

Guidelines for writing lab reports

1. Think about your reader and his/her purpose in reading.

- Who: A reader of your lab report is knowledgeable or expert in your field.
- Purpose: S/he is interested in the results and discussion of your work and also in the credibility of your methods.

2. Remember that an effective lab report begins with pre-lab planning.

- Usually, your professor will clarify the purpose of the lab and the procedures, but if not, then you need to think this through. What do you want to learn? What are the variables? What are the procedures? What materials and facilities will be used?

3. Also remember that an effective lab report requires careful in-lab procedure and on recording data accurately and completely.

4. When you write the lab report, use a conventional pattern of information organization. A basic lab report outline follows.

- Abstract in some but not all cases. Again, learn what your reader expects.
 - o If you are unsure how to write an abstract, see the style guide and the abstract template.
- Introduction
 - o Context, purpose or objectives of lab
 - Can be one or two sentences
- Materials and Methods
 - o Materials, apparatus, facility used
 - o Methods used
 - o Procedure, step-by-step or standard
 - o DON'T mix results into this section
- Results
 - o Write a sentence that summarizes all your findings.
 - o Develop your results section with concise text followed by graphics that show your data.
- Discussion
 - o Some disciplines want "discussion" separated from "results." Other disciplines prefer the two elements to be integrated.
 - o Wherever it occurs, "discussion" is your handling of the data collected.
 - o This section also is where you mention possible sources of error, implications for future work, or other issues.
- Conclusions
 - o This summary closes the report with a general statement of what you learned from this experiment.

5. Use headings and subheadings to help your reader find sections.

- Use page numbers in a document over one page long.

- Some disciplines use a Table of Contents for very long lab reports. Not necessary in short reports.

6. Label, title all graphics, and refer to them in the text.

- Graphics are very effective in the results section. A table or a chart or graphic can show your results clearly. Then, the accompanying text provides discussion.

7. If you are citing the work of others, **use an approved citation style** for your discipline.

8. Style: lab reports are objective. It is uncommon to use “I” or “we.” Writers use the past tense when describing the experiment itself and the present tense when discussing current issues.