

HeartSmart Teachable Moments

the powerful heart
&
the mighty brain

Grades 2 – 3



The Powerful Heart & The Mighty Brain - Heart Facts

Summary

Students will:

- State what they know and what questions they have about their heart
- Review key words about the heart and heart health
- Discuss what good health means and some keys to good health

Objectives

- Students will learn key words and basic facts about the heart
- Students will describe the location of the heart in the body and the sounds the heart makes
- Students will state the three keys to good heart health

Key Words

heart, body, arteries, veins, blood, oxygen, heartbeat, lungs, healthy, food, active play, smoke-free

Preparation

- Research online clips demonstrating the circulatory system in action through animations

Potential Materials

- Writing and drawing materials
- Chart paper and yarn – optional
- A soft ball such as a tennis or stress ball

Main Steps

Choose activities from the following steps to customize your lesson to the needs of your class.

HEART FACTS

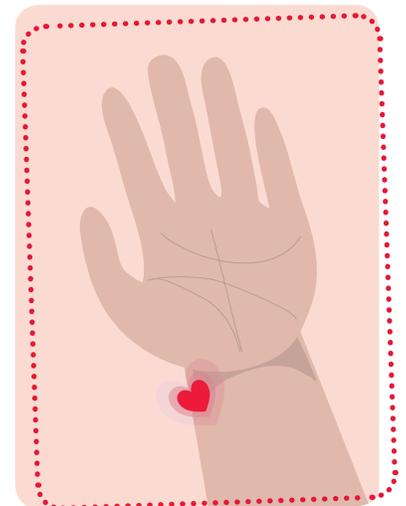
What Do You Know?

Write out the key words on to a piece of chart paper or a white board with the word “heart” in the centre. Review the new vocabulary and have students who know the words help explain them to others. Use simple word games (identifying, sounding out, underlining, etc.) with unfamiliar words.

Use leading questions such as those below to ask what students know about hearts and health. Record what they say on a chart using words and simple drawings (e.g., draw a stick figure of a body and show the heart in the centre, or write the word “Centre”).

- Where is the heart located? *In the centre of the chest.*
- How big is the heart? *About the size of two hands making a fist together.*
- What does the heart do in the body?
It pumps blood to the different parts of the body.
- What sounds does the heart make?
It makes a thumping noise if you listen to your chest.
- What does the heart look like?
It's a bit like a fat, rounded valentine shape, with veins and arteries attached.

Explain that people can feel their heart beat at pulse points. Have students find their wrist pulse point (on the thumb-side of the inner wrist, just up from the joint) and count their own pulse. *Option: Have students squeeze a soft ball in time to a heart rhythm and discuss how much energy it takes.*



The Powerful Heart & The Mighty Brain - The Circulatory System

Write the words “I want to know” on a large piece of chart paper.

- Ask students to discuss in groups how they would complete the sentence, “*What I want to know about my heart is*” and have them write their ideas on a sheet of paper.
- Ask each group what their group wants to know and have them write their ideas on the chart.
- Have students review the ideas on the chart. Explain that the class will learn about the heart and students can find the answers to their questions. If they have any more questions, they will be added to the chart in the lessons that come.

Refer to the chart through subsequent activities to answer questions and record what students have learned or to add more questions that students raise.

THE CIRCULATORY SYSTEM

Distribute the activity sheet “*The Circulatory System.*”

Ask students to explain what the heart and lungs do. Explain that:

- The heart pushes blood through arteries to all parts of the body and it returns to the heart through the veins.
- The lungs let the blood get oxygen from the air and get rid of wastes.
- The blood carries oxygen and food through the arteries to keep the parts of the body healthy and strong.
- The blood also carries wastes away from the parts of the body.
- All the parts – the heart, lungs, blood, arteries and veins – work together as part of the circulatory system.

THREE KEYS TO HEART HEALTH

- Write the word “healthy” on the board and ask students for ideas about what it means. Write their responses in a web on the board. Probe for a variety of responses (e.g., feeling good, the ability to play and have fun, not be sick in bed, etc.)
- Explain that being healthy means feeling good about what you are able to do. This means feeling good physically (in your body), feeling happy, feeling good about your family and friends. These are different ways of being healthy.



Point out that people with disabilities can still have good health, although they might be unable to do some kinds of things.

Ask students what they do to stay healthy. Write their responses in a web on the board. Prompt students with questions such as the following:

- Does playing active games make you feel healthy?
- Does eating good food make you feel healthy?
- Does it feel healthy when you stay away from tobacco smoke?
- How can you keep your heart healthy?

Point out the three keys to good health: *Eat good food, get active play, live smoke-free.*

The Powerful Heart & The Mighty Brain - Review and Summary

Review and Summary

Review the key messages of the lesson:

- The heart beats in the chest to keep the body healthy.
- The heart pumps blood all over the body providing fresh oxygen and nutrients.
- Blood is pumped from the heart through arteries and back through veins to the lungs.
- The three keys to a healthy heart are to eat good food, get active play and live smoke-free.

Home Connections

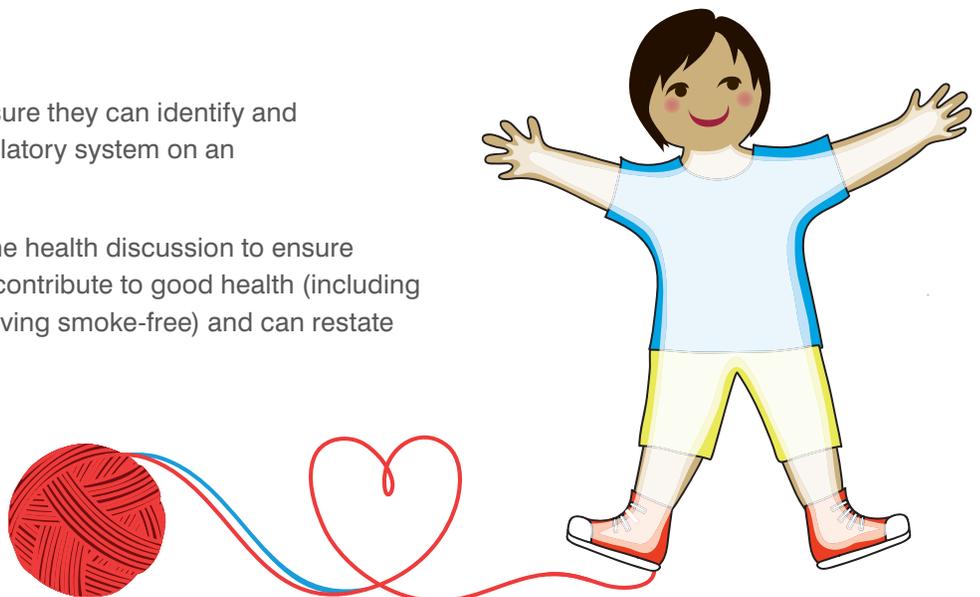
- Invite students to bring home “*The Circulatory System*” activity to their parents or guardians and explain what they learned about the heart.
- Have students and families use the Internet to find animations of the heart and circulatory system.

Extension and Integration

- Have students mimic the sound of the heart, and chant, clap, stamp or use musical instruments to beat the rhythm.
- Invite the school nurse to visit the class and have students listen to their own hearts using a stethoscope. If possible, use a microphone and portable stereo to amplify sounds from the stethoscope so that the whole class can hear.
- Show a video animation of how the heart and circulation system works. Have the class brainstorm all the facts they found out about the heart that they did not know before.
- Have students pump water from a squeeze bottle through rubber tubing to see how pressure forces liquid to move. Have students feel the tubing to feel the water pulse through it when the bottle is pumped, and explain that this is similar to blood being pumped through the arteries.

Assessment

- Review students’ drawings to ensure they can identify and correctly draw and label the circulatory system on an outline of a body.
- Monitor students’ responses to the health discussion to ensure they can describe practices that contribute to good health (including healthy eating, physical activity, living smoke-free) and can restate the three keys to heart health.



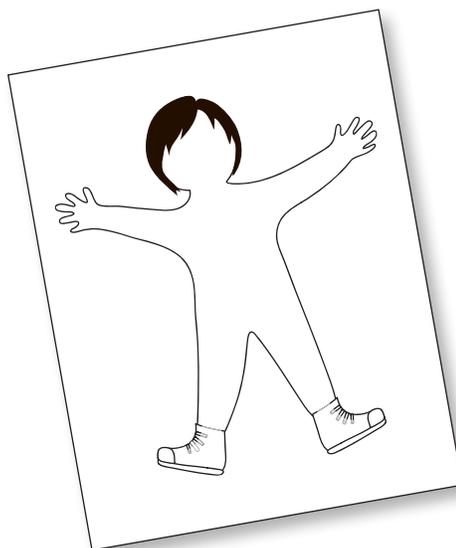
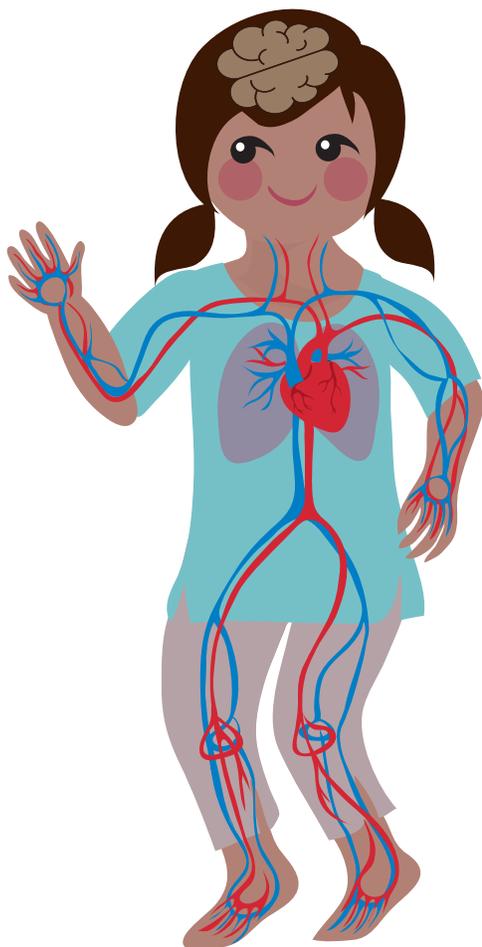
the circulatory system



The circulatory system is very complex. The heart pushes blood through the **arteries** to all parts of the body and it returns to the heart through the **veins**. The blood carries oxygen and nutrients through the **arteries** to keep the parts of the body healthy and strong. The blood also carries wastes, such as carbon dioxide away from parts of the body to the lungs where fresh oxygen is also picked up from the air. All the parts - the heart, lungs, blood, **arteries**, and **veins** - work together as part of the circulatory system.

Count slowly from 1 to 60. That's how long it takes your blood to make one entire trip!

USE THIS IMAGE
AS A GUIDE!



You could also try laying down on a large piece of paper and have someone trace your outline. Then draw the **heart**, **arteries**, **veins**, and **lungs** where they would be on your body.

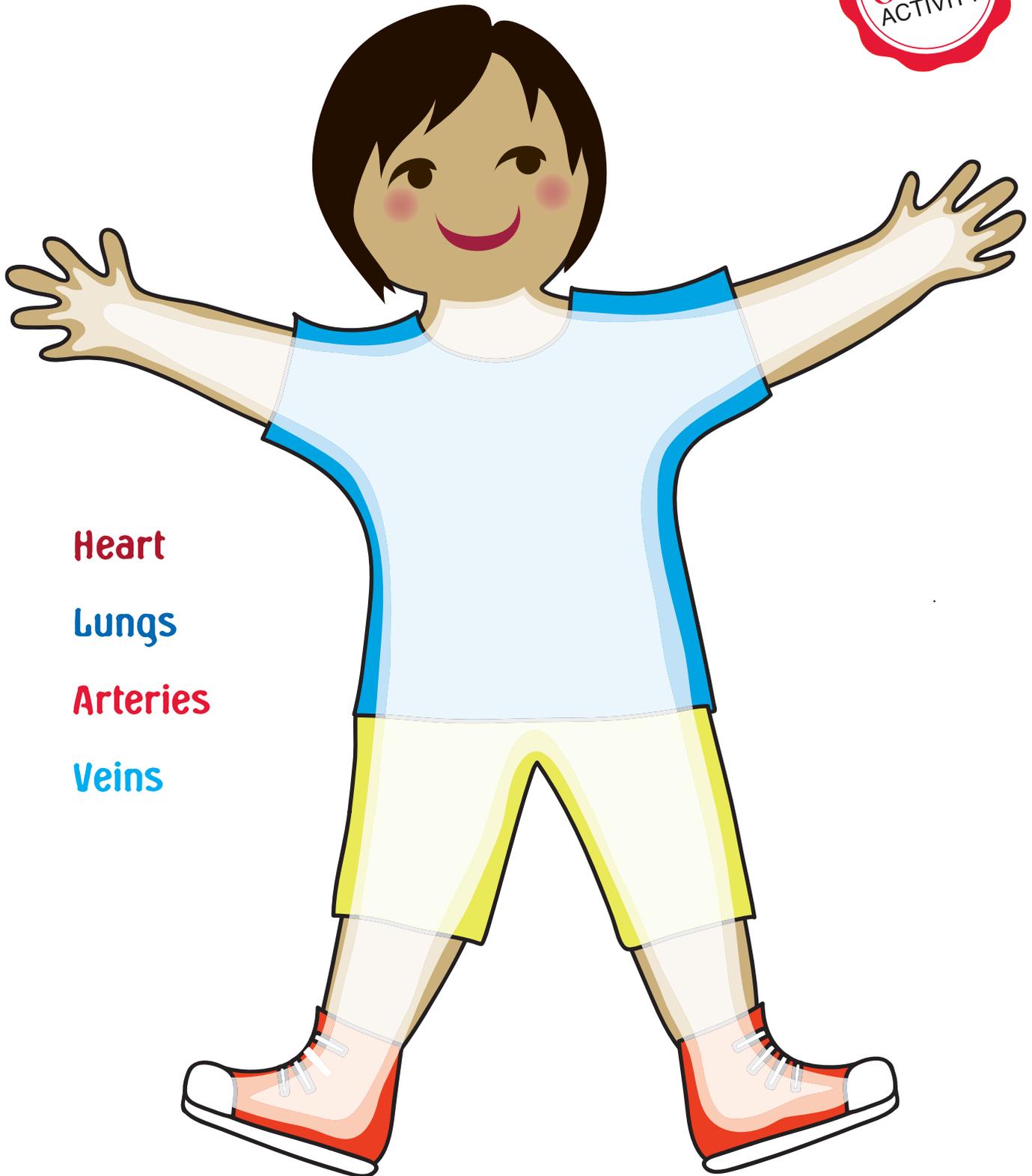
You could also use **blue** and **red** yarn for the **arteries** and **veins** and cut out a **red** heart and **blue** lungs and paste them on. Have fun with it!



Your heart and lungs are the two main organs of your circulatory system.



Draw your **heart in red** and your **lungs in blue** on the picture below.



Heart

Lungs

Arteries

Veins