

Mixed Type Practice for Predicting Reactions

Reaction Type	Reactants	Products
1	$\text{Al} + \text{Pb}(\text{NO}_3)_2$	
2	$\text{Al} + \text{CuCl}_2$	
3	$\text{Fe} + \text{AgC}_2\text{H}_3\text{O}_2$	
4	$\text{Fe}(\text{OH})_3 \rightarrow$	
5	$\text{K}_2\text{CO}_3 + \text{BaCl}_2 \rightarrow$	
6	$\text{Ca}(\text{OH})_2 + \text{H}_3\text{PO}_4 \rightarrow$	
7	$\text{Cd}_3(\text{PO}_4)_2 + (\text{NH}_4)_2\text{S} \rightarrow$	
8	$\text{C}_{25}\text{H}_{52} + \text{O}_2 \rightarrow$	
9	$\text{Cl}_2 + \text{NaI} \rightarrow$	
10	$\text{C}_6\text{H}_6 + \text{O}_2 \rightarrow$	
11	$\text{MgCl}_2 + \text{O}_2 \rightarrow$	
12	$\text{Ni}(\text{ClO}_3)_2 \rightarrow$	
13	$\text{Na} + \text{O}_2 \rightarrow$	
14	$\text{BeO} + \text{CO}_2 \rightarrow$	
15	$\text{HNO}_2 \rightarrow$	
16	$\text{Cr}_2(\text{SO}_3)_3 + \text{H}_2\text{SO}_4 \rightarrow$	
17	$\text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{O}_2 \rightarrow$	
18	$\text{BaO} + \text{CO}_2 \rightarrow$	
19	$\text{Ag}_2\text{O} \rightarrow$	
20	$\text{AgC}_2\text{H}_3\text{O}_2 + \text{K}_2\text{CrO}_4 \rightarrow$	

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	Reaction Type	Reactants	Products
1	single replacement	$2\text{Al} + 3\text{Pb}(\text{NO}_3)_2$	$\rightarrow 2\text{Al}(\text{NO}_3)_3 + 3\text{Pb}$
2	s. rep.	$2\text{Al} + 3\text{CuCl}_2$	$\rightarrow 2\text{AlCl}_3 + 3\text{Cu}$
3	s. rep.	$\text{Fe} + 3\text{AgC}_2\text{H}_3\text{O}_2$	$\rightarrow \text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3 + 3\text{Ag}$
4	decomposition	$2\text{Fe}(\text{OH})_3$	$\rightarrow \text{Fe}_2\text{O}_3 + 3\text{H}_2\text{O}$
5	double replacement	$\text{K}_2\text{CO}_3 + \text{BaCl}_2$	$\rightarrow 2\text{KCl} + \text{BaCO}_3$
6	double replacement	$\text{Ca}(\text{OH})_2 + \text{H}_3\text{PO}_4$	$\rightarrow \text{Ca}_3(\text{PO}_4)_2 + 6\text{H}_2\text{O}$
7	dbl. rep.	$\text{Cd}_3(\text{PO}_4)_2 + 3(\text{NH}_4)_2\text{S}$	$\rightarrow 3\text{CdS} + 2(\text{NH}_4)_3\text{PO}_4$
8	combustion	$\text{C}_{25}\text{H}_{52} + 38\text{O}_2$	$\rightarrow 25\text{CO}_2 + 26\text{H}_2\text{O}$
9	s. rep.	$\text{Cl}_2 + 2\text{NaI}$	$\rightarrow 2\text{NaCl} + \text{I}_2$
10	combustion	$2\text{C}_6\text{H}_6 + 15\text{O}_2$	$\rightarrow 12\text{CO}_2 + 6\text{H}_2\text{O}$
11	combination or synthesis	$\text{MgCl}_2 + 3\text{O}_2$	$\rightarrow \text{Mg}(\text{ClO}_3)_2$
12	decomposition	$\text{Ni}(\text{ClO}_3)_2$	$\rightarrow \text{NiCl}_2 + 3\text{O}_2$
13	combination or synthesis	$4\text{Na} + \text{O}_2$	$\rightarrow 2\text{Na}_2\text{O}$
14	synthesis or combination	$\text{BeO} + \text{CO}_2$	$\rightarrow \text{BeCO}_3$
15		HNO_2	$\rightarrow$
16	dbl. rep.	$\text{Cr}_2(\text{SO}_3)_3 + 3\text{H}_2\text{SO}_4$	$\rightarrow \text{Cr}_2(\text{SO}_4)_3 + 3\text{H}_2\text{SO}_3$
17	combustion	$\text{C}_{12}\text{H}_{22}\text{O}_{11} + 12\text{O}_2$	$\rightarrow 12\text{CO}_2 + 11\text{H}_2\text{O}$
18	synthesis or combination	$\text{BaO} + \text{CO}_2$	$\rightarrow \text{BaCO}_3$
19	decomp.	$2\text{Ag}_2\text{O}$	$\rightarrow 4\text{Ag} + \text{O}_2$
20	dbl. rep.	$2\text{AgC}_2\text{H}_3\text{O}_2 + \text{K}_2\text{CrO}_4$	$\rightarrow \text{Ag}_2\text{CrO}_4 + 2\text{KC}_2\text{H}_3\text{O}_2$