# **Heart Rate and Physical Activity**

# **Objectives:**

- 1. Students will be able to measure their heart rate.
- 2. Students will be able to state several reasons why heart rate increases.
- 3. Students will be able to explain ways to help keep their heart healthy.

# **Description:**

In this activity, students will discover that heartbeat rate will increase as a direct result of physical activity.

### **Materials Needed:**

- Stethoscope
- · Music for dancing
- Watch
- Paper and pencil
- One toilet paper roll for each pair of students (to be used as a "stethoscope")

#### **Procedure:**

### Lesson Introduction:

Write the word "pulse" on the board. Ask students to define the term. Explain to students that a pulse can be found on parts of the body where arteries lie close to the surface. A pulse beats at the same rate as the heart. Hold up the stethoscope and ask students if they have seen the object before. Explain that medical personnel use a stethoscope to listen to a patient's heart. Ask students, "Have you ever felt changes in your heartbeat? Why do you think your heartbeat changes?" Inform students that today they will find their pulse and listen to each other's heartbeat.

#### Lesson Focus:

Ask students, "How can you use your pulse to determine your heart rate?" Help students locate their pulse (have them try their wrist or neck). Ask, "How can you determine the number of times your heart beats in one minute?" Explain to students that if they can count the number of beats for 15 seconds and then multiply by four, the number of heart beats per minute can be found. Have each student time his/her pulse for 15 seconds to determine the number of beats per minute. Students should record their results on a piece of paper.

Next, have students listen to each other's heartbeat. Pass out one toilet paper roll to each pair of students. Inform students that the paper rolls can be used as "stethoscopes." Allow students time to listen to each other's heartbeat. Ask, "What do

you think happens to your heart rate when you exercise?" To verify students' predictions, have students dance to music.

After students dance for a few minutes, stop the music and have students check their pulses. After students record their pulse rates, have them listen to each other's heartbeat again. Remind students to compare the "before" and "after" exercise heartbeat. Ask students to share their "before" and "after" pulse rates. Record students' responses on the board and discuss the results.

### Lesson Closure:

"Besides exercise, can you think of any other times when your heart rate increases?" (examples: stress, fear, excitement) Discuss why hearts need exercise (keeps the muscles strong and allows the heart to pump blood to the body).

http://eduref.org/Virtual/Lessons/Physical\_Education/Skill\_Related/SRF0201.html