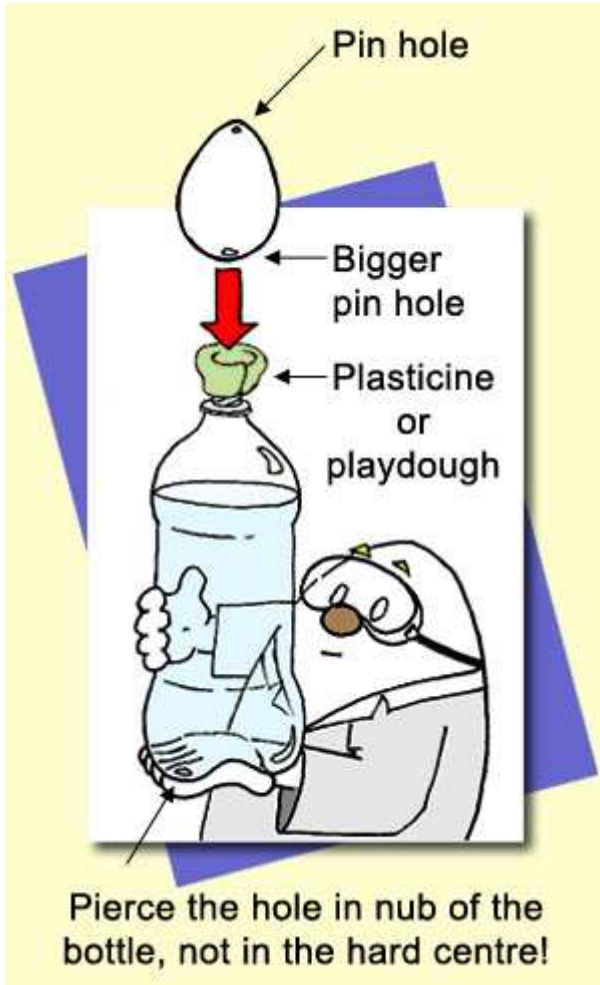


EGG VACUUM - NOT SO EASY

This egg-speriment makes what seems possible, impossible! Believe it with your own eyes. You will need an adult to help you. **Question:** How can you create a vacuum using eggs?



Materials: 2-litre plastic drink bottle
Plasticine or playdough
1 egg at room temperature
Water (hot or cold)
Needle
Sink or large bowl
Scissors

Procedure:

1. Have your adult helper punch a hole in the bottom of the drink bottle with scissors. (the hole should be able to be sealed with your finger)
2. Pierce the eggshell at both ends with the needle. Carefully scramble the yolk inside using the needle. Create a slightly bigger hole at the large end of the egg using the needle.
3. Make a ring of plasticine/playdough to fit around the mouth of the bottle that will accommodate the large end (and larger hole) of the egg. Make sure no air can leak out!
4. Fill the bottle with water (seal bottom hole using your finger). Do this over the sink or large bowl.
5. Fit the large end of the egg onto the plasticine /playdough ring on the mouth of the drink bottle.
6. Holding the egg firmly in place, release a stream of water from the hole in the container (over the sink or bowl of course)!
7. Try releasing and covering the top hole in the egg.

What happened and why?

By not letting any air into the bottle (by sealing the egg to the bottle), while water is leaving the bottle, you created a vacuum inside the bottle. A vacuum is what is created when there is no pressure. By having a hole in the egg, you released some of the pressure but not enough pressure to let the egg come out. By filling the bottle with water and releasing the water, the vacuum forces the insides of the egg to leave the egg as the water drains from the bottle.



Source: Alberta Egg Producers <http://www.eggs.ab.ca/kids/Egg%20Science/eggexperiment007.htm>

