General Chemistry Laboratory Report Rubric

Sections:	Sub-Sections / Descriptions:	Total:
Introduction	**Background:** A summary of real world example(s) and application(s) that affirm the importance / helps introduce the chemistry of this lab. ***Note:*** Do not use the examples in the lab manual. No credit will be given.	/ 3
	Theory: Overview of key scientific concepts / theories that explain how the experiment works.	/ 3
	Hypothesis / Objectives: A hypothesis (1-2 sentences) that states what you believe the overall outcome of the lab should be. This should be followed by the objectives for each part of the lab experiment and a summary on how these will be carried out.	/ 3
Methods	**Part 1 Methods:** This section should contain all of the details recorded in your notebook on how the experiments were carried out. This includes numerical details such as mass, volume, temperature, reaction time, etc.	/ 3
	Part 2 Methods: See the description for Part 1 Methods.	/ 3
	Safety: Should contain information on the chemicals used in this experiment and the necessary precautions taken when using them. There should also be information on any other physical hazards (i.e. fire, sharp objects, etc.) and the precautions you took.	/ 3
Results	**Part 1 Results:** This section should contain all of the data you obtained from the experiments that you performed in week 1. The data should be tabulated, graphed, etc. to make it easy to refer back to in your discussion. Hence, each table, graph, etc. should be numbered / titled appropriately.	/ 3
	Part 2 Results: See the description for Part 1 Results.	/ 3
	Calculations: Show the calculations used in this experiment. For each type of calculation performed, this should include the formula and a sample calculation using that formula.	/ 3
Discussion	**Part 1 Discussion:** This portion of the paper should attempt to explain all of the results from the experiments in weeks 1. You should also justify why certain decisions were made when carrying out the experiments (i.e. if there were options for techniques to be used, compounds to be tested, etc.)	/ 3
	Part 2 Discussion: See the description for Part 1 Discussion.	/ 3
	Sources of Error / Changes to the Experiment: Discuss any major sources of error in the experiment that may have altered the experiment's outcome. Also, discuss any changes you would make to the experiment (to reduce errors, make the experiment more practical, etc.) and explain why.	/ 3
Conclusion	This section should have the experiment's hypothesis / objectives restated and a summary on whether it was affirmed or denied by your data. If there were any major sources of error that could have given unexpected results, this should be briefly discussed here too.	/ 3
Research Connection	This section should summarize an article (published in an accredited scientific journal) that is related to the experiment that you carried out. You should describe the technique(s) used in the article, the motivations for performing the experiment(s), the main findings, and how these factors relate to the experiment you performed.	/ 3
References	Anything that is not your own idea should be cited! Please use **ACS (American Chemical Society) format** and have both an in-text citation, as well as the full citation under the references heading.	/ 3
Overall Format	All sections / subsections, tables, charts, images, etc. headed appropriately. Use a font / text that is agreeable to the eye (ask your TA for any specifics). All sections (except the results section) should be written in paragraph form. Also, all writing should be in past tense and passive voice. Present or future tense may be used **only** in the Introduction.	/ 5
Total Score	50	/ 50