The following outline is the format for your formal lab reports. All information must be typed, excepting calculations. If graphs are required, they should be completed on Graphical Analysis or some other comparable graphical program. These items should be included in your report in order.

TITLE: Include your name (and partner’s name), the date of the experiment, and the title of the experiment.

INTRODUCTION (Objectives): State the hypothesis of the experiment clearly. (Why are you doing this experiment? What are you trying to learn from it?) This does not have to be longer than one or two sentences.

PROCEDURE: The laboratory notebook should contain sufficient information that another person could fully comprehend and, if necessary, reproduce the experiment. This should not be copied from the laboratory manual, but may be paraphrased. (Learn this quickly!!) This should also include any observations you make during the experiment, such as gases evolving, color changes, etc.

DATA: All raw data should be listed in a logical, concise manner. This is to include proper significant measurements. Tabulate and/or graph any intermediate or final results and label these. Finally, a list of the reduced data should be entered into a graph and/or table, with appropriate symbols and units.

CALCULATIONS: Tabulate your final reduced data. This should include any calculations of averaging and percent error on your final solution.

QUESTIONS: Answer any questions requested, including work, reasons, and explanations, if needed. Your data and observations should be the foundation to any and all questions, however, the concepts that should have been gained through the experiment (if different from your data and observations) should be included as well.

CONCLUSION: Make a final conclusion, describing what concept you learned and how it was learned through this experiment. List the unknown number (if applicable) and calculated results (including percent error). Suggestions of possible sources of error should be made and how these errors may have affected your calculations (be specific). Any recommendations for modifications of the procedure which might improve the measurements should be included here. Top it off with your signature and the date of completion.
GRADING: Format (3); Title (1); Introduction (2); Procedure (10); Data (8); Calculations (6); Questions (5); Conclusion (15)
Total = 50
See Rubric for breakdown of points and criteria.