

Make a model lung

Find out how your lungs suck air into your body with this easy-to-make activity.

What you need

- A small, clear plastic bottle
- Scissors
- 2 balloons
- Metal straw
- Elastic band
- Playdough



DID YOU KNOW?

You take about 25,000 breaths every day, and you don't even have to think about it.



1 Ask an adult to help you cut the base off a plastic bottle. Trim off any sharp bits from the top part.



2 Take a balloon and tie a knot in the end of it.



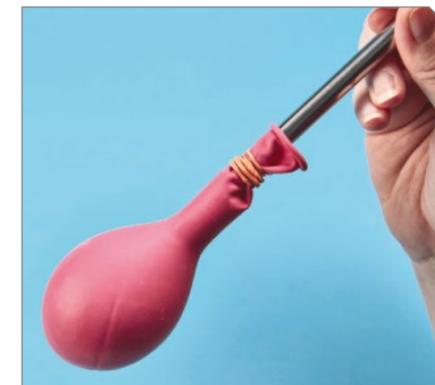
3 Cut off the wide end of the balloon.



4 Stretch the balloon over the wider end of the plastic bottle.



5 Place a straw through the neck of the other balloon and fix it tightly with an elastic band.



6 Inflate the balloon several times by blowing into the straw. This will stretch the balloon.



7 Push the balloon into the bottle so that the straw sticks out of the bottle neck.



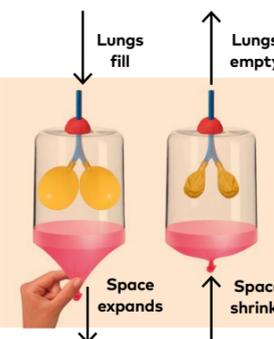
8 Hold the straw in place and seal the neck with playdough. Make sure no air can escape.



9 Grip the bottle tightly and pull the knotted balloon downwards. The inner balloon should inflate.

How does it work?

This simple model uses a balloon to show how your lungs bring air into your body. The balloon at the base of the bottle makes a tight, stretchy sheet. When you pull it down, it increases the volume (creates more space) inside the bottle. As a result, air is sucked in through the straw



and fills the inner balloon "lung". When you let go of the balloon, the space inside the bottle shrinks, forcing air back out of the "lung".

In your body you have a large sheet of muscles called the diaphragm. This attaches to the bottom of your ribcage and works

like the stretchy balloon sheet. When the muscles tighten, they expand the space in your chest, drawing air through your nose or mouth and into your lungs. You breathe air to extract an important gas called oxygen. All the cells in your body need oxygen to function.