

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 internet sites. Actual resources should be noted.*

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 (manipulated) variable is the factor **you change** in the experiment. A dependent (responding) variable is **what happens** as a result of the change (this variable is determined by the change you make).*

Actual procedure used:

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. You may also need to use this area to review your data and determine what data you will actually use as evidence to support your conclusion.*

7) Conclusion/Discussion (see Lab Conclusion form) *Based on your evidence, how would you answer your original question/hypothesis? 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.