THE FORMAL REPORT

In addition to keeping a laboratory notebook you are expected to write a formal report of each experiment. The formal report will be a more detailed, organized and critical analysis of your experiments than the notes you keep in your laboratory notebook. Your formal report should include the following:

1. Title of the experiment
   Include your name, TA's name, partner's name, section & date

2. Method
   Briefly state the purpose of the experiment or a statement of what is to be accomplished. Discuss what measurements will be made and how those measurements lead to the results. Include a concise discussion of theory that supports the procedure. Include relevant chemical equations and mathematical formulas (but do not include the complete derivation of the equations). In the end, this section should explain how the procedure is going to answer the experimental question.

3. Data
   This section contains observations and data organized neatly in a table. Note any changes from the published procedure. If data from the rest of the class is used it should be organized into a table.

4. Calculations and Graphs
   Show calculations that lead from data to results. Calculations should be readable. If calculations are numerous and repetitive only one representative sample must be given.

5. Results
   This section summarizes any conclusions you can make based upon your data and calculations.

6. Discussion
   The discussion section is a detailed evaluation of the procedure and results. Discuss possible errors that would lead to your results being incorrect or inconsistent. Include in this section the answers to any questions that were asked in the lab manual.