

Unit 3: Solutions and Kinetics

AP Chemistry

Section 1- Solutions

Vocabulary Terms to Know:

Solution, solute, solvent, insoluble, soluble, saturated, unsaturated, supersaturated, crystallization, aqueous, miscible, immiscible, electrolytes, nonelectrolytes, dissociation, solvation, hydration, endothermic, exothermic, entropy, Henry's Law, molarity, molality, concentrated, dilute, colligative properties, Raoult's Law, osmosis, colloids, Tyndall Effect

Textbook Practice Problems:

- Pgs. 566-570: 13.1, 13.2, 13.3, 13.5, 13.7, 13.9, 13.10, 13.13, 13.15, 13.17, 13.21, 13.23, 13.27, 13.29, 13.31, 13.33, 13.35, 13.37, 13.39, 13.41, 13.43, 13.47, 13.49, 13.57, 13.61, 13.63, 13.67, 13.69, 13.71, 13.75, 13.77, 13.79, 13.81

Section 2- Kinetics

Vocabulary Terms to Know:

Kinetics, Collision Theory, activation energy, activated complex, reaction rates, instantaneous rate, differential rate law, reaction order, zero order, first order, second order, integrated rate law, half-life, reaction mechanism, elementary step, molecularity, unimolecular, bimolecular, termolecular, multistep mechanism, intermediate, rate-determining step, catalyst, homogeneous catalyst, heterogeneous catalyst, enzyme

Textbook Practice Problems:

- Pgs. 615-624: 14.2, 14.3, 14.5, 14.6, 14.7, 14.8, 14.9, 14.12, 14.13, 14.15, 14.16, 14.17, 14.23, 14.25, 14.27, 14.29, 14.31, 14.33, 14.35, 14.37a, 14.39, 14.41, 14.45, 14.49, 14.51, 14.57, 14.59, 14.65, 14.66, 14.67, 14.68, 14.69, 14.71, 14.73, 14.75, 14.95