**Ms. M.’s Guide to Writing a Formal Lab Report**

Keep this in your science notebook.

Your lab report must have the following section headings and include the following information:

**Problem/Purpose:**

* What is the question you want answered?

*Or*

* What is the purpose of the experiment?

**Hypothesis:**

* Your testable prediction. What do you think will happen based on your background experience (schema)?
* If…. (independent variable), then… (dependent variable)… because (support for what you think will happen).

**Materials:**

* What do you need for your experiment?

Your list must be accurate, complete, and specific.

**Method:**

* What steps will someone need to follow in order to replicate (repeat exactly) your experiment?

The steps must be numbered, clear, and in complete sentences.

**Observations/Data:**

* Record all information that you gathered during your experiment.

Include any calculations and/or observations. Your chart, table, or graph must include an appropriate title and be accurate, complete, and properly labelled.

 **Turn over⮧**

**Conclusion/Analysis:**

* Your conclusion must be fully supported by your data and include each of the following:

- A restatement of the hypothesis.

- A thorough discussion of the data.

- An explanation of whether the data supports or rejects the hypothesis.

**Application/Reflection:**

* Do you feel the data is valid (reliable and accurate)? Why or why not?
* What were the sources of error in this experiment (factors that may have affected your results)? Explain.
* If you had the opportunity to redo the experiment, what changes would you make? How would you improve it? Explain.
* What new questions do you have based on the results of your experiment? Explain.
* What did you learn from the experiment and how can this be applied to everyday life?

**Remember:**

When writing your report,

* Be neat and well organized.
* Show accurate use of scientific terminology and be free from grammatical errors.