

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Chemistry Unit 5 – Chemical Compounds	10 – 12	2 nd cycle	8 days
TEKS/Student Expectations		Examples/Specifications:	
<p>8B - investigate and compare the physical and chemical properties of ionic and covalent compounds</p> <p>8A - identify characteristics of atoms involved in chemical bonding</p> <p>8C - compare the arrangement of atoms in molecules, ionic crystals, polymers, and metallic substances</p> <p>8D - describe the influence of intermolecular forces on the physical and chemical properties of covalent compounds</p> <p>1A - demonstrate safe practices during field and laboratory investigations.</p> <p>1B - make wise choices in the use and conservation of resources and the disposal or recycling of materials.</p> <p>2A - plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology</p> <p>2B - collect data and make measurements with precision</p> <p>2C - express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures</p> <p>2D - organize, analyze, evaluate, make inferences, and predict trends from data</p> <p>2E - communicate valid conclusions</p>	<p>8B – compare the properties of common elements to the common compounds they form in theory and lab.</p> <p>8A, 8C & 8D – compare and contrast ionic, covalent, and metallic bonds and the properties of substances formed from each. Classify compounds as to type of bonding based on properties in lab analysis.</p> <p>1A & B – conduct lab experiments safely and follow instructor guidelines regarding appropriate disposal of materials.</p> <p>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.</p> <p>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.</p> <p>2D & E – apply the steps of the scientific method to lab investigations.</p>		

Language of Instruction:		Instructional Resources/Textbook Correlations:
Covalent bond Covalent compounds Crystal Electrolyte Interparticle force Ion Ionic bond Ionic compound Melting point Metallic bond Molecule Noble gas configuration Octet rule Solubility		Glencoe Chemistry: Concepts and Applications – chapter 4 Element vs compound lab Properties of ionic and covalent substances lab (two days)
		Weblinks/Other Resources:
Evaluation/External Assessment/Local Assessment:		Best Instruction Timeline:
TAKS test (1.1A, 1.2A-D, 4.7D) Teacher-designed test Laboratory reports and performance Quizzes Daily work Homework		2 days – compare properties of elements and compounds including lab 4 days – bonding and lab with analysis 2 days – review and assessment