

Name _____ Period _____

CP Chemistry of the Earth

Assignment 4P – Unit 4 Review – Ionic Bonding

30 Points

Complete the following questions based on the assignments and presentation from Unit 4

Group Number	1A 1	2A 2	1B – 10B	3A 13	4A 14	5A 15	6A 16	7A 17	8A 18
Valance Electrons (e ⁻)	1	2	2	3	4	5	6	7	8
Lewis Dot Structure	X •	• X •	• X •	• X •	• X •	• X •	• X •	• X •	• X •

Complete the following chart based on the chart above

Element Symbol	Al	Cu ³⁺	O			
Element Name				Bromine	Calcium	Nitrogen
Group Number						
Valance Electrons						
Lewis Dot Structure						
Ion Charge						
Lose/Gain e ⁻						
Ion Val Electrons						

Complete the following ionic compound nomenclature

Ion	Ion Name*	Ion Charge**	Cation/Anion	Binary/Poly Ion	Lose/Gain e ⁻
Li ¹⁺					
N ³⁻					
CrO ₄ ²⁻					
NO ₃ ¹⁻					
BrO ₂ ¹⁻					
PO ₃ ³⁻					

Complete the following ionic compounds

Elements	Li	O	Cr ²⁺	Cl	Zn ¹⁺	ClO ₃ ¹⁻
Ion Charge						
Cross Method						
Ionic Formula						
Elements	Al	CO ₂ ²⁻	W ⁶⁺	CrO ₄ ²⁻	Pb ⁴⁺	SO ₄ ²⁻
Ion Charge						
Cross Method						
Ionic Formula						

Name the following ionic compounds

VCl ₃		Cu ₃ P ₂		Mg(BrO ₃) ₂	
Ion	Ion Name	Ion	Ion Name	Ion	Ion Name
V ³⁺		Cu ²⁺		Mg	
Cl		P		BrO ₃ ¹⁻	
Ionic Compound Name		Ionic Compound Name		Ionic Compound Name	
K ₂ C ₂ O ₄		NH ₄ OH		Pb(SO ₃) ₂	
Ion	Ion Name	Ion	Ion Name	Ion	Ion Name
K		NH ₄ ¹⁺		Pb ⁴⁺	
C ₂ O ₄ ²⁻		OH ¹⁻		SO ₃ ²⁻	
Ionic Compound Name		Ionic Compound Name		Ionic Compound Name	