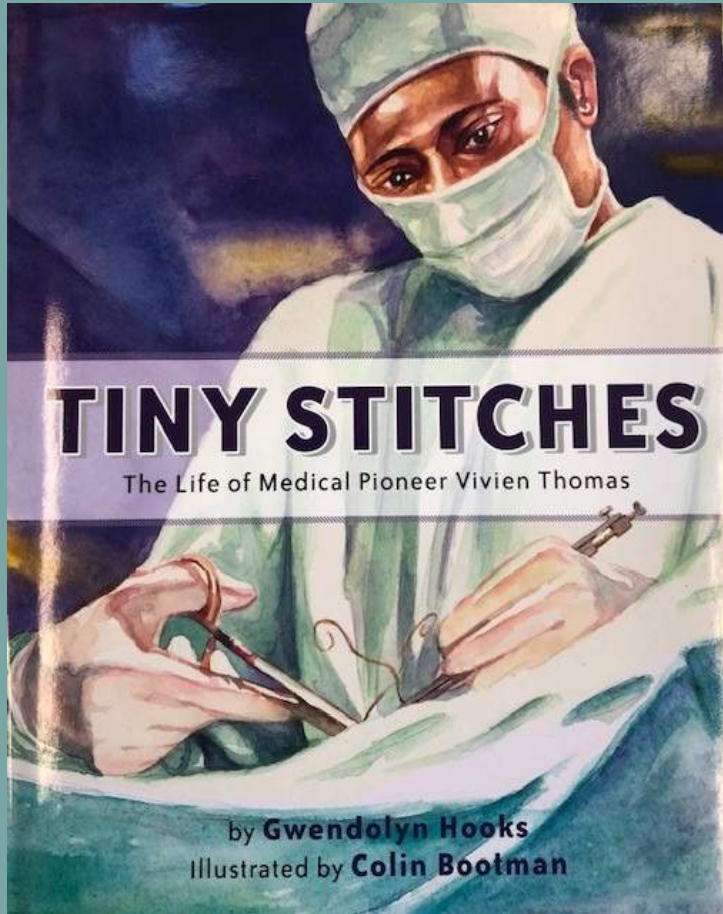


Story Hour: Season 2 with theREP Activity for Grades 3-5



LEARNING STANDARD QUESTIONS:

What problem(s) does Vivien Thomas have in the story?

Possible answers → he lost his savings due to the Great Depression; he couldn't get into the all-white medical schools as a student; he had to deal with mean/angry/jealous white medical students (and doctors and nurses) because of the color of his skin; he couldn't buy a house due to the "white tenants only" rules; the medical needles and surgeries did not exist to help cure blue baby patients; Vivien wasn't allowed to perform the surgery he invented for a long time because of the color of his skin

How does he solve his problem(s)?

Possible answers → To be able to study in the white-only medical schools, he took on a job with a title that did not match what he was doing – he was called a janitor even though he was really a research scientist/med student; he worked steadfast to get answers – both in learning all he could from his mentors, and in the creation of the needles – and surgery technique – that would go on to save blue baby patients from dying.

What are Vivien's personality traits?

Possible answers → determined, smart, dedicated, passionate, focused, creative, compassionate, empathetic, strong, talented

ACTIVITY: Using a paper collage method, students are asked to make a self portrait of their future selves where they are working in the career they currently want to have. (Would you like to be a: doctor, a CEO, YouTuber, artist, computer programmer, lawyer, cop, ballerina, President, teacher, musician etc...)

MATERIALS NEEDED: Construction paper, scissors, pencils, markers, colored pencils

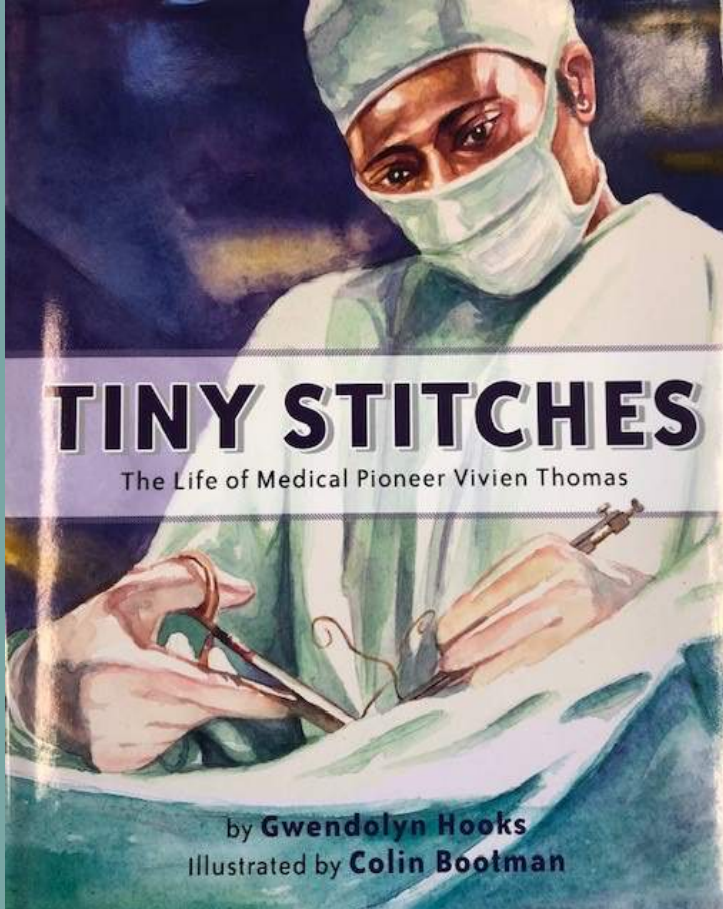
SHARE YOUR CREATION!

theREP would love students to share photos of (or short videos creating) their dreamcatchers! They can be emailed to Associate Artistic Director, Margaret E. Hall, at mhall@capitalrep.org

Arbor Hill Elementary School Students ... Student and Parent/Guardian Activity – at home, students are asked to work with their parent/guardian to write a poem about Vivien Thomas. Students that complete this activity and bring their poem – signed by their parent/guardian – to Ms. Lawrence will receive a special prize.

Dreaming ... write a poem about your dreams (like Vivien

Story Hour: Season 2 with theREP Activity for Grades 3-5



Additional Activity for Students and Parent/Guardian

At home, with their parent/guardian, students are asked to think about Vivien Thomas and the dreams he had for his life. What did he dream of doing? How did he get there? Did it happen right away? What challenges did he have to overcome? Did he overcome them?

Next, connect the student's life/dreams – and their parent/guardian's – to the book. What dreams do you have for your future? What does your parent/guardian do? Is it what they always wanted to do? How did they get there? What dreams do your parents/guardians have now? Have they achieved the dreams they had when they were your age? Are they still working towards their dreams? Have their dreams changed?

Finally, students are to write a poem (or short story) that addresses their dreams – or their parent/guardian's dreams (or both). What connections, in the poem, can students make to the Life of Medical Pioneer Vivien Thoms?



← Scan the QR code to watch *Chairs on Strike*, and any/all other episodes of Story Hour.

This link can also be used to view Story Hour:
https://videoplayer.telvue.com/player/bDPj0rb_iOCBhmRfsFB-YifGv4qBg-ulA/playlists/8700/media/684203?sequenceNumber=1&autostart=true&showtabssearch=true

Let's Get Sciency ...

For teachers who would like to dive into the science talked about in the book, here are some vocabulary words and photos that might help.

Glossary of Medical Terms (from the book):

1. **aorta** (ay-OR-tuh): main, large tube that carries blood away from the heart to the rest of the body, except the lungs
2. **artery** (AR-tuh-ree): tube that carries blood from the heart to all other parts of the body
3. **atrium** (EH-tree-uhm): one of the two collecting chambers that transfer blood to the ventricles
4. **blood vessel** (bluhd VESS-uhl): narrow tube through which the blood flows
5. **oxygenate** (OK-si-juh-neyt): to combine with oxygen
6. **shunt** (shuhnt): surgical reconstruction or synthetic tube placed to divert blood from its normal path
7. **ventricle** (VEN-tri-kuhl): one of the two lower chambers of the heart; it receives blood from an atrium and pumps it to the arteries

MORE ABOUT TETRALOGY OF FALLOT

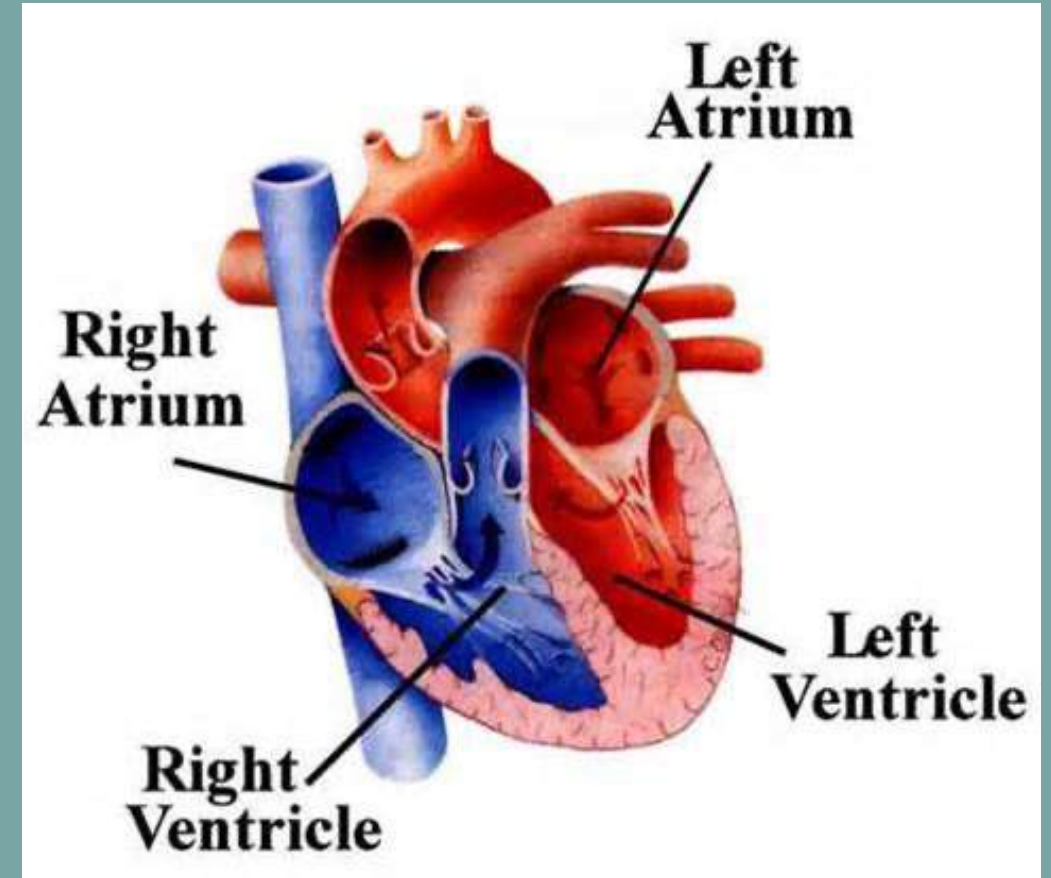
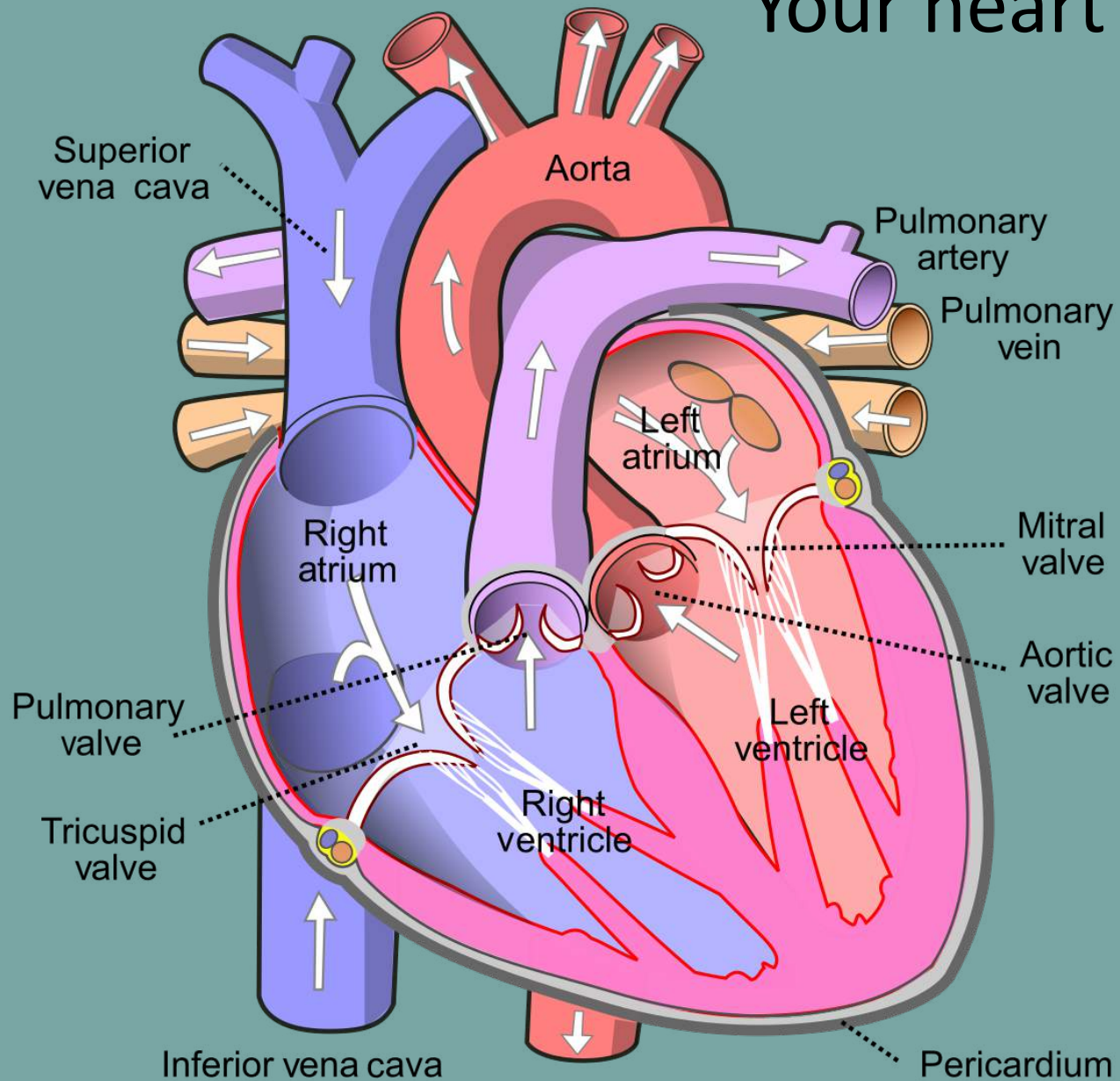
"Blue babies" was once a popular term, but the scientific name for the condition is "tetralogy of Fallot." Babies born with this condition have four heart defects. One defect is a hole in the wall that separates the right and left ventricles of the heart. This hole allows blood to flow back and forth between the left and right ventricles in an inefficient manner, and dilutes the supply of oxygen-rich blood to the body. Another defect involves the right ventricle. In blue babies' hearts it is much larger and thicker than in normal hearts. This overworks the heart and causes the ventricle to stiffen over time. In a third defect, the aorta, the main artery leading out of the heart, is in the wrong position. This allows the aorta to receive blood from both the right and left ventricles and mixes oxygen-poor blood with oxygen-rich blood.

Vivien Thomas decided to focus on the fourth defect: the narrowing of the flap (the pulmonary valve)

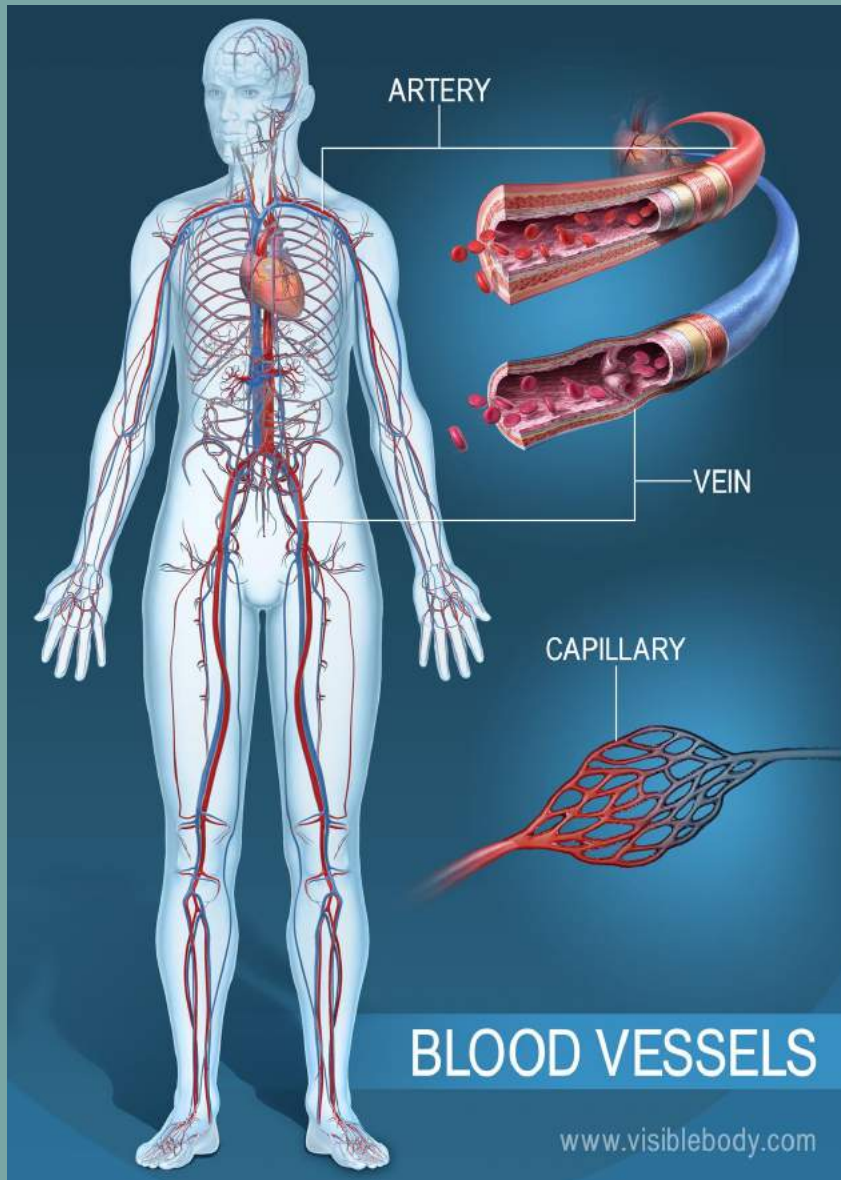
that separates the right ventricle of the heart from the main blood vessel leading to the lungs. This defect limits the amount of blood that reaches the lungs. Vivien and Dr. Blalock created a shunt by joining an artery leaving the heart to an artery leading to the lungs, which allowed more blood to circulate to the lungs and then oxygenate the rest of the body.



Your heart is an amazing organ ...



Your arteries carry blood throughout your body!



The Blalock-Taussig Shunt – Vivien Thomas's Shunt

