

## Ideal gas law lab

### Prelab question

A sample of gas is collected over water at 23.0°C. The gas has a volume of 875.0 mL at an atmospheric pressure of 31.08 inHg. The mass of the gas is determined to be 1.09 g.

1. Use the link on my website to determine the vapor pressure of water in this experiment.
2. Convert the atmospheric pressure to mmHg.
3. Calculate the partial pressure of the gas only in the sample.
4. Calculate the molar mass of the gas.
5. Calculate the density of the gas.