

CHAPTER 4

Balancing Chemical Equations

BLM 2-18

Goal • Practise writing skeleton equations and balanced equations.

1.

Word equation	iron + sulphur $\rightarrow$ iron(II) sulphide
Skeleton equation	$\text{Fe} + \text{S} \rightarrow \text{FeS}$
Balanced equation	$\text{Fe} + \text{S} \rightarrow \text{FeS}$

2.

Word equation	calcium + oxygen $\rightarrow$ calcium oxide
Skeleton equation	$\text{Ca} + \text{O}_2 \rightarrow \text{CaO}$
Balanced equation	$2\text{Ca} + \text{O}_2 \rightarrow 2\text{CaO}$

3.

Word equation	calcium oxide + carbon dioxide $\rightarrow$ calcium carbonate
Skeleton equation	$\text{CaO} + \text{CO}_2 \rightarrow \text{CaCO}_3$
Balanced equation	$\text{CaO} + \text{CO}_2 \rightarrow \text{CaCO}_3$

4.

Word equation	copper(II) oxide $\rightarrow$ copper + oxygen
Skeleton equation	$\text{CuO} \rightarrow \text{Cu} + \text{O}_2$
Balanced equation	$2\text{CuO} \rightarrow 2\text{Cu} + \text{O}_2$

5.

Word equation	barium chloride + potassium sulphate $\rightarrow$ barium sulphate + potassium chloride
Skeleton equation	$\text{BaCl}_2 + \text{K}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{KCl}$
Balanced equation	$\text{BaCl}_2 + \text{K}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + 2\text{KCl}$

6.

Word equation	potassium + water $\rightarrow$ potassium hydroxide + hydrogen
Skeleton equation	$\text{K} + \text{H}_2\text{O} \rightarrow \text{KOH} + \text{H}_2$
Balanced equation	$2\text{K} + 2\text{H}_2\text{O} \rightarrow 2\text{KOH} + \text{H}_2$