Scientific Laboratory Report

Author Name Course Date

Abstract

State the research question, approach, key quantitative result, and conclusion briefly. A reader should understand the experiment without reading further.

1 Introduction

Give the scientific context and motivate the question. End with a testable hypothesis and a prediction.

2 Methods

Describe materials, calibration, sample selection, controls, and the procedure with enough detail for another researcher to reproduce the work. Record the analysis software and version.

3 Results

Report observations before interpreting them. Include units and uncertainty.

Table 1: Replace this illustrative table with measured values.

Condition	n	Mean	Standard deviation
Control	5	10.2	0.8
Treatment	5	12.7	1.1

4 Analysis

Show the calculation that connects the observations to the hypothesis. For a linear calibration, report the fitted slope, intercept, and residual pattern.

5 Discussion

Interpret the result in context, discuss limitations and possible confounders, and distinguish measurement uncertainty from systematic error.

6 Conclusion

Answer the research question in one or two precise paragraphs and state the most useful next experiment.