

Exercise Questions

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1. Fill up the blanks in the following:

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

Solution:

- (a) The process of changing of water into its vapor is called evaporation.
- (b) The process of changing water vapor 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 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.

Solution:

- a) Condensation
- b) Evaporation
- c) Condensation
- d) Evaporation
- e) Evaporation

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

- (a) Water vapor 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 vapor, is called evaporation.()
- (d) The evaporation of water takes place only in sunlight.()
- (e) Water vapor condenses to form tiny droplets of water in the upper layers of air where it is cooler.()

Solution:

- 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? If yes, how?

Solution:

Spreading uniform near an anghiti or heater will help because it increases the rate of evaporation due to heat.

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

Solution:

Because the surface of the air around the bottle cool down and air condenses around the bottle.

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

Solution:

Air coming out from mouth cool down on the surface of glass hence glass becomes wet.

7. How are clouds formed?

Solution:

The process of condensation plays an important role in bringing water back to the surface of the earth. As we go 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 that the water vapor present in it condenses to form tiny drops of water called droplets. It is these tiny droplets that remain floating in the air and appear to us like clouds.

8. When does a drought occur?

Solution:

If it does not rain for two or more years, water is lost from the soil due to evaporation and transpiration. This dries the soil and the water in the ponds and lakes are dried up, leading to drought condition.