

Cherokee County School District
Science Georgia Standards of Excellence
Chemistry Pacing Guide

1 st Semester		2 nd Semester	
Unit 1 Finding Order: Atomic Structure, Energy, Moles	Unit 2 Finding Patterns: Organizing Chemical Knowledge on the Periodic Table	Unit 3 Exploring Change: Bonds, Energy, and Reactions, Moles	Unit 4 Exploring Systems: Reactions and Conditions
<p>SC1a,b,c,f,g SC3c</p> <p>Focus: Scientific Order Atomic structure ,and properties Origin of the elements Modern atomic theory Energy</p>	<p>SC1d,e,f,g SC3c</p> <p>Focus: Modern atomic theory Patterns in the properties of elements Periodicity The periodic table as dynamic graphic organizer Electron configuration.</p>	<p>SC3a,b,c,d,e SC2a,b,c,d,e SC6f,g,h</p> <p>Focus: Atomic structure, Bonding, and Properties, Chemical Changes, Bonds, Energy Formulas, Conservation of Matter, Chemical Reaction, Moles, Stoichiometry, Law of Conservation of Matter and Energy</p>	<p>SC3b,e SC4a,b,c,d SC5a,b,c SC6a,b,c,d,e,f,g,h</p> <p>Focus: Chemical Reaction Systems, Stoichiometry, Physical Systems, Behavior of Gases, Solutions, Factors that Affect Systems, Equilibrium, LeChatelier and Haber, Acids and Bases</p>
<p>The Chemistry Georgia Standards of Excellence are designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in chemistry. These standards include more abstract concepts such as the structure of atoms, structure and properties of matter, the conservation and interaction of energy and matter, and the use of Kinetic Molecular Theory to model atomic and molecular motion in chemical and physical processes. Students investigate chemistry concepts through experiences in laboratories and field work using the process of inquiry.</p> <p>Chemistry students use the periodic table to help with the identification of elements with particular properties, recognize patterns that lead to explain chemical reactivity and bond formation. They use the IUPAC nomenclature in order to predict chemical names for ionic (binary and ternary), acidic, and inorganic covalent compounds, and conduct experiments to manipulate factors that affect chemical reactions.</p>			