Lab: Egg In A Bottle
Once a favorite activity, this became more difficult to perform when glass was exchanged for cartons.

Materials
1 hard boiled egg (one is needed, but several should be available)
1 glass bottle whose opening is just smaller than the egg
(check the beverage and juice sections of a store)
1 piece of paper (1” x 3”)
1 match or lighter

Procedure
Carefully remove the shell from the hard boiled egg. If any tears occur, use another egg.
Once the egg is peeled, place the egg on top of the bottle.
Discuss how you can get the egg inside the bottle in one piece.

Remove the egg from the bottle, and carefully set it to the side.
Hold the piece of paper on one side and carefully light the other. Once lit, drop it inside the bottle and quickly place the egg on the opening.
The paper should burn for a few seconds and the egg will slowly be drawn into the bottle.

Thinking About It
The egg is drawn into the bottle not because of the lack of oxygen, but because of the temperature difference between the inside of the bottle and the outside air. The lower temperature outside has a higher pressure than the hotter temperature inside, thus forcing the egg to be pushed in from the outside.