

## Balancing Chemical Reactions Worksheet #1

Balance the following chemical reactions and indicate the type of reaction:

- $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
- $\text{S}_8 + \text{O}_2 \rightarrow \text{SO}_2$
- $\text{HgO} \rightarrow \text{Hg} + \text{O}_2$
- $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
- $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
- $\text{C}_{10}\text{H}_{16} + \text{Cl}_2 \rightarrow \text{C} + \text{HCl}$
- $\text{Si}_2\text{H}_2 + \text{O}_2 \rightarrow \text{SiO}_2 + \text{H}_2\text{O}$
- $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_2$
- $\text{C}_7\text{H}_6\text{O}_2 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{FeS}_2 + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_2 + \text{SO}_2$
- $\text{Fe}_2\text{O}_2 + \text{H}_2 \rightarrow \text{Fe} + \text{H}_2\text{O}$
- $\text{K} + \text{Br}_2 \rightarrow \text{KBr}$
- $\text{C}_2\text{H}_2 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{H}_2\text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$
- $\text{C}_7\text{H}_{16} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{SiO}_2 + \text{HF} \rightarrow \text{SiF}_4 + \text{H}_2\text{O}$
- $\text{KClO}_2 \rightarrow \text{KCl} + \text{O}_2$
- $\text{KClO}_2 \rightarrow \text{KClO}_4 + \text{KCl}$
- $\text{P}_4\text{O}_{10} + \text{H}_2\text{O} \rightarrow \text{H}_2\text{PO}_4$
- $\text{Sb} + \text{O}_2 \rightarrow \text{Sb}_4\text{O}_6$
- $\text{C}_2\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{Fe}_2\text{O}_2 + \text{CO} \rightarrow \text{Fe} + \text{CO}_2$
- $\text{PCl}_5 + \text{H}_2\text{O} \rightarrow \text{HCl} + \text{H}_2\text{PO}_4$
- $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow \text{S}_8 + \text{HCl}$
- $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_2\text{O}_4 + \text{H}_2$
- $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_2$
- $\text{N}_2 + \text{O}_2 \rightarrow \text{N}_2\text{O}$
- $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
- $\text{SiCl}_4 + \text{H}_2\text{O} \rightarrow \text{H}_4\text{SiO}_4 + \text{HCl}$
- $\text{H}_2\text{PO}_4 \rightarrow \text{H}_4\text{P}_2\text{O}_7 + \text{H}_2\text{O}$
- $\text{CO}_2 + \text{NH}_2 \rightarrow \text{OC}(\text{NH}_2)_2 + \text{H}_2\text{O}$
- $\text{Al}(\text{OH})_2 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_2 + \text{H}_2\text{O}$
- $\text{Fe}_2(\text{SO}_4)_2 + \text{KOH} \rightarrow \text{K}_2\text{SO}_4 + \text{Fe}(\text{OH})_2$
- $\text{H}_2\text{SO}_4 + \text{HI} \rightarrow \text{H}_2\text{S} + \text{I}_2 + \text{H}_2\text{O}$
- $\text{Al} + \text{FeO} \rightarrow \text{Al}_2\text{O}_2 + \text{Fe}$
- $\text{Na}_2\text{CO}_2 + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$
- $\text{P}_4 + \text{O}_2 \rightarrow \text{P}_2\text{O}_5$
- $\text{K}_2\text{O} + \text{H}_2\text{O} \rightarrow \text{KOH}$
- $\text{Al} + \text{O}_2 \rightarrow \text{Al}_2\text{O}_2$
- $\text{Na}_2\text{O}_2 + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{O}_2$
- $\text{C} + \text{H}_2\text{O} \rightarrow \text{CO} + \text{H}_2$
- $\text{H}_2\text{AsO}_4 \rightarrow \text{As}_2\text{O}_5 + \text{H}_2\text{O}$
- $\text{Al}_2(\text{SO}_4)_2 + \text{Ca}(\text{OH})_2 \rightarrow \text{Al}(\text{OH})_2 + \text{CaSO}_4$
- $\text{FeCl}_2 + \text{NH}_4\text{OH} \rightarrow \text{Fe}(\text{OH})_2 + \text{NH}_4\text{Cl}$
- $\text{Ca}_2(\text{PO}_4)_2 + \text{SiO}_2 \rightarrow \text{P}_4\text{O}_{10} + \text{CaSiO}_2$
- $\text{N}_2\text{O}_5 + \text{H}_2\text{O} \rightarrow \text{HNO}_2$
- $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_2 + \text{H}_2$
- $\text{H}_2\text{BO}_2 \rightarrow \text{H}_4\text{B}_6\text{O}_{11} + \text{H}_2\text{O}$
- $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_2\text{N}_2$
- $\text{NaOH} + \text{Cl}_2 \rightarrow \text{NaCl} + \text{NaClO} + \text{H}_2\text{O}$