

Jumpstart your Heart

Did you know that every time you move, your heart speeds up or slows down to make sure your body is getting the blood it needs? Test out this fact with this fun, Jumpstart your Heart activity!

Be sure to have permission before starting this activity!

Background:

Throughout the day, your movements and level of activity play a role in deciding how hard your heart has to work! Your activity may cause the heart to pump more blood out to your body, meaning it will beat more frequently. If your body doesn't need as much blood, your heartbeat may slow down. The number of times your heart beats in one minute is called your **heart rate**. A person's heart rate is determined by their current level of activity and other things like age, height, weight, body position, and much more! This means that your heart rate might be different than your friend's heart rate!

To understand what happens to your heart rate throughout the day, it is important to find your **resting heart rate**. The resting heart rate is found when your heart is pumping the smallest amount of blood your body needs to keep everything happy and healthy! Your resting heart rate is most accurate if you are sitting still or laying down, are calm and relaxed, and aren't sick!

What is your resting heart rate? How does it change with different positions and different activities? Let's find out!

What you'll need:

- A watch/stopwatch
- A calculator
- Plenty of space to move around
- A chair
- A partner (optional)

PART ONE:

We will start this activity by finding your resting heart rate! Remember, your resting heart rate will be most accurate if you are sitting still/laying down, are calm and relaxed, and aren't sick!

After finding your resting heart rate, we'll see whether your heart rate changes when you change positions!

Directions:

1. Find your pulse: take your index and middle fingers on your right hand and place them on your jaw bone near your right ear. Move your fingers down your neck slowly until you feel your pulse!
2. Take your pulse immediately after completing each of the activities. To find your heart rate, count the number of beats for 15 seconds and then multiply that number by 4 to get the number of beats per minute!

Activity	Your Heart Rate	Partner's Heart Rate
Lay silently for 1 minute HINT: This is your resting heart rate!		
Sit silently in a chair for 1 minute		
Find your pulse, then stand up quickly		

Reflection:

1. What was your resting heart rate? _____ beats per minute.
2. Did your heart rate increase or decrease when you changed positions?

PART TWO:

Now that we know our resting heart rate, we can measure the differences in how our heart works during different activities.

Another important measurement we can find is called **Heart Rate Recovery**. This measurement tells us how long it takes our hearts to calm down or get back to the normal resting heart rate after we complete activities like exercise or playing on the playground.

This part of the activity requires physical movement. Be sure to have plenty of space to move around in and safely complete these activities!

Directions:

1. Find your pulse: take your index and middle fingers on your right hand and place them on your jaw bone near your right ear. Move your fingers down your neck slowly until you feel your pulse!
2. Take your pulse immediately after completing each of the physical activities. Take your pulse again 1 minute after completing the activity, then again 2 minutes after completing

the activity. Remember to count the number of beats for 15 seconds and then multiply that number by 4 to get the number of beats per minute!

Physical Activity	Your Heart Rate	After 1 Minute	After 2 Minutes
Resting Heart Rate		-----	-----
Standing relaxed			
After walking around for 2 minutes			
After jogging in place for 2 minutes			
After doing 25 jumping jacks			

Reflection:

1. Did your heart rate increase or decrease after completing each activity?

2. Did your heart rate return to the resting rate after any activities? If so, which ones?

3. Do you think an animal's heart would act the same way? Why or why not?
