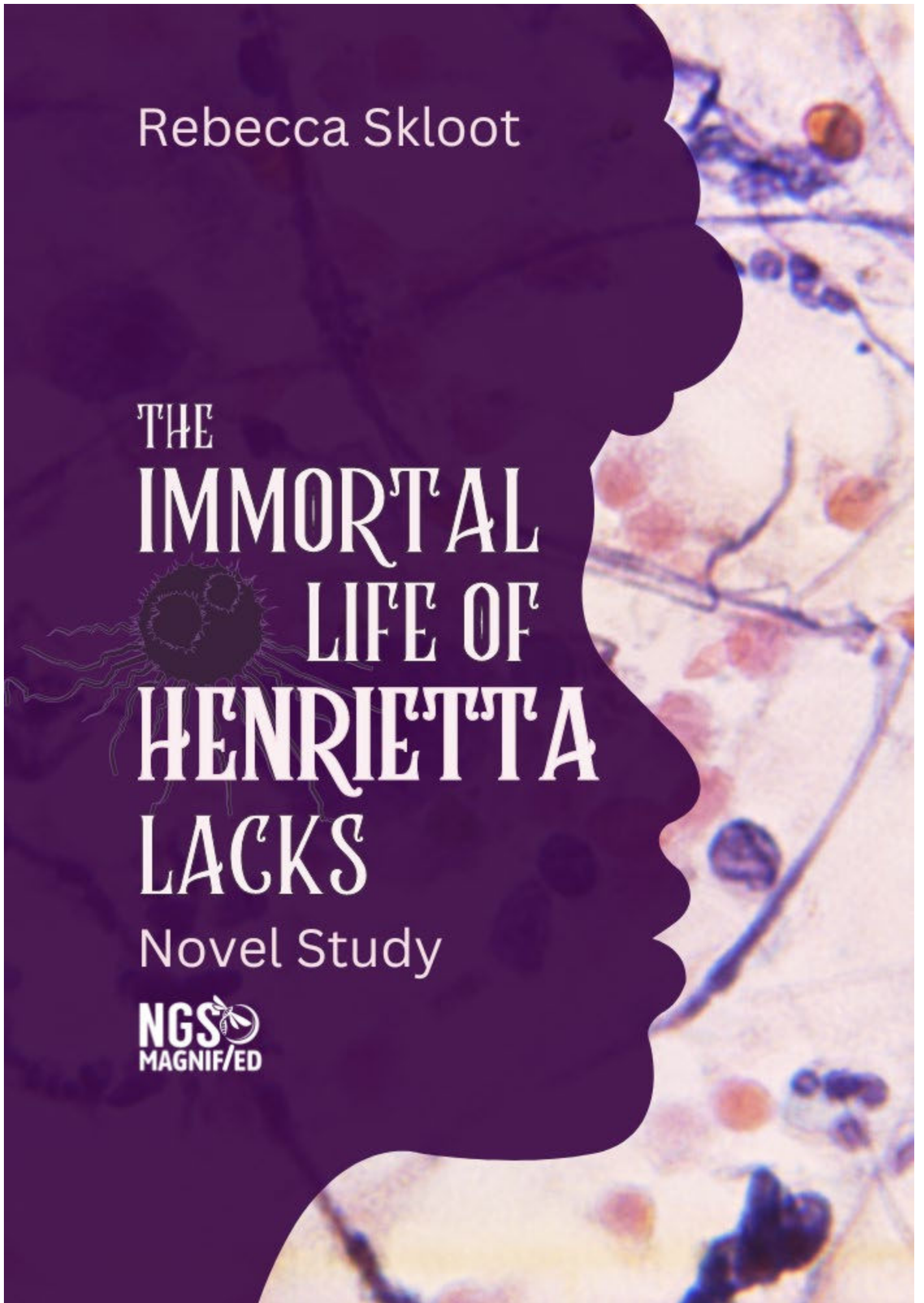


Rebecca Skloot

THE
IMMORTAL
LIFE OF
HENRIETTA
LACKS

Novel Study

NGS
MAGNIF/ED



Novel Studies in the Science Classroom: Developing Science Literacy Skills

Today struggling readers face many long-term challenges and are more at risk of falling behind. However, science is a great way to engage students, no matter their background. NGS Magnified has created novel studies for teachers to use in the science classroom to help bridge that gap. Novel studies help build rapport with students while supporting and fostering independent learning. In addition, we believe that using novel studies in the science classroom will expose students to different perspectives and help them understand how science vocabulary applies to so many events in their lives.

Research shows that connecting content and skills from other subjects enhances students' learning and improves their comprehension.

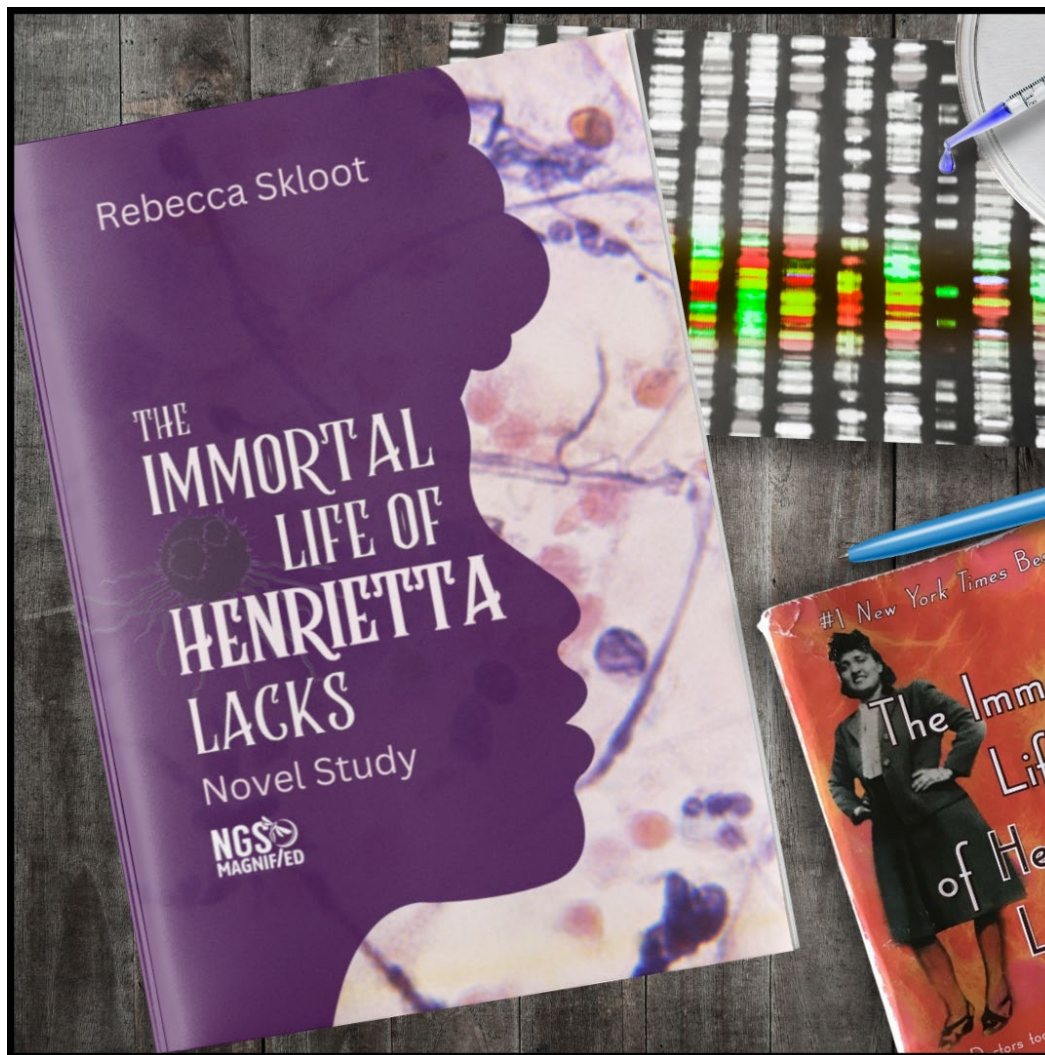
- *The literacy from reading can easily come from non-fiction and fiction novels that surround a science-related topic and are far more of a high-interest read for the majority of students than reading a textbook (Anderson & Hite, 2010; Batchelor, 2017; Coiro, 2012; Freudenrich, 2000).*
- *Science fiction novels are an excellent way to engage students in science ideas while also helping students improve their literacy skills. (Creech and Hale, 2006)*
- *Teachers can add in other readings from the internet and news articles which brings the reading level down to a more manageable level, however students are more willing to learn and spend the time to learn new vocabulary when highly engaged in what they are reading (Weinbugh et al., 2014).*

NGS Magnified novel studies heavily focus on the following:

- vocabulary
- reading comprehension
- simple research
- cross-curricular connections
- culminating final project

Students will focus on inquiry skills such as comparing and contrasting, summarizing, making inferences, cause/effect relationships, fact and opinion, and critical thinking.

Happy reading,
Erica



Her name was Henrietta Lacks, but scientists know her as HeLa. She was a poor Southern tobacco farmer who worked the same land as her slave ancestors, yet her cells—taken without her knowledge—became one of the most important tools in medicine: The first “immortal” human cells grown in culture, which are still alive today, though she has been dead for more than sixty years. HeLa cells were vital for developing the polio vaccine; uncovered secrets of cancer, viruses, and the atom bomb’s effects; helped lead to important advances like in vitro fertilization, cloning, and gene mapping; and have been bought and sold by the billions.

Yet Henrietta Lacks remains virtually unknown, buried in an unmarked grave.

Henrietta’s family did not learn of her “immortality” until more than twenty years after her death, when scientists investigating HeLa began using her husband and children in research without informed consent. And though the cells had launched a multimillion-dollar industry that sells human biological materials, her family never saw any of the profits. As Rebecca Skloot so brilliantly shows, the story of the Lacks family—past and present—is inextricably connected to the dark history of experimentation on African Americans, the birth of bioethics, and the legal battles over whether we control the stuff we are made of.

Over the decade it took to uncover this story, Rebecca became enmeshed in the lives of the Lacks family—especially Henrietta’s daughter Deborah. Deborah was consumed with questions: Had scientists cloned her mother? Had they killed her to harvest her cells? And if her mother was so important to medicine, why couldn’t her children afford health insurance?

Intimate in feeling, astonishing in scope, and impossible to put down, *The Immortal Life of Henrietta Lacks* captures the beauty and drama of scientific discovery, as well as its human consequences.

Hyperlinked Table of Contents

The Immortal Life of Henrietta Lacks Novel Study	
Description	Page #
Before You Read	3
Word Study: Prologue	4-6
Word Study: Part 1 Chapters 1-4	7-10
Word Study: Part 1 Chapters 5-11	11-14
Word Study: Part 2 Chapters 12-14	15-18
Word Study: Part 2 Chapters 15-18	19-22
Word Study: Part 2 Chapters 19-22	23-25
Word Study: Part 3 Chapters 23-25	26-29
Word Study: Part 3 Chapters 26-30	30-32
Word Study: Part 3 Chapters 31-38	33-37
Afterword	38-39
Final Project	40-41
Movie Guide	42-47

© Nitty Gritty Science

**Check out the following sample pages
focusing on science vocabulary, reading
comprehension, and literacy-based projects!**

Teacher Guide included!

THE IMMORTAL LIFE OF HENRIETTA LACKS

Final Project

Novel Project option

Introduction:

Henrietta Lacks's story is a cautionary tale about privacy and the lack of ethics in scientific research looked upon as a massive failure that has been brought to light so that history does not repeat itself. This leads to the question, has there ever been a failure in scientific research that has resulted in something beneficial?

Science offers many opportunities for failure and results that are different from what was expected. However, sometimes, failure causes unexpected and surprising "mistakes."

Directions:

Partner up and choose one of the topics from the teacher. Research how a scientific "mistake" led to a discovery.

One partner will take the role of the scientist and the other will take the role of the reporter. Research details of the discovery and prepare a presentation.

Use the following directions: Answer the following questions that follow along with the movie *The Immortal Life of Henrietta Lacks*.

Topics:

- Mitochondria
- X-chromosome
- Personality
- Psychology
- Anatomy
- Stem cells
- Placenta
- Medicine
- Vaccines
- Technology

Movie Guide

1. Gey says that HEL cells are "growing like crabgrass." Write your own simile to show how quickly these cells are growing.

2. What name did Henrietta Lacks give to her cells?

3. List three biological facts about Henrietta Lacks.

4. What was Rebecca Lacks's job?

5. Why is Deborah Lacks angry?

6. Sonny doesn't want to be a doctor. Why not?

THE IMMORTAL LIFE OF HENRIETTA LACKS

Project Rubric

CATEGORY	4	3	2	1
Preparation	Before the interview, several in-depth AND Factual questions were prepared.	Before the interview, a couple of in-depth questions and several Factual questions were prepared.	Before the interview, Factual questions were prepared, but they were not in-depth.	Questions were not well prepared before the interview.
Interview	Interviewed the subject in a "depth" and "breadth" into their interview.	Interviewed the subject in a "depth" and "breadth" into their interview.	Interviewed the subject in a "depth" and "breadth" into their interview.	Either no research was done or it was not clear that the group used it in the interview.
Report	Reported accurately.	Reported accurately.	Reported accurately.	No facts were reported accurately OR no facts were reported.
Delivery	Spoke clearly and distinctly most of the time AND/OR mispronounces more than 1 word.	Spoke clearly and distinctly most of the time AND/OR mispronounces more than 1 word.	Spoke clearly and distinctly most of the time AND/OR mispronounces more than 1 word.	Does NOT speak clearly and distinctly most of the time AND/OR mispronounces more than 1 word.
Teamwork	Team worked together and all members contributed.	Team worked together and all members contributed.	Team worked together and all members contributed.	Team did not work together and all members contributed.

Movie Guide

7. What part of the eye can they grow in a dish to help treat blindness? RETINA / CORNEA

8. Where was Henrietta Lacks born? BALTIMORE / ROANOAKE

9. What did they suggest that "night doctors" did?

10. Why did the family think their blood was being drawn?

11. Rebecca explained to Deborah the real reason that they drew their blood. What was it?

12. Science fiction is imagined scientific or technological advances and changes upon society and individuals. TRUE / FALSE

13. What is a clone?

Movie Guide Included - Short Answer Questions follow along with movie



Thank you for sharing NGS Magnified with your students!

Terms of Use

Copyright © NGS Magnified, LLC (formerly Nitty Gritty Science, LLC.) All rights reserved by author Dr. Erica Colón. This product is to be used by the original downloader only. Copying for more than one teacher, classroom, department, school, or school system is prohibited. This product may not be distributed or displayed digitally for public view. Failure to comply is a copyright infringement and a violation of the Digital Millennium Copyright Act (DMCA). Clipart and elements found in this PDF are copyrighted and cannot be extracted and used outside of this file without permission or license. Intended for classroom and personal use ONLY.

Contact Information:

Email: admin@nittygrittyscience.com

Website: www.NGSmagnified.com

TPT: <https://www.teacherspayteachers.com/Store/Nitty-Gritty-Science>

