

#### **WELCOME TO THE ONLINE CLASS**

SESSION NO.: 5 CLASS: 4 SUBJECT: SCIENCE CHAPTER NUMBER: 5 CHAPTER NAME: SOLIDS, LIQUIDS AND GASES SUB TOPIC: SHORT AND LONG Q & A

CHANGING YOUR TOMORROW

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#### **LEARNING OBJECTIVE**



Learner will able to:

• Write short and long Q&A

# RECAPITULATION



- 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.
- When we put sugar in water, its molecules scatter throughout the water.
- Molecules of sugar occupy the empty spaces in between the molecules of water, this is why sugar seems to disappear when it is dissolved in water.

# **Short Answers**



A.Tick the correct answer.

- 1. This is a state of matter
- a) Solid 🔽 b) sugar c) salt d) wax
- 2. Which of the following is not a solid?
- a) Sugar b) button c) ink 🔽 d) rice
- 3. Which of the following is soluble in water?
- a) Stone b) salt 🔽 c) sand d) rice
- 4. Which of the following has a fixed volume?
- a) Stone 🔽 b) smoke c) air d) perfume

#### **B. Write T for True or F for False.**



- 1. The molecules of solids are held together very loosely. (F)
- 2. Liquids do not have a fixed volume. (F)
- 3. Water changes into water vapour when it is frozen. (F)
- 4. In water sugar solution, water is the solute. (F)
- 5. Sugar is soluble in water. (T)



C. How solids liquids gases are different from each other? Fill in the table.

SOLIDS	LIQUIDS	GASES
<ol> <li>Solid has fixed shape and volume.</li> <li>Molecules in solids are tightly packed.</li> </ol>	<ul> <li>1.Liquid does not have</li> <li>fixed shape but have</li> <li>fixed volume.</li> <li>2.Molecules in liquids</li> <li>are loosely packed.</li> </ul>	<ol> <li>A gas does not have fixed shape and volume.</li> <li>Molecules in gases are very loosely packed.</li> </ol>

#### **SHORT ANSWERS**

Q4. Name a liquid that you drink often.



Ans: Water is a liquid which we drink oftenly.

Q5. Name a gas that you use for breathing.

- Ans: Oxygen is a gas which we use to breath. LONG ANSWERS
- Q1. How will you show that a gas does not have a fixed volume?
- Ans:When air is filled into balloon it takes up all the spaces inside it.
- As we can also pump more and more air into a football.
- It means more air can be filled and it does not have any fixed volume as molecules are loosely packed and can flow easily.

# **Q2.** What is the difference between the following two solutions?



#### a) Sugar in water

b) sand in water

Ans:	

SUGAR IN WATER	SAND IN WATER
1.When we put sugar in water, its molecules scatter throughout the water and occupy empty spaces.	1.When we put sand in water, its molecules does not scatter in water and is insoluble.
2.Sugar will disappear in water.	2.Sand will not disappear in water, it will settle down in the container.



Q3.When sugar is dissolved in water the volume of the solution does not change. Why?

Ans: The volume of the solution does not change when sugar is dissolved in water because the level of water remains same as the sugar particles gets into the spaces between water molecules.

### **HOMEWORK**



• We always need to store liquids in containers. Why?

### **LEARNING OUTCOME**



The learner will be able to:

• Write short and long Q&A



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