

## **Chemistry Laboratory Report Format**

The following shows all of the information that should be included in the final report for each experiment during the semester. **This is due the week following the completion of the experiment!** It may be typed or filled out in your carbon copy notebook. One copy is completed per lab group. If a section is not needed, label it with the heading and write “N/A”. Your grade will be determined as described in the rubric at the end of this document.

### **Heading:**

- Full experiment title
- Name(s) of all students in the group
- Date of experiment

### **Purpose:**

In your own words, describe how this experiment improves your skills in the lab, and how the experiment relates to the material taught in the lecture. This should be done using complete sentences.

**Data:** This section is a summary of all data and observations recorded during the experiment.

- To show data:
  - Use an organized table
  - Group data by section (for experiments with multiple parts)
  - Label all data (masses with “g”, volumes with “mL”, etc.)
- Write short, concise statements of observations and changes seen in the experiment.

### **Calculations:**

When applicable (not every experiment has calculations), show one sample calculation for each type of calculations. For example, if you made several solutions and then calculated their concentration, show one of those concentration calculations in detail here. It will be assumed that the other concentrations were calculated the same way. (If you type out the report, it may be easier to leave blank space and just write in the calculation here or include an extra sheet of paper with the calculations done by hand. You may also type the calculations.)

### **Discussion:**

This is a written interpretation and analysis of the experiment and its results written in paragraph format and with complete sentences. To aid you in this writing, consider answering these questions (These questions are not an exhaustive list!):

- Did the experiment work as expected?
- What were the results? How does your data relate to the results of the experiment?

- Did you make the product you expected? How much product did you obtain (use the actual numbers)?
- Was there experimental error? How did this affect your results?
- Did the experiment relate to the purpose you wrote for the experiment?
- Are there any improvements, by your or in the procedure, that could have been made?

**Questions:**

Answer any of the questions at given in the lab manual at the end of the experiment.

**Citations:**

**Any information that you looked up, such as boiling points, definitions, or anything else that you did not know off of the top of your head, should be cited.** Please cite this in **MLA format**. The following link has a guide for properly citing sources in MLA format.

<http://www.dacc.edu/library/UsingMLAFormat.pdf>

**Signatures:**

All students listed in the “Heading” section should sign the report saying that they *actively* participated in the preparation of the lab report. If a student does not sign, they are forfeiting their points for this experiment.

## Chemistry Laboratory Report Rubric

Section	Requirement	Points Earned / Total
Heading	<ul style="list-style-type: none"> <li>Title</li> <li>Names</li> <li>Date</li> </ul>	____ / ____ ____ / ____ ____ / ____
Purpose	<ul style="list-style-type: none"> <li>Uses complete sentences</li> <li>Describes skills gained from experiment</li> <li>Relates experiment to material/principles from lecture</li> </ul>	____ / ____ ____ / ____ ____ / ____
Data	<ul style="list-style-type: none"> <li>Organized and easy to read</li> <li>Uses labels for all numbers</li> <li>It is clear what the data is for</li> <li>Observations</li> </ul>	____ / ____ ____ / ____ ____ / ____ ____ / ____
Calculations	<ul style="list-style-type: none"> <li>Work for calculation(s) is shown</li> <li>Calculation(s) is correctly done</li> <li>Calculation(s) are labeled</li> <li>Units are shown</li> </ul>	____ / ____ ____ / ____ ____ / ____ ____ / ____
Discussion	<ul style="list-style-type: none"> <li>Written in paragraph form</li> <li>Correct grammar/spelling and in complete sentences</li> <li>Describes the results of the experiment using actual numbers to support discussion</li> <li>Explains results of experiment</li> <li>Discusses any experimental error and the effects of this error on the results</li> <li>Relates experiment to purpose</li> <li>Improvements to experiment</li> </ul>	____ / ____ ____ / ____ ____ / ____ ____ / ____ ____ / ____ ____ / ____
Questions	<i>This section changes based on the experiment.</i>	
Citations	<ul style="list-style-type: none"> <li>Citations are given in MLA format</li> <li>Information is from a credible source (not Wikipedia)</li> </ul>	____ / ____ ____ / ____
Signatures	All students named in the heading have signed.	____ / ____
	<b>Points Earned / Total Points:</b>	____ / ____