

| Equations | Reactants | Products | Reactants - Final | Products - Final | Balanced Equation |
|--|---|---|---|----------------------------|--|
| $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$ | 2 hydrogen 2 oxygen | 2 hydrogen 1 oxygen | 4 hydrogen 2 oxygen | same as final reactants | $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$ |
| $\text{H}_2\text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$ | 2 hydrogen 2 oxygen | 2 hydrogen 3 oxygen | 4 hydrogen 4 oxygen | same as final reactants | $2\text{H}_2\text{O}_2 \rightarrow 2\text{H}_2\text{O} + \text{O}_2$ |
| $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$ | 1 sodium 2 oxygen | 2 sodium 1 oxygen | 4 sodium 2 oxygen | same as final reactants | $4\text{Na} + \text{O}_2 \rightarrow 2\text{Na}_2\text{O}$ |
| $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$ | 2 nitrogen 2 hydrogen | 1 nitrogen 3 hydrogen | 2 nitrogen 6 hydrogen | same as final reactants | $\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3$ |
| $\text{P}_4 + \text{O}_2 \rightarrow \text{P}_4\text{O}_{10}$ | 4 phosphorus 2 oxygen | 4 phosphorus 10 oxygen | 4 phosphorus 10 oxygen | same as final reactants | $\text{P}_4 + 5\text{O}_2 \rightarrow \text{P}_4\text{O}_{10}$ |
| $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + \text{H}_2$ | 1 iron 2 hydrogen 1 oxygen | 3 iron 2 hydrogen 4 oxygen | 3 iron 8 hydrogen 4 oxygen | same as final reactants | $3\text{Fe} + 4\text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + 4\text{H}_2$ |
| $\text{C} + \text{H}_2 \rightarrow \text{CH}_4$ | 1 carbon 2 hydrogen | 1 carbon 4 hydrogen | 1 carbon 4 hydrogen | same as final reactants | $\text{C} + 2\text{H}_2 \rightarrow \text{CH}_4$ |
| $\text{Na}_2\text{SO}_4 + \text{CaCl}_2 \rightarrow \text{CaSO}_4 + \text{NaCl}$ | 2 sodium 1 sulfur 4 oxygen 1 calcium 2 chlorine | 1 sodium 1 sulfur 4 oxygen 1 calcium 1 chlorine | 2 sodium 1 sulfur 4 oxygen 1 calcium 2 chlorine | same as final reactants | $\text{Na}_2\text{SO}_4 + \text{CaCl}_2 \rightarrow \text{CaSO}_4 + 2\text{NaCl}$ |
| $\text{C}_2\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ | 2 carbon 6 hydrogen 2 oxygen | 1 carbon 2 hydrogen 3 oxygen | 4 carbon 12 hydrogen 14 oxygen | same as final reactants | $2\text{C}_2\text{H}_6 + 7\text{O}_2 \rightarrow 4\text{CO}_2 + 6\text{H}_2\text{O}$ |
| $\text{Al}_2\text{O}_3 \rightarrow \text{Al} + \text{O}_2$ | 2 aluminum 3 oxygen | 1 aluminum 2 oxygen | 4 aluminum 6 oxygen | same as final reactants | $2\text{Al}_2\text{O}_3 \rightarrow 4\text{Al} + 3\text{O}_2$ |