NAME: _____

Formal Lab Report Format

Title
A brief, concise, descriptive title.

Purpose
In a sentence or two, please tell why you are doing this lab, what it is studying, what are you trying to find out, or what do you want to learn?

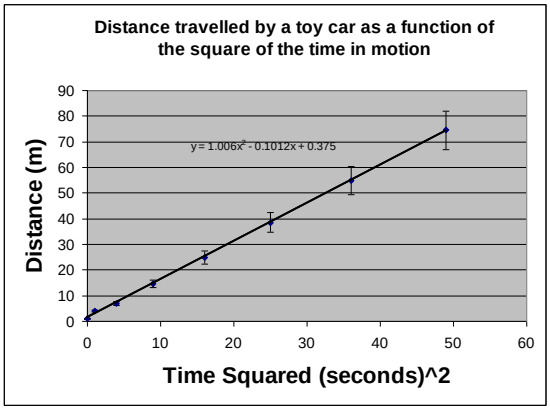
Materials
This is the section of the experiment where you list the materials needed in the lab and a sentence about their specific use.

Procedure
- If the procedure is already written up in a textbook, refer to the textbook and page number only.
- Only write a procedure section when YOU are designing a part of the experiment. This part of the experiment must be extremely detailed, and you should list ALL the steps you did in the lab so anyone can repeat it.
- Include a **diagram** of how the material was set up

Observations & Results
These are the results of the experiment, presented in one or more of the following formats: tables, graphs, observations, additional notes, or drawings (the form the data takes is dependent on the experiment). All tables, graphs, and charts should be neat, labeled properly, consider sig figs, and include units.

Voltage V/V $\pm \Delta V = \pm 0.02$ V	Current I/A $\pm \Delta I = \pm 0.2$ A
1.03	0.5
3.35	1.2
5.18	2.1
7.20	2.7
8.75	3.5
9.88	3.7
10.32	4.1

Analysis
Show any calculations or graphs that you are asked to complete. Each calculation should clearly show the equation, the numbers plugged in (with units), and the answer.



Discussion Questions
Answer all the questions in the lab.

Conclusions
Summarize, in complete sentences, the important aspects of your results. Refer to the **Purpose** of the lab. Discuss what you learned from this lab. Here you can discuss if you got any strange results, inconsistencies, errors, or problems and what the sources of these were – also state possible solutions to correct them next time. Briefly comment on how the investigation could be improved, and what might be a good follow-up experiment.

Final Product

Please type and print you lab report (double sided, if possible). Make sure tables and graphs do not span two pages. Check spelling and try to include typed calculations (not hand written). Reports must be written in the 3rd person (ie no "I", "our", or "we" etc.)

Marking Rubric

	Excellent	Good	Poor	Unacceptable
Purpose Procedure Equipment Diagram	Clear and concise statement of goal. Clear procedures, with all equipment listed and diagrams of the apparatus set-up	Workable statement of goal. Some ambiguity. Possible to do the lab if some assumptions are made. One or two omissions in equipment or diagram.	Purpose of lab not clearly identified or understood. Very difficult to follow, poor description of equipment and set-up	"What was this lab about?" "I think we used that gizmo with all the lights and buttons."
Observations	Clear collection of data in a well presented format. Quantitative information shown in properly formatted tables.	Data given in a format that needs to be tidied up. Some information may be misleading because of the presentation.	Information is difficult to recognize. Does not allow for easy analysis later in lab.	"Was I supposed to write that down?"
Analysis	Perfect analysis based on available observations. Nicely formatted graphs.	Answers objective without completely supporting answer. Some minor calculation errors.	Major calculation errors seriously affect overall analysis.	"That number means the Earth stopped moving for a second."
Discussion Questions	Answered correctly and in full sentences	Some small mistakes or incomplete sentences.	Answers have major errors	"is that my sock hanging off that dial? Is that a problem?"
Conclusion	Wraps up the lab like a neat package. Complete list of sources of error.	Person still has sight of the purpose of this lab. List of errors has some weakness.	Does not address purpose and analysis. Incomplete list of errors.	"The End."
Final Product		Nicely formatted, double sided report.	Some "Hanging Titles", not double sided.	"My dog got to the printer before I did."

Title, Purpose etc.	/3
Observation	/5
Analysis	/5
Conclusion (including errors)	/5
Final Product	/2
Total	**/20**
Discussion Questions	/