

You want to know how much volume is inside your lung? - Let's try!

## **Material:**



- plastic tubing
- a large plastic bottle
- water
- kitchen sink or large water basin

## Instruction:

- 1. Put a little bit of water into the water basin.
- 2. Fill the plastic bottle right to the top with water.

3. Put your hand over the top of the bottle	(to stop water escapin	g when you turn it upside
down).		

- 4. Now turn the bottle upside down. Place the top of the bottle in the basin under the water before removing your hand.
- 5. Push the end of the tube into the bottle.



6. Take a big breathe into the plastic tube.



7	Breathe	out as	much	air a	s vou	can	in	the	tube	



8. Measure the volume of air your lungs had it them.

What happens with the bottle?

## **Explanation:**

As you breathe out through the tube, the air from your lungs takes the place of the water in the bottle. If you made sure you took a big breath in and breathed out fully then the resulting volume of water you pushed out is equivalent to how much air your lungs can hold. Having a big air capacity in your lungs means you can distribute oxygen around your body at a faster rate. The air capacity of lungs increases naturally as children grow up. It can also be increased with

regular exercise. So a child needs only a small bottle for this experiment, an adult needs maybe a bigger bottle.