Egg, and Milk Battle Experiment

MATERIALS:

- Glass bottle with a long, narrow neck
- Boiled egg (boil and allow to go cold)
- Matches Caution: This experiment uses matches and a flame. Get a grown-up to assist you with this experiment.
- Strip of paper







Method

- Put the empty bottle on a table.
- When egg is cooked, allow to go cold. Peel the boiled egg. Dispose
 of egg shell in compost bin.
- Caution: This experiment uses matches and a flame. Get a grownup to assist you with this part of the experiment. Light a match and light up the strip of paper. Drop the paper in the bottle.
- Quickly put the egg over the mouth of the bottle. Make sure there is an air tight seal around the egg.

EXPLANATION:

What happens? Atmospheric pressure does the work. The flame heats the air inside the bottle. When air is heated it expands and takes up more room. As the heated air expands, some of it escapes out of the bottle. When the flame goes out, the air inside the bottle cools and contracts, which takes up less room. This creates a lower pressure inside the bottle than outside the bottle. The greater pressure outside the bottle forces the egg to get sucked into the bottle.

*To get the egg back out of the bottle, tilt the bottle and blow air into it. Make sure you get out of the way, because the egg will shoot out.



