

Exhaled air

Purpose: How does the amount of air inhaled compare to the amount of air exhaled from the lungs?

Procedures:

1. Copy down the data table
2. Show your teacher to receive your yellow square sponge
3. Pour 30 mL of water into the graduated cylinder.
4. Pour the water into the beaker.
5. Using the forceps, pick up the sponge by the edge and dip it into the water in the beaker. (Wait and let the sponge absorb as much water as possible).
6. Pick back up the wet sponge by the edge (let the excess water drip into the beaker)
7. Continue to hold the sponge while your partners pour the water from beaker into the graduated cylinder.
8. Record this in the data table under “the amount of water absorbed by the sponge.”
9. Empty the water in the graduated cylinder into the sink.
10. Hold the sponge over the beaker.
11. Squeeze as much water as you can from the sponge into the beaker.
12. Pour the water you have squeezed out of the sponge into the graduated cylinder.
13. Record this in the data table under “the amount of water I could squeeze from the sponge”
14. Completed the data table.



Analyzing the data:

- a) Was the sponge still wet after you squeezed out as much water as you could?
- b) Why or why not?
- c) Was the sponge still wet after you squeezed out as much water as you could?
- d) Why or why not?
- e) How do you think this activity relates to your lungs and the process of breathing?

Data Table:

Air Inhaled:

Air Exhaled:

Amount of water started with	30 mL
(-) Amount of water left in beaker after sponge is removed	
(=) Amount of water absorbed by sponge <i>(amount of air inhaled by lungs)</i>	