

Five Types of Chemical Reaction Worksheet

Balance the following reactions and indicate which of the five types of chemical reaction are being represented:



Type of reaction: _____

The following is the chemical equation for the chemical reaction that takes place when silver nitrate is dissolved in water and is then mixed with sodium chloride that has been dissolved in water. When these two are mixed, a chemical reaction takes place and silver chloride in solid form and sodium nitrate in solution are produced.

$$\text{AgNO}_3(\text{aq}) + \text{NaCl}(\text{aq}) \rightarrow \text{AgCl}(\text{s}) + \text{NaNO}_3(\text{aq})$$

The reactants are on the left side of the yield sign. The products are on the right side.

Name the reactant(s) in the following chemical reactions:

2. $\text{C}(\text{s}) + \text{O}_2(\text{g}) \rightarrow \text{CO}_2(\text{g})$

3. $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

Name the product(s) in the following chemical reactions:

4. $2\text{Cu} + \text{O}_2 \rightarrow 2\text{Cu}_2\text{O}$

5. $\text{N}_2\text{H}_4 + \text{O}_2 \rightarrow \text{N}_2 + 2\text{H}_2\text{O}$

7. Write the balanced chemical equation for the following chemical reaction: Silver nitrate in solution (dissolved in water) and potassium chloride in solution react to produce silver chloride as a precipitate or solid, and potassium nitrate in solution. (Note that the chemical formula for potassium chloride is KCl. The formula for silver nitrate is AgNO₃.)