

Word and Symbol Equations

A chemical equation shows the reactants and products in a chemical reaction, and the proportions in which they react. The names of the reactants and products can be written in a word equation. The formulae for the reactants and products can also be written in a symbol equation. Numbers may also appear in front of the formulae in symbol equations. These show the proportions in which the reactants combine to form the products. For example, consider the following word and symbol equations for a neutralisation reaction

Zinc Oxide + Hydrochloric Acid \rightarrow Zinc Chloride + Water



Example: Burning Magnesium

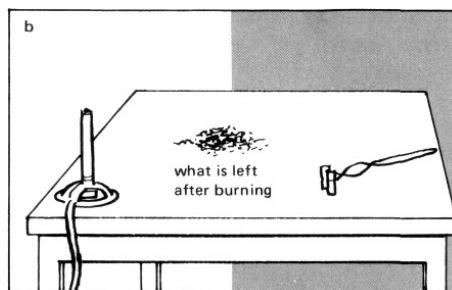
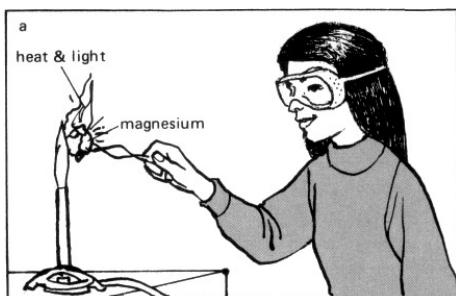
Magnesium + Oxygen \rightarrow Magnesium Oxide



solid

gas

solid in powder form



Questions

1. Name the elements we started with: _____
2. Name the elements we ended with: _____
3. Did the elements stay separate? _____
4. Was a new product formed? _____
5. If yes, what was the new product? _____
6. Were any new elements added? _____
7. Endothermic or exothermic? _____
8. What kinds of energy? _____
9. Were any elements lost? _____
10. Was it a physical or chemical change? _____

Tearing Paper

1. Is tearing paper a physical or chemical change? _____
2. Does the paper look different after being torn? _____
3. Is the paper still paper? _____
4. The chemical properties of the paper _____ changed
5. A chemical equation _____ be written to show a physical change.