

Physical Science Laboratory Report Format

The laboratory report is an effective means of conveying information to others. Since science reporting requires communication of experiments, it is necessary that a reporting procedure be established and used. In writing the report you must be neat and precise and to the point without wasting time on unnecessary information. When you are preparing your report it must conform to the organization given below.

- 1) Use only the front of notebook paper and/or graph paper (with no cover page).
- 2) Label each section (except title). This label should be in all capital letters, underlined, and followed by colon.
- 3) **Skip a minimum of 2 lines between each section.**
- 4) Include all necessary **units**. Try to eliminate all spelling and grammatical errors.
- 5) For some labs we will be using notecards which will reduce the amount of work involved.

TITLE: Centered on top line give title of report followed on second line by your name (centered) followed on the third line with **the date(s) the lab was performed**. The title should be short and descriptive and convey the nature of the experiment. It should include the dependent and independent variables (if applicable).

ABSTRACT: This section contains three **paragraphs**. The first paragraph summarizes the **objectives** of the experiment. The second paragraph summarizes the **procedure** and the final paragraph gives the **numerical results** found in the experiment. Do **not** include any conclusions or new information in this section. The abstract should be completed after all others parts of the write-up are finished.

OBJECTIVES: Using a **bulleted list**, describe the skills and information that should be obtained by the student completing the lab. The conclusions at the end of the report will address the completion of these objectives.

EQUIPMENT: Using a comma separated listing, give the major equipment used.

SAFETY RULES: Using a **bulleted list**, give the special safety rules applicable to this lab.

PROCEDURE: Using **outline format** give the steps required to complete the lab. Be concise.

DATA: The data section is usually presented in tables. Use proper heading and include **units**.

CALCULATIONS: This section contains sample calculations of all types performed. All formulas must be shown with data and units substituted in the proper place.

RESULTS: Using a **bulleted list**, this is a listing of the numerical findings after doing the calculations. Graphs may be included here.

Continued:

CONCLUSIONS: Using **paragraphs**, these are brief statements about the results found during the experiment. Each conclusion should be supported by listing the reasons used to reach that conclusion. Other suggestions:

- 1) What generalizations can you draw from your results?
- 2) What application value might your data have?
- 3) If applicable, state final relationship between dependent and independent variables.

DISCUSSION: Beginning with **paragraphs** discuss the knowledge gained by doing the lab. Include the following:

- 1) Give any differences between what you predicted you might find and what you actually found.
- 2) Include any **observations** made during the experiment.
- 3) Discuss how you could have reduced error or uncertainty in the design/conduction of the experiment.
- 4) Any questions you have about the lab should be introduced here.
- 5) **All questions** given in the lab guide should be answered at the end of the discussion section (number your answers, each on a separate line.)