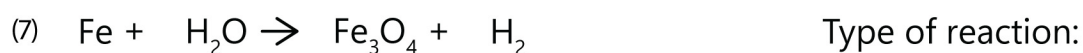
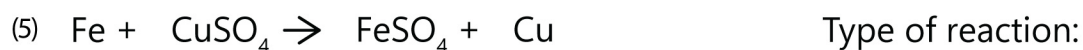


Name : ..... Date : .....

## Identifying and Balancing Chemical Reactions

Determine the reaction type for each of the following reactions and balance them.



Name : \_\_\_\_\_ Date : \_\_\_\_\_

## Identifying and Balancing Chemical Reactions

### Answers

- (1)  $1 \text{ AgNO}_3 + 1 \text{ Cu} \rightarrow 1 \text{ CuNO}_3 + 1 \text{ Ag}$  Type of reaction: **Single replacement**
- (2)  $2 \text{ NaCl} \rightarrow 2 \text{ Na} + 1 \text{ Cl}_2$  Type of reaction: **Decomposition**
- (3)  $1 \text{ N}_2 + 3 \text{ H}_2 \rightarrow 2 \text{ NH}_3$  Type of reaction: **Synthesis**
- (4)  $2 \text{ HCl} + 1 \text{ FeS} \rightarrow 1 \text{ FeCl}_2 + 1 \text{ H}_2\text{S}$  Type of reaction: **Double replacement**
- (5)  $1 \text{ Fe} + 1 \text{ CuSO}_4 \rightarrow 1 \text{ FeSO}_4 + 1 \text{ Cu}$  Type of reaction: **Single replacement**
- (6)  $1 \text{ P}_4\text{O}_{10} + 6 \text{ H}_2\text{O} \rightarrow 4 \text{ H}_3\text{PO}_4$  Type of reaction: **Synthesis**
- (7)  $3 \text{ Fe} + 4 \text{ H}_2\text{O} \rightarrow 1 \text{ Fe}_3\text{O}_4 + 4 \text{ H}_2$  Type of reaction: **Single replacement**
- (8)  $2 \text{ H}_3\text{PO}_4 \rightarrow 1 \text{ H}_4\text{P}_2\text{O}_7 + 1 \text{ H}_2\text{O}$  Type of reaction: **Decomposition**
- (9)  $1 \text{ Fe}_2\text{O}_3 + 3 \text{ C} \rightarrow 3 \text{ CO} + 2 \text{ Fe}$  Type of reaction: **Single replacement**
- (10)  $4 \text{ Fe} + 3 \text{ O}_2 \rightarrow 2 \text{ Fe}_2\text{O}_3$  Type of reaction: **Synthesis**
- (11)  $1 \text{ C}_{10}\text{H}_{16} + 8 \text{ Cl}_2 \rightarrow 10 \text{ C} + 16 \text{ HCl}$  Type of reaction: **Single replacement**
- (12)  $1 \text{ HCl} + 1 \text{ AgNO}_3 \rightarrow 1 \text{ HNO}_3 + 1 \text{ AgCl}$  Type of reaction: **Double replacement**