

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 4E – Types of Reactions – Combination and Decomposition

20 Points

Answer the following questions

Define Combination Reaction	Define Decomposition Reaction
Combination Reaction General Form	Decomposition Reaction General Form
Define Diatomic Element	Define Chemical Reaction Ratio

For the following reactions, determine the reaction type, write the general form for the reaction, then identify A, B, and AB from each reaction.

$\text{Ba} + \text{S} \rightarrow \text{BaS}$				$2\text{Al} + 3\text{Cl}_2 \rightarrow 2\text{AlCl}_3$			
Reaction Type				Reaction Type			
General Form				General Form			

A		B		A		B	
AB		Ratio		AB		Ratio	

$3\text{Cu}^{2+} + 2\text{PO}_4^{3-} \rightarrow \text{Cu}_3(\text{PO}_4)_2$				$\text{Pb}^{4+} + \text{O}_2 \rightarrow \text{PbO}_2$			
Reaction Type				Reaction Type			
General Form				General Form			

A		B		A		B	
AB		Ratio		AB		Ratio	

$2\text{HF} \rightarrow \text{H}_2 + \text{F}_2$				$2\text{NH}_3 \rightarrow \text{N}_2 + 3\text{H}_2$			
Reaction Type				Reaction Type			
General Form				General Form			
A		B		A		B	
AB		Ratio		AB		Ratio	

$\text{CaCO}_3 \rightarrow \text{Ca}^{2+} + \text{CO}_3^{2-}$				$\text{Zn}_3\text{PO}_4 \rightarrow 3\text{Zn} + \text{PO}_4^{3-}$			
Reaction Type				Reaction Type			
General Form				General Form			
A		B		A		B	
AB		Ratio		AB		Ratio	