**Speed Lab**

**Names:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Directions:

This is lab to use the scientific method and test your speed. In this lab you will design and complete your own experiment. Your experiment should answer the question: **How do distance and time affect speed?** Use the steps of the scientific method to setup your experiment. Spend some time brainstorming and deciding what you want to calculate the speed of. Consider the following: What is speed, what measurements do you need to calculate speed, how could you get these measurements? Your group should have 3 variations of your independent variable and will have 3 trials for each variation.

Answer the following Prelab **Questions BEFORE YOU START YOUR EXPERIMENT?**

1. What is the Independent Variables?
2. What is the Dependent Variables?
3. What are some variables you would want to keep constant throughout your experiment? (at least 3)

**Title**

**Purpose/Question you are trying to answer.**

**Partners**

**Materials:**

**Hypothesis:**

**Write your own Procedure (Directions):**

**Draw a data table where you will record the information you collect during the lab. (your table should include room for distances and times, for all trials and variations of independent variable, and a place to calculate speed)**

**Results: Calculate speed, average, and create a distance-time graph**

**Conclusion:**

1. **Is your hypothesis valid or invalid?**
2. **Why? Support with data.**
3. **Errors of mistakes.**
4. **Improvements.**
5. **How do distance and time affect speed?**