

## CHEMISTRY LAB REPORT GUIDELINES

In order to write an exceptional lab report you will need to include the following sections, making sure to follow the guidelines listed. Note: Many lab reports will not include each section mentioned below.

### 1. NAME, DATE, PERIOD

*Your name, Your lab partner's name, the date the lab was performed, and your class period.*

### 2. TITLE

*The title of the lab*

### 3. PURPOSE

*The purpose(s) / objective(s) of the lab*

### 4. INTRO MATERIAL / NOTES

Occasionally you will be required to record some notes before proceeding with the lab.

### 5. EQUIPMENT & MATERIALS

*The equipment and materials used to accomplish the lab*

*If a written procedure is required, all materials must be underlined!*

### 6. PROCEDURE

*The step by step procedure used to complete the lab*

Be specific. Write the procedure so that others who read it, can perform the lab using your description of the steps involved. *If a written procedure is required, all materials must be underlined!*

### 7. DATA

*All pertinent measurements and observations*

Record all your data using appropriate descriptions for qualitative data, and using appropriate units for quantitative data. When appropriate, include space for derived / calculated data as well.

### 8. GRAPHS

*Graph(s) showing important relationships discovered in the lab*

If your data lends itself to a graph, then plot it on graph paper. Give all graphs a title and label each of the axes, including the units. If you choose to complete the graph manually (without the aid of the computer), you must scale the graph appropriately, so that your graph makes use of 75-90% of the graph paper.

### 9. CALCULATIONS

*All necessary calculations required to accomplish the purpose of the lab*

Show all of your work, and remember to include appropriate units throughout each calculation (not just on the answer). If you are using some mathematical equation (e.g.  $D=M/V$ ), then write the general equation before proceeding with your calculations. Always circle your final answer!

### 10. ANSWERS TO QUESTIONS

*Answers to pertinent questions which require extensive knowledge of what took place in the lab*

Answer all questions using complete sentences. Answer each question thoroughly.

### 11. ERROR ANALYSIS

*Discussion of possible errors which took place*

This section must address errors you might have committed while performing the lab, and what specific effect these errors would have on your data and on your calculations. Be specific. Never use the phrase "human error." It is far

too vague to have any real meaning. Also, when appropriate, calculate your percent error in order to quantitatively describe your error.

***TURN OVER FOR MORE***

**12. CONCLUSION/SUMMARY**

*A concluding paragraph which summarizes what was accomplished in the lab*

Your conclusion must summarize what you discovered in the lab. The purpose(s) of the lab should be re-addressed in this section. Discuss any equations or principles which you used or learned during the lab. Make references to class material and notes and how it relates to the lab exercise. Finally, discuss the necessary mathematics involved in accomplishing the purpose.

**FINAL REQUIREMENT**

Staple any lab handouts to the final report, so that you will be able to determine “what you did” as you study for tests and quizzes. Your lab report will be marked down for not including these handouts. This is **REQUIRED**.