**Title**  **Name, Partners, Block, Date**

**Question:**

* Testable and *SPECIFIC.* Gives reader clear idea what you want to test.

**Hypothesis:**

* Your prediction written in form of: " If...(IV).....Then..(DV)....because" statement.

**Variables:**

* **Independent Variable -** something you changed on purpose
* **Dependent Variable** - something measured and depends on or is affected by the independent variable
* **Control Variable** – What stays the same. At least 3.

**Materials:** In *point form,* list all materials and *amounts* needed to conduct experiment

**Procedures:** *Numbered,* step by step instructions on how to conduct the experiment. Include measuring and recording data.

**Observations:**

* Report both *Qualitative* (word descriptions) *and Quantitative (*measurements)observations.
* Quantitative data (measurements, times, temperatures, etc.) should be ina *data table* **.**
* If multiple trials are involved, you must show an *average.*
* Must show *units*

Eg. Plant Height Increase over 1 week period:

|  |  |  |
| --- | --- | --- |
|  | Control | Variable |
| Trial 1 | 22 cm | 25 cm |
| Trial 2 | 23 cm | 28 cm |
| Trial 3 | 21 cm | 27 cm |
| **Average** | **22 cm** | **26.7 cm** |

**Conclusion:** In *paragraph form*, using COMPLETE SENTENCES. address the following:

1. Did your experiment your hypothesis? Summarize the results.
2. Give a reasonable explanation of why you got the results you did.

Ex. “The hypothesis that *…….* was proven incorrect. This may be because ....”

1. What factors or difficulties occurred that may have impacted your findings? *How* did they impact your results?

Ex. “One of the challenges we encountered was that …..”. Another problem was that …. which may have ….. “

1. What *specifically* would you change to improve your experiment? Why?

Ex “*Improvements to this experiment would be… We would also ….*

1. What did you learn from this experiment?
2. Can you apply your learnings to real life?

**Lab Report Checklist**

* I listed my name and partner(s)
* My lab report has an appropriate title
* My question begins with a capital letter and ends with a question mark.
* My question is a complete sentence and indicates what the experiment will be about.
* My hypothesis is a prediction and is a complete sentence.
* My hypothesis begins with “If” and incorporates both independent and dependent variables.
* I have identified at least 3 controlled variables.
* Materials are listed in point form.
* I repeated the experiment at least three times.
* Observations include both qualitative and quantitative data
* My quantitative data is in a chart with headings and units. Average is given.
* Conclusion: My data is summarized, well explained, and in complete sentences.
* Sentence Structure: I used complete sentences, no abbreviations, no slang.
* Organization: my report is in order, with headings, and is easy to read.

**Assessment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Emerging | Developing | Proficient | Extending |
| **Communicating**  I can express my ideas using proper scientific terms  I can express my ideas clearly  My report is neat, easy to read, and well organized |  |  |  |  |
| **Questioning and Predicting**  I can write a specific and testable question  I can write a hypothesis in correct form |  |  |  |  |
| **Planning and Conducting**  I can help design an experiment  I can take detailed observations |  |  |  |  |
| **Evaluating**  I can discuss sources of error and make suggestions for improvement  I can apply to real life |  |  |  |  |