Motion: (Chapter 11)

Objectives:

- 1. Identify frames of reference and describe how they are used to describe motion
- 2. Identify appropriate SI units for measuring devices
- 3. Distinguish between distance and displacement
- 4. Calculate displacement (vector addition or hypotenuse)
- 5. Identify appropriate SI unit for measuring speed and how it is derived
- 6. Compare and contrast average speed and instantaneous speed
- 7. Interpret position(distance) time graphs
- 8. Identify changes in motion that produce acceleration
- 9. Describe examples of constant acceleration
- 10. Calculate acceleration from data and graphical
- 11. Interpret velocity time and position time graphs
- 12. Classify, identify, and describe positive and negative acceleration

Assessments:

- 1. 3 homework assignments = 15
 - a. shopping trip
 - b. 11.1
 - c. 11.2
 - d. 11.3
 - e. wordwise
- 2. castle learning #1 = 10
- 3. 3 formal grade labs (20 point each and 2 participation grade labs (10 points each) = 80
 - a. position time: constant speed
 - b. time, distance, average velocity
 - c. position time: nonlinear
 - d. velocity graphs
 - e. ticker tape lab
- 4. quiz = 10
- 5. test = 60

Vocabulary:

- 1. distance
- 2. displacement
- 3. vector
- 4. velocity
- 5. acceleration
- 6. slope
- 7. frame of reference
- 8. speed
- 9. average speed
- 10. instantaneous speed