

Lab Notebook

- The notebook should include information about the objective of the experiment. What is the point of the experiment? What are you trying to learn? Include an introduction to the experiment.
- The notebook should include information about the procedure. What equipment did you use? How did you put it all together? Pictures almost always important. If you measured something, you should explain what equipment was used and how the measurement was made.
- The notebook should include all of the data that you take. Tables are very useful. You may start a table and find you need more columns. It is ok to start over. If you use variables, define them. As you take data, think about how you are going to estimate error. For each type of measurement, you should include how you are going to estimate the error. What is the uncertainty involved in the measurement. If you can graph your data, include graphs as well.
- Write down anything you observe during your experiment. Does the experiment lead you to ask other questions? Do you have trouble with any equipment? If so note your difficulties and how you solve them.
- Your analysis should be included in your notebook. You should use your notebook to record any calculations you make. You should include graphs of your data. You should indicate what conclusions you can draw from the graphs of your data.
- You should include a conclusions section that indicates what the overall results are, that summarizes the conclusions that you can draw from your experiment, and that describes issues with the experiment and how you might improve on it if you were to repeat it. Your analysis might include sample calculations and graphs. If you include a graph, you should explain what the data means. Why is the graph useful. What do the calculations tell you.