**Scientific Inquiry & the Pendulum Lab**

**Directions:**

Use this outline to complete steps 6-7 of the scientific method

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

**Conclusion Paragraph**

*Sentence 1: Start your paragraph with the purpose statement. (3 points)*

*Sentence 2-3: State your hypothesis. Explain your hypothesis using scientific information. (4 points)*

*In 2-3 sentences: Explain the parts of a pendulum and the vocabulary words period and oscillation (5 points)*

*In 2-3 sentences: Describe how you tested your hypothesis without using "I" (we, our is better) (5 points)*

*In 2-3 sentences: Describe whether your procedure was effective and successful. (3 points)*

*In 2-3 sentences: Summarize your results and what the results show. (4 points)*

*In 1-2 sentences: state that you proved or disproved your hypothesis. (2 points)*

*End sentence: state the relationship between the independent variable (manipulated) and the dependent variable (responding) as shown by your data. (2 points)*

*Describe means you should explain and support your statements.*

Make sure your sentences include detail about the following:

| **Conclusion Checklist** | **Did I include this part?** | |
| --- | --- | --- |
| Did you state the purpose as the first sentence? | * ~~yes~~ | * no |
| Did you include the hypothesis and reasoning? | * ~~yes~~ | * no |
| Did you describe the parts of a pendulum? | * ~~yes~~ | * no |
| Did you explain period and oscillation? | * ~~yes~~ | * no |
| Did you briefly describe how the hypothesis was tested? | * yes | * no |
| Did you use "I" statements? The answer should be NO | * yes | * ~~no~~ |
| Did you use "we" statements? The answer should be yes! | * ~~yes~~ | * no |
| Did you describe whether your procedure was effective and successful? | * ~~yes~~ | * no |
| Did you suggest how to improve the experiment? | * ~~yes~~ | * no |
| Did you summarize the results and what these show? | * ~~yes~~ | * no |
| Did you state that you proved or disproved your hypothesis? | * ~~yes~~ | * no |
| Did you state the relationship between the manipulated variable and the responding variable as shown by your data? | * yes | * no |

**Pendulum Paragraph**

The purpose of a pendulum was quite simple: it is to practice the purpose of the activity. To swing fast or to swing slow, but there is more involved to it. Oscillation and Period, period is the time period of a pendulum that depends on the length of the pendulum and oscillation is a motion that repeats regularly on a daily basis. My hypothesis was that As the string length increases, the period will increase because when the string is long there is more distance to cover The parts of the pendulum are the point of attachment (which could be anything), the wire, and the bob. It is testable because when you push the ball with a shorter string the distance is shorter and the speed is longer and it worked and we also proved it. To improve it you could have many more people on the project, drop it at different heights, find better technology, find a very good strategy, and do more research. Finally the manipulated variable was the string and the responding variable was the bob. That is a pendulum.