

<u>3rd Term – Revision Exercises</u>

Study by filling in the blanks.

There are two types of changes that take place in matter: physical changes and chemical changes.

- **Physical changes** The composition of a substance does not change, only the structure of the existing particles/existing nature changes.
 - Eg 1. Separating a paper into small pieces.

2.-----

• Chemical changes - Changing the composition of a substance to form a new substance.

Eg - 1. When a sheet of paper is burned, a new substance, ash and smoke, is formed.

2. ------

- There is evidence to confirm that a chemical reaction took place. They are -
 - 1. Heating
 - 2. Effervescence
 - 3. -----
 - 4. ---- 5. -----

The substances taking part in a chemical change are called the **reactants**. The new substances produced by a chemical changes are known as the **products**.

Reactants Products

• Complete the table given by considering the following tests.

Test number 1 - When a piece of Magnesium tape is hold in a pair of tongs and burned, it glows with bright flame. Finally a white powder remained.

$$2Mg + O_2 \longrightarrow 2MgO$$

Test number 2 - A small amount of purple Potassium permanganate cubes is heated in a boiling tube, and when a glowing splint inserts to the tube, it glows brightly.

2KMnO₄
$$\rightarrow$$
 K₂MnO₄ + MnO₂ + O₂

Test number 3 - When a piece of Zinc is added to a blue Copper sulphate solution, the previous blue color gradually decreases to brown.

 $CuSO_4 + Zn \longrightarrow ZnSO_4 + Cu$

Test number 4 - When a little Barium chloride solution is taken into a test tube and a little Sodium sulphate solution is added into it, a white precipitate is obtained.

$BaCl_2 + Na_2SO_4$	\rightarrow	$BaSO_4 + 2NaCl$
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Test	Nature of the reactants	Nature of the products
Number 1	Silvery white metal.	A white powder.
Number 2		
Number 3		
Number 4		

- Select the appropriate test number above and fill in the blanks.
- > Test number.....is a chemical decomposition reaction.
- > Test number..... is an example of a chemical combination reaction.
- > The single displacement reaction is test number.....
- > An example of a double displacement reaction is test number