

Name: \_\_\_\_\_  
Mr. Willis  
Conceptual Physics: \_\_\_\_\_  
Date: \_\_\_\_\_

Unit II  
Motion (Velocity/Acceleration)  
Need extra help?  
Check out <http://www.bayhicoach.com>

# II

## Unit Syllabus and Portfolio Directions

**Objective:** Assemble the assignments for the units into a booklet. Then use the booklet to complete review questions and prepare for the test.

The following items should be put in the following order in the portfolio:

- \_\_\_ Unit Syllabus and Portfolio Directions (this sheet)
- \_\_\_ Vocabulary Review Sheet
- \_\_\_ Classwork/Daily Log
- \_\_\_ Video: ESPN Speed & Acceleration
- \_\_\_ Reading Assignment (Chapter 11, sec 1, 2 & 3)
- \_\_\_ Distance-Time Graphing Activity
- \_\_\_ Acceleration and Speed-Time Graphs
- \_\_\_ Graphing Your Motion Lab
- \_\_\_ Free Fall Lab
- \_\_\_ Speedometer Activity
- \_\_\_ Unit Review

### Portfolio Grade

- cover (out of 5) \_\_\_\_\_ (Neatness, effort, and color are important.)
- objectives (out of 5) \_\_\_\_\_
- concepts (out of 5) \_\_\_\_\_ (You may use words, symbols, diagrams on each.)
- contents (out of 5) \_\_\_\_\_ (All assignments must be included and in order.)
- total (out of 20) \_\_\_\_\_

### Test Grade

\_\_\_\_\_

### The Front Cover

Write the unit title on the cover. "Unit II – Motion (Velocity/Acceleration)"  
Decorate the front cover with drawings of concepts from the chapter.

### The Inside Front Cover

Write "Objectives" at the top of the page. List the following unit objectives:

- Know how to determine units for calculated data.
- Use distance and time to compute speed.
- Use speed and time to determine acceleration.
- Create distance/time graphs and speed/time graphs.
- Be able to read a distance-time graph and calculate the slope (speed).
- Be able to read a speed-time graph and calculate the slope (acceleration).
- Be able to plot instantaneous speed on a speedometer type graph.
- Be able to differentiate between speed, velocity and acceleration.
- Distinguish between linear and non-linear graphs.

### Inside Back Cover

Write "Concepts" at the top of the page. Divide the page into nine squares.  
Explain the answers to the unit objectives with words and diagrams.

**Back Cover** Write your name – last name, first name and class in the lower right hand corner.