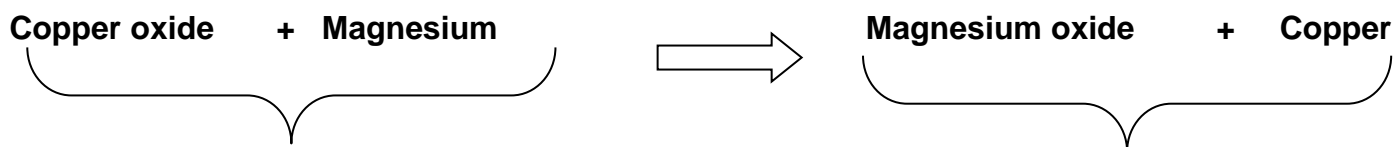


If copper oxide is heated with magnesium it will react to form magnesium oxide and copper. We can write this as a simple word equation:



Reactants

(substances we started the reaction with), always go on the **left**.

Products

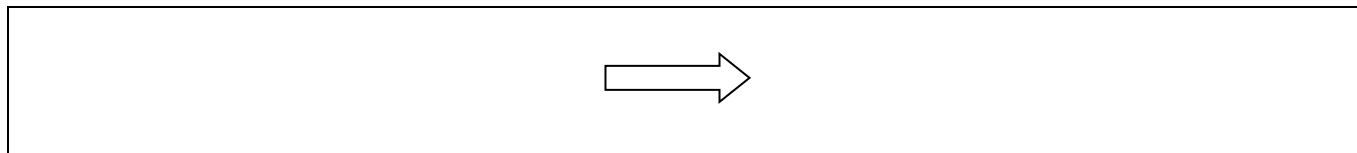
(substances formed during a reaction), always go to the **right** of the arrow.

For each of the chemical reactions below:

1. Highlight or circle the reactants in one colour and the products in another colour,
2. Write the word equation and balanced chemical equation for each reaction.

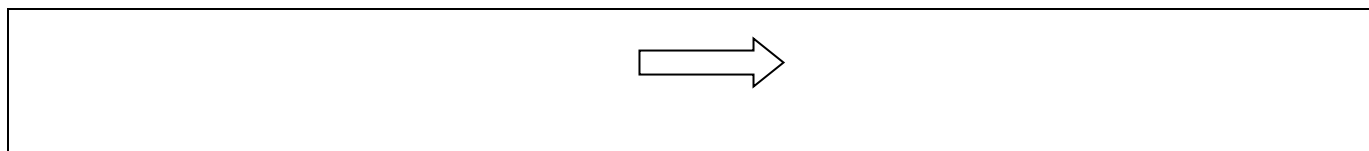
Reaction 1

Kiara dropped a lump of magnesium into a test tube of hydrochloric acid, the chemical magnesium chloride was formed. She also noticed a gas being formed. When a lit splint was placed in the gas it made a squeaky 'pop' sound.



Reaction 2

Lucy reacted a lump of calcium carbonate with some sulphuric acid. Two of the products formed were water and calcium sulphate. The other product formed was a gas that turned lime water milky.



Reaction 3

Milos put a brand new iron nail outside and studied it for several weeks. He noticed that gradually the surface of the nail became coated with rust. His teacher has told him that the chemical name for rust is "iron oxide".



Use the table of results below to help you work out the answers to the questions.

	Silver nitrate	Copper sulfate	Magnesium sulfate	Iron sulfate	Zinc sulfate
silver	x	no reaction	no reaction	no reaction	no reaction
copper	reaction	x	no reaction	no reaction	no reaction
magnesium	reaction	reaction	x	reaction	reaction
iron	reaction	reaction	no reaction	x	no reaction
zinc	reaction	reaction	no reaction	reaction	x

- Aluminium is more reactive than zinc and less reactive than magnesium. Would it react with:
 - copper sulfate?
 - magnesium sulfate?
- Tin is more reactive than copper and less reactive than iron. Would it react with:
 - silver nitrate?
 - zinc sulfate?
- Lead is more reactive than copper and less reactive than tin. Would it react with:
 - copper sulfate?
 - iron sulfate?
- Sodium is a very reactive metal. Would a reaction take place between magnesium and sodium chloride?
.....
- Write the word equation for the reaction between zinc and copper sulfate.
.....