

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Chemistry Unit 6 – Ionic Nomenclature	10 – 12	2 nd cycle	10 days
TEKS/Student Expectations		Examples/Specifications:	
<p>11A - identify common elements and compounds using scientific nomenclature</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>4D - describe the physical and chemical characteristics of an element using the periodic table and make inferences about its chemical behavior</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>11A – name and write correct chemical formulas for ionic compounds including those involving common polyatomic ions and transition metals.</p> <p>8A & C, 4D – recognize that ionic bonds are usually formed between metals and nonmetals and the resulting structure is crystalline in the solid phase. Investigate the properties of hydrated ionic crystals in lab.</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>		

2E - communicate valid conclusions		
Language of Instruction:		Instructional Resources/Textbook Correlations:
Anhydrous Anion Binary compound Cation Deliquescent Formula unit Hydrate Hygroscopic Oxidation number Polyatomic ion Roman numeral		Glencoe Chemistry: Concepts and Applications – chapter 5.1 Empirical formula lab Ionic puzzle activity (two days) Hydrate lab
		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		3 days – binary ionic compounds including transition metals and lab 3 days – ionic compounds containing polyatomic ions and ionic puzzle activity 2 days – hydrated ionic compounds and lab 2 days – review and assessment