




# Lab Report Rubric

ITEM	DESCRIPTION	Points
 <b>Part 1: Purpose</b>		
<b>Title</b>	Should reflect the <b>purpose</b> of the lab	<b>2</b>
<b>Problem</b>	What do you want to learn? What exactly are you trying to find out? What do you want answered or solved? Can be written as a question or a statement: Question example: What is the effect of fertilizer on plants Statement example: To study the effect of fertilizer on plants.	<b>2</b>
<b>Research</b>	Research prior to experimentation. Two or more definitions or sentences related to the experiment.	<b>2</b>
<b>Hypothesis</b>	An educated guess/logical prediction written in a complete sentence. Must be testable and supported by scientific thought. Avoid I, you, my, etc.. (do not say "I think")  If/Then/Because statement relating to the variables If (Independent Variable), then (Dependent Variable) because (why) If (this is done), then (this will happen) because (why)  <b>If</b> a bowling ball and a feather are dropped from the same height, <b>then</b> they will hit the bottom at the same time, <b>because</b> the acceleration of the two objects is the same.	<b>3</b>
<b>Variables</b>	Identify the <b>Independent Variable</b> (manipulated/changed/tested) and <b>Dependent Variable</b> (responding/measured) Include units of measurement.	<b>2</b>
 <b>Part 2: Materials</b>		
<b>Materials</b>	List (no full sentences in this part) <b>ALL</b> of the materials including equipment used to perform the experiment. Include units and quantities whenever possible. Use Bullets, NOT Numbers. Be Specific!	<b>5</b>
 <b>Part 3: Procedure</b>		
<b>Safety</b>	List the main safety precautions to be taken during the lab.	<b>2</b>
<b>Procedure</b>	A numbered set of instructions, in your own words, to successfully complete the experiment. Step-by-step! Organized! Numbered! Can have Sections! Written in third person (no pronouns) A shopping list.	<b>5</b>



### Part 4: Data Collection

<b>Quantitative Data</b>	<p><b>Data Collection Chart:</b> Determine how you will collect your <b>measurable</b> data for your experiment before beginning.</p> <p><b>Title:</b> Descriptive of data being collected</p> <p><b>Columns:</b> Should follow procedure. Data is aligned correctly with lines separating.</p> <p><b>Headings:</b> Each column should have a heading which describes the type of data found in the column and the units of measurement of data found in that column</p> <p>Data is correctly and completely entered during the experiment. Frequency of measurement and numbers of times trials are repeated are appropriate. Will you include a mean/average column? <b>Measurements must be in METRIC</b></p>	<b>10</b>
<b>Qualitative Data</b>	Minimum of <b>two Qualitative Descriptions</b> (data gained with senses, observations, non-measured) in complete sentences	<b>4</b>
<b>Sketch</b>	<p><b>Title:</b> Name given, underlined and all words capitalized. Do not use “sketch” in the title. You can use “Experiment Set-Up” or “Experiment Design”.</p> <p><b>View:</b> top, side, back view is stated</p> <p><b>Scale (size):</b> this is listed by the title. For example: 10x</p> <p><b>Drawing:</b> Firm lines give relevant detail. Shading or coloring adds features.</p> <p><b>Labeling:</b> Label at least three parts.</p>	<b>3</b>



### Part 5: Data Analysis

<b>Results</b>	<p><b>Graph:</b> Data from experiment is graphed</p> <p><b>Correct graph</b> type is presented (bar, line, circle)</p> <p><b>Title</b> reflects both <b>independent (changed/tested)</b> and <b>dependent variables (measured)</b></p> <p><b>X axis is labeled ( independent variable) with name and units</b></p> <p><b>Y axis is labeled ( dependent variable) with name and units</b></p> <p><b>Intervals</b> for both axes are appropriately set up; <b>Data is</b> accurately plotted.</p> <p><b>Appearance</b> is neat and easily readable. Makes use of available space. <b>Ruler</b> is used. <b>Legend</b> is included if there is more than one set of data.</p>	<b>15</b>
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### Part 6: Conclusion

<b>Conclusion</b>	<b>Answer the following questions in paragraph form:</b>	
	1. Restate the original hypothesis, discuss whether it was supported or rejected	<b>5</b>
	2. Analyze the data. What did you learn from this lab? Explain in detail!	<b>5</b>
	3. Did the lab go as planned? Were there any unplanned variables? (Not just Yes or No)	<b>5</b>
	4. What other similar experiment(s) can be performed by changing a variable? Is there an extension of the experiment that would provide more information?	<b>5</b>
	5. How does this relate to real life? How could this be applied to real life?	<b>5</b>
<b>Total</b>		<b>80</b>