

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 6A – Counting Atom Review

20 Points

For the balanced reactions below determine the total number of atoms and molecule and/or compounds on each side of the reaction based on the in-class notes and examples

$3\text{Na}_2\text{O} + 2\text{AlCl}_3 \rightarrow 6\text{NaCl} + \text{Al}_2\text{O}_3$							
Reactants				Products			
Na ₂ O		AlCl ₃		NaCl		Al ₂ O ₃	
Na		Al		Na		Al	
O		Cl		Cl		O	

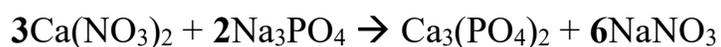
$\text{Ca}_3\text{P}_2 + 2\text{FeBr}_3 \rightarrow 3\text{CaBr}_2 + 2\text{FeP}$							
Reactants				Products			
Ca ₃ P ₂		FeBr ₃		CaBr ₂		FeP	
Ca		Fe		Ca		Fe	
P		Br		Br		P	

$3\text{TiO}_2 + 4\text{MnI}_3 \rightarrow 3\text{TiI}_4 + 2\text{Mn}_2\text{O}_3$							
Reactants				Products			
TiO ₂		MnI ₃		TiI ₄		Mn ₂ O ₃	
Ti		Mn		Ti		Mn	
O		I		I		O	

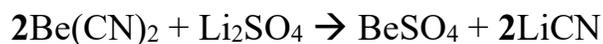
$3\text{NaOH} + \text{VF}_3 \rightarrow 3\text{NaF} + \text{V(OH)}_3$							
Reactants				Products			
NaOH		VF ₃		NaF		V(OH) ₃	
Na		V		Na		V	
O		F		F		O	
H						H	



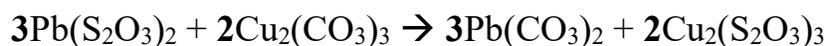
Reactants				Products			
$\text{Cr}(\text{BrO}_3)_2$		Zn_3N		Cr_3N_2		ZnBrO_3	
Cr		Zn		Cr		Zn	
Br		N		N		Br	
O						O	



Reactants				Products			
$\text{Ca}(\text{NO}_3)_2$		Na_3PO_4		$\text{Ca}_3(\text{PO}_4)_2$		NaNO_3	
Ca		Na		Ca		Na	
N		P		P		N	
O		O		O		O	



Reactants				Products			
$\text{Be}(\text{CN})_2$		Li_2SO_4		BeSO_4		LiCN	
Be		Li		Be		Li	
C		S		S		C	
N		O		O		N	



Reactants				Products			
$\text{Pb}(\text{S}_2\text{O}_3)_2$		$\text{Cu}_2(\text{CO}_3)_3$		$\text{Pb}(\text{CO}_3)_2$		$\text{Cu}_2(\text{S}_2\text{O}_3)_3$	
Pb		Cu		Pb		Cu	
S		C		C		S	
O		O		O		O	