

Gas Laws Class work Handout Name: _____

The product of _____ and _____ of a sample of gas is a constant.

A sample of chlorine gas is collected at a pressure of 156.5 kPa. The volume of the gas is 1.450 L. what is the constant for this sample of gas? (pay attention to units)

Using this $PV = \text{Constant}$ concept, if the pressure is changed 10 different times (as in the table below), calculate how the volume changes? Fill in the Volume column now.

In the three small graphs here, label the three sets of axis lines as:

graph 1: mass as a function of volume;

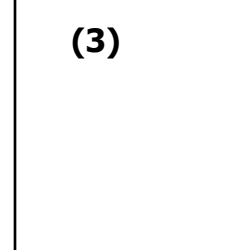
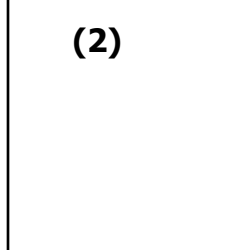
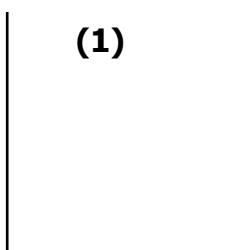
graph 2: distance as a function of time;

graph 3: height as a function of eggs eaten.

Use letters:

M & V, D & T, and H & E as labels.

Pressure (kPa)	Volume (L)
350.	
250.	
150.	
125.	
100.	
90.0	
80.0	
70.0	
60.0	
50.0	



Graph the data in the table above on the back of the sheet showing volume as a function of pressure. Connect the dots with a smooth curved line. Labels, units, and title are important to include on the back.

Make a graph below of the data in the pressure/volume table. Make your graph VOLUME as a function of PRESSURE.

Label the axes properly, title the graph, and connect the points with a SMOOTH curved LINE.

