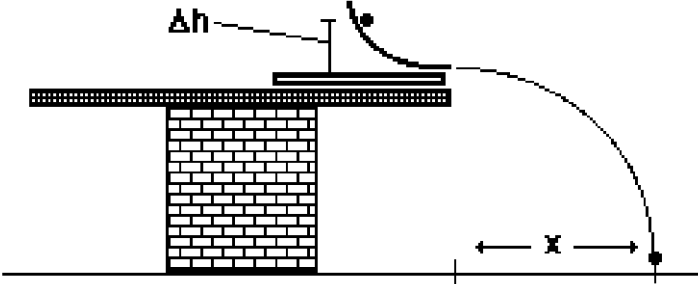


## Writing the Science Lab Report (with rubric)

Labs form the basis for our understanding of key concepts in science. The following are basic guidelines for successful writing and production of a quality lab report:

1. Always keep notes and data collected during a lab on a lab notebook.
2. Write laboratory reports on loose-leaf paper or word-processed (12 pt, Arial, double space, and on one side only).
3. Write an appropriate title for the report in the center of the first page (cover page) of the report.
4. Write your name, the name(s) of all members of your laboratory team, and the date the investigation was performed under the title.
5. Complete each of the following sections:

Category	Description	Exceeds Standard (4)	Meets Standard (3)	Nearly Meets Standard (2)	Does Not Meet Standard (1)	No Evidence (0)	Score
<b>Purpose and Hypothesis</b>	Statement of the problem to be investigated. Describe the reason for performing experiment and what are the expected outcomes. This should provide the overall direction for the laboratory investigation and must be re-addressed in the conclusion.						
<b>Apparatus</b>	List and draw all laboratory apparatus used in the investigation. Drawing must be a detailed diagram illustrating the configuration of the apparatus. The variables to be measured should be clearly pictured. See sample below: <div style="text-align: center;">  </div>						
<b>Procedure</b>	List all the procedures necessary to recreate your experiment/activity. Identify and name all experimental variables and briefly describe how the independent variables are controlled. Anyone not present during the lab must be able to understand and recreate the experiment by following your procedures.						

<b>Data</b>	Create a table of all the data collected. Data consists only of those values measured directly from the experimental apparatus. No values obtained by way of mathematical manipulations or interpretations of any kind may be included in this section of the report. Data should consist of as many trials as judgment would indicate necessary. The units for physical measurements (kg, m, s, etc.) in a data table should be specified in column heading only.						
<b>Evaluation Of Data</b>	Include all graphs, analysis of graphs, and calculations performed in the analysis of data. State each formula, and if necessary, identify the symbols used in the formula. If repetitive calculations are to be performed, substitute only one set of data into each formula and then construct a <b>table of values</b> for all additional calculated values. Be certain that your final calculated values are expressed to the correct number of significant figures.						
<b>Conclusion</b>	Write the purpose and the results of the experiment: <b>a)</b> verify the outcome of the experiment; <b>b)</b> state the relationship between the variables identified in the <b>Purpose</b> ; <b>c)</b> use clear and concise sentences; <b>d)</b> (when appropriate), state the meaning of the slope, area under the curve, and discuss the significance of the <b>y</b> -intercept, and write the mathematical expression derived from graphical analysis with the appropriate units; <b>e)</b> describe any new terms that arise as a result of your evaluation of data; and <b>f)</b> provide a plausible explanation when your results differ from what is expected.						