

Exercise: NCERT Solution

Water

1. Fill up the blanks.

- (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 _____.

Answer.

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

2. State for each of the following weather 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 cold winter morning.
- (d) Blackboard dries up after wiping it.
- (e) Steam rising from a hot girdle when water is sprinkled on it.

Answer:

- (a) Water drops appear on the outer surface of a glass containing cold water. (Condensation)
- (b) Steam rising from wet clothes while they are ironed. (Evaporation)

- (c) Fog appearing cold winter morning. (Condensation)
- (d) Blackboard dries up after wiping it. (Evaporation)
- (e) Steam rising from a hot girdle when water is sprinkled on it. (Evaporation)

3. Which of the following state mentioned 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 layer of air where it is cooler.

Answer:

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

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

Answer. Yes. Spreading it near an anghiti or heater would help dry the clothes quicker. This is because heat is generated from an anghiti or heater causes the water to evaporate at a faster rate.

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?

Answer:

This is because water vapour near the cold bottle collides with it, because cool and condenses into water droplets. These water droplets collect and form a puddle of water around the bottle.

6. To clean their spectacles, people often breath out on glasses to make them wet. Explain while the glasses become wet?

Answer:

During the exhalation (breathe out), carbon dioxide is released along with water vapour. If one breathes out onto glass, the released water vapours collide with surface of the glass, thereby making it cooler. As a result, the water vapours present in the air surrounding the glass condense and get attached to the glass surface. Consequently glass becomes wet.

7. How are clouds formed?

Answer:

The clouds are formed by the process of evaporation and condensation. Water evaporates from oceans, rivers, seas, ponds, lakes and plants and other land surfaces. As water vapour goes higher from the surface of the earth, it gets cooler. When the air moves up it gets cooler and cooler. At sufficient heights the air becomes so cool. The vapour present in it condenses to form drops of water called droplets. It is these tiny droplets that remain floating in air and appear to us as cloud.

8. When does a drought occur?

Answer:

A drought occurs if there is no rainfall for long time. Usually water lost by soil due to evaporation and transpiration and it is returned to soil by rains. But no rainfall occurs for long time, it leads to a decrease in water level of various ponds and wells. This lead to the condition of drought.