

Term 1	Term 2	Term 3	Term 4
<p>Unit 1: <u>Lab Safety and Scientific Investigations</u></p> <ul style="list-style-type: none"> • Lab Safety • Lab Equipment <p>Unit 2: <u>Measurement</u></p> <ul style="list-style-type: none"> • Scientific investigations • Scientific Notation, accuracy and precision, sig figs (PAP only) • Metric conversion • Mole conversion and molar mass <p>Unit 3: <u>Gas Laws</u></p> <ul style="list-style-type: none"> • Kinetic Molecular Theory • Relationships between variables using gas laws • Calculations using gas laws <p>Unit 4: <u>Properties of Matter</u></p> <ul style="list-style-type: none"> • Physical/chemical changes and properties • Mixtures/Pure substances <p>Unit 5: <u>Atomic Structure</u> (continues into term 2)</p> <ul style="list-style-type: none"> • History of atomic theory • Review of the atom 	<p>Unit 5: <u>Atomic Structure cont'd</u></p> <ul style="list-style-type: none"> • Isotopes, calculating average atomic mass <p>Unit 6: <u>Electrons and Light</u></p> <ul style="list-style-type: none"> • Energy, frequency, & wavelength (calculations-PAP only) • Electron configurations <p>Unit 7: <u>Periodic Table and trends</u></p> <ul style="list-style-type: none"> • History of the periodic table • Properties of the periodic table • Periodic trends <p><u>Fall exam review and assessment</u></p>	<p>Unit 8: <u>Ionic, Covalent, and Metallic Bonding</u></p> <ul style="list-style-type: none"> • Ionic and Metallic Bonding • Covalent Bonding • VSEPR <p>Unit 9: <u>Ionic and Covalent Nomenclature</u></p> <ul style="list-style-type: none"> • Covalent & Acids and bases nomenclature • Ionic Nomenclature <p>Unit 10: <u>Chemical Reactions</u></p> <ul style="list-style-type: none"> • Write and balance chemical equations • Types of reactions • Predict products <p>Unit 11: <u>Stoichiometry and Chemical formulas</u> (continues into term 4)</p> <ul style="list-style-type: none"> • Percent Composition • Empirical and Molecular Formulas • Stoichiometric calculations 	<p>Unit 11: <u>Stoichiometry and Chemical formulas cont'd</u></p> <ul style="list-style-type: none"> • Stoichiometric calculations • Limiting reactants and percent yield <p>Unit 12: <u>Thermochemistry</u></p> <ul style="list-style-type: none"> • Endo vs exothermic reactions • Enthalpy • Specific heat calculations • Energy change occurring in chemical reactions <p>Unit 13: <u>Solutions</u></p> <ul style="list-style-type: none"> • Properties of water • Electrolytes • Factors affecting rate of dissolution • Solubility curve • Molarity and dilutions • Using and applying solubility rules • Differentiate b/w acid-base, precipitation, and redox reactions <p>Unit 14: <u>Acids and Bases</u></p> <ul style="list-style-type: none"> • Characteristics of acids and bases • Acid base reactions • pH <p>Unit 15: <u>Nuclear</u></p> <ul style="list-style-type: none"> • Types of radiation & balancing nuclear reactions • Fission vs Fusion <p><u>Spring Exam review & assessment</u></p>

Chemistry Year-At-A-Glance (Optional)
2020-2021

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