

## Long form Lab (LF)

Number  
Name:  
Date:

### Title

**1) Objective:** *What are you trying to find out?*

*Why are you doing this experiment? Should be written in complete sentence as statement or question.*

**2) Research/What you know:** *May come from information given during class period, prior experience or reference books or sites.*

**3) Hypothesis:** *Your educated guess of what you think might happen in this experiment. Use an **if/then** statement. Ex. **If** the polar ice caps begin to melt, **then** the level of the water in the ocean will rise. Ex. **If** seeds need heat to germinate, **then** seeds will not germinate in the cold.*

**4) Experiment Procedure: Independent Variable:**

#### Dependent Variable:

*A controlled experiment tests only one factor at a time. In a controlled experiment, there is a control group and one or more experimental groups. All of the factors for the control group and the experimental groups are the same except for one. The one factor that differs is called the **variable**. An **independent variable** is the factor you change in the experiment. A **dependent variable** is what happens as a result of the change (this variable is determined by the change you make).*

*Be sure to state, in numerical order, all the steps taken to perform your experiment. Include any equations or formulas needed to assess data.*

**5) Data/Observations:** *This information describes what you observed during the experiment. Be specific and detailed. The information is represented by (or a combination of): pictures, written descriptions, tables, charts, and numbers.*

**6) Analysis/Questions:** *Organize what you have observed. You may want to use a table, chart or graph. This is also where you should answer any of the questions I list on your lab handout, or write on the board about your results.*

**7) Conclusion/Discussion** *Did the results of your experiment show that your hypothesis was correct or incorrect? What part of the lab procedure might have been a source for experimental error? How would you change your experiment to better answer your question? Do you have additional questions that your experiment didn't answer?*

**All lab write-ups must be complete, typed, with correct spelling and proper sentence structure.**