

TENDER HEART HIGH SCHOOL SEC-33B, CHD

13.5.24

CLASS - VII
CHAPTER - 2

SUBJECT - CHEMISTRY
TEACHER - MOHINISHA THAKUR

Good morning to all the students!

Students this lesson is for class - VII for the subject of chemistry. Topic - 'Terms involved in some physical changes' which is covered in chapter - 2 'Physical and chemical changes' starting on page no - 19 of your text-book titled - 'Concise chemistry' by 'Selina Publication' and is being submitted to you on 13, May, 2024

All students may now please open page no-19 of your notebook in front of you.

If all students are ready then let us start with this chapter. All students may now please listen carefully.

A lot of processes occur around us all the time. Let's understand some of these in detail and classify them as physical changes on the basis of our understanding.

1 Dissolving :-

The process in which a solid such as salt or sugar when added to a liquid like water (POTD).

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disappears into water to form a homogeneous mixture is called dissolving.

2 Melting :-

The process in which a solid on heating changes into liquid is called melting or fusion. During melting, the temperature remains constant.

Melting point :-

A temperature at which solid (ice) starts melt is known as melting point. Example :- Melting point of ice is 0°C .

3 Freezing :-

The process in which a liquid on cooling changes into solid is called freezing or solidification. During freezing, the temperature remains constant.

Freezing point :-

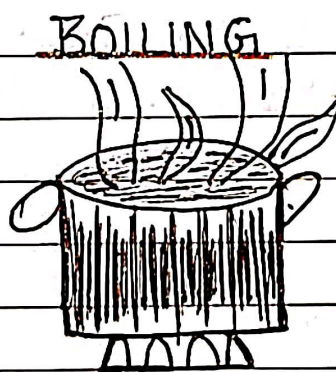
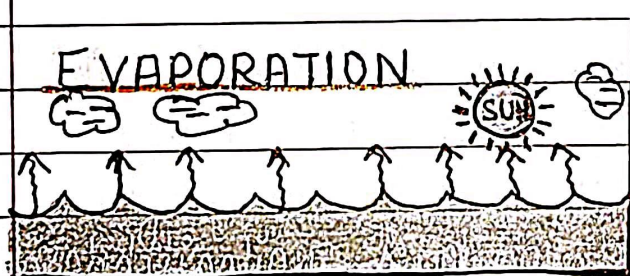
A temperature at which a liquid starts changing into its solid state at a given pressure is called its freezing point.

4. Boiling and Evaporation :-

The process in which a liquid on heating changes into vapour is called boiling. During boiling, the temperature remains constant.

The process in which a liquid changes into vapour by absorbing heat energy from its surroundings is called evaporation. This change takes place below the boiling point of a liquid.

Boiling and evaporation both are physical changes in which a liquid changes from liquid state to vapour state, but still both the processes are different.



1. Evaporation is a slow process.
2. It takes place at all temperatures below the boiling point.
3. Evaporation takes place from the surface of liquid.

Boiling is a fast process.

Boiling takes place at a fixed temperature on heating at the boiling point.

Boiling takes place from all parts of the liquid.

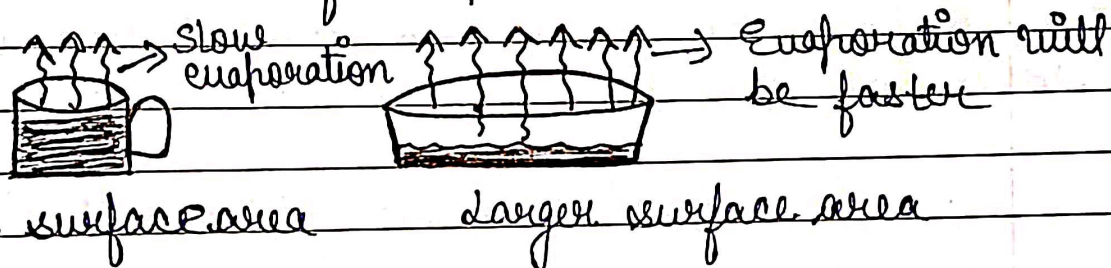
(P.O.T.O.)

Next, we will discuss 'Conditions Affecting Evaporation'

Conditions Affecting Evaporation

1. Surface area:-

Higher is the surface area of liquid, higher will be the rate of evaporation.



2. Temperature:-

With increase in temperature rate of evaporation increases. In summers the ponds and lakes dry due to evaporation of water.

3. Humidity:-

Humidity means the water vapour present in air. In summers, when air is dry the rate of evaporation is also high. The clothes dry easily. During rainy season air becomes humid and already contains lot of water vapour so the rate of evaporation becomes slow. The clothes do not dry easily and take time in rainy season and winters. (Bo'Too)

4. Nature of liquids :-

Some liquids like petrol and nail polish remover evaporate easily. You can feel the cooling effect due to evaporation if you take a drop of remover on your palm immediately. Water evaporates slowly.

Students, now I will ask you three very short Questions. You will get a three minutes break to write the answers.

Q1 :- What is the melting point of ice?

Q2 :- Evaporation is a _____ process.

Q3 :- With increase in temperature rate of evaporation increases or decreases?

I hope you all have written the answers by now. Let us check the answers now.

Ans1 :- 0°Celsius .

Ans2 :- Slow.

Ans3 :- Increases.

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Students, now I am ending the lesson for today by giving 'Instructions'.

Instructions :-

You all are required to read the lesson again and revise or learn all the topics which we have done today.

X (End) X