

# Balancing Equations Worksheet KEY

1.  $\text{Zn (s)} + 2 \text{AgNO}_3 \text{ (aq)} \Rightarrow \text{Zn(NO}_3)_2 \text{ (aq)} + 2 \text{Ag (s)}$
2.  $\text{N}_2 \text{ (g)} + 3 \text{H}_2 \text{ (g)} \Rightarrow 2 \text{NH}_3 \text{ (g)}$
3.  $\text{NaCl (aq)} + \text{AgC}_2\text{H}_3\text{O}_2 \text{ (aq)} \Rightarrow \text{NaC}_2\text{H}_3\text{O}_2 \text{ (aq)} + \text{AgCl (s)}$
4.  $3 \text{Mg(OH)}_2 \text{ (aq)} + 2 \text{H}_3\text{PO}_4 \text{ (aq)} \Rightarrow 6 \text{H}_2\text{O (l)} + \text{Mg}_3(\text{PO}_4)_2 \text{ (aq)}$
5.  $2 \text{HNO}_3 \text{ (aq)} + \text{Ni (s)} \Rightarrow \text{Ni(NO}_3)_2 \text{ (aq)} + \text{H}_2 \text{ (g)}$
6.  $\text{Ba(HCO}_3)_2 \text{ (s)} \Rightarrow \text{BaCO}_3 \text{ (s)} + \text{H}_2\text{O (g)} + \text{CO}_2 \text{ (g)}$
7.  $\text{BaCl}_2 \text{ (aq)} + \text{Na}_2\text{SO}_4 \text{ (aq)} \Rightarrow 2 \text{NaCl (aq)} + \text{BaSO}_4 \text{ (s)}$
8.  $\text{Al}_2(\text{CO}_3)_3 \text{ (s)} \Rightarrow \text{Al}_2\text{O}_3 \text{ (s)} + 3 \text{CO}_2 \text{ (g)}$
9.  $\text{Ca (s)} + 2 \text{H}_2\text{O (l)} \Rightarrow \text{Ca(OH)}_2 \text{ (aq)} + \text{H}_2 \text{ (g)}$
10.  $2 \text{LiHCO}_3 \text{ (s)} \Rightarrow \text{Li}_2\text{CO}_3 \text{ (s)} + \text{H}_2\text{O (g)} + \text{CO}_2 \text{ (g)}$
11.  $2 \text{N}_2 \text{ (g)} + 5 \text{O}_2 \text{ (g)} \Rightarrow 2 \text{N}_2\text{O}_5 \text{ (g)}$
12.  $\text{MgBr}_2 \text{ (aq)} + 2 \text{KOH (aq)} \Rightarrow 2 \text{KBr (aq)} + \text{Mg(OH)}_2 \text{ (s)}$
13.  $\text{Mn (s)} + 2 \text{CuCl (aq)} \Rightarrow 2 \text{Cu (s)} + \text{MnCl}_2 \text{ (s)}$
14.  $8 \text{Zn (s)} + \text{S}_8 \text{ (s)} \Rightarrow 8 \text{ZnS (s)}$
15.  $2 \text{NaOH (aq)} + \text{H}_2\text{SO}_4 \text{ (aq)} \Rightarrow 2 \text{H}_2\text{O (l)} + \text{Na}_2\text{SO}_4 \text{ (aq)}$
16.  $2 \text{K (s)} + 2 \text{H}_2\text{O (l)} \Rightarrow 2 \text{KOH (aq)} + \text{H}_2 \text{ (g)}$
17.  $\text{C}_5\text{H}_{12} \text{ (l)} + 8 \text{O}_2 \text{ (g)} \Rightarrow 6 \text{H}_2\text{O (g)} + 5 \text{CO}_2 \text{ (g)}$
18.  $2 \text{KOH (aq)} + \text{H}_2\text{CO}_3 \text{ (aq)} \Rightarrow 2 \text{H}_2\text{O (l)} + \text{K}_2\text{CO}_3 \text{ (aq)}$
19.  $\text{C}_4\text{H}_8\text{O}_2 \text{ (l)} + 5 \text{O}_2 \text{ (g)} \Rightarrow 4 \text{H}_2\text{O (g)} + 4 \text{CO}_2 \text{ (g)}$
20.  $16 \text{Al (s)} + 3 \text{S}_8 \text{ (s)} \Rightarrow 8 \text{Al}_2\text{O}_3 \text{ (s)}$