



ALL ABOUT **ME**

PUMP IT UP!

Biology

The heart is a muscular organ and an incredibly strong one at that; the average adult heart has to pump five (5) liters of blood throughout the body per minute. In order to keep your heart pumping, you need to keep it healthy. You can keep your heart healthy by staying active and eating a balanced diet. This activity can help you understand how hard your heart works while also getting you moving!



Never stop wondering.
Never stop imagining.™

PUMP IT UP!

SUPPLIES

- Two (2) Buckets or Bins
- One (1) Sponge
- One (1) Timer
- Water

CHALLENGE

Can you move all the water from one bucket to the other before time runs out?

1. Fill one bucket with about as much water as there is blood in your body (you can calculate this by taking approximately 7% of your body weight, then converting the lbs to L or mL)
2. Set the buckets the entirety of your arm-span away from each other (arm-span has been shown to be a decent approximation of height)
3. Place the sponge next to the bucket with water in it
4. Have someone set a timer for 1 minute
5. Try to get all the water into the other bucket, using only the sponge, before time runs out!

QUESTIONS

1. Take your pulse before you start the activity and find your beats per minute (bpm). You can do this by finding your pulse, counting how many times it beats in 15 seconds, then multiplying that number by 4. To find your pulse, place your index and middle finger on your wrist below the base of your thumb. What was your bpm before the activity?
2. Find your bpm after you complete the activity. Is it higher or lower than it was before you started?
3. How much water did you manage to move during the time allotted?
4. How long does it take before your heart rate returns to normal?