

WELCOME TO THE ONLINE CLASS

SESSION NO.: 4

CLASS: 4

SUBJECT: SCIENCE

CHAPTER NUMBER: 5

CHAPTER NAME: SOLIDS, LIQUIDS AND GASES

SUB TOPIC: DISSOLVING SOLIDS IN WATER

CHANGING YOUR TOMORROW

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Learner will able to:

- Understand the term 'solute', 'solvent' and 'solution'
- conduct simple experiments.





- The particles of solid are closely packed and occupy less space while particles of gases are loosely packed and occupy the complete space available.
- Solid, liquid and gas are interchangeable states.
- We have three forms of water in solid, liquid and gaseous.
- Water on heating can be converted into water vapour.
- Burning of candle can get melted into wax.



Dissolving Solids Into Liquids

What happens when sugar dissolves in water?

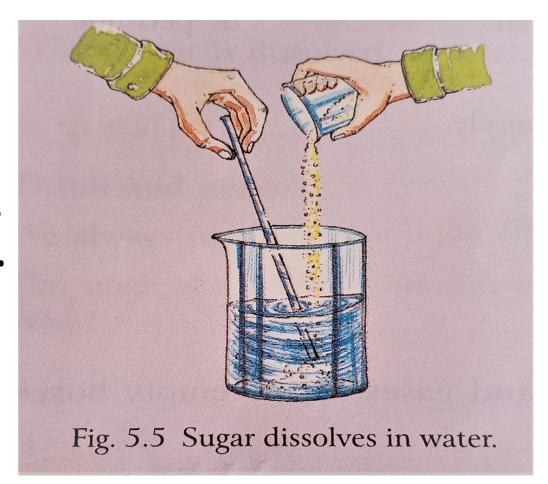
- When we put sugar in water, its molecules scatter throughout the water.
- They occupy the empty spaces in between the molecules of water, this is why sugar seems to disappear when it is dissolved in water.
- The sugar solution does not look different from pure water, However, it tastes sweet.



Now let us compare the volume of the water and the solution through the following activity.



- 1. Take a beaker half-filled with water.
- 2. Put some sugar into it and stir well.
- 3.Can you see the sugar now? No.
- 4. Taste the water. Is it sweet? Yes.
- 5. This is because the sugar has dissolved in the water.
- 6. The liquid is now a sugar solution.



SOLUTION OF WATER AND SUGAR

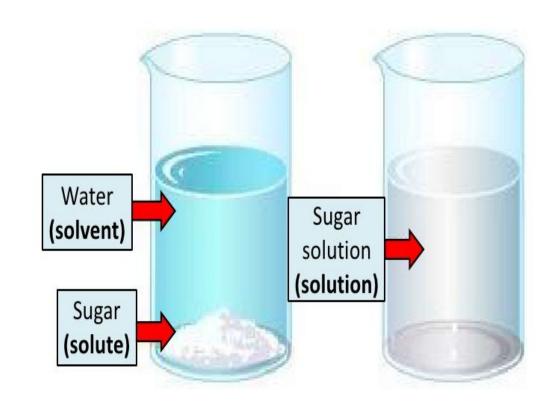


In the mixture:

Sugar + Water = Sweet Water [solute] [solvent] [solution]

solute: a solid that dissolves in liquid solvent: a liquid in which a solid dissolves

solution: the solute and the solvent together gives solution.



SUMMARY



- When we put sugar in water, its molecules scatter throughout the water.
- Sugar solution will look same as pure water because its molecules occupies the empty spaces in between the molecules of water.
- A solid substance that dissolves in a liquid is called a solute.
- The liquid in which a solid dissolves is called a solvent.
- The solute and the solvent together form a solution.

HOMEWORK



- Do the oral Q & A of page no. 44.
- Do the short Q & A in the notebook.





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THANKING YOU ODM EDUCATIONAL GROUP