

A.P.E.S. 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, and they” or any such terms.
 - Avoid slang (use “compressed” instead of “squished”).
-

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; BESPECIFIC! (Bullet point and include numbers of each item necessary)

Procedure:

- Detailed steps in order, numbered (1, 2, 3, etc..)
- **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: clearly label all calculations; INCLUDE UNITS (significant figures are not emphasized in APES)

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: (when applicable)

- Percent error = $(|\text{ACTUAL} - \text{THEORETICAL}|) / \text{THEORETICAL} \times 100$
- Focus on equipment or other circumstances but not human error!

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

Questions: (when applicable) pre-lab and/or post-lab questions. Answer in complete sentences. You do not have to rewrite the questions.

References: Use proper citation format (APA)