

Title of Lab

Your Name

Physics _____ Lab

Instructor: Jason Haraldsen

Date

Purpose:

This is where you explain what the lab is about, what you are supposed to learn, and why it is important. This does not have to be very long. It can be just a couple of sentences. **DO NOT COPY THE LAB BOOK!!!** That plagiarism and it tells me nothing about what you learned.

Theory and Method:

All labs have a theoretical background. Here is where you describe that background. You should be using equations and formulas to help with your description. Make sure you are clear on what things stand for. It does not matter if your formulas are typed like this

$$F = ma = \frac{mv^2}{r},$$

or if they are hand written like this

It just matters that they are legible, understandable, and, most important, correct. You should make sure you show a logical progression of terms and formulas.

The second part of this section is the methods part. This is where you describe how the theory that you just described becomes reality in the experiment. You can describe the basic setup and the general procedure. You do not have to put down every single step like in the lab book.

Data and Calculations:

Here is where you put your data. There is a big difference between data and results. Mainly and most simply, data is the information from the experiment. It can be a plot or graph, or most likely a table of numbers and values. You can attach your data sheets to the lab report, but make sure that in this section you state, "See Attached". Otherwise there is no direction in the report.

The calculations are important for the overall understanding of your data. Here is where you give just a basic sample of some of the calculations you did. It does not have to be a long drawn out process.

Results:

As mentioned above, this is different than data. This is the barebones, overall results from your data. This is just a simple list of percentages and values that is the final information that you were looking for. If your purpose was a plot, then that is your result. If you have to determine a constant, then that is your result (make sure you include percent error or difference).

Discussion (or conclusion):

This is where you wrap everything up. You state your objective, what your results were, and what everything means. It is kind of repetitive, but it is necessary. Keep in mind that you have to consider that your lab report is your communication of the experiment you did. Every piece has to be able to stand on its own and provide the reader with the exact information they are expecting.

Questions:

Here is where you will put the questions from the end of the lab. Please pay attention, because weeks vary and sometimes they are required and sometimes not.