

# Lab Report Guidelines

Lab reports should be typed. Data sheets and graphs should be neat and readable.

At the top of the first page, the following items should be present:

- Your name
- The names of your lab partners
- The number of your lab section
- The date the lab is due
- The number and name of the lab

**Introduction:** Identify the purpose of the experiment. You must give some background information and include concepts demonstrated in the lab. Also, if you made any predictions on what the results will be, mention those here. In this section and the Procedure section, you should not be copying directly from the lab manual. Use your own words!

**Procedure:** In detail, explain how you obtained your data. Include the materials and equipment used during the lab. The important thing here is to say what you did, rather than just copying from the lab manual.

**Data:** All the data collected during the experiment should appear here. Using a spreadsheet is a nice way of organizing your data. You also include graphs here. Each graph needs a title, and both axes of the graph need a label. Do not do any calculations in this section.

**Results and Discussion:** This is where you answer the questions that are asked in the lab manual and do any calculations. Answer the questions in paragraph format, not in a list. You need to show all of your work and show all the calculations that you made.

**Error Analysis:** Discuss whether your results make sense. When available, compare your results to accepted values. In addition, identify any sources of error, and describe how these affected your data. Note: Do not just write "human error" as your source of error.

**Conclusion:** Comment on how you fulfilled the purpose of the lab. If you made a prediction before you began the lab, then talk about whether your prediction was correct or not. Refer back to the "Introduction" section, and mention how this lab demonstrates the major concepts that you learned. Also, tell me what you thought of the lab. Did you learn anything? Is there something we should change?