

## Unit 4: Equilibrium and Acids / Bases

### AP Chemistry

#### Section 1- Equilibrium

##### Vocabulary Terms to Know:

*Equilibrium, static equilibrium, dynamic equilibrium, Law of Mass Action, homogeneous equilibrium, heterogeneous equilibrium, reaction quotient, common ion effect, Le Chatelier's Principle*

##### Textbook Practice Problems:

- Pgs. 661-666: 15.1, 15.2, 15.3, 15.5, 15.6, 15.7, 15.9, 15.15, 15.17, 15.19, 15.21, 15.23, 15.27, 15.31, 15.33, 15.35, 15.37, 15.39, 15.41, 15.43, 15.49, 15.51, 15.61, 15.63, 15.67
- Pgs. 769-771: 17.49, 17.51, 17.53, 17.55, 17.67, 17.73, 17.75

#### Section 2- Acids / Bases

##### Vocabulary Terms to Know:

*Arrhenius acid, Arrhenius base, Bronsted-Lowry acid, Bronsted-Lowry base, Lewis acid, Lewis base, amphiprotic, amphoteric, conjugate acid-base, pH scale, polyprotic acid, monoprotic, diprotic, triprotic, common ion effect, neutralization reaction, titration, standardized, titrant, analyte, equivalence point, half-equivalence point, indicators, end point, titration curve, buffers, buffer capacity*

##### Textbook Practice Problems:

- Pgs. 715-720: 16.1, 16.4, 16.5, 16.10, 16.11, 16.15, 16.17, 16.19, 16.21, 16.23, 16.27, 16.29, 16.31, 16.33, 16.37, 16.41, 16.43, 16.45, 16.47, 16.49, 16.51, 16.53, 16.55, 16.57, 16.61, 16.65, 16.71, 16.77, 16.81, 16.83, 16.85, 16.87, 16.91, 16.93
- Pgs. 766-769: 17.1, 17.4, 17.5, 17.6, 17.7, 17.13, 17.17, 17.19, 17.21, 17.23, 17.25, 17.27, 17.29, 17.33, 17.35, 17.37, 17.41, 17.43, 17.45, 17.47