Heart and Circulatory System

Synopsis
Today's Walking Classroom podcast focuses on the circulatory system. The circulatory system is made up of the heart, blood vessels, and blood. They all work together to deliver oxygen to the cells of your body and dispose of carbon dioxide waste. The heart is divided into four chambers, and each chamber has a special job.

Objectives
1. Identify the key components of the circulatory system.
2. Understand the path that blood takes through the body.
3. Explain the purpose of the circulatory system and the role it plays in our health.

Procedure
If you want to compare student comprehension before and after listening, administer the Comprehension Quiz before doing anything related to the podcast. Retest after walking.

1. Review key vocabulary (included definitions are limited to the context of today’s podcast).
   - **circulatory (adjective):** moving around in a circuit
     *The circulatory system helps move blood through the body.*
   - **ventricle (noun):** one of the lower two chambers of the heart
     *There are two ventricles in the human heart.*
   - **atrium (noun):** one of the top two chambers of the heart
     *Blood enters the heart through the right atrium.*
   - **artery (noun):** a tube that leads blood away from the heart
     *The nurse inserted a needle into my artery to draw blood.*
   - **vein (noun):** a tube that carries blood toward the heart
     *The veins in my hands look blue through my skin.*

2. Build background by asking students, "Have you ever heard of the circulatory system? What do you know about it?"
3. Allow time for discussion.
4. Podcast preview: "Did you ever wonder why blood is important to our body’s health? Today we’re going to learn more about the circulatory system and how it carries oxygen to cells. Ready? Let’s go!"
5. Walk!

Questions for Thought and Discussion

Upon return to the classroom, discuss the main ideas and content from the podcast using the questions and suggested answers below.

1. What were some of the big ideas of this podcast?
   - The circulatory system is made up of the heart, blood vessels (arteries and veins) and blood. They all work together to deliver oxygen to the cells of your body and dispose of carbon dioxide waste.
   - The heart is divided into four chambers. These chambers are the right atrium, the right ventricle, the left atrium and the left ventricle. Blood flows away from the heart through arteries and returns to the heart through veins.
   - Blood flows in a specific circuit through the body. Within the heart, the flow of blood is controlled by valves.

2. Why is a strong circulatory system important to good health?
   - A strong circulatory system provides oxygen that repairs and creates cells.

3. A healthy circulatory system is reliable; we can depend on it to carry blood through our bodies without even thinking about it.
   a. Why is reliability an important character trait?
      - Suggestion: Reliability means that you have proven yourself to be trustworthy and dependable and others know that you will follow through on your word.
   b. In what ways are you reliable?
      - Suggestion: Always doing your chores and homework.
Heart and Circulatory System Comprehension Quiz

Name: ___________________________  
Date: ___________________________

1. The circulatory system includes  
   a. the heart and lungs. 
   b. the heart, blood vessels and blood. 
   c. oxygen, carbon dioxide and blood.

2. When blood flows through the body  
   a. it only flows away from the heart and not back to the heart. 
   b. it carries carbon dioxide to the cells. 
   c. it carries oxygen to the cells.

3. The chambers of the heart are called  
   a. right and left atrium. 
   b. right and left ventricle. 
   c. both a and b.

4. Circulatory means  
   a. containing many circles. 
   b. moving along a continuous circuit. 
   c. curly.

5. According to the podcast, what word would best describe the circulatory system?  
   a. weak  
   b. independent  
   c. critical

6. Which of the following is a fact about the circulatory system?  
   a. The lungs are the most important organs because they get rid of carbon dioxide and supply fresh oxygen. 
   b. Heart valves push blood through and then close tightly to permit blood from flowing backwards. 
   c. Arteries perform a more difficult job than veins.

7. Number the events in the order in which they happen. (1, 2, 3)  
   _____ Veins carry carbon dioxide-rich blood back to the heart.  
   _____ Blood travels through the body delivering oxygen to the cells.  
   _____ Oxygen-rich blood leaves the heart through the right ventricle.

8. Why is a strong circulatory system important to good health?  
   a. It makes new blood for the body each day. 
   b. It provides oxygen that repairs and creates cells. 
   c. Without it, we would not be able to properly digest our food.

9. Minerals are found in dirt and are absorbed by plants through the soil.  
   a. true  
   b. false

10. Eating fruits and vegetables is a good way to provide your body with vitamins and minerals.  
    a. true  
    b. false