

Name _____ Period _____

CP Chemistry of the Earth

Assignment 40 – Combination/Decomp/Single Replacement Reaction Review

20 Points

Complete the following combination chemical reactions, including showing the cross method for formulas. No Work = No Credit!

Reaction	$\text{Cu} + \text{Br}_2 \rightarrow$ [Cu = +3]				
General Form	A	+	B	$\rightarrow$	AB
Reaction		+		$\rightarrow$	

charge of metal []

Answer

From problem

* Not Br_2 (element symbol only!)

Top Problem

Bottom Problem

A	B	AB	A	B	AB
Element Poly Ion	Element Poly Ion	Cross Method (work)	Element Poly Ion	Element Poly Ion	Cross Method
Charge	Charge (group 17)		Charge	Charge	

put just element symbol or ion.
given or Table

min work!

(Don't Forget Arrows!)

write answer!

Reaction	$\text{Pb} + \text{N}_2 \rightarrow$ [Pb = +4]				
General Form	A	+	B	$\rightarrow$	AB
Reaction		+		$\rightarrow$	

Complete the following decomposition chemical reaction. Remember diatomic elements

Reaction	$\text{H}_3\text{N} \rightarrow$				
General Form	AB	$\rightarrow$	A	+	B
Reaction		$\rightarrow$		+	

Diatomic Element

$\text{H}_2, \text{N}_2, \text{O}_2, \text{F}_2, \text{Cl}_2, \text{Br}_2, \text{I}_2$

(Write from problem)

check if diatomic

Complete the following single replacement chemical reactions, including showing the cross method and all work. No Work = No Credit!

Reaction	$\overset{\text{A}}{\text{Mg}} + \overset{\text{BC}}{\text{SnS}_2} \rightarrow$ <i>element compound</i> <i>If charge needed (Sn + 4)</i>						
General Form	A	+	BC	→	AC	+	B
Reaction		+		→		+	

Exactly as appears in equation!

Element symbol or ion only!

A	C	AC
Element Poly Ion	Element Poly Ion	Cross Method
Charge <i>(group 2)</i>	Charge <i>(group 16)</i>	

Reduce

$2:2 \rightarrow 1:1$ $2:4 \rightarrow 1:2$
 $3:3 \rightarrow 1:1$ $4:2 \rightarrow 2:1$
 $2:6 \rightarrow 1:3$
 $3:6 \rightarrow 1:2$

min work

Reduce

Final formula

Reaction	$\text{V} + \text{CaCO}_3 \rightarrow$ $[\text{V} = +3]$						
General Form	A	+	BC	→	AC	+	B
Reaction		+		→		+	

A	C	AC
Element Poly Ion	Element Poly Ion	Cross Method
Charge	Charge	