WRITING A FORMAL LAB REPORT

Laboratory activities are one of the best ways a student can become exposed to scientific material in Chemistry! Writing a formal laboratory report encourages the student to "wonder" and "think critically" and record their findings in a narrative form.

Name
Date
Block # / Color

Lab Title

I. Purpose

II. Procedures

III. Data

IV. Questions

V. Conclusion

Here are some specifics on each of the above areas:

I. Purpose
- The purpose should be 1 or 2 sentences that concisely state the point of the experiment.
- When necessary, the *hypothesis* is included in this section.

II. Procedures
- List form of the procedures followed when conducting the activity.
- Write the list so that another person would be able to conduct the lab from your procedures!!

III. Data & Observations
- Section of lab report where the data collected will be documented
  - i. Calculations
  - ii. Measurements
  - iii. Units
  - iv. Tables and Graphs
  - v. Drawings

IV. Questions
- Answers to questions pertaining to the lab in complete sentences
- **Restate** the question and then thoughtfully answers the question

Ex) 1. Q: ~~~~~~~~~~~~~~~~~~~~
A: ----------

V. Conclusion
- Brief analysis of what was accomplished during the lab should be stated.
- Items in the purpose should be discussed
- Discuss possible sources of error in the lab
- Focus on results, not procedures
- "Third Person" statements
- Most important part of the lab report!

No Conclusion = No Credit

Miscellaneous requirements:
- Front side of paper only
- Written in pencil or typed (EC for typed)
- All sections should be in chronological Roman numeral sequence
- No "dead space" should exist between sections
- All lines drawn in the report should be done using a ruler
- Ragged spiral edges should be cut off the paper and should have no tears.

SPECIAL NOTE:
As always...**plan ahead** by completing the *Purpose and Procedures Sections* **before** you come to lab. Please be ready to hand in your report at the beginning of class on the assigned due date. It is unacceptable to come to class and expect to "print" the report at that time ☹

Multiple Copies Policy

It is important that students do their own individual work! During these modern times of computers the internet, students sometimes feel it is ok to word process their work and then let their lab partner or another student run a copy of the same lab report or assignment.

This will not be acceptable. Multiple copies or any type of "copy" will result in both (all) parties receiving a **ZERO** for the assignment. This also includes photocopies or copies where the font size or selection has been changed.

Chemistry Lab Report: *Grading Rubric*

Student's Name: _____ Lab # and Title: _____

Partner's Name: _____

CATEGORY				
Format	Lab uses headings and subheadings to visually organize the material and *completely adheres to format.* 4	Lab report uses headings and subheadings to visually organize the material and *mostly adheres to format.* Ex. Wrong order, Ruler for lines 3	Lab report formatting does not help visually organize the material and *somewhat adheres to format.* Ex. Writing on back of Paper, Not restating Questions 2	Lab report looks sloppy with cross-outs, multiple erasures, tears, creases, and/or *does not adhere to format* 1 0
Purpose	N/A	N/A	The purpose of the lab or the question to be answered during the lab is clearly identified and stated. 1	The purpose of the lab or the question to be answered during the lab is erroneous or irrelevant. 0
Procedures	N/A	N/A	Procedures are listed in clear steps. Each step is numbered and is a complete sentence. 1	Procedures do not accurately list the steps of the experiment. 0
Data	*Professional looking* and accurate representation of the data in tables and/or graphs. Graphs and tables are *labeled* and *titled.* 6 5	Accurate representation of the data in tables and/or graphs. Graphs and tables *are not* labeled and titled. 4 3	Accurate representations of the data in written form, but <u>no graphs or tables are presented</u>. 2 1	Data inaccurate with no graphs or tables presented. 0
Questions	Prepares <u>all</u> answers neatly and correctly, using proper sentences as needed, and shows all needed calculations with proper units. 8 7	Prepares <u>most answers</u> neatly and correctly, using proper sentences as needed, and shows many needed calculations with proper units. 6 5	Prepares <u>some answers</u> neatly and correctly, using improper sentences, and often fails to shows needed calculations with proper units 4 3	Prepares <u>few answers</u> neatly while using improper sentences, and fails to show relevant calculations with proper units 2 0
Conclusion (Analysis of Results)	Focuses on analyzing results, not restating procedures. Conclusion includes whether the findings supported the purpose, identifies possible sources of error, and explains what was learned from the experiment. 10 9 8	Focuses on analyzing results, not restating procedures. Conclusion includes whether the findings supported the purpose and what was learned from the experiment, but sources of error were missing. 7 6 5	Focuses on procedures instead of results. Conclusion includes what was learned from the experiment, but lacked a thorough explanation of results 4 3 2	Shows little effort and reflection or *no conclusion provided.* 1 0