



Students will participate in several activities that give a clear message: for good health, it's time to get moving!

ACTIVITY ONE

♥ Materials for each group:

- 2 large same-size containers, such as mixing bowls
- $\frac{1}{3}$ c. measuring cup
- water
- paper towels (if needed for cleanup)

♥ Additional materials:

- stopwatch or clock with a second hand



1. For each group, fill one container with four to five cups of water.
2. Explain that the heart of an average adult male pumps about 2.4 ounces of blood with each heartbeat, which is a little less than $\frac{1}{3}$ cup. Also point out that the heart of an adult at rest pumps between 60–100 times in just one minute.
3. Choose one child in each group to start the activity. At your signal, the selected child tries to scoop the water (using the measuring cup) from the filled bowl into the empty bowl 60 times before one minute is up, as the other students count the number of scoops aloud. Sound easy? Not for the child who has to scoop water that quickly!
4. If time allows, repeat the activity so that other students in the group can try their hand at the challenge.
5. Talk with students about how hard the heart works, even when at rest, and why staying physically active can help keep you and your heart strong by lowering blood pressure, increasing the flow of oxygen and preventing bone loss, among many other benefits.

IT'S A FACT!

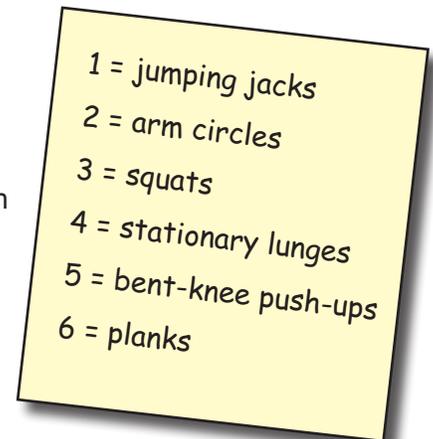
The average adult male has 5 to 6 liters of blood, or blood volume. The average adult female has slightly less, at 4 to 5 liters. The resting heart rate of children who are 7–9 years old is 70–110 beats per minute.

ACTIVITY TWO

♥ **Materials for each group of four students:**
one die

One excuse people often give for not being physically active is a lack of time. But physical activity is something you can do even if you only have a few minutes. To show students how easy it is to squeeze in some physical activity throughout the day, follow these steps:

1. Write a code similar to the one shown on chart paper.
2. Divide students into groups of four to six students each and give each group a die.
3. Ask one student in each group to roll the die and, using the code, identify the activity his group will do.
4. Have another group member roll the die to determine the number of repetitions. Then have the group complete the activity for the determined number of repetitions.
5. Challenge groups to repeat the steps until they have completed ten rounds; then have them tally the total number of exercises they completed.
6. Gather back together as a large group and tally the impact of doing that many exercises every day for a week, a month, and a year. For an extra challenge, have older students determine the number of exercises for an entire class or grade level. Good habits really add up!



For supersize dice students will love, cover cube-shaped tissue boxes with paper and label the sides with dots.

ACTIVITY THREE

♥ Materials for each group of four or five students:

- 2 plastic cups: each with a hole punched in it as shown, with one hole larger than the other one
- permanent marker
- 2 plastic drinking straws (one with a larger diameter than the other one)
- play dough or modeling clay
- large pan
- water colored with red food coloring (in two separate containers)

What can happen to the heart when a person is not physically active? Students will find out with this hands-on experience. First, review with students that an artery is a blood vessel that carries blood from the heart to any part of the body. In some people, the walls of blood vessels can experience a buildup of cholesterol. This buildup is called plaque. Explain that when plaque builds up in the walls of the arteries, the arteries narrow, making it more difficult for blood to flow and creating a risk for heart attack or stroke. Further point out that being physically active can help to lower cholesterol. Next, divide students into groups of four or five each. (If desired, demonstrate this experiment to the whole group rather than having students complete the experiment in groups.) Give each group the materials listed.

Have each group follow these steps:

1. With the marker, mark a line on each cup to show how far to fill it with water. Make sure the lines on the cups are the same.
2. Put a straw in the hole of each cup, making sure the straw with the smaller diameter is in the cup with the smaller hole. Make sure the cup's hole is large enough to prevent any squeezing of the straw.
3. Using the play dough or clay, seal the hole inside each cup and around the straw so that no water will leak out through the hole.
4. Point the straws downward as shown.
5. Put both cups in the pan. Then quickly fill both cups at the same time with water to the line on the cup. Watch to see if the water stops flowing from the cups at the same or different times.
6. Based on the results, what do you think might happen to the flow of blood in a person who has coronary heart disease (whose arteries have smaller diameters than healthy arteries)? How might this affect their overall health?

