



Task 1

Join lines from the key terms to their definitions and then on to observation you would make during a chemical reaction.

Element	made up of two or more elements strongly joined together	change colour when heated
Mixture	contain only one type of atom	separated easily
Compound	made up of two or more elements not joined together	has a fixed melting point

Task 2

Chemistry uses its own language, especially with prefixes and suffixes.

Prefixes can be added to compound names to provide information about the composition of the compound. Fill in the meanings of the prefixes in the table below.

Prefix	Meaning
Mono-	
Di-	
Tri-	

The other way chemistry uses its own language is with symbols.

Match the compounds to their symbols.

hydroxide	CO ₃
nitrate	SO ₄
sulfate	NO ₃
carbonate	OH



Task 3

1 Write down the names of the chemicals represented by the following symbols.

H

O

N

C

Fe

Zn

Cu

S

Al

I

Br

Cl

Na

K

Mg

2 Using Question 1 to help you, complete the proportions of each element in these common compounds.

Compound name	Chemical formula	Relative number of atoms of each element
water	H ₂ O	2 hydrogens, 1 oxygen
sulfur dioxide		
sodium hydroxide		
calcium carbonate		



Fill in the gaps to complete the sentences using the following key words:
elements, compounds, atom, molecules.

Draw particle diagrams below to show each substance.

Solid gold	Oxygen molecules	Carbon dioxide	A mixture

[illegible]



Label the Periodic Table with the labels below:

- groups
- periods
- metals
- non-metals
- Group 0
- Group 1
- Group 7

Match the group numbers to the descriptions of the elements in the group.

Group 0	Non-metals called halogens.
Group 1	Unreactive gases called noble gases.
Group 7	Reactive metals called alkali metals.

Task 6

1 Fill in the gaps to describe the reactions of the Group 1 elements and Group 7 elements.

Group 1 elements react with to make gas and an solution.

Group 7 elements from the top of the group elements from lower in the group from their compounds.

2 Complete the sentences below by circling the correct term.

As you go down Group 1 the metals get **more/less** reactive and their melting point **increases/decreases**.

As you go down Group 7 the halogens get **more/less** reactive and their melting point **increases/decreases**.

3 Use your answers to Questions 1 and 2 to describe how caesium (Cs) will react with water.

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