
Chemical Processes 4

Types of Chemical Reactions

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Key Terms:

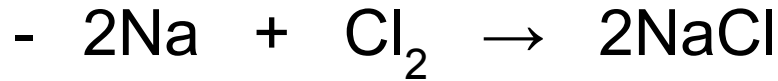
- Synthesis
 - Decomposition
 - Single replacement
 - Double replacement
 - Neutralization
 - Combustion
 - Precipitation
 - Precipitate
-

Synthesis Reactions

- Two or more reactants combine to produce a single product:



- Example:



- Synthesis Reactions BLM 2-34

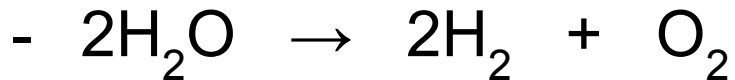
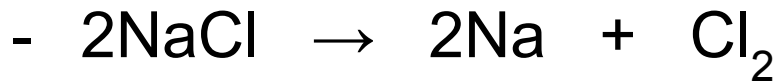
- Need More Practice: BC Science 10 P259 #1 and 2

Decomposition Reactions

- The breakdown of a compound



- Example:

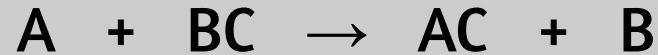


- Decomposition Reactions BLM 2-35
- Need More Practice: BC Science 10 P260 #1 and 2

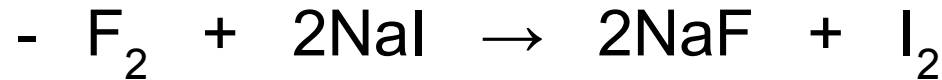
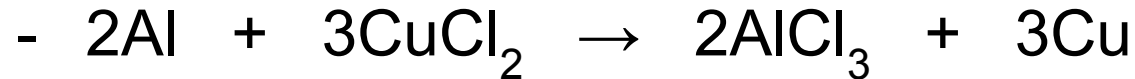
Single Replacement Reactions

- See BC Science 10
Connections p162

- Occurs between a reactive element and a compound. One element is replaced by another element.



- Example:



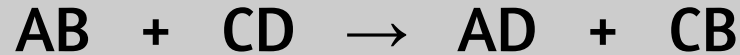
- Single Replacement
BLM 2-36

- Need More Practice: BC Science
10 P261 #1 and 2

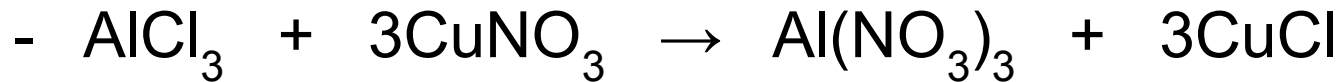
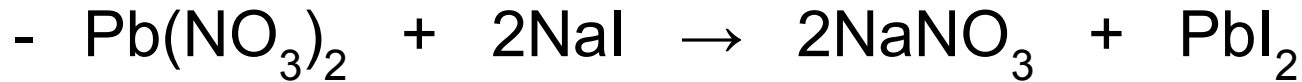
Double Replacement Reactions

- See BC Science 10
Connections p164

- Involves two ionic solutions combined to produce an ionic compound
- One compound forms a precipitate



- Example:



- Double Replacement BLM 2-37

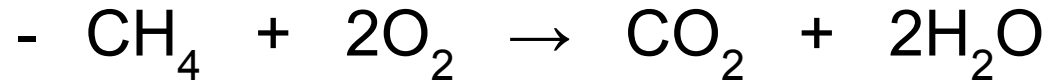
- Need More Practice: BC Science 10 P262 #1 and 2

Combustion Reactions

- A reaction of a compound or element with oxygen to form an oxide and to produce heat.

hydrocarbon + oxygen \rightarrow carbon dioxide + water

- Example:



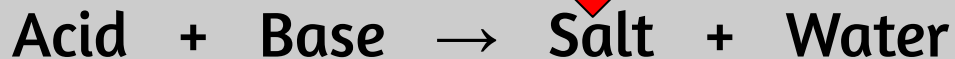
**We will be revisiting this kind of reaction later in section 7 of this unit.

Neutralization Reactions

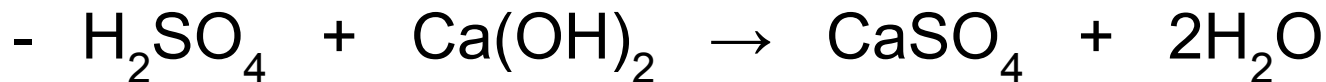
- See BC Science 10 Connections p 172

- Neutralization reactions are a type of double replacement reaction

Metal and a non-metal: ionic bond



- Example:



More Practice: BC Science 10 P263 #1 and 2

More Practice

- READ!! BC Science 10 Connections Page 173-174, and THEN do the practice questions on page 174
- Complete BLM 2-39: Classifying and Balancing Equations

Need More Practice

- BC Science 10 P 265 #1-7
- Checking your understanding p271 all questions (a,c,e...) as applicable.