



LABORATORY REPORT FORMAT

During your enrollment in science classes at Palo Verde High School, numerous laboratory investigations will be assigned. These experiments will require you to follow a specific laboratory format which exhibits certain characteristics. You must communicate exactly what happened in an experiment and what conclusions you can draw from your results. Anyone should be able to repeat the experiment exactly as it was first performed in order to check the results obtained. Experiments do not have right or wrong answers. The steps you took and your explanation of the results is the key to a thorough lab report.

The format for each laboratory investigation should include the following information.

- I. **TITLE:** Write a short title that best describes the experiment. It may come from the lab handout or the book.
- II. **PURPOSE/PROBLEM:** This section should state the objective of the problem being looked at in the experiment. It should be a question or statement that describes the reason you are doing the experiment. It is often included in the experiment handout.
- III. **HYPOTHESIS:** (OPTIONAL) This is a guess or prediction as to the outcome of the solution to the problem.
- IV. **MATERIALS:** In a vertical column(s) list all supplies, equipment, chemicals, etc. used to complete the experiment. Include a diagram of the laboratory set-up in this section if necessary.
- V. **PROCEDURE:** This is a description of what you didn't in each step of the experiment. Steps must be numbered, in a vertical column, with one instruction per step. In your own words, describe exactly what to do using detailed, short sentences.
- VI. **DATA SUMMARY:** This section includes the results of the experiment. All information and observations collected during the investigation must be included. Descriptions, drawings, data tables and graphs must be neat and clearly labeled. Any necessary calculations should be included here. Due to the uncertainty associated with measurement, some experiments will require qualitative and quantitative error analysis.
- VII. **CONCLUSION:** This is a summary of the results of the experiment based on the data. In your own words, describe what happened in the experiment. Did your results support or answer the purpose/problem? Interpret your graph and data table. What did they show? State whether or not your original hypothesis was correct. Were there any sources of experimental error? What went wrong? Why? Also, answer any assigned questions in this section.

The above format is to be used on all labs handed in unless instructed otherwise. Grading will be based on completeness, neatness, quality of graphs and data tables, and your thoughts and explanations in the conclusion section.

