

Name _____

Formal Laboratory Report

Keep the Scientific Method in mind when doing any lab work.

All labs are to be typed and printed (no flash drives or e-mails). Calculations may be neatly written by hand in black ink. Data should be in a typed table.

Appearance matters!

Lab Title

Must be descriptive of the lab.

1. Problem

What question, problem, or concept are you investigating? Be specific.

2. Hypothesis

Make an educated guess that relates to the problem. The guess must be something that can be proven wrong in the course of your experiment.

3. Materials and Equipment Used

List everything you used or will use in the laboratory investigation.

4. Procedure

Detail each step that was performed in the experiment including deviations from the instructions. Use the past tense passive voice. Ex: "The copper on the outer rim of a post-1982 penny was filed away." Do not use the words "I" or "we". The focus is to be on the experiment itself, not the individuals who conducted it. It also is to describe what actually happened, not what the reader is supposed to do.

5. Observations, Data, and Calculations

Put your data in a data table and record all your observations below the data table. Plot the data if it helps you to see trends or better make conclusions. Show the set-ups for all calculations (even simple additions and subtractions). Anyone reading your lab needs to be able to follow your work and identify any math errors you may have made.

6. Conclusion

This has three parts: 1) Briefly summarize the lab. 2) Evaluate your hypothesis. Was it correct? What did you conclude from your data? 3) Evaluate the lab. What problems did you encounter that could have induced error? How would you change your procedure to make results more reliable and repeatable?

Parts 1-3 should be completed BEFORE you begin the lab if possible. Parts 4-6 should be completed during and after the lab.