

EP3_1C N5 Naming & Word Equations



Write the date in the margin of your jotter.

Write the title of this Exercise as a heading: EP_1 N5 Naming & Word Equations

SUMMARY

2. Compound: is formed when 2 or more elements chemically join. e.g. sodium chloride

3. Naming compounds

End in "IDE" → compound contains 2 elements

e.g. sodium chloride contains sodium + chlorine

End in "ATE" → compound also contain OXYGEN

Or "ITE"

e.g. potassium nitrate contains potassium, nitrogen + oxygen

4. WORD EQUATIONS

These are used to represent a chemical reaction.

Eg. When magnesium metal reacts with oxygen a white powder called magnesium oxide forms.

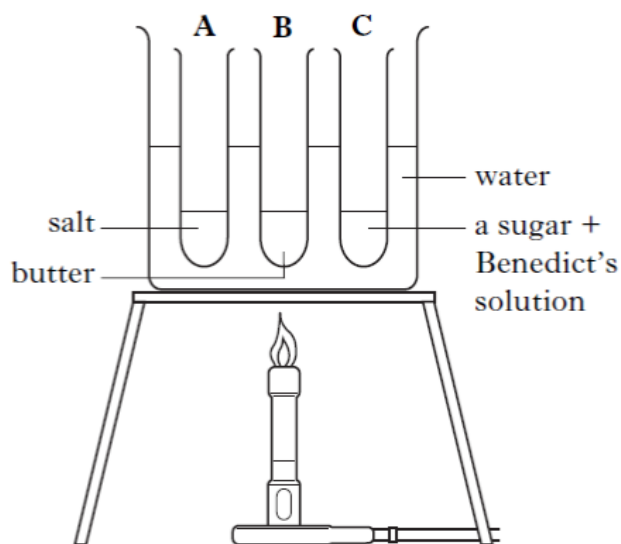
magnesium + oxygen → magnesium oxide

Magnesium and oxygen are the REACTANTS and magnesium oxide is the PRODUCT.

QUESTIONS

1.

The experiment below was carried out to investigate what happens when different substances are heated and then allowed to cool.



The results are shown.

Test tube	Contents	Observation on heating	Observation on cooling
A	salt	no change	no change
B	butter	yellow solid to yellow liquid	yellow liquid to yellow solid
C	a sugar and Benedict's solution	blue liquid to orange solid	orange solid remains

(a) In which test tube, **A**, **B** or **C**, did a chemical reaction take place?

(b) Suggest a name for the sugar in test tube **C**.

2.

A butter melting	B distillation of crude oil
C wood burning	D water evaporating

Identify the chemical reaction.

GEN 2012/5

3.

The grid contains the names of some compounds.

A magnesium chloride	B calcium nitrate	C barium sulphate
D sulphur dioxide	E sodium chloride	F potassium oxide

(a) Identify the **two** compounds which contain three elements.

GEN 2013/4

4.

The grid shows the names of some compounds.

A copper carbonate	B potassium sulphite
C sodium fluoride	D calcium sulphide

(c) Identify the **two** compounds which contain oxygen.

GEN 2007/4

5.

Plants make glucose and oxygen gas during photosynthesis.

(a) (i) State the test for oxygen gas.

1

GEN 2010/11

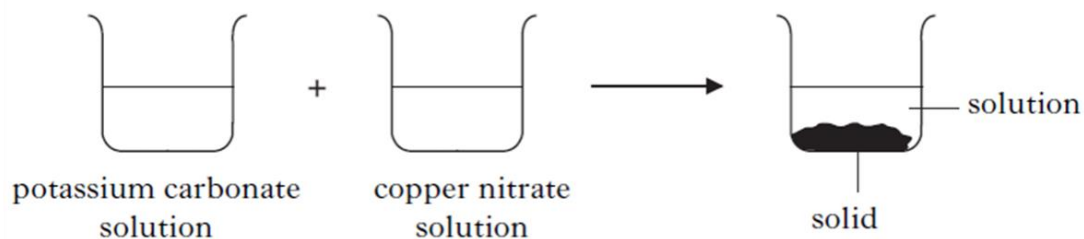
6.

Potassium carbonate is a compound made up of different elements.

(a) Name the elements present in potassium carbonate.

1

(b) When potassium carbonate solution and copper nitrate solution are mixed, a chemical reaction takes place.



(iii) How could the solid be separated from the solution?

GEN 2010/13

7.

The grid shows the names of some compounds.

A zinc chloride	B magnesium sulphite	C sodium chlorate
D lead carbonate	E hydrogen sulphide	F potassium nitrite

(a) Identify the **two** compounds which do not contain oxygen.

GEN 2012/6

8.

- (d) Copper can be extracted from the ionic compound copper oxide as shown.



Name Y.

GEN 2012/18

9.

- (b) Some indigestion tablets contain calcium carbonate.

Calcium chloride, carbon dioxide and water are produced when calcium carbonate reacts with hydrochloric acid in the stomach.

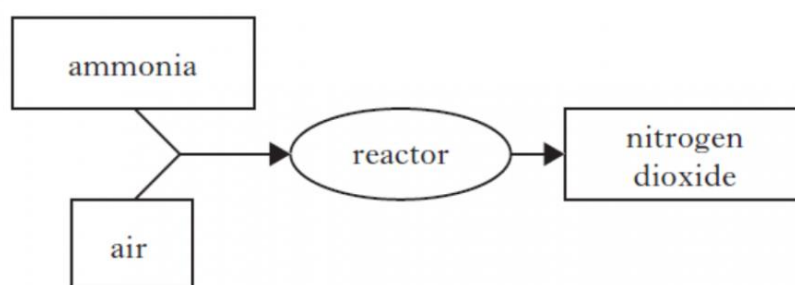
- (i) Write a **word** equation for the reaction.
- (ii) Describe the chemical test, including the result, for carbon dioxide.

GEN 2013/16

10

Ammonia can be used in industry to manufacture nitric acid.

- (c) The flow diagram shows one part of this process.



The reaction is exothermic.

What is meant by the term **exothermic**?

GEN 2013/167