Lab Report Format

Your name
Your partners' name(s)
Date of the experiment

Title of the Experiment

Purpose: *Why are you doing the lab?*

Ex. The purpose of the lab is to determine how different types of soil affect the growth rate of plants.

Hypothesis: *What do you predict will happen in the lab?*

Ex. Coarse sand particles will sediment more quickly than fine sand particles because the particles are larger

- Do not use "I think" in your hypothesis, it should be a scientific statement, not a thought
- You must support your hypothesis with scientific reasoning. After your prediction, use the word "because" and explain your prediction.

Variables: *What are the independent variables, dependant variables, and controls in your experiment?*

Ex. Independent variable: Type of soil plants are grown in
Dependant variable: The rate of plant growth
Controls: amount of water, amount of sunlight

Materials: List all the materials used of the lab

Ex. Plants
Soil
Water

Procedure: *What steps did you follow while performing your experiment?*

- Write a numbered list, not in paragraph form
- Write in present tense
- Include all materials used in each step, and all precise measurements will units

Results: Include data tables and graphs (when necessary).

a) **Data tables:**
   - Data must be in the form of a table
   - All data must be included in the results section
   - If you performed any calculations, a sample must be provided in this section

b) **Graphs**
   - Graphs are places after the table
   - It may be a line graph or a bar graph depending on the type of data you collected
   - Graphs should be made using Excel, only in certain special cases should graphs be done by hand
   - Your graph must have a title: “independent variable” versus “dependant variable”
   - The x axis (independent variable) and y axis (dependant variable) on your graph must have a title including the appropriate units

Analysis:

- Explain your results (tables and graphs) using scientific language. This should be a complete paragraph.
- Say if your results agree or disagree with your hypothesis.
- Discuss whether or not you think your results are valid (was it the result you were expecting?).
- If it was not the result you were expecting, explain what you think should have happened.
- Explain any mistakes you think you made during the experiment.

Conclusion:

- Summarize your results in one sentence. This should be written as an answer to the experimental question or task.
- Explain your results using scientific language and theory. Explain why you think this was the result (scientifically).
- Make suggestions of how you could make improvements to the procedure if you were to do the lab again.