

Generic Lab Format

Title:

Short & concise, relates to the topic

Question/Purpose/Problem:

State what you expect to accomplish/test upon completion of this experiment. Why are you doing this experiment? What do you expect to figure out?

Hypothesis:

Write your hypothesis as a statement that describes the relationship between the variables and predicts the result of the experiment. Might be written as an "If...then" statement (not required). Hypothesis must be testable.

Variables and Groups:

List the independent and dependent variables. Describe the experimental and the control group. What variables must remain the same?

Materials:

List any materials or apparatus used in the experiment. Usually a bulleted list.

Procedure:

The procedure is the plan for how you will conduct your experiment. The procedure should be written as numbered steps. Be sure to use enough detail so that someone who has not seen or heard about this lab could come in and do the lab from your procedure. Diagrams of your set-up are a useful visual aid.

Observations/Data:

State what occurs during the experiment. What do you see, hear, and smell? Tables, graphs, and data are listed here. Data should be quantitative whenever possible. Make sure information is labeled. Label the units and degree of uncertainty in all tables. Example: cm (± 0.1)

Analysis:

Calculations are completed showing all steps and units. Analysis questions are answered using complete sentences.

Conclusion:

This is the most important part of the lab. Using the information gained in the lab, did you accomplish what you set out to do/learn? Was your hypothesis supported? Did your results match the accepted value (if accepted value is known)? If not, what could have happened to affect your results? What could you have done to improve your results? Was there any experimental error? Identify any questions or areas that you would like to further explore relating or expanding upon this lab. Please use paragraph form.