Lab Reports in a Lab Composition Book

Components to be included in the lab book

1. Title and date

2. Purpose
   • A statement as to the objective of the lab, what does one hope to gain from conducting this particular investigation? What are you looking for in the experiment?

3. Procedures
   • A brief yet clear explanation as to how the experiment was carried out
   • Identify all variables being investigated
   • Sketches of apparatus should be included, computer produced diagrams are desired

4. Data
   • Consists of only values measured directly with the apparatus
   • Should be displayed in neat tables clearly labeled with appropriate units
   • A separate chart should be created and clearly labeled “calculated data” for any calculated numbers which used the collected data in the calculations

4. Analysis
   • This section includes all graphs which are clearly labeled
   • Graphs should contain proper regressions indicating the relationship between the variables
   • Graphs should be computer generated
   • Accuracy of your results should be contained in the section
     o For graphs the root mean square error should be reported or another acceptable analysis statistic
     o If applicable percent error and or percent difference should be indicated (with sample calculations included)
   • If applicable questions from the teacher should be answered in this section, the question and or paraphrasing of the question should precede the answer

5. Conclusion/Summary
   • The purpose statement should be addressed/answered
   • Relationships between variable should be clearly stated both a verbal description and mathematical model (equation)
   • Discuss possible extensions of the experiment and or questions that the experiment has generated