Chemistry Scope and Sequence

	Quarter: 1	Quarter2	Quarter 3	Quarter 4
	STRUCTURE AND PROPERTIES OF MATTER	**STRUCTURE AND PROPERTIES OF MATTER**	**INTERACTIONS OF MATTER**	**INTERACTIONS OF MATTER**
Content	**C.PM.1:** Atomic structure • Evolution of atomic models/theory • Electrons • Electron configurations **C.PM.2:** Periodic Table • Properties • Trends **C.PM.3:** Chemical bonding • Ionic • Polar/covalent	**C.PM.4:** Representing compounds • Formula writing • Nomenclature • Models and shapes (Lewis structures, ball and stick, molecular geometries) **C.PM.5:** Quantifying matter **C.PM.6:** Intermolecular forces of attraction • Types and strengths • Implications for properties of substances ▪ Melting and boiling point ▪ Solubility ▪ Vapor pressure	**C.IM.1:** Chemical reactions • Types of reactions • Kinetics • Energy • Equilibrium • Acids/bases **C.IM.2:** Gas laws • Pressure, volume and temperature • Ideal gas law	**C.IM.3:** Stoichiometry • Molecular calculations • Solutions • Limiting reagents
Resources	**McGraw Hill** **ODE Model Curriculum**	**McGraw Hill** **ODE Model Curriculum**	**McGraw Hill** **ODE Model Curriculum**	**McGraw Hill** **ODE Model Curriculum**
Vocabulary				

WHCSD Scope and Sequence **Chemistry** **2021-2022**

Quarter(s) 1-4
During the years of 9-12, all students must become proficient in the use of the following scientific processes, with appropriate laboratory safety techniques, to construct their knowledge and understanding in all science content areas: **SIA1** Identify questions and concepts that guide scientific investigations. **SIA2** Design and conduct scientific investigations. **SIA3** Use technology and mathematics to improve investigations and communications. **SIA4** Formulate and revise explanations and models using logic and evidence (critical thinking). **SIA5** Recognize and analyze explanations and models. **SIA6** Communicate and support a scientific argument.

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