

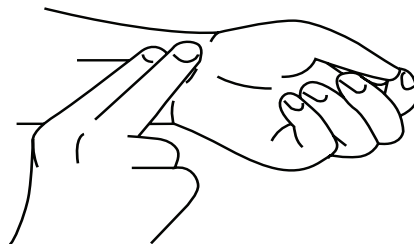


Name \_\_\_\_\_

# Every Beat of Your Heart

**CCGPS Standards of Mathematical Practice:** Use appropriate tools strategically; attend to precision.

The heart of a child below the age of 12 beats about 100 times a minute while at rest. During your involvement in Walk Georgia, you will participate in activities that will affect your heart rate. Try the following experiment: Check your heartbeat by pressing your fingers to your wrist to find your pulse (see below). The pulse is the beating felt when the heart pumps blood. Once you can feel your pulse, count how many times your heart beats in six seconds as your partner keeps track of time using a stopwatch.



*Press your fingers to your wrist to find your pulse.*

1. Using the number of times your heart beat in six seconds, determine the following:

a. Number of heartbeats in one minute while at rest

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

b. Number of heartbeats in 90 seconds while at rest

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

c. Number of heartbeats in one hour while at rest

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

2. Using the number of times your heart beat in six seconds following one minute of exercise, determine the following:

a. Number of heartbeats in one minute after stepping up and down

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

b. Number of heartbeats in one minute after walking

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

c. Number of heartbeats in one minute after running in place

Yours \_\_\_\_\_ Partner's \_\_\_\_\_

3. Does the heart beat faster at rest or after exercise? Why do you think this is?

4. Did you or your partner have a faster heartbeat? Was it the same every time? Why?

5. Which exercise caused the heart to beat fastest: stepping up and down, walking or running?

6. Would the heart beat faster if you exercised for more than one minute? Why?

7. Do you think the heart would beat faster after running or after biking? How could you test your prediction?

8. Whose heart would beat faster: a person who has just run a long race or someone who has just sprinted 100 yards? How could you find out?