Physics Lab Report Rubric

Criteria	1	2	3	4	5
Purpose	• Purpose is not identified • Relevant variables are not described	• Purpose is somewhat vague • Relevant variables are not described	• Purpose is identified • Relevant variables are described in somewhat unclear manner	• Purpose is identified • Relevant variables are described	• Purpose is clearly identified • Relevant variables are described
Hypothesis (optional)	• Predicted results and hypothesized relationship between variables not stated	• Predicted results and hypothesized relationship between variables are unclear	• Predicted results and hypothesized relationship between variables stated and appear reasonable	• Predicted results and hypothesized relationship between variables stated	• Predicted results and hypothesized relationship between variables clearly stated and reasonable
Materials (optional)	• There is not a list of the necessary lab materials	• Most lab materials included	• All necessary lab materials included but not listed in any particular order	• All necessary lab materials included and listed	• All necessary lab materials included and listed in an organized manner
Procedure (optional)	• Procedures are not listed	• Procedures are listed but not in clear steps	• Procedures are listed in clear steps but not numbered and/or in complete sentences	• Procedures are listed in clear steps • Each step is numbered and in a complete sentence	• Procedures are listed in clear steps • Each step is numbered and in a complete sentence • Diagrams are included to describe the set-up
Data	• Data is not represented or is not accurate	• Data lacks precision • Greater than 20% difference with accepted values	• Good representation of the data using tables and/or graphs • Less than 15% difference with accepted values • Precision is acceptable	• Accurate representation of the data using tables and/or graphs • Data is fairly precise • Less than 10% difference with accepted values	• Accurate representation of the data using tables and/or graphs • Graphs and tables are labeled and titled • Less than 5% difference with accepted values • Data is precise
Analysis	• Trends/patterns are not analyzed • Questions are not answered • Analysis is not relevant	• Trends/patterns are not analyzed • Answers to questions are incomplete • Analysis is inconsistent	• Trends/patterns are logically analyzed for the most part • Questions are answered in complete sentences • Analysis is general	• Trends/patterns are logically analyzed • Questions are answered in complete sentences • Analysis is thoughtful	• Trends/patterns are logically analyzed • Questions are answered thoroughly and in complete sentences • Analysis is insightful
Error Analysis (optional)	• There is no discussion of experimental errors	• Some experimental errors are identified	• Experimental errors and their effects are discussed	• Experimental errors are determined • Their effects are discussed	• Experimental errors are determined • Their effect and ways to reduce errors are discussed
Conclusion	• No conclusion was included or shows little effort and reflection on the lab	• A statement of the results is incomplete with little reflection on the lab	• A statement of the results of the lab indicates whether results support the hypothesis	• Accurate statement of the results of the lab indicates whether results support the hypothesis • Possible sources of error identified	• Accurate statement of the results of lab indicates whether results support hypothesis • Possible sources of error and what was learned from the lab discussed