# NYS LEARNING STANDARDS

### IX. Acids, Bases, and Salts

**IX.1** Behavior of many acids and bases can be explained by the Arrhenius theory. Arrhenius acids and bases are electrolytes. (3.1uu)

**IX.2** An **electrolyte** is a substance which, when dissolved in water, forms a solution capable of conducting an electric current. The ability of a solution to conduct an electric current depends on the concentration of ions. (3.1rr)

**IX.3 Arrhenius acids** yield H+ (aq), hydrogen ion as the only positive ion in an aqueous solution. The hydrogen ion may also be written as H3O+ (aq), hydronium ion. (3.1vv)

**IX.4 Arrhenius bases** yield OH- (aq), hydroxide ion as the only negative ion in an aqueous solution. (3.1ww)

**IX.5** In the process of **neutralization**, an Arrhenius acid and an Arrhenius base react to form a salt and water. (3.1xx)

**IX.6 Titration** is a laboratory process in which a volume of solution of known concentration is used to determine the concentration of another solution. (3.1zz)

**IX.7** There are alternate **acid-base theories**. One theory states that an acid is an H+ donor and a base is an H+ acceptor. (3.1yy)

**IX.8** The **acidity** or **alkalinity** of a solution can be measured by its pH value. The relative level of acidity or alkalinity of a solution can be shown by using indicators. (3.1ss)

**IX.9** On the **pH** scale, each decrease of one unit of pH represents a tenfold increase in hydronium ion concentration. (3.1tt)

## USE THESE STANDARDS TO MAKE AN ACIDS/BASES VOCABULARY CHEAT SHEET