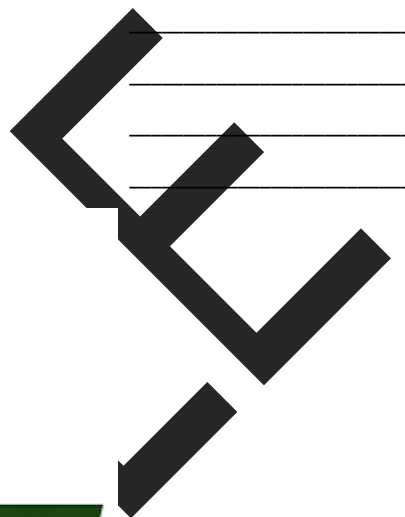


Balancing and Types of Chemical Reactions Worksheet - Set 1

For each of the following chemical reactions, balance the equation and identify the type of reaction as synthesis, decomposition, single replacement, double replacement, or combustion.

Type of Reaction

1. ___ Fe + ___ O₂ → ___ Fe₂O₃
2. ___ NaCl + ___ AgNO₃ → ___ NaNO₃ + ___ AgCl
3. ___ Cu + ___ FeSO₄ → ___ CuSO₄ + ___ Fe
4. ___ KBr + ___ Cl₂ → ___ KCl + ___ Br₂
5. ___ CaCO₃ → ___ CaO + ___ CO₂



TWF



25. ___ HgO + ___ Cl₂ → ___ HgCl₂ + ___ O₂

Answers to Balancing and Types of Chemical Reactions Worksheet - Set 1

1. $4 \text{ Fe} + 3 \text{ O}_2 \rightarrow 2 \text{ Fe}_2\text{O}_3$ (Synthesis)
2. $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{NaNO}_3 + \text{AgCl}$ (Double replacement)
3. $\text{Cu} + \text{FeSO}_4 \rightarrow \text{CuSO}_4 + \text{Fe}$ (Single replacement)
4. $2 \text{ KBr} + \text{Cl}_2 \rightarrow 2 \text{ KCl} + \text{Br}_2$ (Single replacement)
5. $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$ (Decomposition)

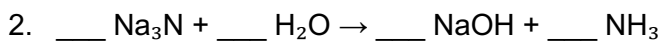


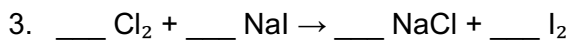
Balancing and Types of Chemical Reactions Worksheet - Set 2

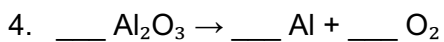
For each of the following chemical reactions, balance the equation and identify the type of reaction as synthesis, decomposition, single replacement, double replacement, or combustion.

Type of Reaction

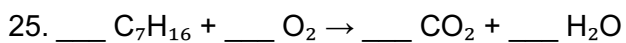








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Answers to Balancing and Types of Chemical Reactions Worksheet - Set 2

1. $\text{Ca} + \text{Br}_2 \rightarrow \text{CaBr}_2$ (Synthesis)
2. $3 \text{Na}_3\text{N} + 3 \text{H}_2\text{O} \rightarrow 9 \text{NaOH} + \text{NH}_3$ (Double replacement)
3. $\text{Cl}_2 + 2 \text{NaI} \rightarrow 2 \text{NaCl} + \text{I}_2$ (Single replacement)
4. $2 \text{Al}_2\text{O}_3 \rightarrow 4 \text{Al} + 3 \text{O}_2$ (Decomposition)

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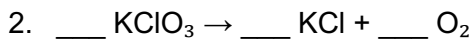
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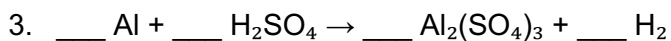
Balancing and Types of Chemical Reactions Worksheet - Set 3

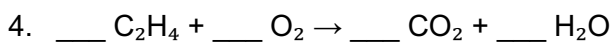
For each of the following chemical reactions, balance the equation and identify the type of reaction as synthesis, decomposition, single replacement, double replacement, or combustion.

Type of Reaction



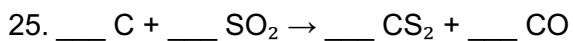






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Answers to Balancing and Types of Chemical Reactions Worksheet - Set 3

1. $2 \text{H}_2 + \text{O}_2 \rightarrow 2 \text{H}_2\text{O}$ (Synthesis)
2. $2 \text{KClO}_3 \rightarrow 2 \text{KCl} + 3 \text{O}_2$ (Decomposition)
3. $2 \text{Al} + 3 \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + 3 \text{H}_2$ (Single replacement)
4. $\text{C}_2\text{H}_4 + 3 \text{O}_2 \rightarrow 2 \text{CO}_2 + 2 \text{H}_2\text{O}$ (Combustion)

TWFF

SA