

Balancing Chemical Equation Worksheet

Which of the following is the correctly balanced equation for the reaction where hydrogen gas reacts with nitrogen gas to form ammonia?

- $3\text{H}_2 + \text{N}_2 \rightarrow 2\text{NH}_3$
- $\text{H}_2 + \text{N}_2 \rightarrow \text{NH}_3$
- $3\text{H}_2 + \text{N}_2 \rightarrow \text{NH}_3$
- $\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3$

Identify the correctly balanced equation for the combustion of glucose ($\text{C}_6\text{H}_{12}\text{O}_6$).

- $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$
- $\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 12\text{H}_2\text{O}$
- $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$

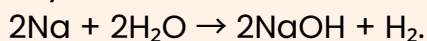
Balance the equation for the reaction of iron (III) oxide with carbon monoxide to produce iron and carbon dioxide.

- Unbalanced Equation:
 $\text{Fe}_2\text{O}_3 + \text{CO} \rightarrow \text{Fe} + \text{CO}_2$

How many molecules of water are produced when 2 molecules of propane (C_3H_8) are completely combusted in oxygen?

- Unbalanced Equation:
 $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$

Classify the reaction:



Identify the type of reaction and balance it:

