

Chemistry I Scope & Sequence

Days	Unit	Standard(s)/Outcome(s)	Essential/Guiding Questions
20	Chemistry of the Big Bang <ul style="list-style-type: none"> ● Atomic Foundations ● Atomic Structure ● Lights ● Radioactivity and Radiation ● Fusion and Fission 	HS-PS1-8 HS-ESS1-1 HS-ESS1-2 HS-ESS1-3 HS-ESS2-4 HS-ESS3-6	<i>Driving Question: How can we explain the formation of our universe?</i>
15	Damaged Statue <ul style="list-style-type: none"> ● Qualitative vs. Quantitative Properties ● Physical Properties of Water ● Chemical Properties of Water 	HS-PS1-3 HS-PS1-5 HS-ESS2-5 HS-ESS3-6	<i>Driving Question: How do chemical and physical properties of water damage a statue?</i>
15	Chesapeake Bay Water Quality <ul style="list-style-type: none"> ● Chemical Properties of Water ● Mixtures and Pure Substances ● Density 	HS-PS1-3 HS-PS1-5 HS-ESS2-4 HS-ESS2-5 HS-ESS3-5 HS-ESS3-6	<i>Driving Question: Why does the water quality of the Chesapeake Bay change?</i>

20	Dangerous Compounds <ul style="list-style-type: none"> ● Electron Configuration ● Lewis Dot Diagrams ● Periodic Table Patterns ● Ionic Compounds ● Covalent Compounds 	HS-PS1-1 HS-PS1-2 HS-PS1-3 HS-PS1-4	<i>Driving Question: Why is sodium dangerous but NaCl_2?</i>
20	Hot and Cold Packs <ul style="list-style-type: none"> ● Exothermic and Endothermic Reactions ● Synthesis Reactions ● Decomposition Reactions ● Single Replacement Reactions ● Double Replacement Reactions - Acid Rain ● Neutralization Reactions - Ocean Acidification ● Combustion Reactions ● Stoichiometry 	HS-PS1-2 HS-PS1-4 HS-PS1-6 HS-PS1-7	<i>Driving Question: How do hot and cold packs work?</i>