Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 4K – Writing Single Replacement Reactions w/Polyatomic Ions 20 Points

For the following ions, determine the charges for each ion/element

$Al(BrO_3)_3$				$CuSO_4$				$V(OH)_3$			
Al		BrO_3		Cu		SO_4		V		OH	

Na_3PO_4				$W(CrO_4)_3$				$Fe_2(C_2O_4)_3$			
Na		PO_4		W		CrO_4		Fe		C_2O_4	

For the following reactions, write the products of each reaction following the template provided. Show work for ionic compound

Reaction	$Fe^{2+} + Ca(BrO_4)_2 \rightarrow$ ____ + ____				
A + BC → AC + B					
A		BC		B	

Reaction	$Mg + CuCO_3 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$Nb^{2+} + Ba(HCO_3)_2 \rightarrow$ ____ + ____				
A + BC → AC + B					
A		BC		B	

Reaction	$Al + H_2SO_4 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$Ti^{4+} + MgCrO_4 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$Tc^{3+} + RbNO_3 \rightarrow$ ____ + ____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$Sn^{4+} + Al_2(HPO_4)_3 \rightarrow$ ____ + ____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$K + PdC_2O_4 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$Sr + Ag_2Cr_2O_7 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reaction	$H_2 + Cr(IO_3)_2 \rightarrow$ _____ + _____				
A + BC → AC + B					
A		BC		B	

Formula	A	C
Ion Charge		
Cross Method		
AC		