Life of Henrietta Lacks. (Excerpts)
Number of Lessons in Unit	15

Introduction

In the first unit of Module 10.3, students continue to work on skills, practices, and routines introduced in Modules 10.1 and Module 10.2: reading closely, annotating text, and evidence-based discussion and writing, especially through questioning, focused annotation, and an independent analysis of text. In addition, students begin the inquiry-based research process.

In this unit, students read excerpts from Rebecca Skloot's *The Immortal Life of Henrietta Lacks*. The text serves two primary functions: first, students analyze how Skloot unfolds and draws connections between key events and ideas in the text while developing and refining her central ideas; and second, the text is a seed text that students use to surface and explore potential research topics. Students identify and track these topics, which become springboards to the inquiry-based research process that continues in the following unit. Additionally, students are introduced to posing and refining inquiry questions about their topic for the purpose of guiding their initial research. In preparation for writing a research-based argument paper in 10.3.3, students begin to analyze authors' perspectives and arguments during their early research, while also beginning to work on developing initial claims themselves.

There is one formal assessment in this unit. At the end of the unit, students engage in a two-part assessment. First, students synthesize and compose a multi-paragraph response examining how Skloot unfolds an analysis of a central idea throughout *The Immortal Life of Henrietta Lacks* excerpts (RI.9-10.2, RI.9-10.3, W.9-10.2. b, d, e, L.9-10.1, L.9-10.2). In part two, students reflect on the research process begun in this unit by writing about two or three areas of investigation that emerged from *The Immortal Life of Henrietta Lacks*, explaining how and from where the areas emerged (W.9-10.9). These areas of investigation are the foundation for the research process that fully develops in 10.3.2.

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Note: This unit suspends Accountable Independent Reading (AIR). Students are held accountable for building a volume of independent reading as they independently read *The Immortal Life of Henrietta Lacks* for homework. Additionally, students are expected to read outside sources as they explore potential areas of investigation for research.

Literacy Skills and Habits

- Read closely for textual details.
- Annotate texts to support comprehension and analysis.
- Engage in productive evidence-based discussions about text.
- Collect and organize evidence from texts to support analysis in writing.
- Collect and organize evidence from texts to support claims made in writing.
- Use vocabulary strategies to define unknown words.
- Identify potential topics for research within a text.
- Use questioning to guide research.
- Conduct pre-searches to validate sufficiency of information for exploring potential topics.
- Delineate arguments and explain relevant and sufficient evidence.
- Analyze perspectives in potential research texts.

Standards for This Unit

College and Career Readiness Anchor Standards for Reading		
None.	None.	
CCS Standard	ds: Reading — Literature	
None.		
CCS Standard	ds: Reading — Informational Text	
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.	
RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	
RI.9-10.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of	

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	specific word choices on meaning and tone (e.g., how the language of a court opinion	
	differs from that of a newspaper).	
RI.9-10.5	Analyze in detail how an author's ideas or claims are developed and refined by	
	particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	
RI.9-10.6	Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	
RI.9-10.8	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	
CCS Standards	s: Writing	
W.9-10.2 b, d, e	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	
	 Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. 	
	d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.	
	e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	
W.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.	
	b. Apply grades 9-10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").	
CCS Standards	s: Speaking & Listening	
SL.9-10.1.a,	Initiate and participate effectively in a range of collaborative discussions (one-on-one,	
с	in groups, and teacher-led) with diverse partners on <i>grades 9–10 topics, texts, and</i>	
	issues, building on others' ideas and expressing their own clearly and persuasively.	
	a. Come to discussions prepared, having read and researched material under study;	

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	 research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. 	
CCS Standard	ls: Language	
L.9-10.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	
L.9-10.2 .a	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. 	
L.9-10.4. a, c, d	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, 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). 	
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. 	

Note: Bold text indicates targeted standards that will be assessed in the unit.



Unit Assessments

Ongoing Assessr	Ongoing Assessment	
Standards Assessed	RI.9-10.2, RI.9-10.3, RI.9-10.4, RI.9-10.5, RI.9-10.6, RI.9-10.8, W.9-10.9.b, L.9-10.2	
Description of Assessment	Varies by lesson but may include short written responses to questions focused on how the author unfolds events or ideas, develops and refines a central idea, or advances her purpose. This may also include the development of factual, interpretive, and evaluative questions for further exploration of research topics and pre-searches to narrow down selected areas of investigation.	

End-of-Unit Assessment		
Standards Assessed	RI.9-10.2, RI.9-10.3, W.9-10.2.b, d, e, W.9-10.9.b, L.9-10.1, L.9-10.2	
Description of Assessment	 Part 1: Choose one central idea that Skloot develops in the text. How does Skloot unfold an analysis of this central idea? Part 2: Articulate two to three areas of investigation and where they emerge from the text. 	

Unit-at-a-Glance Calendar

Lesson	Text	Learning Outcomes/Goals
1	The Immortal Life of Henrietta Lacks, pp. 1–4	In this first lesson of the unit and module, students are introduced to the module's focus: inquiry-based research to build evidence-based arguments. Students begin reading and analyzing the Prologue of <i>The Immortal Life of Henrietta</i> <i>Lacks</i> , focusing on the connection between Henrietta Lacks and the scientific advancement provided by the research of her "immortal" cells. This excerpt focuses on the connections Skloot draws between Henrietta Lacks, as a person, and the scientific advancement her cells supported.

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Lesson	Text	Learning Outcomes/Goals
2	The Immortal Life of Henrietta Lacks, pp. 27–33	In this lesson, students read and analyze another excerpt from <i>The Immortal Life of Henrietta Lacks</i> , in which Skloot further surfaces ideas and events related to the story of Henrietta Lacks and her "contribution" to human tissue research. Students analyze the text through reading and evidence-based discussions, with specific attention paid to how Skloot unfolds the series of events and ideas by using a Tracking Events and Ideas Tool.
3	The Immortal Life of Henrietta Lacks, pp. 63–66	In this lesson, students continue to read and analyze <i>The</i> <i>Immortal Life of Henrietta Lacks</i> , focusing on how Skloot provides a narrative account of Henrietta's deteriorating health. In small groups, students explore the care Henrietta receives from the Johns Hopkins medical staff through analysis of Skloot's specific word choice and purposeful use of language. Additionally, students begin the research process by learning how to surface issues and pose inquiry questions using a Surfacing Issues Tool and Posing Inquiry Questions Handout.
4	The Immortal Life of Henrietta Lacks, pp. 93–102	In this lesson, students read another excerpt from <i>The</i> <i>Immortal Life of Henrietta Lacks</i> , building their understanding of central ideas present in the text as they examine the history of HeLa through the lens of scientific discovery. Students discuss their understanding in pairs and continue to surface issues in the text for the purpose of research. Students also continue to generate, refine and select inquiry questions to guide their research.
5	The Immortal Life of Henrietta Lacks, pp. 127–136	In this lesson, students continue to read and analyze another excerpt from <i>The Immortal Life of Henrietta Lacks</i> , in which Skloot describes cases of HeLa cell misuse and explores issues of informed consent and human experimentation. Students explore this passage through a series of questions and discussion, in which they analyze how Skloot supports a perspective through description and use of language. Students continue to surface issues that emerge from the text and record these issues on their Surfacing Issues Tool.

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Lesson	Text	Learning Outcomes/Goals
6	The Immortal Life of Henrietta Lacks, pp. 127–136	In this lesson, students reread the excerpt from the previous lesson, focusing on identifying and delineating one of Skloot's claims, and assessing whether it is relevant and sufficient to support the claim. Student groups identify and delineate one of Skloot's claims and evaluate evidence that she uses in pages 127–136 to support her claim. Students participate in collaborative group discussion and synthesize their findings on the Lesson 6 Evidence Collection Tool.
7	The Immortal Life of Henrietta Lacks, pp. 164–169	In this lesson, students continue reading an excerpt from <i>The</i> <i>Immortal Life of Henrietta Lacks</i> , focusing on the Lacks family's distrust of Johns Hopkins Hospital and the history of unethical medical practices conducted against the African- American community. Students analyze how Skloot unfolds credible and relevant evidence to support the perspective of the Lacks family. Students also continue searching for topics/issues using the Surfacing Issues Tool, and are introduced to the Exploring a Topic Tool, in which they consider their own reasons for selecting various topics to further explore in research.
8	The Immortal Life of Henrietta Lacks, pp. 179–183	In this lesson, students read and analyze an excerpt from the text that describes how the Lacks family discovers the HeLa cells, and how the research community makes use of the Lacks family's DNA to untangle a cell culture contamination problem. Students read and analyze the text, and work to identify a central idea based on specific details. Students are introduced to the pre-search process and the Pre-Search Tool.
9	The Immortal Life of Henrietta Lacks, pp. 194–198	In this lesson, students analyze an excerpt in which Skloot describes how the family struggles to understand the public information regarding the HeLa cells. Students continue to build their understanding of how specific sections of text develop, and refine specific ideas that have emerged in the larger text. Students also continue to pre-search topics/issues that interest them and gather potential sources for their research. Students begin the vocabulary journal.



Lesson	Text	Learning Outcomes/Goals
10	The Immortal Life of Henrietta Lacks, pp. 199–201	In this lesson, students examine an excerpt that introduces the story of John Moore, whose cells were used to develop the cell line Mo, without his knowledge, after he received treatment for cancer. Students compare this story to that of Henrietta Lacks through text analysis. After reading, students learn about the concept of perspective and continue with their pre-searches.
11	The Immortal Life of Henrietta Lacks, pp. 201–206	In this lesson, students continue to examine the excerpt that details the court hearings of John Moore and presents multiple perspectives on the issue of cell tissue ownership. Students consider how the information in this excerpt impacts their developing understanding of tissue ownership. Students continue to conduct pre-searches for homework.
12	The Immortal Life of Henrietta Lacks, pp. 245– 247; 261–267	In this lesson, students read two excerpts. The first describes Skloot's encounter with Zakariyya (Henrietta's son), when he discusses his anger with the Hopkins' scientists. The second describes a visit that Skloot, Deborah, and Zakariyya make to Hopkins to meet a scientist, who ends up being surprisingly kind to the Lacks family. Students consider how this excerpt affects Zakariyya's ideas about the medical community. Students continue to pre-search areas of investigation or homework.
13	The Immortal Life of Henrietta Lacks (all excerpts)	In this lesson, students engage in an evidence collection activity using <i>The Immortal Life of Henrietta Lacks</i> , in order to prepare for a discussion in the following lesson about the text's various claims and evidence. The focus of this lesson is on understanding claims and evidence in informational text, as well as developing claims for future argument writing. Additionally, this lesson develops students' proficiency for gathering and synthesizing evidence from a text.



Lesson	Text	Learning Outcomes/Goals
14	<i>The Immortal Life of</i> <i>Henrietta Lacks</i> (all excerpts)	In this lesson, students build upon the evidence collection work done in the previous lesson by engaging in a group discussion that validates their understanding of evidence used to support claims found in <i>The Immortal Life of</i> <i>Henrietta Lacks</i> . Within expert groups, students take turns presenting their claim and evidence to the other members of their group, allowing time for counterclaims and clarifying questions. As an assessment, students write a paragraph response that synthesizes their understanding of supporting evidence with their ability to identify a claim in the text, and determine whether the evidence provided is relevant and sufficient.
15	<i>The Immortal Life of</i> <i>Henrietta Lacks</i> (all excerpts)	In this final lesson of the unit, the End-of-Unit Assessment, students complete a two-part assessment. First, students synthesize and compose a multi-paragraph response examining how Skloot unfolds an analysis of a central idea throughout <i>The Immortal Life of Henrietta Lacks</i> . In part two, students reflect on the research process begun in this unit by writing about two or three areas of investigation that emerged from <i>The Immortal Life of Henrietta Lacks</i> , explaining how and from where the areas emerged.

Preparation, Materials, and Resources

Preparation

- Read and annotate excerpts from *The Immortal Life of Henrietta Lacks*.
- Review the Short Response Rubric and Checklist.
- Review all unit standards and post in classroom.
- Consider creating a word wall of the vocabulary provided in all lessons.

Materials and Resources

- Chart paper
- Copies of the text The Immortal Life of Henrietta Lacks

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- Writing utensils including pencils, pens, markers, and highlighters
- Methods for collecting student work: student notebooks, folders, etc.
- Access to technology (if possible): interactive whiteboard, document camera, and LCD projector
- Copies of handouts and tools for each student: see Materials list in individual lesson plans
- Copies of the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist
- Copies of the Short Response Rubric and Checklist
- Self-stick notes for students (optional)
- Copies of the Speaking and Listening Rubric and Checklist for standard SL.9-10.1.a, c for each student

• Copies of the 10.3.1 Unit Glossary

10.3.1 Lesson 1

Introduction

In this first lesson of the unit and module, students are introduced to the focus of the module: building evidence-based arguments through inquiry-based research. Students listen to a Masterful Reading of an excerpt from the prologue of Rebecca Skloot's *The Immortal Life of Henrietta Lacks*, focusing on the connections Skloot makes between Henrietta Lacks the person and the scientific advancement her cells supported.

In Unit 1, students begin learning about a specific approach to research that is developed and completed throughout Units 2 and 3. This module addresses research as an iterative, non-linear process, designed to develop students' skills in crafting evidence-based arguments on issues of interest. In this unit, students read and analyze a seed text, *The Immortal Life of Henrietta Lacks*, to identify topics that spark inquiry and provide entry points into the research process with which they engage throughout the module. The intent of this unit is to model how to initiate a process of inquiry-based research using texts that are rich enough to provide claims, counterclaims, and foster varying points of argumentation. In this research module, students are expected to read and analyze sources during in-class work and for homework.

In this lesson, students begin reading and analyzing the prologue of *The Immortal Life of Henrietta Lacks* (pp. 1–4) from "There's a photo on my wall of a woman I've never met" to "There has to be more to the story." Students focus on the connection between Henrietta Lacks and the scientific advancement provided by the research of her "immortal" cells. The assessment in this lesson is a Quick Write prompt: How does Skloot unfold events in this excerpt and what connections does she draw among these events? For homework, students preview pp. 27–33 from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" and annotate for evidence of Skloot's strategic unfolding of events and ideas.

Standards

Assessed Standard(s)	
RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

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Addressed Sta	andard(s)
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.
	 Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").
L.9-10.4.a	 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.

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 Skloot unfold events in this excerpt and what connections does she draw among these events?
- ① Throughout this unit, Quick Writes will be evaluated using the Short Response Rubric.

High Performance Response(s)

A High Performance Response should:

- Describe how Skloot unfolds events in this excerpt (e.g., Skloot first introduces readers to Henrietta Lacks, then she discusses the scientific/medical impact made by Henrietta's cells, and finally Skloot shares how she personally became interested in Henrietta's story).
- Explain the connections Skloot draws among the events (e.g., Skloot introduces Henrietta Lacks, the person, with the statement, "There's a photo on my wall of a woman I've never met ...,"(p.1) and then discusses her cells and their profound medical and scientific contributions by saying, "I've spent years staring at that photo, wondering ... what she'd think about cells from her cervix living on forever—bought, sold, packaged and shipped by the trillions to laboratories all around the world"(pp.1–2). Skloot then highlights these contributions before sharing with readers how she personally connects to the story of Henrietta and her cells by discussing, "I first learned about HeLa cells and the woman behind them in 1988, thirty-seven years after her death, when I was sixteen and sitting in a community college biology class"(p.2). Skloot then returns readers to Henrietta, the human being, as she is left wondering about Henrietta's personal story.).





Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- cervix (n.) any neck-like part, especially the constricted lower end of the uterus
- chemotherapy (n.) the treatment of disease by means of chemicals that have a specific toxic effect upon disease-producing microorganisms or that selectively destroy cancerous tissue
- cloning (n.) the process of producing a clone (a cell, cell product, or organism that is genetically identical to the unit or individual from which it was derived)
- gene mapping (n.) any of a number of methods used to construct a model of the linear sequence of genes of a particular chromosome
- in vitro fertilization (n.) a specialized technique by which an ovum, especially a human one, is fertilized by sperm outside the body, with the resulting embryo later implanted in the uterus for gestation
- herpes (n.) any of several diseases caused by herpes virus, characterized by eruption of blisters on the skin or mucous membranes
- influenza (n.) an acute, commonly epidemic disease, occurring in several forms, caused by numerous rapidly mutating viral strains and characterized by respiratory symptoms and general prostration
- hemophilia (n.) any of several X-linked disorders, symptomatic chiefly in males, in which excessive bleeding occurs owing to the absence or abnormality of a clotting factor in the blood
- Parkinson's disease (n.) a common neurologic disease believed to be caused by deterioration of the brain cells that produce dopamine, occurring primarily after the age of 60, characterized by tremors, especially of the fingers and hands, muscle rigidity, shuffling gait, slow speech, and a masklike facial expression
- lactose digestion (n.) the process of digesting a disaccharide that is present in milk
- sexually transmitted disease (n.) any disease characteristically transmitted by sexual contact
- appendicitis (n.) inflammation of the vermiform appendix
- genome (n.) a full set of chromosomes; all the inheritable traits of an organism
- workhorse (n.) person or thing that works tirelessly at a task, assumes extra duties, etc.

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

- immortal (adj.) not mortal; not liable or subject to death
- ① Due to the volume of Tier 3/discipline-specific vocabulary in this text, students will be provided with a 10.3.1 Unit Glossary in this lesson.



Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.3, W.9-10.9.b, L.9-10.4.a	
• Text: The Immortal Life of Henrietta Lacks (pp. 1–4)	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 10%
2. Homework Accountability	2. 5%
3. Masterful Reading	3. 20%
4. Reading and Discussion	4. 50%
5. Quick Write	5. 10%
6. Closing	6. 5%

Materials

- Copies of the Short Response Rubric and Checklist for each student
- Copies of the 10.3.1 Unit Glossary for each student

Learning Sequence

How to U	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

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.3. Today, students experience a new text called *The Immortal Life of Henrietta Lacks* through a Masterful Reading of a small excerpt and begin the process of reading pages 1–4 closely from "There's a photo on my wall of a woman I've never met" to "There has to be more to the story" to determine how the author unfolds key events and draws connections between them.

DRAFT

• Students look at the agenda.

Share with students that the focus of this module is to engage in an inquiry-based, iterative process for research to build evidence-based arguments. Inform students that they are to explore topics that have multiple claims and perspectives by gathering and analyzing research to establish a central claim of their own and to generate an evidence-based perspective. This serves as the foundation of a written research-based argument paper that synthesizes and articulates several claims with valid reasoning and relevant and sufficient evidence. Students' writing is strengthened through a strategic process of editing and revision.

Share with students the End-of-Unit Assessments and the Module Performance Assessment. Inform students that their work over the next several weeks should prepare them for these assessments. Briefly introduce the unit and the text: *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. Inform students that this unit focuses on reading and analyzing excerpts from the book to consider the development of central ideas and authorial purpose and choices through specific textual details. Additionally, students begin the research process by surfacing and tracking issues, generating inquiry questions, examining central and supporting claims, identifying areas of investigation, and analyzing arguments using Skloot's text as the initial resource.

• Students listen.

Activity 2: Homework Accountability

Explain to students that the Accountable Independent Reading requirement is suspended during this module. Instead, for Unit 1 reading homework, students periodically preview *The Immortal Life of Henrietta Lacks*, while also beginning to research by independently reading possible sources for a variety of topics that arise from the Skloot text. Explain to students that in Unit 2, the volume of independent reading comes from students' searches related to their research topic/problem-based question. Students read a variety of academic sources to deepen their understanding of their research topic/problem-based question.

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• Students listen.



Activity 3: Masterful Reading

Have students listen to a Masterful Reading of *The Immortal Life of Henrietta Lacks* (pp. 1–4) from "There's a photo on my wall of a woman I've never met" to "There has to be more to the story." Instruct students to read along in their text.

- (i) The term "HeLa" is pronounced hee lah.
 - Students follow along, reading silently.

After the Masterful Reading, ask students to independently write down initial reactions and questions they have about the text. Give students 3–5 minutes to write down initial reactions and questions.

- Student questions may include:
 - What made Henrietta's cells immortal?
 - How did her cells help in the treatment of medical diseases and conditions?
 - Have her cells helped cure any diseases or conditions?
 - What happened to the five children she left motherless?
 - Why are her cells in laboratories all over the world?
 - What was significant about the code name HeLa?
- ① Assure students that any question related to the text is valid. If students are struggling with questions, encourage them to think about unknown vocabulary, textual details that seem confusing, or any information they still want to know from the text after this initial reading.

Ask students to share out their initial questions. Record the questions on the board or on chart paper. Share with students that it is okay to have questions as they engage in a complex text and that questions like these initiate the inquiry-based research process. As students read, they can look for answers, or be mindful of what questions remain unanswered.

- Students share out their initial questions.
- ① Continue to return to these initial questions as Unit 1 progresses, addressing the answers as they emerge from the text or research.

Activity 4: Reading and Discussion

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

Inform students that they are to reread closely the first four pages of *The Immortal Life of Henrietta Lacks* and analyze how Skloot unfolds and draws connections between key events.

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• Students listen.



Distribute the 10.3.1 Unit Glossary. Inform students that as they read the text excerpts in this unit, they may come across many unfamiliar discipline-specific words. Explain that the 10.3.1 Unit Glossary provides many of these definitions and is a reference for students to use while reading and analyzing the text. Explain to students that many of these words are examined further as they identify issues for research in subsequent lessons.

- Students examine the 10.3.1 Unit Glossary.
- Instruct students to consult the 10.3.1 Unit Glossary as they read and analyze today's text excerpt. The terms that can be found in today's reading include: *cervix, chemotherapy, cloning, gene mapping, in vitro fertilization, herpes, influenza, hemophilia, Parkinson's disease, lactose digestion, sexually transmitted disease, appendicitis, genome, and workhorse.*

Instruct student pairs to reread pp. 1–2 from "There's a photo on my wall of a woman I've never met" to "sold, packaged, and shipped by the trillions to laboratories around the world" and answer the following questions before sharing out with the class. Students can also box any unfamiliar words at this time.

- ① Remind students to take notes and annotate the text as they engage in the following evidencebased discussion. This annotation supports students' engagement with W.9-10.9.b, which focuses on the use of textual evidence in writing.
- ① Consider reviewing the annotation codes previously taught in Module 10.1, including:
 - Put a question mark next to a section you are questioning (?).
 - Write in the margin at the top or bottom of the page to record questions (and perhaps answers) that a passage raises in your mind.
 - Use an exclamation point for areas that remind you of another text, strike you in some way, or surprise you (!).
 - Star ideas that seem important or that may support your thesis writing later (*).
 - Box or circle words and phrases that you do not know or that you find confusing. Rewrite a word or phrase you might have figured out.
 - Add an arrow to make connections between points.

In paragraph 1, how does Skloot connect Henrietta and the future of medicine?

 Henrietta and the future of medicine are connected by the tumor growing inside her, according to Skloot's statement "a tumor that would leave her five children motherless and change the future of medicine" (p. 1).

How has Henrietta been identified in pictures that have appeared "hundreds of times in magazines and science textbooks" (p. 1)? What is the impact of how Henrietta has been identified?

• Student responses may include:



- She is usually identified by another name, "Helen Lane" (p. 1) or "she has no name at all" (p. 1). She is usually called HeLa, "the code name given to the world's first immortal human cells *her* cells" (p. 1).
- The impact is that Henrietta is not identified as a person but by her cells' "code name" (p. 1), revealing that science is more important than the human being behind the cells.

To whom does the abbreviation HeLa refer?

➡ HeLa refers to "Henrietta Lacks" (p. 1).

What does Skloot mean when she describes HeLa cells as "immortal" (p. 1)? Cite evidence from the text to support your understanding of the word "immortal".

- Skloot says Henrietta's cells are "immortal" (p. 1), and then wonders what Henrietta would "think about cells from her cervix living on forever" (p. 2), so *immortal* refers to something that will never die or something that just keeps going on in some way.
- ① To ensure student understanding of the meaning of *immortal*, contrast it with the word *mortal* and discuss how the two words are opposite in meaning.
- 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.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread pages 2–3, from "I've tried to imagine how she'd feel knowing that her cells" to "our tissues—muscle, bone, blood—which in turn make up our organs" and discuss the following question before sharing out with the class.

How have Henrietta's cells "helped with some of the most important advances in medicine" (p. 2)?

- Skloot shares that Henrietta's cells went up in space to help study zero gravity and helped with medical advances including "the polio vaccine, chemotherapy, cloning, gene mapping, in vitro fertilization" (p. 2).
- ① Polio vaccine is defined and further explored in 10.3.1 Lesson 4.

Lead a brief whole-class discussion of student responses.



Instruct student pairs to read the paragraphs, "I first learned about HeLa cells and the woman behind them" (p.2) to "They make up all our tissues —muscle, bone, blood— which in turn make up our organs" (p.3) and discuss the following question before sharing out with the class.

What events occur in these paragraphs, and how are they connected?

■ The events that occur provide readers with an understanding of the path that brought Skloot to Henrietta and Henrietta's cells. Skloot talks about the genesis of her research on HeLa cells by stating "I first learned about HeLa cells and the woman behind them in 1988, thirty-seven years after her death, when I was sixteen and sitting in a community college biology class" (p. 2), and goes on to detail the circumstances that brought her to that class saying "I was taking Defler's class for high-school credit" (p. 2), and the content that led to her first hearing the name Henrietta Lacks, stating about her instructor "he wanted us to understand ... that cells are amazing things" (p. 3).

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Under the microscope, a cell looks a lot like a fried egg" to "where he wrote two words in enormous print: HENRIETTA LACKS" (p. 3) and discuss the following question before sharing out with the class.

How does Skloot further develop connections between cells and cancer in this passage?

▲ After describing the detailed parts of a cell, cell division, and the role cells play in various body processes, Skloot says "All it takes is one small mistake anywhere in the division process for cells to start growing out of control . . . Just *one* enzyme misfiring, just *one* wrong protein activation, and you could have cancer" (p. 3).

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Henrietta died in 1951 from a vicious case of cervical cancer" to "There has to be more to the story" (pp. 3–4) and discuss the following questions before sharing out with the class.

What made Henrietta's cells different from any other previously studied cells?

Skloot states "Scientists had been trying to keep human cells alive in culture for decades, but they all eventually died. Henrietta's were different: they reproduced an entire generation every twenty-four hours, and they never stopped" (p. 4). Her cells are the first immortal cells grown in a laboratory.



What connects Henrietta to almost any cell culture lab in the world?

- Henrietta's cells are grown in almost every research lab. Skloot shares that her instructor said "If we went to almost any cell culture lab in the world . . . we'd probably find millions—if not billions—of Henrietta's cells in small vials on ice" (p. 4).
- Consider discussing the word meaning of *culture* in this context. In biology, *culture* is used to describe growing microorganisms or tissues in a controlled or defined medium or nutritive substance. Students encounter this word again in 10.3.1 Lesson 4.

How does Skloot relate Henrietta's cells to guinea pigs and mice?

- Student responses may include:
 - After listing all the ways Henrietta's cells were part of research, Skloot states, "Like guinea pigs and mice, Henrietta's cells have become the standard laboratory workhorses" (p. 4).
 - Like guinea pigs and mice, Henrietta's cells have been used for a wide variety of scientific research.
 - Her cells, despite doing amazing things for science and medicine, have now become cogs in the research machine, no different from guinea pigs and mice.
- ① Differentiation Consideration: If students struggle, consider discussing how guinea pigs and mice are frequently used for testing in various kinds of research. Additionally, instruct students to reference the 10.3.1 Unit Glossary for the meaning of the word *workhorse* (a person or thing that works tirelessly at a task, assumes extra duties, etc.).

What is the impact of Skloot including Defler's final quote "She was a black woman" (p. 4)?

Skloot wants readers to connect the science of the HeLa cells to an actual person, specifically "a black woman" (p. 4).

Summarize the key events unfolded in today's excerpt, from "There's a photo on my wall of a woman I've never met" to "There has to be more to the story" (pp. 1–4).

- Student responses should include:
 - Skloot begins by introducing the picture on her wall and the name Henrietta Lacks so we know the person first before learning about her cells (p. 1). (E.g., "There's a photo on my wall of a woman I've never met, its left corner torn and patched together with tape.")
 - She details many of the scientific contributions made possible by the study of Henrietta's cells (p. 3). (E.g., "... helped with some of the most important advances in medicine.")
 - She explains how she became interested in the story of Henrietta's cells and explains cell structure and function (pp. 2–3). (E.g., "I first learned about HeLa cells and the woman behind them in 1988, thirty-seven years after her death.")





 The excerpt ends with Skloot refocusing the story on Henrietta and what her story might be besides her cells (p. 4). (E.g., "That's it? That's all we get? There has to be more to the story.")

Lead a brief whole-class discussion of student responses.

Activity 5: Quick Write

10%

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

How does Skloot unfold events in this excerpt and what connections does she draw among these events?

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 to guide their written responses.

- ① Display the prompt for students to see, or provide the prompt in hard copy.
 - Students independently answer the prompt, using evidence from the text.
 - See the High Performance Response at the beginning of this lesson.

Activity 6: Closing

Display and distribute the homework assignment. For homework, instruct students to preview *The Immortal Life of Henrietta Lacks* (pp. 27–33) from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" and annotate for evidence of Skloot's unfolding of a series of events and ideas.

- ① This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.
- (i) Remind students to use the annotation codes introduced in Modules 10.1 and 10.2.
 - Students follow along.

Homework

Preview *The Immortal Life of Henrietta Lacks* (pp.27–33) from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" and annotate for evidence of Skloot's unfolding of a series of events and ideas.



5%

Short Response Rubric

	Name:		Class:		Date:	
--	-------	--	--------	--	-------	--

Assessed Standard: _____

	2-Point Response	1-Point Response	0-Point Response
Inferences/Claims	Includes valid inferences or claims from the text Fully and directly responds to the prompt	Includes inferences or claims that are loosely based on the text Responds partially to the prompt or does not address all elements of the prompt	Does not address any of the requirements of the prompt or is totally inaccurate
Analysis	Includes evidence of reflection and analysis of the text	A mostly literal recounting of events or details from the text	The response is blank
Evidence	Includes relevant and sufficient textual evidence to develop response according to the requirements of the quick write	Includes some relevant facts, definitions, concrete details and/or other information from the text to develop an analysis of the text according to the requirements of the quick write	The response includes no evidence from the text
Conventions	Uses complete sentences where errors do not impact readability	Includes incomplete sentences or bullets	The response is unintelligible or indecipherable





Short Response Checklist

Name: Class: Date:

Assessed Standard: _____

Does my writing	Did I	
Include valid inferences and/or claims from the text?	Closely read the prompt and address the whole prompt in my response?	
	Clearly state a text-based claim I want the reader to consider?	
	Confirm that my claim is directly supported by what I read in the text?	
Develop an analysis of the text?	Did I consider the author's choices, impact of word choices, the text's central ideas, etc.?	
Include evidence from the text?	Directly quote or paraphrase evidence from the text?	
	Arrange my evidence in an order that makes sense and supports my claim?	
	Reflect on the text to ensure the evidence I used is the best evidence to support my claim?	
Use complete sentences, correct punctuation, and spelling?	Reread my writing to ensure it means exactly what I want it to mean?	
	Review my writing for correct grammar, spelling, and punctuation?	



10.3.1 Unit Glossary

Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
cervix	(n) – any neck-like part, especially the constricted lower end of the uterus	1	1
chemotherapy	(n.) – the treatment of disease by means of chemicals that have a specific toxic effect upon disease-producing microorganisms or that selectively destroy cancerous tissue	2	1
cloning	(n.) – the process of producing a clone (a cell, cell product, or organism that is genetically identical to the unit or individual from which it was derived)	2	1
gene mapping	(n.) – any of a number of methods used to construct a model of the linear sequence of genes of a particular chromosome	2	1
in vitro fertilization	(n.) – a specialized technique by which an ovum, especially a human one, is fertilized by sperm outside the body, with the resulting embryo later implanted in the uterus for gestation	2	1
genome	(n.) – a full set of chromosomes; all the inheritable traits of an organism	3	1
herpes	(n.) – any of several diseases caused by herpes virus, characterized by eruption of blisters on the skin or mucous membranes	4	1



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
influenza	(n.) – an acute, commonly epidemic disease, occurring in several forms, caused by numerous rapidly mutating viral strains and characterized by respiratory symptoms and general prostration	4	1
hemophilia	(n.) – any of several X-linked disorders, symptomatic chiefly in males, in which excessive bleeding occurs owing to the absence or abnormality of a clotting factor in the blood	4	1
Parkinson's disease	(n.) – a common neurologic disease believed to be caused by deterioration of the brain cells that produce dopamine, occurring primarily after the age of 60, characterized by tremors, especially of the fingers and hands, muscle rigidity, shuffling gait, slow speech, and a masklike facial expression	4	1
lactose digestion	(n.) – the process of digesting a disaccharide that is present in milk	4	1
sexually transmitted disease	(n.) – any disease characteristically transmitted by sexual contact	4	1
appendicitis	(n.) – inflammation of the vermiform appendix	4	1
workhorse	(n.) – a person or thing that works tirelessly at a task, assumes extra duties, etc.	4	1



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
biopsy	(n.) – the removal for diagnostic study of a piece of tissue from a living body	27	2
epidermoid carcinoma	(n.) – cancer that begins in squamous cells (squamous cells are thin, flat cells that look like fish scales, and are found in the tissue that forms the surface of the skin, the lining of the hollow organs of the body, and the lining of the respiratory and digestive tracts.)	27	2
menopause	(n.) – the period of permanent cessation of menstruation, usually between the ages of 45–55	27	2
endometriosis	(n.) – the presence of uterine lining in other pelvic organs, especially the ovaries, characterized by cyst formation, adhesions, and menstrual pains	27	2
gynecology	(n.) – the branch of medical science that deals with the health maintenance and diseases of women, especially of the reproductive organs	28	2
pipette	(n.) – a slender graduated tube used in a laboratory for measuring and transferring liquids from one container to another	28	2
hysterectomy	(n.) – excision of the uterus	29	2
indigent	(adj.) – needy, poor, impoverished	30	2

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Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
dearth	(n.) – an inadequate supply; scarcity; lack	30	2
radioactive	(adj.) – of, pertaining to, exhibiting, or caused by radioactivity	32	2
dilated	(v.) – made wider or larger; caused to expand	33	2
catheter	(n.) – a flexible or rigid hollow tube employed to drain fluids from body cavities or to distend body passages	33	2
deception	(n.) – the act of deceiving (misleading by false appearance or statement)	63	3
specimen	(n.) – a sample of a substance or material for examination or study	66	3
polio	(n.) – shortened form of poliomyelitis; a serious disease that affects the nerves of the spine and often makes a person permanently unable to move particular muscles	93	4
vaccine	(n.) – a substance that is usually injected into a person or animal to protect against a particular disease.	93	4
autoclave	(n.) – a heavy vessel for conducting chemical reactions under high pressure	96	4



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
incubators	(n.) – apparatus in which media inoculated with microorganisms are cultivated at a constant temperature	96	4
proteins	(n.) – any of various naturally occurring extremely complex substances that consist of amino- acid residues joined by peptide bonds; contain the elements carbon, hydrogen, nitrogen, oxygen, usually sulfur, and occasionally other elements (as phosphorus or iron); and include many essential biological compounds (as enzymes, hormones, or antibodies)	97	4
optimal	(adj.) – most favorable	97	4
hardy	(adj.) – capable of enduring hardship; strong	97	4
metabolism	(n.) – the chemical processes by which a plant or animal uses food, water, etc., to grow and heal and to make energy	98	4
culture medium	(n.) – a liquid or solidified nutrient material suitable for the cultivation of microorganisms	99	4
inoculation	(n.) – introduction of (the causative agent of disease) into the body of (a person or animal), in order to induce immunity	127	5



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
immune systems	(n.) – a diffuse, complex network of interacting cells, cell products, and cell-forming tissues that protects the body from pathogens and other foreign substances, destroys infected and malignant cells, and removes cellular debris	128	5
lymph nodes	(n.) – any of the glandlike masses of tissue in the lymphatic vessels containing cells that become lymphocytes through which lymph passes to be filtered and cleaned	128	5
refrain	(n.) – a phrase or verse recurring at intervals in a song or poem	129	5
diagnosis	(n.) – the process of determining by examination the nature and circumstances of a diseased condition	130	5
dissecting	(v.) – cutting apart (an animal body, plant, etc.) to examine the structure, relation of parts, or the like	131	5
ethical boundaries	(n.) – the limits of accepted principles of right and wrong that govern the conduct of a profession	132	5
civil courts	(n.) – courts of law in which civil cases (private and civilian affairs) are tried and determined	132	5



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
inalienable rights	(n.) – that which is due to anyone by just claim, legal guarantees, moral principles, etc., and cannot be transferred to another without consent (e.g., rights of liberty or of speech)	134	5
abducted	(v.) – took (someone) away from a place by force	165	7
tactics	(n.) – modes or procedures for gaining advantage or success	166	7
exhumed	(v.) – removed a body from the place where it was buried	166	7
anesthesia	(n.) – loss of sensation, especially of pain, induced by drugs; called general anesthesia when consciousness is lost	166	7
peril	(n.) – something that is likely to cause injury, pain, harm, or loss	167	7
discretion	(n.) – the power or right to decide or act according to one's own judgment; freedom of judgment or choice	167	7
predisposition	(n.) – tendency to a condition or quality, usually based on the combined effect genetic and environmental factors	167	7
abatement	(n.) – suppression or termination	168	7



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
exploited	(v.) – used (someone or something) in a way that helps you unfairly	168	7
autopsy	(n.) – an examination of a dead body to find out the cause of death	181	8
deduce	(v.) – to use logic or reason to form a conclusion or opinion about something; to decide (something) after thinking about the known facts	183	8
receptive	(adj.) – able or quick to receive knowledge, ideas, etc. *Hsu uses the word <i>receptible</i> , which is not a word in English. What Hsu likely meant was <i>receptive</i> .	183	8
biotech [biotechnology]	(n.) – the use of living organisms or other biological systems in the manufacture of drugs or other products or for environmental management, as in waste recycling; includes the use of bioreactors in manufacturing, microorganisms to degrade oil slicks or organic waste, and genetically engineered bacteria to produce human hormones	194	9
crossed	combined characteristics of two different types of individuals	196	9
malignant	(adj.) – (of a tumor) characterized by uncontrolled growth; cancerous, invasive, or metastatic	199	10
severed	(v.) – separated (a part) from the whole, as by cutting or the like	199	10



Word	Definition	Introduced Where in the Text (Page Number)	Lesson #
cremation	(n.) – consumption by fire; process of burning	199	10
voluntarily	(adv.) – done, made, brought about, undertaken, etc. of one's own accord or by free choice	200	10
heirs	(n.) – people who inherit or have a right of inheritance in the property of another following the latter's death	200	10
patent	(n.) – the exclusive right granted by a government to an inventor to manufacture, use, or sell an invention for a number of years	201	11
pharmaceutical companies	(n.) – companies that manufacture and sell medicinal drugs	202	11
legislation	(n.) – a law or body of laws enacted	204	11
incentive	(n.) – something that encourages a person to do something or work harder	205	11

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10.3.1 Lesson 2

Introduction

In this lesson, students read and analyze *The Immortal Life of Henrietta Lacks*, pp. 27–33 from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" in which Skloot further surfaces ideas and events related to the story of Henrietta Lacks and her "contribution" to human tissue research. Students analyze the text through reading and evidence-based discussions, with specific attention paid to how Skloot unfolds the series of events and ideas, describing the advent of the study that immortalizes Henrietta's cells, using both science and Henrietta's narrative to provide the account.

Analysis and evidence-based discussions inform students' completion of the lesson assessment, the Tracking Events and Ideas Tool. Specifically, the tool helps students represent how the science behind human tissue research and the story of Henrietta Lacks converge to create the first immortal line of human cells. For homework, students craft a 1–2 paragraph response explaining how the events and ideas communicated in the reading (including the order in which they were introduced and the connections drawn between them) work together to shape the culminating event of the excerpt based on students' analysis of the Tracking Events and Ideas Tool.

Standards

Assessed Star	Assessed Standard(s)		
RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.		
Addressed Sta	Addressed Standard(s)		
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.		
	 Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). 		



L.9-10.4.a	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.	

Assessment

Assessment(s)

Student learning is assessed via the Tracking Events and Ideas Tool at the end of the lesson. Students use the tool to help them analyze how Skloot unfolds the events leading to the culminating event in this excerpt, including the order in which the points are made and the connections that are drawn between them.

① The Tracking Events and Ideas Tool serves as the assessment for this lesson.

High Performance Response(s)

A High Performance Response should:

• See Model Tracking Events and Ideas Tool for student responses.

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- biopsy (n.) the removal for diagnostic study of a piece of tissue from a living body
- epidermoid carcinoma (n.) cancer that begins in squamous cells. (Squamous cells are thin, flat cells that look like fish scales, and are found in the tissue that forms the surface of the skin, the lining of the hollow organs of the body, and the lining of the respiratory and digestive tracts.)
- menopause (n.) the period of permanent cessation of menstruation, usually between the ages of 45–55
- endometriosis (n.) the presence of uterine lining in other pelvic organs, especially the ovaries, characterized by cyst formation, adhesions, and menstrual pains
- gynecology (n.) the branch of medical science that deals with the health maintenance and diseases of women, especially of the reproductive organs
- pipette (n.) a slender graduated tube used in a laboratory for measuring and transferring liquids from one container to another

2

• hysterectomy (n.) – excision of the uterus





- indigent (adj.) needy, poor, impoverished
- dearth (n.) an inadequate supply; scarcity; lack
- radioactive (adj.) of, pertaining to, exhibiting, or caused by radioactivity
- dilated (v.) made wider or larger; caused to expand
- catheter (n.) a flexible or rigid hollow tube employed to drain fluids from body cavities or to distend body passages

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

- heckled (v.) to harass (a public speaker, performer, etc.) with impertinent questions, gibes, or the like; badger
- consent (v.) to permit, approve, or agree

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson	
Standards & Text:		
• Standards: RI.9-10.3, W.9-10.9.b, L.9-10.4.a		
• Text: The Immortal Life of Henrietta Lacks, pp. 27–33		
Learning Sequence:		
1. Introduction of Lesson Agenda	1. 5%	
2. Homework Accountability	2. 10%	
3. Masterful Reading	3. 10%	
4. Reading and Discussion	4. 40%	
5. Tracking Events and Ideas Tool and Assessment	5. 25%	
6. Closing	6. 10%	

Materials

- Copies of the Tracking Events and Ideas Tool for each student
- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)



Learning Sequence

How to U	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.	
	Italicized text indicates a vocabulary word.	
•	Indicates student action(s).	
ſ	Indicates possible student response(s) to teacher questions.	
í	Indicates instructional notes for the teacher.	

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.3. In this lesson, students read *The Immortal Life of Henrietta Lacks*, pages 27–33 from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" and analyze how Skloot unfolds her analysis of ideas and events surrounding the genesis of HeLa. Students apply their analysis to track the unfolding of events, the order in which points are made, and ideas and the connections that are drawn between them using a Tracking Events and Ideas Tool.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out their homework from the previous lesson where they were asked to preview *The Immortal Life of Henrietta Lacks*, pages 27–33 from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" and annotate for evidence of Skloot's unfolding of a series of events and ideas.

Direct students to choose 3–4 annotations that best exemplify Skloot's unfolding of a series of events and ideas, and complete a Turn-and-Talk in pairs.

- Students take out their homework and discuss 3–4 annotations in pairs.
- In keeping with varied references throughout *The Immortal Life of Henrietta Lacks*, this unit may refer to The Johns Hopkins Hospital as: Hopkins, Johns Hopkins, Johns Hopkins Hospital, or The Johns Hopkins Hospital.

4



5%

10%

Student annotation may include:

- Star next to the first paragraph from "After her visit to Hopkins, Henrietta went about life" to "Epidermoid carcinoma of the cervix, Stage I" noting when Henrietta finds out she has cancer (p. 27).
- Star next to the lines in paragraph two from "By chance, when Henrietta showed up at Hopkins" to "cervical cancer, and how best to treat it" acknowledging the debate over what qualifies as cervical cancer and how best to treat it (p. 27).
- Star near the paragraph that begins with "In 1951, most doctors in the field" and ends with "but his critics called it extreme and unnecessary" noting discord between the way TeLinde and the rest of the medical community treat cervical cancer during this time period (p. 28).
- Star by the paragraph that begins with "Diagnosing carcinoma in situ had only been possible" and ends on page 29 with "and cervical cancer would be almost entirely preventable" explaining the advances in cancer detection facilitated by the development of the Pap smear (p. 28–29).
- Star next to the paragraph that begins "At that point, more than 15,000 women" and ends with "they often didn't know how those changes should be treated" noting the prevailing confusion of cervical cancer diagnosis and the lack of patient knowledge at the time (p. 29).
- Star next to the paragraph that begins with "Not long before Henrietta's first exam" and ending with "to see how many initially had carcinoma in situ" detailing TeLinde's plan for research and setting the stage for the convergence of Henrietta's life and science (p. 29).
- Exclamation point next to the lines "Like many doctors of his era, TeLinde often used patients" and continuing on to page 30 ending with "large indigent black population, had no dearth of clinical material" for setting up the issues of race and informed consent that develop through the remainder of the excerpt (p. 29–30).
- Star next to the lines beginning with "In addition to that study, TeLinde thought" and ending with "something never done before—he could compare all three" noting TeLinde's need for a vehicle to validate his hypothesis (p. 30).
- Star near the sentence beginning with "The Geys were determined to grow the first *immortal* human cells" noting the Geys background interest in the research they would partner in with TeLinde (p. 30).
- Exclamation point next to the sentence beginning with "And TeLinde began collecting samples from any woman" noting the events that tie Henrietta into TeLinde and Gey's research (p. 30).
- Star near the last paragraph from "One nurse placed the Brack plaques on a stainless" to "staff dressed in white gowns, hats, masks, and gloves" noting the separate treatment of African-American patients (p. 32).
- Star next to the lines "But first—though no one had told Henrietta that TeLinde was collecting" reinforcing the lack of consent regarding Henrietta's tissue (p. 33).





10%

40%

Star the quote from Henrietta's chart that read "Henrietta Lacks . . . Biopsy of cervical tissue . . . Tissue given to Dr. George Gey" noting that records were kept of the tissue given to researchers despite nothing being said to Henrietta or her family (p. 33).

Remind students that annotating helps them keep track of evidence they use later in the End-of-Unit Assessment and Performance Assessment, which focus on the development of central ideas.

This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Activity 3: Masterful Reading

Have students listen to a Masterful Reading of *The Immortal Life of Henrietta Lacks*, from "After her visit to Hopkins, Henrietta went about life as usual" to "They were sure Henrietta's cells would die just like all the others" (pp. 27–33).

- Students follow along, reading silently.
- ① This section introduces potentially charged issues, like the treatment of African-Americans in midtwentieth century America, as well as the motives behind medical research, and the notion of tissue collection. Sensitivity to the emotional climate in the classroom for this and subsequent lessons may necessitate more lengthy or directed discussions.

Activity 4: Reading and Discussion

Explain that the focus of this lesson is to analyze how Skloot unfolds her analysis of ideas and events, including the connections she draws between them.

Students listen.

Instruct students to form pairs. Post or project each set of questions below for students to discuss. Instruct student pairs to reread from "After her visit to Hopkins, Henrietta went about life as usual" to "But few in the field believed him" (pp. 27–28) and answer the following question before sharing out with the class.

- Students form pairs and reread pages 27–28.
- In paragraph 1, "Jones" is mentioned as the individual who received Henrietta's biopsy results.
 "Jones" refers to Dr. Howard Jones, the gynecologist who first saw Henrietta at Johns Hopkins gynecology clinic.

6

Encourage student pairs to annotate and take notes on the evidence-based discussion.



Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading, including: biopsy, epidermoid carcinoma, menopause, endometriosis, gynecology, pipette, hysterectomy, indigent, dearth, radioactive, dilated, and catheter.

Why does Skloot use the words "by chance" to describe Henrietta going to Johns Hopkins gynecology clinic on page 27?

Skloot uses the words "by chance" because she wants readers to understand it was the perfect time for Henrietta to go to Johns Hopkins with her specific health problem. She states: "By chance, when Henrietta showed up at Hopkins complaining of abnormal bleeding, Jones and his boss, Richard Wesley TeLinde, were involved in a heated nationwide debate over what qualified as cervical cancer and how best to treat it" (p. 27). All of these variables (time, place, people, and circumstance) came together "by chance" to propel science in a new direction.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Cervical carcinomas are divided into two types" to "needed aggressive treatment, so their cancer didn't become invasive" (pp. 28–29) and discuss the following question before sharing out with the class.

What was TeLinde's motivation for research?

- TeLinde wanted "to prove that women with carcinoma in situ needed aggressive treatment" (p. 29) just like invasive carcinoma patients received. According to Skloot, "He argued that this would drastically reduce cervical cancer deaths" (p. 28). He also wanted doctors to know how to correctly interpret Pap smear results and to establish appropriate treatment protocol in order to "minimize . . . 'unjustifiable hysterectomies'" (p. 29).
- ① Consider reviewing Skloot's definition of *carcinoma in situ,* "which derives from the Latin for 'cancer in its original place'."

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Not long before Henrietta's first exam, TeLinde presented his argument" to "who happened to walk into Hopkins with cervical cancer. Including Henrietta" (pp. 29– 30) and discuss the following questions before sharing out with the class.



Why does Telinde return to Hopkins to plan a study?

➡ TeLinde plans the study after he is heckled off the stage when he presents "his argument about carcinoma in situ to a major meeting of pathologists" (p. 29).

What words (synonyms) could replace heckled in this context?

- Heckled could mean laughed at, jeered, or booed.
- 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.

Instruct student pairs to refer to the text from "Like many doctors of his era, TeLinde" to "large indigent black population, had no dearth of clinical material" (pp. 29–30) and highlight or circle the different terms used to reference human beings in this paragraph.

- Student responses should include:
 - o patients
 - o research subjects
 - o black population
 - o clinical material

What cumulative impact do these word choices have on understanding the doctors' perspective? Why might doctors have had this perspective?

Doctors viewed people more scientifically than humanly, and justified their behavior based on a patient's inability to pay. Skloot notes that "Like many doctors of his era, TeLinde often used patients from the public wards for research, usually without their knowledge" (p. 29) and goes on to say: "Many scientists believed that since patients were treated for free in the public wards, it was fair to use them as research subjects as a form of payment" (p. 30).

Explain the connections between TeLinde's research and the research of George Gey.

Skloot notes that if TeLinde "could prove that carcinoma in situ and invasive carcinoma looked and behaved similarly in the laboratory he could end the debate, showing that he'd been right all along" (p. 30). Skloot also notes that George Gey and his wife "were determined to grow the first *immortal* human cells" (p. 30). She further explains the relationship between TeLinde and George Gey by writing, "So when Telinde offered him a supply of cervical cancer tissue in exchange for trying to grow some cells, Gey didn't hesitate" (p. 30). TeLinde needed Gey so he could prove his point and change cervical cancer diagnosis/treatment methods. Gey needed TeLinde to supply him with cell tissue so he could grow the first immortal human cells.



Explain the connection between Henrietta and the research of TeLinde and Gey.

 Henrietta went to Johns Hopkins for treatment at the same time TeLinde had partnered with Gey, so her tissue was collected for research like "any woman who happened to walk into Hopkins with cervical cancer" (p. 30).

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "On February 5, 1951, after Jones got Henrietta's biopsy report" (p. 31) to "They were sure Henrietta's cells would die just like all the others" (p. 33), and discuss the following questions before sharing out with the class.

What was the importance of the "Operation Permit" Henrietta signed on page 31?

➡ Henrietta was agreeing to "any operative procedures and under any anesthetic either local or general that they may deem necessary" (p. 31).

What could the word consent mean?

- Consent means to agree with something or approve it.
- ① Differentiation Consideration: Consider discussing the language of the Operation Permit if students struggle with the previous two questions.
- 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 The word *consent* is important in this text and will be explored further in subsequent text-analysis lessons. The topic of informed consent will surface and be discussed as a possible research topic later in the unit. Students should become familiar with this key word as they progress through the module; consider additional practice with this word in other contexts, if possible.

What is Henrietta not told about during her "first treatment" (pp. 32-33)?

Henrietta is not told that tissue samples will be taken from her cervix. Skloot writes that while "no one had told Henrietta that TeLinde was collecting samples or asked if she wanted to be a donor . . . Wharton picked up a sharp knife and shaved off two dime-sized pieces of tissue from Henrietta's cervix" (p. 33).

How does this information connect to the Operation Permit Henrietta signed when she was admitted for treatment?



She consented to "any operative procedures" deemed "necessary in the proper surgical care and treatment" (p. 31) of her cancer in the Operation Permit, but she neither knew about nor gave consent to tissue donation during her treatment.

What connections does Skloot further develop between Henrietta, TeLinde, and George Gey in this section of text?

➡ Henrietta's life intersects with the research of TeLinde and Gey after a doctor shaves off pieces of her cervix tissue and has a resident take "the dish with the samples to Gey's lab" (p. 33).

Lead a brief whole-class discussion of student responses.

Activity	/ 5: 1	Tracking	Events	and Ideas	Tool and	d Assessment	25%
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Distribute the Tracking Events and Ideas Tool.

• Students examine the Tracking Events and Ideas Tool.

Explain to students that this tool helps them analyze how Skloot unfolds the events and ideas leading to the culminating event in this excerpt, including the order in which the points are made and the connections that are drawn between them. Ask students the following questions:

What are the two series of events addressed simultaneously throughout this excerpt?

 Henrietta's story of going to Johns Hopkins for cancer treatments and TeLinde and Gey's converging research on cervical cancer and immortal cell development.

What is the culminating event in this excerpt?

 Dr. Wharton takes Henrietta's tissue, without her consent, and gives it to George Gey for research purposes.

Explain to students that by using this tool, they trace the series of key events and ideas Skloot unfolds in this excerpt that lead up to the culminating event. Students should focus on the order in which the events and ideas are unfolded and the connections Skloot draws between them.

• Students listen.

Explain to students that the tool is divided into two columns where they are to track information according to how it appears in the excerpt. In the left column, students track events and ideas related to one series of events and ideas in the text; in the right column, students track events and ideas related to another series of events and ideas in the text. Both columns lead to the culminating event that occurs at the end of the excerpt where the columns merge.

• Students individually complete the Tracking Events and Ideas Tool.



- Consider modeling this tool to support student comprehension; the model tool is available at the end of the lesson.
- This tool is not collected at the end of the lesson because students need to use the tool for the homework. Consider holding students accountable for this lesson assessment by monitoring students' completion of the tool over the course of the lesson.

Activity 6: Closing

10%

Display and distribute the homework assignment. For homework, instruct students to craft a 1–2 paragraph response explaining how the events and ideas communicated in the reading (including the order in which they were introduced and the connections between them) work together to shape the culminating event of the excerpt based on their analysis of the Tracking Events and Ideas Tool.

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

• Students follow along.

Homework

Based upon today's Masterful Reading and text analysis, and upon completion of the Tracking Events and Ideas Tool, write 1–2 paragraphs explaining how the events and ideas communicated in the excerpt (including the order in which they were introduced and the connections between them) work together to shape the culminating event. Use the lesson's vocabulary wherever possible in your written response.



Tracking Events and Ideas Tool

Name:	Class:		Date:		
Events and Ideas #1:	Events and Ideas #2:	Events and Ideas #2:			
(include page numbers where inform found)	(include page numbers where information is found)				
Culminating Event/Page Number	Culminating Event/Page Number				





Model Tracking Events and Ideas Tool

Name: Class:	Date:				
Events & Ideas #1: Scientific Research	Events and Ideas #2: Henrietta's Story				
(include page numbers where information is found)	(include page numbers where information is found)				
Debate about what qualifies as cervical cancer and how to best treat it (p. 27)	Dr. Jones gets Henrietta's pathology report: Epidermoid carcinoma of the cervix, stage I (Henrietta's cervical cancer diagnosis) (p. 27)				
TeLinde's theory (1951) about carcinoma in situ made possible by Pap smear test (p. 28)	Henrietta arrives at Hopkins in 1951 (p. 28)				
TeLinde wants to minimize "unjustifiable hysterectomies" by documenting what was not cancer and to prove carcinoma in situ needs aggressive treatment (p. 29)	Patients from public wards used for research without their knowledge. Many doctors believe that this is fair use since "patients were treated for free" (pp. 29-30)				
TeLinde's argument about carcinoma in situ rejected by peers so he plans a study to determine if carcinoma in situ leads to invasive cervical cancer (p. 29)	Henrietta goes to Johns Hopkins for her first cancer treatment and signs an Operation Permit, consenting to the surgical care she will receive (p. 31)				
TeLinde (with Jones's help) finds that 62% of invasive cervical cancers began as carcinoma in situ. TeLinde then wants to find a way to grow living samples from normal and cancerous cervical tissues to compare and prove he had been right (p. 30)	Henrietta's cancer is treated with topical radium, the standard cancer treatment of the time (p. 32)				
TeLinde calls George Gey, head of tissue culture research at Hopkins; they agree to a partnership that provides Gey with the tissue samples he needs for his attempts to grow the first line of immortal human cells (p. 30)	While Henrietta is under anesthesia for the radium treatment, her doctor removes two tissue samples from her cervix, without her knowledge or consent to be a tissue donor (p. 33)				
TeLinde begins collecting cells from any woman with cervical cancer seeking healthcare at Johns Hopkins (p. 30)					
Culminating Event/Page Number					
Henrietta's cervical tissue is taken without her consent and delivered to George Gey's lab (p. 33)					



10.3.1 Lesson 3

Introduction

In this lesson, students continue to read and analyze pp. 63–66 of *The Immortal Life of Henrietta Lacks* from "In early June, Henrietta told her doctors several times that she thought" to "she was glad her pain would come to some good for someone." In this portion of the text, Skloot provides a narrative account of Henrietta's deteriorating health and her interactions with the medical staff at Johns Hopkins Hospital.

This lesson's excerpt is a departure from the scientific focus of previous excerpts, instead offering students a deeper connection to the text by revealing the suffering endured by Henrietta during her cancer treatment in 1951. In small groups, students explore the care Henrietta received from the medical staff through analysis of Skloot's specific word choice and purposeful use of language. The lesson assessment asks students to analyze the cumulative impact of specific word choices made by Skloot to advance her purpose. Additionally, students begin the research process by learning about the Surfacing Issues Tool, which initiates the process of identifying potential areas of inquiry, and the Posing Inquiry Questions Handout, which guides students through the process of generating, selecting, and refining good inquiry questions. Both the Surfacing Issues Tool and the Posing Inquiry Questions Handout revisit research skills students began to develop in Module 9.3. For homework, students complete a short research assignment to discover more about the Tuskegee syphilis studies.

Standards

Assessed Star	Assessed Standard(s)						
RI.9-10.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).						
RI.9-10.6	Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.						
Addressed St	andard(s)						
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.						
	b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning						

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1





	is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning")
L.9-10.4.a	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, 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.

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 cumulative impact of specific word choices and phrases advance Skloot's purpose in this excerpt?
- ① Differentiation Consideration: If students struggle, consider providing specific phrases such as "miserable specimen" or "benevolent deception" to support their responses.

High Performance Response(s)

A High Performance Response should:

- Explain that Skloot's purpose in the chapter is to depict the indifferent and detached treatment Henrietta receives from the medical community during the final stages of her illness.
- Cite specific word choices and/or phrases that advance Skloot's purpose (e.g., Skloot cites phrases such as "miserable specimen," used by doctors to describe Henrietta, and "benevolent deception," to describe the concept of doctors withholding information from patients, along with "doctors knew best" to describe patients' trust in their physicians. She further conveys the racial implications of the time with, "it was understood that black people didn't question white people's professional judgment." Skloot also shares how Henrietta continued to go to doctors with "discomfort" and how they repeatedly sent her away citing "No evidence of recurrence" until the end of her illness when her need for medical care surpassed the ability to treat her).
- If students infer that Skloot's purpose is to reveal the medical community's bigoted treatment of Henrietta during her cancer treatment, they must provide sufficient textual evidence to support the inference.



Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- deception (n.) the act of deceiving (misleading by false appearance or statement)
- specimen (n.) a sample of a substance or material for examination or study

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

- benevolent (adj.) characterized by expressing goodwill or kindly feelings; charitable
- vain (adj.) ineffectual or unsuccessful; futile

Lesson Agenda/Overview

Student-Facing Agenda % of Les						
Sta						
•	Standards: RI.9-10.4, RI.9-10.6, W.9-10.9.b, L.9-10.4.a					
•	Text: The Immortal Life of Henrietta Lacks, pp. 63–66					
Lea	Learning Sequence:					
1.	Introduction of Lesson Agenda	1.	5%			
2.	Homework Accountability	2.	10%			
3.	Masterful Reading	3.	15%			
4.	Reading and Discussion	4.	35%			
5.	Quick Write	5.	10%			
6.	Surfacing Issues and Posing Inquiry Questions	6.	20%			
7.	Closing	7.	5%			

3

Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)
- Copies of the Surfacing Issues Tool for each student
- Copies of the Posing Inquiry Questions Handout for each student



Learning Sequence

How to l	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.				
Symbol	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

Begin by reviewing the agenda and assessed standards for this lesson: RI.9-10.4 and RI.9-10.6. In this lesson, students read *The Immortal Life of Henrietta Lacks*, (pp. 63–66) and analyze the cumulative impact of specific word choices the author makes in advancing her purpose. Students then apply their analysis of this reading and previously analyzed excerpts to begin surfacing potential research issues while also posing inquiry questions about those potential research issues.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out their written responses to the previous lesson's homework prompt and Turn-and-Talk with a classmate about two ways in which the events and ideas work together to shape the culminating event.

- Student responses may include:
 - The Pap smear informed and furthered TeLinde's research.
 - TeLinde partnered with George Gey to research cell tissue at the same time Henrietta went to Johns Hopkins for treatment.
 - TeLinde scraped Henrietta's cell tissue because he collected "samples from any woman who happened to walk into Hopkins with cervical cancer. Including Henrietta" (p. 30).

Activity 3: Masterful Reading

Have students listen to a Masterful Reading of The Immortal Life of Henrietta Lacks, pp. 63-66.

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10%

5%

15%

35%

- Students follow along, reading silently.
- In the first paragraph on page 65 "Sadie, Margaret, and Day" are mentioned. Sadie and Margaret are Henrietta's cousins. Day is short for David, Henrietta's husband.

Activity 4: Reading and Discussion

Instruct students to form small groups of 3–4. Post or project each set of questions below for students to discuss.

Instruct student groups to reread pages 63–64 from "In early June, Henrietta told her doctors several times" to "She is obviously in pain. He sent her home to bed" and answer the following questions before sharing out with the class:

- ① Remind students to take notes or annotate the text as they engage in the evidence-based discussion that follows. This annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.
- Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading, including *deception* and *specimen*.

Instruct students to underline each time Skloot references a statement from the medical profession about Henrietta's condition and circle Henrietta's responses or feelings about her health.

• Student responses should include:

Underlined:

- "but they found nothing wrong with her" (p. 63)
- "No evidence of recurrence. Return in one month." (p. 63)
- "The patient states that she feels fairly well . . . however she continues to complain of some vague lower abdominal discomfort" (p. 63)
- "the doctor told her she was fine" (p. 64)
- "No evidence of recurrence. Return in one month." (p. 64)
- "The patient looks chronically ill. She is obviously in pain." (p. 64)

Circled:

- "She thought the cancer was spreading, that she could feel it moving through her" (p. 63)
- "however she continues to complain of some vague lower abdominal discomfort" (p. 63)
- "she went back to Hopkins saying that the 'discomfort' she'd complained about" (p. 64)
- o "The pain made it hard to walk. She went back to Hopkins." (p. 64)
- o "Three days later, when she returned complaining once again of pain" (p. 64)



5



Why does Skloot include repeated references to both Henrietta's health and the doctor's responses?

Skloot shows that despite the symptoms Henrietta was experiencing, she was not questioning her doctors; the prevailing opinion of the time was "Doctors knew best and most patients didn't question that" (p. 63). Henrietta's concerns were not taken seriously until, after repeated visits to Johns Hopkins for help, one doctor found "a 'stony hard' mass" (p. 64) when he pressed on her abdomen. Skloot writes, "Only weeks after a previous entry had declared her healthy, one of the doctors wrote, 'The patient looks chronically ill'" (p. 64).

Based on Skloot's explanation of *"benevolent* deception" on page 63, what is meant by the word *benevolent* in this context?

- Skloot explains the term "benevolent deception" as a "common practice" whereby "doctors often withheld even the most fundamental information from their patients, sometimes not giving them any diagnosis at all. They believed it was best not to confuse or upset patients with frightening terms they might not understand, like cancer" (p. 63). Based on this explanation, benevolent means to do something with the intent to be nice or charitable.
- ① It may be necessary to provide students with the definition of *deception* for this discussion.
- 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.

How does Skloot's description of the time period further develop the idea that Henrietta might have "deferred to anything her doctors said" (p. 63)?

 Skloot explains, "This was 1951 in Baltimore, segregation was law, and it was understood that black people didn't question white people's professional judgment" (p. 63). Skloot explains, "Many black patients were just glad to be getting treatment" (p. 63–64).

Why might Skloot have included this historical description when explaining Henrietta's declining health?

Skloot wants to show that race may have played a role in Henrietta's doctors not heeding her health warnings early on. Even though Skloot says "All we can know for sure are the facts of Henrietta's medical records" (p. 64), she continues to point out Henrietta's repeated attempts to communicate her "discomfort" (pp. 63–64) with the doctors continuing to note "No evidence of recurrence" (pp. 63–64).

Lead a brief whole-class discussion of student responses.



Instruct student groups to reread all of page 65, from "Until that point, no one except Sadie, Margaret, and Day" to "her cells died immediately in culture" and answer the following questions before sharing out with the class.

How does Skloot distinguish what the doctors knew and what they told the Lacks family?

The Lacks family "didn't realize she was dying. They thought the doctors were still trying to cure her" (p. 65) while at the same time doctors were just trying to "ease the pain until her death" (p. 65) with increasing amounts of radiation.

What words or phrases does Skloot use to communicate Henrietta's decline in health?

- Student responses may include:
 - "They could hear Henrietta from a block away, wailing for the Lord to help her" (p. 65)
 - "stone-hard tumors filled the inside of her abdomen" (p. 65)
 - "In view of the rapid extension of the disease process the outlook is quite poor" (p. 65)
 - "Henrietta couldn't walk from the house to the car" (p. 65)
 - "Patient has been complaining bitterly of pain and she seems genuinely miserable" (p. 65)

How does the description of Henrietta's treatment on page 66, help you understand the meaning of the word *vain* in this context?

Skloot says "Her doctors tried in vain to ease her suffering" (p. 66) and goes on to describe all of the medicines doctors gave Henrietta to help relieve her pain that did not help her, so vain in this context means that their efforts did not work.

What phrase did doctors use to describe Henrietta on page 66?

Doctors call her a "miserable specimen."

The word *specimen* can be defined as "a sample of a substance or material for examination or study." Why might the doctor use that word to refer to a patient?

■ The doctor did not relate to Henrietta as a person but as something to be studied.

What is the impact of the word specimen in describing Henrietta?

 It creates a sense of distance or detachment on behalf of the medical staff who try to help her and see their efforts fail. Skloot shares that someone wrote in Henrietta's chart: "As far as I can see we are doing all that can be done" (p. 66).

7

Lead a brief whole-class discussion of student responses.



Activity 5: Quick Write

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

How does the cumulative impact of specific word choices and phrases advance Skloot's purpose in this excerpt?

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 to guide their written responses.

- ① Display the prompt for students to see, or provide the prompt in hard copy.
 - Students independently answer the prompt, using evidence from the text.
 - See the High Performance Response at the beginning of this lesson.

Activity 6: Surfacing Issues and Posing Inquiry Questions 20%

Share with students that they have been reading and analyzing texts (in this and previous modules) for several purposes, including developing skills in evidence-based discussion and writing. Explain that this type of reading and writing also fosters skills necessary to build evidence-based arguments around a problem-based question for research.

For the purposes of this and subsequent lessons, the text analysis is about analyzing the text itself, based on the standards, and about surfacing topics that are potentially interesting and rich to research. These initial topics begin the inquiry process. As the process unfolds, aspects of the topics develop as questions are posed and refined and pre-research is conducted.

• Students listen.

Explain to students that as they initiate the process of inquiry and research, they begin to contemplate issues surfaced in *The Immortal Life of Henrietta Lacks*. The term *issue* can be defined as: An important aspect of human society for which there are many different opinions about what to think or do. Many issues can be framed as a problem-based question.

Distribute the Surfacing Issues Tool to students and ask them to brainstorm 3–4 issues that have surfaced in their initial reading of the excerpts from *The Immortal Life of Henrietta Lacks*.

- Students record issues in the left column on the Surfacing Issues Tool.
- Student responses may include the following:
 - Human tissue research
 - Racial issues in medical care
 - o Consent for tissues to be used in medical research





• The evolution of cancer treatment

Lead a brief class share-out about issues surfaced. Students should record the page number location of the issue in the text and a description of key information related to the issue.

 Students share issues surfaced and record the page number and description of key information related to the issue on the Surfacing Issues Tool.

Instruct students to keep out their Surfacing Issues Tool. Inform students they will continue to record topics in this way in future lessons, and that today they begin to use these topics to generate inquiry questions as they begin the process of building evidence-based arguments around research. Explain that during this research process, they use inquiry questions to guide their research and analysis.

- This process is recurring and students continue to surface new questions as they acquire information about their research topics.
 - Students listen.

Inform students that *The Immortal Life of Henrietta Lacks* is used to generate sample topics/issues for research in this module. Explain that Skloot touches on many topics/issues throughout the first excerpts of *The Immortal Life of Henrietta Lacks*. Of these, they use human tissue research as a sample topic/issue to generate inquiry questions as a class.

Students listen.

① All research topics should be issues that garner multiple perspectives and claims.

Distribute the Posing Inquiry Questions Handout to students. Inform them that they are to focus on generating inquiry questions that they select and refine in later lessons. At this stage, the inquiry questions are meant to guide an initial exploration of a topic or issue that is surfaced from the text. Instruct students to read the Generating Questions portion of the handout.

• Students read the Generating Questions portion of the handout.

Explain to students that by using the questions on the handout concerning each individual topic, it is possible to come up with a wide variety of inquiry questions. Remind students to consider what they find interesting and what they would like to know more about when they are generating questions. Explain to students at this stage it is best to brainstorm as many questions as possible.

• Students listen.

Display the human tissue research topic for students and the example inquiry question:

How is human tissue research beneficial in disease prevention?

Explain to students that based on the "What other topics/issues is it connected to or associated with?" prompt from the handout, this is an open-ended inquiry question. Ask students to volunteer potential inquiry questions for the issue of human tissue research.





- Student responses may include:
 - What is defined as human tissue?
 - Where did human tissue research originate?
 - What is the history of human tissue research?
 - What are the major aspects of human tissue research?
 - Who are experts in human tissue research?
 - Who is affected by human tissue research?
 - Who profits from human tissue research?

Instruct students to form pairs, choose a topic from the Surfacing Issues Tool, and generate five inquiry questions for that topic/issue.

- Student responses vary depending on the potential research topic/issue but may include:
 - Topic: Race issues in medical care
 - Inquiry Questions:
 - What is the history of racial issues in medical care?
 - Who has been most affected by racial issues in medical care?
 - What are major aspects of race in medical care?
 - What are important advances in racial issues concerning medical care?
 - o In what way do racial issues in medical care reflect racial issues in society?

Activity 7: Closing

Display and distribute the homework assignment. For homework, instruct students to conduct a web search, finding resources about the history of the Tuskegee syphilis studies. Instruct students to come to class prepared to discuss the nature of this study as well as the resources that assisted with comprehension and understanding. These resources should include common online reference materials and other online resources such as audio and video.

Students follow along.

Homework

Conduct a web search to discover more about the Tuskegee syphilis studies conducted at the Tuskegee Institute. Summarize the study in your own words. How do the resources you found help you understand this study?

Be prepared to discuss the nature of this study as well as the resources you found. These resources should include common online reference materials and other online resources such as audio and video.

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Surfacing Issues Tool

Name:	Class:			Date:	
Issue	Page Number(s)		Key Information about the Issue from the Text		

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Model Surfacing Issues Tool

Name:	Class:	Date:
Issue	Page Number(s)	Key Information about the Issue from the Text
Human tissue research	2, 4, 30	Henrietta's cells are the first immortal human cells and have been used for a wide variety of medical and scientific purposes (pp. 2, 4). George Gey works to develop the first line of immortal human cells (p. 30).
Race issues in medical care	30, 63–64	Scientists often used black patients from Johns Hopkins for research in lieu of receiving payment for medical services, usually without their knowledge (p. 30). Black patients in public wards did not question white people's professional judgment, but there is no way of knowing if Henrietta's treatment would have been different if she had been white (pp. 63–64).
Consent for tissues to be used in medical research	29, 31, 33	Patients from public wards were often used for research without their knowledge (p. 29). Henrietta signed a consent form for operative procedures, but not for the donation of her tissue for research (pp. 31, 33).
The evolution of cancer treatment	27–30, 32–33	TeLinde wanted to prove that carcinoma in situ could become invasive cervical cancer so that the non-invasive cancers could be treated more aggressively (pp. 27–30). Cancer in the mid-twentieth century was treated with radium (pp. 32–33).

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Posing Inquiry Questions Handout

Class: Date:

Generating Questions

In this module, *The Immortal Life of Henrietta Lacks* is a starter or "seed text" that helps generate potential topics and issues that drive the research process. Issues and topics that are surfaced in the text will be used to pose inquiry questions. These inquiry questions will help illuminate different potential areas of investigation within a research topic. When generating inquiry questions, it is often a good idea to brainstorm as many as possible before selecting and refining the richest ones. Here are several to help you get started:

- How is the topic defined?
- What are its major aspects?
- Where did it originate?
- What are its causes and implications?
- What is its history?
- What other topics/issues is it connected to or associated with?
- What are its important places, things, people, and experts?

Selecting and Refining Questions

Once the brainstorming process is completed, it is important to review and select the strongest questions generated. Use these questions to assist with selecting and refining the strongest inquiry questions:

Are you genuinely interested in answering your question?

There is a lot of work involved in research, and genuine interest motivates the research process. The best questions are about things that are interesting to individual researchers and what they consider to be valuable information.

Can your question truly be answered through your research?

Some questions are unanswerable (Are there aliens on Jupiter?) or take years to answer (What are the long-term effects of sleep loss on a person's health?). A suitable inquiry question is realistic and researchable within the timeframe available.

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Is your question clear? Can you pose your question in a way that you and others understand what you are asking?

Effective inquiry questions are straightforward and not confusing. If the question has two parts, it may be better to separate the parts to form two new questions.

What sort of answers does your question require?

Questions that can be answered with a simple "yes" or "no" generally do not make good inquiry questions. An inquiry question should support plenty of investigation that may even lead to multiple answers, and more questions. For example, the question "What are the characteristics of a cancer cell?" could lead to asking questions about how these characteristics are defined and when they were first discovered.

Do you already know what the answer is?

Suitable inquiry questions are actually questions that cannot be answered immediately. The research process involves inquiry, finding more information about a question, and developing a perspective based on the evidence discovered and this cannot happen if the question is already answered or too simplistic. For example, there is a big difference between the questions "How many types of cancer are there?" (an easily answered question that requires little research) and "What is the history of cancer research?" (a question that would require a lot of research).

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10.3.1 Lesson 4

Introduction

In this lesson, students continue to read *The Immortal Life of Henrietta Lacks*, pp. 93–102. In this excerpt, Skloot reveals the scientific advancements made possible by the HeLa cells, as well as the birth of the human biological materials industry.

Students continue to build their understanding of central ideas present in this text as they examine the history of HeLa through the lens of scientific discovery. Students discuss their understanding in pairs and continue to surface issues in the text for the purpose of research. Students also continue to generate, refine, and select inquiry questions that guide their research. The assessment is a Quick Write that requires students to analyze the development of a central idea in this text and use specific details to support their answers.

For homework, students preview the text from 10.3.1 Lesson 5 and annotate from "As HeLa grew like crabgrass in laboratories around the world" to "In fact, research flourished. And much of it involved HeLa" (pp. 127-136).

Assessed Star	ndard(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 St	andard(s)					
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). 					
SL.9-10.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.					

1

Standards

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engage^{ny} Our Students, Their Moment

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.

• Determine a central idea in this excerpt and analyze how specific details about HeLa cells contribute to its development.

High Performance Response(s)

A High Performance Response should:

- Determine a central idea present in this text (e.g., HeLa's positive contributions to scientific development including the scientific discoveries made possible by HeLa cells, the development of a vaccine for polio using HeLa, the beginning of the "first industrial-scale, for-profit cell distribution center," and dramatic improvements to the field of tissue culture).
- Select details to illustrate the development of that central idea (e.g., the polio vaccine production forced Gey to develop a way to "make sure cells could survive long trips." The large scale production and shipping method made it possible for many scientists to have access to the cells and presented opportunities for many scientific discoveries such as the "cloning of individual cells.").

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- polio (n.) shortened form of poliomyelitis; a serious disease that affects the nerves of the spine and often makes a person permanently unable to move particular muscles
- vaccine (n.) a substance that is usually injected into a person or animal to protect against a
 particular disease
- autoclave (n.) a heavy vessel for conducting chemical reactions under high pressure
- incubators (n.) apparatus in which media inoculated with microorganisms are cultivated at a constant temperature
- proteins (n.) any of various naturally occurring extremely complex substances that consist of amino-acid residues joined by peptide bonds; contain the elements carbon, hydrogen, nitrogen, oxygen, usually sulfur, and occasionally other elements (such as phosphorus or iron); and include many essential biological compounds (such as enzymes, hormones, or antibodies)
- optimal (adj.) most favorable





- hardy (adj.) capable of enduring hardship; strong
- metabolism (n.) the chemical processes by which a plant or animal uses food, water, etc. to grow and heal and to make energy
- culture medium (n.) a liquid or solidified nutrient material suitable for the cultivation of microorganisms
- (i) *culture* was defined in 10.3.1 Lesson 1.

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

• susceptible (adj.) - open, subject, or unresistant to some stimulus, influence, or agency

Lesson Agenda/Overview

Stu	% of Lesson				
Sta					
•	Standards: RI.9-10.2, W.9-10.9.b, SL.9-10.1				
•	Text: The Immortal Life of Henrietta Lacks, pages 93–102				
Lea	Learning Sequence:				
1.	Introduction of Lesson Agenda	1.	5%		
2.	Homework Accountability	2.	15%		
3.	Reading and Discussion	3.	45%		
4.	4. Generating and Refining Inquiry Questions				
5.	Quick Write	5.	10%		
6.	Closing	6.	5%		

Materials

- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Posing Inquiry Questions Handout (refer to 10.3.1 Lesson 3)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)

3



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5%

15%

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.		
	Italicized text indicates a vocabulary word.		
•	Indicates student action(s).		
¢	Indicates possible student response(s) to teacher questions.		
í	Indicates instructional notes for the teacher.		

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.2. Explain that today students continue reading and analyzing pages 93–102 of *The Immortal Life of Henrietta Lacks*, focusing on the development of a central idea. Students also track potential research issues, as well as generate and refine further inquiry questions for research purposes.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to Turn-and-Talk with a classmate about the information they found for homework related to the Tuskegee syphilis study.

- ① Differentiation Consideration: Consider leading a brief whole-class discussion in order to clarify the history of the study and provide students an opportunity to discuss their findings and opinions as a group before pair discussion.
- This is a highly sensitive, racially charged issue; however, addressing this study is crucial to understanding the issues present in this text. Consider establishing and modeling classroom norms and expectations for a respectful and critical approach to sensitive topics in an academic context.
 - Students Turn-and-Talk with a classmate, discussing the information they found for homework.
 - The Tuskegee syphilis study was a scientific study done in Alabama. In this study, African-American men who had syphilis were not given medicine to treat the syphilis when it became available by white doctors, but were observed to see if the effects of syphilis were different between African-Americans and white Americans. Many of the men in the study died from syphilis.

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Ask students:

How did the resources you found help you understand these terms?

- Student pairs discuss the resources they found and how it helped them understand the Tuskegee syphilis study.
- Student responses vary depending on the resource but may include:
 - This article ("Tuskegee Syphilis Study") on Science Museum (<u>www.sciencemuseum.org.uk</u>) helped me understand the study because it presents a brief account of what happened to the men and gives the dates of when the study started and ended. It also mentions that some of the men who were a part of the study were not allowed to be drafted and fight in World War II.

Activity 3: Reading and Discussion

45%

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

Instruct students to take out their Surfacing Issues Tools, and reread *The Immortal Life of Henrietta Lacks*, from "Not long after Henrietta's death, planning began" to "were conducting the infamous Tuskegee syphilis studies" (pp. 93–97) and answer the following questions before sharing out with the class.

 If necessary to support comprehension and fluency, consider using a Masterful Reading of the focus excerpt for the lesson.

Direct student pairs to also annotate the text, surface issues, and record their answers in writing. Remind students to record issues for research as they read on their Surfacing Issues Tool.

- Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading including: polio, vaccine, autoclave, incubator, culture medium, hardy, optimal, proteins, and metabolism.
- This annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.
- ③ For potential student issues surfaced for this reading see the Model Surfacing Issues Tool at the end of this lesson.

What was the problem with Salk's polio vaccine? How did HeLa solve this problem?

← There needed to be "millions of neutralization tests" (p. 93), which cost a lot of money because "monkeys were expensive" (p. 94). HeLa cells could be easily grown on a massive scale, which





was cheaper than buying monkeys; "HeLa cells weren't limited by space . . . it would solve the mass production problem" (p. 94–95).

What is the significance of HeLa cells being "more susceptible to the virus than any other cultured cells" (p. 95)?

Scientists needed to see if "the virus would infect the cells" (p. 94), to figure out if the vaccine worked. Since HeLa is "more susceptible" it meant that the virus would infect the cell faster and results would be seen quickly.

What is the meaning of the word susceptible (p. 94)?

HeLa needed to be "susceptible to poliovirus" (p. 94) in order to be effective for testing.
 Susceptible might mean easily affected by a virus.

How did Gey play a role in proving the polio vaccine effective?

■ Gey gave away a vial of HeLa cells in a shipping experiment and that allowed the Tuskegee Institute to mass-produce HeLa cells to prove the vaccine's effectiveness: "It was the first-ever cell production factory, and it started with a single vial of HeLa that Gey had sent Schrerer in their first shipping experiment, not long after Henrietta's death" (p. 96).

What contrast does Skloot present at the end of pages 93–97? How does the homework assignment concerning the Tuskegee syphilis study deepen your understanding of this contrast?

① Remind students to refer to the research they completed for homework.

Skloot contrasts "Black scientists and technicians . . . cells from a black woman" (p. 97) of the Tuskegee Institute with the Americans who benefited from the polio vaccine, "most of them white" (p. 97). The research on the Tuskegee syphilis study deepens this contrast because not only were black scientists working to help white patients, but at the same institute there were white scientists actively doing harm to black patients.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to read *The Immortal Life of Henrietta Lacks*, from "At first the Tuskegee Center supplied HeLa cells" to "which glassware and test-tube stoppers were least toxic to cells" (pp. 97–99) and answer the following questions before sharing out with the class. Also direct student pairs to annotate the text and record the answers in writing. Remind students to record potential issues for research as they read on the Surfacing Issues Tool.

What made HeLa cells an "optimal (most favorable) tool" (p. 97) for studying cell behavior?

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➡ HeLa cells could be used to study "any number of things in culture" (p. 97) and shared "many basic characteristics with normal cells" (p. 97), but they "produced results faster" (p. 97).

How did HeLa cells allow scientists to view "spontaneous transformation"?

Researchers used HeLa to develop "methods for freezing cells" (p. 98), and since they could freeze cells they could look at "identical cells at different points in time" (p. 98). Spontaneous transformation is the point at which a "normal cell . . . became malignant" (p. 98) and by freezing cells, researchers could see when this happened.

Why was standardization of materials and methods important for scientific study? Provide two examples of how HeLa cells contributed to standardization.

Standardization was important because an experiment "isn't considered valid if others can't repeat the work" (p. 99). HeLa cells were used to develop the "first standardized culture medium," as well as test which glassware were "least toxic to cells" (p. 99).

Lead a brief whole-class discussion of student responses.

Instruct student pairs to read *The Immortal Life of Henrietta Lacks*, from "Only then, for the first time, could researchers around the world" to "But none grew in quantities like HeLa" (pp. 99–102) and answer the following questions before sharing out with the class. Also direct student pairs to annotate the text and record answers in writing. Remind students to record potential issues for research as they read on the Surfacing Issues Tool.

Why was it necessary to clone HeLa cells?

 Scientists wanted to clone individual cells because they "often behave differently" (p. 99) even if they are from the same cluster. Scientists needed to clone cells in order to use and understand each of their "unique traits" (p. 100).

What was the "fortunate mistake"? How did this contribute to scientific understanding?

The "fortunate mistake" was an accidental mixing of a liquid with "HeLa and a few other cells" (p. 100) that allowed scientists to see all the chromosomes clearly. This allowed scientists to know exactly "how many chromosomes people were supposed to have," and allowed scientific discovery in the field of "chromosomal disorders" (p. 100).

How was Microbiological Associates "an absolute revolution in the field" (p. 101)? Use evidence from the text to support your answer.



Microbiological Associates and Samuel Reader were the first to create a "for-profit cell distribution center" (p. 101). They used HeLa cells to create a "multibillion-dollar industry" (p. 101) because no one had the "time or ability" (p. 100) to grow HeLa cells in large amounts.

How does the quote, "HeLa was a workhorse: it was *hardy* (capable of enduring hardship; strong), it was inexpensive, and it was everywhere" (p. 97) help develop the central ideas in this portion of text?

- Since HeLa was "a workhorse" (p. 97) and "hardy" (p. 97), it was able to produce results quickly and "made several important scientific advances" (p. 98). One of these advancements was helping scientists understand "how many chromosomes people were *supposed* to have" (p. 100). HeLa cells were "inexpensive" (p. 97) and many scientists wanted them for experiments, "but few had the time or ability to grow them" (p. 100) so instead scientists just bought them. The demand for HeLa was so great it helped launch a "multibillion-dollar industry" (p. 101), which started with Samuel Reader's "Cell Factory" (p. 101).
- ③ Remind students they have been introduced to *workhorse* in 10.3.1 Lesson 1 and instruct them to consult the Unit 10.3.1 Unit Glossary for a definition.

Lead a brief whole-class discussion of student responses.

Activity 4: Generating and Refining Inquiry Questions

Explain to students that in this lesson, they continue the work of collaborative discussion outlined in SL.9-10.1, to which students were previously introduced. Remind students that in the previous lesson, they were introduced to generating and refining inquiry questions to support rich inquiry and research. Instruct students to first form heterogeneous groups of four or five, and ask each group to generate five inquiry questions based on the issues recorded in this lesson. Instruct students to use the selecting and refining process introduced in the previous lesson to select their strongest inquiry questions. Instruct students to refer to their Posing Inquiry Questions Handout as they generate, refine, and select inquiry questions.

- ① Consider reminding students of the skills inherent in the substandards of SL.9-10.1, to which students were previously introduced.
- ① Remind students that the process of selecting and refining inquiry questions helps them identify the strongest questions for further inquiry.
 - Students form groups and generate and refine inquiry questions.
 - Student responses vary depending on the topic, inquiry questions, and refining process, but may include:

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• Issue: Cell cloning



20%

- Inquiry questions: 1.What is the history of cell cloning? 2. What are the major aspects of cell cloning? 3. What else is cell cloning associated with? 4. What have been the implications or discoveries made possible by cell cloning? 5. Who are the scientists who first grew cell clones?
- ① Through selecting and refining inquiry questions, student groups identify their strongest questions to guide their initial searches in subsequent lessons.

Activity 5: Quick Write

10%

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

Determine a central idea in this excerpt and analyze how specific details about HeLa cells contribute to its development.

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 to guide their written responses.

- ① Display the prompt for students to see, or provide the prompt in hard copy.
 - Students independently answer the prompt, using evidence from the text.
 - See the High Performance Response at the beginning of this lesson.

Activity 6: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to read and annotate from "As HeLa grew like crabgrass in laboratories around the world" to "In fact, research flourished. And much of it involved HeLa" (pp. 127–136). Direct students to box any unfamiliar words and look up their definitions. Instruct them to choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.

• Students follow along.

Homework

Read and annotate from "As HeLa grew like crabgrass in laboratories around the world" to "In fact, research flourished. And much of it involved HeLa" (pp. 127–136). Box any unfamiliar words and look up their definitions. Choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.

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Model Surfacing Issues Tool

Name:	Class:	Date:
Issue	Page Number(s)	Key Information About the Issue from the Text
Cloning cells	99–100	Cell cloning was used because HeLa came from "a cluster of cells" and scientists wanted to grow and study traits of individual cells. The advancements made with cell cloning "helped lead to many later advances."
Racial inequality	96–97	Black scientists and technicians were studying and using cells "from a black woman" to help save the lives of millions of white Americans.
Biological materials industry	100–101	There was a great demand for HeLa cells and Microbiological Associates began producing HeLa cells in large quantities and made millions of dollars.
Polio vaccine	93–97	HeLa cells were used for "neutralization tests" because they were cheap, easy to produce, and very susceptible to the poliovirus.

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10.3.1 Lesson 5

Introduction

In this lesson, the first in a series of two lessons, students read and analyze pp. 127–136 of *The Immortal Life of Henrietta Lacks*. In this excerpt, Skloot describes cases in which HeLa cells were misused and explores issues of informed consent and human experimentation.

Students explore this passage through a Masterful Reading and a series of questions and discussions, in which they analyze how Skloot supports a perspective through description and use of language. Students continue to surface issues that emerge from the text and record them on their Surfacing Issues Tool. The assessment in this lesson is a Quick Write prompt: Analyze how Skloot uses examples in this portion of text to advance her purpose.

For homework, students select and refine inquiry questions they generated in this lesson. Students also respond to a writing prompt that requires them to compare the representation of HeLa cells in this lesson's excerpt with how they were represented in the previous lesson's text (pp. 93–97).

Assessed Standard(s)					
RI.9-10.6	Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.				
Addressed Standard(s)					
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). 				
L.9-10.4.a	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, 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. 				

Standards

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Assessment

Assessment(s)

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

• Analyze how Skloot uses examples in this portion of text to advance her purpose.

High Performance Response(s)

A High Performance Response should:

- Determine Skloot's purpose in this portion of text (e.g., the importance of informed consent and the need to protect patient rights).
- Provide specific examples that advance Skloot's purpose (e.g., human experimentation by Nazi doctors, Southam's cancer experiments with HeLa cells on prisoners and cancer patients, Southam's trial).
- Describe how the details advance Skloot's purpose (e.g., Skloot gives the example of the horrible cases of "human experimentation" conducted by Nazi doctors such as "dissecting people alive" to demonstrate that patients should have rights and be protected. These horrific experiments led to the Nuremberg Code, which said "The voluntary consent of the human subject is essential" but it was not a law and provided no protection for patients in the United States, where "The bills were repeatedly voted down." The Nuremberg Code is the reason three doctors would not participate in Southam's cancer experiments and consequently called the study "illegal, immoral, and deplorable.").

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- inoculation (n.) introduction of (the causative agent of disease) into the body of (a person or animal), in order to induce immunity
- immune system (n.) a diffuse, complex network of interacting cells, cell products, and cellforming tissues that protects the body from pathogens and other foreign substances, destroys infected and malignant cells, and removes cellular debris
- lymph nodes (n.) any of the glandlike masses of tissue in the lymphatic vessels containing cells that become lymphocytes through which lymph passes to be filtered and cleaned
- refrain (n.) a phrase or verse recurring at intervals in a song or poem
- diagnosis (n.) the process of determining by examination the nature and circumstances of a diseased condition

2

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- dissecting (v.) cutting apart (an animal body, plant, etc.) to examine the structure, relation of parts, or the like
- ethical boundaries (n.) the limits of accepted principles of right and wrong that govern the conduct of a profession
- civil courts (n.) courts of law in which civil cases (private and civilian affairs) are tried and determined
- inalienable rights (n.) that which is due to anyone by just claim, legal guarantees, moral principles, etc., and cannot be transferred to another without consent (e.g., rights of liberty or of speech)

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

- informed consent (n.) a patient's consent to a medical or surgical procedure or to participation in a clinical study after being properly advised of the relevant medical facts and the risks involved
- human experimentation (n.) a test or procedure carried out on a person under controlled conditions to determine the validity of a theory or make a discovery

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.6, W.9-10.9.b, L.9-10.4.a	
• Text: The Immortal Life of Henrietta Lacks, pp. 127–136	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 10%
3. Masterful Reading	3. 20%
4. Reading and Discussion	4. 45%
5. Quick Write	5. 15%
6. Closing	6. 5%

3

Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)



Learning Sequence

How to l	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.		
Symbol	Italicized text indicates a vocabulary word.		
•	Indicates student action(s).		
¢	Indicates possible student response(s) to teacher questions.		
í	Indicates instructional notes for the teacher.		

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.6. Explain that in this lesson students listen to a Masterful Reading and analyze pages 127–136 of *The Immortal Life of Henrietta Lacks,* focusing on Skloot's purpose and how she advances that purpose in this portion of text. Additionally, students track potential research issues, as well as generate further inquiry questions based on the issues surfaced in the text.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to Turn-and-Talk with a classmate about the previous lesson's homework (preview the following lesson's text) and annotate from "As HeLa grew like crabgrass in laboratories around the world" to "In fact, research flourished. And much of it involved HeLa" (pp. 127–136).

- Students Turn-and-Talk with a classmate, discussing the reading and annotations.
- Student responses may include:
 - Star near "He told them he was testing their immune systems; he said nothing about injecting them with someone else's malignant cells" (p. 128) this seems like an important detail because the doctor did not tell his patients what he was doing.
 - Star near "The deception was for his benefit . . . to participate in his study if they'd known what he was injecting" (p. 130) – this relates to the previous idea and also seems connected to the excerpt title: "Illegal, Immoral, and Deplorable."
 - Box around "human experimentation" (p. 131) this seems like an important vocabulary term.

4



10%

5%

- Star near "Every human being has an inalienable right to determine what shall be done with his own body" (p. 134) – this is taking a firm perspective about the testing that was happening.
- Box around "inalienable" (p. 134) this is part of the opposite perspective to Southam's and seems like an important word because it is connected with "rights" (p. 134).
- This annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Activity 3: Masterful Reading	20%
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Begin a Masterful Reading of the entire excerpt from "As HeLa grew like crabgrass in laboratories" to "In fact, research flourished. And much of it involved HeLa" (pp. 127–136). Instruct students to follow along silently in their text as they listen to a Masterful Reading.

• Students follow along, reading silently.

Activity 4: Reading and Discussion

Instruct students to form pairs. Post or project each group of questions below for students to discuss.

Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading: inoculation, immune system, lymph nodes, refrain, diagnosis, dissecting, ethical boundaries, civil courts, and inalienable rights.

Instruct students to take out their Surfacing Issues Tool. Explain that students should record any potential research issues after each portion of text is read, and record two inquiry questions for each issue they surface in the text.

③ For potential surfaced issues from this portion of text, see the Model Surfacing Issues Tool at the end of this lesson.

Instruct student pairs to reread from "As HeLa grew like crabgrass in laboratories" to "that could someday lead to a cancer vaccine" (pp. 127–129), annotate their texts, and answer the following questions before sharing out with the class.

What was the purpose of Southam's experiment?

Southam started his experiments because he wanted to understand cancer, whether it started as "a virus or an immune system deficiency" (p. 128). Southam was also worried about the safety of scientists, and he thought HeLa might "infect the scientists" (p. 127) who were working with the cells.

5

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Review the following portion of text on page 128: "Within hours, the patients' forearms grew red and swollen" to "Henrietta's cancer cells metastasized to her lymph nodes." What inferences can you make about the effects of the experiments on the health of the first test subjects?

Skloot writes that the tumors "returned again, and again" (p. 128) and in one case "Henrietta's cancer cells metastasized to her lymph nodes" (p. 128). The way Skloot describes the condition of these patients makes it seem like their health had gotten worse.

Why did Southam choose prisoners as test subjects?

- Southam used prisoners because they had "cooperated in several other studies" (p. 128) and they were "being used for research of all kinds" (p. 129) and were considered a "vulnerable population" (p. 129) because they could not give "informed consent" (p. 129). They are considered vulnerable because they may lack education that would help give them *informed consent*.
- ① Consider providing students with the following definition: *informed consent* means "a patient's consent to a medical or surgical procedure or to participation in a clinical study after being properly advised of the relevant medical facts and the risks involved."
 - Students write the definition of *informed consent* on their copy of the text or in a vocabulary journal.

How does Skloot's description of the experiments on prisoners help make meaning of *informed consent*?

- Skloot describes experiments that sound awful like "X-raying testicles" (p. 129) or being "infected with a potentially deadly disease" (p. 129). If prisoners were "unable" (p. 129) to give informed consent then it probably means they did not know much about the experiments.
- 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.

What is the effect of Skloot's use of the word refrain to describe the prisoner's quotes?

Skloot quotes the prisoners saying they want to "pay back a little bit" (p. 129) and that these experiments "the wrong I have done . . . this might make a right on it" (p. 129); her use of the word *refrain* means this kind of phrase was repeated over and over and they were motivated mostly by guilt.

How do Skloot's details of Southam's patients contribute to her perspective about *informed consent* in this specific study?



Skloot describes the prisoners as a "vulnerable population" (p. 129) and the first subjects were "about a dozen other cancer patients" (p. 128) as well as "terminally ill" (p. 129). Skloot's details about Southam saying "nothing about . . . malignant cells" (p. 128) as well as the description of the size and frequency of the cancerous nodules as "two centimeters" (p. 128) contribute to her perspective of supporting *informed consent*.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "In the coming years, Southam injected HeLa" to "They also knew about the famous Nuremberg Trials" (pp. 129–131) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions.

Why did Southam believe he was actually testing patients for cancer?

Southam believed that by "timing the rejection rate" (p. 130) of HeLa cells he could tell which subjects actually had cancer. The patients who "reject the cells more slowly" (p. 130) were likely to have cancer.

What did Southam consider to be "responsible clinical practice" (p. 130)?

Southam believed that doctors should not cause "unnecessary fear" (p. 130) and that being informed about the study would be too "emotionally disturbing" (p. 130) to the uninformed patient. They would think that their "diagnosis is cancer" (p. 130) when he believed he was not actually giving anyone cancer.

What is the impact of Skloot's insertion of "(rightly or wrongly)" (p. 130) into Southam's quote?

 Skloot's insertion impacts Southam's claim because she is questioning whether it was right or wrong that his test would "suggest" (p. 130) to patients that they may have cancer.

What claim does Skloot make about Southam's "deception" (p. 130)?

Skloot claims that Southam did not fully explain his study and it "was for his benefit" (p. 130), since his patients may have "refused to participate" (p. 130).

What is the effect of Skloot's reference to "the research Nazis had done on Jewish prisoners" (p. 131) in connection with Southam's study? How does this reference advance her purpose in this portion of text?

 Skloot's reference to the "research Nazis had done" (p. 131) relates Southam's study with one of the worst cases of human treatment in human history, therefore making Southam seem





horrible. The doctors would not "conduct research on patients without their consent" (p. 130) and Skloot's purpose in this text so far is to reinforce the importance of informed consent.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Sixteen years earlier, on August 20, 1947" to "an empty formality. With this we cannot agree" (pp. 131–134) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions.

- ① Consider providing students with the following definition: *human experimentation* means "a test or procedure carried out on a person under controlled conditions to determine the validity of a theory or make a discovery."
 - Students write the definition of *human experimentation* on their copy of the text or in a vocabulary journal.

Why does Skloot choose this section of the Nuremberg Code?

Skloot quotes the part of the Nuremberg Code that talks about "voluntary consent" (p. 131) being necessary for *human experimentation*—testing research on humans. Skloot uses this portion of the code to advance her purpose that *informed consent* is important when experimenting on people. Skloot also notes there were "rules protecting laboratory animals" (p. 131) but not for "humans until Nuremberg" (p. 131).

Why did the Nuremberg Code never pass as a law in the United States?

The Nuremberg Code was "essentially, a list of recommendations" (p. 131) and did not become a law in the United States because there was "fear of interfering with the progress of science" (p. 131).

Why was Southam free from the informed consent ruling in civil court?

This ruling did not apply to Southam because he was a researcher, not a physician, and the ruling stated that a physician "violates his duty" (p. 132) if he or she does not provide *informed consent*, but in Southam's case "subjects weren't the researcher's patients" (p. 132).

What can you infer from Southam's statement that "it seemed stupid to take even a little risk" (p. 134)?

 This statement means that Southam knew that injecting HeLa cells was potentially harmful because he "didn't inject himself" (p. 134).





How did Southam's lawyer support the claim that Southam did not participate in "unprofessional conduct" (p. 134)?

Many doctors said "they'd been conducting similar research for decades" (p. 134). Southam's lawyer's claim was supported by the testimony of the other doctors; they thought his practices were "ethical in the field" (p. 134).

Explain the two perspectives present in the case brought before the Board of Regents. Which perspective supports Skloot's purpose?

The first perspective in this case was that Southam was doing what all doctors did in the field: "it was unnecessary to disclose all information" (p. 134). Southam did what was "ethical in the field" (p. 134) so he did not consider his actions wrong. The Attorney General's perspective argued that it was a part of people's *inalienable rights* "to be fearful and frightened and thus say NO" (p. 134). Skloot has been advocating for *informed consent* in this text: "Informed consent focused on what doctors were required to tell their patients" (p. 132). The Attorney General's perspective supports Skloot's purpose.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from "Their decision called for more specific guidelines" to "In fact research flourished. And much of it involved HeLa" (pp. 134–136) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions. Additionally, students discuss their answers to the following questions and annotate the text in pairs.

Compare the cases of Bertil Bjorklund and Southam. What happened to each scientist? Which case brought about change in scientific practices?

- Student responses should include:
 - Both scientists had been giving "patients intravenous injections" (p. 133) but Bjorklund also injected himself.
 - Both scientists were punished. Bjorklund was "expelled from his laboratory" (p. 133).
 Southam was put on probation for a year, though shortly thereafter "Southam was elected president of the American Association for Cancer Research" (p. 135).
 - Even though Southam's punishment was easier, it caused the NIH to implement "one of the largest research oversight changes in the history of experimentation on humans" (p. 135).

Lead a brief whole-class discussion of student responses.





Activity 5: Quick Write

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

Analyze how Skloot uses examples in this portion of text to advance her purpose.

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 to 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 6: Closing

Display and distribute the homework assignment. For homework, instruct students to select and refine three of the inquiry questions they generated in this lesson. Also, instruct students to respond to the following prompt:

What conclusions can you draw between the representation of HeLa in this excerpt ("Illegal, Immoral, and Deplorable") versus the representation of HeLa in "The HeLa Factory"?

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

Students follow along.

Homework

Refine your inquiry questions and select three from the questions generated in this lesson. Respond in writing to the following prompt:

What conclusions can you draw between the representation of HeLa in this excerpt ("Illegal, Immoral, and Deplorable") versus the representation of HeLa in "The HeLa Factory"?



5%

Model Surfacing Issues Tool

Name:	Class:	Date:
Issue	Page Number(s)	Key Information about the Issue from the Text
Southam's cancer experiments	127–136	Southam injected HeLa cells into patients without telling them because "he didn't want to cause any unnecessary fear." This example includes <i>informed consent</i> and <i>human experimentation</i> .
The Nuremberg Code	131	This example is about a code of medical ethics made after Nazi doctors were put on trial. The code called for "voluntary consent" when performing <i>human</i> <i>experimentation</i> . It was not a law, just "a list of recommendations."
Informed Consent	128–136	Most medical researchers thought it was "unnecessary to disclose all information to research subjects." This lead to experiments on "vulnerable populations" like prisoners.
Human experimentation	131–136	Nazi doctors had done "unthinkable research on Jews" and the Nuremberg Code was set to provide protection for human subjects. This was not a law and many researchers conducted dangerous experiments on people.

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10.3.1 Lesson 6

Introduction

In this lesson, students closely reread a paragraph of *The Immortal Life of Henrietta Lacks* on page 130, in which Skloot makes several claims about immoral research. Students analyze the rest of the excerpt for evidence in support of Skloot's claims. This lesson focuses on identifying and delineating one of Skloot's claims, and evaluating how relevant and sufficient Skloot's evidence is in supporting the claim.

Students explore the paragraph on page 130 through the lens of identifying and delineating one of Skloot's claims. Next, students participate in guided practice to determine what qualifies as relevant and sufficient evidence to support a claim. The assessment in this lesson is the Lesson 6 Evidence Collection Tool that requires student groups to identify and evaluate evidence that Skloot uses in pages 127–136 to support her claim. Students participate in collaborative group discussion and synthesize their findings on the Lesson 6 Evidence Collection Tool. For homework, students preview the following lesson's text and annotate from "But Day didn't want to talk about Henrietta's life" to "I think I would have killed him myself" (pp. 164–169).

Assessed Star	ndard(s)
RI.9-10.8	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
Addressed St	andard(s)
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").
SL.9-10.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Standards

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engage^{ny} Our Students. Their Moment.

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Assessment

Assessment(s)

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

- Evaluate Skloot's claim in paragraph 4 on page 130, and determine whether the evidence in the rest of the excerpt is relevant and sufficient to support her claim.
- ③ Students should write their Quick Write responses directly on the Lesson 6 Evidence Collection Tool.

High Performance Response(s)

A High Performance Response should:

• See Model Lesson 6 Evidence Tool for High Performance Responses

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- inoculation (n.) introduction of (the causative agent of disease) into the body of (a person or animal), in order to induce immunity
- immune system (n.) a diffuse, complex network of interacting cells, cell products, and cellforming tissues that protects the body from pathogens and other foreign substances, destroys infected and malignant cells, and removes cellular debris
- lymph nodes (n.) any of the glandlike masses of tissue in the lymphatic vessels containing cells that become lymphocytes through which lymph passes to be filtered and cleaned
- refrain (n.) a phrase or verse recurring at intervals in a song or poem
- diagnosis (n.) the process of determining by examination the nature and circumstances of a diseased condition
- dissecting (v.) cutting apart (an animal body, plant, etc.) to examine the structure, relation of parts, or the like
- ethical boundaries (n.) the limits of accepted principles of right and wrong that govern the conduct of a profession
- civil courts (n.) courts of law in which civil cases (private and civilian affairs) are tried and determined
- inalienable rights (n.) that which is due to anyone by just claim, legal guarantees, moral principles, etc., and cannot be transferred to another without consent (e.g., rights of liberty or of





speech)

① Students were given these terms in 10.3.1 Lesson 5.

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

- informed consent (n.) a patient's consent to a medical or surgical procedure or to participation in a clinical study after being properly advised of the relevant medical facts and the risks involved
- human experimentation (n.) a test or procedure carried out on a person under controlled conditions to determine the validity of a theory or make a discovery

Lesson Agenda/Overview

Stu	Student-Facing Agenda		
Sta	indards & Text:		
•	Standards: RI.9-10.8, SL.9-10.1, W.9-10.9.b		
•	Text: The Immortal Life of Henrietta Lacks, pp. 127–136		
Lea	arning Sequence:		
1.	Introduction of Lesson Agenda	1.	5%
2.	Homework Accountability	2.	10%
3.	Identifying and Delineating Arguments	3.	30%
4.	Evidence Collection Tool Small Group Activity	4.	40%
5.	Quick Write	5.	10%
6.	Closing	6.	5%

Materials

- Copies of the Lesson 6 Evidence Collection Tool for each student
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)

Learning Sequence

How to Use the Learning Sequence		
Symbol	Symbol Type of Text & Interpretation of the Symbol	
10%	Percentage indicates the percentage of lesson time each activity should take.	
no Plain text indicates teacher action.		

3

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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.	
í	Indicates instructional notes for the teacher.	

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.8. Explain that in this lesson, students review argumentation, delineate an argument in Skloot's text by identifying claims, and learn about relevant and sufficient evidence. Students analyze a paragraph of *The Immortal Life of Henrietta Lacks* on page 130, with a focus on how Skloot supports her argument in pages 127–136 of the text.

- Students look at the agenda.
- ③ Students were introduced to argumentation in Modules 9.4 and 10.2.

Activity 2: Homework Accountability

Instruct students to Turn-and-Talk with a classmate and briefly share two inquiry questions they refined and selected for homework.

- Students Turn-and-Talk with a classmate, discussing their inquiry questions.
- Student responses may include:
 - o What are other important cases of human experimentation?
 - \circ What have been the benefits of human experimentation?

Instruct students to Turn-and-Talk with a classmate about the writing prompt they completed for homework (What conclusions can you draw between the representation of HeLa in this excerpt ("Illegal, Immoral, and Deplorable") versus the representation of HeLa in "The HeLa Factory"?).

- Students Turn-and-Talk with a classmate, discussing their answer to the previous lesson's prompt.
- In "Illegal, Immoral, and Deplorable" doctors experimented on cancer patients using HeLa cells and caused "HeLa tumors" (p. 128). HeLa cells were used in dangerous ways on people. In "The HeLa Factory" HeLa cells are used for scientific discovery; in one case "to help stop polio" (p. 93) by being used to test a vaccine. This polio vaccine was developed using HeLa and "helped save the lives of millions of Americans" (p. 97).

4



10%

5%

Activity 3: Identifying and Delineating Arguments

Instruct students to independently reread the paragraph on page 130 from "But Southam wasn't their doctor, and he wasn't withholding upsetting health information" to "to use the hospital's patients for his research" (p. 130).

DRAFT

• Students independently reread the paragraph on page 130.

Explain to students that in this lesson they will identify and *delineate* Skloot's claim in this paragraph. Explain to students that *delineating* means describing precisely in words, and to *delineate* an argument means "to trace or outline the argument's central and supporting claims." For example, in the text, Skloot makes a central claim that doctors and researchers opposed laws "regulating human experimentation" (p. 131). To *delineate* Skloot's argument further would be to identify supporting claims, such as the doctors' fear such laws would interfere with "the progress of science" (p. 131).

- Students follow along.
- ① Consider reminding students of their previous work with RI.9-10.8 in Module 10.2.
- ① The texts in this module do not support instruction around false statements or fallacious reasoning.

Instruct students to briefly Turn-and-Talk with a classmate and discuss what Skloot's central claim (the main point of her argument) might be in this paragraph, citing evidence, before engaging in a whole-class discussion.

• Students Turn-and-Talk.

Lead a brief whole-class discussion of student responses.

- Student responses may include:
 - Southam would have continued his experiments indefinitely: "Southam probably would have continued doing this for years" (p. 130).
 - Southam lied and did not explain his experiments because patients may not have agreed:
 "The deception was for his benefit" (p. 130).

Explain to students that in order to determine Skloot's central claim in this paragraph, the issue encompassing her claim also needs to be identified. Ask students to volunteer an answer to this question:

Based on the Surfacing Issues Tool and reading from the previous lesson, what is the issue?

 The issue is about informed consent because the "patients might have refused" (p. 130) if Southam hadn't been "withholding information" (p. 130).

Display the claim and issue for students. Explain to students that in addition to determining the claims in an argument, another part of *delineating* an argument is evaluating the evidence used to support those



claims. It is important that the evidence used is both *relevant*, which means "related to the issue in an appropriate way," and *sufficient*, which means "adequate for the purpose, or enough." *Relevant* evidence is connected to the claim and *sufficient* evidence thoroughly reinforces the claims in an argument (central and/or supporting claims). One piece of powerful evidence may be *sufficient* to support a claim, or several pieces of evidence may be collectively *sufficient* to support a claim.

- ③ Students have an opportunity to record the issue and claim on the Evidence Collection Tool later in this lesson.
- ① **Differentiation Consideration:** Consider reminding students that evidence supports claims and claims support a central claim within an argument.
 - Students follow along.

Display Skloot's claim and two examples of textual evidence:

Claim: Southam lied and did not explain his experiments because patients may not have agreed: "The deception was for his benefit" (p. 130).

- 1. "He chose the Ohio prison because its inmates had cooperated in several other studies without resistance" (p. 128).
- 2. "When Southam reported his results, the press hailed them as a tremendous breakthrough that could someday lead to a cancer vaccine" (p. 129).
- ① Differentiation Consideration: Consider reminding students that evidence refers to the topical and textual facts, events, and ideas from which the claims of an argument arise, and which are cited to support those claims.

Instruct students to briefly Turn-and-Talk with a classmate about which piece of evidence is more *relevant* to the claim, and how that evidence supports the claim.

• Students Turn-and-Talk.

Lead a brief whole-class discussion of student responses.

 The second piece of evidence is more relevant because it gives an example of how "the deception" (p. 130) benefited Southam.

Activity 4: Evidence Collection Tool Small Group Activity

40%

Display and distribute the Lesson 6 Evidence Collection Tool. Instruct students to form heterogeneous groups of 4–5 for this activity. Explain to students that they will use this tool to identify and evaluate evidence that Skloot uses in pages 127–136 of *The Immortal Life of Henrietta Lacks*, and assess whether the evidence is *relevant* and *sufficient* to support her claim. Instruct students to identify evidence in the excerpt, cite the page number, and evaluate if this evidence supports Skloot's claim.

6



• Students form heterogeneous groups and examine the tool.

Instruct student groups to copy the issue and claim discussed in the previous activity on the appropriate portions of the Lesson 6 Evidence Collection Tool. Ask student groups to briefly discuss the following question before sharing out with the whole class:

Based on Skloot's claim and the issue, what sort of evidence will be relevant?

• Student groups briefly discuss.

Lead a brief whole-class discussion of student responses.

Relevant evidence will relate to the issue of informed consent as well as Southam's experiments.

Remind students that as they are identifying evidence and rereading, they should think about the purpose of the activity: to identify and evaluate evidence Skloot uses in this excerpt to support her claim.

Display the first "Evidence" portion of the Model Lesson 6 Evidence Collection Tool for students. Ask student groups to record the modeled evidence, discuss briefly in their groups, and record the outcome of their discussion on their Lesson 6 Evidence Collection Tool. Ask students:

How does this evidence contribute to Skloot's claim? Is it relevant and sufficient?

- Student groups briefly discuss and evaluate the evidence.
- Student responses may include:
 - This evidence contributes to Skloot's claim because it explains the facts in the legal system Southam used to avoid telling his patients what he was doing.
 - This evidence directly addresses the issue of informed consent and includes Southam, which directly supports Skloot's claim.

① Differentiation Consideration: If student groups struggle with evaluating the model piece of evidence, consider revising this activity by engaging in a modeled think-aloud and directing students to follow along with the modeling.

Remind students to discuss as a group the merits or faults of each piece of evidence identified in the text before recording their thoughts on their tool. Remind students this is a collaborative discussion as outlined in SL.9-10.1. Explain to students that after they have analyzed the evidence, they will synthesize their conclusions about Skloot's claim on the second side of the Lesson 6 Evidence Collection Tool.

① Consider reminding students of the structure of collaborative discussion and skills inherent in the substandards of Standard SL.9-10.1, to which students were previously introduced.

Instruct student groups to begin. Circulate around the room as students work in their groups and answer any questions that arise.

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- Student groups identify and evaluate evidence pertaining to Skloot's claim.
- See the Model Lesson 6 Evidence Collection Tool at the end of this lesson for sample student responses.

Activity 5: Quick Write

Instruct students to respond briefly in writing on the second side of the Lesson 6 Evidence Collection Tool to the following prompt:

Evaluate Skloot's claim in paragraph 4 on page 130, and determine whether the evidence in the rest of the excerpt is relevant and sufficient to support her claim.

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

Students listen and read the Quick Write prompt.

Transition to the independent Quick Write.

- Students independently answer the prompt using evidence from the text.
- See the High Performance Responses on the Model Lesson 6 Evidence Collection Tool (side 2).

Collect the Model Lesson 6 Evidence Collection Tool for assessment purposes.

Activity 6: Closing

Display and distribute the homework assignment. For homework, instruct students to preview the following lesson's text and annotate for central idea (CI) from "But Day didn't want to talk about Henrietta's life" to "I think I would have killed him myself" (pp. 164–169). Direct students to box any unfamiliar words and look up their definitions. Instruct them to choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.

- Students follow along.
- This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Homework

Preview the following lesson's text and annotate for central idea (CI) from "But Day didn't want to talk about Henrietta's life" to "I think I would have killed him myself" (pp. 164–169). Box any unfamiliar words and look up their definitions. Choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.

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Lesson 6 Evidence Collection Tool (Side 1)

Name:	Class:		Date:	
Issue:				
Claim:				
Evidence		How does this evidence con claim (is this evidence relev		

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Lesson 6 Evidence Collection Tool (Side 2)

Name:	Class		Date:	
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Directions: Now that you have gathered and evaluated evidence in the text and discussed how relevant and sufficient it is, evaluate Skloot's claim in a brief response to the following prompt:

Evaluate Skloot's claim in paragraph 4 on page 130, and determine whether the evidence in the rest of the excerpt is relevant and sufficient to support her claim.





Model Lesson 6 Evidence Collection Tool (Side 1)

Name: Class:	Date:
Issue: Informed Consent	
Claim: Southam lied and did not explain his experim deception was for his benefit" (p. 130).	ents because patients may not have agreed, "The
Evidence	How does this evidence contribute to Skloot's claim (is this evidence relevant and sufficient)?
"Informed consent focused on what doctors were required" to "it might apply to research like Southam's" (p. 132).	This evidence contributes to Skloot's claim because it explains the facts in the legal system Southam used to avoid telling his patients what he was doing.
"He [Southam] told them [patients] he was testing" to "nothing about injecting them with someone else's malignant cells" (p. 128).	This evidence is extremely relevant because it is the first instance where Southam started his experiments and used HeLa. Not only does he not tell the patients about the malignant cells but he says it is something completely different.
"soon after the end" to "was elected president of the American Association for Cancer Research" (p. 135).	Southam was promoted to a prestigious position because of his experiments. This is relevant because it shows how greatly he benefited from his experiments.
"the patients in the study wouldn't have been capable of giving informed consent" to "one had advanced Parkinson's disease" (p. 133).	This supports Skloot's claim because it shows that the experiments targeted those who could not fully understand what was happening to them. They were unable to comprehend informed consent and were extremely vulnerable.
"Because of that 'phobia and ignorance,' Southam wrote, he didn't tell patients" to "he didn't want to cause any unnecessary fear" (p. 130).	This evidence is somewhat relevant because it presents Southam's perspective and because Skloot uses his words "phobia and ignorance" (p. 130) to demonstrate that his reasoning was not as valid as looking out for the patient's wellbeing.





Model Lesson 6 Evidence Collection Tool (Side 2)

Name: Class:	Date:
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Directions: Now that you have gathered and evaluated evidence in the text and discussed how relevant and sufficient it is, evaluate Skloot's claim in a brief response to the following prompt:

Evaluate Skloot's claim in paragraph 4 on page 130, and determine whether the evidence in the rest of the excerpt is relevant and sufficient to support her claim.

- A High Performance Response should:
 - Delineate Skloot's claim in this portion of text (e.g., Identifying the examples of Southam's cancer research, the supporting evidence that suggests Southam benefited from the research, why Southam did not give informed consent, etc.).
 - Evaluate Skloot's claim synthesizing the evidence gathered (e.g., It is clear that Southam lied to his patient because "he said nothing about injecting them with someone else's malignant cells" and, as a result of this research, was eventually elected as "president of the American Association for Cancer Research." This demonstrates that Southam directly benefited from the research, and may not have benefited in this way if he had told patients what was in the "saline solution.")
 - Determine whether the evidence is relevant and sufficient to support Skloot's claim (e.g., Skloot gives a sufficient amount of evidence to support her claim that Southam lied for his own benefit: "When Southam reported his results the press hailed them as a tremendous breakthrough." Skloot also uses relevant examples, such as the Nazi doctors and the Nuremberg Trials, to develop the importance of "ethical boundaries" in the medical profession. Southam was testing on patients who "wouldn't have been capable of giving informed consent.")



10.3.1 Lesson 7

Introduction

In this lesson, students reread and analyze *The Immortal Life of Henrietta Lacks*, pages 164–169 from "First I heard about it was, she had that cancer" to "I think I would have killed him myself." In this excerpt, the Lacks family expresses distrust of Johns Hopkins Hospital and Skloot unfolds a series of events that validates the Lacks family's distrust of the medical community. Students analyze how Skloot unfolds credible and relevant evidence to support the perspective of the Lacks family. For the lesson assessment, students complete a Quick Write, demonstrating their understandings of the impact of the order in which the ideas and events are presented in this excerpt.

As they read and analyze the text, students also continue to surface research topics/issues using the Surfacing Issues Tool, and are introduced to the Exploring a Topic Tool, in which they articulate their reasons for selecting various topics/issues to explore. For homework, students complete the Exploring a Topic Tool and preview the text excerpt from 10.3.1 Lesson 8 by reading and annotating pages 179–181 from "On a hazy day in 1973, in a brown brick row house" to "Lawrence hung up and didn't know who else to call" for emerging and developing central ideas.

Assessed Sta	ndard(s)
RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
Addressed St	andard(s)
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and
	fallacious reasoning").

Standards



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.

• What is the impact of the order in which Skloot unfolds events and ideas in this passage?

High Performance Response(s)

A High Performance Response should:

- Explain how Skloot unfolds events and ideas in this passage (e.g., substantiating the Lacks family's claims by providing evidence about historical, unethical medical practices in relation to the African-American community, then describing the injustices of Johns Hopkins Hospital itself, and finally including further claims from the Lacks family about Hopkins Hospital).
- Discuss the impact of the order of events and ideas (e.g., Skloot opens the chapter with the Lacks family's claims about their negative perspective of Hopkins Hospital. Skloot uses historical instances of white doctors trying "new surgical techniques" and the exhuming of black corpses for research to demonstrate that there is a historical basis for the Lacks family's distrust. Skloot transitions from the "night doctors" evidence to evidence concerning Hopkins Hospital conducting unethical research such as exposing "children to lead." Skloot further unfolds ideas to show that "Hopkins Hospital certainly isn't pristine" which further validates the Lacks family, and chooses to end the excerpt with further claims from the Lacks family about Henrietta and Hopkins Hospital that are also grounded in fact, "They took them [cells] and didn't ask").

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- tactics (n.) modes or procedures for gaining advantage or success
- exhumed (v.) removed a body from the place where it was buried
- anesthesia (n.) loss of sensation, especially of pain, induced by drugs; called general anesthesia when consciousness is lost
- peril (n.) something that is likely to cause injury, pain, harm, or loss
- abducted (v.) took (someone) away from a place by force
- discretion (n.) the power or right to decide or act according to one's own judgment; freedom of judgment or choice
- predisposition (n.) tendency to a condition or quality, usually based on the combined effect of genetic and environmental factors





- abatement (n.) suppression or termination
- exploited (v.) used (someone or something) in a way that helps you unfairly

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

• pristine (adj.) - in perfect condition: completely clean, fresh, or neat

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.3, W.9-10.9.b	
• Text: The Immortal Life of Henrietta Lacks, pp. 164–169	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 10%
3. Reading and Discussion	3. 45%
4. Quick Write	4. 15%
5. Exploring a Topic Activity	5. 20%
6. Closing	6. 5%

Materials

- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Copies of the Exploring a Topic Tool for each student
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 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	Plain text indicates teacher action.					
symbol Bold text indicates questions for the teacher to ask students.						

3

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Activity 1: Introduction of Lesson Agenda

Indicates student action(s).

Italicized text indicates a vocabulary word.

Indicates instructional notes for the teacher.

Indicates possible student response(s) to teacher questions.

Begin by reviewing the agenda and assessed standard for the lesson: RI.9-10.3. Inform students that in this lesson, they analyze the impact of the order in which Skloot unfolds the events and ideas in this portion of text. Additionally, students begin to explore different surfaced issues/topics and consider their own interest in further researching specific issues/topics.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out their homework from the previous lesson. The homework from the previous lesson was the following: "Preview the text from 10.3.1 Lesson 8 and annotate for central idea (CI) from 'But Day didn't want to talk about Henrietta's life' to 'I think I would have killed him myself' (pp. 164–169)."

• Students take out their homework.

Instruct students to choose four annotations that best exemplify emerging and developing central ideas and discuss with a partner.

- Student responses may include:
 - (CI) next to "Back then they did things . . . Especially to black folks. Johns Hopkins was known for experimentin on black folks" (p. 165). This statement reveals the central idea about the African-American community not trusting Hopkins' motivations.
 - (CI) next to "'we had to be *on the steps*, or Hopkins might get us" (p. 165). The Lacks family grew up in fear of Hopkins, as it was used as a threat to keep children near the house, further revealing their distrust of Hopkins as a central idea.
 - (CI) next to "Those sheets eventually gave rise to the white hooded cloaks of the Ku Klux Klan" (p. 166). This piece of evidence further develops the idea of discord between Hopkins and their treatment of the black community.

(CI) next to the paragraph that begins "Because of this history, black residents near Hopkins" (p. 166). Skloot is pointing out that Hopkins was built to benefit Baltimore's poor, but black residents have believed that it was built so that scientists could continue to experiment on



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black people. This supports the idea of a disconnect between the medical community and the African-American community.

- (CI) next to the paragraph that begins "But today when people talk about" (p. 168). This
 paragraph suggests that people in Baltimore believe that of all the bad conduct of Hopkins
 regarding the African-American community, the Lacks family's story is the worst.
- (CI) next to the sentence "If our mother so important to science, why can't we get health insurance?" (p. 168). This further develops the idea of science profiting from HeLa cells and the family not profiting or benefitting from their own mother's cells and her contribution to science.
- ① This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Activity 3: Reading and Discussion

Instruct students to take out their Surfacing Issues Tools. Ask students to continue to record potential topics for research as they read and discuss this portion of *The Immortal Life of Henrietta Lacks*. Remind students to record the issues and key details of the issue on their Surfacing Issues Tools.

• Students read and discuss, and note issues for research that appear in the reading.

Encourage students to share surfaced issues during the lesson.

Instruct students to form pairs. Post or project each set of questions below for students to discuss. Instruct student pairs to read from page 164 "But Day didn't want to talk about Henrietta's life" to page 165 through "we had to be on the steps, or Hopkins might get us" and answer the following questions before sharing out with the class. Remind students to annotate the text as they discuss, and as they identify research topics/issues in the text, to note them on their Surfacing Issues Tools while discussing the issues in pairs.

- If necessary to support comprehension and fluency, consider using a Masterful Reading of the focus excerpt for the lesson.
 - Students read, discuss the questions, annotate the text, and record possible research topics/issues in pairs.
- Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading including: tactics, exhumed, anesthesia, peril, abducted, discretion, predisposition, abatement, and exploited.

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Why did Day agree to let Hopkins do an autopsy?

- Student responses may include:
 - Day's cousin said "it wouldn't hurt none" (p. 164) and he agreed.
 - Hopkins lied about what they were doing with Henrietta's body "never said nuthin about . . . growin no cells" (p. 164).
 - Day trusted the doctors to do what was right "you got to go by what they say" (p. 165).
 - \circ Day wanted to help his children "in case they came down with cancer" (p. 165).

What does Bobbette mean when she says "I wouldn't even go there [Hopkins] to get my toenails cut"?

Bobbette means that she has no trust in Hopkins; she says they were "Snatchin people" (p. 165) and Sonny said they were "experimentin on black folks" (p.165). Bobbette learned from an early age to be fearful of Hopkins: "When it got dark and we were young, we had to be *on the steps*, or Hopkins might get us."

Lead a brief whole-class discussion of student responses.

Instruct students to read from page 165, "The Lackses aren't the only ones who heard from a young age" to page 167 "free care to the poor, many of them black" and answer the following questions before sharing out with the class. Remind students to annotate the text as they discuss, and as they identify research topics/issues in the text, to note them on their Surfacing Issues Tools while discussing the issues in pairs.

- Students read, discuss the questions, annotate the text, and record possible research topics/issues in pairs.
- ① This particular section of text may be sensitive for students, as it presents several dehumanizing aspects of how early medical professionals treated African-Americans, especially when slavery was legal. Consider reviewing classroom norms and expectations for the sensitive nature of this academic discussion.

What are two examples of the "disturbing truths" (p. 165) behind the story of the night doctors?

 Doctors would perform tests on black slaves, experimenting with drugs and "new surgical techniques, often without using anesthesia" (p. 166). There were also instances of black bodies being "exhumed from graves for research" (p. 166) and sent to schools to be used for classes.

What is the impact of the "disturbing truths" (p. 165) Skloot provides about the night doctors?



These examples demonstrate that night doctors were more than just "scare tactics" (p. 166) and there was inhumane treatment of the black community for medical research. The examples provide concrete evidence that warrants the Lacks family's distrust of white doctors and hospitals.

Summarize Hopkins' letter to the board of trustees. What was the purpose of the Hopkins Hospital?

The Hopkins letter said that anyone, "without regard to sex, age, or color" who was sick should be treated without paying for help. The purpose of the hospital was to "help those who otherwise couldn't get medical care" (p. 166).

How does the evidence in this section impact the Lacks family's claims about Johns Hopkins Hospital?

If doctors were testing drugs on slaves and shipping corpses in turpentine barrels (p. 166) this contributes to an old "oral history" (p. 165) of distrust and provides credible evidence to support the Lacks family's distrust of Johns Hopkins Hospital even though it was "built for the benefit of Baltimore's poor" (p. 166).

Lead a brief whole-class discussion of student responses.

Instruct students to read page 167, from "But the history of Hopkins Hospital certainly isn't pristine" to page 169 "I think I would have killed him myself" and answer the following questions before sharing out with the class. Remind students to annotate the text as they discuss, and as they identify research topics/issues in the text, to note them on their Surfacing Issues Tools while discussing the issues in pairs.

Students read, discuss the questions, annotate the text, and record possible research topics/issues in pairs.

Why is the history of Hopkins hospital not pristine when it comes to black patients? What could pristine mean in this context?

- ① Consider providing students with the following definition: *pristine* means "in perfect condition: completely clean, fresh, or neat."
 - Students write the definition of *pristine* on their copy of the text or in a vocabulary journal.
 - The history of Hopkins is not *pristine* because they did research on patients without their consent, "to look for a genetic predisposition to criminal behavior" (p. 167) as well as research that was harmful to patients "researchers had knowingly exposed their children to lead," (p. 168).

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Since Hopkins was not *pristine* it could mean in good condition or perfect because Skloot contrasts the "millions of dollars in free care to the poor" (p. 167) with the awful research conducted by doctors at Hopkins.

According to Bobbette, what "really would upset Henrietta" (p. 169)? How is this connected to the examples Skloot provides of Hopkins' history with the black community?

Bobbette claims that the most upsetting part of their situation is that "Dr. Gey never told the family anything" (p. 169). The lack of information as well as consent "She didn't donate nothing" (p. 169) connects all the examples Skloot provides about Hopkins. In the 1969 case the researchers "didn't get consent" (p. 167) which violated the patients' "civil rights" (p. 167). In the case of the lead study the Department of Health and Human Services determined that the consent forms did not give enough information about the "different levels of lead abatement in the homes" (p. 168).

What are the alternate perspectives about Johns Hopkins hospital? Which perspective does Skloot validate in this excerpt?

- Student responses should include:
 - There are positive and negative perspectives about Johns Hopkins hospital presented in this excerpt. John Hopkins, the man, believed in free medical care and "helping black children" (p. 167), it also has "one of the top medical schools in the country" (p. 167). On the other hand, there is the perspective of the black community regarding Hopkins; that they were only "potential research subjects" (p. 166) and that "black people were disappearing cause Hopkins was experimenting on them" (p. 169).
 - Skloot validates the perspective of the Lacks family; though Skloot does not provide examples of when Hopkins "abducted black people" (p. 165) she does provide examples of research that violated the rights of mostly black research subjects. The blood samples to look for "criminal behavior" (p. 167) as well as the lead abatement study in which "all families involved were black" (p. 168). Skloot also does not provide any current information about positive work being done by Hopkins, only instances of research that *exploited* the black community.
- (i) **Differentiation Consideration:** Ask students to consider what evidence about Hopkins Skloot does not include in this excerpt.

Lead a brief whole-class discussion of student responses.

① Consider asking students to identify some issues using the Surfacing Issues Tool. Issues that can be surfaced are: lack of consent for research, doctor-patient confidentiality violations, and research on a genetic predisposition for a social ill.



Activity 4: Quick Write

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

What is the impact of the order in which Skloot unfolds events and ideas in this passage?

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 to guide their written responses.

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

Transition to the independent prompt.

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

Activity 5: Exploring a Topic Activity

Instruct students to take out all of their completed Surfacing Issues Tools for reference during this activity. Explain that in this activity, students choose 2–3 areas of investigation based on the issues explored and inquiry questions generated in the previous lessons.

Distribute the Exploring a Topic Tool. Remind students that they have explored several issues, generated inquiry questions for these topics, and now they begin to identify areas of investigation for research. Explain that while early research discussions produce many topics, now they are narrowing their investigation by focusing on specific aspects of the topic, known as areas of investigation. Through discussions and pre-searches, students focus on more specific questions and topics that they continue to investigate. Explain that students are going to explore aspects of their research topics/issues and look for different opinions about the issue.

• Students listen.

Post or project the Exploring a Topic Tool to model the three sections/boxes in the tool. Explain that each of the three sections serve a specific purpose to guide their investigation. In each section, students should include a well-articulated statement or a question. Encourage students to move beyond the text to areas of investigation that Henrietta Lacks' story has provoked thus far. Explain to students that a sample issue for this investigation is "research without consent."

Inform students that the first box on the Exploring a Topic Tool identifies a focus for investigation within the issue. Here, students describe an area within the topic/issue that they would like to know more about. For the second box, students consider why they are curious about this particular area of investigation and how it may connect to the original issue. For the third box, students express their

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20%

potential area of investigation as a question or problem. Explain to students that since conducting research requires asking questions, their pre-searches begin with a question that eventually leads to other questions.

• Students follow along and copy column one onto their tool.

Activity 6: Closing

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Display and distribute the homework assignment. For homework, instruct students to work on column two of the Exploring a Topic Tool, completing the three boxes around their 2–3 areas of investigation. Remind students to choose their own topics, not the one used for modeling.

Also, instruct students to preview the excerpt from 10.3.1 Lesson 8, by reading and annotating for emerging or developing central ideas from "On a hazy day in 1973, in a brown brick row house" to "Lawrence hung up and didn't know who else to call" (pp. 179–181). Direct students to box any unfamiliar words and look up their definitions. Instruct them to choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.

- Students follow along
- This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Homework

Complete the Exploring a Topic Tool, remembering to choose your own topic, not the one used for modeling. Also, preview the excerpt from 10.3.1 Lesson 8 by reading and annotating for emerging or developing central ideas from "On a hazy day in 1973, in a brown brick row house" to "Lawrence hung up and didn't know who else to call" (pages 179–181). Box any unfamiliar words and look up their definitions. Choose the definition that makes the most sense in the context, and write a brief definition above or near the word in the text.



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Model Surfacing Issues Tool

Name:	Class:	Date:		
Issue	Page Number(s)	Key Information about the Issue from the Text		
Informed Consent	167	A researcher who did not get consent sent young boys' genetic testing results to state and juvenile courts, to identify genetic predispositions for criminal behavior. "The researcher didn't get consent."		
Doctor-Patient Confidentiality	167	Because the researcher did not get consent, the "American Civil Liberties Union filed suit, claiming the study violated the boys' civil rights and breached confidentiality of doctor-patient relationships."		
Research on a genetic predisposition for a social ill	167	The boys' blood was being tested for a genetic marker that would brand them criminals. Most of these 7,000 neighborhood children came from "poor black families," revealing the racial and economic injustice behind the study.		
Research on stolen dead bodies	166	Corpses had been removed from graves without consent for years, and many medical schools continued to accept bodies. "The bodies sometimes arrived, a dozen or so at a time, in barrels labeled turpentine."		

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Write a	brief a	account	of the	class o	conversa	ation a	about t	he topic	,
describi	ing wl	nat you	know a	at this	point ak	bout s	ome of	its aspe	cts:

POTENTIAL AREA OF INVESTIGATION 1

Ξ

In a few words, describe an area within the topic that you would like to know more about:

Explain why you are interested in this area of the topic:

EXPLORING A TOPIC

Express your potential area of investigation as a question or

problem:





Name				
POTENTIAL AREA OF INVESTIGATION 2	POTENTIAL AREA OF INVESTIGATION 3	POTENTIAL AREA OF INVESTIGATION 4		
In a few words, describe what you would like to know more about within the topic:	In a few words, describe what you would like to know more about within the topic:	In a few words, describe what you would like to know more about within the topic:		
Explain why you are interested in this:	Explain why you are interested in this:	Explain why you are interested in this:		
Express your potential area of investigation as a question or problem:	Express your potential area of investigation as a question or problem:	Express your potential area of investigation as a question or problem:		

EXPLORING A TOPIC

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Write a brief account of the class conversation about the topic, describing what you know at this point about some of its aspects: We talked about Southam's studies when he injected people with cancer cells, and in this chapter, slaves were used for experimentation. Also, in the chapter 17 discussion of Southam's studies, prisoners were used as test subjects. I know that informed consent requires that the subject understand the full possible effects of the experimentation and agree to them.

POTENTIAL AREA OF INVESTIGATION 1

In a few words, describe an area within the topic that you would like to know more about: I would like to know what rights a person has if he or she is used for research without consent.

Explain why you are interested in this area of the topic:

I think it would be terrible to be experimented on without knowledge, as was the case with Henrietta Lacks. I want to know if there are any laws or if this has happened to anyone else and what they were able to do about it.

Express your potential area of investigation as a question or problem:

What rights do people have if they are used for experimentation or research without their consent?

EXPLORING A TOPIC





POTENTIAL AREA OF INVESTIGATION 2	POTENTIAL AREA OF INVESTIGATION 3	POTENTIAL AREA OF INVESTIGATION 4
In a few words, describe what you would like to know more about within the topic: I would like to know if minors (people under age 18) can give informed consent, or if only their parents or guardians can.	In a few words, describe what you would like to know more about within the topic: I know that prisoners cannot give consent, but what rules apply to them? I wonder if all prisoners can be recruited for trials, or just some prisoners who have done very bad things.	In a few words, describe what you would like to know more about within the topic: I want to know if people who are mentally incapacitated can give informed consent.
Explain why you are interested in this: I want to know if parents can decide that a child can be experimented on, and at what age a child or minor can make his or her own decisions about participating.	Explain why you are interested in this: I think it would be unfair to make all prisoners participate without informed consent because some inmates have not committed serious crimes, and that is not fair. I wonder if the severity of the crime is taken into account.	Explain why you are interested in this: I want to know if people who have low IQs or people who have Alzheimer's or other diseases that affect the brain are able to make decisions for themselves because it does not seem like a good idea.
Express your potential area of investigation as a question or problem: What rules or laws apply to the informed consent of minors?	Express your potential area of investigation as a question or problem: What rules or laws apply to the informed consent of prisoners?	Express your potential area of investigation as a question or problem: What rules or laws apply to the informed consent of mentally incapacitated people?

EXPLORING A TOPIC



10.3.1 Lesson 8

Introduction

In this lesson, students read *The Immortal Life of Henrietta Lacks* (pp. 179–183) from "On a hazy day in 1973, in a brown brick row house" to "'we would like to have that blood from you people.'" This excerpt describes how the Lacks family found out about HeLa and how the research community made use of the Lacks family's DNA to untangle a cell-culture contamination problem. Students read and analyze the text and work to identify a central idea based on specific details. Students also continue tracing possible research issues using the Surfacing Issues Tool. Students demonstrate their learning in a Quick Write about how Skloot uses specific details to further develop and refine a central idea.

Students are introduced to the pre-search process in this lesson. Students engage in a pre-search activity in which they begin gathering sources for research in future lessons and begin developing their proficiency for posing general and specific questions. Students use the Pre-Search Tool to record relevant information about the sources they find (title, location, author's name, and how the source relates to the topic). During this activity, students develop the ability to find relevant sources independently, as well as to navigate through a wide pool of potential research sources. This activity confirms that there are multiple perspectives around students' identified debatable research topics/issues to warrant further research. For homework, students continue with their pre-searches and find three additional potential sources.

Standards

Assessed Star	ndard(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 St	andard(s)			
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research.			
	 Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning") 			







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 Skloot use specific details in this section to further develop and refine a central idea in the text?

High Performance Response(s)

A High Performance Response should:

- Identify a developing central idea in the text (e.g., violation of privacy, the value of informed consent, or the effect of racial or cultural isolation).
- Include specific details that develop and refine the central idea (e.g., the researchers' assumptions about the Lacks family's knowledge about the family's DNA research, such as Hsu's statement about how "They are pretty intelligent" and "Everybody talking about HeLa back then," as well as McKusick's claim that "there was no effort to explain anything in great detail" and how the researchers planned to use the Lacks family's blood without acquiring informed consent, such as when Hsu says, "We are not doing some kind of medical research").

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- autopsy (n.) an examination of a dead body to find out the cause of death
- deduce (v.) to use logic or reason to form a conclusion or opinion about something; to decide (something) after thinking about the known facts
- receptive (adj.) able or quick to receive knowledge, ideas, etc.

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

• None.



Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.2, W.9-10.9.b	
• Text: The Immortal Life of Henrietta Lacks (pp. 179–183)	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 15%
3. Masterful Reading	3. 10%
4. Reading and Discussion	4. 30%
5. Quick Write	5. 15%
6. Pre-Search Activity	6. 20%
7. Closing	7. 5%

Materials

- Student copies of 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)
- Copies of the Pre-Search Tool for each student

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.			
Symbol	Italicized text indicates a vocabulary word.			
•	Indicates student action(s).			
•	Indicates possible student response(s) to teacher questions.			
(j)	Indicates instructional notes for the teacher.			

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3

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.2. Inform students that in this lesson they consider how Skloot develops and refines a central idea in the text. Additionally, students begin to pre-search using topics that are interesting to them and locating sources that reveal different claims or perspectives on their research topics/issues.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out their homework from the previous lesson: Complete the Exploring a Topic Tool. Preview the following lesson's excerpt by reading and annotating pages 179–181 from "On a hazy day in 1973, in a brown brick row house" to "Lawrence hung up and didn't know who else to call" for emerging or developing central ideas (CI).

• Students take out their homework.

Instruct students to talk in pairs about the potential areas of investigation that they identified. Then ask volunteers to share out with the class.

- In pairs and then with the class, students share potential areas of investigation.
- Student responses vary based on the individual research they have conducted. See the Model Exploring a Topic Tool in 10.3.1 Lesson 7 for possible student responses.

Instruct students to examine their annotations from the homework and choose two that best exemplify emerging or developing central ideas. Instruct student pairs to complete a Turn-and-Talk about two exemplar annotations.

- Student pairs examine their annotations from pages 179–181 and discuss two that best exemplify emerging or developing central ideas.
- Students responses may include:
 - CI next to "'What?!' Bobbette yelled, jumping up from her chair. 'What you mean you got her cells in your lab?'" (p. 180), noting how angry and violated Bobbette seems in this passage, which suggests the central idea of violation of privacy and its harmful effects.
 - CI next to "'I ordered them from a supplier just like everybody else'" (p. 180). This further supports the medical community's dishonesty since the researchers who used the cells had knowledge and access to the cells, while the family lacks knowledge of the cell's existence.
 - CI next to the paragraph that begins "Gardenia's brother-in-law told Bobbette" (p. 180). This further reveals the idea of the medical community's lack of communication with the family.



The brother-in-law is talking about contamination of the cells, while Bobbette just wants to know why no one ever told her about her mother-in-law's cells.

- CI near the paragraph that begins "Lawrence called the main switchboard at Hopkins" (p. 181). This further reveals the lack of communication between the Lacks family and the medical community.
- ① Consider tracking one or more central idea on chart paper and add to the list as the lesson continues.
- ① Circulate around the room to monitor the pair discussions. Listen for students discussing the annotations above in support of emerging and developing central ideas from the text including: violation of privacy, informed consent, or cultural isolation (as the medical community is isolated from the African American community, an idea that emerges in the text analysis from 10.3.1 Lesson 7).
- This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Activity 3: Masterful Reading

Explain to students that they are first going to listen to a Masterful Reading of the entire excerpt, from "Soon after Lawrence called Hopkins, in June 1973" to "'we would like to have that blood from you people'" (pp. 181–183). Instruct students to follow along as the excerpt is read masterfully.

Students follow along, reading silently.

Explain to students that in this lesson they focus on how the central ideas that emerged or developed in pages 179–181 are further refined and developed by the information in the rest of the excerpt.

Students listen.

Activity 4: Reading and Discussion

Instruct students to take out their Surfacing Issues Tools. Explain that they will continue to record potential topics for research as they read and discuss this portion of *The Immortal Life of Henrietta* Lacks. Remind students to record the issues, as well as the key details about the issue from the text on their Surfacing Issues Tools.

Students take out their Surfacing Issues Tracking Tool. As they read and discuss, they note issues for research that appear in the reading. Encourage them to share these surfaced issues during the lesson.

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





10%

30%

Instruct student pairs to reread from "Soon after Lawrence called Hopkins, in June 1973" (p. 181) to "'As soon as you get back to Baltimore, get this done'" (p. 182) and answer the following questions before sharing out with the class.

() Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading, including: *autopsy, deduce,* and *receptive*.

Remind student pairs to annotate the text while discussing the following questions.

This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Why did the researchers need the Lacks family to be involved in solving the contamination problem?

- The HeLa cells were getting into other cultures and making them impure. Then "someone pointed out that the whole mess could be sorted out if they found genetic markers specific to Henrietta" (p. 181). The researchers needed DNA and blood from the Lacks family to identify specific markers that helped them to "identify which cell were hers and which weren't" (p. 181).
- ① Rather than explain how genetic markers work, encourage students to use the text to build a general sense of how the contaminating cells would be identified.
- Differentiation Consideration: If students have never heard of DNA, ask students if they have similar features to their family members. Students who are genetically related to their family members (not adopted) may be able to point out specific common traits. Explain that cells within a family have similar traits. Ask students how cells with similar traits could potentially help identify the HeLa cells.

What does McKusick offer to do in this section?

 McKusick offers to retrieve and share the family's medical records and get blood drawn from the family members in order to study their DNA. "As a physician on staff, McKusick had access to their medical records and contact information" (p. 181).

How does this action relate to a developing central idea in this excerpt?

McKusick plans to get "access to their medical records and contact information" (p. 181) by using his status "as a physician on staff" (p. 181). It further develops a central idea of privacy violations (doctor-patient confidentiality) between the Lacks family and the Hopkins medical staff.

Lead a brief whole-class discussion of student responses.





Instruct student pairs to reread from "McKusick didn't give Hsu instructions for explaining the research" to "get this blood drawn,' I did it" (p. 182) and answer the following question before sharing out with the class. Remind students to annotate the text during the evidence-based discussion.

Why did Hsu follow McKusick's directions?

- Student responses may include:
 - She says, "he was a famous, famous man" and "he trained most of the other famous medical geneticists in the world" (p. 182). This shows that she was in awe of Dr. McKusick and did not think to question his methods.
 - She says, "When Dr. McKusick said, 'You go back to Baltimore, get this blood drawn,' I did it" (p. 182), revealing that she had to listen to her superior and not question him.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to reread from, "When Hsu got home from the conference" to "'we would like to have that blood from you people'" (pp. 182–183) and answer the following questions before sharing out with the class. Remind students to annotate the text during the evidence-based discussion.

① Hsu uses the word *receptible*, which is not a word in English. What Hsu likely meant was *receptive*, which means able or quick to receive knowledge, ideas, etc.

For what purpose did Day say the researchers wanted blood from him and his children?

 Day says, "They wanted to come test my children see if they got that cancer killed their mother" (p. 182). He thought they would be testing the family for cancer.

Reread what Hsu says to the family about the genetic research. Highlight words for which you might need thorough explanation in order to understand fully McKusick and Hsu's research.

Student responses may include HLA antigen, genetic marker profile, *deduce*, Henrietta Lacks genotype.

What did Day understand about what Hsu said? Why did he agree to give his blood?

Day understood almost none of what Hsu said because of their strong language barriers. "Hsu's accent was strong, and so was Day's—he spoke with a Southern country drawl so thick his own children often had a hard time understanding him" (p. 183). He also would not have been able to understand the technical language she was using. "Day wouldn't have understood the concept of immortal cells or HLA markers coming from anyone" (p. 183). However, "he did what he'd always done when he didn't understand something a doctor said: he nodded and said yes" (p. 183).

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How does McKusick seem to feel about getting informed consent from the Lacks family?

- McKusick does not seem concerned about the lack of informed consent because he says, "'I suspect there was no effort to explain anything in great detail'" (p. 183). McKusick also dismisses Day's understanding of what was said and explains what should have been said to the Lacks family: "'Your mother had cancer, the cells from that cancer have been growing all over the place and studied in great detail, in order to understand that better, we would like to have that blood from you people.'"
- ① Differentiation Consideration: Consider reminding students that *informed consent* was defined in 10.3.1 Lesson 5 and they should reference the 10.3.1 Unit Glossary for the definition if necessary.

Lead a brief whole-class discussion of student responses.

Activity 5: Quick Write

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

How does Skloot use specific details in this section to further develop and refine a central idea in the text?

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 to 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 the lesson.

Activity 6: Pre-Search Activity

Now that students have developed their inquiry questions for two to three areas of investigation (Exploring a Topic Tool from 10.3.1 Lesson 7), instruct them to use one of these questions to guide preliminary research into one area of investigation. Inform students that the nature of this lesson's presearch is not to fully answer their inquiry questions, but to ensure there is enough source material to begin doing more in-depth research and that there are multiple perspectives on the research topic/issue.

8





15%

Ask students to also use this lesson's pre-search exercise to refine their inquiry questions before beginning more detailed research. Finally, instruct students to use this pre-search to confirm their interest in the topic, as well as the direction in which their question leads them.

• Students listen.

Distribute the Pre-Search Tool and instruct students to use the Pre-Search Tool to record general information about the sources they find, including title, location, author's name, and how the source relates to the topic. Explain to students that this process helps them keep track of their sources.

• Students examine the Pre-Search Tool and listen.

Instruct students to use the resources available to them (the Internet, library, librarian/media specialist, etc.) to begin independently searching for sources. Inform students that, at this point, they should not read closely and annotate the sources they find; instead, they should record general information on the Pre-Search Tool and read enough of the potential source to confirm that it is relevant. The students' goal should be to confirm that there is enough available information on this topic to warrant further research.

- ① Remember to use the school's resources to support this process. Consider coordinating with the school's librarian/media specialist in advance to ensure computer access and support for students during the entire inquiry process.
- ① Explain to students that the librarian/media specialist has a broad knowledge of media resources, and they can help students locate an array of resources appropriate to their research.

As they search, students should consider:

- Do these sources point your research in a different direction?
- After reading through several potential sources, how could you refine your inquiry question to sharpen your research?
- Do any of these sources make you curious about something else?
- Consider the school's resources and model a search for sources about doctor-patient confidentiality.
 (In the absence of a computer in class, prepare a presentation in advance, or coordinate with the school's librarian/media specialist in advance to ensure computer access for students.)
 - Students follow along.

Instruct students to record basic information about the sources they identify using the Pre-Search Tool.

Consider taking students to the school library to use the physical and technological resources available to them there. Encourage students to discuss their pre-searches with a librarian/media specialist.

Pause for questions and clarification. Circulate and assist students as they conduct their pre-search.





- Students conduct their pre-searches.
- ① Differentiation Consideration: If students are not prepared to begin searching independently, or if they would benefit from working in pairs, consider organizing students by topic into small groups of two to four. Students may work alongside one another and share with the group the sources they find individually. This model may help students articulate general information about the source as they explain it to the rest of the group.
 - Students use the resources available to them to begin independently searching for sources, recording what they find on the Pre-Search Tool.

Activity 7: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to continue with their pre-search by finding three more potential sources and recording the following information on additional copies of the Pre-Search Tool: title, location, author's name, and how the source relates to the topic.

Students follow along.

Homework

Continue with your pre-search. Find three more potential sources and record the following information on additional copies of the Pre-Search Tool: title, location, author's name, and how the source relates to the topic.



Pre-Search Tool

Name:	Class:			Date:	
Source Notes		How does this source connect to your potential area of investigation?			
Source #1					
Title:					
Location:					
Author:					
Source #2					
Title:					
Location:					
Author:					
Source #3					
Title:					
Location:					
Author:					

Is there enough source information to research this potential area of investigation?

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Model Pre-Search Tool

Name: Class	Date:
Source Notes	How does this source connect to your potential area of investigation?
Source #1 Title: Ten Uses for Your Body after You Die Location: <u>http://www.cnn.com/</u> Author: Elizabeth Cohen	My issue is about using dead bodies in research. This source describes different ways your body can be used for science after you die. This does not present an issue, but I could focus on one of these ten ideas and investigate whether it is a good use of a dead body.
Source #2 Title: Gruesome Tests on Cadavers Betray Dor Location: <u>http://www.scu.edu/</u> Author: Michael Meyer	This article describes how some dead bodies donated to science were blown up with land mines and some body parts were illegally sold. This fits with my topic because it shows the negative side of donating your body to science.
Source #3 Title: Origins of Exhibited Cadavers Questione Location: <u>http://www.npr.org/templates/story/story.ph</u> <u>oryId=5637687</u> Author: Neda Ulaby	Preserved by plastination and shown in science may have come from prisons and mental institutions and some are unclaimed bodies.

Is there enough source information to research this potential area of investigation?

Yes, but there is a lot of medical information that is too difficult to read.

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10.3.1 Lesson 9

Introduction

In this lesson, students continue to read *The Immortal Life of Henrietta Lacks*, from "Various spokespeople for Johns Hopkins, including at least one past university president" to "But there was no such federal oversight at the time" (pp. 194–198). In this excerpt, Skloot describes how the family struggles to understand public information regarding the HeLa cells.

Students continue to build their understanding of how specific sections of text develop and refine specific ideas that have emerged in the larger text. Students discuss their analysis in pairs and also continue to pre-search topics/issues that interest them and gather potential sources for their research. The assessment is a Quick Write that requires students to identify how a specific section of text develops and refines ideas in the larger portion of the text. For homework, students continue to use the Pre-Search Tool to record relevant information about the sources they find, and begin adding vocabulary to their vocabulary journals.

Standards

Assessed Star	ndard(s)
RI.9-10.5	Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).
Addressed St	andard(s)
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9-10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").
L.9-10.2.a	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.



L.9-10.4.a,	Determine or clarify the meaning of unknown and multiple-meaning words and phrases
c, d	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 section on page 197 from "On March 25, 1976, when Mike Rogers's Rolling Stone article" to "of Henrietta's DNA that scientists could use to help identify HeLa cells in culture" develop and refine Skloot's ideas in this excerpt?

High Performance Response(s)

A High Performance Response should:

- Identify several ideas in the excerpt that are developed or refined by the identified section of text (e.g., racial injustice, privacy violations, continued disconnect between the medical community and the Lacks family).
- Analyze how the author's ideas are developed or refined in the excerpt (e.g., the increase in racial tensions during this time period, such as "the Black Panthers . . . protesting what they saw as a racist health system" and the Tuskegee study, and how this historical background further develops the racial injustices previously explored in the text; the family's lack of knowledge concerning the use of their blood drawn by McKusick and Hsu to "create a map of Henrietta's DNA" in a study that included the family's genetic markers published without consent, again furthering ideas of privacy violations; continued disconnect between the medical community and the Lacks family; and lack of informed consent).



Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- biotech [biotechnology] (n.) the use of living organisms or other biological systems in the manufacture of drugs or other products or for environmental management, as in waste recycling; includes the use of bioreactors in manufacturing, microorganisms to degrade oil slicks or organic waste, and genetically engineered bacteria to produce human hormones
- crossed (v.) combined characteristics of two different types of individuals

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

- quantify (v.) to find or calculate the quantity or amount of something
- prosperity (n.) the state of being successful, usually by making a lot of money

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: RI.9-10.5, W.9-10.9.b, L.9-10.2.a, L.9-10.4a, c, d	
• Text: The Immortal Life of Henrietta Lacks, pp. 194–198	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability	2. 10%
3. Reading and Discussion	3. 40%
4. Quick Write	4. 15%
5. Vocabulary Journal Introduction	5. 25%
6. Closing	6. 5%

Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)
- Copies of the vocabulary journal for each student (Optional)
- Student copies of the Pre-Search Tool (refer to 10.3.1 Lesson 8)
- The vocabulary journal is optional. Students may write their vocabulary in a notebook rather than on the vocabulary journal.

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Learning Sequence

How to l	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.			
Symbol	Italicized text indicates a vocabulary word.			
•	Indicates student action(s).			
¢	Indicates possible student response(s) to teacher questions.			
í	Indicates instructional notes for the teacher.			

DRAFT

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and the assessed standard for this lesson: RI.9-10.5. In this lesson, students consider how specific sections of text develop and refine specific ideas that have emerged in the larger text by reading and answering questions and annotating the text. Finally, students are introduced to the vocabulary journal to capture new and unfamiliar words in their potential sources as they complete pre-searches for homework.

• Students look at the agenda.

Activity 2: Homework Accountability

Ask students to work in pairs and share the potential sources they found for homework. Instruct students to first articulate their inquiry question and then briefly explain how each source relates to that question.

• Student pairs share the potential sources they found for homework. The students' responses vary based on the individual research they conducted.

Now ask students to discuss in pairs how the source is relevant to the inquiry question. Remind students that *relevant* means "closely connected to their question."

- () To review the definition and explanation of *relevant*, refer to 10.3.1 Lesson 6.
- ① Consider collecting the homework to assess students' research progress.
 - Student responses vary based on their individual research topics/questions and research conducted. Student responses may include:
 - My question was, "What privacy rights should patients expect?" The source I found is related to this question because it discusses the HIPAA Privacy Rule that gives doctors who





10%

5%

are both medical researchers and private physicians some guidelines about what they can keep private and what they can share.

(i) A Model Pre-Search Tool is included at the end of this lesson.

Activity 3: Reading and Discussion

40%

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

Instruct student pairs to read from "Various spokespeople for Johns Hopkins, including at least one past university president" to "popular cell lines in the world, that number is surely significant" (p. 194) and answer the following questions before sharing out with the class. Remind student pairs to annotate the text as they engage in the following evidence-based discussion.

- 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 including: *biotech* and *crossed*.

Why does Skloot quote prices per vial of HeLa products and the number of patents made with HeLa?

She is showing how much money is made from HeLa cells by different for-profit and nonprofit companies. "What we do know is that today, Invitrogen sells HeLa products that cost anywhere from \$100 to nearly \$10,000 per vial" (p. 194).

Why can Skloot not quantify the professional gain made by scientists? What does quantify mean?

- She cannot quantify the professional gain because it is not in price per vial or in a number of patents. Quantify means "to add up or to represent in numbers."
- If students struggle with the word *quantify*, ask them to think of another word with the root "quant" (quantity). Guide them to see that *quantity* means "amount" and the suffix "ify" means to "make into." Therefore, *quantify* means "to find or calculate the quantity or amount of something."

Skloot begins this section with Hopkins' claims that "Hopkins never made a cent off HeLa cells." How is this statement refined by the information that follows?

 Skloot's statements about the "many for-profit cell banks and biotech companies," (p. 194) such as Microbiological Associates, and later Invitrogen and Bio Whittaker, did profit tremendously from the HeLa cells, even if they were given away for free.



 Skloot implies that Hopkins' profit is not limited to how much Gey sold the cells for, but to the "professional gain" that the HeLa cells and associated research has provided for many medical community members.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to read from "Lawrence and Sonny knew none of this" to "and gave them to customers at Lawrence's store" (pp. 194–195) and answer the following question before sharing out with the class. . Remind student pairs to annotate the text as they engage in the following evidence-based discussion.

What is the effect of including the information about the Lacks family right after the information about HeLa profits?

- Student responses may include:
 - It serves to highlight the disconnect between the Lacks family and the medical community.
 "Lawrence and Sonny knew none of this" (p. 194).
 - It underscores the lack of control the Lacks family has over the HeLa cells and how they are used. "... they made handouts about Henrietta Lack's family being owed their due, and gave them to customers at Lawrence's store" (p. 195).

Ask students to look more closely at the five paragraphs about Deborah on pages 195–197. Instruct student pairs to read and annotate the Deborah-focused section from "Deborah wanted nothing to do with fighting Hopkins" (p.195) to "*least they can do is give her credit for it*" (p. 197) to identify ideas that are developed or refined in this section.

- Student pairs annotate pages 195–197 for ideas that are developed or refined in this section.
- Inform students that there is one section of text that shows a journal entry by Deborah. Explain that they should not try to analyze the grammatical errors, but instead look carefully at what Deborah is saying. Explain that they should think about why Skloot decided to include the whole journal entry instead of just summarizing what Deborah wrote. You may want to ask students:
 - When would you decide to use someone's exact words instead of just paraphrasing what they said?
 - What kind of information is in a journal entry? Why might that kind of information be significant?



When students finish, instruct them to examine the annotation from pages 195–197 and choose two annotations that best illustrate ideas that are developed or refined in this section.

 Students examine annotation from pages 195–197 and choose two annotations that best illustrate ideas that are developed or refined.

Instruct students to complete a Turn-and-Talk with a classmate about their two annotations, specifically discussing why the annotation best illustrates ideas that are developed or refined in this section.

- Annotation discussed may include:
 - Exclamation point next to "I was brought up to be quiet, no talking, just listen" (p. 195). This may be included to show how the Lacks family has dealt with authority, including the medical community, which may make them more vulnerable (p. 195).
 - Star next to "You see I am trying to relive that day in my mind." This part shows the human story of Henrietta—the one of a dying woman and a troubled family, which supports the idea that the invasion of her body at that time for research added insult to injury. Additionally, this part shows the injury Hopkins committed against Henrietta did not stop with Henrietta, but the pain and damage continues with Deborah (p. 195).
 - Star next to "the side for Black's only, oh yes, I know." This suggests that Deborah understood the segregation her mother faced at Johns Hopkins (p. 195).
 - Exclamation point next to "No No No. Robbed self." (p. 196). "Robbed self" could mean that Henrietta herself was robbed, but it could also apply to her – they robbed her of her mother and of herself. Skloot may have included this to show how violated Deborah feels and to show why the issue is important to Deborah. This also shows that she feels disconnected from her mother and lacks control to change her situation (p. 196).
 - Star next to the paragraph that begins "The more Deborah struggled to understand her mother's cells" This section shows that even though Deborah is reading the biology textbooks, she fundamentally misunderstands how cells work. She believes that her mother can feel pain in each of these cells or will somehow be present spiritually in a genetically crossed species. This shows that Deborah is still disconnected from the medical community that has taken charge of her mother's cells and legacy (p. 196).
 - Star near the sentence "But what bothered her most was the fact that so many scientists and journalists around the world continued to call her mother Helen Lane." Skloot titled the chapter, "Least They Can Do," which indicates that this is an important idea. Skloot may be reinforcing the idea that Hopkins did not even do the "least" thing, which was to give credit to Henrietta for her remarkable cells (p. 197).

Circulate around the room to monitor the pair discussion. Listen for students to discuss the above annotation.

Lead a whole-class discussion of the annotation discussion.

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This focused annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

Instruct student pairs to read from "On March 25, 1976, when Mike Rogers' *Rolling Stone* article" to "one of the most important tools in medicine. This was big news" (p. 197) and answer the following questions before sharing out with the class. Remind students to annotate the text while engaging in the evidence-based discussion.

Why does Henrietta flee north for prosperity? What clues help you figure out the meaning of *prosperity*?

Henrietta went north to get a better life, so *prosperity* means "a better life" or "more money or opportunities." The clues are that she left a life of "slavery and sharecropping," so she went north to leave that life behind and seek opportunities.

Look carefully at the sentence from "News of the Tuskegee study was still fresh" to "impossible to ignore." What is the effect of using semicolons instead of simply writing three separate sentences?

- The semicolons connect the events (Tuskegee, Black Panthers, and Henrietta's story) more closely and show how they all happened around the same time, which adds to the impact of the racial implications of Henrietta's story.
- ① Remind students of their work with semicolons in Module 10.3.1 in relation to standard L.9-10.2.a. Instruct students to use a highlighter to mark semicolons in the text. Explain that a semicolon is used to connect independent but related ideas in a sentence, and how its use is different from that of a colon.
- ③ Remind students of their work with the Tuskegee syphilis study in 10.3.1 Lesson 4.

What structural choices does Skloot make to show that Henrietta's story was "big news"?

- Student responses may include:
 - Skloot uses repetition of the words *white* and *black* to reinforce the racial tensions of the time period as a reason for why Henrietta's story was popular.
 - Skloot uses provocative words to show the story's popularity with the public including: *True story, mainstream media, explosive, protesting, racist, impossible, ignore, contaminating, one drop, black blood, uncredited*. Skloot uses this language to illustrate the extreme racial tensions of the time and how the time period fuels the impact of the journal article.
 - Skloot also juxtaposes the racial issues of the past and present to reveal the story's popularity: "It was a story of white selling black, of black cultures 'contaminating' white

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ones with a single cell in an era when a person with 'one drop' of black blood had only recently gained the legal right to marry a white person" (p. 197).

① Explain to students that *mainstream media* is a collective term for the largest and most popular news programs and newspapers.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to read from "Rogers's article caught the attention of several other journalists" to "no such federal oversight at the time" (pp. 197–198) and answer the following question before sharing out with the class. Remind students to annotate the text while engaging in the evidence-based discussion.

What information is being shared with the public about the Lacks family? What is the impact of this shared information?

There are two types of media described here. Newspapers and magazines "published articles about Henrietta, 'one of the pivotal figures in the crusade against cancer.'" The idea is that Henrietta Lacks and her family were finally getting credit for the cells. However, McKusick also published a map of "forty-three different genetic markers present in DNA from Day and two of the Lacks children," (p. 197) which, it is explained, is a violation of the Lacks family's privacy.

Lead a brief whole-class discussion of student responses.

Activity 4: Quick Write

15%

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

How does the section on page 197 from "On March 25, 1976, when Mike Rogers's *Rolling Stone* article" to "of Henrietta's DNA that scientists could use to help identify HeLa cells in culture" develop and refine Skloot's ideas in this excerpt?

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 to guide their written responses.

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- 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.



25%

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

Activity 5: Vocabulary Journal Introduction

Share with students that the research process exposes them to new vocabulary through the reading of a wide variety of academic texts. Instruct students to keep track of vocabulary learned by using a vocabulary journal. Ask students to use the vocabulary journal to record their reflections on the strategies employed to learn the vocabulary.

- Students listen.
- ③ Because the following lessons in this module are designed to support students' research, the vocabulary journal ensures the application of vocabulary strategies modeled thus far.

Explain to students that the vocabulary they track in their vocabulary journal features words they come across in their searches that are proving to be an obstacle to understanding the text. Additionally, the words should fit into one of two categories. One category is words that are found across multiple texts, in a variety of classes; these are words that might appear in all of their content classes like science, math, English, and social studies. Examples are words like *consent, relevant,* and *assess*. The second category of words is vocabulary that is specific to one content area or class. These are words like *HLA markers, somatic,* and *genome.* Ask students to record in their vocabulary journal any difficult words that may fit into one of the categories above.

- ① Share with students the purpose of differentiating between these words: one type of words are those they are likely to encounter often with texts as they proceed with the remainder of high school, college, and their civic lives; the other type are words that may be specific to the domain of their research. For example, *quantify*, *culture*, and *revenue* are words that they may see in their arts, science, and social studies texts; *lead abatement*, *pharmaceutical*, and *serum* are words they may encounter in a science article that would be a potential source related to their area of investigation.
 - Students listen.
- ① Remind students that the volume of unknown words should not prove such an obstacle that the text is largely inaccessible. The Potential Sources Tool (refer to 10.3.2 Lesson 3) should vet for this type of issue.

Share with students the following strategies that can be employed to determine the meaning of unknown words or phrases:

• 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.



- Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical). How do changes in prefixes and suffixes affect word meaning?
- Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.
- Verify the meaning of the word or phrase (by checking the inferred meaning in context or in a dictionary).

Inform students that etymology can be an important part of learning vocabulary. *Etymology* is the study of the origin of words and the way in which their meanings have changed throughout history.

- Students listen.
- (i) Consider displaying the strategies for students to see.
- Consider reviewing how to use reference materials (dictionaries, glossaries, thesauruses) to determine word meaning if students need more support.
- These strategies come directly from standards L.9-10.4a-d. Consider drawing students' attention to their application of standards L.9-10.4.a, c, d by using context to make meaning of a word; consulting reference materials to clarify its precise meaning; verifying the preliminary determination of its meaning.

Instruct students how to complete the vocabulary journal when it is assigned for homework by explaining the questions for each word ("Describe where you encountered the word/phrase in the research and why it is problematic"; "Explain how you tried to figure out the meaning of the word/phrase"; "Confirm the word's meaning as it is used in the research text by using a reference source (dictionary, encyclopedia, etc.)").

- Students listen.
- ① Consider instructing students to use notebooks or additional paper for the vocabulary journal. The notebook or additional paper can be kept in the Research Portfolio throughout the research process in 10.3.2.

Activity 6: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to continue with their pre-search by finding three more potential sources and recording the following information: source, title, location, author's name, and relationship to topic using the Pre-Search Tool. Instruct students to begin their vocabulary journals by using the strategies introduced in the lesson.

• Students follow along.

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① The Pre-Search activity helps to develop students' ability to find relevant sources on their own, as well as to navigate through a wide pool of potential research sources. This activity also helps students to confirm that there is enough information available about their topic to warrant further research.

Homework

Continue with your pre-search. Find three more potential sources and record the following information: source, title, location, author's name, and relationship to topic, using the Pre-Search Tool. Add vocabulary to your vocabulary journal based on the strategies introduced in class.



Vocabulary Journal

Name:		Class:	Date:	
Word	R	esponse		
the wor	e where you encountered d/phrase in the research r it is problematic.			
out the	now you tried to figure meaning of the nrase in context.			
Confirm the word's meaning as it is used in the research text by using a reference source (dictionary, encyclopedia, etc.).				
Word	R	esponse		
the wor	e where you encountered d/phrase in the research r it is problematic.			
out the	now you tried to figure meaning of the nrase in context.			
is used i using a i	the word's meaning as it n the research text by reference source ary, encyclopedia, etc.).			



Model Vocabulary Journal

Name:	Class: Date:			
Word: human genome	Response			
Describe where you encountered the word/phrase in the research and why it is problematic.	I saw it in the first article and I did not know what it meant. It is part of the main point of the article.			
Explain how you tried to figure out the meaning of the word/phrase in context.	I know what <i>gene</i> means, and <i>genome</i> seems to be similar to that.			
Confirm the word's meaning as it is used in the research text by using a reference source (dictionary, encyclopedia, etc.).	The dictionary says, "one haploid set of chromosomes with the genes they contain; broadly: the genetic material of an organism" so it appears to be all the genes that make up a person.			
Word: conjoined	Response			
Describe where you encountered the word/phrase in the research and why it is problematic.	The word was in an article about twins.			
Explain how you tried to figure out the meaning of the word/phrase in context.	I know that it has the word <i>joined</i> in it, and I know that the prefix <i>con</i> can mean <i>together</i> , but I did not know if the twins were together before they were born or after.			
Confirm the word's meaning as it is used in the research text by using a reference source (dictionary, encyclopedia, etc.).	The definition said, "being, coming, or brought together so as to meet, touch, overlap, or unite" but that did not help. So I searched "conjoined twins" and that said, "twins that are physically united at some part or parts of their bodies at the time of birth" so it means twins that are physically connected after they are born.			

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Model Pre-Search Tool

Name: Class:	Date:
Source Notes	How does this source connect to your potential area of investigation?
Source #1 Title: "Genetic Basis for Crime: A New Look" Location: <u>http://www.nytimes.com/2011/06/20/arts/genetics-</u> <u>and-crime-at-institute-of-justice-conference.html</u>	My topic is testing for a genetic predisposition for criminal behavior. This article says that now that the human genome has been sequenced, some researchers are thinking about looking for criminal behavior in genes.
Author: Patricia Cohen Source #2 Title: "Twin Mystique" Location: http://www.tampabay.com/ Author: John Barry	Twin studies are important to this topic because they have the same genetic material, so shared behaviors show a genetic predisposition. This article describes how conjoined twins who have been separated are being studied to see if both twins display similar social behaviors and life choices after separation.
Source #3 Title: "A Vision of the Future" Location: <u>http://www.pbs.org/</u> Author: Steven I. Friedland	This article describes how some places might use DNA fingerprinting to figure out if you have a predisposition to criminal behavior. Also, genetic disorders are being considered in trials, so being able to verify a criminal tendency might be effective for the legal system.

Is there enough source information to research this potential area of investigation?

Yes, there is. I was able to find different perspectives on this issue.

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10.3.1 Lesson 10

Introduction

In this lesson, students continue reading *The Immortal Life of Henrietta Lacks*, from "In 1976—the same year Mike Rogers" to "it's market value was estimated to be \$3 billion" (pp. 199–201). This portion of text introduces the story of John Moore, whose cells were used without his knowledge to develop the cell line Mo, after he received treatment for cancer. Students compare this story to that of Henrietta Lacks. The lesson assessment is a Quick Write that asks students how this excerpt further refines a central idea in the text.

After reading, students continue with their pre-searches, using the Pre-Search Tool to collect relevant information about the sources they find. Students also use their vocabulary journals to capture unfamiliar words they encounter as they search. Students receive direct instruction around authors' perspectives, and are asked to begin considering authors' perspectives as they search for sources. For homework, students find three more potential sources and record information on the Pre-Search Tool.

Assessed Star	ndard(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.
RI.9-10.5	Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).
Addressed St	andard(s)
L.9-10.4.a, c, d	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, 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).

Standards

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Assessment

Assessment(s)

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

• How does Skloot use this portion of text to further refine a central idea?

High Performance Response(s)

A High Performance Response should:

- Identify a central idea in the text (e.g., patient consent, cell line development, etc.).
- Identify similarities between Moore's story and Lacks' story (e.g., both had cells being used to create a valuable cell line, neither one knew their tissue was being used to create valuable cell lines, etc.).
- Describe the evolving nature of patient consent in cell-line development as detailed in Moore's specific case (e.g., Moore realized his cells were being used and refused to continue granting the doctors access to his cell line: "Moore thought that was odd . . . when a nurse handed him a new consent form").

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

- malignant (adj.) (of a tumor) characterized by uncontrolled growth; cancerous, invasive, or metastatic
- severed (v.) separated (a part) from the whole, as by cutting or the like
- voluntarily (adv.) done, made, brought about, undertaken, etc. of one's own accord or by free choice
- heirs (n.) people who inherit or have a right of inheritance in the property of another following the latter's death

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• cremation (n.) – consumption by fire; process of burning

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

- bulged (v.) swelled or bent outward; filled to capacity
- obtained (v.) gained possession of; acquired



Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson		
Standards & Text:			
• Standards: RI.9-10.2, RI.9-10.5, L.9-10.4.a, c, d			
Text: The Immortal Life of Henrietta Lacks (pp. 199–201)			
Learning Sequence:			
1. Introduction of Lesson Agenda	1. 5%		
2. Homework Accountability	2. 10%		
3. Reading and Discussion	3. 40%		
4. Quick Write	4. 10%		
5. Pre-Searches and Perspective	5. 30%		
6. Closing	6. 5%		

Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 Lesson 1)
- Student copies of 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.	
no symbol	Plain text indicates teacher action.	
	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.	
(j)	Indicates instructional notes for the teacher.	

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Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and the assessed standards for this lesson: RI.9-10.2 and RI.9-10.5. Explain that in this lesson, students continue reading *The Immortal Life of Henrietta Lacks*, page 199 from "In 1976—the same year Mike Rogers" to "its market value was estimated to be \$3 billion" (pp. 199–201). Students consider how this excerpt further refines a central idea in the text. Students also continue with their pre-searches and vocabulary journals (refer to 10.3.1 Lesson 9).

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to Turn-and-Talk about one source they found during their pre-searches for homework. In addition, instruct students to share 2–3 words (from the vocabulary journal) they found in those sources, and explain how those words function in context.

- ① Consider collecting the students' research homework to assess students' research progress.
 - Students Turn-and-Talk about the sources they found for homework, and 2–3 words within those sources.
 - Student responses will vary depending on their individual areas of investigation and sources.
- Consider giving students a structure to follow when discussing the vocabulary words. For example, display the following sentence starters to support students in their vocabulary discussions: The word I found is ______. I found it in ______ source, related to my area of investigation, which is ______. In the source, this word serves the purpose of ______.
- ① Consider circulating to ensure that students have chosen Tier II or III words that will build understanding within and across topics.
- (i) Consider reminding students of the strategies inherent in the standards L.9-10.4.a, c, d.

Activity 3: Reading and Discussion

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

Instruct students to read from "In 1976—the same year Mike Rogers" to "its market value was estimated to be \$3 billion" (pp. 199–201) and answer the following questions before sharing out with the class. Remind students to annotate the text as they engage in discussion.

(1) If necessary to support comprehension and fluency, consider using a masterful reading of the focus excerpt for the lesson.

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10%

- Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today's reading including: *malignant, severed, voluntarily, cremation,* and *heirs*.
- ① Consider instructing students to use the Surfacing Issues Tool to continue surfacing issues from the text, if students' areas of investigation are yielding inadequate research results or they are growing disinterested in their selected research topics/issues.

Why did Moore think his "job was killing him" (p. 199)?

 Because he was working very long, hard hours as a surveyor in Alaska, and he assumed this was causing his gums to bleed, his belly to swell, and bruises to develop on his body.

What caused his spleen to "bulge(d) like an overfilled inner tube," (p. 199)? What might *bulged* mean in this context?

- He had "hairy-cell leukemia" (p. 199). Malignant blood cells in his spleen caused it to bulge or get bigger.
- ① Consider providing students with the following definition: *bulged* means "swelled or filled to capacity."
 - Students write the definition of *bulged* on their copy of the text or in a vocabulary journal.

What was severed from Moore's body? Why?

➡ His spleen, because Golde said this was the best way to treat the cancer (p. 199).

What does severed mean in this context?

◄ It means removed or separated from the body.

What did the consent form Moore signed give the hospital the right to do with his spleen?

➡ The consent form allowed the hospital to "dispose" of the spleen "by *cremation*" (p. 199).

What did Moore think was "odd" about Golde's behavior after the surgery?

➡ He thought it was odd that Golde wanted him to continue coming to Los Angeles from Seattle for tests, and that he would pay for his flights and "put him up in style" at a nice hotel (p. 200).

What would it mean for someone to *"voluntarily* grant . . . all rights" they have over their cells to someone else (p. 200)?

It means they would choose to let someone else decide what to do with their cells.

In addition to the rights over individual cells, what rights does the consent form grant the University of California?





- It grants the University rights over any "potential product . . . developed from the blood and/or bone marrow *obtained*" from the patient (p. 200).
- ① **Differentiation Consideration**: To ensure comprehension, consider having students paraphrase the consent form on page 200.

What does obtained mean in this context?

- *Obtained* means that they got or acquired the blood and bone marrow.
- If students struggle, consider providing the following definition: *obtained* means "gained possession of; acquired."

By circling "do" on the consent form, what did Moore give the University of California the right to do?

 By circling "do" on the consent form, Moore gave up all his rights and allowed the University of California to make a product from his cells, blood, and/or bone marrow (p. 200).

Why did Moore ask Golde if "any of the follow-up work he was doing had commercial value," (p. 200)?

 Because if there was commercial value, he did not want to give up the rights to his cells and allow Golde to make money on products developed from his tissue.

What did the lawyer find when Moore had him investigate Golde?

➡ The lawyer "found that Golde had devoted much of the seven years since Moore's surgery to developing and marketing a cell line called 'Mo'" from Moore's cells (p. 201).

Why did Moore feel "like a piece of meat" (p. 201)?

 Because Golde was using him to develop a cell line and make money, and he thought it was "dehumanizing to be thought of as Mo" (p. 201).

How much money was Golde going to make from the Mo cell line?

• During the lawsuit, the value of the cell line was "estimated to be \$3 billion" (p. 201).

Lead a brief whole-class discussion of student responses.

Ask the following questions to discuss as a whole class:

Consider what you know of Moore's story so far. How is it similar to Henrietta Lacks' story?

Student responses may include:





- The doctor developed a product from Moore's cells without his knowledge.
- The doctor was going to patent the cell line and sell it to make money.
- Moore almost gave up all the rights he and his *heirs* had to his cells.

Look back at the consent form on page 31. How is it similar to or different than the one on page 200?

The consent form on page 31 only gives doctors permission to "perform any operative procedures . . . they may deem necessary in the proper surgical care" of the patient. The consent form on page 200 gives doctors' explicit permission to create and sell products based on a patient's cells.

Lead a brief whole-class discussion of student responses.

Activity 4: Quick Write

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

How does Skloot use this portion of text to further refine a central idea?

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 to 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: Pre-Searches and Perspective

Instruct students to take out their Pre-Search Tool. Explain that students will continue searching for sources related to their inquiry questions.

• Students take out their Pre-Search Tool.

Explain to students that while researching topics such as cell ownership and patient consent, it is very likely that they will find authors with different perspectives. Explain that a perspective is how someone understands an issue, including his/her relationship to and analysis of the issue. Explain that an author's perspective is like an iceberg, because only a small portion of it appears in the text. Much of the







10%

perspective is often buried beneath what is visible or explicit in the text. Skloot has a perspective that informs her retelling of Lacks story, but she often remains neutral and journalistic in her writing. Inform students that an argumentative text—like those they might find during their pre-searches—will most likely have a more explicit perspective.

- Students listen.
- ① Students may need more clarification around perspective. If necessary, allow time for students to ask questions to clarify their understanding.

Instruct students to consider an author's perspective while reading, and include a sentence or two briefly summarizing what they believe to be an author's perspective on the Pre-Search Tool. To do this, students should ask themselves: What do I know about the author? What do I know about the publication? What does the author explicitly say in the text? Can I infer a perspective based on the author's tone, language, and approach?

- Students listen.
- Differentiation Consideration: If students require more modeling for comprehension, consider offering an example perspective summary using today's excerpt. Skloot's objective, reportorial tone makes it difficult to determine a distinct perspective, but the fact that she decides to embed the Moore story within that of Lacks' story suggests that she is calling into question the integrity of doctors who deliberately under-inform their patients for the sake of scientific inquiry.

Instruct students to continue with their pre-searches.

- Students continue with pre-searches, using the Pre-Search Tool to support them.
- Consider taking the students to the school library to use the physical and technological resources available to them there. Encourage students to discuss their pre-searches with a media specialist or librarian.

Activity 6: Closing

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. Instruct students to consider an author's perspective and, when appropriate, summarize it in the margins of the Pre-Search Tool.

8

- Students listen.
- ① Consider distributing more Pre-Search Tools if necessary.



5%

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. Be sure to consider an author's perspective and, when appropriate, summarize it in the margins of the Pre-Search Tool.

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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 grades 9–10 reading and content, 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). 	

1





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

2

- 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

Stı	% of Lesson			
Sta	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			
Lea				
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 l	How to Use the Learning Sequence		
Symbol	bol 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.		
Symbol	Italicized text indicates a vocabulary word.		
•	Indicates student action(s).		
۹	Indicates possible student response(s) to teacher questions.		
í	Indicates instructional notes for the teacher.		

Activity 1: Introduction of Lesson Agenda

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

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5%

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

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

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.

- (1) 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*.

4



60%

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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?

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?

- 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:

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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.
- ① 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:
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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.



10.3.1 Lesson 12

Introduction

In this lesson, students read two excerpts from *The Immortal Life of Henrietta Lacks*. The first is on pages 245–247 from "I think my birth was a miracle" to "didn't deserve her help as far as I'm concerned." This excerpt describes Skloot's encounter with Zakariyya (Henrietta's son), when he discusses his anger with the Hopkins scientists. The second excerpt is on pages 261–267 from "Okay' Christoph said, looking at Deborah. 'It must be pretty hard'" to "her arm around me and said, 'Girl, you just witnessed a miracle.'" In this excerpt, Skloot describes a visit that she, Deborah, and Zakariyya make to Hopkins to meet a scientist, who ends up being surprisingly kind to the Lacks family. After reading and discussion, students respond to a Quick Write that asks them to consider how this excerpt affects Zakariyya's ideas about the medical community. For homework, students continue with their pre-searches, adding vocabulary to their journals when appropriate.

Standards

Assessed Sta	Assessed Standard(s)		
RI.9-10.5	Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).		
Addressed St	andard(s)		
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). 		
L.9-10.4.a, c, d	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, 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 answer the following prompt, citing textual evidence to support analysis and inferences drawn from the text.

• What "miracle" happens in this portion of text, and what effect does it have on the idea that "what them doctors did was wrong" (pp. 245–246)?

High Performance Response(s)

A High Performance Response should:

- Describe how Zakariyya is calm at the end of the chapter, touches Christoph's shoulder (then Skloot's) and says "Thank you," (p. 267).
- Explain why this event may have happened, why it is important, and why Deborah calls it a "miracle" (e.g., Christoph is the first doctor to validate the family's desire to claim some amount of ownership over Henrietta's cells; the "miracle" is Zakariyya's simple gesture of thanking Skloot and Christoph, or Zakariyya's transformation from the first excerpt to the second one; the "miracle" is Christoph's kindness, or what Zakariyya learns about Henrietta, or the simple act of seeing Henrietta's cells in person). Students do not need to explain every possibility, but should back up their reasoning with evidence from the text.
- Discuss how Christoph does not embody the portrait of the medical community Zakariyya paints in the first excerpt, and how this seems to impact the Lacks family's concept of the medical community.

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

• None.

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

- vials (n.) very small glass or plastic containers used for perfumes, medicines, etc.
- contamination (v.) the state of being made impure or unsuitable by contact or mixture with something unclean, bad, etc.



Lesson Agenda/Overview

Stı	% of Lesson			
Sta				
• Standards: RI.9-10.5, W.9-10.9.b, L.9-10.4.a, c, d				
•	• Text: The Immortal Life of Henrietta Lacks, pp. 245–247 and 261–267			
Lea				
1.	Introduction of Lesson Agenda	1. 5%		
2.	Homework Accountability	2. 10%		
3.	Reading and Discussion	3. 65%		
4.	Quick Write	4. 15%		
5.	Closing	5. 5%		

Materials

- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Pre-Search Tool (refer to 10.3.1 Lesson 8)

Learning Sequence

How to l	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.		
Symbol	Italicized text indicates a vocabulary word.		
•	Indicates student action(s).		
•	Indicates possible student response(s) to teacher questions.		
í	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.9-10.5. In this lesson, students engage with two excerpts from *The Immortal Life of Henrietta Lacks*. The first is on pages 245––247 from "I think my birth was a miracle" to "didn't deserve her help as far as I'm concerned." The

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second excerpt is on pages 261–267 from "'Okay' Christoph said, looking at Deborah. 'It must be pretty hard'" to "her arm around me and said, 'Girl, you just witnessed a miracle.'"

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to Turn-and-Talk about the sources they found during their pre-searches for homework. Tell students to share three new words they added to their vocabulary journals, as well as a short description of any perspectives they noticed, if the perspectives are apparent in the sources.

- Students Turn-and-Talk about the sources and three new words they found for homework, and explain the perspective of the authors of those sources, if apparent in the sources.
- Student responses will vary by their individual research.

Activity 3: Reading and Discussion

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

Instruct student pairs to read from page 245 (at "I think my birth was a miracle") to page 247 (at "didn't deserve her help as far as I'm concerned"), and answer the following questions before sharing out with the class. Remind students to annotate the text as they engage in discussion.

- If necessary to support comprehension and fluency, consider using a Masterful Reading of the focus excerpts for the lesson.
- This annotation supports students' engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.
- ① Differentiation Consideration: Consider encouraging students to surface issues from the text (using the Surfacing Issues Tool) if they are struggling to find enough research for a previously selected area of investigation, or if they are becoming disinterested in their research topic.

Why does Zakariyya think his "birth was a miracle" (p. 245)?

 When he was born, his mother—Henrietta Lacks—was "full of tumors" and very sick, but he was born unharmed and healthy (p. 245).

Why does Zakariyya think what the "doctors did was wrong" (p. 246)? What support does he give for this statement?

➡ He says they stole her cells without her permission and made money off of them. He is angry because now the Lacks family is "'po' as po','" when they should have made money off of Henrietta's cells (p. 246).





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As Zakariyya points out, many doctors argue that Henrietta's cells helped many people. What is his response to this claim?

Zakariyya says that even though the cells helped many others, they did not help the Lacks family, and they did not help Henrietta. Now, he says, they "can't even go see a doctor cause [they] can't afford it," but the people who "stole" her cells are rich because of it (pp. 246–247).

How would you describe Zakariyya's emotions in this passage? Why?

 He is irritable and angry. He curses and yells a lot, he "snap[s] back," and he stands over Skloot, "yelling" about George Gey (p. 246).

Based on his tone and what he says in this passage, what is Zakariyya's opinion of doctors?

Zakariyya hates the people who "stole" Henrietta's cells, and thinks that if God "wants to provide a disease cure, He'd provide a cure of his own, it's not for man to tamper with" (p. 246). He says that if George Gey "were here right now, I'd kill him dead" (p. 246). Zakariyya clearly does not like or trust doctors, especially the ones involved with the removal of Henrietta's cells or HeLa.

Lead a brief whole-class discussion of student responses.

Instruct student pairs to read from page 261 (at "'Okay' Christoph said, looking at Deborah. 'It must be pretty hard'") to page 267 (at "her arm around me and said, 'Girl, you just witnessed a miracle'") and answer the following questions before sharing out with the class.

To contextualize this portion of text, consider telling students that Skloot, Deborah (Henrietta's daughter), and Zakariyya (Henrietta's son) are visiting Hopkins Hospital to see Henrietta's cells in person. Cristoph is the doctor who is showing them the cells.

How are the HeLA cells contained? What are vials?

➡ The cells are contained in a very cold freezer in "thousands of inch-tall plastic vials" (p. 262). Vials are small containers used to hold liquid.

Why are the cells stored in an "extra room" all by themselves (p. 262)?

■ To avoid *contamination* from other substances.

What does contamination mean in this passage?

 Contamination means that another substance gets into the cells or the cells get into another substance causing impurity or ruining the cells.





What does Zakariyya do as Christoph is explaining how cells work?

➡ Zakariyya turns up his hearing aid and leans in (p. 264).

How is Zakariyya's behavior different in this passage compared to the first passage?

➡ He is much less angry; he is quiet, calm, and interested. When Christoph shows them the cells on the screen, Zakariyya stares like he has "gone into a trance" (p. 265).

What does Christoph say that stuns Deborah?

Christoph says that he thinks "Hopkins pretty much screwed up" (p. 266).

Explain the nature and tone of Christoph's interaction with Deborah and Zakariyya.

Christoph is very kind to both Deborah and Zakariyya; he patiently explains how cells work, and shows them their mother's cells. He says, "I don't blame you for being angry" (p. 266), and agrees with them that they "should get the money. At least some of it" from the HeLa profits, (p. 267). Overall, he is very kind to them, unlike other scientists with whom they have interacted.

How would you characterize Deborah and Zakariyya's reaction to Christoph?

Both of them seem shocked and "stunned" (p. 266) by his point of view and how kind and welcoming Christoph is; Deborah is more understanding with Christoph than with others at Hopkins: "Deborah looked like she wanted to hug him. 'This is amazing,' she said, shaking her head and looking at him like he was a mirage" (p. 266).

What is Christoph's perspective about how HeLa profits should be handled? How does he compare cells to oil (p. 267)?

Christoph thinks that the Lacks family should be getting "at least some" of the profits from Henrietta's cells. He says "Why not treat valuable cells like oil . . . When you find oil on somebody's property it doesn't automatically belong to them, but they do get a portion of the profits" (p. 267).

What does Zakariyya do before leaving the hospital?

 He "reach[es] up and touch[es] Christoph on the back" and thanks him (p. 267). Then he does the same thing to Skloot.

How do Deborah and Skloot react to this?

• They stand "in silence," and Deborah says, "Girl, you just witnessed a miracle" (p. 267).





Lead a brief whole-class discussion of student responses.

Instruct student pairs to discuss the following question and write a brief response on a separate sheet of paper before sharing out with the class.

Describe Zakariyya in the first and second excerpt in this lesson.

In the first excerpt, Zakariyya is very loud and angry with the medical community, and he curses a lot: "It's the highest degree of disrespect. That's why I say I hope he burn in hell." In the second excerpt, he is calmer and gentler. He "lean[s] close," to listen to Christoph explain cells (p. 264), and he is silent most of the visit. When he does begin to "[yell] something about George Gey," he quickly stops when Deborah "thump[s] her cane on his toe" (p. 266). Overall, Zakariyya seems taken aback by Christoph's kindness.

Activity 4: Quick Write

15%

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

What "miracle" happens in this portion of text, and what effect does it have on the idea that "what them doctors did was wrong" (pp. 245–246)?

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 to 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

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 a Pre-Search Tool: author's name, topic, source, location, publication date, and general content/key ideas. Instruct students to continue to consider an author's perspective, and, when

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5%

appropriate, summarize it in the margins of the Pre-Search Tool. Finally, instruct students to continue adding to their vocabulary journal when appropriate.

- Students listen.
- ① Consider reminding students to use the vocabulary strategies in standards L.9-10.4.a, c, d when completing the vocabulary journal.
- ① 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 the Pre-Search Tool: author's name, topic, source, location, publication date, and general content/key ideas. 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.



10.3.1 Lesson 13

Introduction

In this lesson, the first in a series of two lessons, students engage in an evidence collection activity using The Immortal Life of Henrietta Lacks, in order to prepare for a discussion in the following lesson (Lesson 14) about the text's various claims and evidence. This lesson focuses on understanding central ideas and evidence in informational text, as well as developing claims for future argument writing. Additionally, this lesson develops students' proficiency for gathering and synthesizing evidence from a text.

Students work collaboratively in groups to identify textual evidence from The Immortal Life of Henrietta Lacks to support a claim from the text. Each student records information on an Evidence Identification Tool as the culmination of the group work in this lesson. This tool helps to identify the evidence used to support various claims in the text and allows students to see a clear path of support for the author's central ideas. The completion of this tool serves as the assessment for this lesson. Students' group work provides a foundation of evidence for Lesson 14's discussion activity.

10.3.1 Lesson 13 and 10.3.1 Lesson 14 scaffold to the End-of-Unit Assessment in Lesson 15, in which students write a multi-paragraph essay examining how Skloot introduces and develops the analysis of a central idea throughout the text. This two-lesson series expands student understanding of central ideas in the text as students analyze the various claims Skloot presents, while allowing them to examine different portions of the larger text in a new context. In doing so, it supports the End-of-Unit Assessment and further investigation by establishing the relationship between text and evidence. For homework, students continue with their pre-searches to develop potential sources for future argument writing.

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.	
W.9-10.9.b	 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning 	





	is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").	
Addressed Sta	andard(s)	
SL.9-10.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grades 9–10 topics, texts, and issues,</i> building on others' ideas and expressing their own clearly and persuasively.	
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)
The learning in this lesson will be captured through the completion of the Evidence Identification Tool.
Students submit a completed Evidence Identification Tool during the lesson's closing.
① The Evidence Identification Tool will serve as the assessment for this unit.
High Performance Response(s)
A High Performance Response should:
• See the Model Evidence Identification Tool located at the end of the lesson.

Use the following criteria to assess individual student's Evidence Identification Tool:

- Does the textual evidence provided support the text's claim?
- Is the textual evidence provided relevant and sufficient?
- Does the student correctly identify the purpose of this supporting evidence?



Vocabulary

Vocabulary to provide directly (will not include extended instruction)

• None.*

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

• None.*

*Because this is not a close reading or a research lesson, there is no specified vocabulary. However, in the process of returning to the text, students may uncover unfamiliar words. Teachers can guide students to make meaning of these words by following the protocols described in 1E of this document http://www.engageny.org/sites/default/files/resource/attachments/9-12_ela_prefatory_material.pdf

Lesson Agenda/Overview

Stu	ident-Facing Agenda	% 0	of Lesson	
Sta	indards & Text:			
•	Standards: RI.9-10.2, W.9-10.9.b, SL.9-10.1, L.9-10.4.a, c, d			
•	Text: The Immortal Life of Henrietta Lacks			
Lea	Learning Sequence:			
1.	Introduction of Lesson Agenda	1.	5%	
2.	Homework Accountability	2.	10%	
3.	Identifying Claims and Evidence in the Text	3.	20%	
4.	Evidence Identification Tool Activity and Assessment	4.	60%	
5.	Closing	5.	5%	

Materials

• Copies of the Evidence Identification Tool for each student

Learning Sequence

How to Use the Learning Sequence				
Symbol	Symbol Type of Text & Interpretation of the Symbol			
10%	10% Percentage indicates the percentage of lesson time each activity should take.			
no	no Plain text indicates teacher action.			

3

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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.	
Indicates instructional notes for the teacher.	

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and the assessed standards for this lesson: RI.9-10.2 and W.9-10.9.b. In this lesson, students engage in an evidence collection activity using *The Immortal Life of Henrietta Lacks* in order to prepare for a discussion in the following lesson (10.3.1 Lesson 14). Students work collaboratively in groups to identify textual evidence from *The Immortal Life of Henrietta Lacks* to support a central claim from the text. Each student records information on an Evidence Identification Tool as the culmination of the group work in this lesson. The completion of this tool will serve as the assessment for this lesson.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out the homework from the previous lesson. The previous lesson's homework prompt was: Continue with your pre-searches. Find three more potential sources and record the following information on the Pre-Search Tool: author's name, topic, source, location, publication date, and general content/key ideas. 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.

Ask students to work in pairs and share one or two potential sources they found for homework. Instruct students to first articulate their inquiry question and then briefly explain how each source relates to that question.

- Student pairs share the potential sources they found for homework.
- Student responses will vary based on their individual research questions and research conducted. Students should use the language of the Pre-Search Tool in discussion.

Activity 3: Identifying Claims and Evidence in the Text

This part of the lesson is a whole-class discussion about how to identify claims and supporting evidence in the text. Explain that the goal of this discussion is to encourage students to think about what claims they can identify in the text that they have read, and what evidence is provided in the text to support these claims. Remind students of the work they have done with the Surfacing Issues Tool. This tool provides an ideal gateway into the many claims of the text. Ask students the following questions:

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10%

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20%

How do you define an issue in a text?

 An issue is an important aspect of human society for which there are many different opinions about what to think or do.

As you have explored this text, what are some issues that have surfaced?

- Student responses should include:
 - Do individuals own their tissue?
 - Is it right to use humans in experiments without their knowledge?
 - Should doctors be able to profit from research on patients?
 - Does patient privacy and consent hinder medical advancement?
 - Are black patients treated differently than white patients?
- If students struggle to identify issues in the text, consider guiding them through sourcing an issue from the Surfacing Issues Tool, or directly providing them with an issue from the above list to model ideal responses.

Once students have developed a list of rich and substantial issues, continue the discussion by asking the following questions to bring students to a deeper understanding of perspective and claim. The purpose of these questions is to scaffold towards sourcing evidence by understanding a writer's perspective.

How is a claim distinct from a perspective?

A claim is someone's stance on what to do or think about a clearly defined issue based on their perspective and understanding of it. In argument-based essays, the writer's claim may be expressed as a thesis. A perspective is how someone understands an issue, including his or her relationship to and analysis of the issue.

How would you use an issue to create a claim?

By taking a position on the issue.

How would you transform one of the issues above to form a claim?

- Student responses should include:
 - An individual does not own their tissue after it leaves his or her body.
 - It is never acceptable for doctors to use humans for experiments without their knowledge.
 - Doctors should be able to profit from research.
 - Patients of color are treated differently than white patients.
- ① Consider reminding students of the previous work done to clarify the role of a claim in a text in 10.3.1 Lesson 6.





Explain the concept of counterclaims and opposing evidence to students. Explain that a counterclaim is a statement that opposes another claim. It is often paired with opposing evidence that calls into question the proof used by a claim. A simple way to think about counterclaims is by considering claims that are opposed to one's own. Model the following progression from issue to claim to counter claim for students to deepen their understanding of the concepts.

- Issue: Do individuals own their tissue?
- Claim: Patients should be paid for all tissue that is removed from their body for research.
- Counterclaim: Patients no longer own tissue once it leaves their body.

Ask students the following question:

What other claims might challenge the stated claim of "Patients should be paid for all tissue that is taken from their body for research?"

- Student responses may include:
 - As long as doctors tell patients what they are doing, it is all right for them to use patient tissue.
 - It would be too expensive to pay patients for their tissue.
 - Doctors are the ones making discoveries so they have a right to profit off of discoveries.

Explain to students that the following activity will take place over two lessons and involves both the research component in this lesson and the culminating discussion in the next one (Lesson 14).

• Students listen.

Distribute the Evidence Identification Tool. Since this is the first time students are encountering this tool, briefly review the tool with students. Explain that this tool is a way for them to collect and analyze evidence in the text and draw connections between the evidence they collect to support a claim Skloot presents in the text.

- Students examine the Evidence Identification Tool.
- ① Consider reminding students that the claims Skloot presents in the text are associated with the various central ideas that have been discussed in previous text analysis lessons. For example, the claim that an individual does not own his or her tissue after it leaves the body is associated with the central idea of tissue ownership.

Remind students of the criteria used to evaluate evidence in informational text: identifying what claim the evidence supports, identifying how the evidence is relevant to the claim, and explaining whether or

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not the evidence is sufficient to support the claim. Students gain a deeper understanding of what makes an ideal piece of supporting evidence by examining how pieces of evidence support a claim and how relevant and sufficient each piece of evidence is.

① Consider reminding students of the work done in 10.3.1 Lesson 6 with relevant and sufficient evidence.

Inform students that this tool comprises their assessment for this lesson and that they will submit their tools at the close of this lesson.

- ③ See the model tool at the end of this lesson for clarification on the layout and use of the Evidence Identification Tool.
- If necessary, consider modeling one example of a text-based claim and evidence before students begin working on this tool in their groups.

Lead students through an explanation of the components of this tool.

Explain to students that the goal of the upcoming activity is to source three separate pieces of evidence from the text, two of which support the chosen claim of their group and one piece of evidence that might be used to challenge this claim. Students identify evidence and then write a statement connecting the evidence to the claim. Students should analyze all of the excerpts from this unit for evidence. Encourage students to work together in their groups to vet various pieces of textual evidence and evaluate whether they are relevant and sufficient to support or counter the claim.

- ① Consider spending a moment to clarify the role of counterevidence for students. Completing the tool does not require students to develop a counterclaim to the one their group is researching but some groups might find it helpful to develop a counterclaim as a starting point for sourcing counterevidence.
- Identifying counterevidence build students' skills in working with counterclaims. This scaffolding will help students as they research and write arguments, specifically when focusing on W.9-10.1.a and W.9-10.1.b.
 - Students follow along on their copies of the Evidence Identification Tool.

Activity 4: Evidence Identification Tool Activity and Assessment

Instruct students to take out their annotated excerpts of *The Immortal Life of Henrietta Lacks*, and all discussion notes, tools, and Quick Writes from the unit for the Evidence Identification Tool activity.

• Students take out their materials.

Designate 4–5 students per group for this activity. These will serve as the home groups for the jigsaw activity in the next lesson (Lesson 14). Explain that in this activity, students are preparing for a jigsaw





60%

discussion in the following lesson by doing research in home groups on a text-based claim. In the culminating discussion (occurring in the following lesson) students will be expected to represent their text-based claim in expert groups as well as respond to counterclaims and answer clarifying questions.

• Students form home groups.

Instruct each home group to select a claim from the text. Selected claims should have the required depth of evidence to support the completion of an Evidence Identification Tool.

- Student groups select a claim from the text and fill out the claim section of their Evidence Identification Tool.
- If necessary, consider assigning a claim to each group from the list of examples in the previous activity (Identifying Claims and Evidence in the Text).
- ① Consider reminding students of their previous work with standard SL.9-10.1, which requires that students participate in collaborative discussions, building on each other's ideas and expressing their own clearly and persuasively.

Instruct student groups to focus on identifying supporting evidence for their claim in the text. This information should be used to complete each student's individual Evidence Identification Tool. Students should work together to find as many supporting pieces of evidence as possible, focusing on how relevant and sufficient the evidence is. Prompt students to discuss in their groups the connections between these pieces of evidence and the purpose(s) the evidence serves in the text, in order to draft a connection statement.

• Students work in groups to complete the Evidence Identification Tool.

Remind students that the Evidence Identification Tool will aid in identifying and analyzing evidence that can be used in the following lesson's writing activity, in support of W.9-10.9.b.

- Student listen.
- ① Circulate during the activity to address student questions or concerns.
- ① **Differentiation Consideration:** If groups struggle with finding evidence for their claim, consider asking the following questions:
 - Where in the excerpts did we encounter this issue?
 - What examples does the text use when talking about this issue?
 - Why does Skloot use these examples in talking about this issue?

Collect completed Evidence Identification Tools from students as the assessment for this lesson.

• Students turn in completed Evidence Identification Tools.



Activity 5: Closing

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 a Pre-Search Tool: author's name, topic, source, location, publication date, and general content/key ideas. Instruct 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.

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- In preparation for the activity in 10.3.1 Lesson 14, students will need access to their discussion notes, tools, and Quick Writes from the unit. Ensure that students have access to these materials. If students have been keeping their own notes via a portfolio or other tool, instruct students to bring this to class for Lesson 14.
- ① Consider reminding students to use the vocabulary strategies in standards L.9-10.4.a, c, d when completing the vocabulary journal.
 - Students follow along.

Homework

Continue with your pre-searches. Find three more potential sources and record the following information: author's name, topic, source, location, publication date, and general content/key ideas on the Pre-Search Tool. Be sure to 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.



Evidence Identification Tool

Name		Class:		Date:	
------	--	--------	--	-------	--

Claim:

w does the evidence counter the claim?



Model Evidence Identification Tool

Name:	Class:		Date:	
-------	--------	--	-------	--

Claim: Patients of color are treated differently than white patients.

Evidence	How does the evidence support the claim?
Johns Hopkins used the tissue of black patients without their consent for various purposes. "Hopkins, with its large indigent black population, had no dearth of clinical material." (p. 30)	Doctors viewed patients' tissue as fair game for experimentation and studies. In particular, they used the large population of poor, black patients who came to Hopkins for free treatment.
John Moore's doctor sought permission from him to use his cells and Moore was able to obtain legal counsel and publicity for his plight. "That's when Moore sent the form to a lawyer" & "The public didn't realize there was big money in cell lines." (pp. 199–204)	Although the time periods are different, it is important to note the difference with which Moore was treated and the options available to him (i.e., a lawyer and national publicity). Skloot is clearly drawing a comparison between the two cases to illustrate Henrietta's mistreatment.
Counter Evidence	How does the evidence counter the claim?
Henrietta received radium cancer treatment that was standard for hospitals nationwide. "like hospitals nationwide, Hopkins treated all invasive cervical carcinomas with radium" (pp. 31–32) The Johns Hopkins center was specifically established with a charter to treat all patients the same, "Without regard to sex, age, or color" (pp. 166–167).	This indicates a certain level of equality in medical treatment. In some cases, a doctor sees only a sick patient and does not alter the treatment plan based on the color of their skin.



10.3.1 Lesson 14

Introduction

In this lesson, students build upon the evidence collection work done in 10.3.1 Lesson 13 by engaging in a group discussion that validates their understanding of evidence used to support central claims presented in the text, *The Immortal Life of Henrietta Lacks*. Students use the evidence collected in 10.3.1 Lesson 13 to engage in a Jigsaw activity during which they discuss their understanding of supporting evidence for a claim made in the text. Within expert groups, students take turns presenting their claim and evidence to the other members of their group, allowing time for counterclaims and clarifying questions. During each group discussion, students record additional evidence for use in the lesson assessment.

As an assessment, students write a one-paragraph response that synthesizes their understanding of supporting evidence with their ability to identify a claim presented in the text and determine whether the evidence provided is relevant and sufficient. This lesson directly supports the End-of-Unit Assessment by deepening students' understanding of claims in the text, as well as the ways in which Skloot shapes and refines these central ideas. For homework, students review their Evidence Identification Tool and their annotations—as well as notes from today's discussion activity—in preparation for the End-of-Unit Assessment. Additionally, students review the Surfacing Issues Tool and the Pre-Search Tool to prepare to articulate two to three areas of investigation and where they emerge from *The Immortal Life of Henrietta Lacks*.

Standards

Assessed Star	ndard(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.				
W.9-10.9Draw evidence from literary or informational texts to support analysis, reflection, a research.				
Addressed St	Addressed Standard(s)			
SL.9-10.1.a,Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.				

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	a. Come to discussions prepared, having read and researched material under study;
	explicitly draw on that preparation by referring to evidence from texts and other
	research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of
	ideas.
	c. Propel conversations by posing and responding to questions that relate the current
	discussion to broader themes or larger ideas; actively incorporate others into the
	discussion; and clarify, verify, or challenge ideas and conclusions.
L.9-10.4.a,	Determine or clarify the meaning of unknown and multiple-meaning words and phrases
c, d	based on grades 9–10 reading and content, 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 writing prompt at the end of the lesson. Students respond to the following prompt, citing textual evidence to support analysis and inferences drawn from the text.

• Compose a one-paragraph response that examines one of the claims discussed in the discussion activity today. Examine and support this claim using relevant and sufficient evidence found in the text.

High Performance Response(s)

A High Performance Response should:

- Include a clearly defined claim from the text (e.g., It is never acceptable for doctors to use humans for experiments without their knowledge; Doctors should be able to profit from research; An individual does not own their tissue after it is removed from their body.).
- Cite textual evidence that is both relevant and sufficient to support the claim.



Vocabulary

Vocabulary to provide directly (will not include extended instruction)

• None.*

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

• None.*

*Because this is not a close reading or a research lesson, there is no specified vocabulary. However, in the process of returning to the text, students may uncover unfamiliar words. Teachers can guide students to make meaning of these words by following the protocols described in 1E of this document http://www.engageny.org/sites/default/files/resource/attachments/9-12_ela_prefatory_material.pdf.

Lesson Agenda/Overview

Stu	ident-Facing Agenda	% (of Lesson	
Sta	ndards & Text:			
•	Standards: RI.9-10.2, W.9-10.9, SL.9-10.1.a, c, L.9-10.4.a, c, d			
•	Text: The Immortal Life of Henrietta Lacks			
Lea	Learning Sequence:			
1.	Introduction of Lesson Agenda	1.	5%	
2.	Homework Accountability	2.	10%	
3.	Central Claim and Evidence Discussion Activity	3.	55%	
4.	Lesson Assessment	4.	20%	
5.	Closing	5.	10%	

Materials

- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Pre-Search Tool (refer to 10.3.1 Lesson 8)
- Copies of the Speaking and Listening Rubric and Checklist for standard SL.9-10.1.a, c for each student



Learning Sequence

How to l	How to Use the Learning Sequence		
Symbol	mbol 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.		
Symbol	Italicized text indicates a vocabulary word.		
Indicates student action(s).			
¢	Indicates possible student response(s) to teacher questions.		
(j)	Indicates instructional notes for the teacher.		

Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and the assessed standards for this lesson: RI.9-10.2 and W.9-10.9. Inform students that today they use the material that they gathered in 10.3.1 Lesson 13 in a culminating discussion activity. Students engage in an evidence-based discussion on the claim and evidence they researched in 10.3.1 Lesson 13. As their assessment, students write a one-paragraph response that synthesizes their understanding of supporting evidence with their ability to identify a claim in the text and determine whether the evidence provided is relevant and sufficient.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to take out the homework from the previous lesson: "Continue with your pre-searches. Find three more potential sources and record the following information: author's name, topic, source, location, publication date, and general content/key ideas on the Pre-Search Tool. Be sure to 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."

Instruct student pairs to share and discuss the vocabulary words they identified and defined in the previous lesson's homework. Instruct students to articulate the strategies they used to figure out the meaning of the vocabulary words.

- Student responses vary based on the individual research.
- Remind students to discuss how they used the strategies of L.9-10.4.a, c, and d, as introduced in 10.3.1 Lesson 9.

4



10%

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Activity 3: Central Claim and Evidence Discussion Activity

Instruct students to take out their annotated excerpts of *The Immortal Life of Henrietta Lacks*, and all discussion notes, tools, and Quick Writes from 10.3.1. Distribute students' completed Evidence Identification Tool from 10.3.1 Lesson 13. Explain to students that they are going to draw upon their collected evidence to support their group discussions and the lesson assessment.

• Students take out their materials and listen.

Explain to students that they are going to form small groups with one delegate from each of the groups from 10.3.1 Lesson 13 and present the claim they researched, which students worked to develop in those previous groups. Each group should be made up of representatives from the 10.3.1 Lesson 13 groups (i.e., one student representing a claim on patient rights; one student representing a claim on tissue ownership; and so on). Students take turns acting as the "expert presenter" for their claim, allowing other students in the group to challenge their claim and evidence and to ask clarifying questions.

• Students listen.

Inform students that the discussion is structured formally, such that each student follows a set of steps to ensure that the claims and evidence that they have gathered are thoroughly explored. Each student presenter should follow these steps:

- Present the claim your group worked on and the supporting evidence.
- Each student in the group who is not presenting poses a counterclaim or rebuttal to the presenter's claim and supporting evidence.
- The presenting student addresses the counterclaims and rebuttals.
- Each student who is not presenting asks any additional clarifying questions.
- The student presenter answers these questions.
- To aid student understanding, model an ideal exchange within a group to support students' understanding of the discussion method.
 - Students listen.

Instruct students to form small groups and begin the discussion. Remind students to keep the strategies of SL.9-10.1.a, c in mind as they engage in the evidence-based discussion.

- Students form small groups and engage in the discussion.
- (i) Students were introduced to SL.9-10.1.a, c in Module 10.1.

Circulate to monitor the small groups' progress and adherence to the established activity format.





55%

- ① Consider informally assessing SL.9-10.1, using the Speaking and Listening Rubric during the Jigsaw discussion.
 - Small groups engage in structured discussion.
 - Student responses should include:
 - The claim found in the text
 - How the evidence supports this claim
 - o What counterclaims exist to this claim
 - o Clarifying questions

Activity 4: Lesson Assessment

20%

10%

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

Compose a paragraph response that examines one of the claims discussed in the discussion activity today. Examine and support this claim using relevant and sufficient evidence found in the text.

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 to guide their written responses.

- Students listen and read the 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

Display and distribute the homework assignment. For homework, instruct students to review their Evidence Identification Tool and their annotations—as well as notes from today's discussion activity—in preparation for the End-of-Unit Assessment. Additionally, instruct students to review the Surfacing Issues Tool and their Pre-Search Tool. Inform students that the End-of-Unit Assessment is a two-part writing assessment:

Choose one central idea that Skloot develops in the text. How does Skloot unfold an analysis of this central idea?



Articulate two to three areas of investigation and where they emerge from the text.

- Students follow along.
- (i) It may be important to inform students that the text-based claims examined in 10.3.1 Lesson 13 and this lesson are associated with Skloot's central ideas in the text.

Homework

Review your annotations and notes on *The Immortal Life of Henrietta Lacks*—as well as notes from today's discussion activity—in preparation for the End-of-Unit Assessment. Additionally, review the Surfacing Issues Tool and Pre-Search Tool.



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Speaking and Listening Rubric

Assessed Standard: SL.9-10.1.a, c

Comprehension and Collaboration

		2-Point Participation	1-Point Participation	0-Point Participation
Preparation	SL.9-10.1.a	Student demonstrates strong evidence of preparation; student draws on preparation by referring to strong and thorough evidence from text(s).	Student demonstrates some evidence of preparation; student refers to some evidence from text(s).	Student demonstrates no evidence of preparation; student does not refer to evidence from text(s).
Responsiveness to Others	SL.9-10.1.c	Responds well to others by often engaging in the following: propels conversation by relating discussion to broader ideas and themes; actively incorporates others; clarifies, verifies, or challenges ideas or conclusions.	Student responds to others, occasionally engaging in the following: propels conversations by relating discussion to broader ideas and themes; incorporates others; clarifies, verifies, or challenges ideas or conclusions.	Student does not respond to others, rarely engaging in the following: propels conversations; incorporates others; clarifies, verifies, or challenges ideas or conclusions.

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Speaking and Listening Checklist

Assessed Standard: SL.9-10.1.a, c

Comprehension and Collaboration

	Did I	~
Preparation	Prepare for the discussion by reading all the necessary material, annotating my text(s), and organizing my notes?	
	Refer to strong evidence from my text(s) and notes during the discussion?	
	Connect comments from the discussion to broader ideas and themes?	
Responsiveness to Others	Actively include others in the discussion?	
	Clarify and/or respectfully challenge others' ideas?	

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10.3.1 Lesson 15

Introduction

In this final lesson of the unit, the End-of-Unit Assessment, students complete a two-part assessment. First, students synthesize and compose a multi-paragraph response examining how Skloot unfolds an analysis of a central idea throughout *The Immortal Life of Henrietta Lacks*. Second, students reflect on the research process begun in this unit by writing about two to three areas of investigation that emerged from *The Immortal Life of Henrietta Lacks*, explaining how and from where the areas emerged.

This lesson asks students to apply standards RI.9-10.2, RI.9-10.3, W.9-10.2.b, d, e, W.9-10.9, L.9-10.1, and L.9-10.2 as they examine the unfolding of a central idea's analysis throughout the text. This lesson also assesses students' comprehension of the research process that has been introduced in this unit. Students use their areas of investigation to guide the research in the following unit. For homework, students continue to read sources found during pre-searches and identify, record, and use vocabulary strategies to define unknown words in their vocabulary journal.

Assessed Stand	ard(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.
RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
W.9-10.2.b, d, e	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
	 Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
	d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.

Standards

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	e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.		
W.9-10.9	Draw evidence from literary or information texts to support analysis, reflection and research.		
L.9-10.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.		
L.9-10.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.		
Addressed Standard(s)			
W.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		

Assessment

Assessment(s)

Student learning is assessed via the End-of-Unit Assessment. Students respond to the following prompts, citing textual evidence to support analysis and inferences drawn from the text.

- Part 1: Choose one central idea that Skloot develops in the text. How does Skloot unfold an analysis of this central idea?
- Part 2: Articulate two to three areas of investigation and where they emerge from the text.
- ③ Part 1 is assessed using the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist. Part 2 is assessed using the Area Evaluation Checklist.

High Performance Response(s)

Part 1

A High Performance Response should:

- Identify and explain a central idea from Skloot's text (e.g., patient rights, tissue ownership, the conflict of science and human wellbeing, the ethical considerations of experimentation).
- Include evidence from the text, making clear connections between the details selected and the statements made.
- Examine Skloot's unfolding of the identified central idea's analysis through specific textual details. Student responses may include:
- The idea of patients' rights and whether they are sufficient to protect individuals in modern society is a central claim that Skloot develops early in the text. It starts with the how Henrietta is





treated and how her cells are taken without her consent.

- Skloot develops a number of examples that examine the idea of patients' rights. The development of the HeLa cell line is directly contrasted to the story of John Moore. Both serve as examples where current rights and regulations did not protect the patients.
- The text makes it clear that the rights of individuals in relation to science and experimentation are confusing and ill-defined. Between Lacks, Moore, and the experiments of Chester Southam, it is apparent that new legal protections may be needed.

Part 2

A High Performance Response should:

- Identify clearly two or three areas of investigation and reference their appearance in the text (e.g., Who owns tissue once it is removed from an individual? How have patients' rights changed as science has advanced?").
- Provide areas of investigation that are distinct from one another.

Student responses vary based on individual research. Student responses may include:

- The questions of who owns tissue once it's removed from the body and whether or not doctors can profit from this tissue are two areas of investigation that emerge from the text. These first appear in the case of Henrietta Lacks but are often refined by Skloot both in relation to the other cases she cites and as direct questions.
- Who owns our tissue and what can be done with it, with or without our consent, comes up again and again throughout the excerpts read. Skloot connects many of these ideas together in the chapter "Illegal, Immoral, and Deplorable" which provides in rapid-fire fashion a number of serious examples of patients' rights.

Vocabulary

Vocabulary to provide directly (will not include extended instruction)

• None.*

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

• None.*

*Because this is not a close reading or a research lesson, there is no specified vocabulary. However, in the process of returning to the text, students may uncover unfamiliar words. Teachers can guide students to make meaning of these words by following the protocols described in 1E of this document http://www.engageny.org/sites/default/files/resource/attachments/9-12_ela_prefatory_material.pdf



Lesson Agenda/Overview

Stu	Student-Facing Agenda				
Sta					
•	Standards: RI.9-10.2, RI.9-10.3, W.9-10.2.b, d, e, W.9-10.9, L.9-10.1, L.9-10.2				
•	Text: The Immortal Life of Henrietta Lacks				
Lea	Learning Sequence:				
1.	Introduction of Lesson Agenda	1.	5%		
2.	Homework Accountability	2.	10%		
3.	10.3.1 End-of-Unit Assessment Part 1: The Immortal Life of Henrietta Lacks	3.	50%		
4.	10.3.1 End-of-Unit Assessment Part 2: Areas of Investigation	4.	30%		
5.	Closing	5.	5%		

Materials

- Copies of the 10.3.1 End-of-Unit Assessment for each student
- Copies of the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist for each student
- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Evidence Identification Tool (refer to 10.3.1 Lesson 13)
- Student copies of the Exploring a Topic Tool (refer to 10.3.1 Lesson 7)
- Copies of the Area Evaluation Checklist for teacher use only

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.		
Symbol	Italicized text indicates a vocabulary word.		
•	Indicates student action(s).		
¢	Indicates possible student response(s) to teacher questions.		
í	Indicates instructional notes for the teacher.		

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Activity 1: Introduction of Lesson Agenda

Begin by reviewing the agenda and assessed standards for this lesson: RI.9-10.2, RI.9-10.3, W.9-10.9, L.9-10.1, and L.9-10.2. Inform students that they are going to complete a two-part End-of-Unit Assessment: A multi-paragraph response analyzing the development and refinement of a central idea in *The Immortal Life of Henrietta Lacks*, paying close attention to how Skloot unfolds an analysis of this central idea. Students are also to analyze 2–3 areas of investigation that have emerged throughout their reading of *The Immortal Life of Henrietta Lacks*.

• Students look at the agenda.

Activity 2: Homework Accountability

Instruct students to form pairs and Turn-and-Talk to discuss their review of the Skloot text and their annotations, as well as their notes from the previous lesson's Jigsaw discussion, in preparation for the End-of-Unit Assessment.

- Students form pairs and discuss their review of the Skloot text, annotations, and the previous lesson's Jigsaw discussion notes.
- Students are held accountable for the second part of the previous lesson's homework (to review the Surfacing Issues Tool and Pre-Search Tool) when they articulate 2–3 areas of investigation in Activity 4.

Activity 3: 10.3.1 End-of-Unit Assessment Part 1: The Immortal Life of Henrietta Lacks

Explain to students that because it is a formal writing task, the 10.3.1 End-of-Unit Assessment should include an introductory statement, well-organized ideas supported by significant and relevant evidence, and a concluding statement or section that articulates the significance of the topic. Remind students to use domain-specific vocabulary, as well as proper grammar, capitalization, punctuation, and spelling to achieve a formal style and objective tone. Remind students to practice the skills outlined in W.9-10.4, to which they were introduced in Module 10.1.3 Lesson 8.

If necessary, consider reviewing the components of W.9-10.4, which include producing clear, coherent writing that employs organization and style appropriate to the task, purpose, and audience.

Instruct students to write a multi-paragraph response to the following prompt:

Choose one central idea that Skloot develops in the text. How does Skloot unfold an analysis of this central idea?



50%

Remind students to use the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist to guide their written responses. Ask students to use this unit's vocabulary wherever possible in their written responses.

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

Ask students if they have remaining questions about the assessment prompt.

Distribute and review the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist. Remind students to revisit the rubric once they are finished with the assessment to ensure they have fulfilled all the criteria.

• Students review the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist.

Remind students as they write to refer to their notes, tools, and annotated text from the previous lessons.

- Students independently answer the prompt using evidence from the text.
- See the High Performance response at the beginning of this lesson.

Activity 4: 10.3.1 End-of-Unit Assessment Part 2: Areas of Investigation 30%

Instruct students to write a multi-paragraph response to the following prompt:

Articulate 2–3 areas of investigation and where they emerge from the text.

Remind students to use the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist to guide their written responses. Ask students to use this unit's vocabulary wherever possible in their written responses.

Ask students if they have remaining questions about the assessment prompt.

Inform students that they may use their Surfacing Issues Tool, Evidence Identification Tool, and notes to assist them with composing this portion of the End-of-Unit Assessment. Students should use their notes from the Skloot text to describe how the area of investigation emerged from the text. Remind students that they already have all the information needed to answer this prompt; referencing these tools provides support for students in their synthesis of this information.

- The Evidence Identification Tool may be useful to students as a reminder of topics that they have previously investigated.
 - Students independently answer the second prompt using evidence from the text.
 - See the High Performance Response at the beginning of this lesson.



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Activity 5: Closing

Display and distribute the homework assignment. For homework, instruct students to continue to read the sources they found during their pre-searches and identify, record, and define unknown vocabulary using their vocabulary journals. Ask students to check the definitions for at least five unknown vocabulary words. Remind students to be prepared to discuss this vocabulary and the definitions they found for these words in the following lesson.

- (i) The vocabulary journal was introduced in 10.3.1 Lesson 9.
 - Students follow along.

Homework

Continue to read the sources you found during your pre-searches and identify, record, and define unknown vocabulary using your vocabulary journal. Check the definitions of at least five unknown vocabulary words. Be prepared to discuss these words and their definitions in the following lesson.



10.3.1 End-of-Unit Assessment: Part 1

Part 1: Text-Based Response

Your Task: Rely on your close reading of *The Immortal Life of Henrietta Lacks* to write a well-crafted multi-paragraph response to the following prompt.

Choose one central idea that Skloot develops in the text. How does Skloot unfold an analysis of this central idea?

Your writing will be assessed using the 10.3.1 End-of-Unit Text Analysis Rubric and Checklist.

Guidelines

Be sure to:

- Closely read the prompt
- Respond directly to all parts of the prompt
- Paraphrase, quote, and reference relevant evidence to support your analysis
- Organize your ideas in a cohesive and coherent manner
- Use precise language appropriate for your task
- Follow the conventions of standard written English

CCSS: RI.9-10.2; RI.9-10.3, W.9-10.2.b, d, e, L.9-10.1, L.9-10.2

Commentary on the Task:

This task measures RL.9-10.2 and RI.9-10.3 because it demands that students:

- Determine a central idea of a text and analyze in detail 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.
- Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

This task measures W.9-10.2.b, d, e because it demands that students:

- Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
- Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of







the topic.

- Use precise language and domain-specific vocabulary to manage the complexity of the topic.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

This task measures L.9-10.1 and L.9-10.2 because it demands that students:

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.



10.3.1 End-of-Unit Assessment: Part 2

Part 2: Articulating Areas of Investigation

Your Task: Rely on your Surfacing Issues Tool and Exploring a Topic Tool along with your notes from *The Immortal Life of Henrietta Lacks* to write a well-crafted multi-paragraph response to the following prompt.

Articulate two to three areas of investigation and where they emerge from the text.

Your writing will be assessed using the Area Evaluation Checklist.

Guidelines

Be sure to:

- Closely read the prompt
- Respond directly to all parts of the prompt
- Paraphrase, quote, and reference relevant evidence to support your analysis
- Organize your ideas in a cohesive and coherent manner
- Use precise language appropriate for your task
- Follow the conventions of standard written English

CCSS: W.9-10.9

Commentary on the Task:

This task measures W.9-10.9 because it demands that students:

• Draw evidence from informational texts to support analysis, reflection, and research.

This task measures W.9-10.2 and W.9-10.2 b, d, e because it demands that students:

- Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
- Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- Use precise language and domain-specific vocabulary to manage the complexity of the topic.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.







This task measures L.9-10.1 and L.9-10.2 because it demands that students:

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.



10.3.1 End-of-Unit Text Analysis Rubric

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Criteria	4 – Responses at this Level:	3 – Responses at this Level:	2 – Responses at this Level:	1 – Responses at this Level:
Content and Analysis The extent to which the response determines and analyzes central idea(s) clearly and accurately in order to respond to the task and support an analysis of the text. CCSS.ELA-Literacy.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.	Determine a central idea from the text and analyze its development by providing precise and sufficient examples of the central idea's emergence and refinement using specific details.	Determine a central idea from the text and analyze its development by providing relevant and sufficient examples of the central idea's emergence and refinement using specific details.	Determine a central idea from the text and analyze its development by undeveloped or insufficient but relevant examples of the central idea's emergence and refinement using specific details.	Fail to identify and/or explain a central idea from the text. Provide no examples or irrelevant and insufficient examples of the central idea's emergence and refinement.
Content and Analysis The extent to which the response analyzes how the author unfolds an analysis clearly and accurately in order to respond to the task and support an analysis of the text. CCSS.ELA-Literacy.RI.9-10.3 Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	Explain how the author unfolds an analysis or series of ideas or events; effectively analyze how the details are ordered, introduced, and developed.	Explain how the author unfolds an analysis or series of ideas or events; accurately analyze how the details are ordered, introduced and developed.	Explain how the author unfolds an analysis or series of ideas or events; provide a partial analysis of how the details are ordered, introduced and developed.	Fail to demonstrate analysis through specific textual details. Provide little to no analysis of how the details are ordered, introduced, and developed.
Command of Evidence and Reasoning The extent to which the response presents relevant and sufficient evidence from the text to develop the topic and uses examples appropriate to the audience's knowledge. CCSS.ELA-Literacy.W.9-10.2.b Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	Develop the response with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	Develop the response with relevant and sufficient facts, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	Partially develop the response with relevant facts, details, quotations, or other information and examples that are appropriate to the audience's knowledge of the topic.	Do not develop the response with relevant facts, details, quotations, or other information and examples that are appropriate to the audience's knowledge of the topic.

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CCSS.ELA-Literacy.W.9-10.9				
Draw evidence from literary or informational texts to support analysis, reflection, and research.				
Coherence, Organization, and Style The extent to which the response includes and uses precise language and domain specific vocabulary to manage the complexity of the topic. CCSS.ELA-Literacy.W.9-10.2.d d. Use precise language and domain-specific vocabulary to manage the complexity of the	Skillfully and accurately use precise language and domain-specific vocabulary to manage the complexity of the topic.	Accurately use precise language or domain-specific vocabulary to manage the complexity of the topic.	Inconsistently use domain-specific vocabulary to manage the complexity of the topic.	Ineffectively or inappropriately use precise language or domain-specific vocabulary to manage the complexity of the topic.
topic.				
Coherence, Organization, and Style The extent to which the response properly uses formal style and objective tone as well as adheres to the writing conventions of the discipline. CCSS.ELA-Literacy.W.9-10.2.e	Skillfully establish and maintain a formal style and objective tone appropriate to the norms and conventions of the discipline.	Establish a style and tone appropriate to the discipline; demonstrate inconsistent use of formality and objectivity.	Use inconsistent style and tone with some attention to formality and objectivity.	Lack a formal style, using language that is basic, imprecise, or contextually inappropriate.
 e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. 				
Control of Conventions The extent to which the response demonstrates command of conventions of standard English grammar, usage, capitalization, punctuation, and spelling.	Demonstrate control of conventions with essentially no errors, even with sophisticated language.	Demonstrate basic control of conventions with occasional errors that do not hinder comprehension.	Demonstrate partial control of conventions with some errors that hinder comprehension.	Demonstrate little control of conventions with frequent errors that make comprehension difficult.
CCSS.ELA-Literacy.L.9-10.1				
Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
CCSS.ELA-Literacy.L.9-10.2				
Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				

• A response that is a personal response and makes little or no reference to the task or text can be scored no higher than a 1.

• A response that is totally copied from the text with no original writing must be given a 0.

• A response that is totally unrelated to the task, illegible, incoherent, blank, or unrecognizable as English must be scored as a 0.

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10.3.1 End-of-Unit Text Analysis Checklist

Assessed Standards:

	Does my writing	~
Content and Analysis	Identify a central idea from the text and analyze its development? (RI.9-10.2)	
	Provide examples of the emergence and refinement of the central idea using specific details? (RI.9-10.2)	
	Include a summary of the text to frame the development and refinement of the central idea? (RI.9-10.2)	
	Examine how an author unfolds an analysis or series of events using specific textual details? (RI.9-10.3)	
	Provide an accurate analysis of how the details are ordered, introduced and developed? (RI.9-10.3)	
	Include thorough evidence from the text, making clear connections between the details selected and the statements made? (RI.9-10.3)	
Command of Evidence and Reasoning	Present ideas clearly and consistently, making effective use of relevant and sufficient evidence to support analysis, reflection, and research? (W.9-10.2.b, W.9-10.9)	
Coherence, Organization, and Style	Establish and maintain a formal style and objective tone, using precise language and domain-specific vocabulary? (W.9-10.2.d,e)	
Control of Conventions	Demonstrate control of the conventions with infrequent errors? (L.9-10.1, L.9-10.2)	



Area Evaluation Checklist

Name:	Class:			Date:	
Area Evaluation Checklist			Commer	nts	
I. COHERENCE OF AREA What is the area of investigation?	The researcher can speak and write about the area of investigation in a way that makes sense to others and is clearly understood.				
II. SCOPE OF AREA What do you need to know to gain an understanding of the area of investigation?	The questions necessary to investigate for gaining an understanding require more than a quick review of easily accessed sources. The questions are reasonable enough so that the researcher is likely to find credible sources that address the issue in the time allotted for research.				
III. RELEVANCE OF AREA TO ARGUMENT Are there multiple claims that compose the area of investigation?	The area of investigation is relevant to an argument because multiple claims can be made about that area of investigation.				
IV. INTEREST IN AREA Why are you interested in this area of investigation?	The researcher is able to communicate genuine interest in the area of investigation. Gaining an understanding of the area would be valuable for the student.				

Evaluate the strength of your selected area of investigation. Explain whether you plan to use this as your final topic and explain why or why not.

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