

Henrietta Lacks and The Great Migration

Author Katie Schober
Grade Level 7
Duration 3 class periods

National Standards

GEOGRAPHY

Element Four:

Human Systems

9 The characteristics, distribution, and migration of human populations on Earth's surface
12 The processes, patterns, and functions of human settlement

AZ Standards

ELA

Reading

Key Ideas and Details

7.RI.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.

7.RI.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Writing

Production and Distribution of Writing

7.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Life Science Standards

7.L1U1.8 Obtain, evaluate, and communicate

information to provide evidence that all living things are made of cells, cells come from existing cells, and cells are the basic structural and functional unit of all living things.

7.L1U1.10 Develop and use a model to explain how cells, tissues, and organ systems maintain life (animals).

Arizona Social Science Standards

Geography

The use of geographic representations and tools helps individuals understand their world.

7.G1.1 Use and construct maps and other geographic representations to explain the spatial patterns of cultural and environmental characteristics. Key tools and representations such as maps, globes, aerial and other photos, remotely sensed images, tables, graphs, and geospatial technology
7.G1.2 Analyze various geographic representations and use geographic tools to explain relationships between the location of places and their environments.

Human-environment interactions are essential aspects of human life in all societies.

7.G2.1 Explain how cultural demographic patterns, economic decisions, and human adaptations shape the identity of nearby and distant places.

7.G2.2 Analyze cultural and environmental characteristics that make places both similar and different.

Examining human population and movement helps individuals understand past, present, and future conditions on Earth's surface.

7.G3.4 Evaluate human population and movement may cause conflict or promote cooperation.

History

The development of civilizations, societies, cultures, and innovations have influenced history and continue to impact the modern world.

7.H1.2 Trace the development and impact of scientific, technological, and educational innovations within historical time periods.

Economic, political, and religious ideas and institutions have influenced history and continue to shape the modern world.

7.H3.2 Analyze how economic and political motivations impact people and events.

Patterns of social and political interactions have shaped people, places, and events

Henrietta Lacks and The Great Migration

throughout history and continue to shape the modern world.

7.H4.2 Evaluate the changing patterns of class, ethnic, racial, and gender structures and relations; consider immigration, migration, and social mobility.

Economics

By applying economic reasoning, individuals seek to understand the decisions of people, groups, and societies.

7.E2.1 Explain how economic decisions affect the well-being of individuals, businesses, and society.

SIOP Elements

Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent
Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral

Arizona English Language Proficiency Standards

Grade 6-8

Basic

Listening and Reading

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-1: determine the central idea or theme and explain how they are supported by using some text evidence.

B-2: recount specific details and information in a variety of texts.

Speaking and Writing

Standard 3 By the end of each language proficiency level, an English learner can speak and write about grade appropriate complex literary and informational texts and topics.

B-3 compose informational text that includes details to develop a topic while using appropriate conventions.

B-5: use examples of precise language and domain-specific vocabulary within informative texts.

Listening, Speaking, Reading, and Writing

Standard 7 By the end of each language proficiency level, an English learner can conduct research and evaluate and communicate findings to answer questions or solve problems.

B-1: gather information from multiple provided resources to answer questions.

B-2: paraphrase observations/information notes with labeled illustrations, diagrams, or other graphics, as appropriate.

B-3: cite sources used in research.

Standard 9 By the end of each language proficiency level, an English learner can create clear and coherent grade-appropriate speech and text.

B-1: introduce and present facts about an informational topic and provide a conclusion when writing and speaking.

Henrietta Lacks and The Great Migration

B-2: introduce and develop a sequence of events, using an increasing range of temporal and other linking words to connect, compare, and contrast ideas, and information (e.g., before, because, also) when writing and speaking.

Overview

Fighting disease took a big leap ahead when scientists discovered cells taken (without her permission) from Henrietta Lacks could be used to study and create treatments and cures for cancer and other diseases. This use of her cells brings up several aspects of study for students. 1) Who was Henrietta Lacks and how did she contribute to our knowledge of cancer? 2) Is it ethical for companies to profit from Henrietta's malignant tumor cells? 3) What does The Great Migration of the early 1900s have to do with Henrietta Lacks?

Purpose

In this lesson, through the use of various primary and secondary sources, students will learn about the push-pull factors that affected African Americans in rural areas of our country as they made decisions on joining The Great Migration in the early 1900s. It also exposes students a little-known fact that medical science uses the cells taken from Henrietta Lack to create new treatments and vaccines. This use of her cells, without her permission, brings up questions of medical ethics.

Key Vocabulary

Reconstruction - time of rebuilding the South and protecting African Americans' rights after the Civil War

sharecropping - the practice of farmers, living on the land, giving a portion of harvest to the landowner as rent

agriculture - raising crops and livestock as food or for use in products

The Great Migration – (1910-1970) over six million African Americans, living in the South, moved to northern cities

economic - conditions related to the production and consumption of goods and services

parcel - a piece of land defined by specific boundaries

Jim Crow Laws - legalized segregation of communities based on race

Materials

- Notebook paper

- Post-It Notes
- Labels: "Push Factors" and "Pull Factors"
- Vocabulary Cards cut apart and in envelopes or some other container
- Henrietta Lacks and The Great Migration book https://read.bookcreator.com/TdHZw0o0HXbBMbwVcANrpWW1WOX2/I4lZc4qNSxGYzZDoQSd_dWA
- Reading Guide
- Primary and Secondary Sources Processing Sheet and Answer Key
- Primary and Secondary Source Materials (1-6)
- Writing Prompt Options
- Primary Source: Letter from Johann Bonkowski
- Friendly Letter
- Vocabulary Test and Answer Key
- HeLa Cells reading

Objectives

The student will be able to:

1. Analyze primary and secondary sources to identify author purpose and push-pull factors of The Great Migration
2. Identify financial risks and economic production impacting a decision to migrate or stay in an area production, that affect the choice to remain in an area or migrate
3. Analyze their own feelings about the use of HeLa cells by pharmaceutical companies without the permission of the owner or her family.

Procedures

SESSION ONE

Prior to this Session: Place 2 labels on the walls: Push and Pull. Write on the whiteboard the Vocabulary Words for this lesson. Have Vocabulary Cards cut in three sections, enough for small groups to have one set of the words.

Engage:

1. Have students take out some paper and a writing tool. Ask students: "Think about a place that you love. It should be somewhere you feel comfortable so that when you are there, you know you are free to be your true self. Or you can imagine what a place might be like where you would feel comfortable, confident, and joyful." (**Preparation: Linking to Background**)

Henrietta Lacks and The Great Migration

- Tell students; "Write down at least three characteristics of this place, the people or experiences that make this place feel so inviting for you."
- Ask: "What two **factors** or **negative experiences** that could happen in this place would make you consider never returning to this place that you love?"
- Distribute two Post-It notes to each student. Invite students to share with a partner at least one factor that would make them leave and one factor that would prevent them from leaving this favorite location. Have students write their responses on the Post-It notes (one for leaving and one for not leaving). **(Integrating Processes: Speaking, Writing, and Listening; Grouping Option: Independent and Partners)**
- Define Push factors as those things that drive a person away from their home. Have students select their Post-It that describes a reason for leaving a place and attach it near the label Push.
- Read off the push factors. Invite the whole group to share patterns that they notice in similarities or differences
- Repeat steps 5 and 6 for factors that could prevent you from wanting to leave this place, even if it became difficult to continue to be in your favorite place. These are Pull factors. **(Application: Promotes engagement, Linked to objectives)**
- Explain that Pull factors also include the things that are drawing you to the new place. Have students think of factors of a new location that makes you want to move and live there. **(Integrating Processes: Speaking and Listening; Grouping Option: Whole class)**

Explore:

- Read through the seven vocabulary terms written on the whiteboard. Invite students to share any observations, connections, or prior knowledge they have about the words. **(Preparation: Linking to background or past learning)**
- Distribute the cut-up Vocabulary Cards to small groups of students. Have groups match their image with the correct vocabulary term and definition **(Application: Promotes engagement)**
- Have students do a Quick Write on notebook paper incorporating the vocabulary terms into one or two paragraphs. Students can then share with a partner their Quick Write. **(Integrating Processes: Writing and Speaking)**

SESSION TWO

Explain:

- Distribute the Reading Guide and explain the directions. Read as a class, Henrietta Lacks and The Great Migration book found at: <https://read.bookcreator.com/TdHZw0o0HXbBMbwVcANrpWW1WOX2/I4Izc4qNSxGYzZDoQSDdWA> As the book is read, have students analyze the pictures, discuss the questions at the bottom of each page, and complete the Reading Guide. Reading the book twice will help students. **(Scaffolding: Comprehensible Input)**
- Project YouTube video "PushPull Factors" (1.57 min) <https://www.youtube.com/watch?v=rF86TGM3eSE> As factors are identified in the video, record them on the whiteboard under Push or Pull labels. Have students add to the lists at the end of the video.
- Distribute the Primary and Secondary Source Processing Sheet. Have students contribute ideas for the push/pull factors from The Great Migration book and complete the first two questions. **(Application: Linked to objectives)**

Elaborate:

- Distribute the Primary and Secondary Source Materials packet. Instruct students not to write on these pages.
- Model the process of analyzing a primary source by reading the map and information presented in Sources 1 and 2. **(Scaffolding: Modeling, Guided practice)**
- Assign students to groups of four. Give each student in the group a different primary source (Sources 3-6. Students will independently read and respond to questions about their source.
- Students will then share their findings about the primary source with their larger group of four students, first describing the source and then reviewing the answers to the corresponding questions on the Factors and Primary and Secondary Sources Processing Sheet. **(Integrating Processes- Reading and Writing; Grouping Option: Independent, Small group)**
- If time, review vocabulary by covering up a word / definition/ image and asking students to identify the correct vocabulary term. **(Application: Linked to objectives)**

SESSION THREE

Evaluate:

- Begin the session by projecting and reading the Writing Prompt Options and explain that the letter will be graded for Content and Ideas on the 6 Traits Writing Rubric. Read and discuss

Henrietta Lacks and The Great Migration

the letter entitled Primary Source: Letter from Johann Bonkowski.

21. Distribute the Writing Prompt Outline and model how it could be filled out. Allow time for students to complete the outline working with partners if preferred. **(Scaffolding: Modeling)**
22. As students complete their outline, have them turn the outline into a letter.
23. For diverse learners who may need extra help, distribute the Friendly Letter template that uses sentence starters to help students compose the letter. **(Preparation: Adapting content)**
24. End the session by having students take the Vocabulary Test and read HeLa Cells. Have students write a reflection based on their opinion of this event in medical history. What was right about the situation? What was wrong? Any other impressions.

Assessment

Geography and ELA

The Reading Guide can be graded for accuracy and completeness. Mastery will be considered a score of 80% or higher.

The Factors and Primary and Secondary Sources Processing Sheet can be graded for accuracy and completeness. Mastery will be considered a score of 80% or higher.

The letter can be graded using the 6 Traits Writing Rubric with a focus on Content and Ideas. Mastery will be considered a score of 4 or higher.

The Vocabulary Test can be used to measure language acquisition. Mastery will be considered a score of 80% or higher.

Science

The reflection based on the HeLa Cells reading can be graded. Points can be assigned for supporting their opinion of what was right and wrong about this event. **(Assessments: Written, Individual)**

Extensions

Explore Henrietta Lacks' cell use as an introduction to a unit on cells or about bioethics. Then, have students use a toothpick to scrape off cheek cells, preparing a blank slide with a stain such as red food coloring, to observe cells. See intro clip here:

<https://www.youtube.com/watch?v=22IGbAVWhro>

Explore research done with HeLa cells.

<https://osp.od.nih.gov/scientific-sharing/hela-cells-timeline/>

Explore mitosis, mutations, and errors which can cause cancer. Watch YouTube Video on How do cancer cells behave differently from healthy ones? (3.50 min)

<https://www.youtube.com/watch?v=BmFEoCFDi-w>

Have students watch YouTube Video on Oprah Speaks to Tell Story of Henrietta Lacks (3.17 min)

<https://www.youtube.com/watch?v=fd9NITWpcp0>

Sources

The Immortal Life of Henrietta Lacks, Rebecca Skloot

"The Great Migration and the power of a single decision" by Isabel Wilkerson:

<https://www.youtube.com/watch?v=n3qA8DNc2Ss>

Images found on CC search;

<https://search.creativecommons.org/>

Sample Letter, Johann Bonkowski to his family in Poland:

https://www.jaha.org/edu/discovery_center/push-pull/letterstohome.html

Other sources are listed on the primary source documents found in the student files.