

## Exercise N5 S3\_2A Reactions & Compounds

Write the date in the margin of your homework jotter.

Write the title of this Exercise as a heading: Exercise N5 S3\_2A Reactions & Compounds

1.

Which of the following compounds does not contain oxygen

- A Magnesium oxide
- B Magnesium sulphate
- C Magnesium sulphide
- D Magnesium sulphite

2.

Which element is missing from the word equation?



- A Carbon
- B Copper
- C Hydrogen
- D Oxygen

3.

Which of the following is an example of a chemical reaction?

- A Petrol burning
- B Nail varnish drying
- C An ice cube melting
- D Sugar dissolving in tea

5.

Which of the following changes is **not** an example of a chemical reaction?

- A Ice melting
- B Iron rusting
- C Methane burning
- D Neutralising an acid

6.

A compound burns in air. The only products of the reaction are carbon dioxide, sulphur dioxide and water vapour.

The compound **must** contain

- A carbon and hydrogen only
- B carbon and sulphur only
- C carbon, hydrogen and sulphur
- D carbon, hydrogen, sulphur and oxygen.

7.

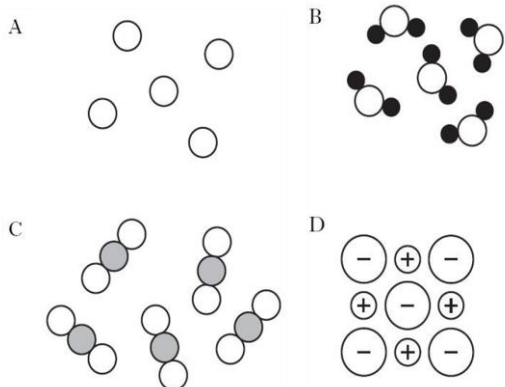
Which of the following compounds contains oxygen?

- A calcium chloride
- B lithium sulfide
- C potassium nitrate
- D sodium chloride

4.

The structure of substances can be represented by models.

Which of the following models shows an element?



8.

In a chemical reaction a gas was produced. The gas could be identified as hydrogen if it

- A burns with a pop
- B relights a glowing splint
- C turns damp pH paper red
- D turns limewater cloudy.

9.

A a gas given off	B a colour change	C a match burning
D a temperature rise	E a new substance forms	F an energy change occurs

Which box (or boxes) in the grid shows:

- (a) something that always happens in a chemical reaction (2 boxes)
- (b) an example of an everyday chemical reaction (1 box)

10. In a table, divide the list of substances below into 2 groups under the headings: elements and compounds.

hydrogen	lead	nitrogen dioxide	sodium chloride
carbon dioxide	water	iron	magnesium

Use the table to answer the following.

11.	<b>A</b> sodium chloride	<b>B</b> copper oxide	<b>C</b> carbon
	<b>D</b> helium and hydrogen	<b>E</b> chlorine	<b>F</b> barium nitrate

- (a) Which two boxes show
- (i) elements only?
  - (ii) a 2 element compound?
- (b) Which one box shows:
- (i) a 3 element compound?
  - (ii) a mixture?

12. When the following elements react, name the compound they form:

- (a) iron & sulfur
- (b) magnesium & chlorine
- (c) zinc, sulphur & oxygen
- (d) lead, carbon & oxygen

13. Which elements are found in:

- (a) aluminium sulfide
- (b) magnesium nitrate
- (c) hydrogen chloride
- (d) lithium sulfate
- (e) calcium hydroxide
- (f) silicon oxide



A marking guide for this Homework is available (password required).