

EE 347 Lesson Plan

Name: Natalia Narajczyk	School: AACA
Grade Level(s) 2 nd , 3 rd , 4 th	Length of Lesson: 30 minutes
Instructional Materials (list everything you need): Book: <i>Tiny Stitches: The Life of Medical Pioneer Vivien Thomas</i> True or False Sticks + Activity Circulatory System Diagram Word Search Criss Cross Puzzle Video: <i>How Your Heart Works</i> https://www.youtube.com/watch?v=tg_ObDJEaGo	
Common Core Standard (at least one, not more than 3, you can have the same one for all grades, or different ones for each grade): - Identify the main topic and retell key details of a text.	
Learning Target/Objectives: At the end of the lesson students will know and be able to do... At the end of this lesson, students will know about who Vivien Thomas was and what his career timeline looked like until he successfully came up with a surgical procedure to help “blue babies.” Students will demonstrate this knowledge by being able to identify a few important vocabulary terms from the book as well as reflect on Vivien’s career and his hardships before he became such a successful surgeon.	
LEARNING PLAN <u>Step-by-Step Lesson Implementation.</u> <i>Part 1/Before Reading</i> (___ Minutes): How will you introduce the lesson? What will you do first? What will you have the students do? In this part of the lesson you want to hook them into the book/topic/lesson AND activate their prior knowledge. Read and talk about the title of the book. Ask students what they think the title, <i>Tiny Stitches: The Life of Medical Pioneer Vivien Thomas</i> , means. Then ask them what and whom they think this book will most likely be about. What places or situations might be talked about in the text? What do you think might happen? What information do you think you might learn? What makes you think that?	

Then, look through the book with them, pay attention to the illustrations on the front and back covers. Look at the additional information on the inside flaps. Afterwards, we will start reading!

I managed to successfully go through my “before reading” questions with every grade level. Second grade needed a little bit more explaining when it came to introducing the topic of surgeons, not just average doctors. The third and fourth graders I worked with answered all of my questions and had a lot of prior knowledge, which was great!

Part 2/During Reading (___Minutes) : How will you develop the sequence of the instructional portion of the lesson? (What will you do after the opening introduction, what will do to build on their prior knowledge, how will you keep them engaged? What questions will you ask to check for understanding DURING the lesson?

During reading, I will make sure to stop a few times to explain trickier words/events such as the Great Depression or even make a few quick comments about what it looked like for people of color when it came to finding homes or jobs such as Vivien Thomas was doing. I will have post it's on the pages I would like to ask certain questions or point out important details.

I had to adapt and actually skim through a few of the pages of the story because it was actually very lengthy. For second grade, I had to stop and explain many more terms than the other grades. For example, I stopped to briefly cover the idea of segregation which was a prominent issue in this book. By using simple terms, I managed to explain it pretty well and my students understood it. In third and fourth grade I stopped mainly to discuss any questions the students had along the way. I also had to explain why Vivien could not attend college/medical school, as well as why he was treated so poorly (racism). Also, I ended up having to go a little in-depth on the Great Depression/explaining why people, i.e. Vivien Thomas, lost their money and how this managed to happen.

Part 3/After Reading (_____Minutes): After reading the book, what structured learning experience will you engage in with the child to scaffold their learning (which means actually teach them the content of the lesson, have them practice whatever it was you said you were going to have them learn)?

I think that I would like to show them a video that I found on the circulatory system, however I might leave this for the end so that I do not run out of time. I am debating between trying to focus more on explaining the way a heart works and what a circulatory system is.

I think that I would rather focus on briefly covering what was discussed about the heart while we read the story. Then, I would have the students discuss what hardships Vivien encountered on his career journey. Next, I would have the students create a short story

about what they hope their careers look like. I am not sure if this would be acceptable/work for this book. I would bring in these mini books that they could create on their own, including various art supplies they could use. They would have to create their own stories about what they would want their career to look like and what hardships they might encounter along the way. If anyone finishes their personal book early, I can give them a word search to complete that pertains directly to careers. Then, if we still have time, we can watch the video on the circulatory system and finish off by discussing everything we learned.

I ended up asking some reflective questions after reading the story each time. We connected some aspects of the story to each student because many of them found a connection to their lives which led to great conversations.

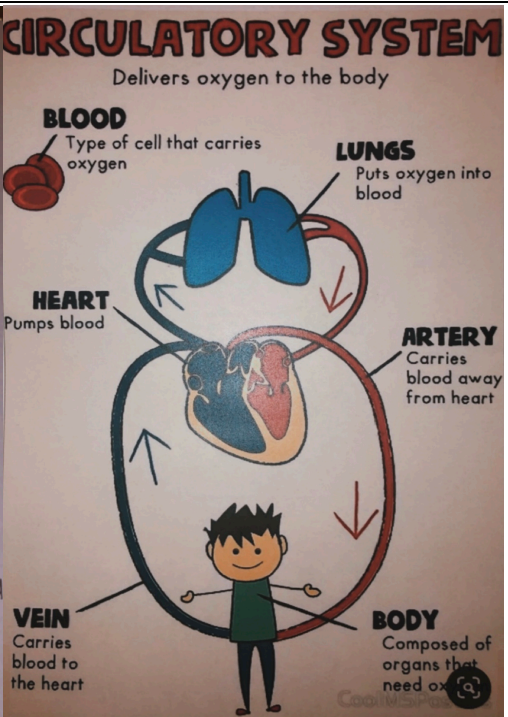
Next, I showed them the easy circulatory system diagram. Then, I had everyone watch a snippet of the video, the first two minutes or so just to get a gist of what it was about and a general overview of the circulatory system. Afterwards, I had them participate in the true or false activity which I just adapted the difficulty of the questions based on each grade level. This activity ended up being a hit. Finally, I had the extra activities/worksheets for each grade level in case they were to finish all of the previous work ahead of time. Our first run through the lessons, with third grade, I only had enough time to get through the diagram and true or false game. With second grade we ended up cutting the true or false short and focusing on the body diagram worksheet they could color in. The fourth graders did all of the work, so we moved on to the word search which they ended up not finishing but taking home!

Before Reading

1. What is persistence?
2. What do you know about the human heart? What is its main function? Why does your heart beat? How can we take care of our hearts?
3. What do you think the title means? What and who do you think this book will be about? What makes you think that?

After Reading

1. How does Dr. Blalock treat Vivien? Does he respect him? Why?
2. How does Vivien get to where he is? What were some obstacles?
3. Do you think it was fair of the doctors to take full credit of Vivien's work? How do you think that made him feel? How would that make you feel?



True or False?

1. Vivien went to college / school? (T)
2. Vivien was a janitor. (F)
3. Vivien and his family looked for a new home for months. (F)
4. Vivien was not happy to test on animals. (F)
5. Vivien operated on actual human beings / babies. (F)
6. Vivien helped the main doctor finish their solution. (F)
7. Vivien waited 5 years until he received recognition. (F)
8. Blue babies mean that they ate too many blueberries. (F)
9. The first time Vivien's theory was tested, it failed to work. (F)
10. The procedure Vivien created is still used today. (F)
11. Your body needs oxygen to work. (T)
12. The heart pumps blood. (T)
13. Vein carries blood to the heart. (T)
14. Artery carries blood away from the heart. (T)
15. Lungs don't put any oxygen into your blood. (False)

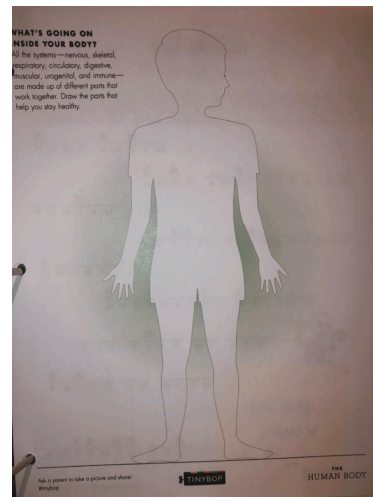
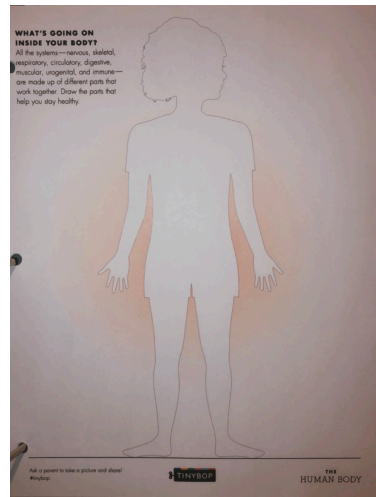
⚠️ Mix up the order to vary the responses
 ⚠️

DIFFERENTIATION:
 This is the section where you can write how you will adapt the lesson for each of the grade levels if it is too hard or too easy. What is your "back up plan to be able to meet the students at their level:

If it is too hard/too easy for 2nd grade:

I will have a simplified word search for 2nd grade in case they would like it. However, they are pretty short and simple words, so I think it should be easy enough.

I had a diagram for them about the human body. We had some extra time, so I had them draw their interpretation of what they thought the inside of a human body looked like. This related back to the quick video snippet explaining the circulatory system, the heart, lungs, veins, arteries, and bones. One of the students I worked with really enjoyed this activity as she jumped right in with her idea of various bones, organs, etc. The other student was excited as well and would have finished/kept working on it if we had more time. Both of them took the worksheets home with them!



If it is too hard/too easy for 3rd grade:

(Same as 2nd grade, however, I think this should be just enough for a third-grade group of students).

If it is too hard/too easy for 4th grade:

In case the 4th graders finish reading much quicker and then create their mini stories really quickly, we will watch the video I have, and go through a small vocabulary matching game that relates back to the vocab in the video.

I prepared these extra activities for the third and fourth graders in case they were to finish early. Third grade did not have enough time for extra work. However, my two fourth graders went through the additional informational sheet and then worked on the word search!

Cryptogram

Can you figure out what the message says?

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
5	16						21						22	1											

M 22 18 13 4 B 5 18 1 7 13 N

C 16 18 22 7 M 4 18 21 7 4 3 7 8 G 10 4

N 15 18 24 1 4 13

B 8 17 5 5 7 8 23 M 22 10 4 7 8 24 10 11

C 16 10 11 11 7 6

C 16 10 8 4 24 11 10 21 7 G 16 18 2 7 8 13

N 4 3 7 7 1 6 13 18 9 4 3 7

B 5 18 1 7 13 N 4 18 25 7 7 20

M 4 3 7 22 M 9 8 18 22

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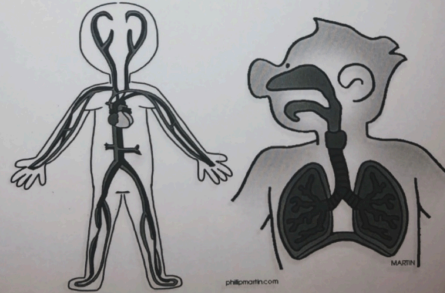
The Circulatory and Respiratory Systems

Your Respiratory and Circulatory Systems work together to bring in oxygen to your body. Together, they bring in the oxygen, transport it to your muscles and organs, and remove waste from your body, which we call carbon dioxide. Your body needs oxygen to work! When you breathe in air, it contains oxygen. The oxygen travels into your lungs. Your lungs are surrounded by tiny blood vessels called capillaries. These blood vessels absorb the oxygen and put it into your blood.

Blood that has oxygen enters your heart through the left atrium. When your heart beats, it pumps this blood into your left ventricle, which sends this blood to your body. As the oxygen-rich blood moves through your body it gives the oxygen to your muscles and organs. Your muscles and organs use the oxygen to do work and they create waste- carbon dioxide. This is kind of what it's like when a car lets out exhaust after using gas to make its engine work. Your blood picks up the carbon dioxide after it drops off the oxygen and carries it back to your heart.

When oxygen-poor blood gets back to your heart, it enters through the right atrium. Then your heart pumps and pushed it into your right ventricle. The right ventricle sends this blood to your lungs, where it drops off the carbon dioxide. When you exhale, you breathe the carbon dioxide out, and the cycle is complete!

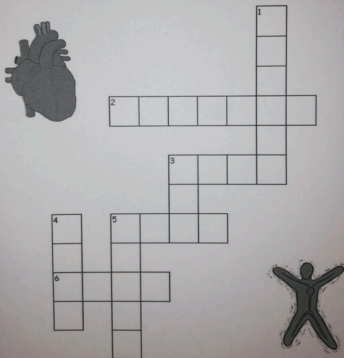
Take a second to breathe in and out one time. Feel your heart beat! How long did it take you to breathe? How quickly did your heart beat? That's how fast your body does all this work! Amazing, right?



Criss Cross

Fit the words into the squares.

- fibers
- cage
- red
- ribs
- muscles
- grow
- body
- blood



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KARSON'S CLASSROOM

The Human Body

P	S	S	K	H	N	F	E	I	X	X	O
E	K	V	I	T	S	C	K	U	U	I	J
L	E	I	D	L	N	T	C	Q	N	R	N
C	L	H	N	T	U	O	O	T	R	B	I
S	E	T	E	F	L	N	E	B	I	R	K
U	T	U	Y	O	G	S	G	Z	D	A	S
M	O	O	S	E	T	T	B	S	T	I	T
U	N	M	Y	I	C	O	A	G	P	N	O
X	O	O	N	B	D	S	R	I	I	B	M
Y	X	E	U	Y	F	G	M	A	Y	F	A
M	S	N	R	W	S	N	A	G	R	O	C
H	L	H	E	A	R	T	W	E	J	X	H

- brain
- skeleton
- stomach
- muscle
- body
- intestine
- skin
- kidneys
- heart
- mouth
- lungs
- organs

If students meet the learning target prior to the end of the lesson and need enrichment, what will you do? (need to do more than say “I will ask more questions about the story” Or “I will chat with them about what they like about school.” What additional learning experiences will you have on hand in case they zip through what you have planned? An extra vocabulary activity? A worksheet? A “something about the author” sheet?

I will have an additional educational video about the heart/circulatory system. I will also have additional worksheets for the students to choose from that will range from extra word searches about the circulatory system as well as coloring pages on the heart.

Closure (_5_ Minutes): How will you end the lesson to assure that students saw its meaning, purpose, and relevance?

I will end the lesson by asking who Vivien Thomas was. What is a “blue baby”? How did Vivien become successful? Then we will go into a quick discussion about what makes people successful and what should we do if we encounter hardships along our paths.

How will they complete this sentence: I learned about... who Vivien Thomas was and how his work relates to the circulatory system.

Citation: (If you adapted this lesson plan from a source, or if you used material from a source, please cite it here):

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