



INDIAN SCHOOL AL WADI AL KABIR



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| CLASS: VI               | DEPARTMENT: SCIENCE<br>2026-2027            | DATE: 01/09/2026        |
| TEXTBOOK Q & A          | TOPIC: A JOURNEY THROUGH<br>STATES OF WATER | NOTE: A4 FILE<br>FORMAT |
| NAME OF THE<br>STUDENT: | CLASS & SECTION:                            | ROLL NO.                |

1. Which of the following best describes condensation?

- (i) The conversion of water into its vapour state.
- (ii) The process of water changing from a liquid into a gaseous state.
- (iii) The formation of clouds from tiny water droplets.

**(iv) The conversion of water vapour into its liquid state.**

2. Identify in which of the given processes evaporation is very important-

(i) Colouring with

- (a) crayons
- (b) water colours
- (c) acrylic colours
- (d) pencil colours

(ii) Writing on paper with

- (a) pencil
- (b) ink pen
- (c) ball point pen

**[Hint: (i) (b) water colours (Evaporation is important because the water evaporates, leaving the colour (pigment) behind on the paper.)**

**(ii) (b) ink pen (Evaporation helps the ink dry on the paper after writing, preventing it from smudging.)]**

3. We see green coloured plastic grass at many places these days. Space around natural grass feels cooler than space around the plastic grass. Can you find out why?

**[Hint: The space around natural grass feels cooler because the grass releases water vapour into the air through transpiration. This water vapour and the water from the soil and grass evaporate. During evaporation, heat is absorbed from the surroundings, which cools the nearby air, while plastic grass lacks this process.]**

4. Give examples of liquids other than water which evaporate.

**[Hint: Some liquids that evaporate are oils, alcohol, petrol, perfume, acetone, and sanitiser.]**

5. Fans move air around, creating a cooling sensation. It might seem strange to use a fan to dry wet clothes since fans usually make things cooler, not warmer. Normally, when water evaporates, it requires heat, not cold air. What do you think about this?

**[Hint: The rate of evaporation increases when air is moving. When we turn on the fan, the air moving across the wet clothes carries away the water vapour from them, creating a drier environment around the cloth. This airflow helps to reduce the humidity and hence speeds up the rate of evaporation. This helps in drying the cloth under the fan.]**

6. Usually, when sludge is removed from drains, it is left in heaps next to the drain for 3-4 days. Afterwards, it is transported to a garden or a field where it can be used as manure. This approach reduces the transportation cost of the sludge and enhances the safety of individuals handling it. Reflect upon it and explain how

**[Hint: When dirty water is cleaned in a sewage treatment plant, the solid waste that settles at the bottom forms sludge. Sludge is a thick, wet mixture of water and waste that settles at the bottom.]**  
**When sludge is left in heaps for 3–4 days, some of the water present in it evaporates. As a result, the sludge becomes drier, lighter, and smaller in volume. This reduces the transportation cost of the sludge and enhances the safety of individuals handling it.]**

7. Observe the activities in your house for a day. Identify the activities that involve evaporation. How does understanding the process of evaporation help us in our daily activities?

**[Hint: Activities that involve evaporation include drying clothes, mopping the floor, cooking, drying wet utensils after washing and sweating. Knowing that water evaporates faster in sunlight and with increased air movement or that the rate of evaporation increases with lower humidity helps to ease our daily activities.]**

8. How is water present in the solid state in nature?

**[Hint: Water is present in the solid state in nature as ice caps, glaciers, snow, hail and frost.]**

9. Reflect on the statement “Water is our responsibility before it is our right.” Share your thoughts.

**[Hint: Water is a precious and limited natural resource that is essential for all living beings. It is important to use water wisely and avoid wasting and polluting it. It is our duty to preserve water resources to ensure that they are available for the future.]**

10. The seat of a two-wheeler parked on a sunny day has become very hot. How can you cool it down?

**[Hint: To cool down the hot seat of a two-wheeler parked on a sunny day, we can:**  
**i. Cover it with a wet cloth: As the water evaporates, it absorbs heat from the seat, making it cooler.**

- ii. Sprinkle a little water on the seat: The evaporating water will help to lower the temperature of the seat.
- iii. Use a sunshade or a seat cover: If available, use a sunshade or a seat cover; this protects the seat from direct sunlight and prevents it from becoming too hot.
- iv. Park in the shade: If possible, move the two-wheeler to a shaded area to reduce the seat's exposure to direct sunlight.]

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