

Types of Chemical Reaction Worksheet

Balance the reactions **1 to 6** and indicate which type of chemical reaction (synthesis, decomposition, single-displacement, double-displacement or combustion) is being represented:

1. $2\text{NaBr} + \text{Ca(OH)}_2 \rightarrow \text{CaBr}_2 + 2\text{NaOH}$ Reaction Type : _____
2. $2\text{NH}_3 + \text{H}_2\text{SO}_4 \rightarrow (\text{NH}_4)_2\text{SO}_4$ Reaction Type : _____
3. $4\text{C}_5\text{H}_9\text{O} + 27\text{O}_2 \rightarrow 20\text{CO}_2 + 18\text{H}_2\text{O}$ Reaction Type : _____
4. $3\text{Pb} + 2\text{H}_3\text{PO}_4 \rightarrow 3\text{H}_2 + \text{Pb}_3(\text{PO}_4)_2$ Reaction Type : _____
5. $\text{Li}_3\text{N} + 3\text{NH}_4\text{NO}_3 \rightarrow 3\text{LiNO}_3 + (\text{NH}_4)_3\text{N}$ Reaction Type : _____
6. $3\text{HBr} + \text{Al(OH)}_3 \rightarrow 3\text{H}_2\text{O} + \text{AlBr}_3$ Reaction Type : _____
7. $\text{Na}_3\text{PO}_4 + 3\text{KOH} \rightarrow 3\text{NaOH} + \text{K}_3\text{PO}_4$ Reaction Type: _____
8. $\text{MgCl}_2 + \text{Li}_2\text{CO}_3 \rightarrow \text{MgCO}_3 + 2\text{LiCl}$ Reaction Type: _____
9. $\text{C}_8\text{H}_{16} + 12\text{O}_2 \rightarrow 8\text{CO}_2 + 8\text{H}_2\text{O}$ Reaction Type: _____

Indicate which type of chemical reaction (synthesis, decomposition, single-displacement, double-displacement or combustion) is being represented in 7 to 20.

10. $\text{Pb} + \text{FeSO}_4 \rightarrow \text{PbSO}_4 + \text{Fe}$ Reaction Type _____
11. $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$ Reaction Type _____
12. $\text{P}_4 + 3\text{O}_2 \rightarrow 2\text{P}_2\text{O}_3$ Reaction Type _____
13. $2\text{RbNO}_3 + \text{BeF}_2 \rightarrow \text{Be(NO}_3)_2 + 2\text{RbF}$ Reaction Type _____
14. $2\text{AgNO}_3 + \text{Cu} \rightarrow \text{Cu(NO}_3)_2 + 2\text{Ag}$ Reaction Type _____
15. $\text{C}_3\text{H}_6\text{O} + 4\text{O}_2 \rightarrow 3\text{CO}_2 + 3\text{H}_2\text{O}$ Reaction Type _____
16. $2\text{C}_5\text{H}_5 + \text{Fe} \rightarrow \text{Fe(C}_5\text{H}_5)_2$ Reaction Type _____
17. $\text{SeCl}_6 + \text{O}_2 \rightarrow \text{SeO}_2 + 3\text{Cl}_2$ Reaction Type _____
18. $2\text{MgI}_2 + \text{Mn}(\text{SO}_3)_2 \rightarrow 2\text{MgSO}_3 + \text{MnI}_4$ Reaction Type _____
19. $\text{O}_3 \rightarrow \text{O} + \text{O}_2$ Reaction Type _____
20. $2\text{NO}_2 \rightarrow 2\text{O}_2 + \text{N}_2$ Reaction Type _____