

Study Guide for Test 2 CH 116, Fall 2008

The test material for test 2 starts from the exact place where the test 1 left off.

Chapter 11:

The test material starts from Bonding of Solids, covering molecular solids, covalent network solids, ionic solids and metallic solids.

Chapter 13- Properties of Solutions:

The solution process/ Energy change and solution formation/ solution formation, spontaneity and disorder/ solution formation and chemical reactions/ saturated solutions and solubility / Factors affecting solubility / solute solvent interactions/ pressure effects /Henry's Law/ Temperature effects/ Ways of expressing concentration / mass %, ppm, ppb/mole fraction molarity and molality/ Colligative properties/ lowering of vapor pressure/ Boiling point elevation/ freezing point depression/ osmosis/Determination of molar mass from colligative properties of solutions.

Chapter 15-Chemical Kinetics:

Factors that affect reaction rates/ Reaction Rates/ Change of rate with time/ reaction rates and stoichiometry / Concentration and rate/ exponents in the rate law/ units in the rate constants/ using initial rates to determine rate laws/change of concentration with time / First order reaction /Half life for first order reaction