

8/27/2009

Home assignment (complete the problems by next Friday, Sept 4th):

Chapter 1. – read the whole chapter (till pp. 30) during the first week.

Recommended problems: on pp. 31-40 problem numbers 1.XX, where XX is

10, 11, 30, 32, 34, 37,

40, 42, 47, 50, 54, 57,

62, 65, 68, 69, 77, 80,

83, 88, 91, 103, 123, 133

(Remember, the blue ones have solutions in the end of the book – work out your own solution first, 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), substance, element, compound, law of constant composition, 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.