**Scientific Inquiry & the Pendulum Lab**

**Directions:**

Use this template (outline) to complete steps 5-7 of the scientific method

Headings are in **bold** & instructions are in *italics*

**Analyze Data**

*Insert your data into the data table. Create a title for the table. (title 2 points; content 18 pts)*

*Insert your graph below the data table*

Table 1. Effect of \_\_\_\_\_\_\_\_\_\_\_\_\_on the time period of a pendulum (30 points)

| **Manipulated Variable** | **Trial** | **Time for 10 swings** | **Period of 1 swing** | **Average Period** |
| --- | --- | --- | --- | --- |
|  | 1 |  |  |  |
| 2 |  |  |
| 3 |  |  |
|  | 1 |  |  |  |
| 2 |  |  |
| 3 |  |  |
|  | 1 |  |  |  |
| 2 |  |  |
| 3 |  |  |
|  | 1 |  |  |  |
| 2 |  |  |
| 3 |  |  |

| **5. Analyzing the results** | **You will make a graph**  **What will be on the x-axis?**  **What will be on the y-axis?**  **What type of graph will you make?** |  |
| --- | --- | --- |
| **Analyze Observations:**  **Quantitative Observations: put these in a data table**  **Qualitative Observations: (what else did you observe)** |  |
| **Identify Errors and limitations- what might have caused errors in measurement? what limited your ability to collect accurate and precise data?** |  |

Figure 1. Effect of \_\_\_\_\_\_\_\_\_\_\_\_\_on the time period of a pendulum

***Graph Grading:***

*Title (2 points); axes labels with units (2 points each); no data labels (2 points); data entered and graphed correctly (9 points)*

| **6. Drawing conclusions &**  **7.Communicating results** | | **Paragraph Assignment- on separate document LAB pendulum paragraph** |
| --- | --- | --- |