

8/30/2011

Home assignment (complete the problems by next Friday, Sept 9th):

Chapter 1. – read the whole chapter (till pp. 30) by Wed Sept 7th.

End of Chapter problems: on pp. 31-35 problem numbers 1.XX, where XX is

text review: 22 , 26, 27, 29, 31, 34

elements memorization practice: 38 - 41, 47

units and sigfigs operations: 49, 50, 56 , 67, 69, 72, 73,

units and temp conversions (dimensional analysis) : 74, 75, 77, 82, 96

density: 88, 92

combined skills multi-step practice: 108, 113

(Remember, you have access to all the solutions for these problems in the end of your book.

However, always try to work out your own solution first, and only THEN check the book solution.

Be sure you understand it.

Let me know if any of the solutions in the book are wrong – it has happened before!)

Be Able to Explain IN WRITING the following **terms**:

Experiment, law, hypothesis, theory (and how they all are related to each other), law of conservation of mass, physical change and chemical change (and what the differences between the two are), extensive and intensive properties; substance, element, compound, law of constant composition, general lay-out of the Periodic table (groups/periods); homogeneous and heterogeneous mixtures, phase change, SI prefixes, SI base units for mass, length, time, temperature, volume; density.

Operational skills you should acquire: recognize significant figures, determine the correct number of sig. figs in your answers, convert to and from scientific notation, carry out unit conversions via correct conversion factor, calculate density via volume and mass and vice versa, do temperature conversions.

MEMORIZE ELEMENTS 1-18 names and symbols by the end of next week!!