

Name: _____

PRE-LAB #1
VARIABLES, MEASUREMENTS & GRAPHS

Before starting the laboratory session, be sure read *Investigation #1: Variables, Measurements & Graphs* and then answer the following questions.

1. What type of variable describes an attribute without numbers? With numbers?

2. Distinguish between the *independent variable* and the *dependent variable* in an experiment.

3. What is a *controlled variable*? What is the controlled variable for the example described in Fig. 1 and Fig. 2.

4. What are the three types of graphs that are described in this investigation? Which of these graphs would be most appropriate when plotting a general “classification?”

5. In **Part III-B** of this investigation, you will examine three particular variables in order to see how they affect the time period of a swinging pendulum. What are these three variables?

6. **Prediction:** Which of the three variables from the previous question do you think will have the most significant effect on the period of the pendulum? Why do you think that?