

PREAP CHEMISTRY LESSON PLAN
UNIT 03: NOMENCLATURE, BONDING AND GEOMETRY
OCTOBER 8, 2007 – OCTOBER 22, 2007

DAY	OBJECTIVE(S)	ACTIVITIES
MONDAY	Define cation and anion and relate them to metal and nonmetal	UNIT DAY 1 (10/8) 1. Check your nuclear practice problems in class – quiz wed/Thurs 2. Binary Ionic Naming Lecture and practice 3. Handouts – notes and practice problems
	Use the periodic table to determine the charge on an ion	
	Apply the rules for naming and writing formulas for binary ionic compounds	HW: Nomenclature Practice Problems due Friday. Nuclear Quiz Wed/Thurs
TUESDAY	Define a polyatomic ion and give the names and formulas of the most common polyatomic ions	UNIT DAY 2 (10/9) 1. Warm Up: Binary Ionic Compound Naming practice 2. Ternary Ionic Naming lecture and practice
	Apply the rules for naming and writing formulas for ternary ionic compounds	
		HW: Nomenclature Practice Problems due Friday. Nuclear Quiz Wed/Thurs
WEDNESDAY/ THURSDAY BLOCK	Distinguish between ionic and molecular compounds	UNIT DAY 3 and 4 (10/10 and 10/11) 1. QUIZ: Nuclear rxns 2. Lecture and Notes: Compare/Contrast: Ionic/Molecular 3. Lecture and Notes: Molecular and Hydrate nomenclature 4. Activity: Ionic naming practice
	Distinguish among chemical formulas, molecular formulas, and formula units	
	Apply the rules for naming and writing formulas for binary molecular compounds	
	Apply the rules for naming and writing formulas for hydrates	HW: Nomenclature Practice Problems due Friday. Naming Quiz FRIDAY
FRIDAY		UNIT DAY 5 (10/12) 1. QUIZ: Nomenclature 2. Ionic bonding and Properties of ionic compounds 3. Electron sea model for metallic bonding and connection to physical properties of metals 4. Properties of molecular substances. Covalent network solids
	Distinguish between the three types of intermolecular bonds: Ionic/Covalent/Metallic	
		HW: Memorize the common polyatomic ions

DAY	OBJECTIVE(S)	ACTIVITIES
MONDAY		UNIT DAY 6 <ol style="list-style-type: none"> 1. Covalent bonding: Electronegativity, and polarity 2. Types and properties of covalent bonds: single, double, triple, coordinate, polar 3. NOTES: LEWIS DOT STRUCTURES FOR MOLECULES 4. Steps for Drawing Lewis Dot Structures and exceptions to the octet rule 5. PRACTICE: Drawing Lewis structures
TUESDAY		UNIT DAY 7 <ol style="list-style-type: none"> 1. Lecture: Lewis dot structures and resonance 2. PRACTICE: Drawing resonance structures
WEDNESDAY/ THURSDAY BLOCK		UNIT DAY 8 and 9 <ol style="list-style-type: none"> 1. Lecture: Lewis dot structures and resonance 2. Lab Lecture: VSPER models for molecular compounds 3. Lab: VSEPR model
FRIDAY		UNIT DAY 10 <ol style="list-style-type: none"> 1.
		HW: