Oxygen / Air pressure Lab

Name:

- 1. With some melted wax, attach a small candle to the center of a bowl or pan.
- 2. Fill the pan with about 2cm of water.
- 3. Light the candle and cover it with a graduated cylinder.
- 4. Measure the height of the water in the graduated cylinder (with a ruler).
- 5. Measure the total length of the graduated cylinder (with a ruler).



Calculations:

 $\frac{\text{Height of the water in the cylinder}}{\text{Total length of the graduated cylinder.}} \qquad x \qquad 100 =$

The actual composition of the Earth's atmosphere is 21% oxygen 78% nitrogen 1% other gases.

- 1. How does your answer from today's lab compare to the amount of oxygen in our atmosphere (21%)?
- 2. Now the catch...the results from today's lab have nothing to do with the percentage of earth's atmosphere made up of oxygen! It is just coincidence that your results were similar to 21%. So how do you explain what happened?
 - a. What happens when air is heated?

b. Explain why water rushed into your graduated cylinder once the flame went out?