

## Unit 10 Ionization and Ionic Equations

1. What is an electrolyte?
2. What two types of substances ionize completely when dissolved in water?
3. How did Arrhenius define an acid?
4. List the seven strong acids.
5. What is a weak acid?
6. Label the following as either a strong, weak or non electrolyte
  - a.  $\text{NaNO}_3$
  - b.  $\text{Ca(OH)}_2$
  - c.  $\text{H}_2\text{SO}_4$
  - d.  $\text{HNO}_2$
  - e.  $\text{BaSO}_4$
7. For each of the following, complete, balance, write ionic and net ionic equations
  - a. calcium + nitric acid
  - b. aluminum + chloric acid
  - c. magnesium + sulfuric acid
8. For each of the following, complete, balance, write ionic and net ionic equations
  - a. sodium phosphate + barium chloride
  - b. potassium carbonate + calcium nitrate
  - c. lithium bromide + lead (II) chlorate
9. For each of the following, complete, balance, write ionic and net ionic equations
  - a. sulfuric acid + barium hydroxide
  - b. nitric acid + potassium hydroxide
  - c. carbonic acid + lithium hydroxide