Chemistry 4th Nine Weeks: Scope and Sequence

Content Standards	Dates Taught	% of Students scoring 70% and over	Dates Re-taught (Optional)	Formative and Summative Assessments/ (Any Additional Comments Optional)
ACOS (4) Describe solubility in terms of energy changes associated with the solution process. • Using solubility curves to interpret saturation levels • Describing acids and bases in terms of strength, concentration, pH, and neutralization reactions • Solving problems involving molarity, including solution preparation and dilution				
ACOS (5) Use the kinetic theory to explain states of matter, phase changes, solubility, and chemical reactions . Example:				
ACOS (6) Solve stoichiometric problems involving relationships among the number of particles, moles, and masses of reactants and products in a chemical reaction. • Predicting ionic and covalent bond types and products given known reactants • Assigning oxidation numbers for individual atoms of monatomic and polyatomic ions. • Identifying the nomenclature of ionic compounds, binary compounds,, and acids • Classifying chemical reactions as composition, decomposition, single replacement, or double replacement • Determining the empirical or molecular formula for a compound using percent composition [chapter 12]				
ACOS (7) Explain the behavior of ideal gases I terms of pressure, volume, temperature, and number of particles using Charles's law, Boyle's law, Gay –Lussac's law, the combined gas law, and the ideal gas law,				
ACOS (8) Distinguish among endothermic and exothermic physical and chemical changes. • Calculating temperature change using specific heat				

• Using LeChatlier's principle to explain changes in physical and chemical equilibrium				
ACOS (9) **Distinguish between chemical and nuclear reactions.** • Identify atomic and subatomic particles • Calculate half-life of selective radioactive isotopes • Contrast fusion and fission • Identify types of radiation and their properties				