

SPAN/AP CHEMISTRY

Dates	Topics	Concepts	Skills	Activities Assessments
8/8-8/17	Nomenclature of Inorganic compounds	Common and Systematic names	Students learn the systematic approach for naming chemicals using the older Latin prefixes and suffixes along with the new stock method	Read Chapters 5-7 & 10
		Oxidation numbers Writing formulas a. Binary b. Ternary Salts of Multivalented cations	Students look at periodic table to predict trends in oxidation numbers for each ion Students apply rules for writing compounds correctly making sure the algebraic sum is zero Students introduced to Coulomb's effect of opposites attract	Worksheets and problems from Ch 7 Lab- Safety Test: MC & ORQ Lab: Measurements Lab: Elements, Compounds, mixtures Lab: Formula of Hydrate
	Quantitative Composition of compounds	The mole	Students apply the concepts of very large numbers (the mole) to the real world (scientific notation)	
		Molar mass of compounds Percentage composition Empirical formula Molecular formula	Students use the Periodic table to calculate molecular mass or formula weights Students do quantitative analysis of compounds to determine % composition Students do quantitative analysis to determine empirical formula from % compositions Students compare/contrast empirical formula with molecular formula Students work problems of applications to real world	
8/18-9/15	Chemical reactions	Types of reactions a. composition b. decomposition c. single replacement d. double replacement e. REDOX Balancing reactions Activity of series of elements Solubility charts	Students perform experiment of different types of reactions Students determine experimentally how activity charts are developed Students develop methods for balancing equations (not Redox) by inspection Students learn to balance redox equations by oxid-reduction eq. method, half reaction method in acidic soln, in basic soln Students learn techniques for predicting products of reactions.	Read Ch 8 & 17 Do questions & Problems pf 169-172 OR Test on Types OR Test on Balancing OR Test on Predicting products Test balancing redox rxns Lab: Density of Solid & Identification of Unknov Lab: Simple Rxn Lab: activity series