

CHEMISTRY - CHAPTER 3: EQUATIONS

BALANCING EQUATIONS: FORMULAS GIVEN

Practice Sheet #1

Balance the following equations:

- $\text{Al} + \text{N}_2 \rightarrow \text{AlN}$
- $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_3\text{O}_4$
- $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- $\text{NH}_4\text{NO}_3 \rightarrow \text{N}_2\text{O} + \text{H}_2\text{O}$
- $\text{KI} + \text{Cl}_2 \rightarrow \text{KCl} + \text{I}_2$
- $\text{Pb}(\text{NO}_3)_2 + \text{HCl} \rightarrow \text{PbCl}_2 + \text{HNO}_3$
- $\text{BaO}_2 \rightarrow \text{BaO} + \text{O}_2$
- $\text{Al} + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2$
- $\text{CH}_4 + \text{Cl}_2 \rightarrow \text{CHCl}_3 + \text{HCl}$
- $\text{MgCl}_2 + \text{NaOH} \rightarrow \text{Mg}(\text{OH})_2 + \text{NaCl}$
- $\text{AgNO}_3 + \text{CuCl}_2 \rightarrow \text{AgCl} + \text{Cu}(\text{NO}_3)_2$
- $\text{ZnS} + \text{O}_2 \rightarrow \text{ZnO} + \text{SO}_2$
- $\text{Na} + \text{H}_2\text{O} \rightarrow \text{H}_2 + \text{NaOH}$
- $\text{BaCl}_2 + (\text{NH}_4)_2\text{CO}_3 \rightarrow \text{BaCO}_3 + \text{NH}_4\text{Cl}$
- $\text{C}_6\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
- $\text{Fe} + \text{FeCl}_3 \rightarrow \text{FeCl}_2$
- $\text{Ba}(\text{OH})_2 + \text{AlCl}_3 \rightarrow \text{Al}(\text{OH})_3 + \text{BaCl}_2$
- $\text{H}_2\text{C}_2\text{O}_4 + \text{KOH} \rightarrow \text{K}_2\text{C}_2\text{O}_4 + \text{H}_2\text{O}$
- $\text{C}_2\text{H}_2\text{Cl}_4 + \text{Ca}(\text{OH})_2 \rightarrow \text{C}_2\text{HCl}_3 + \text{CaCl}_2 + \text{H}_2\text{O}$
- $(\text{NH}_4)_2\text{Cr}_2\text{O}_7 \rightarrow \text{N}_2 + \text{Cr}_2\text{O}_3 + \text{H}_2\text{O}$
- $\text{Zn}_3\text{Sb}_2 + \text{H}_2\text{O} \rightarrow \text{Zn}(\text{OH})_2 + \text{SbH}_3$
- $\text{HClO}_4 + \text{P}_4\text{O}_{10} \rightarrow \text{H}_3\text{PO}_4 + \text{Cl}_2\text{O}_7$
- $\text{C}_6\text{H}_5\text{Cl} + \text{SiCl}_4 + \text{Na} \rightarrow (\text{C}_6\text{H}_5)_4\text{Si} + \text{NaCl}$
- $\text{Sb}_2\text{S}_3 + \text{HCl} \rightarrow \text{H}_3\text{SbCl}_6 + \text{H}_2\text{S}$
- $\text{IBr} + \text{NH}_3 \rightarrow \text{NI}_3 + \text{NH}_4\text{Br}$
- $\text{KrF}_2 + \text{H}_2\text{O} \rightarrow \text{Kr} + \text{O}_2 + \text{HF}$
- $\text{Na}_2\text{CO}_3 + \text{C} + \text{N}_2 \rightarrow \text{NaCN} + \text{CO}$
- $\text{K}_4\text{Fe}(\text{CN})_6 + \text{H}_2\text{SO}_4 + \text{H}_2\text{O} \rightarrow \text{K}_2\text{SO}_4 + \text{FeSO}_4 + (\text{NH}_4)_2\text{SO}_4 + \text{CO}$