

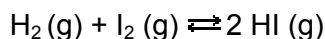
## Chemistry 30

## Unit 3: Chemical Equilibrium

## Assignment 1: 1-1 to 1-2

## Graphing Equilibrium Reactions

1. Hydrogen and iodine gas react to form hydrogen iodide in a reversible reaction. Concentrations of the reaction participants were recorded over time as the system reached equilibrium. This data is recorded in the following chart:



Time (s)	[H <sub>2</sub> ]	[I <sub>2</sub> ]	[HI]
0.1	0.11	0.11	0.01
0.2	0.08	0.08	0.070
0.3	0.06	0.06	0.110
0.4	0.05	0.05	0.130
0.5	0.05	0.05	0.130

Graph the change in concentration of [H<sub>2</sub>] and [HI] over time. Plot the concentration of both substances on the same graph. Concentration (M) will be on the y-axis and Time (s) will be the x-axis.

It is recommended that you use a spreadsheet program such as Excel or QuatroPro to create your graph, but you may create the graph by hand on graph paper if you like. If you're not sure how to use a spreadsheet to create a graph you may want to try to get some help from a local expert or follow the link to the Graphing Tips provided in the Chemistry 30 resources (online).

Your finished graph should look similar to the following. Remember to include a title for your graph and labeled axes:

