

Class 3.

Science

Chap 8: Some Properties of Water.

Q1. What are the properties of water?

A1. Water is a colourless, tasteless and odourless liquid. It has a fixed volume but no fixed shape. It is present on earth in all three states - solid, liquid and gas.

Q2. Why is water known as the universal solvent?

A2. Water is known as the universal solvent as it dissolves many different solutes in it.

Q3. What are solute, solvent and solution?

A3. The substance that dissolves is called the solute. The substance in which the solute dissolves is called the solvent. A solute and solvent together form a solution.

Q4. What are soluble and insoluble substances? Give 2 examples of each.

A4. The substances that dissolve in water are called soluble substances. eg. salt, sugar. The substances that do not dissolve in water are called insoluble substances. eg. sand, Chalk powder.

Q5. Why do objects sink in
or float on water. Give
2 examples of each.

A5. Objects that are heavier
than water sink in it.
eg. stone, coin.

Objects that are lighter
than water float on it.
eg. wood, oil.

Activity

Aim: To study floating and sinking in water

Material: A small tub that contains water, a plastic cap, a small piece of sponge, a key, a small piece of cork, a glass marble, and a coin

Procedure:

1. Drop the plastic cap in the tub of water.
2. See if it sinks or floats.
3. Now drop the other objects one-by-one. Every time, observe carefully whether the object sinks or floats.

Observation: The plastic cap, the cork, and the piece of sponge float on water, while the key, marble, and the coin sink in water.

Conclusion: The plastic cap, the cork, and the piece of sponge are lighter objects and so they float on water. The key, marble, and coin are heavier objects and so they sink in water.



Questions

Choose the correct option to fill in the blank.

1. The state of water in glaciers is ... solid (solid/liquid).
2. Water has no smell, so we can call it ... odourless (colourless/odourless)
3. Oil ... floats on (float on/sinks in) water.
4. An example of an object that sinks in water is ... stone (sponge/stone).



Wrap Up

- Water is a colourless, tasteless, and odourless liquid.
- Water is present on Earth in all three states - solid, liquid, and gas.
- Water has a fixed volume, but no fixed shape.
- A solution is formed when two or more substances mix together uniformly.
- The substance that gets dissolved in another substance is called the solute.
- The substance in which the solute gets dissolved is called the solvent.
- The substances that dissolve in water are called soluble substances.
- The substances that do not dissolve in water are called insoluble substances.



Exercises

SECTION I

A. Give two examples of the following.

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|-----------------------------------|-----------------------|------------------------|
| 1. Forms of water |solid..... |gas..... |
| 2. Solution |sweet water..... |salty water..... |
| 3. Substances insoluble in water |sand..... |chalk powder..... |
| 4. Substances that float on water |Wood..... |oil..... |
| 5. Substances that sink in water |stone..... |spoon..... |

B. Write T for True and F for False. Correct the false statements.

- | | |
|---|--------|
| 1. Water exists in only three forms. | True. |
| 2. When a solute is powdered, it dissolves faster in the solvent. | True.. |
| 3. When sugar is dissolved in water, it forms a solution | True.. |
| 4. Water is the universal solvent. | True |
| 5. Salt is not a solute. | False |

C. Choose the correct option.

1. Water is a liquid.

a. colourless	b. odourless	c. tasteless	<input checked="" type="checkbox"/> d. all of these
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2. We get water vapour from

<input checked="" type="checkbox"/> a. water	b. sand	c. chalk	d. nail
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3. Which of these is soluble in water?

<input checked="" type="checkbox"/> a. Sugar	b. Sand	c. Soil	d. None of these
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4. Which of these objects floats on water?

<input checked="" type="checkbox"/> a. Oil	b. Sand	c. Coin	d. Stone
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D. Choose the correct option to fill in the blank.

1. Water is odourless (has odour/is odourless).
2. In nature, water is present in gaseous state as water vapour (ice/water vapour).
3. Salt is an example of solute (solute/solvent) in water.
4. Sweet water is an example of a solution (solute/solution).
5. (Ink/Water) Water is called the universal solvent.