Types of Reactions Worksheet

Indicate the type of reaction taking place:

1) \( \text{NaBr} + \text{H}_3\text{PO}_4 \rightarrow \text{Na}_3\text{PO}_4 + \text{HBr} \)
   Reaction type: __________________________________________

2) \( \text{Ca(OH)}_2 + \text{Al}_2(\text{SO}_4)_3 \rightarrow \text{CaSO}_4 + \text{Al(OH)}_3 \)
   Reaction type: __________________________________________

3) \( \text{Mg} + \text{Fe}_2\text{O}_3 \rightarrow \text{Fe} + \text{MgO} \)
   Reaction type: __________________________________________

4) \( \text{C}_2\text{H}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O} \)
   Reaction type: __________________________________________

5) \( \text{PbSO}_4 \rightarrow \text{PbSO}_3 + \text{O}_2 \)
   Reaction type: __________________________________________

6) \( \text{NH}_3 + \text{I}_2 \rightarrow \text{N}_2\text{I}_6 + \text{H}_2 \)
   Reaction type: __________________________________________

7) \( \text{H}_2\text{O} + \text{SO}_3 \rightarrow \text{H}_2\text{SO}_4 \)
   Reaction type: __________________________________________

8) \( \text{O}_2 + \text{C}_3\text{H}_8 \rightarrow \text{H}_2\text{O} + \text{CO}_2 \)
   Reaction type: __________________________________________
9) \( \text{NaOH} + \text{KNO}_3 \rightarrow \text{NaNO}_3 + \text{KOH} \)

Reaction type:____________________________________

10) \( \text{CH}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O} \)

Reaction type:____________________________________

11) \( \text{Fe} + \text{NaBr} \rightarrow \text{FeBr}_3 + \text{Na} \)

Reaction type:____________________________________

12) \( \text{CaSO}_4 + \text{Mg(OH)}_2 \rightarrow \text{Ca(OH)}_2 + \text{MgSO}_4 \)

Reaction type:____________________________________

13) \( \text{Na}_2\text{CO}_3 \rightarrow \text{Na}_2\text{O} + \text{CO}_2 \)

Reaction type:____________________________________

14) \( \text{Pb} + \text{O}_2 \rightarrow \text{PbO}_2 \)

Reaction type:____________________________________
### Types of Reactions Worksheet – Solutions

1) $3\text{NaBr} + 1\text{H}_3\text{PO}_4 \rightarrow 1\text{Na}_3\text{PO}_4 + 3\text{HBr}$

   Reaction type: double displacement

2) $3\text{Ca(OH)}_2 + 1\text{Al}_2(\text{SO}_4)_3 \rightarrow 3\text{CaSO}_4 + 2\text{Al(OH)}_3$

   Reaction type: double displacement

3) $3\text{Mg} + 1\text{Fe}_2\text{O}_3 \rightarrow 2\text{Fe} + 3\text{MgO}$

   Reaction type: single displacement

4) $1\text{C}_2\text{H}_4 + 3\text{O}_2 \rightarrow 2\text{CO}_2 + 2\text{H}_2\text{O}$

   Reaction type: combustion

5) $2\text{PbSO}_4 \rightarrow 2\text{PbSO}_3 + 1\text{O}_2$

   Reaction type: decomposition

6) $2\text{NH}_3 + 3\text{I}_2 \rightarrow 1\text{N}_2\text{I}_6 + 3\text{H}_2$

   Reaction type: double displacement

7) $1\text{H}_2\text{O} + 1\text{SO}_3 \rightarrow 1\text{H}_2\text{SO}_4$

   Reaction type: synthesis

8) $\text{O}_2 + \text{C}_3\text{H}_8 \rightarrow \text{H}_2\text{O} + \text{CO}_2$

   Reaction type: combustion

9) double displacement
10) combustion
11) single displacement
12) double displacement
13)
14) decomposition
15) synthesis