

AP Physics Level 1 Summer Assignment
Mr. Nugent

Please complete the listed assignments below prior to the **first day of school**. I know for many of you this is your first year (and only year for that matter) of taking Physics. Physics is both highly conceptual and mathematical. We will use mathematics (data, graphs, and formulas) to explain different phenomena. It is exceptionally important for you to have a good mathematical foundation in algebra and basic trigonometry (specifically right triangle trigonometry) to be successful in this course. The first unit of any physics class provides you with the foundation for the mathematics you will use for the entire laboratory-based course (over 30 different structured and inquiry-based laboratory activities).

1. Read *Chapter 1* from *Physics 9e* using link below:
 - [Physics 9e Cutnell and Johnson](#) – Textbook (You will have access to the entire textbook at the beginning of the school year. However, if you would like a hard copy of the textbook, please see me in Room 209 prior to the end of school.)
2. Download the Chapter 1 Notes using link below to your iPad watch the screencast of the notes:
 - [Chapter 1 Notes](#)
 - [Chapter 1 Notes Screencast](#)
3. Complete [Significant Digits Review Worksheet](#)
4. Watch the screencasts of the Chapter 1 Example Problems using the links below:
 - [Chapter 1 Example Problems 1, 13, and 33](#)
 - [Chapter 1 Example Problem 51](#)
 - [Chapter 1 Example Problem 68](#)
5. Complete the following **Chapter 1 Problems** to the best of your ability (starting on textbook page 22 at the end of the chapter): 2,5,6,10,12,14,16,23,24,27,35,40,42,45, 46,53, and 66. You may find this [Problem Solving with Vectors Graphical Organizer](#) helpful in completing these problems.

Upon returning to school, I will answer any questions you may have concerning these concepts and problems. Two laboratory activities will also be completed involving a *Force Table* and the iPad application of *Vernier Graphical Analysis 4* (please download this application from Self-Service prior to the start of school). We will use Vernier Graphical Analysis regularly to create graphs and allow your iPads to collect and analyze real-time data using a LabQuest and probes. There will likely be a test on this material during the second week of school so please come ready to go and hit the ground running! Have a great summer and I look forward to seeing you all the first day of school!