# How Does The Heart Work? Lesson Idea K-2

#### **Objectives**

 Explain the concept of circulation, i.e., blood is pumped through tubes (blood vessels) through the body and back to the heart.

## **Prepare**

- Download and print the "What Am I?" story
- Download and print Follow the Blood Activity Sheet for class distribution.

## **Materials**

Follow the Blood Activity Sheet, "What Am I?" story

## **Explore**

1. On the chalkboard or on chart paper, draw a picture of a train with an engine and at least two cars. Draw tracks under the train extending in both directions. Ask children to identify the picture and tell about what a train does. Explain that a train's job is to transport. It picks up things at one place, carries them along a route and delivers them to another place.

Write the word *blood* on one train car. *How is the circulatory system like a railroad? Imagine that the train is the blood.* Encourage children to extend the analogy. The tracks are the blood vessels; the stations along the route are the heart, lungs and body. The circulatory system carries and delivers blood to all parts of the body following a particular route, just like the train carries and delivers goods to stations along its route.

2. Explain that the blood follows a certain route each time it returns to the heart. Point to and name the four chambers of the heart as you describe the route that the blood travels: Right atrium, right ventricle, lungs—left atrium, left ventricle, rest of body. Encourage children to say the names with you. Then give children the Follow the Blood Activity Sheet. Have them trace the route that the blood travels as it passes through the heart.

Why does the blood pass through the heart twice? If children know anything about the oxygen-carrying ability of blood, encourage them to share that information. If not, explain that just as the train picks up and delivers, goods, the blood picks up and delivers two gases—oxygen and carbon dioxide. Point out that oxygen is a gas we breathe in to live, and carbon dioxide is a gas we get rid of when we breathe out.

Blood carrying carbon dioxide into right atrium, right ventricle, lungs; carbon dioxide out, oxygen in; blood carrying oxygen into left atrium, left ventricle, rest of body; oxygen out, carbon dioxide in and so on. Encourage children to say the route with you.

3. Why is oxygen important? (Your body needs oxygen in order to live.) What carries oxygen all around your body? (The blood) What pumps the blood all around the body? (The heart) What does your heart do if your body suddenly needs more oxygen? (It pumps faster.)