CHAPTER 3 LEARNING OBJECTIVES

To satisfy the minimum requirements for this course, you should be able to:

Understand the concept of stoichiometry and be able to:
  • write balanced chemical equations including states

Apply your understanding of the properties of aqueous solutions to:
  • identify the solvent and solute(s) in a solution
  • predict whether a substance is a strong electrolyte, weak electrolyte, or nonelectrolyte
  • write balanced chemical equations for the dissolving of molecular compounds, ionic compounds, or acids in water

Write balanced chemical, complete ionic, and net ionic equations for precipitation reactions and acid-base reactions and identify spectator ions

Recognize precipitation reactions and use solubility rules (See the General Chemistry Reference Sheet and Figure 3.10) to predict when a precipitation reaction is likely to occur

Recognize acid-base reactions and be able to:
  • Define Brønsted acids and bases
  • explain the differences between strong and weak acids and between strong and weak bases