

What is Air Pressure?

We hear the words **air pressure** a lot, especially regarding BC's weather! But how does it work?



SCIENTISTS

This egg-speriment should be demonstrated by an adult for kids to watch and learn. For this particular egg-speriment, safety goggles are a must! Note: It is always wise to wash your hands after handling eggs and your other scientific equipment.

EQUIPMENT CHECKLIST

- 1 peeled, hard-boiled egg
- 1 completely dry wide-necked glass bottle, with an opening that is slightly smaller than the hardboiled egg
- at least 3 matches
- a rolled strip of paper
- safety goggles
- a timer



METHOD

STEP 1

Make sure the egg is completely peeled. To check the egg-speriment will work, place the egg, narrow end down, on top of the neck of the bottle. The neck of the bottle needs to be slightly smaller than the diameter of the egg.



STEP 2

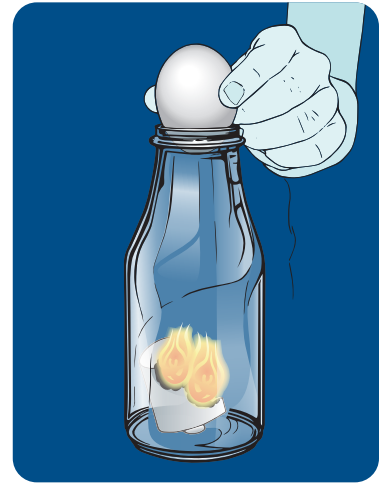
Remove the egg, and hold it close by, pointy end down. *Safety goggles are a must for this egg-speriment.* Put them on now. Light the rolled strip of paper and drop it into the bottle, be sure that it stays lit.



What is Air Pressure? continued

STEP 3

Swiftly but carefully reposition the egg, pointy end down in the neck of the bottle.



STEP 4

Start a timer, and watch the movement of the egg closely! How long does it take before the egg is sucked into the bottle?



RESULTS AND CONCLUSIONS

What made the egg slip inside the bottle?
Air pressure. Air expands and contracts depending on temperature.

In Step 1, the egg did not slip inside the bottle. What does that mean about the air pressure inside the bottle, and outside the bottle?

To think about: When did the air pressure inside the bottle change? What made it change? Was it when the matches were burning or was it when they went out?