

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 4I – Writing Single Replacement Reactions

20 Points

For the following reactions, write the products of each reaction following the template provided.

Show work for ionic compound

Reaction	Na + CuCl ₂ → _____ + _____					
A	+	BC	→	AC	+	B
	+		→		+	

	A	C
Element or Ion		

Ion Charge		
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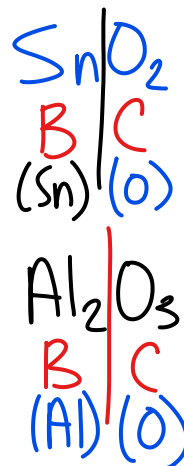
Cross Method		
Final Formula		

Reaction	$A + BC \rightarrow AC + B$ Al + <u>Sn</u> O ₂ → _____ + _____					
A	+	BC	→	AC	+	B
Al	+	SnO ₂	→	Al ₂ O ₃	+	Sn

	A	C
Element or Ion	Al	O

(13) Ion Charge	+3	(16) -2
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Cross Method		
Final Formula	Al ₂ O ₃ ← AC	



Reaction	Mg + ZnBr → _____ + _____					
A	+	BC	→	AC	+	B
	+		→		+	

	A	C
Element or Ion		

Ion Charge		
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Cross Method		
Final Formula		

Reaction	Fe ³⁺ + Hg ₃ N ₂ → _____ + _____					
A	+	BC	→	AC	+	B
	+		→		+	

	A	C
Element or Ion		

Ion Charge		
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Cross Method		
Final Formula		

Reaction	$\text{Mn}^{3+} + \text{NiS} \rightarrow \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$					
A	+	BC	$\rightarrow$	AC	+	B
	+		$\rightarrow$		+	

	A	C
Element or Ion		

Ion Charge		
Cross Method		
Final Formula		

Reaction	$\text{Sr} + \text{AlP} \rightarrow \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$					
A	+	BC	$\rightarrow$	AC	+	B
	+		$\rightarrow$		+	

	A	C
Element or Ion		

Ion Charge		
Cross Method		
Final Formula		

Reaction	$\text{Cd}^{3+} + \text{PbBr}_4 \rightarrow \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$					
A	+	BC	$\rightarrow$	AC	+	B
Cd^{3+}	+	PbBr_4	$\rightarrow$	CdBr_3	+	Pb

	A	C
Element or Ion	Cd	Br

(given) Ion Charge	+3	-1
Cross Method	Cd Br	
Final Formula	Cd Br ₃	

← Finding AC (use element/ion only!)

← AC

Pb | Br₄
B | C
(Pb) | (Br)

Reaction	$\text{Cr}^{2+} + \text{Ag}_2\text{S} \rightarrow \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$					
A	+	BC	$\rightarrow$	AC	+	B
	+		$\rightarrow$		+	

	A	C
Element or Ion		

Ion Charge		
Cross Method		
Final Formula		