

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Chemistry Unit 8 – Chemical Equations	10 – 12	3 rd cycle	10 days
TEKS/Student Expectations		Examples/Specifications:	
5A - identify changes in matter, determine the nature of the change, and examine the forms of energy involved		5A & B – recognize the characteristics of chemical changes and differentiate them from physical changes in lab.	
5B - identify and measure energy transformations and exchanges involved in chemical reactions			
11B - demonstrate the use of symbols, formulas, and equations in describing interactions of matter such as chemical and nuclear reactions		11B – write and interpret chemical equations.	
11C - explain and balance chemical and nuclear equations using number of atoms, masses, and charge		11C – balance chemical equations using coefficients.	
10A - identify oxidation-reduction processes		10A & B – recognize redox reactions and their significance in everyday life such as combustion and corrosion.	
10B - demonstrate and document the effects of a corrosion process and evaluate the importance of electroplating metals			
1A - demonstrate safe practices during field and laboratory investigations.		1A & B – conduct lab experiments safely and follow instructor guidelines regarding appropriate disposal of materials.	
1B - make wise choices in the use and conservation of resources and the disposal or recycling of materials.			
2A - plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology		2A – use the scientific method when planning a controlled experiment, including the identification and selection of appropriate equipment, and the development of a suitable hypothesis.	
2B - collect data and make measurements with precision		2B & C– using the metric system, measure quantities to the correct number of significant digits using scientific notation as appropriate. Convert between units as needed and round to the correct number of digits when reporting a calculated answer.	
2C - express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures			

<p>2D - organize, analyze, evaluate, make inferences, and predict trends from data</p> <p>2E - communicate valid conclusions</p>	<p>2D & E – apply the steps of the scientific method to lab investigations.</p>
<p>Language of Instruction:</p>	
<p>Reactant Product Coefficient Synthesis Decomposition Single replacement Double replacement Combustion Oxidation Reduction Corrosion</p>	<p>Instructional Resources/Textbook Correlations:</p> <p>Glencoe Chemistry: Concepts and Applications – chapter 6 and 16.1 Chemical changes lab Types of reactions lab Redox lab Balancing equations activity</p> <p>Weblinks/Other Resources:</p>
<p>Evaluation/External Assessment/Local Assessment:</p>	
<p>TAKS test (1.1A, 1.2A-D, 4.8A-C) Teacher-designed test Laboratory reports and performance Quizzes Daily work Homework</p>	<p>Best Instruction Timeline:</p> <p>2 days – chemical changes and lab 2 day – chemical equations and balancing 2 days – types of reactions and lab 2 days – redox and lab 2 days – review and assessment</p>