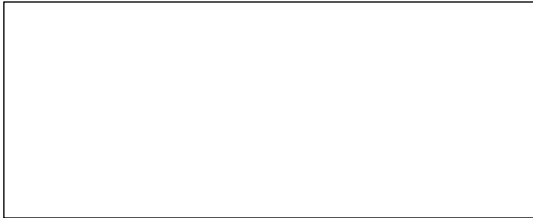


How to Write a Lab Report



General Guidelines:

- ❖ Remember, a lab report is a formal academic document. The font, formatting, and presentation should represent your most professional work.
- ❖ Always use a traditional font. A good rule of thumb is size 12, Times New Roman for all formal academic documents. Print in black ink and only use color to emphasize important information such as differentiating between variables in a graph.
- ❖ Include all steps of the Scientific Method. Be detailed in explaining each part (*How* did you develop your hypothesis? *Why* did you choose the variables you've selected? etc.).
- ❖ Be clear and specific in your word choice. Use scientific vocabulary. Avoid the use of pronouns, especially without antecedents.
- ❖ Include a coversheet with the following information:

Title of Project:
Research Question
Student Name
Grade/Class
School
City and State
Date(s) of Experiment

- ❖ Add additional information as an appendix to the report (an attachment at the end of the document).
- ❖ Use the attached template as a guide.

Title of Lab*(Title can be creative but should relate directly to the experiment)***Question:** *(What scientific question is the experiment attempting to answer?)*

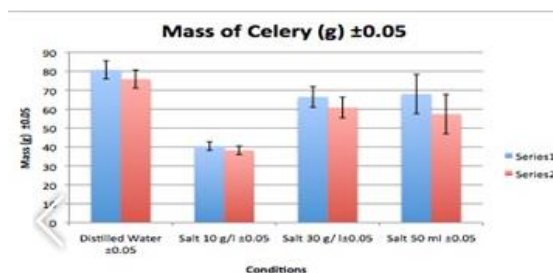
Hypothesis: *(Include an educated guess in “If...Then...Because...” format.)*

Materials: *(Make a bulleted list of ALL materials used, including quantities. It is a good idea to list materials in the order they are used during the experiment.)*

- Be sure to include quantities.
- For example, don't write, “Water”
- Write “1 cup of water” instead.
- If your list is long, use the *column* feature.
- This will help your list fit neatly on the page.

Procedure: *(Create a numbered list of all steps taken during the experiment.)*

1. “Gather Materials,” is an excellent first step.
2. Be sure your list is detailed and all steps are in the correct order.
3. A reader should be able to re-create your experiment exactly following the steps you have written.
4. Try to avoid personal pronouns (Ex. “I poured 1 cup of water into a large bowl” becomes “Pour 1 cup of water into a large bowl”).
5. “Clean up” is a good last step.

Data and Results: *(Record all observations and data collected in easy to read formats such as tables, charts, and graphs)***Conclusion:** *(Use paragraphs to analyze data and apply results to the real world.)*

Ms. Brown's Tips for Writing a Great Lab Report!



Be sure the **QUESTION**:

- Cannot be answered with a “yes” or “no.”
- Does not use personal pronouns.
- Can be researched through experimentation.

Check that the **HYPOTHESIS**:

- Answers the question with a researched-based educated guess.
- Explains *why* you're making this prediction.
- Uses “*If...Then...Because...*” format.

Make sure the list of **MATERIALS**:

- Includes quantities.
- Is written as a bulleted list.
- Fits neatly on the page (write the list in multiple columns if there are more than 6 items).

Ensure the **PROCEDURE**:

- Is detailed enough for your experiment to be duplicated.
- Includes all steps in the correct order.
- Is written as a numbered list.

The **DATA AND RESULTS** should:

- Include all pertinent observations.

- Be written in easy to read formats such as tables, graphs, and charts.
 - All tables, graphs, and charts should have:
 - A title
 - Labels for columns, rows, axis, etc.
 - Even intervals on graphs
 - Units of measure (seconds, cm, etc.)
- Include pictures with captions, especially if your materials cannot be brought to class.

A good **CONCLUSION**:

- Uses the BAM to recap the question and hypothesis.
- Tells if the data supported or disproved the hypothesis.
- Refers to specific observations/data to support claims
- Explains how the experiment may have produced data that was incorrect (sources of error).
- Describes how information learned during the experiment can be applied to the real world.
- Lists lingering questions about the topic OR information you would like to learn more about and why.