

WRITING LAB REPORTS

[in a Lab Book]



A lab report is a neatly written account of your experiment, as described below. It should be an impersonal account written in third person, with the exception of the conclusion. The report should be written with a pen. All pages should be of the same size with writing on only one side of each sheet, with no ragged edges. The report should have a title and should include the following information, with headings to begin each section.

Purpose/Objective:

A short statement giving the objective to be achieved by performing this experiment.

Hypothesis:

A statement predicting the results; usually written as an if-then statement, containing the independent and dependent variables.

Materials:

Should be two lists of materials, which are needed in the lab: list of chemicals and a list of equipment.

Procedure:

The procedure is an impersonal set of directions on how to perform the lab. It should include detailed directions. The directions should be such that if any person needed to perform the lab, they could use only your directions to guide them safely through it.

The procedure should not include:

- any personal nouns (I, we, you, us, . . .)
- any irregular event that went on specifically in your lab
- any calculations

Observations:

Some labs require certain observations of physical/chemical properties/changes. Such observations should be recorded.

Data Table/Graphs:

Data that is collected in the lab should be displayed accurately and neatly on a data table/graph. Graphs displaying data should be neat and accurate. Be sure to include units and labels. Each table and graph should be followed by a brief explanation.

Sample Calculation:

This section should **not** include all calculations but instead an example of each type of calculation needed to perform the lab. A sample calculation should show formulas and each step of the mathematical procedure used. Be sure to include labels and units.

[see back]

Conclusion: [The personal part of the lab write-up]

The conclusion of a lab report is the most personal part of the lab and has three different parts.

1. First give a detailed description of what you learned, including analysis of data, graphs, and observations. Be sure to restate and discuss the hypothesis.
2. Next write about what parts of the lab you would do different or would pay more attention to if you performed the lab over.
3. Finally you should relate the purpose of the lab to a real purpose. Tell why it might be necessary for a person to perform this sort of lab. Identify an occupation or industry which might need to make similar observations, calculations, and/or experimentation.

Things to be careful of while writing your report:

- Always date lab book entries
- Be sure not to erase or white out anything. If something is written down wrong, simply draw one solid line through it and correct it above or beside the mistake
- Be sure to include all parts of the lab report on the front side of the pages are for notes scratch pad, calculations . . .
- Be sure to number the pages
- Be sure to you conclusion is **not** short (i.e. more than one page) and contains all three parts
- Be sure all numbers have units and are written correctly, even on the data table

*If you complete the lab report ahead of schedule, the instructor will gladly look over your report and inform you of any mistakes, without deducting points from the grade.