

Heart Saver

How Vivien Thomas became a pioneer in heart surgery
and saved countless lives

About the Story

Lexile® Measure 990L

For qualitative complexity factors,
go to *Scope Online*.

Learning Objective: to
identify key ideas and details in a
narrative nonfiction article

Featured Skill: key ideas and
details

**Additional skills covered in
this lesson plan:** mood,
author's craft, text evidence,
figurative language, compare and
contrast

Essential Questions:

- What is a trailblazer?
- How does prejudice affect society?
- How do people overcome challenges?

Standards:

The article and its suite of
support materials support these
Common Core Anchor
Standards: R.1, R.2, R.3, R.4, R.5,
R.7, W.2, SL.1, SL.2

For more standards
information—including TEKS—go
to *Scope Online*.



Your Teaching Package

Find your full suite of support materials at scope.scholastic.com.

Audio:

- Article read-aloud
- Text-to-speech
- Vocabulary

Video:

- Meet the Illustrator: Alvin Epps

Differentiated Articles:

- Lower-Lexile version
- Spanish language version

Connected readings from the *Scope* archives:

- Black History: Stories from the *Scope* Collection

Activities to print, project, or share digitally:

- Vocabulary: Definitions and Practice
- Close-Reading and Critical-Thinking Questions
- Featured Skill: Key Ideas and Details
- Choice Board
- **Core Skills Workout:** Summarizing,* Text Features, Nonfiction Elements
- Lesson Plan Slide Deck
- Quiz*

*Available on two levels

Step-by-Step Lesson Plan

1. Prepare to Read (20 minutes)

Do Now: Journal (5 minutes)

- Project the following sentence stems on your whiteboard for students to respond to in their journals, on a piece of paper, or in their own digital document:

Being educated means _____.

Education takes place in _____.

Preview Vocabulary (15 minutes)

- Project the Google Slides version of **Vocabulary: Definitions and Practice** on your whiteboard. Review the definitions and complete the activity as a class. Highlighted words: *artery, brash, delicate, dramatic, economic, menial, reluctance, rigorous*. Audio pronunciations of the words and a read-aloud of the definitions are embedded on the slides. Optionally, print the PDF version or share the slideshow link directly to your LMS and have students preview the words and complete the activity independently before class.

2. Read and Discuss (55 minutes)

- Invite a volunteer to read the As You Read box on page 5 or at the top of the digital story page.
- Read the article once as a class. (*Differentiation: Share the lower-Lexile version or the Spanish version of the article.*) Optionally, have students listen to the article being read aloud while they follow along. The **audio read-aloud** is located in the Resources tab in Teacher View and at the top of the story page in Student View.
- Divide students into groups to read the article again and respond to the following **Close-Reading and Critical-Thinking** questions, also located in the Resources tab.

Close-Reading Questions

(30 minutes)

The following questions can be shared in printable or interactive form.

1. **The article begins with a dramatic description of a very sick baby. Why might Lauren Tarshis have started her story this way?** (mood, author's craft) *Tarshis likely started her story this way to draw the reader in. The heartrending description of the baby shows the seriousness of blue baby syndrome and makes the reader want to keep reading to find out what happens.*
2. **What challenges did Vivien Thomas face while trying to achieve his goals of attending college and medical school? How did he overcome these challenges?** (text evidence) *Thomas's plans were first shattered by the Great Depression. He lost the education savings he'd been working for since age 13, and there was no more carpentry work to be found. Taking a major pay cut, Thomas accepted a job in Alfred Blalock's lab at Vanderbilt University and worked hard to learn everything he could. Tarshis writes that he often went home with stacks of textbooks that he pored over late into the night. Thomas proved himself to Blalock, who soon came to consider Thomas a partner in his research. However, because Thomas was Black, he faced discrimination. After six years at Vanderbilt, he was still being paid a menial wage. What's more, Vanderbilt listed him as a janitor in its official records. Thomas stood up for himself and spoke to Blalock; his salary soon increased. When Thomas moved to Maryland so that he could continue working with Blalock, he experienced even worse discrimination. He had trouble finding a landlord who would rent to him and his family, and his new employer, Johns Hopkins, was segregated. But Thomas refused to let the unfair and hateful way he was treated distract him from his work with Blalock.*
3. **Tarshis writes that in the 1940s, heart surgery was seen as the "Mount Everest" of medicine. Explain the metaphor she is using. What does it help the reader understand about Thomas, Alfred Blalock, and Helen Taussig?** (figurative language) *Mount Everest is an incredibly difficult and dangerous mountain to climb—anyone who successfully scales Everest joins a small and elite group of the world's best climbers. By comparing heart surgery and Everest, Tarshis helps readers understand that Thomas, Blalock, and Taussig were undertaking something incredibly difficult and full of risk, and that they were among the best in their field.*
4. **How was Thomas's life in the lab different from his life outside of it? How was it the same?** (compare and contrast) *Out in the world, Thomas was treated unfairly and with great prejudice because he was Black. Throughout the U.S. at that time, Black people were forbidden to swim in most public pools, sit in the front of buses, or even go into most libraries. Inside the lab, Thomas was Blalock's partner and a respected member of the team. Yet because he was Black, Thomas was not able to earn a medical degree from the very institution where he helped develop the procedure to treat blue babies. He did not receive the same level of recognition from the world that Blalock did, and he did not receive fair pay for his work.*

5. **At the end of the article, Tarshis writes that a portrait of Thomas now hangs across from Blalock's in the medical school at Johns Hopkins. Why might she have included this detail?** (author's craft) *This detail shows that after years of being overlooked, Thomas has finally been recognized for his contributions. Placing his portrait across from Blalock's presents the two men as equals.*
- As a class, discuss the following questions.

Critical-Thinking Questions

(5 minutes)

The following questions can be shared in printable or interactive form.

1. **An unsung hero is someone who has achieved greatness but is not recognized or celebrated for their achievements. How was Thomas an unsung hero?** *Thomas was a hero because he helped pioneer a lifesaving heart surgery and went on to train other heart surgeons who saved many more lives. He also opened the door for other Black people to enter medicine, including his own nephew. Thomas was "unsung" because he was not recognized for his accomplishments for many decades. Unlike Blalock, Thomas never became rich or famous.*
 2. **Think about the kind of prejudice and racism that Thomas faced during his lifetime. How does this kind of discrimination affect society?** *Answers will vary. Students may say that segregation prevented many Black people from getting an education. Thomas, for example, was barred from entering public libraries and attending most medical schools, including Johns Hopkins. Such discrimination is immoral and it discourages people from realizing their potential.*
 3. **Tarshis writes that Thomas and Blalock created blue baby syndrome in animals so that they could figure out how to treat it. What's your opinion: Is animal testing for scientific research and medical advancement justified? Explain.** *Answers will vary.*
- Have students revisit their Do Now responses and edit if necessary. Discuss: How did reading about Thomas confirm, challenge, or change your responses?

Watch a Video (10 minutes)

- Show students our **Meet the Illustrator video**, in which Alvin Epps talks about creating the illustrations for "Heart Saver" and his job as an illustrator and graphic novelist in general.

3. Write About It: Key Ideas and Details (45 minutes)

- Have students complete the **Featured Skill Activity: Key Ideas and Details**. This activity prepares them to respond to the writing prompt on page 9 in the printed magazine and at the bottom of the digital story page:

Your legacy is how you are remembered and the contributions you make during your life. What is Vivien Thomas's legacy?

- Alternatively, have students choose a task from the **Choice Board**, a menu of culminating tasks. (Our Choice Board options include the writing prompt from the magazine, differentiated versions of the writing prompt, and additional creative ways for students to demonstrate their understanding of a story or article.)

Support for Multilingual Learners

These questions are designed to help students respond to the text at a level that's right for them.

Yes/No Questions

Ask students to demonstrate comprehension with a very simple answer.

- Did Vivien Thomas have a medical degree? *No, he didn't.*
- Would most medical schools admit Thomas in 1944? *No, they wouldn't.*
- Did Alfred Blalock treat Thomas as his equal and partner? *Yes, he did.*
- Were Blalock and Thomas able to save Eileen Saxon's life? *Yes, they were.*
- Did Thomas become rich and famous? *No, he didn't.*

Either/Or Questions

Encourage students to use language from the question in their answer.

- Did Vivien Thomas work as a carpenter or a janitor before joining Alfred Blalock? *Vivien Thomas worked as a carpenter before joining Alfred Blalock.*
- In the early 1940s, were there just a few blue babies or thousands of blue babies? *There were thousands of blue babies.*
- Was moving to Maryland easy or challenging for Thomas? *Moving to Maryland was challenging for Thomas.*
- After the surgery, did Eileen Saxon's skin turn from blue to pink slowly or quickly? *Eileen's skin turned pink quickly.*
- Was the surgery on Eileen a failure or a success? *The surgery on Eileen was a success.*

Short-Answer Questions

Challenge students to produce simple answers on their own.

1. How did Vivien Thomas develop the procedure Helen Taussig asked for? *Thomas created blue baby syndrome in animals so he could figure out how to treat it. He also created better instruments to use.*
2. How did parents of blue babies react to Eileen Saxon's surgery? *Following Eileen's surgery, families from all over the United States rushed their blue babies to Johns Hopkins Hospital for treatment.*

Language-Acquisition Springboard: Preview figurative language

Before reading the article, tell students that figurative language is a way of using words and expressions in a creative, nonliteral way. *Nonliteral* means not using a word's usual meaning—the way it would be defined in a dictionary. Have students consider the following sentences. (The bolded phrases appear in "Heart Saver.")

1. *Winning the Superbowl is **the Mount Everest of** football.*
Ask: What is Mount Everest? *Mount Everest is the highest mountain in the world.*
Project: an image or video of Mount Everest or people summiting Mount Everest
Ask: If a task or achievement is described as the "Mount Everest" of something, do you think it is easy or difficult?
Explain: This phrase compares something to Mount Everest, one of the tallest and most challenging mountains in the world to climb. If you say a task is the "Mount Everest" of some category, you mean it is the most challenging task within that category.
2. *The concert gates opened and fans **flooded into** the stadium.*
Ask: What is a flood? *A flood is a large flow of water that spreads over land that is normally dry.*
Project: an image or video of a flood
Ask: If people are flooding into an area, do you think there is a small number of people or a large number of people? Are they moving quickly or slowly?
Explain: This phrase suggests a large number of people or things moving quickly and filling a space.
3. *Steve Jobs **blazed a trail** in the world of technology with the invention of the iPhone.*
Ask: What is a trail? *A trail is a marked path or route.*
Explain: Blazing a trail means putting marks on trees to show where the trail is.
Project: an image of a tree with a blaze (trail marker) on it
Ask: If someone "blazes a trail," do you think they are the first person to do that thing or have many people done that thing before them?
Explain: This phrase means to be the first one to do something and to show others how to do it.

As you read, be sure to pause and discuss Tarshis's use of the expressions:

p. 8: "At the time, heart surgery was considered the 'Mount Everest' of medicine—few doctors had even attempted it."

p. 8 (in the caption "Making Medical History"): "Following the first successful surgery to repair a blue baby's heart, other blue babies and their families began flooding into Johns Hopkins from across the country."

p. 10: "Thomas never became rich or famous, but he blazed a trail for Black Americans in medicine, including his nephew, who entered Johns Hopkins medical school in 1983."

Connected readings from the *Scope* archives:

- [Black History: Stories From the *Scope* Collection](#)