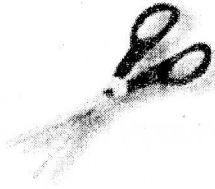


Do-It-Yourself Lung Model

Here's what you'll need...



A pair of scissors



2 straws



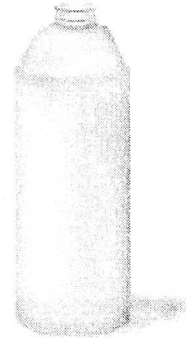
Three balloons (at least 1 large one)



Two rubber bands



A large lump of modeling clay



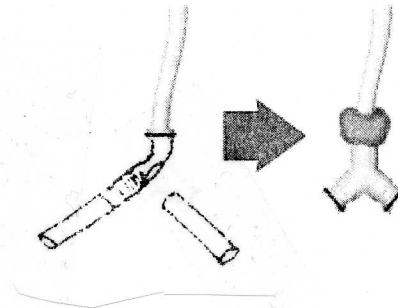
A clear plastic one-liter bottle

Step One: Assemble the "lungs"

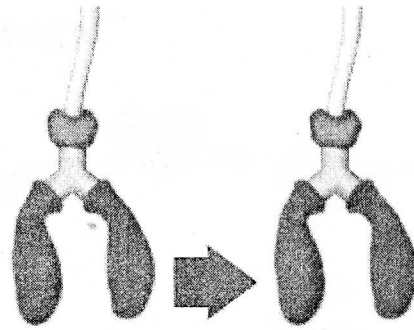
Cut a 3 cm, inflexible section of a straw

Make a small slit in the elbow of another straw

Insert the 3 cm piece of straw into the slit to form a "Y". Tape this joint to make it airtight.

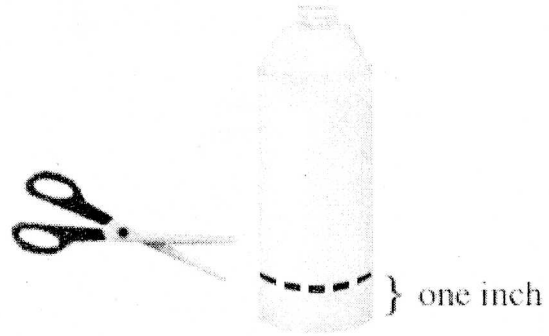


Tightly fix a balloon onto each of the other openings with the rubber bands, making sure the seal is airtight.



Step Two: Prepare the "chest cavity"

Carefully cut off the bottom 1 inch.
Make sure the cut edge of the bottle is smooth.

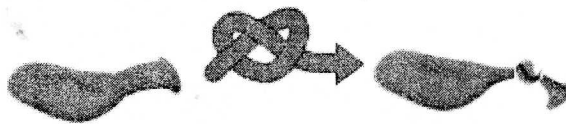


Place the lungs (balloons and connector) inside, and seal the plastic tube into the neck of the bottle with the rest of the clay to make an airtight fit.



Step Three: Prepare the "diaphragm"

Tie a knot in the neck of the third balloon, then carefully cut it in half, crossways.



Gently stretch the half of the balloon with the knot in it over the bottom of the bottle, pulling it up around the sides. Make the balloon as taut as you can - like the top of a drum.

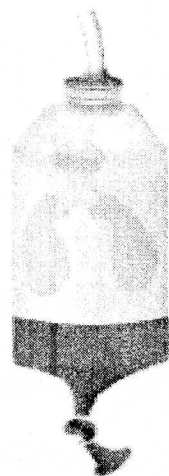


Step Four: Start breathing!

throat

lungs

diaphragm



The lower part of the balloon represents the diaphragm, the main breathing muscle. Pull it down, as though you were inhaling.

This lowers the air pressure in the bottle. Air from outside rushes in and makes the two balloons expand, just like the real lungs inside your chest.