

14. water (solved exercise)

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1. Fill up the blanks in the following:

- (a) The process of changing of water into its vapour is called _____ .
- (b) The process of changing water vapour into water is called _____ .
- (c) No rainfall for a year or more may lead to _____ in that region.
- (d) Excessive rains may cause _____ .

Ans:

- (a) evaporation or vaporisation
- (b) condensation
- (c) droughts
- (d) flood

2. State for each of the following whether it is due to evaporation or condensation:

- (a) Water drops appear on the outer surface of a glass containing cold water.
- (b) Steam rising from wet clothes while they are ironed.
- (c) Fog appearing on a cold winter morning.
- (d) Blackboard dries up after wiping it.
- (e) Steam rising from a hot girdle when water is sprinkled on it.

Ans:

- (a) condensation
- (b) evaporation
- (c) condensation
- (d) evaporation
- (e) evaporation.

3. Which of the following statements are “true”?

- (a) Water vapour is present in air only during the monsoon.
- (b) Water evaporates into air from oceans, rivers and lakes but not from the soil.
- (c) The process of water changing into its vapour is called evaporation.
- (d) The evaporation of water takes place only in sunlight.
- (e) Water vapour condenses to form tiny droplets of water in the upper layers of air where it is cooler.

Ans:

- (a) False
- (b) False
- (c) True
- (d) False
- (e) True.

4. Suppose you want to dry your school uniform quickly. Would spreading it near an anghiti or heater help you? If yes, how?

Ans: Yes, to dry the school uniform quickly, the uniform is spread near an anghiti or heater because evaporation is rapid at higher temperature. Higher the temperature faster is the rate of evaporation. So the uniform is dried up quickly.

5. Take out a cooled bottle of water from refrigerator and keep it on a table. After some time you notice a puddle of water around it. Why?

Ans: The cooled water bottle has very cold exposed surface. Due to cool surface there is condensation of water-vapour from air on the surface of water bottle because water vapour is present in atmosphere. The condensed water molecules spread around the bottle. So a puddle of water is noticed after sometime.

6. To clean their spectacles, people often breathe out on glasses to make them wet.

Explain why the glasses become wet?

Ans: The breathe out gases contain water-vapour. The water-vapour condenses at spectacles so glass becomes wet and with the help of small amount of water, it is easy to clean the spectacles.

7. How are clouds formed?

Ans: The water present on the earth evaporates due to heating by the sun. The water vapour in the air condenses to form tiny droplets of water at high altitude, which appears as clouds. Thus clouds are formed by the condensation of water vapours present in air at high altitude.

8. When does a drought occur?

Ans: If there is no rain for a long period or for many years then there is scarcity of water in that region. This leads to drought.