

Name: _____

Hr: _____



Physics Lab Report Requirements

Purpose: Begin by stating **why** you are doing the lab, not how to do the lab (what you want to find, not how you found it.) You will need to refer back to your purpose in your results, so make sure it's specific. It's always safe to start with "The purpose of this lab is to..."

Procedure: Draw a quick sketch labeling the essential parts of the lab setup **and** write one or two sentences explaining how the data was collected during the lab. You should NOT mention questions or calculations or graphs during the procedure.

Data Table: Record and present your data in a neat and logical format. Include a title and units for every column.

Sample Data Table

Position	Time	Final Velocity	Acceleration
(m)	(s)	(m/s)	(m/s ²)

Calculations: Provide *one* example of *each* calculation performed in the lab. Show all work: include formulas, number substitutions, and units.

% error calculations must be included if there is an accepted value.

% difference calculations are sometimes included, when asked for.

$$\% \text{ error} = \left| \frac{\text{accepted value} - \text{experimental value}}{\text{accepted value}} \right| * 100$$

$$\% \text{ difference} = \left| \frac{\text{experimental value 1} - \text{experimental value 2}}{\text{average experimental value}} \right| * 100$$

Graphs: Graphs should always include a title, axis labels with units, and appropriate scales.

Questions: Answer each question carefully and completely.

Results: Refer back to the purpose. If the lab's purpose is to determine specific values, list them here. Include a percent error or difference when there is one. [eg: The _____ is xxx.xx (units) with a percent error of _____.] If the lab's purpose is to determine relationships, describe them here.

Discussion: Discuss the accuracy of your results. Did you encounter any difficulties collecting data? Is there any error involved with the measurement tools you used or in the way you collected data? Do you have any suggestions for how to collect more accurate data?