The Laboratory Notebook Guidelines



A laboratory notebook should be used to record all laboratory observations, collect data, and show how calculations were made. It is the record of your work and should be used when writing your lab report. So, it is important that your notebook be used routinely as the <u>primary recipient of observations</u> and be completely honest.

If the experiment works, everything in the notebook needs to be 100% true so that others can reproduce your results. If an experiment doesn't work, an accurate record can save others hours of time by showing them what doesn't work.

The record of a researcher's laboratory work is an <u>important document</u>, which will show the quality of the laboratory work performed. As you record information in your notebook, keep in mind that someone who is unfamiliar with your work may be using this notebook to evaluate your laboratory experience in chemistry. When you explain your work, list your data, calculate values and answer questions, be sure that the meaning will be obvious to anyone who reads your notebook.

"Think first, and then write" should be your motto.

NOTEBOOK SET UP

- 1. Use a composition book with a sewn binding and quadrille pages as your lab book.
- 2. Write your name and Chemistry on the front cover.
- 3. Write in blue or black ink. Use only the right hand pages for your records and use the left hand pages as scratch paper for preliminary notes, calculations or a quick graph.
- 4. On the first page include the following information: the name of the researcher the name of the institution the date the notebook was started and finished complete contact information in case the notebook is lost
- 5. Save the next two pages for a Table of Contents. This should be kept current as you proceed. Each time you write up a lab, place the title, date and page number of the lab in the Table of Contents.
- 6. In ink, number all the right-hand pages on the lower right corner if they are not already numbered. If you are left-handed, you may use the left pages instead of the right if you wish.

7. If you make a mistake **DO NOT ERASE OR USE WHITE OUT**. Just draw ONE LINE through your error, and continue. It is expected that some errors will occur. You will not produce a perfect, error-free notebook.

PRE-LAB PREP

Before you come to the laboratory your lab notebook should be prepared with at least the following information ready to be used:

- 1. **Title** The title should be descriptive.
- 2. Date The date you performed the experiment.
- 3. **Purpose** A brief statement of what you are attempting to do.
- 4. Materials A list of the things used to perform the activity.
- 5. **Procedure** A description of the method you are using.
- 6. Data tables Have tables and lists ready to go.

POST LAB

After you have performed the lab and collected all the necessary data you need to finish the lab with the following:

- 1. **Observations** Record all observations directly into your lab book.
- 2. **Graphs** Graphs should be large, neat and properly labeled.
- 3. **Calculations** All calculations should be neat and shown to justify your work.
- 4. **Analysis** Discuss what you observed, give your opinion and be sure to give the reasons for any errors you might have encountered.
- 5. **Conclusion** Interpret the results of the experiment. Don't repeat the discussion or the procedure. What was demonstrated?
- 6. **Questions** Answer all the questions with complete sentences.

GENERAL COMMENTS

- Do not decorate the lab book, errors, or reports.
- Use a ruler to draw tables and graphs.
- Be aware of large writing. You may need to obtain another lab notebook.
- Don't be wordy.
- Don't paste.
- Don't use white out.
- Don't ever tear out pages.

"People remember how well you did it, not how fast."