Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Homeroom: \_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ **1.5**

**Comparing Graphs Homework (Inquiry 3)**

**Part I: Data Tables**

1. Create a *data table* for the following experiment: Farmer Joe from Knoxville, TN wanted to see how the amount of water was going to affect the height of his corn. When he added no water to his corn, the average height of his corn crops was 1 meter. When he added 10 mL of water to the corn, the average height was 2 meters. When added 20 mL of water to his corn, the average height was 3 meters.

2. What is Farmer Joe’s control group?

3. What would be some necessary control variables for his experiment?

4. What type of graph would you use to display this data?

5. What would be a good title for this graph?

6. What variable is graphed on the x-axis? What would that be for this experiment?

7. What variable is graphed on the y-axis? What would that be for this experiment?

8. What are the units for your independent variable? Dependent variable?

9. Create your graph with a title, labeled axes (with units), and plotted data points!

**Part II: Choosing Which Graph to Use**

*For the following experiments choose which type of graph (bar graph, pie chart, or line graph) you would use to display your data.*

1. Comparing homeroom science assessment scores
2. Seeing how Mr. Gates’ assessment scores have improved throughout the year
3. Discovering how much of Mr. Boggs’ classroom is blue
4. Observing the pH of various substances
5. Looking at the percentage of our atmosphere that is made up of oxygen

**Part III: Brainstorming for your “Experiment RAFT”**

1. What is your idea for your experiment?
2. What would be the independent variable?
3. What would be the dependent variable?
4. What would be some necessary control variables for your experiment?
5. What would be a good control group for your experiment?