**How to Record a Lab in your Notebook**

You’ll work through each lab in your notebook, so you’ll need a basic format to follow to ensure you have a solid record of your work.

***If you are an AP Physics student, you may need to show this notebook to your college in order to receive college credit for AP Physics 1, so do a good job on it and keep it safe!* ☺**

For each lab, you should have the following sections in your notebook. **LABEL** each section clearly. **Write neatly**. **Be organized** in how you take notes and set up your data table(s).

**PRE-LAB:**

Take notes on the pre-lab discussion. Write down whatever I write down, and ALSO important things I say or do. Write down your observations of the physical situation/demo I present. These notes should always include:

* Drawing or diagram of the physical setup or situation – label apparatus or important parts
* Important terms and newly defined words.
* Variables – independent, dependent, with their symbols, units and a short definition of what they are
* Any important instructions or basic outline of procedures, if given
* Lab Purpose statement – given on board. You write it down word for word.

**DATA:**

* Write down all the data you collect and anything else that happens or that you notice during the lab. Every student should have a complete set of data for each lab.
* Data should be recorded in an appropriately designed and neatly drawn data table. Err on the side of writing too much information, rather than not enough.
* Note number of data points and number of trials. A good rule is the 10 x 10 rule. 10 data points, with at least a 10 unit spread between your lowest and highest value.
* Note any potential sources of error.

**DATA ANALYSIS:**

Anything you do to/with the data goes here, including:

* calculations
* graphs (both primary and attempts to linearize)
* new data sets (a calculated data column, etc.)
* equations & derivations/work that your group does
* y-intercept 5% rule and % error calculations

**BE NEAT.** Anyone should be able to follow what you did!

**POST-LAB:**

* You should take notes during/after the Whiteboarding and post-lab discussion.
* Focus on major issues, the physical meaning of the slope, any equations you can derive and write, any general equations that emerge.
* Show EVERY STEP in the derivation of any equation(s) that emerge
* Note sources of error.