

## Lab Writeups

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You must keep laboratory notebooks. The lab notebook must be one that makes a carbon copy. The purpose of a notebook is to be able to look at the experiment at a later time and be able to figure out just what procedures were performed. Results should be put into the notebook directly, and the dates of the experiments listed. Notebooks, of course, should be legible, but need not be immaculate. Grading will not be done on neatness, however, if I cannot read or find the necessary information in the notebook, you will be graded down. For each experiment, the following outline will be used in evaluating your notebooks:

- **Introduction:** For each experiment, you should prepare a **short** summary of the experiment and its objectives. Short means *not more than one page*. This introduction should **not** be identical to or a paraphrase of the introduction in the experiments that are handed out.
- **Materials and Methods:** The procedures and quantities used are usually noted in your notebooks while doing the experiment. For the methods, you can use paste a copy of the handout in the notebook, but be sure to note any changes from the handout.
- **Results:** Calculations and observations performed during or after the experiment should then be listed.
- **Conclusions:** Explain your results here. Indicate how you could have improved the experiment and why it might not have worked as expected. The conclusion *must* include suggestions for improving the lab. If the lab worked, you should suggest changes that will make the experiment work even better. If the lab didn't work, explain why it might have failed and how you might fix the experiment the next time.

You are expected to do your own notebooks. If you get any ideas or data from somebody else or some other group (verbally, in the literature, etc), *be sure to cite the source*.

**NOTE:** A list of questions accompanies each handout. These are listed to give you an idea of *what* to cover in your Results and Discussions. You will need to include other things, as well.

Notebooks are due by the beginning of lecture on Friday, one week after finishing the lab. Late notebooks will have points deducted (one point per day late).