

Graphing Assignment:

1. The volume of a gas decreases as the temperature of the gas decreases. A sample of gas was collected at 100 degrees Celsius and then cooled. The changes in the volume of the sample are shown below:

Temperature (°C)	100	80	60	40	30	20	10	0	-10	-30
Volume (mL)	317	297	288	278	252	243	236	233	227	202

Follow the "8 Steps to a Perfect Graph" to create a **hand-drawn** graph of this experimental data so that you can extrapolate to find the temperature that the volume of the gas will be 0. The temperature at which the volume of the gas reaches zero is the theoretical temperature of Absolute Zero. From this graph, what is the Celsius Temperature for Absolute Zero?

2. Using a timer and a metre-stick, drop a ball from various heights. Record the amount of time elapsed when the ball hits the ground. Use this data to construct a graph using MS Excel. What shape does the graph take? What type of relationship is this? If your graph is linear, calculate the slope.