## Chem Gas Lab

Purpose: Prepare sufficient $\mathrm{CO}_{2}$ gas to exert a pressure of 100 mm Hg at room temperature in a 125 ml Erlenmeyer flask.

Materials used: potassium carbonate • $1.5 \mathrm{H}_{2} \mathrm{O} ; 6 \mathrm{M}$ Hydrochloric acid
Equipment used: Lab Pro, pressure sensor, computer, 125 ml Erlenmeyer flask, rubber tube/stopper/valve, brain, 100 ml cylinder, thermometer, balance, plastic test tube.

Procedure: Create the apparatus shown in the picture below.


Use the Gay-Lussac lab set up
Don't tip the tube until the flask is sealed and you are ready to collect data.
(remember to release the pressure created by pushing in the stopper). Print the graph.

## Things to consider:

-Measure potential gas volume by using water.
-Will the total pressure measured be due only to the gas pressure?
-Would the volume of the tube be relevant?

Write-up: Show all math and give a written explanation of how you did the math. Prepare a computer generated graph of the time vs. pressure data. Calculate \% error.

