

Honors Freshman Physics

Chapter 1: Describing the Physical Universe

Test Date: August 22, 2008

This unit will allow each student to:

- a. gain a better understanding of the concepts of speed, velocity and acceleration as well as describing them visually through the use of graphs
- b. continue making proper scientific measurements and calculations w/ significant digits
- c. define and properly use all vocabulary
- d. properly apply all terms in describing/explaining real world examples
- e. relate these concepts her/his daily activities and behaviors
- f. teach someone else the concepts discussed
- g. practice proper laboratory safety

This will be accomplished by each student that is able to:

1. Explain what makes up the physical universe.
2. Describe how the scientific method is used.
3. Explain the effects of energy on a system.
4. Express distance measurements in both English and metric units.
5. Distinguish between independent and dependent variables.
6. Convert between different units, using dimensional analysis (unit cancellation).
7. Distinguish between speed and velocity
8. Interpret (a) distance v. time (b) position v. time (c) speed v. time and (d) velocity v. time graphs
9. Construct (a) distance v. time (b) position v. time and (c) speed v. time
10. Perform calculations using (K-U-E-S) to determine (a) speed, time, or distance and (b) velocity, displacement, or time.

Key Terms:

natural laws, experiment, analysis, mass, system, independent variable, dependent variable, matter, energy, speed, constant speed

Course Website:

www.waltonhigh.org – follow the instructions below

Go to Departments (middle of screen) – **Science Department** (left-side of screen)- **Honors Freshman Physics** (left-side of screen)

Textbook- Physics A First Course

Name: _____ Period: _____

Homework Assignment Sheet & Grade Sheet
Chapter 1: Describing the Physical Universe

Write in the date, copy the homework assignment and due day each day/week from the board. Homework will be collected/checked as designated by your teacher. Remember homework counts as 10% of your total grade and will not be accepted late.

Date:	Homework Assignment	Due