

Writing a Lab Report (What I expect to see)

TITLE:

PROBLEM: This may also be called the Purpose or Objective, and it may or may not be phrased as a question. (e.g., “To find the relationship between . . .”) In either case, you must base the solution (conclusion) to the problem on an analysis of your data collected.

HYPOTHESIS: A hypothesis is often referred to as an “educated guess,” which is a prediction that will be tested in the experiment.

EXPERIMENTAL DESIGN: This may also be called the Materials and Procedure. (The ability to replicate an experiment is one of the cornerstones of the scientific process. As such the materials & procedure must be clearly stated.

DATA: These are the results of the experiment, presented in one or more of the following formats: tables, graphs, or drawings (the form the data takes is dependent on the experiment).

QUESTIONS: A Questions or Analysis section, may be included here.

CONCLUSION: The conclusion should make reference to the PROBLEM, HYPOTHESIS (if there is one), EXPERIMENTAL DESIGN (especially in terms of the validity of the DATA), and the DATA. All conclusions should be driven by the data. It is essential that the student discuss any factors that may have affected the validity of the data, and (depending upon the lab or teacher) describe how to improve the lab.

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