AP Chemistry Lab Journal

* Use a 100 page (min) permanently bound notebook and NEVER tear out any pages.
* On the front cover, write (line 1) your first & last name, (line 2) course title & number, and (line 3) school year.
* Leave the first 3-4 pages blank. These pages will serve as the table of contents for your lab journal, and should be updated with each lab using the format modeled below.

**Table of Contents**

Lab #1: Separation of Mixtures……………………………………….............pages 5-9

Lab #2: Paper Chromatography………………………………………………….pages 10-14

* Pre-number the pages and only write on one side of each page.
* Write in ink. If you make a mistake, cross it out with one neat line; do not obliterate errors. This may be misconstrued as an attempt to hide unfavorable data. (This is why we also never tear out any pages, nor use white-out nor an eraser.)
* Each lab should be recorded in the manual using these parameters;
  1. Title, date and names of lab group members (highlight or underline your own name).
  2. A brief paragraph explaining the purpose and the scientific concepts which provide background for the experiment.
  3. Answer pre-lab concept/review questions, if applicable.
  4. Objectives of the lab (bulleted list)
  5. List of equipment and materials
  6. Step-by-step procedure to follow, including where the procedure came from (This is especially important for inquiry labs, where students write their own procedure, but can also be very helpful in condensing and delineating procedures that are provided in paragraph form.)
  7. Table(s) of data and observations (use a straight edge) including any automatically generated graphs\* (like those from Logger Pro).
  8. Formulas used for calculations, including one example using actual lab data for each type of calculation.
  9. Graphs generated by hand, on Excel, on a calculator, or using any other form of technology\*.
  10. One or more paragraphs, summarizing conclusions drawn from the experiment and an analysis of the quality of the results, including error analysis. Students must avoid sweeping generalizations of error and specifically address the nature of their results. If they calculated a value that was too high, their error analysis should offer at least two reasonable explanations for why the results were higher than expected. If results were too low, error analysis must focus on at least two factors which would explain a reduction in values.
  11. Lab follow-up questions and their respective answers.
* Numbers 1-6 must be completed prior to beginning the lab. For #7, blank tables are to be drawn in to the note book prior to lab and filled in as the lab progresses. The remaining items are to be completed within 5 school days of completing the experiment.

\*Printouts of graphs and/or data tables should be trimmed neatly with scissors, glued or taped into the journal, and accompanied by a brief (no more than 3 sentences) description of what the graph represents.