



REACTIONS OF PERIOD 3 OXIDES

Write a balanced equation for these reactions of period 3 oxides.

1	magnesium oxide + sulfuric acid $\text{MgO} + \text{H}_2\text{SO}_4 \rightarrow \text{MgSO}_4 + \text{H}_2\text{O}$
2	sulfur trioxide + sodium hydroxide $\text{SO}_3 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$
3	sodium oxide + water $\text{Na}_2\text{O} + \text{H}_2\text{O} \rightarrow 2\text{NaOH}$
4	sodium oxide + nitric acid $\text{Na}_2\text{O} + 2\text{HNO}_3 \rightarrow 2\text{NaNO}_3 + \text{H}_2\text{O}$
5	phosphorus oxide + sodium hydroxide $\text{P}_4\text{O}_{10} + 12\text{NaOH} \rightarrow 4\text{Na}_3\text{PO}_4 + 6\text{H}_2\text{O}$
6	sulfur dioxide + potassium hydroxide $\text{SO}_2 + 2\text{KOH} \rightarrow \text{K}_2\text{SO}_3 + \text{H}_2\text{O}$
7	aluminium oxide + nitric acid $\text{Al}_2\text{O}_3 + 6\text{HNO}_3 \rightarrow 2\text{Al}(\text{NO}_3)_3 + 3\text{H}_2\text{O}$
8	phosphorus oxide + water $\text{P}_4\text{O}_{10} + 6\text{H}_2\text{O} \rightarrow 4\text{H}_3\text{PO}_4$
9	silicon dioxide + sodium hydroxide $\text{SiO}_2 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SiO}_3 + \text{H}_2\text{O}$
10	aluminium oxide + sodium hydroxide $\text{Al}_2\text{O}_3 + 2\text{NaOH} + 3\text{H}_2\text{O} \rightarrow 2\text{NaAl}(\text{H}_2\text{O})_2(\text{OH})_4$
11	sulfur dioxide + sodium oxide $\text{SO}_2 + \text{Na}_2\text{O} \rightarrow \text{Na}_2\text{SO}_3$
12	magnesium oxide + phosphorus oxide $6\text{MgO} + \text{P}_4\text{O}_{10} \rightarrow 2\text{Mg}_3(\text{PO}_4)_2$