# Conceptual Physics Lab Report Format

Every lab is different, so this format is meant as a general guide.

1) Introduction
    a. Title of lab
    b. Names of those in lab group
    c. Class name
    d. Date
    e. Procedure – The procedure is often outlined in the lab handout, but this must be a step by step procedure, in your own words, describing what your group did so someone else could do exactly the same steps.
2) Data
    a. What you actually measured
    b. Generally in table format
    c. All numbers should have units (usually at the top of the column)
3) Analysis
    a. Calculations: One sample calculation of each type of calculation you had to make
    b. Show equations, numbers, answers, and units.
    c. Include explanations where needed
    d. A table of the results of all of your calculations
    e. Graphs
        i. Must be done using Graphical Analysis
        ii. Must have a title
        iii. Each axis must have labels and units
        iv. Do not connect points. Show a trend line or curve.
        v. Explain what the graph shows. What is the equation? What is the shape and relationship.
    f. Questions
        i. Answer everything asked in class and in the lab handout
4) Conclusion
    a. What did you do (summarize the lab)?
    b. What did you learn (report your results and what you learned)?
    c. What conclusions can you draw?
    d. Uncertainty analysis
        i. How much uncertainty is in your measurements and results?
        ii. What are the sources of uncertainty?
            1. Systematic (see http://www.experiment-resources.com/systematic-error.html)
            2. Random (see http://www.experiment-resources.com/random-error.html)
5) Responsibility – Each lab group member needs to sign the lab and indicate which parts of the lab write-up they were responsible for.