How to format your SCHS Science Lab Report

In formal lab reports, the following sections need to be included in the order that they appear.

*****Note that creating a lab report involves more than simply copying the materials and procedure from the text or lab sheet. It is a record of the real experiment that you performed and the real results that occurred, even if they were not what was expected or 'correct'.***

Formatting:

1. *You should create a header with your class title (ex Heidebreicht Science 10) in the top left corner*
2. *Your name in the top right.*
3. *Titles of sections should be bold, while the rest of the lab should be in regular 12-point font. Remember to use a simple font that is easy to read, such as Times New Roman or Arial.*
4. *A footer should be added with page numbers if your report is more than one page long.*

Background knowledge: *(your teacher will tell you if this is required for a given lab) This may include information that you have learned in class or assigned research from credible sources (marks will vary by assignment)*

Purpose: *What question or problem are we answering/ solving in this lab? Be specific and concise.*

Experimental Design: *This section of your report briefly describes what you will do and what variables you will measure in order to test the hypothesis. Identify the manipulated variable, responding variable, and controlled variable(s), as they apply.*

- *The* ***manipulated variable*** *(independent variable) is the factor that is changed on purpose during the experiment.*
- *The* ***responding variable*** *(dependent variable) is the factor that is measured as changes are made to the manipulated variable.*
- ***Controlled variables*** *are factors that are kept constant throughout the experiment.*

Prediction/Hypothesis: *Create a reasonable hypothesis based on your own prior knowledge (1-2 sentences long). This is created BEFORE you do the experiment and should be recorded as you predicted regardless of the outcome of the experiment. We will be using the general format of: "If…then…because…." (2 marks).*

Safety precautions: *What precautions are listed in the lab handout / text information? Has your teacher informed you of other precautions to take?*

Materials: *List the materials used. Include the amount of substance used or size of equipment used. Note any changes or substitutions. Occasionally it may be acceptable to refer to the published procedure and note changes. Your teacher will inform you when this is the case.*

Procedure: *List the steps taken in performing the lab. Note any deviations from or changes that were made to the original instructions. You must write out the entire procedure, unless your teacher indicates otherwise.*

Observations: *Neatly and accurately record any observations you made. Use a well-constructed table for data and neat, labeled scientific drawings if appropriate. Each table or graph should include a title (ie. Table 1, Figure 1, etc.)*

Analysis: *Complete assigned analysis questions from the lab handout / text or discuss your results and their possible implications. This section will also include all required calculations.*

Conclusion: *Complete assigned Conclusion questions, or discuss:*

1) *Write a summary statement that answer the question or problem posed in the lab. Did you answer/solve your question/problem from your lab?*
2) *State whether or not hypothesis was supported, if not why?*
3) *Do your results support current theories or laws? Explain*
4) *What are the sources of error present in this lab? Evaluate the experiment design, the procedure, or any technological skills used (adequate or inadequate).*

******Keep your conclusion as brief and to the point as possible.***

References: *It is ESSENTIAL that you reference any resources that you use. This includes your text or the assignment sheet as well as any other sources of information. Failure to do so may result in an Academic Dishonesty mark (5 marks)*
In science, we use APA formatting. You can learn more about APA formatting here: https://owl.english.purdue.edu/owl/section/2/10/ . It is acceptable to use BibMe for your lab reports.
For MLA Citation Examples: Refer to
https://www.umuc.edu/library/libhow/mla_examples.cfm#articles

Handing the assignment in: *Submit a hard copy of your lab to Mr. Sawchuk for grading. If you type your lab, you will be required to print it at home before submitting.*