

At the conclusion of each lab, you are expected to complete a lab “write-up.” Unlike a formal “lab report”, these write-ups are to be done in your lab notebook. As is the case with all pre-lab notes and lab observations, these summary remarks are to be written in pen. The basic format of each write-up is as follows:

INTRODUCTION: A short statement of the purpose of the lab and any relevant background information.

PROCEDURE: Your notes on how to perform the lab. This section should always include enough information to re-do the lab from your notes.

DATA: All direct measurements before calculations (often best expressed in a table or plot).

[The first three sections are usually completed during the course of the lab exercise (assuming you take good notes and record data carefully) and need not be re-written.]

RESULTS/OBSERVATIONS: In this section, you should summarize your results and observations. For “quantitative” labs (those involving the calculation of specific quantities), you should summarize and discuss your calculations and results and include comments on the results of the class as a whole, where appropriate. In addition, you are expected to include the calculation of any experimental and percent errors (deviations from accepted or theoretical values) and to discuss legitimate reasons why your results may have deviated from these expected values. To say that your results were off because you “mismeasured something” is not legitimate!! You must discuss real physical principles that could have lead to the deviations that you observed.

CONCLUSIONS: In this section, begin by briefly discussing the objective of the lab and give an overview of the procedure(s) (three to five sentences max). This is your opportunity to demonstrate that you really understood what this particular lab was all about. This section can be almost (emphasis on almost!) like a journal where you take the time to reflect upon your efforts in the lab. What did you learning by doing this lab? What concepts/principles were being demonstrated? What concepts are clearer now having done this lab? What principles still need clarification? In addition, make a conscious effort to think back to earlier labs. Do you see parallels between each of these exercises? Has revisiting certain procedures and concepts helped you to develop a deeper understanding of the topic(s)?

ALL LAB WRITE-UPS ARE DUE ONE WEEK AFTER THE CONCLUSION OF THE LAB.