A.P.E.S. – A FORMAL LAB REPORT FORMAT

Setup:
- The lab report must be **typed**, in 12 point font, preferably Times New Roman.
- White paper must be used.
- No graphics as decoration

General language:
- Avoid the use of "I, me, you, he, she, we, us, they" or any such terms.
- Avoid slang ("compressed" instead of "squished").

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Title page:
- Experiment title, lab partners (use full names; student author listed first), due date
- 12 point font, preferably Times New Roman
- No graphics as decoration

Abstract/Introduction: summarizes the **purpose** of the experiment, **background information**, relevant formulas, and **key findings/major conclusions**. The abstract should not be over 200 words. The abstract may contain a *thesis statement*, which is a short (usually 1-3 sentences) statement of the most important point in the lab report. The thesis statement is specific, states one main idea, and justifies discussion.

Materials: complete list

Procedure:
- detailed steps in order, in paragraph form
- **use passive voice**:
    > Correct: "The beaker was filled with water."
    > Incorrect: "Fill the beaker with water." or "We filled the beaker with water."

If the procedure was changed from the original lab sheet, write what was done by the students, not what was originally written.

Data: graphs, tables, etc.
- Graphs must have a title and have each axis clearly labeled.
- Tables must be clearly labeled.
- Diagrams must be clearly labeled.
- When using colors, display a color key.
- Use a ruler for any lines drawn.
- Anecdotal logs (descriptive data) should have dates for entries.

Calculations: watch significant figures and units; clearly label all calculations

Discussion: interpretation and analysis
- Explain your results in terms of the objectives, theory, and background information.
- Compare expected results with experimental results, and account for any differences.
- Compare your results to those of other lab groups, and discuss similarities and differences.

Error Analysis:
- Percent error = (|ACTUAL – THEORETICAL|) / THEORETICAL x 100
- Focus on equipment or other circumstances but *not* human error!

Conclusion: short statement of what is known as a result of the lab

References: Use proper citation format