

Chapter - 14

Water

Multiple Choice Questions:

1. Which of the following activity does not involve use of water?

- (a) Washing clothes
- (b) Bathing
- (c) Cleaning utensils
- (d) Drying wet clothes

Solution:

(d): Drying wet clothes

Drying wet clothes, water gets converted into vapour form. Whereas washing, bathing and cleaning utensils are the activities which require the use of water.

2. In which of the following activities will you use minimum amount of water?

- (a) Bathing
- (b) Brushing teeth
- (c) Washing clothes
- (d) Mopping a room

Solution:

(b): Brushing teeth

Bathing, washing clothes and mopping a room will require a large amount of water. Brushing teeth requires minimum amount of water.

3. The quantity of water required to produce one page of your book is

- (a) one bucket
- (b) ten buckets
- (c) two glasses
- (d) few drops.

Solution:

(c): two glasses

To make one sheet of paper requires two glasses of water.

4. Water in our tap comes from a

- (a) river
- (b) lake
- (c) well
- (d) river, lake or well

Solution:

(d): river, lake or well

Water in our tap comes from rivers, lakes or wells. Water is routed through water

treatment plants before it gets supplied through taps. The water drawn from these sources is fit for consumption.

5. In which of the following case evaporation of water will be slowest?

- (a) A tray of water kept in sunlight.**
- (b) A kettle of water kept on a burner.**
- (c) A glass of water kept in a room.**
- (d) A bucket of water kept on rooftop.**

Solution:

(c): A glass of water kept in a room.

Evaporation is directly proportional to temperature when temperature increases, evaporation also increases. Temperature in the room will be lower as compared to the temperatures of sunlight, burner and rooftop. So, a glass of water kept in a room has slowest water evaporation.

6. Transpiration is a process in which plants

- (a) receive water from soil**
- (b) absorb water vapour from air**
- (c) prepare food from water**
- (d) release water vapour**

Solution:

(d): release water vapour

Transpiration is a process when the water is lost in the form of vapour which when parts of a plant (mainly leaves) are exposed is termed as transpiration. The loss of water due to transpiration is quite high.

7. Clouds are

- (a) tiny drops of water floating in air**
- (b) mixture of dust and water vapour**
- (c) particles of water vapour**
- (d) rain drops in air.**

Solution:

(a): tiny drops of water floating in air

Water vapour present in air condenses to form tiny droplets of water floating in air which appear to us as clouds. Later these tiny water droplets are formed into larger sized water drops and then get converted to rainfall.

8. Wells are fed by

- (a) pond water**

- (b) lake water**
- (c) rain water**
- (d) groundwater**

Solution:

(d): groundwater

Lakes, ponds, rivers and other water bodies are filled up by rainwater. Some of the rainwater is evaporated back to air. The rest, soil absorbs the water into the ground and becomes available as groundwater. Hence, wells are fed by this ground water.

9. Floods causes extensive damage to

- (a) crops**
- (b) property and human life**
- (c) domestic animals**
- (d) all of the above**

Solution:

(d): all of the above

Due to heavy rains, water level rises in rivers, lakes and ponds. This water then spreads over large area causing floods. In turn crop fields, forests, villages and cities get submerged under water. Hence, flood causes extensive damage to crops, domestic animals, property and human life.

10. “Catch water where it falls” is the basic idea behind

- (a) recycling of water**
- (b) making dams to store water**
- (c) rainwater harvesting**
- (d) condensation of water vapour.**

Solution:

(c): rainwater harvesting

Rainwater harvesting is a method used to collect rainwater. By storing the water, we can increase the availability of water which is collected and stored for later use.

Very Short Answer Questions:

11. Look at fig 14.1

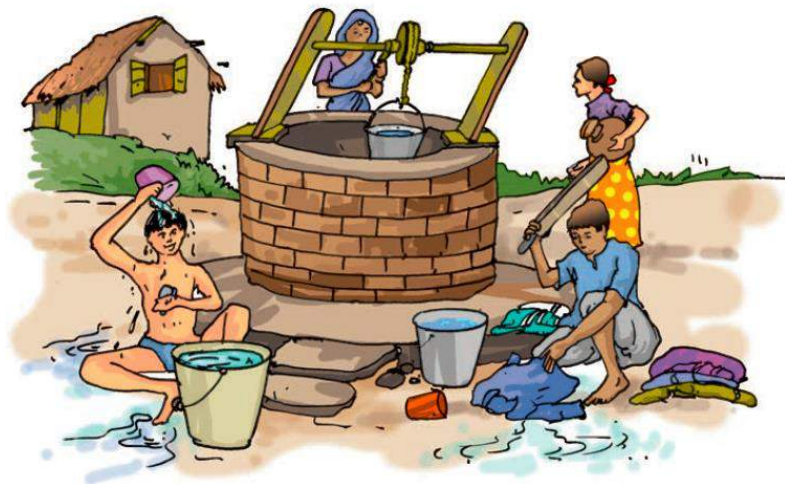


Fig. 14.1

Write down activities shown in this figure in which water is being used.

Solution:

The activities shown in the given figure in which water is being used are :

- (i) Water is used for bathing.
- (ii) Water is used for washing clothes.
- (iii) Water is lifted from the well to store water and for drinking purposes.

12. Write any two activities which require more than a bucket of water.

Solution:

The two activities which require more than a bucket of water are :

- (i) For irrigation purpose we require more water.
- (ii) For washing large number of clothes.

13. Write any two activities which require less than one bucket of water.

Solution:

The two activities which require less than one bucket of water are:

- (i) For brushing teeth.
- (ii) For washing hands.

Short Answer Questions:

14. Why do wet clothes placed on a clothes line get dry after some time? Explain.

Solution:

Wet clothes placed on a clothes line get dry after some time because on exposing to sunlight, firstly water present in wet clothes gets converted into water vapour due to

evaporation and as a result clothes get dry after some time.

15. Water kept in sunlight gets heat from sun and is evaporated. But how does water kept under the shade of a tree also get evaporated? Explain.

Solution:

Water gets evaporated when kept under the shade of a tree during daytime due to the air around the tree also gets heated up from the presence of sunlight so water gets evaporated from the heated air.

16. How do the areas covered with concrete affect the availability of groundwater?

Solution:

Areas covered with concrete affect the availability of groundwater because it reduces the entry of rainwater into the ground, which in turn reduces the availability of groundwater.

17. Why is there a need for conserving water? Give two reasons.

Solution:

There is a need for conserving water because:

(i) With rise in population, availability of water is decreasing. The demand for water is increasing day to day. Hence we need to conserve water for future.

(ii) The level of groundwater is decreasing drastically due to the change in climate which results in limited usage of water. This would lead to extreme water scarcity and hence we should conserve water for next generations.

18. Fill in the blanks selecting words from, the following list.

Snow, rain, clouds, vapour, evaporation, transpiration.

Water, as _____ goes into atmosphere by the processes of _____ and _____ and forms _____, which on condensation fall in the form of _____ and _____.

Solution:

vapour

Evaporation

Transpiration

Clouds

Snow

Rain

Long Answer Questions:

19. Most of the water that falls on the land as rain and snow, sooner or later goes

back to a sea or an ocean. Explain how it happens?

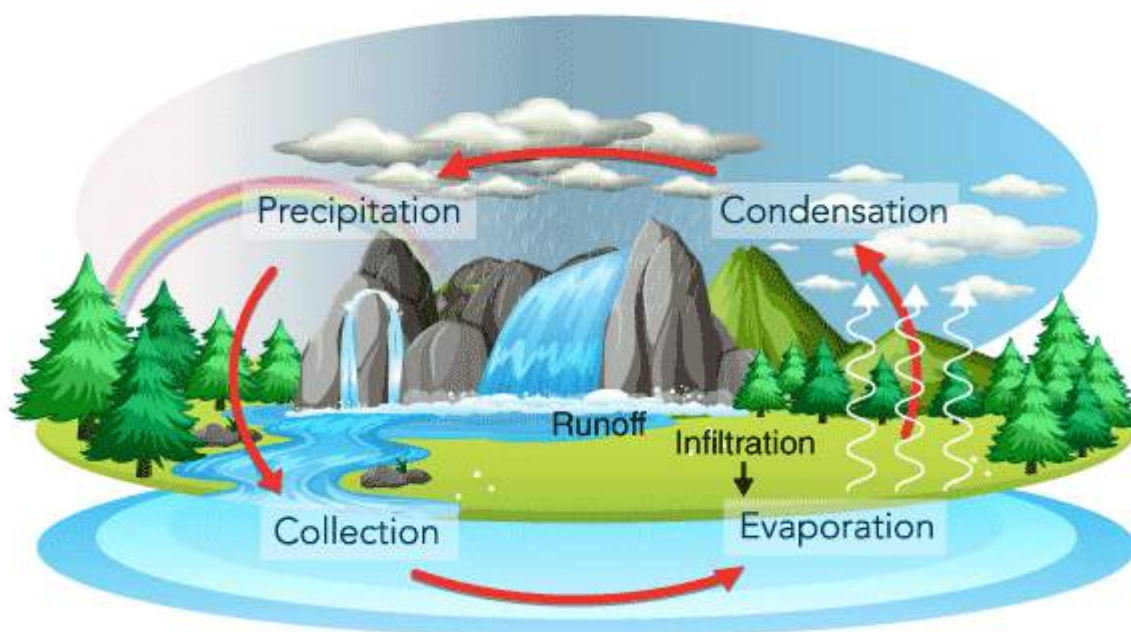
Solution:

Most of the water that falls on the land as rain and snow, sooner or later goes back to a sea or an ocean because the water that falls on the land as snow melts during summers and flows into the rivers and streams, from there it goes into the sea or oceans. Some of the water enters into ground and becomes available to us as groundwater. The groundwater is pumped out for domestic, irrigation and industrial use, which eventually goes into rivers and finally into the seas or oceans.

20. Draw a diagram to show how sea water reaches a lake or pond.

Solution:

Here is the diagram which shows the sea water reaching a lake or a pond:



21. Dissolve two spoons of common salt in half a cup of water. Now if you want to get the salt back, what will you do?

Solution:

To get the salt back from the water we have two methods to do:

- (i) Water can be removed from the salt solution by heating it on a stove.
- (ii) Or by keeping it in the sun in a plate for few hours for evaporation.

Evaporation is a slow conversion of water into its vapour state. Once the water gets evaporated, we get the salt back.

22. Explain the process of rooftop rainwater harvesting with the help of a suitable

diagram.

Solution:

Rooftop rainwater harvesting – is a method where rainwater is collected from the rooftop to a storage tank, through pipes. This water needs to be filtered before using because it may contain some soil from the roof. Instead of collecting rainwater directly in the tank, the pipes can go directly into a pit in the ground. This then enters into the soil to recharge or refill the groundwater.

Here is the diagram which shows the process of rooftop rainwater harvesting:

