

Tender Heart High School, Chandigarh. Date 14.10.24

Class-V

Subject: Science

Date:

Teacher: Nimrita

L-7 Solids, Liquids and Gases.

Good Morning students!

This lesson is of Class-V, for the subject of Science, Chapter-7, Solids, Liquids and Gases of your textbook, New Trends in Science, Evergreen Publications. It is being submitted to you on 14 October 2024.

In the last lecture, we studied about change of state. Today, we will study about solubility and solution.

- Water is known as Universal solvent because it can dissolve all kinds of solids, liquids or gases.

Soluble Substances:- The substances which dissolve rapidly in water are called as soluble substances. eg: Salt.

Insoluble Substances:- The substances which dissolve very little or do not seem to dissolve in water are called as insoluble substances.

Common terms used in the formation of a solution.

- 1) Solvent:- A liquid which dissolves other substances in it is called as solvent.
- 2) Solute:- A substance which dissolves in a liquid is called a solute.
- 3) Unsaturated Solution:- A solution which has less amount of solute and can dissolve more of it.

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L-7 Solid, Liquid and Gases.

4.) Saturated Solution: A solution which has large amount of solute and cannot dissolve more of it

Conditions which enhance the formation of a solution:-

- 1.) Solute and solvent must be capable of mixing.
- 2.) High temperature enhances the formation of a solution.
- 3.) Stirring helps in quick formation of the solution.
- 4.) Solute should be in the form of a fine powder, as it helps in the formation of a solution quickly.

Impurities and its removal:-

Soluble impurities:- The impurities that dissolve in water

Insoluble impurities:- The impurities that do not dissolve in water.

Some methods of removing insoluble impurities:-

① Filtration:- The separation of insoluble impurities with the help of filter paper is known as filtration.

Filtrate:- The clear liquid which passes through the filter paper is known as filtrate.

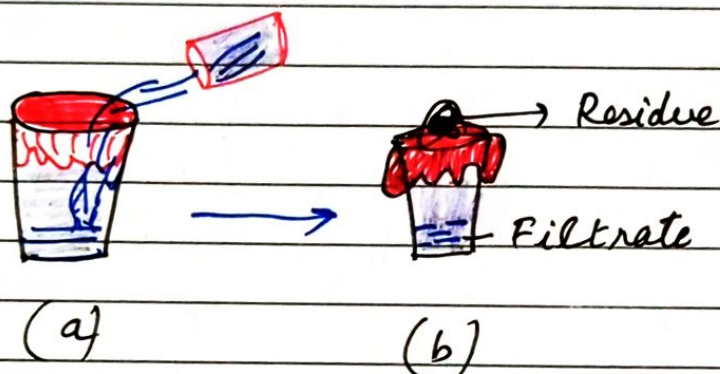
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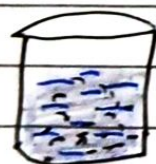
Residue: The solid impurities left on the filter paper is known as residue.



2.) Sedimentation and Decantation:-

Sedimentation:- The process of settling down of heavy impurities at the bottom of the container is known as sedimentation.

Decantation:- The removal of the clear liquid from the top of the container is known as Decantation.



(i)
Impure
water



(ii) Impurities
settle at the
bottom of beaker



(iii) Clear
water
in separate
containers
(Decantation)

I am ending today's topic.

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