

Introduction to Natural Science, Winter 2007

Chemistry Laboratory Notebook Procedure for Winter Quarter

During the fall quarter we learned how to record information from the lab in our lab notebooks and how to analyze them to reach useful conclusions. It is now time to improve the quality of our lab notebooks. We will follow the following procedure in the winter quarter. I urge you to use the same lab notebook from fall quarter.

- Do your pre-lab as before on a separate sheet and bring to lab.
- Staple the lab write-up to the left hand side of your lab notebook (if you are left handed you may switch sides).
- While in lab, record all your data on the left hand side of your lab notebook.
- After you go home, transfer your data and do your analysis on the right hand side of your lab notebook. The right hand side should look clean, neat, and professional. It must contain only complete sentences or complete mathematical statements. ***If this is not done, your lab notebook will not be graded and will be returned to you to follow instructions.***

Example:

“**bead = 5.4687g**” is not a complete sentence

“**Weight of malachite bead = 5.4687g**” is a complete mathematical sentence

“**Color is red**” is not a complete sentence. “**The color of my reactant was red.**” is a complete sentence.

Include the following sections on the right hand side of your lab notebook

Date: Be sure to put the date of your lab. While this is not as important in INS, it is critical that you put the date down in any lab notebook so you can establish the date on which an experiment was done. A good habit is learned early!

Title: make up an appropriate title for your lab that is descriptive of the experiment you are doing. You will need a separate title for each experiment.

Data and Observations: This section should include all the data (mathematical and otherwise) you collected in the lab and all the observations you made while in the lab. Drawings of the experimental setup will be included here.

Calculations: This is where you analyze your data using the data you collected in the lab. Graphs will be included here.

Conclusions: Use your analysis to draw conclusions. The reader should get a clear understanding of what you were planning to accomplish in lab and whether or not you were able to accomplish it. If you were unable to reach your goals, describe why. If you were able, describe how well you were able to do so. Suggest improvements when ever possible.

As always, this will be a learning process. I will work with you to help you make your lab notebooks look more professional.