

Balancing Chemical Equations

Balance the equations below:

- 1) $\underline{\quad}$ N₂ + $\underline{\quad}$ H₂ \rightarrow $\underline{\quad}$ NH₃
- 2) $\underline{\quad}$ KClO₃ \rightarrow $\underline{\quad}$ KCl + $\underline{\quad}$ O₂
- 3) $\underline{\quad}$ NaCl + $\underline{\quad}$ F₂ \rightarrow $\underline{\quad}$ NaF + $\underline{\quad}$ Cl₂
- 4) $\underline{\quad}$ H₂ + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ H₂O
- 5) $\underline{\quad}$ Pb(OH)₂ + $\underline{\quad}$ HCl \rightarrow $\underline{\quad}$ H₂O + $\underline{\quad}$ PbCl₂
- 6) $\underline{\quad}$ AlBr₃ + $\underline{\quad}$ K₂SO₄ \rightarrow $\underline{\quad}$ KBr + $\underline{\quad}$ Al₂(SO₄)₃
- 7) $\underline{\quad}$ CH₄ + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ CO₂ + $\underline{\quad}$ H₂O
- 8) $\underline{\quad}$ C₃H₈ + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ CO₂ + $\underline{\quad}$ H₂O
- 9) $\underline{\quad}$ C₈H₁₈ + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ CO₂ + $\underline{\quad}$ H₂O
- 10) $\underline{\quad}$ FeCl₃ + $\underline{\quad}$ NaOH \rightarrow $\underline{\quad}$ Fe(OH)₃ + $\underline{\quad}$ NaCl
- 11) $\underline{\quad}$ P + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ P₂O₅
- 12) $\underline{\quad}$ Na + $\underline{\quad}$ H₂O \rightarrow $\underline{\quad}$ NaOH + $\underline{\quad}$ H₂
- 13) $\underline{\quad}$ Ag₂O \rightarrow $\underline{\quad}$ Ag + $\underline{\quad}$ O₂
- 14) $\underline{\quad}$ S₈ + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ SO₃
- 15) $\underline{\quad}$ CO₂ + $\underline{\quad}$ H₂O \rightarrow $\underline{\quad}$ C₆H₁₂O₆ + $\underline{\quad}$ O₂
- 16) $\underline{\quad}$ K + $\underline{\quad}$ MgBr \rightarrow $\underline{\quad}$ KBr + $\underline{\quad}$ Mg
- 17) $\underline{\quad}$ HCl + $\underline{\quad}$ CaCO₃ \rightarrow $\underline{\quad}$ CaCl₂ + $\underline{\quad}$ H₂O + $\underline{\quad}$ CO₂
- 18) $\underline{\quad}$ HNO₃ + $\underline{\quad}$ NaHCO₃ \rightarrow $\underline{\quad}$ NaNO₃ + $\underline{\quad}$ H₂O + $\underline{\quad}$ CO₂
- 19) $\underline{\quad}$ H₂O + $\underline{\quad}$ O₂ \rightarrow $\underline{\quad}$ H₂O₂
- 20) $\underline{\quad}$ NaBr + $\underline{\quad}$ CaF₂ \rightarrow $\underline{\quad}$ NaF + $\underline{\quad}$ CaBr₂
- 21) $\underline{\quad}$ H₂SO₄ + $\underline{\quad}$ NaNO₂ \rightarrow $\underline{\quad}$ HNO₂ + $\underline{\quad}$ Na₂SO₄

Balancing Chemical Equations – Answer Key

Balance the equations below:

- 1) $1 \text{ N}_2 + 3 \text{ H}_2 \rightarrow 2 \text{ NH}_3$
- 2) $2 \text{ KClO}_3 \rightarrow 2 \text{ KCl} + 3 \text{ O}_2$
- 3) $2 \text{ NaCl} + 1 \text{ F}_2 \rightarrow 2 \text{ NaF} + 1 \text{ Cl}_2$
- 4) $2 \text{ H}_2 + 1 \text{ O}_2 \rightarrow 2 \text{ H}_2\text{O}$
- 5) $1 \text{ Pb(OH)}_2 + 2 \text{ HCl} \rightarrow 2 \text{ H}_2\text{O} + 1 \text{ PbCl}_2$
- 6) $2 \text{ AlBr}_3 + 3 \text{ K}_2\text{SO}_4 \rightarrow 6 \text{ KBr} + 1 \text{ Al}_2(\text{SO}_4)_3$
- 7) $1 \text{ CH}_4 + 2 \text{ O}_2 \rightarrow 1 \text{ CO}_2 + 2 \text{ H}_2\text{O}$
- 8) $1 \text{ C}_3\text{H}_8 + 5 \text{ O}_2 \rightarrow 3 \text{ CO}_2 + 4 \text{ H}_2\text{O}$
- 9) $2 \text{ C}_8\text{H}_{18} + 25 \text{ O}_2 \rightarrow 16 \text{ CO}_2 + 18 \text{ H}_2\text{O}$
- 10) $1 \text{ FeCl}_3 + 3 \text{ NaOH} \rightarrow 1 \text{ Fe(OH)}_3 + 3 \text{ NaCl}$
- 11) $4 \text{ P} + 5 \text{ O}_2 \rightarrow 2 \text{ P}_2\text{O}_5$
- 12) $2 \text{ Na} + 2 \text{ H}_2\text{O} \rightarrow 2 \text{ NaOH} + 1 \text{ H}_2$
- 13) $2 \text{ Ag}_2\text{O} \rightarrow 4 \text{ Ag} + 1 \text{ O}_2$
- 14) $1 \text{ S}_8 + 12 \text{ O}_2 \rightarrow 8 \text{ SO}_3$
- 15) $6 \text{ CO}_2 + 6 \text{ H}_2\text{O} \rightarrow 1 \text{ C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$
- 16) $1 \text{ K} + 1 \text{ MgBr} \rightarrow 1 \text{ KBr} + 1 \text{ Mg}$
- 17) $2 \text{ HCl} + 1 \text{ CaCO}_3 \rightarrow 1 \text{ CaCl}_2 + 1 \text{ H}_2\text{O} + 1 \text{ CO}_2$
- 18) $1 \text{ HNO}_3 + 1 \text{ NaHCO}_3 \rightarrow 1 \text{ NaNO}_3 + 1 \text{ H}_2\text{O} + 1 \text{ CO}_2$
- 19) $2 \text{ H}_2\text{O} + 1 \text{ O}_2 \rightarrow 2 \text{ H}_2\text{O}_2$
- 20) $2 \text{ NaBr} + 1 \text{ CaF}_2 \rightarrow 2 \text{ NaF} + 1 \text{ CaBr}_2$
- 21) $1 \text{ H}_2\text{SO}_4 + 2 \text{ NaNO}_2 \rightarrow 2 \text{ HNO}_2 + 1 \text{ Na}_2\text{SO}_4$