Teacher: White Course: SCH 3UI - 2018 Date: Feb 1, 2018 8:30 AM

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	TOTALS
Name of Unit	**Matter and Chemical Bonding**	**Chemical Reactions**	**Chemical Quantities**	**Solutions and Solubility**	**Gases**	
True/False	1	6	6	7		20
Multiple Choice	8	10	5	7		30
Completion	4	4	1	4	2	15
Written Response	(9)	(8)(4)	(4)(5) (6)	(2)(4)(3)	(4)	50
Choice	(3)		(6)	(2)		10
TOTALS	25	32	33	29	6	125

Section	Topics	
Matter and Chemical Bonding	❑ Chemistry math ❑ Ionic/Covalent Bonding ❑ Lewis structures ❑ Atomic Radius ❑ Electron Affinity ❑ Ionization energy ❑ Polyatomic Ions ❑ Bond Polarity ❑ Hydrogen Bonding ❑ London Dispersion Forces	❑ Intramolecular forces ❑ Naming/Formulas ❑ Periodic Table ❑ Anions/Cations ❑ Electronegativity ❑ Dipole-dipole attraction ❑ VSEPR theory (shapes, bond angles etc) ❑ Polar/Non Polar Molecules ❑ Van der Waal forces ❑ Isotopes
Chemical Reactions	❑ Decomposition reactions ❑ Activity Series ❑ Single displacement reactions ❑ Complete combustion ❑ Double displacement and gases	❑ Double displacement reactions ❑ Balancing Equations ❑ Synthesis Reactions ❑ Incomplete combustion ❑ Ionic equations (total/net)
Chemical Quantities	❑ Balancing Equations ❑ Moles ❑ Molar Mass ❑ % Composition ❑ Empirical Formula ❑ Molar Concentration ❑ Carbon-hydrogen combustion analysis	❑ Molecular Formula ❑ **Stoichiometry** ❑ Avogadro constant ❑ Molar Ratios ❑ Limiting reactant
Solutions and Solubility	❑ Precipitates ❑ Neutralization and Titration ❑ pH ❑ Arrehenius vs Bronsted-Lowry ❑ Solubility and Solubility curves ❑ Solute and Solvent	❑ Conjugate Acid Base pairs ❑ Concentration (% and ppm) ❑ Factors affecting rate of dissolving and solubility ❑ Molar concentration ❑ **Solution stoichiometry**
Gases	❑ Kelvin vs. Celsius ❑ STP/STAP ❑ Boyle's Law	❑ Charles' Law ❑ Gay-Lussac's Law ❑ Combined Gas Law