**Gen Chem Test #1 Review: Data Collection and Manipulation**

1. What are all of the characteristics of a good graph?

2. What is the independent variable in an experiment?

3. Why is it more correct to draw a graph using a best fit line than with a connect-the-dots?

4. Define the following terms:

* precision
* qualitative data
* significant figure

3. Convert 3.40 cm to inches. There are 2.54 cm in 1 in.

4. Convert 34 μm to mm.

5. Convert 405 degrees Celsius to Kelvin

6. How many significant figures do each of the following numbers have? What precision do they indicate? (2 pt each)

|  |  |  |
| --- | --- | --- |
| Measured value | Number of sig figs | Precision indicated |
| 3400 km |  |  |
| 0.03400 km |  |  |
| 3.040 x 103 km |  |  |

7. Give the symbols and numeric value for each of the following metric prefixes:

* milli
* centi
* micro
* kilo