Science 9 Chemistry Study Guide

Name: Date: Block:

Create a study guide that includes the major vocabulary and concepts you learn in this unit. Include **definitions**, **examples**, and/or **relevant diagrams**. Your study guide can be a rewriting of your notes, a series of questions/answers, a brochure, a mind map showing the connections between concepts, or any other way you can think of. You can create your study guide on a regular sized piece of paper, a large piece of poster paper, or cue cards

Chemistry I: Matter,	Pure Substances,	Mixture,	and Properties
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Vocabulary	Concepts
Matter	Classify examples as element, compound, or
Pure substance	mixture
Mixture	Physical vs Chemical properties
Homogenous mixture	Physical vs Chemical changes
Heterogenous mixture	
Element	
Compound	
Physical properties	
Chemical properties	
Malleability	
Texture	
Viscosity	
Conductivity	
State of matter	
Melting point	
Boiling point	
Solubility	
Ductility	
Combustibility	

Chemistry II: Elements, Periodic Table, and Properties of Elements

Vocabulary	Concepts
Elements	Dmitri Mendeleev and his periodic table
Chemical name	Modern Periodic Table
Chemical symbol	How can we find protons, neutrons, and
Atomic number	electrons for individual elements?
Atomic mass	Groups (Families) vs Periods
Proton	Properties of Metals, Metalloids, and Non-
Neutron	Metals
Electron	Properties of Families 1, 2, 17, and 18
Metal	
Non-metal	
Metalloid/Semi-metal	
Group/Family	
Period	

Chemistry III: Bohr Models and Ions

Vocabulary	Concepts	
Bohr Model Valence electron	How do we find the number of protons, neutrons, and electrons in atoms ?	
Valence shell	How do we find the number of protons, neutrons, and electrons in ions ? How do we draw Bohr models from atoms ?	
Atom		
Ion		
Cation	How do we draw Bohr models from ions ?	
Anion		

Chemistry IV: Ionic and Covalent Compounds

Vocabulary	Concepts	
Ionic compound	Ionic Compounds	
Lattice	• How do they form?	
Brittle	• What are the properties of ionic	
Conductor	compounds?	
Covalent compound	ionic compounds?	
Molecule	Covalent Compounds	
Diatomic molecule	• How do they form?	
	\circ What are the properties of covalent	
	compounds?	
	 How do we draw Bohr models for 	
	covalent compounds?	

Chemistry V: Naming Ionic and Covalent Compounds

Vocabulary	Concepts	
Chemical formula Subscript Prefix Multivalent metal	Naming ionic compounds • How do we go from a formula to a name? • How do we go from a name to a formula?	
Polyatomic ion	 What are subscripts and what do they indicate? What is a multivalent metal? How do we name/write formulas for multivalent metals in an ionic compound? What is a polyatomic ion? How do we name/write formulas for compounds containing polyatomic ions? 	
	Naming covalent compounds	
	 How do we go from a formula to a name? 	
	 How do we go from a name to a formula? 	