Your AP Physics Lab Book

Introduction:

As an AP Physics student, you will be required to keep a lab book. Your lab book MUST be adhesive-bound – *no loose-leaf binders or wire bound notebooks*. Composition notebooks, particularly quadrille ruled composition books (graph paper), are the best for the job. "Real" scientists and engineers typically keep a complete and careful record of their work in such a book. A lab book can provide a permanent record of a scientist's work, and can even be used as legal evidence in priority disputes. Learning to use a lab book correctly may well be one of the most valuable skills you take away from AP Physics. Many unfortunate young scientists and engineers find out "the hard way" that people judge the quality of their work from the quality of their communication. Learning now is easier!

Preliminaries:

Before you do anything else:

1. Write your name in permanent ink on the cover of your lab book.
2. Number every page (front and back) of the book, in ink, in the upper corner of the page.
3. Go back to page 1, and title it "Index".

General Lab Book Rules:

1. Use permanent ink only - no pencil.
2. Write legibly.
3. Never remove pages from a lab book.
4. Never erase anything in a lab book, or "color" over anything so that it cannot be read. If there is an error, "X" it out, and indicate briefly why you did so.
5. Write original data directly into your lab book. Do not recopy it "to make it neater".
6. Computer-generated data tables, graphs, and diagrams must be permanently fixed inside your lab book. **Absolutely no loose papers**, ever. Best way: a thin bead of glue. Not the best, but sometimes all that's available: tape (it deteriorates rapidly), staples (cause bulges)
7. It is best if papers permanently inserted into your lab book are trimmed to fit the pages. If that can't be done, they need to be folded to fit inside the lab book. Nothing should be "hanging out" of your lab book.
8. While a great deal of discussion and collaboration is expected in the physics laboratory, your lab book should be your own work. After you discuss the lab with your colleagues, write your analysis in your own words. **Do not copy from your lab partners**.

What Goes Into the Lab Book:

1. Lab proposals. When asked to write a proposal, these should be done before the day of the lab. I will check these before you begin working on the lab.
2. Data and notes. When actually performing an experiment, please record data and make notes on the page after your proposal (please DO NOT put your data in the tables you made in your proposal). Record notes on setup changes, procedure changes, etc., as well. Lab proposals are not necessarily set in stone and you're allowed to improve your methods as you go through the lab. If you do make changes you should make careful note of them.
3. Calculations and preliminary graphs. It's always good to sketch rough graphs before generating one on the computer to include in your formal lab reports.