Lab Report Format

Please follow the format listed below for your lab reports. Make sure the parts of your lab report are in this order and labeled.

**Title** of the experiment effects the purpose if the experiment.

**Purpose:**

The purpose of the experiment may be written as an objective or as a problem/question statement.

**Background information**

This is a summary of what you already know about the science topic using reliable and credible information. This information should lead to the formation of your hypothesis.

**Hypothesis**:

You are to write what you think the outcome of the experiment might be based on the background information you just described. Hypothesis must be realistic and logical and be able to be tested using a scientific procedure.

State the independent and dependent variable indicated by your hypothesis.

**Materials:**

What will you be using in this experiment? List each material. Quantities of each material should be included. Any item discussed in the ‘procedure’ should be listed in the ‘materials’ section.

**Procedure:**

A step by step set of instructions designed to test your hypothesis.

1. Experiment must be reproducible.
2. Each step described should be a single task.
3. Write as 1,2,3,4……… steps.
4. The last step is a description of how the data will be analyzed to determine whether the hypothesis is supported or rejected . Mathematical functions like average, mode, median, range, etc… are easy ways to analyze data sets.

**Data:**

Data collected will be strictly numerical, quantitative.

1. Data must be recorded in an organized manner and may include, but not limited to the following: data tables, graphs, labeled diagrams, figures, equations and calculations.
2. ALL data collected must be represented. This is commonly called ‘raw data’ as opposed to the analyzed (condensed) data.

**Conclusion:**

Most importantly, sum up this experiment in terms of the stated purpose and hypothesis.

* 1. How did your results compare to your hypothesis? Use data you collected in your experimental procedure to support or reject your hypothesis.
  2. What problems did you encounter in conducting your experiment? Discuss two changes that you would make in future to correct these procedural errors or shortcomings? Also discuss why these changes improve the experimental procedure.

**Works Cited:** A correct bibliography for articles used in your background information. **(if applicable)**

**Mechanics** Sentence structure, grammar, labeling, etc. will be evaluated.

**General Lab Report Rubric**

**Title** of the lab investigation is stated. 1 point(s) \_\_\_\_\_\_\_\_\_

**Purpose** is clearly stated and/or defined. 2 \_\_\_\_\_\_\_\_\_

**Background information** The information presented is written in TBD

such a way that demonstrates an understanding of the scientific

topic/purpose being investigated.

This section may or may not require cited references. TBD

**Hypothesis** is supported by background information 3 \_\_\_\_\_\_\_\_\_

Independent variable is correctly identified 1

Dependent variable is correctly identified 1

**Materials** used is complete and exact. 2 \_\_\_\_\_\_\_\_\_

**Procedure:** written in steps (1,2,3,4…) 1 \_\_\_\_\_\_\_\_\_

Steps in logical, chronological order 1

Procedure clear and complete 3

Last step describes data analysis 1

**Data** Raw data organized in a table. 3 \_\_\_\_\_\_\_\_\_

Data table is labeled correctly. 2

Simplified data is shown as a part of data table or

alternate graph. 5

**Conclusion**  Restate purpose and hypothesis. 1 \_\_\_\_\_\_\_\_\_

Discuss simplified data to support or reject hypothesis 3

Discuss two procedural improvements 2

Discuss purpose of procedural improvements 2

**Works Cited** A correct bibliography has been included. TBD \_\_\_\_\_\_\_\_\_

**Mechanics** Grammar and spelling are correct. 2 \_\_\_\_\_\_\_\_\_

Labels of report sections included. 2

Overall neatness of presentation of report. 2

When appropriate, complete sentences and 2

paragraphs are present.

**TOTAL: TBD \_\_\_\_\_\_\_\_\_\_**