

-Pencil or pen

Part 1: Measuring Your Resting Heart Rate

1. Sit or lay quietly for 1 minute.

2. Use your fingers to count your heart rate, or the number of "lub-dub" sounds your heart makes in 1 minute; this is your **standing heart rate**.

<u>Hint:</u> You can count the number of "lub-dubs" your heart makes in 15 seconds, and then multiply by 4 to get the number of sounds in 60 seconds (1 minute).

Resting Heart Rate: _____ beats per minute

Part 2: Measuring Your Active Heart Rate

1. Now, perform a cheer like the Science Cheerleaders! Jump and move around as much as you can while doing the cheer, and repeat it three times. (The cheer is written below.)

2. After you complete the cheer three times, count your heart rate again. Write this number down; this is your **active heart rate**.

Are you breathing faster and harder? Did your heart rate increase after you did the cheer?

Active Heart Rate: _____ beats per minute

Bigger! Better!

Faster! Longer!

GOOOOOO SCIENCE!

Gotta make the

heart beat stronger!





Part 3: Returning Your Heart Rate to Rest

1. Now, take a break for 10 minutes, but count your heart rate every 2 minutes.

Did your pulse rate go back to the rate it was before you did the Science Cheer? How fast did that happen?

Why did your heart rate change after the cheer and again after you rested?

Resting Heart Rate @ 2 minutes: _____ beats per minute

@ 4 minutes: _____ beats per minute

@ 6 minutes: _____ beats per minute

@ 8 minutes: _____ beats per minute

@ 10 minutes: _____ beats per minute

Did you know?

Your brain controls your heart by sending it signals telling it how fast to beat.

Everyone's heart rates are different! Measure the standing heart rate of two other people. How do they compare to your standing heart rates?

More than exercise can increase your heart rate! When you're excited, scared, or nervous, your heart is told to beat faster. This is part of your "fight or flight" response and it gets you ready to run, if needed. Your heart also beats faster when you have a fever to bring more blood to the surface of your body. This helps get rid of heat and cool your body down.

Some people's heart rates are lower! The heart of a highly-trained athlete can pump more blood with each heartbeat, so his or her heart doesn't need to beat as fast.

The heart and your brain are an amazing pair, and together work to make sure your body has exactly what it needs. They do all of this without you even thinking about it!

