

Lab notebook format

Thursday, March 27, 2008
9:40 AM

Purpose (+1) - clear and detailed goal statement of the problem to be investigated. This purpose must be directly addressed in the conclusion.

Date (+1) - dates on which the lab was carried out.

Partners (+1) - list all people with whom you worked (first and last name)

Summary of Procedure (+1) - should list the independent and dependent variables and should give enough detail that a reader with your similar physics background can understand what you are doing.

Materials & Sketch (+1) - all lab apparatus should be listed along with a detailed illustration showing how the lab was conducted listing the location of the dependent and independent variable.

Data (+5) - Consists of the values measured directly from the experimental apparatus as well as summary representations (mean, error, etc.). Data tables should be neat and orderly with no calculations or extraneous notation.

Analysis (+5) - This section includes sample calculations (one of each type), graphs, post lab calculations for derived quantities. List all equations used. Trivial calculations such as addition, subtraction, and averaging need not be included in sample calculations. In your graphs, UNDER NO CIRCUMSTANCES SHOULD YOU CONNECT THE DATA WITH A SERIES OF STRAIGHT LINES!!!!!! If you are finding a curve of best fit list the equation and sketch this equation on your graph.

Conclusion (+5) - you must: a) the purpose statement must be directly and completely addressed in the conclusion. b) state the relationship between the variables identified in the purpose in a clear, concise English sentence. c) when a mathematical expression can be derived from graphical analysis, write it, making sure to include the appropriate units. State the meaning of the slope and discuss the significance of the y-intercept (when appropriate) d) how good was your data? Discuss your sources of error. e) what physics concepts were incorporated in the lab. f) what generalizations and conclusions does this lab suggest