



STEPPING STONE
SCHOOL (HIGH)

CLASS: VIII

Subject: CHEMISTRY

Date: 12/05/2020

Topic: PHYSICAL AND CHEMICAL CHANGES

Time Limit: 45 MINUTES

Worksheet No.:4

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

Good day children, today I am going to teach you the second chapter of your book; **Physical and Chemical Changes**.

Change is a universal phenomenon almost all substances undergo change. Change is a law of nature and a change always has some cause.

Classification of changes:-

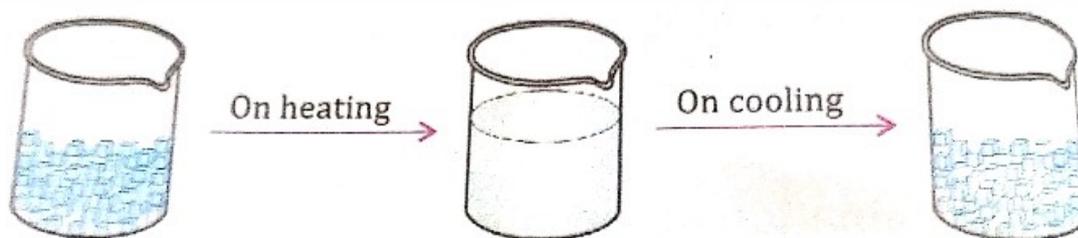
- Slow and fast changes.
- Reversible and irreversible changes.
- Natural and man-made changes.
- Periodic and Non-Periodic changes.
- Desirable and Undesirable changes.
- Physical and Chemical changes.

1. SLOW & FAST CHANGES :-

<u>SLOW CHANGE</u>	<u>FAST CHANGE</u>
<p>The change that occurs over a long period of time is known as slow change.</p> <p>E.g -</p> <p>a) Germination of seeds. b) Curdling of milk.</p>	<p>The change that occurs over a short period of time is known as fast change.</p> <p>E.g -</p> <p>a) Burning of matchsticks. b) Melting of ice.</p>

2. REVERSIBLE & IRREVERSIBLE CHANGES :-

<u>REVERSIBLE CHANGE</u>	<u>IRREVERSIBLE CHANGE</u>
<p>The changes which can be reversed by reversing its conditions are called reversible changes.</p> <p>E.g -</p> <p>a) Water freezing to ice on cooling and ice melting to water at room temp.</p>	<p>The changes which can't be reversed are called irreversible changes.</p> <p>E.g -</p> <p>a) Burning of paper.</p>



REVERSIBLE CHANGE

3. NATURAL & MAN-MADE CHANGES :-

<u>NATURAL CHANGES</u>	<u>MAN-MADE CHANGES</u>
<p>Some changes that take place in nature by themselves which are called Natural Changes.</p> <p>E.g -</p> <ol style="list-style-type: none">Change of day & night.Earthquake.	<p>Changes that occurs due to the efforts of human beings are called Man-Made Changes.</p> <p>E.g -</p> <ol style="list-style-type: none">Cooking of food.Formation of steel from iron.

4. PERIODIC & NON-PERIODIC CHANGES :-

<u>PERIODIC CHANGES</u>	<u>NON-PERIODIC CHANGES</u>
<p>Changes which are repeated after a fixed interval of time are known as periodic changes.</p> <p>E.g-</p> <ol style="list-style-type: none">Heartbeats.Swinging of pendulum	<p>Changes that are not repeated at regular intervals are known as non-periodic changes.</p> <p>E.g -</p> <ol style="list-style-type: none">Earthquake.An accident.

5. DESIRABLE & UNDESIRABLE CHANGES:-

<u>DESIRABLE CHANGES</u>	<u>UNDESIRABLE CHANGES</u>
<p>The changes that benefit us in some way or the other, are called desirable changes.</p> <p>E.g. -</p> <ol style="list-style-type: none">Ripening of fruits.Drying of cloths in the Sun.	<p>The changes which bring some form of harm or destruction are called undesirable changes.</p> <p>E.g. -</p> <ol style="list-style-type: none">Spoiling of food stuffs.Rusting of iron.

PASTEURISATION :-

A method by which we can stop spoilage of food. By this method milk is heated at least at 63°C for 30 minutes, which kills most of the bacteria present in milk and allows it to stay fresh for several days.

After going through the above discussion answer the following questions: --

1. Classify the following changes under the categories slow and fast change, reversible & irreversible change, periodic & non-periodic change and desirable & undesirable change.

- a) Rusting of iron.
- b) Bursting of balloon.
- c) Ploughing a field.
- d) Motion of swing.
- e) Evaporation of alcohol.

2. Define Pasteurisation.

3. Give Reason:-

- a) Is falling of leaves from a tree an irreversible change?
- b) Cyclonic weather is a periodic or non-periodic change.
Explain with justification.
