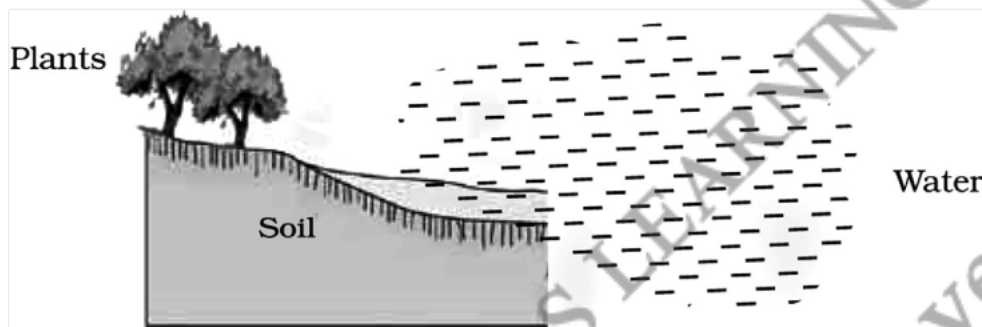
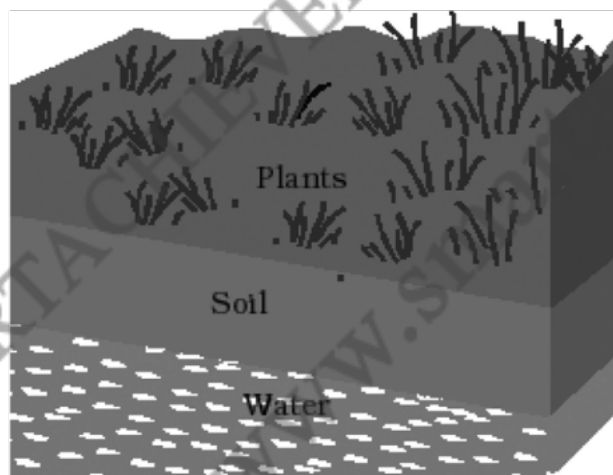


- Q1.** Prepare a list of five items that you use daily in the school. Identify from the list such items that can be recycled.
- Q2.** List two advantages associated with water harvesting at the community level.
- Q3.** In a village in Karnataka, peoples started cultivating crops all around a lake which was always filled with water. They added fertilisers to their field in order to enhance the yield. Soon they discovered that the waterbody was completely covered with green floating plants and fishes started dying in large numbers.
Analyse the situation and give reasons for excessive growth of plants and death of fish in the lake.
- Q4.** What measures would you take to conserve electricity in your house?
- Q5.** Although coal and petroleum are produced by degradation of bio-mass, yet we need to conserve them. Why?
- Q6.** Suggest a few measures for controlling carbon dioxide levels in the atmosphere.
- Q7.** (a) Locate and name the water reservoirs in figures (a) and (b).



(a)



(b)

- (b) Which was an advantage over the other and why?
- Q8.** In the context of conservation of natural resources, explain the terms reduce, recycle and reuse. From among the materials that we use in daily life, identify two materials for each category.
- Q9.** Prepare a list of five activities that you perform daily in which natural resource can be conserved or energy utilisation can be minimised.

Q10. Is water conservation necessary? Give reason.

Q11. Suggest a few useful ways of utilising waste water.

Q12. What is the importance of forest as a resource?

Q13. Why are the Arbari forests of Bengal known to be a good example of conserved forest?

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S1. Paper, rexin bag, blade, pen, plastic box, scale, eraser, compass and dividers (metallic), steel lunch box, steel spoon.

Paper, blade, plastic box, eraser, compass, steel lunch box and steel spoon can be recycled.

S2. Hint: (a) The ground water level increases due to recharging of wells.
(b) Ground water keeps the layers of soil above it moist and prevents loss of water by evaporation.
(c) The water can be stored during rainy season and can be used when required.

S3. Since people used excessive fertilisers in the fields, they were carried down to the lake during rains. As many fertilisers contain phosphates and nitrates, the water body became enriched with these chemicals. These chemicals promote excessive growth of aquatic plants and the surface of water was completely covered with plants. (eutrophication)

Depletion of light in the water body and insufficient availability of dissolved and nutrients resulted in the death of fish.

S4. Hint: (a) Put off the fans and lights when they are not required.
(b) Maximum use of solar radiation.
(c) Use of solar water heating system, during winters.
(d) Use of fluorescent tubes or CFL.

S5. Both the energy sources coal and petroleum take millions of years for their formation. As these resources are being utilised at a much faster rate than their formation, they will be exhausted in the near future, hence they need to be conserved.

S6. Hint: (a) Reduce the consumption of petrol in the automobiles.
(b) Use of CNG or clean fuel.
(c) Instead of burning litter prepare manure out of it.
(d) Treatment of smoke to remove harmful gases before discharging into atmospheric.
(e) Plant more trees.

S7. (a) The water reservoir is a pond in figure (a) and underground water body in the figure (b).
(b) Figure (b) has more advantage than figure (a), because the advantages of water stored in the ground are many. For example
(i) It does not evaporate.
(ii) It spreads out to recharge wells.
(iii) Provides moisture for vegetation over a wide area.
(iv) It is protected from contamination by animal and human wastes.
(v) It prevents breeding of insects.

S8. Reduce means to use a material/commodity in lesser quantity, e.g., electricity and water.

Recycle means a material that is used once is collected and sent back to a manufacturer so that they can make some other useful material from it: e.g., plastic cups and buckets, glass tumbler, paper, metal objects.

Reuse means using a thing over and over again instead of throwing it away. It does not involve the process of recycling either in small or large scale: e.g., used envelopes, plastic carry bags, bottles of jam.

- S9. Hint:** (a) Unused water in the water bottle may be used for watering plant
(b) Close all the taps before you go the sleep. (c) Avoid using a hose pipe for watering plants.
(d) Wash vehicles only when they are dirty. (e) Use fan and light only when required.
(f) Use solar water heating devices. (g) Use CFL in place of conventional bulbs/tubes.
- S10. Hint:** The total amount of fresh water is more than enough to meet the needs of human beings. But due to its uneven distribution, wide seasonal as well as yearly fluctuation in rainfalls and wastage water shortage is a chronic problem in most parts of the world.
- S11. Hint:** Waste water can be used for
(a) recharging the ground water
(b) can be used for irrigation.
(c) treated municipal water can be used for washing cars, watering the gardens.
(d) certain pollutants in sewage water can become fertiliser for various crops.
- S12. Hint:** Forests are renewable resources which provide
(a) Habitat, food, protection to wild life.
(b) Help in balancing CO₂ and O₂ of atmosphere.
(c) Improves water holding capacity of soil.
(d) Regulates water cycle.
(e) For human being, they are the source for all essential commodities like, fuel wood, timber pulp and paper etc.
(f) It provides useful products like fruits, resins, gum, essential oils, bidi wrapper etc.
- S13. Hint:** The forest department developed a strategy in which the villagers were involved in the protection of the forest. In return for the labour, the villagers were paid and also had some benefit in harvesting operations. They were allowed to collect wood and fodder on payment of nominal fee. In this way, by the active and willing participation of the local people, the sal forests of Arabari were conserved.

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