# Writing a Lab Report

Many science classes include a lab component. Lab reports are an important part of your grade in these classes. Some teachers provide a format they want you to use when writing a lab report. Here is a format you can follow when your teacher does not provide a format that will make it easier to write a good lab report.

## **Title**

Make the title short and to the point. Try to keep it less than ten words. The title should immediately tell the reader what the report is about.

# Introduction

The introduction to the report should consist of a single paragraph in which you provide an overview of the experiment you conducted. Write the introduction in a style that will motivate the reader to read the rest of the report. It is important to specify the purpose of the experiment ("The purpose of this experiment was to...") and state the hypothesis in this section. Include any background information that will help the reader better understand the report. Include only background information that is pertinent to the experiment.

#### **Materials and Methods**

Describe in your own words the procedure you followed to perform the experiment. Clearly describe all of the steps you completed. Include information about all of the materials you used to conduct the experiment. While this section of the report must be detailed, be careful not to overwhelm m the reader with too much detail. A good rule of thumb to follow is that the reader should be able to repeat the experiment without further instructions. Keep in mind; however, that you are describing what you did in this section, not writing a set of directions.

#### **Results**

This section is the "meat" of a lab report. Here is where you provide the raw data from the experiment (Raw data is the actual measured values you recorded during the experiment.). Describe in words what your data means. Include graphs, tables, and figures as appropriate. Be sure that any of these visual aids you provide have descriptive titles, and show the units of data entries clearly.

## **Discussions and Conclusions**

In this section you present an interpretation of your data to determine whether or not your hypothesis was accepted or rejected. You should relate your findings to existing theory and knowledge that is relevant to the experiment. Unlike the Results

Section, which must be straightforward, you can engage in speculation in this section. For example, you might talk about how your experiment might have been improved or what might have happened had you changed your procedures in some way. It is even appropriate to acknowledge any mistakes you may have made.

# References

As for any written paper, you must list all articles or books that you cited in your report.