

# Experiment Title

Your Name  
Partner's Name  
Westminster College  
*The Date*

## **Abstract**

*Brief* summary, including conclusions,  
not assuming the reader has read the report.

## **Introduction**

What is the motivation or background for performing the experiment?

## **Theory**

Relevant theory goes here. May be merged with Introduction. Use Symbol font for Greek letters. Use superscripts for exponents in scientific notation. Be sure to explain what each symbol means. (Do not assume the reader knows what  $F$  or  $i$  is.) When referring to variables in a sentence, they are traditionally italicized (as in the previous parentheses).

## **Procedure**

Brief description of equipment and what you did. Do not resort to a numbered outline; use complete sentences and paragraphs. Do not sound like a lab manual. Describe what you *did* (past tense).

## **Results**

Results often include graphs or tables. Each plot should have a caption and be discussed in the text. Interpreting the data is an essential part of science and this section will be long and complete.

## **Analysis**

What do the results mean? Compare observed versus accepted results here. May be merged with Results. In comparing theory and experiment, you will need to include a discussion/calculation of the effect on the final result from error in the raw data.

## **Conclusion**

Brief summary, assuming the reader has read report.

### ***Other Notes:***

Your lab report should be formatted roughly like these instructions.

Each section should be labeled (*Theory, Results, etc.*).

Use double-spacing and at least 1 inch margins for the body of the report.

The abstract may be single-spaced and indented more than the body. See a scientific journal for examples.

When I grade the reports, I will be using four main criteria:

#### **1. Are the results discussed clearly?**

The discussion of your results is the most important element. Discussion does not mean a simple listing of your results. In a discussion, you should think about your results and the meaning and implications of them. What were possible errors? Are these errors reasonable? What could you change to improve the experiment?

#### **2. Are the data presented clearly in graphs and tables?**

If you do not present your data understandably, no one will believe your conclusions. Graphs **MUST** be labeled. If there is more than one dataset on a graph, then there must be a legend explaining which dataset is which.

#### **3. Is the experimental procedure explained clearly?**

Your explanations should be clear to someone who is informed about science but who has **NOT** done the lab.

#### **4. Are the mechanics of the writing correct?**

Is the grammar correct? Are words spelled correctly?

**If you have any questions about how to write this formal report, please ask them!**