**CCA Physics Lab Report Rubric**

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| --- | --- | --- |
| Category |  | Total points |
| Abstract | * Purpose * Method * Result | 3 |
| Introduction | * Essential Question * Hypothesis * Pre – lab questions. | 3 or 4 points depends on lab |
| Methods | * List equipment * Draw diagram – check units * Procedure (2 pt.) | 4 |
| Data | * Data table | 2 or 3 points depends on lab |
| Calculation | * One trial step by step calculation * Graphs * Percent Error analysis | 5 |
| Result and Discussion | * Summary Table * Analysis Lab result * Error Analysis * Guided Question | 8 |
| Conclusion | * Objective * Result, list numbers and percent error * Error Analysis * State the limitation and future lab goals | 5 |
| Cover Page |  | 2 |
| Total Point |  | 30 |

1. **Abstract**

Summarizes three key components of the report in 2 - 3 sentences

1. **Purpose** of the experiment – describe what theory(ies) are going to be tested or examined. or what questions you want to solve
2. **Method** of the experiment - how theory(ies) are going to be tested or examined.
3. **Result**/conclusion of the experiment - what did you find from your experiment? What did you learn?
4. **Introduction**
5. What is the essential question of the lab?
6. What is your hypothesis?
7. Provide some basic background information to the experiment you are doing, such as explaining some scientific terminology. Sometimes, the *pre-lab questions answer can be written in here.*

1. **Methods**
2. List all the equipment's
3. Draw a diagram of your lab. (sometimes, you can use a picture)
4. Describe how you conduct your experiment. The description should be clear enough so that if I were to give your lab report write up to another student, they would be able to replicate what you did in lab. Make sure to identify the material you use, the quantity of material used, and what equipment or labware you use.

Be sure to include any safety considerations you took to complete the lab.

1. **Data**
2. For each setup, use a table format to present data. Simple rule: whatever you measure, you write in the data as is. Do not massage any measurement.
3. Be SURE to include your data page from your lab notebook. This is where you tear out the top original piece and you keep the carbon copy. ***This goes at the end of your lab report.***
4. **Calculation**
5. Draw a diagram with coordinate system, vectors, or whatever you need to deduce your data. Present mathematical calculations here. Leave equations as variable format as long as possible and insert actual numbers only at the end. Do not pack too many equations on one page.
6. If you use excel to perform your calculation. Provide at least one calculation step by step.
7. Graphs may be included
8. Calculate the percent error.
9. **Result and Discussion**
10. Present important figures in a table format so that a reader can see important measurements and results including percent errors at a glance.
11. Based on your result, can you reject your hypothesis? how? Describe what did the data show and how does it relate to your beginning question / hypothesis.
12. Discuss possible causes of errors.
13. *Answer other discussion questions*
14. **Conclusion**

* State the objective
* State the result, list numbers and percent error
* State possible error of your lab
* State the limitation and future lab goals

1. **References**

Cite any resources you used in writing up this lab report.

**Front Page Requirement: (Type in the center)**

Lab number Lab Title

Your name (Partners’ full names spelled correctly in parentheses)

Class name and Period

Lab station name

Due Date (not the date you turned it in)