INDIAN SCHOOL AL WADI AL KABIR		
CLASS: VI	**DEPARTMENT: SCIENCE** **2024-25**	**DATE: 11-12-2024**
TEXTBOOK Q & A	**TOPIC: A JOURNEY THROUGH STATES OF WATER**	**NOTE: A4 FILE FORMAT**
NAME OF THE 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 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 as water dries to leave the colour.)
(ii) (b) ink pen (evaporation helps the ink dry on the paper.]

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: Natural grass cools the surrounding area through transpiration and evaporation, by absorbing heat, while plastic grass lacks this process.]

4. Give examples of liquids other than water, which evaporate.
[Hint: Some of the liquids that evaporate are oils, alcohol, petrol and sanitizer.]

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 carry away the water vapour from them creating a drier

environment around the cloth. This air-flow helps to reduce the humidity and hence speeds up the rate of evaporation. This help 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. Afterward, it is transported to a garden or a field where it can be used as manure. This approach reduces transportation cost of the sludge and enhances the safety of individuals handling it. Reflect upon it and explain how.

[Hint: Sludge has long been a major challenge for the water treatment industry as it increases health hazards and disposal costs. Leaving sludge in heaps (sludge dewatering process) allows some water to evaporate, reducing its weight and 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 and sweating. Knowing that water evaporates faster in sunlight and with increased air movement or that the rate of evaporation increases with lower humidity, help 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 essential for life, and its availability is limited. 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 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 water on it: Lightly sprinkle water directly on the seat. The evaporating water will help to lower the temperature.

iii. Use a sunshade or a cover : If available, use a sunshade or a seat cover to protect the seat from direct sunlight, which will help keep it cooler.

iv. Park in the shade: If possible, move the two-wheeler to a shaded area to reduce the seat's exposure to direct sunlight.]

Prepared by: *Ms Neena Alex*	*Checked by:* *HoD Science*