Chemistry Pacing Guide FALL 2013

Weeks	Dates	Units/Topics
1-3	**Aug 8-23**	***Unit 1: Tools of the Trade*** Scientific method, lab safety and basics, chemical and physical properties/changes, metric system, dimensional analysis
4	**Aug 26-30**	***Unit 2: Atoms 101*** Early atomic theory (to Bohr); atoms, isotopes, ions; average atomic mass; location of groups on periodic table
5	**Sept 3-6**	***Unit 3: Compound Stoichiometry*** Molar mass, percent composition, empirical formula, molecular formula, Law(s) of Conservation
6	**Sept 9-13**	**Unit 4: Modern Atomic Theory & Periodicity** Quantum model, EMR spectrum basics, electron configurations, periodic trends
7-8	**Sept 16-27**	***Unit 5: Bonding & Naming*** Types of bonds, bond properties, polarity, IMFs, naming compounds
9	**Sept 30 - Oct 4**	***Unit 6: Reactions 101*** Types of rxns, using the activity series, balancing equations
10	**Oct 7-11**	***Unit 7: Rxn Stoichiometry*** Limiting reactant, percent yield
11	**Oct 14-18**	***Unit 8: Gases*** KMT review, gas laws
12	**Oct 21-25**	***Unit 9: Solutions*** Molarity, saturation, colligative properties, uniqueness of water
13	**Oct 28-Nov 1**	***Unit 10: Acids and Bases*** Acids vs. bases, concentration (molarity) vs. strength (degree of dissociation), titration
14	**Nov 4-8**	***Unit 11: Thermo and Nuclear*** Specific heat, enthalpy, free energy, radiation, fission vs. fusion
15-16	**Nov 11-22**	***Unit 12: Kinetics and Equilibrium*** Rxn mechanisms, rxn orders, rate laws, equilibrium expressions, Le Châtlier's principle, buffers, Ksp
17	**Dec 3-7**	***SATP Testing. No new material. Review/Catch-up.***
18	**Dec 9-13**	***Unit 13: REDOX*** Oxidation numbers, half-rxns, practical applications of REDOX