

Chapter 1 – Introduction: Matter and Measurement (Syllabus)

Chemistry: The Central Science

1. Read entire chapter (pgs. 3-34) & take notes on Sections 1.1-1.5 (pgs. 3-23)
2. Review Fig. 1.9 (Classification of Matter)
3. Section 1.4: Review the basic form of energy from physical science.
4. Table 1.3 (Base Units)
5. Table 1.4 (Selected Prefixes)
6. Fig. 1.21 (Common volumetric glassware)
7. **Most important:** Sections 1.6-1.7 (pgs. 24-33)
 - a. **Know the 4 rules for determining significant figures and the 2 rules for calculations involving measurements.**
 - b. **NOTE:** Up to 1 point may be lost out of a 9 point free response item (AP Test) for gross misuse of sig. figs. and/or gross mathematical mistakes! Correct answers are still important!
 - c. **Dimensional Analysis:** ALL MATHEMATICAL WORK MUST BE SHOWN USING THIS FORMAT TO OBTAIN AS MUCH PARTIAL CREDIT AS POSSIBLE ON PROBLEMS THROUGHOUT THE REST OF THIS COURSE.
8. **NOTES:**
 - a. See me if you are having trouble with a particular concept, not on the morning of a test but in homeroom, class time, and/or before or after school.
 - b. Keep all your problems in a separate removable section of your notebook.
 - c. **You are responsible for everything in a chapter (including all of the “Visualizing Concepts” and “Exercises” at the end of the chapter) unless told otherwise!!!! I will provide some “Additional Exercises” with each chapter.**
9. You are responsible for ALL of the “Visualizing Concepts” & “Exercises” at the end of Ch. 1. Remember to start with the Focus Problems (given below) and then progress from there, ending with the “Additional Exercises”.

Chapter 1 Focus Problems:

 - Sections 1.1-1.5: #'s 1, 13, 19, 21, 25, 27, 33, 35, 7
 - Sections 1.6-1.7: #'s 8, 43, 45, 49, 57, 61
 - Additional Exercises: #'s 69, 84, 91
10. **Lab:** Experiment 3: Separation of the Components of a Mixture
11. **Test:** Ch. 1-3 combined test in a few weeks