Lab Notebooks

Lab Notebook Etiquette

- Write in pen!
- Be as neat as possible.
- Neatly cross out mistakes with a ~~single line~~. No scribbling out errors or using white out! If you make a mistake, I need to see it. You will not be penalized for mistakes.

Table of contents

This should be the very first page in your notebook. As you start each lab, add it to this table.

Lab Report Components

Header (2 pts)

This must include the date the lab was performed as well as your partner's name.

Title (2 pts)

This should be relevant and scientific.

Purpose (2-5 pts)

State the purpose of the lab in your own words. What is your motivating factor? What conclusions should I draw? This is clear and concise. If the purpose is not given to you, develop one after you read the lab.

Materials

List all the materials required for the lab in bulleted form. Specify which items you will need. Include amounts needed (ie 5 g of NaCl)

Pre-lab questions (5-10 pts)

Answer the questions.

Procedure (5-10 pts)

Cut and paste the procedure if it is given to you.
If you develop your own procedure, summarize all the steps you followed in the lab so that your procedure can be replicated. This can be in bullets/steps.

Data and observations (10 – 20 pts)

ALWAYS include qualitative and quantitative data. Use a data table when appropriate. Don't forget labels and units! Include scientific descriptions where applicable.

Calculations and graphs (10 – 20 pts each)

Include all necessary calculations with units. *SHOW ALL WORK*! Circle or box your answer
Graphs must follow good graphing guidelines. Use graph paper! Attach your graph to your lab.

Questions (10 – 20 pts)

Answer all questions thoroughly and accurately.

Analysis and conclusion (10 pts)

Discuss your results in a paragraph. Was your purpose met? What scientific conclusions can you draw? Use your results and questions to support any statements. How close to the correct answer are you (percent error/yield, if applicable)? Discuss possible sources of error (*NOT* "human error") and how they could have affected your results. Include a logical extension of the experiment for further experimentation or research.