

## Lab write-up format 2022/23 for AP Physics

Please make sure to title the lab and write your name and date on the lab, even if shared electronically.

### 1. Purpose:

- Put in your OWN words!! The intended purpose will not always be the same as what is in the lab(s). This should be to the point.

### 2. Set Up:

- Use drawings/schematics to aid in making your procedures brief. "Synthesize" elements from the lab and make sure another group could understand well enough to repeat what you do.

### 3. Data:

- Use tables and graphs. Label the measurements and what units you used thoroughly.

### 4. Calculations:

- Use three steps.
  - A) Formula
  - B) Actual data replacing the variables
  - C) The answers with correct units

### 5. Analysis and Results:

Analyze your results and interpret what they mean based on your findings. Be sure to include relationships and references to your data and calculations. You may want to include reasons for experimental error, possible improvements to the experiment, etc. here. The *analysis* of what went right, what went wrong, and how your lab could be improved are important. The amount of analysis is the most important part of your lab write-up. ALL lab analyses should include a discussion about the specific uncertainties and specific errors within your experiment, and these should be based on the method and quantity of data you collect.

**A conclusion to any lab should be your unique answer to "What did I learn, and how did I learn it?"**

Please note: This year, most if not all lab write-ups will be submitted electronically. I may consider having each group submit a single write-up, with different people sharing the work for the top parts (Purpose, Set Up, Data, Calculations) with each person writing their own analysis. We'll talk about this early in the year.

Normally, neatness is taken into account in the overall grade, so remember write-ups are expected to be word processed. However, a messy lab write-up on time is still much better than a '0' for something being turned in late.

