

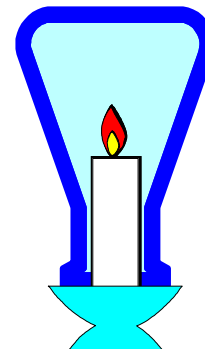
Purpose:

To demonstrate the effects of air pressure

Materials

1. Glass jar or bottle  
(Erlenmeyer flasks  
and Mason Jars works well)
2. Small bowl
3. Candle  
(birthday candles  
hot glued to pennies work well)
4. Matches
5. Water

## *Candle Magic*



Hypothesis:

Ask Students what they think will happen to the water in the bowl.

Procedure:

1. Fill bowl half full of water
2. Put candle in middle of bowl and light it
3. Put jar over candle.
4. Observe and explain what's happening

Results:

After the candle goes out, the water in the bowl rises into the jar.

Conclusion:

There is a pile of air on top of everything on earth. There's so much air piled up on us that it pushes with a force of a little more than 14 pounds for every square inch of stuff. In a natural state that air takes up all the space around the water in the bowl and inside the jar.

The lit candle "uses up" or exchanges the oxygen in the air. As the oxygen is changed, and empty space is created in the jar. The force of the air pushing down on the water in the bowl forces the water into the jar to take up the empty space that used to be occupied by the oxygen molecules.