



Writing a Lab Report for Mr. Noble's Chemistry Class

All lab experiments are to be recorded in the back half of your Lab Book (composition book). You should get into the habit of writing in ink; this will be a college requirement, although I won't make it mandatory. Spelling should be correct and grammar should be proper. You should also get into the habit of not using "white-out" for any errors but simply ~~cross-out~~ the error. This too is a college requirement. The lab report will have a minimum of 4 sections, 6 sections if a "Hypothesis" or "Calculations" section is required. The section names should be written in the margin (the left side of the red line) of your lab book. The sections are as follows:

Title

This section will include identifying information such as your name, the names of your partners, the date the lab was performed and the actual title of your investigation.

Target

The target, also known as the purpose, is a statement of the problem addressed by the laboratory experiment. It should also include the techniques that are going to be used and concepts that will be learned. In other words, it describes what you are trying to accomplish by doing this experiment.

Hypothesis & Variables *(If required)*

This is a complete sentence explaining what you think will happen during the experiment. Included with the hypothesis is a chart or list showing Independent, Dependent, & Controlled Variables.

Data

Make written notes about what you observe during your experiment, even if you are collecting primarily quantitative data. Be specific and concise. Each data table should be neat (rulers are required!). Your tables should be large enough to read easily. Columns and rows should be labeled and proper units and should appear with the labels. If a graph is required, this too should meet the above requirements.

Calculations *(If required)*

Any calculations should be done in a neat and organized section, not haphazardly in the margins. Your calculations **must** show all units!! You must also show all work involved. (Dimensional analysis) Any chemical equations must be properly written.

Conclusion & Reflection (Typically 3 paragraphs long)

In this section of your lab report, you will summarize the findings of the lab activity (should be closely tied to the target). You must evaluate the information you gathered. Try explaining the data by discussing the chemistry behind the results. Here are some things to think about:

What was the purpose of the experiment? What were your findings? Did the data support the hypothesis? What possible explanations can you offer for your findings? What is the error (or errors) in your data? Are there any unexpected results? If so, why are they there? Did you accidentally spill part of a reactant altering the volume needed? Did you wait too long during part of the lab procedure?

REMEMBER, it is not wrong to make mistakes during a lab procedure. However, it is **wrong** to falsify or misrepresent results! In essence, you are answering the question, "What did I learn by doing this lab?"

Integrity Signature

Sign the lab book indicating, even though you worked with others, the work in this report is authentic, solely yours.