

UNIT 9 PRECIPITATION REACTIONS

Textbook References: *Chemistry* Zumdahl 5th Edition Chapter 15

1. use solubility rules to determine if a salt is soluble
2. determine K_{sp} from solubility
3. determine solubility from K_{sp}
4. use reaction quotient to determine if a salt will precipitate or not
5. determine the ion concentration required to begin precipitation
6. solve common ion problems
7. develop a scheme to separate a mixture of ions by difference in solubility

Vocabulary:

solubility product, reaction quotient, saturated, solubility

AP Course Guide correlation:

III. Reactions

A. Reaction types

C. Equilibrium

2. Quantitative treatment

b. Equilibrium constants for reactions in solution

(2) Solubility product constants and their application to precipitation and the dissolution of slightly soluble compounds

(3) Common ion effect