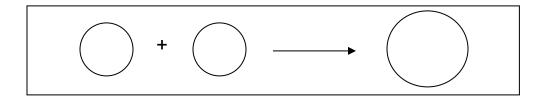
# 1. Synthesis Reactions

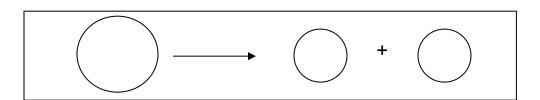
- It is represented by the following equation:



• An example is:

#### 2. Decomposition Reactions

- A decomposition reaction \_\_\_\_\_\_\_
- It is represented by the following equation:



An example is:

# 3. Single Displacement Reactions

• It is represented by the following equation:

• An example is:

### 4. Double Displacement Reactions

• It is represented by the following equation:



• An example is:

## **Worksheet - Types of Chemical Reactions**

Write a balanced chemical equation and identify each type of reaction.

- 1. zinc + copper (II) sulfate → zinc sulfate + copper (II)
- 2. potassium chlorate (heated) → potassium chloride + oxygen gas
- 3. aluminum + oxygen gas → aluminum oxide
- 4. potassium iodide + lead (II) nitrate → lead (II) iodide + potassium nitrate
- 5. aluminum + iron (II) oxide  $\rightarrow$  aluminum oxide + iron (II)
- 6. zinc sulfate (when heated) → zinc sulfite + oxygen gas
- 7. nitrogen gas + hydrogen gas → ammonia
- 8. lead (II) + phosphoric acid (H<sub>3</sub>PO<sub>4 (aq)</sub>) → lead (II) phosphate + hydrogen gas
- 9. sodium nitrate → sodum nitrite + oxygen gas
- 10. magnesium bromide + ammonium nitrate → magnesium nitrate + ammonium bromide