Chemistry Laboratory Rubric: Note: In some labs you will be graded on your results. At times, in both in a Chemistry class, in life, and when growing fruit, you must produce.

	Beginning	Developing	Accomplished	Exemplary
Pre-Lab Basics	o Lab report <i>has not</i> demonstrated clear communication, objectives and hazardous materials assessment.	o Lab report with <i>somewhat</i> clear communication, objectives and hazardous materials assessment.	o Organized lab report with <i>mostly</i> clear communication, objectives and hazardous materials assessment.	o Organized and professional lab report with clear communication, definitive objectives and thorough hazardous materials assessment.
Procedure /Flowchart	o Lab could not be reproduced if procedure repeated by an outside party.	o Lab could be <i>somewhat</i> reproduced if procedure repeated by an outside party.	o Lab could be <i>mostly</i> reproduced if procedure repeated by an outside party.	o Lab would be reproduced if procedure repeated by an outside party.
Data	o Data is incomplete.	o Data is somewhat complete.	o Data is <i>mostly</i> complete.	o Data is complete.
Calculations	o Calculations <i>have not</i> communicated understanding of the concepts covered in this lab.	o Calculations <i>somewhat</i> communicates understanding of the concepts covered in the lab.	o Calculations <i>mostly</i> communicates understanding of the concepts covered in this lab.	o Calculations <i>clearly</i> communicates understanding of the concepts covered in this lab.
Graphs	o <i>Does not</i> demonstrate the relationship between variables.	o Somewhat demonstrates the relationship between variables.	o <i>Mostly</i> demonstrates the relationship between variables.	o <i>Clearly</i> demonstrates the relationship between variables.
Discussion	o Discussion questions are not answered completely and do not connect concepts explored in lab to theory.	o Discussion questions somewhat answered completely and somewhat connect concepts explored in lab to theory	o Discussion questions are <i>mostly</i> answered completely and <i>mostly</i> connect concepts explored in lab to theory.	o Discussion questions are answered completely and connect concepts explored in lab to theory
Conclusion	o Conclusion is incomplete and/or does not demonstrate an understanding of the concepts covered in this lab.	o Conclusion is complete and demonstrates some understanding of the concepts covered in this lab.	o Conclusion is <i>mostly</i> thorough, demonstrating an understanding of the concepts covered in this lab.	o Conclusion is thorough , demonstrating a strong understanding of the concepts covered in this lab.

Pre-Lab:

- includes all of the following: Subject, Unit, Name, Partner's Name, Date of Lab completion
- title that reflects the purpose of the lab
- purpose that clearly identifies objectives of the lab
- all materials are listed and all Hazardous Materials are listed in HEM

Procedure/Flowchart:

- excellent organization
- clear and concise
- includes diagrams/pictures of apparatus' used throughout the lab
- all steps are included and flow from one step to the next

Data:

- tables are well-organized
- proper sig-figs and uncertainty
- includes units
- includes label/heading
- multiple trials for each point if applicable

Calculations:

- ordered in a stepwise fashion
- includes correct units
- calculations are free from errors

Graphing:

- title follows x vs. y for "process being analyzed"
- axis labelled with units
- lines/curves of best fit include equation
- line of best fit is not "forced" through the origin

Discussion/Conclusion:

- questions are answered completely and connect to theory
- all answers demonstrate a thorough understanding of the concepts

Conclusion:

- conclusion answers purpose by comparing key results to predictions/hypothesis (supported/no supported)
- connects to big picture and asks new question questions and suggests new experiments

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