



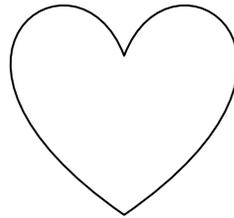
# Maggie's Activity Pack

Name \_\_\_\_\_

Date \_\_\_\_\_

## I ♥ My Heart

When you think of a delivery system, what comes to mind? Envelopes? Boxes? Valentines arriving at your door? Yes, all these are delivered to homes and businesses. But did you know you have your own special delivery system that works just for you every second of every day? That's right. Your circulatory system can't stop working. Even when you're resting, blood needs to be pumped through your body. And what does all this heavy lifting? Your heart!



Yes, when February 14 rolls around, we fold red and pink paper and cut out heart shapes to send to friends and family. But this shape we are so fond of for Valentine's Day isn't the shape of the heart we depend on for life. It is more like a pear and is about the size of your fist. The heart in your body is a strong muscle with four chambers. It acts as the pump for our blood. The heart's four chambers work in harmony to be sure blood flows in an even way through your body.

When you take a breath, you fill your lungs with oxygen. Blood, with this life-giving air, travels into a chamber of your heart. Arteries and capillaries deliver this blood to other parts of your body. Your veins carry the blood back to your heart. So, as you can imagine, your heart and all the arteries and veins are necessary for life.

There are a lot of veins and arteries in your body. If you stretched them all out, your blood vessels would go around the Earth at the equator at least twice. When you are an adult, you may have enough to go around our planet four times! Now you can see why the heart must be a good pump!

Besides using the wrong shape for a heart, people often think of a heartbeat in the wrong way. Poets and songwriters talk about hearing heartbeats for a loved one. A heartbeat is really the valves in your heart. You hear a beat when these valves close to push blood through the parts or chambers of your heart. These valves have to be strong because they pump between 1500 gallons to 4000 gallons of blood everyday, depending on your age and size! That's a lot of work to do.

So, the next time you hear phrases like broken heart, cry your heart out, or have your heart set on something, think about the real heart that works so hard for you all the time. How can you take better care of it?



Think about the differences between the heart in Valentine art and the heart in your body. Make a list of the contrasts.

A Real Heart

An Art Heart

What are some ways you could take good care of your real heart?

---

---

---

---

Dear Colleague,

We at Maggie's Earth Adventures are always on the lookout for a new twist on an old holiday...and what better way to celebrate Valentine's Day than to think about its artsy inspiration – the heart! As we hear about more and more childhood obesity and the fact that test prep seems to erase recess from our days, we wanted to highlight the necessity to eat healthy and play robustly: a formula for a hale and hearty heart! We encourage you to use this opportunity to encourage healthy habits in your classroom (not to mention yourself!).

This WAP is a good opportunity to introduce your students to the circulatory system and all that it does to make our bodies function properly. You may want to delve into the specifics of the heart's chambers more fully. Have your students look at a drawing of these chambers and then write an explanation for the mechanics of this strong muscle. Writing captions for the many graphics you can find on Google Images is a helpful way to learn. When children generate their own thoughts, learning is active, not passive. That's key whether we're learning or trying to be healthy!

We also like the idea of creating a visual contrast. This helps children see their ideas come to life. Completing the Venn Diagram will help your children better understand the physical heart and may also generate thought about how society values the heart and has thus used it as a symbol.

Integrate other subjects, too. Think of the math you can do with the number facts provided in this WAP. Why not have children create Valentine cards explaining how the recipient can take care of himself or herself? With sentiments such as, "I care about you! Let's run in the playground to keep our hearts healthy" would be a new twist on science and Valentine's Day!

Happy teaching,  
Dr. Kathy

Answers will vary.

Ask children to share ways they have seen the heart used in popular culture. Encourage your technologically-minded students to film a "public service" announcement about caring for hearts. What a fun way to integrate science, technology, and oral literacy skills.

**Goals:**

Children will read an article about the importance of the heart. They are asked to contrast the differences between the physical heart and the heart as it is portrayed in popular culture. To develop critical thinking skills, children use the facts from the article to explain how to care for the heart. This activity is available on the primary and intermediate levels and correlates with Content Standard C, Life Science, and Content Standard F, Science in Personal and Social Perspectives of the National Science Standards.