

Use the glossary at the back of the book to define:  
Chemical reaction:

Catalyst

Physical change:

Products:

Reactants:

What is thermal decomposition? Pg 92

Give some examples of decomposition reactions and name the products.

What is a fuel? Pg 90

What is combustion? Give the word equation.

What is an oxidation reaction?

What do balanced symbol equations show? Pg95

Write an example of a balanced symbol equation:

Describe the difference between a chemical and physical change. Pg 87

## C1. 3 Reactions

What is meant by conservation of mass? Pg 94

12.5g of zinc carbonate is heated it decomposes to make 8.1g of zinc carbonate. Calculate the mass of carbon dioxide made.

You start with 100g of calcium carbonate, at the end of the reaction there was 56g of calcium oxide. Calculate the mass of carbon dioxide made.

10g of magnesium is burned in the air and it makes 17g magnesium oxide. How much oxygen was reacted?

What is an endothermic change? Give an example. Pg 96

What is an exothermic change? Give an example.

Describe the different signs that show a chemical reaction has taken place. Pg 86

Write word equations for the reactions of:

a) sulphur and oxygen making sulphur dioxide

b) Potassium and chlorine

For each identify the product and reactants.  
Pg88

State what type of reaction this is (Combustion, oxidation, thermal decomposition or exothermic) There may be more than one answer for each.

1. Calcium carbonate  $\rightarrow$  Calcium oxide + carbon dioxide
2. Magnesium + Oxygen  $\rightarrow$  Magnesium oxide
3. Methane + Oxygen  $\rightarrow$  Carbon dioxide + water
4. Sulphuric acid + Sodium hydroxide  $\rightarrow$  Sodium sulphate + Water