

Lab Report Rubric

Experimental Design Rubric		Got it?	Grading
Question or Problem	Problem is clearly stated in a format similar to "How does X affect Y?," making independent variable (X) and dependent variable (Y) clear.		Mastery = all requirements met
Hypothesis	Hypothesis clearly predicts the relationship between variables		Proficient = missing 1-3 components
	A logical justification, or rationale for the hypothesis, is provided.		Basic = missing more than three components
Procedure	Presented in a logical list of steps others could easily follow		
	Describes exactly how X, the independent variable, is changed		
	Describes how Y, the dependent variable, is measured		
	All sizes and amounts of materials used are listed using SI units		
	Multiple trials are performed for each change in X		
	Steps describe how all other potential variables are kept constant for each trial. Example: Drop each ball from a height of 50 cm.		
	Safety issues are described.		
Set Up	A clear labelled drawing of the set up is provided		
Results Rubric		Got it?	Grading
Data Table	Data table is organized with correctly labelled columns that include units.		Mastery = all requirements met
	X is in the first column, all trials for Y are shown in columns and are averaged in another column.		Proficient = missing 1-2 components
	Properly calculated quantities are shown in columns as well.		Basic = missing more than two components
Graph	X on the X-axis and Y on the Y-axis.		
	Axes are properly labeled and include units.		
	Data points are correctly placed.		
	Any extrapolations are drawn with dashed lines when needed		
	Keys are provided when necessary		
Calculations	Examples of any calculations using scientific formulas are shown: 1. State the formula, 2. Show how the data was plugged into it, 3. State the answer with proper unit.		
Analytical Statement	An analytical statement is provided stating the relationship shown between variables.		
Conclusion Rubric		Got it?	Grading
Conclusion	Hypothesis is restated.		Mastery = all requirements met
	Accurately compares hypothesis to experimental results.		Proficient = missing 1 component
	Supports statements with a description of the data collected and trends evident in the analysis - Talk about the numbers!		Basic = missing more than one component
	English Usage: Complete sentences, proper spelling and punctuation		
	Connection to unit content- Uses new and old unit vocabulary properly in context		
Discussion Rubric		Got it?	Grading
Discussion	Sources of error are described		Mastery = all requirements met
	Potential impacts of error on the validity of the data are discussed		Proficient = missing 1 component
	Ideas for improving experimental design are offered.		Basic = missing more than one component