

### Chemistry I Curriculum Map

	August	September	October	November	December	January
<b>Essential Questions</b>		How can matter be described, qualified and quantified, Chapters 1 - 5	How are chemical reactions described, illustrated, and classified. Chapters 6 - 8		How can reactant or product quantities be predicted. Chapters 9 and 10	
<b>Content</b> in terms of essential concepts and topics		Chemistry an Introduction, Measurement and calculations, Matter and Energy, Chemical foundations: Elements, atoms and Ions, Nomenclature.	Chemical Reactions: An introduction,	Reactions in Aqueous Solutions	Chemical Composition,	Chemical Quantities.
<b>Standards/Skills</b> i.e., processes and skills emphasized Indiana Academic Standards plus MCSC skills		1.1, 1.2, 1.6, 1.8, 1.32, 1.38, 2.3,	1.2, 1.3, 1.9, 1.10, 1.11, 1.40, 1.41	1.2, 1.4, 1.1	1.2, 1.12, 1.13, 1.16,	1.2, 1.12, 1.13, 1.15,
<b>Product/Assessments</b> It is assumed that teachers will assess students with traditional tests.		Density Lab, Calorimetry Lab, Average Atomic Mass	Performance exam on Law of Conservation of Mass in a Chemical Reaction.	Solubility Lab	Percent Composition Lab, Empirical Formula Lab	Percent Yield Lab

## Chemistry I Curriculum Map

	February	March	April	May
<b>Essential Questions</b>	How can the behavior of matter be predicted. Chapters 11 and 12.	What is the impacted of physical changes on the phases of matter. Chapters 13 and 14.	How can measured amounts of solutes/solvents predict new physical properties. Chapter 15 How do external factors affect the dynamics of a system. Chapter 16.	How are acids and bases defined and how do they interact. Chapter 17. What are the results of electron transfer. Chapter 18.
<b>Content</b> in terms of essential concepts and topics	Modern Atomic Theory, Chemical Bonding.	Gases, Liquids and Solids	Solutions, Equilibrium	Acids and Bases, Oxidation Reduction Reactions and Electrochemistry
<b>Standards/Skills</b> i.e., processes and skills emphasized Indiana Academic Standards plus MCSC skills	1.2, 1.28, 1.33, 1.34, 1.35, 1.36, 1.37, 2.6	1.2, 1.15, 1.26, 1.30, 1.31	1.2, 1.4, 1.5, 1.8, 1.15, 1.17, 1.18, 1.26	1.2, 1.8, 1.19, 1.22, 1.25, 2.5
<b>Product/Assessments</b> It is assumed that teachers will assess students with traditional tests.	Flame Test, Molecular Modeling	Boyles Law Lab, Charles Law Lab, Molar Volume Lab	Beer's Law Lab, Iodine Clock Lab, Equilibrium $K_{sp}$ Lab	Titration Lab, $K_a$ Lab, Electrochemical Cell Lab