

**Chemistry 11 – Unit 6—Chemical Reactions**  
**Unit Outline**

<b>Topic</b>	<b>Activity</b>
Introduction to Chemical Reactions and Equations	<p>“World War III” demonstration. List the types of evidence which suggest a Chemical Reaction.</p> <p>Definition of Reactants, Products, Open and Closed Systems and the Conservation Laws. See p. 105-107 in SW.</p>
Balancing Chemical Equations	<p>Class Examples of Tricks to Balancing Chemical Equations. Read p. 107-110 in SW.</p> <p>Selected practice in balancing from Exercises 7-56 on p. 110-112 of SW.</p> <p>Examples of using phases (s), (l), (g) and (aq) in chemical equations. See p. 113 in SW.</p> <p>Writing Balanced Chemical Equations starting with Word Equations. Class Examples and see p. 113 in SW.</p> <p>Do Exercises 57 (a-e), 58, 59, 60 and 61 on p. 113-114 of SW.</p> <p>Hand-In Assignment #7—Chemical Equations</p>
Types of Chemical Reactions	<p>Class Notes, Examples and Demonstrations of Synthesis, Decomposition, Single Replacement, Double Replacement, Neutralization and Combustion Reactions. See p. 114-118 in SW.</p> <p>Do Experiment 5C—Types of Chemical Reactions</p> <p>Selected Exercises from 65, 66 and 67 on p. 118 of SW.</p> <p>Hand-In Assignment #8—Completing, Balancing and Classifying Chemical Equations. (CBC)</p>
Energy Changes in Chemical Reactions	<p>Demonstration of Exothermic and Endothermic Reactions</p> <p>Class Introduction to Enthalpy (H), Enthalpy Diagrams and <math>\Delta H</math>. See p. 119-122 in SW.</p> <p>Do Ex. 76-80 on p. 122 of SW.</p> <p>Class Introduction to and notes on Calorimetry. (Not in SW.)</p>

<b>Topic</b>	<b>Activity</b>
Energy Changes in Chemical Reactions	Do Experiment 17B—Heat of Fusion of Ice  Class Explanation and Examples of $\Delta H$ and Coefficients (Moles) in Chemical Equations.  Hand-In Assignment #9—Energy in Chemical Reactions
Summary and Test	Class Review of Unit 6—Chemical Reactions  Test on Unit 6