

How much air can my lungs hold?



EQUIPMENT	Large basin of water, Large plastic bottle (4 to 5 litre) with cap, Plastic tubing, Old towels for mopping up.
PREPARATION	Mark volume on the plastic bottle e.g. the 1 litre mark, 2 litre, 3 litre, 3.5 litre etc by pouring in a known volume of water.
BACKGROUND INFORMATION	Each time you breathe your lungs fill with air and empty again. The amount of empty space at the top of the bottle shows the amount of air that was in your lungs and which pushed the water out.
SKILLS	Investigating Estimating Measuring
ACTIVITY	Measuring the Capacity of Your Lungs: Fill the plastic bottle with water and put on the lid. Turn it upside down in the basin of water and remove the lid. Put one end of the tube into the bottle (careful not to let any air in). Take a big breath and then blow into the tube until you cannot breathe out any more. What happens?
SAFETY	Hygiene – clean the end of the plastic tube with dilute Milton solution after each child.
FOLLOW-UP ACTIVITIES	Can you refill the bottle from the basin of water using the plastic tube as a siphon this time?

**A space forms at the top of the bottle.
This shows how much air you were
able to hold in your lungs in one breath**

Do not let any air in

