

Project Heart

Activities for the Classroom

EXPERIMENT

MAKE A STETHOSCOPE

Introduction

When pumping blood through the body, the heart makes a “lub-dub” sound. To listen to your heart, doctors and nurses use an instrument called a stethoscope. Of course, not everyone has access to a stethoscope, but you can make your own simple model.

Materials

1. Empty 2-liter bottle
2. Cardboard paper towel tube
3. Scissors
4. Masking tape
5. A friend or family member

Directions

1. Cut the top off of the empty 2-liter bottle.
2. Remove cap from bottle top and attach the cardboard paper towel tube to the mouth of the bottle with tape.
3. Find a friend or family member and go to a quiet location to conduct your experiment.
4. Ask your partner to locate his heartbeat on the upper left side of his chest using his right hand. Your partner should be able to feel it beating up and down.
5. Now put the open end of the bottle on your partner's

heart.

6. Place the cardboard tube over your ear to listen to your partner's heartbeat.
7. Switch places so your partner can hear your heartbeat.

Troubleshooting

Unable to hear your partner's heartbeat? Ask a parent to purchase a medium-sized funnel and 12 inches of rubber tubing to make an even better stethoscope. Simply attach one end of the tubing to the end of the funnel. Gently put the open end of the tube in your ear and the open end of the funnel on your partner's heart. Not only does this type of stethoscope model make the heartbeat easier to hear, the flexible tube also allows you to listen to your own heartbeat!

Deep Exploration

1. Listen to your partner's heartbeat while he is sitting, standing, walking, and skipping. Did his heartbeat change?
2. Listen to another partner's heartbeat. Does it sound different? What are some reasons that might make one person's heartbeat sound different from another?

