

AP Physics C Summer Assignment - Preblich

Due: **1st full day of school!**

AP Physics C is a challenging course and we will have much to learn next year. Therefore, I'd like you to come to school warmed up and ready to go! I know you are anxious to solve lots of physics problems (can you ever get enough?), but please **wait until about two weeks before school starts** to complete this assignment (so they are fresh in your mind). Until then, relax and enjoy your summer (but feel free to think physics all the time)! Have fun!



Please sign out a “Fundamentals of Physics” book by Halliday/Resnick/Walker. Note any problem with the binding.

Here is your summer assignment for AP Physics C. **This assignment is mandatory.** Remember to **SHOW YOUR WORK** to get credit! (I have made people do the assignment over because they did not show enough work!!!)

In this class, you are expected to remember what you have learned from Physics I. We have no time for reviewing Physics I in class. **Knowing how to do these problems are prerequisites to this class!**

There will be a **QUIZ** on these problems during the first week you are back.

You have two assignments:

1. **READ AND OUTLINE CHAPTERS 1-4.** Break each chapter down into sections, such as 1-1, 1-2, 1-3, etc. Equations are not enough! You need to have a description of what the chapter was about in words. Usually one or two sides of a page are enough per chapter (but you must have something for each section).

2. Do the following Problems (under the **“Problems”** section – not the “Questions” section):

Chapter 1 – Measurement: Problems #3, 8

Chapter 2 – 1D Motion: Problems #1, 25, 27, 48, 61

Chapter 3 – Vectors: Problems #6, 8, 9

Chapter 4 – 2D Motion: Problems #20, 22, 28, 32, 44, 45

Chapter 5 – Force and Motion I: Problems #24, 29, 35, 63, 80

Chapter 6 – Force and Motion II: Problems #4, 36, 39, 40, 45, 89, 104

Chapter 7 – Kinetic Energy and Work: Problems #1, 2, 24

Chapter 8 – Potential Energy and Conservation of Energy: Problems #1, 22, 27ab, 28

Chapter 9 – Linear Momentum: Problems #18, 56

Chapter 21 – Electric Charge: Problems #3, 8, 21, 23, 61

Chapter 22 – Electric Fields: Problems #4, 5, 38

Chapter 26 – Current and Resistance: Problems #1, 15, 18

Chapter 27 – Circuits: Problems #2 (emf is voltage), 98 (potential difference is voltage drop)

You can do #17 for Extra Credit!