

## Chemistry Chapter 18

1. **Chemical Equilibrium:** the state in which forward and reverse reactions balance each other because they occur at equal rates.
2. **Common Ion:** an ion that is common to two or more ionic compounds.
3. **Common Ion Effect:** the lowering of the solubility of a substance by the presence of a common ion.
4. **Equilibrium Constant:**  $K_{eq}$ , which describes the ratio of product concentrations to reactant concentrations, with each raised to the power corresponding to its coefficient in the balanced equation.
5. **Heterogeneous Equilibrium:** a state of equilibrium that occurs when the reactants and products of a reaction are present in more than one physical state.
6. **Homogeneous Equilibrium:** a state of equilibrium that occurs when all the reactants and products of a reaction are in the same physical state.
7. **Law of Chemical Equilibrium:** states that at a given temperature, a chemical system may reach a state in which a particular ratio of reactant and product concentrations has a constant value.
8. **Le Châtelier's Principle:** states that if a stress is applied to a system at equilibrium, the system shifts in the direction that relieves the stress.
9. **Reversible Reaction:** a reaction that can take place in both the forward and reverse direction; leads to an equilibrium state where the forward and reverse reactions occur at equal rates and the concentrations of reactants and products remain constant.
10. **Solubility Product Constant:**  $K_{sp}$ , which is an equilibrium constant for dissolving of a sparingly soluble ionic compound of water.
11.  $K_{eq} = \frac{[C]^c [D]^d}{[A]^a [B]^b}$  page 563