

## CHAPTER 4 LEARNING OBJECTIVES

1. Correctly balance chemical equations.
2. Calculate the theoretical and actual yields of chemical reactions.
3. Identify the limiting and excess reagents in a reaction mixture.
4. Determine the amount (in moles or grams) of excess reagent(s) remaining at the end of a reaction and the amount (in moles or grams) of product(s) produced.
5. Understand the four general types of chemical reactions.
6. Predict the products of the combustion reactions of hydrocarbons.

Review the “In Closing” and “Key Terms” sections of Chapter 4 (page 153).