

Year At a Glance: Chemistry

2016-2017

	Week	Major Concepts / Topics	Possible Resources
Quarter 1	1-3	SC.912.N.1.1-1.7, SC.912.N.2.4: Beginning Science skills including lab safety, calculator use, investigation variables, graphing skills, beginning math skills (scientific notation, etc.)	Cpalms. Org for all topics. Florida Student.org : all topics Bozemanscience.com : History of the Atom, Matter, Significant Digits. Tyler DeWitt (You Tube) : Multiple excellent videos on all topics.
	4-5.5	SC.912.P.8.1, P.12.11, P.10.5: states of matter, phase changes, temperature's relationship to average kinetic energy.	
	5.5-9	SC.912.P.8.2-8.4: Physical/chemical properties and changes, Atomic Theory, structure of atoms.	
	Week	Major Concepts / Topics	Possible Resources
Quarter 2	1-4	SC.912.P.10.18, 10.9, 8.5: energy quantization, electromagnetic spectrum, electron configurations, orbital diagrams.	Bozemanscience.com : Chemical Bonds, Naming Compounds.
	5-9	SC.912.P.8.7, 8.6: Ion formation, covalent and ionic bonding, writing and naming chemical formulas. Includes time for semester review.	
	Week	Major Concepts / Topics	Possible Resources
Quarter 3	1-4	SC.912.L.19.12, SC.912.P.8.8: Writing & balancing chemical equations, characterizing reaction types.	Bozemanscience.com : Factor Label Method.
	5-9	SC.912.P.8.9: Stoichiometry including empirical and molecular formulas, percent yield, calculations for grams, moles, particles.	
	Week	Major Concepts / Topics	Possible Resources
Quarter 4	1-3.5	SC.912.P.12.10: Gas Laws	Bozemanscience.com : Acids, Bases & pH
	3.5-5	SC.912.P.12.12, P.12.13: equilibrium and factors that impact.	
	5-6.5	SC.912.P.10.6, 10.1, 10.7: energy changes including potential energy diagrams.	
	6.5-8	SC.912.P.8.11, 10.12: acids and bases, nuclear/chemical energy.	
	9	Final exam review	

All standards are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

