



# Constructing a Lab Report

## WHAT IS THE PURPOSE OF A LAB REPORT?

**Purpose:** The purpose of a lab report is to clearly communicate the details of an experiment, including the methods, results, and conclusions. It helps students practice scientific thinking and allows others to understand and replicate the work.

## STRUCTURE

The goal is to formulate and test a hypothesis and draw conclusions. Consider how the document can structure your research process and planning.

## FORMAT

- APA Format
- Double Spaced

## TITLE PAGE

- Concise
- Adequately describes content

Example: *The Effects of LED and Fluorescent Lighting on the Growth Rate of Red-Leaf Lettuce (L. sativa).*

## ABSTRACT

- The purpose of the study or the question being addressed by the study.
- The procedures used in the study.
- The major results of the study, and any conclusions drawn by the author(s).
- The abstract should be 100–200 words.

## INTRODUCTION

- The introduction presents the problem, gives background information and theoretical context, highlights the purpose of the experiment, details any specialized equipment involved, and outlines the objectives.
- Why did you do the work?
- What were the central motivations and hypotheses?

## DATA

- Basic reporting of facts and/or information discovered during the lab.
- Includes how the information was obtained.
- All collected data and calculated results should be presented in tables, graphs, or lists.
- Do not exclude raw data.

## RESULTS

- Analysis and interpretation of data
- Demonstrates competency of experimental objective and implication of results
- Address potential errors
- Explain how the expected results led to the conclusion
- Explain results in relation to theoretical issues
- Compare results to similar investigations
- Analyze the strengths and limitations of your experimental design

## CONCLUSION

- Avoid simple repetition
- Instead bring emphasis to only specific details
- Contextualize the information
- State what you know after the experiment, based on your hypothesis and Results
- Indicate significance of the work
- How might you change in the next attempt?
- Did you receive unexpected results?

## REFERENCES

The sources used for background information and any figures you did not create.

## TIPS & TRICKS

- All actions should be in past tense when reporting on experiments.
- Lab equipment and theories should be in present tense.
- Write the abstract after you finish the report.
- Avoid using first person and active voice (i.e. I, We, You, They, She, He). You do not own your data.