

Name _____ Period _____

CP Chemistry of the Earth

Assignment 2M – Polyatomic Ion Compounds (Part 1)

30 Points

Complete the following chart using the in class polyatomic ion chart, including name and charge

Poly Ion	Ion Name	Charge	Poly Ion	Ion Name	Charge
NO_3^{1-}			SO_4^{2-}		
CN^{1-}			CrO_4^{2-}		
BrO_3^{1-}			PO_4^{3-}		
OH^{1-}			NH_4^{1+}		

Complete the following ionic compounds based on the chart below using the cross method.

Elements	Na	NO_3^{1-}	Si^{4+}	CN^{1-}	Cu^{3+}	SO_4^{2-}
Ion Charge	+1	-1	+4	-1	+3	-2
Cross Method	Na(NO₃) NaNO₃		Si(CN) Si(CN)		Cu(SO₄) Cu(SO₄)	
Ionic Formula	NaNO_3^*		$\text{Si}(\text{CN})_4$		$\text{Cu}_2(\text{SO}_4)_3$	
Elements	Al	CrO_4^{2-}	Fe^{2+}	PO_4^{3-}	V^{3+}	NO_3^{1-}
Ion Charge			+2	-3		
Cross Method			Fe(PO₄) Fe(PO₄)			
Ionic Formula			$\text{Fe}_3(\text{PO}_4)_2$			

Use provided chart!

* ~~Na(NO₃)~~
~~NaNO₃~~
~~NaNO₃~~

Elements	Si ⁴⁺	BrO ₃ ¹⁻	W ⁶⁺	OH ¹⁻	Mg	ClO ₃ ¹⁻
Ion Charge						
Cross Method						
Ionic Formula						