

Activity Name: Counting Your Heartbeat

Activity Description: After a group discussion, children get into partners and demonstrate their knowledge of how to listen to a heartbeat counting the beats per 15 seconds using a paper towel roll, then a stethoscope, and then take the pulse of their partner who will then listen to their heartbeat counting the beats and take their pulse so that each partner has the opportunity to demonstrate their knowledge.

Suggested Grade Level / Age Range: K-5

Science Content Covered (just provide keywords - *example - heat, light, energy*): Heart beats, pulse

Time needed to complete the activity: 10-15 minutes

Materials Required (per student):

- Paper towel rolls (at least 10)
- Digital timers (at least 2)
- Stethoscope
- Alcohol Wipes
- Dry Erase Board/Markers
- Handout sheets with directions for finding pulse
- Even number of students
- Calculator (optional)

Directions as well as Activity Success Tips for Parents and Teachers:

1. Discuss verbally as a whole group what a heart beat is.
 1. What is a heartbeat?
 2. Ask why you have a heartbeat?
 3. Ask who remembers ever going to the doctor and them listening to their heartbeat?
2. Have students pair up into partners
3. One partner will listen to the other person's heartbeat using the paper towel roll while they are in a still position for a timed amount of 15 seconds; counting each heartbeat.
4. After 15 seconds they will record their partner's number of heartbeats down on the dry erase board they are given under the still position or before exercise category.
5. After they have ran in place for one minute, the same partner will listen to the other person's heartbeat again using the paper towel roll for 15 seconds.
6. After 15 seconds they will record their partner's number of heartbeats down on the dry erase board they are given under the running category.

7. Have the partners switch roles and repeat the process.
8. After all students have listened and counted the heartbeats for both still positions and running in place, they need to add their number of beats per 15 seconds four times to find out how many times each minute their partner's heart beats.
9. They should do this with both standing and running in place results.
10. After all students have calculated the results discuss their findings
 1. How did their heartbeats change when they went from standing to running in place?
 2. How does this affect your heart when you change your pace?
 3. What is the correct way to take you pulse and listen for a heartbeat?
11. Closure:
 1. Explain to students that the heart beats faster after exercise in order to pump more blood (oxygen) to the working muscles.
 2. Demonstrate the correct way to take your pulse and listen for a heartbeat
 1. Taking your pulse: Place first finger and middle finger together and place at your wrist bone. Apply slight pressure and feel the beat.
 2. Taking those same two fingers in the same way, place them on the side of the neck just under your jaw line. Apply slight pressure and feel the beat.
 3. Listening for a heartbeat: Place the stethoscope in your ears and take the end of it and place it on a student's heart. Ask them to take a deep breath in and a deep breath out. Listen for the heartbeat.

Safety comments / considerations: Make sure there are no health concerns before completing this activity since it does involve physical activity.

If your activity should be credited to any specific source or citation - indicate that here: <http://www.fi.edu/tfi/activity/bio/bio-2.html>

So we can make sure your organization gets credit for your participation and we refer people accurately to your organization:

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