

Name \_\_\_\_\_ Period \_\_\_\_\_

## College Prep Chemistry of the Earth

## Assignment 5P – Types of Reactions – Double Replacement Reactions

20 Points

*Answer the following questions*

Define Double Replacement Reaction	Define Acid Base Reaction
Double Replacement Reaction General Form	Acid Base Reaction General Form
Why are gases or precipitates required for a double replacement reaction?	Define a Binary and Polyatomic Acid
What determines whether a compound will be aqueous or produce a precipitate	Define a Base

*For the following reactions, determine the reaction type, write the general form for the reaction, then identify A, B, C, D and AB, CD, AD, CB*

$\text{Na}_2\text{S} + \text{CaCl}_2 \rightarrow 2\text{NaCl} + \text{CaS}$		$4\text{Cu}(\text{NO}_3)_2 + 3\text{PbF}_4 \rightarrow 4\text{CuF}_2 + 3\text{Pb}(\text{NO}_3)_4$	
Reaction Type		Reaction Type	
General Form		General Form	

A		B		A		B	
C		D		C		D	
AB		CD		AB		CD	
AD		CB		AD		CB	
Ratio				Ratio			

$3\text{Ag}_2\text{SO}_4 + 2\text{Al}(\text{CN})_3 \rightarrow 6\text{AgCN} + \text{Al}_2(\text{SO}_4)_3$				$\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{HOH}$			
Reaction Type				Reaction Type			
General Form				General Form			

A		B		A		B	
C		D		C		D	
AB		CD		AB		CD	
AD		CB		AD		CB	
Ratio				Ratio			

$\text{H}_2\text{CO}_3 + 2\text{ZnOH} \rightarrow \text{Zn}_2\text{CO}_3 + 2\text{HOH}$				$4\text{H}_3\text{PO}_4 + 3\text{Pb}(\text{OH})_4 \rightarrow \text{Pb}_3(\text{PO}_4)_4 + 12\text{HOH}$			
Reaction Type				Reaction Type			
General Form				General Form			

A		B		A		B	
C		D		C		D	
AB		CD		AB		CD	
AD		CB		AD		CB	
Ratio				Ratio			

*Note: HOH is the acid/base form of H<sub>2</sub>O (Water)*