

Chapter 8 – Study Guide

Reaction	Trigger	Mechanism	Miscellaneous
Combination	$2 R \rightarrow 1 P$	NM \rightarrow Molecular M \rightarrow Ionic	<ul style="list-style-type: none"> • Compounds should make sense! • Molecular = 8 common gases • Ionic = balance charges
Decomposition	$1 R \rightarrow 2 P$		
Double Displacement	C + C	Swap 1 copy of each cation	<ul style="list-style-type: none"> • Must form (s) or (g) • Memorize 3 common decompositions
Acid/Base	Acid + Base	Swap 2 copy of each cation + heat	<ul style="list-style-type: none"> • Always occur! • Acids = H^+ • Bases = OH^-
Single Displacement	E + C	Swap cation or anion	<ul style="list-style-type: none"> • Activity Series • More active E wants to be in the compound
Combustion	Anything + O_2 (g)	\rightarrow ___ CO_2 (g) + ___ H_2O (g) + heat	<ul style="list-style-type: none"> • Memorize • Balance

Steps for Balancing Reactions

1. Determine the type of Reaction
2. Does it occur (SD and DD)?
3. Mechanism (Do the reaction)
4. Balance Charges
5. Diatomics
6. States
7. Balance the Reaction

Things to Memorize

1. States – Elements (11 – (g), 2 – (l))
2. 8 common molecular gases
3. Diatomics
4. 3 Decomposition Reactions