

## Chemistry I WOC Chapter 7 Objectives

1. Define *chemical reaction*.
2. Why do chemical reactions occur?
3. What are some evidences that a chemical reaction has occurred?
4. Define these terms in terms of chemical reactions:  
reactant - product      word equation      formula equation  
balanced equation      coefficient
5. Write the word and formula equations for the reaction when calcium carbonate decomposes to form calcium oxide and carbon dioxide.
6. Outline the steps of balancing a chemical equation.
7. Write a balanced equation for the reaction in which sodium nitrate reacts with calcium chloride to produce sodium chloride and calcium nitrate.
8. Write formulas for each of these compounds and be able to write formulas for compounds containing these ions: Calcium carbonate      Magnesium oxide      Lead (II) acetate  
Sodium Fluoride      Copper (III) nitrate      Potassium sulfate      Copper (III) chloride  
Ammonium nitrite      Sodium phosphate
9. Describe the Law of Conservation of Matter as it applies to writing chemical equations.
10. Be able to write a balanced formula equation when given a previously unencountered word description of a chemical reaction.