

LIVING SCIENCE CLASS6 SOLUTION CHAPTER 15. WATER

P. 168 Oral Questions For Formative Assessment

1. This is due to the following reasons:

a. We cannot use directly the salty water from seas and oceans (more than 97 %).

b. Water is not evenly spread on the earth.

c. There is shortage and pollution of sources of water.

2. Yes

3. ice, water vapour, water

4. temperature

5. by cooling the air 6. Because, water evaporates faster in the sun.

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1. false

2. droplets of water. Water vapour gets cooled by the cooler air higher up in atmosphere and condenses to form water droplets. Many such droplets together form clouds.

3. The impurities are dust particles and some gases. They get dissolved while it rains. Where the air is polluted, the rainwater may contains harmful substances like acids.

4. Because, monsoon winds lose most of their moisture by the time they reach Rajasthan.

5. In a big city, because, there is less vegetation due to cutting down of trees and less open space due to construction of buildings and roads.

P. 174 For Formative and Summative Assessment

A. 1. b 2. b 3. a 4. d 5. a 6. d 7. c 8. b 9. b

B. 1. true 2. 70 3. Atmosphere in the form of water vapour 4. true

5. freezing, heating, melting 6. hot water 7. boiling 8. Condensation 9. false 10. false

11. true 12. Water table 13 true 14. cannot 15 true 16. true

17. cyclones 18. harvesting

C. 1 The three states of water are solid, liquid and gas /

Solid - Ice. liquid - water. Gaseous - water vapour

3. If the substance is hotter, then evaporation will be faster, that is, the higher the temperature, the more the evaporation. In fact, evaporation will take place from the surface of a liquid at all temperatures. The effect of temperature is to affect the rate at which evaporation will take place. Evaporation occurs even when liquid water is at 0°C .
4. Water vapour condenses when it reaches high up in the atmosphere because the air higher up in the atmosphere is cooler. This cools the water vapors and it condenses to form water droplets.
5. As the clouds get cooled further, water drops become bigger and when they become too heavy, they fall on the earth as rain.
6. a. freezing b. melting c. condensation
7. The groundwater may run along the surface of the non-porous rocks and come out of the surface at some places to form a natural spring.
8. Three uses of water are:
- (i) Water is essential for drinking, cooking and washing.
 - (ii) It is used in dams to generate electricity
 - (iii) A large amount of water is used in agriculture and industries.
9. The constant circulation of water from the earth to the atmosphere and back to the earth again is known as the water cycle.
- D. 1. Water is so important for our body because it is essential for life. Several life processes such as digestion of food, absorption of nutrients by the body and so on need the presence of water. It also helps to control our body temperature.
2. In plants, water is essential for germination of seeds and their growth as well. It also helps to transport nutrients from the soil, and food from the leaves to different parts of the plants. Plants use water, along with CO_2 from air to make food in the presence of sunlight known as photosynthesis.
3. Take water in a beaker and add a few ice cubes to it to make the water cold. Keep it for some time on the table, and then observe the beaker. We see tiny drops of water on the outside of the beaker. As the air in contact with the beaker cools down, the water vapour present in the air condenses to form water. This shows that water vapour is present in the air.

4. Overuse of groundwater is causing the water table in cities to go down rapidly resulting in the lowering of water table.
5. Lack of water influences crop growth in many ways. Because droughts gradually lead to the reduction in soil fertility, plant growth and crop yield is affected, as a result the prices of grains, fruits and vegetables go up. Yes, because all the crops get washed away in the flood water.
6. The strong wind causes high waves, called tidal waves, in the sea. They cause flooding. In coastal areas, flooding is often caused by cyclones.
7. The four ways in which we can conserve water are:
 - (i) Avoid wastage of water, and recycle wherever possible.
 - (ii) Plant trees and other vegetation. This increases the absorption of water by the soil and increases the water table.
 - (iii) Control flooding and store water for use.
 - (iv) By rainwater harvesting, which consists of storing rainwater for later use.
8. Big dams destroy wildlife and displace people from their homes. Also accumulation of silt in the storage reservoir reduces their effectiveness with time.
9. Rainwater harvesting is storing rainwater for later use. The two ways in which it can be done are:
 - (i) The water falling on the roof of a building is allowed to flow into a storage tank and used for daily activities. Or it is allowed to flow into a deep pit to recharge groundwater.
 - (ii) The rainwater flowing into roadside drains is allowed to flow into deep pits so that it adds to the groundwater.

HOTS Questions

1. There is a limited amount of water on the earth, which would have been consumed long back if it had not been recycled by nature. This all life on earth would have died long back.
2. Rainwater harvesting.
3. Candle-wax, butter or ghee