Laboratory Write-Up Form (100 points)

Lab reports must be written in third person.

Prelab is stamped before the lab day. Prelab contains Parts I. – VI.

Every report will contain the following:

I. **Title of Experiment and Date (5 points)**

II. **Abstract** – Use the background information given on the lab worksheet/manual or research using sites or textbook. Summarize using 3-5 sentences. This sums up what the lab is all about. **(10 points)**

III. **Purpose and Hypothesis**- Using no more than two or three sentences, state the purpose of the experiment, and give your hypothesis. (Where appropriate, use an if/then format for stating the hypothesis). **(5 points)**

IV. **Procedure**- Create a Flow Chart of the lab procedure. Depending on the lab, you may need to develop all or part of your procedure on your own. **(10 points)**

V. **Prelab Questions**: Answer all prelab questions provided before the lab day. No need to copy the questions but answer in complete sentences. Annotate during post lab discussion using a red pen. **(10 points)**

VI. **Data** (**if there are**)- Organize your observations/data and present this information in the form of illustrations, drawings, graphs, tables and/or qualitative statements. All quantitative measurements must be labeled with units and descriptions. (**10 points**)

VII. **Calculations** (if there are) -Show all calculations used in the lab. If there are no calculations, write "none" in this section. (**10 points**)

VIII. **Questions**- Answer any questions given in the lab or by the instructor here. No need to copy questions but make sure to answer in complete sentences. Annotate during post lab discussion using a red pen. (20 points)

IX. **Discussion of Error**- Discuss 2 possible errors and the effects of any possible sources of error for the data analyzed in this lab. These are not errors you made but possible lab errors on technique or measurements that can skew the results. (**10 points**)

X. **Conclusion**- Using your own words write a conclusion. The conclusion has the following basic format and should be 2 to 3 paragraphs long. Please write in a paragraph form. (10 points)

   a. Claim: Restate your hypothesis; was it correct or incorrect?
   b. Evidence: What evidence is there in your data to support or not support your hypothesis? This is very important, as it connects your results to the conclusion.
   c. Reasoning: How does your data support the scientific principle explored in this lab? This is a research section. Use your text as one reference and you will need one additional reference beyond the text and the notes.
   d. Connections to the Real World: Explain how your results are related to something in the real world or answer questions about this.
   e. Further Experiment: Give an idea for an experiment that tests this concept further. You may not describe the same experiment with different materials.