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#637874

The freshwater stored in the ground is much more than that present in the rivers and lakes of the world.

- A True
- B False

**Solution**

- Groundwater is the water found underground in the cracks and spaces in soil, sand, and rock. It is stored in and moves slowly through geologic formations of soil, sand, and rocks called aquifers.
- Groundwater is the source of about 33 % of the water that county and city water departments supply to households and businesses (public supply).
- Hence The freshwater stored in the ground is much more than that present in the rivers and lakes of the world is a true statement.
- So, the correct answer is 'True'.

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#637875

Water shortage is a problem faced only by people living in rural areas.

- A True
- B False

**Solution**

- Water shortage is a problem faced only by people living in rural areas because water problem is faced by all people rural as well as urban but urban areas face water problem more because the water used in urban areas is more.
- Hence Water shortage is a problem faced only by people living in rural areas is a False statement.

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#637876

Water from rivers is the only source for irrigation in the fields

- A True
- B False

**Solution**

- Irrigation is the application of controlled amounts of water to plants at needed intervals. Irrigation helps to grow agricultural crops, maintain landscapes, and revegetate disturbed soils in dry areas and during periods of less than average rainfall.
- Sources of irrigation water include groundwater, through springs or wells, surface water, through rivers, lakes, or reservoirs, or even other sources, such as treated wastewater or desalinated water.
- Hence Water from rivers is the only source for irrigation in the fields is a false statement.
- So, the correct answer is 'False'.

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#637877

Rain is the ultimate source of water.

- A True
- B False

**Solution**

- The ultimate source of water is the water bodies which are present on earth which includes large oceans, seas, rivers, etc. Rain is only the way of water returning to their sources which they have lost by evaporation.
  - This rain is not an ultimate source of water .the ultimate source are the water bodies present on earth example large oceans, rivers etc
  - So, the correct answer is 'False'.
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**#637878**

Explain how groundwater is recharged.

**Solution**

- Process of seeping (flow or leak slowly through a porous material or small holes) of water into the ground is called infiltration. Infiltration is the process by which water on the ground surface enters the soil.
- Water not used by plants moves deeper into the ground. The top of the water in the soil, sand, or rocks is called the water table and the water that fills the empty spaces and cracks is called groundwater. Water seeping down from the land surface adds to the groundwater and is called recharge water.
- Hence groundwater is recharged by infiltration.

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**#637880**

There are ten tube wells in a lane of fifty houses. What could be the long-term impact on the water table?

**Solution**

The effect on the water table depends on the replenishment of underground water. Only five families will share a tubewell, the water used for daily domestic purposes will not effect the water table. But if there is shortage of rains, the water used by the family not replenished and water table will fall down.

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**#637882**

You have been asked to maintain a garden. How will you minimise the use of water?

**Solution**

- When I was asked to maintain garden I will minimize the use of water using the drip irrigation method.
- In drip irrigation method, water is supplied directly to the base of the plants using narrow pipes, thereby reducing the loss of water. Then I will check the leakages in the water pipes and arrange small pits for rainwater harvesting. The collected rainwater will be used later.
- Hence drip irrigation method is used to minimize the use of water to maintain a garden.

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**#637885**

Explain the factors responsible for the depletion of water table.

**Solution**

- (i) Increased population: Demand for water has been increased by the increased population. As the number of humans increases, the consumption of water also increases.
- (ii) Increasing industries: All industries need water. As the number of human population increase, the number of industries is also increased which definitely increases the consumption of water.
- (iii) Lack of water conservation techniques: Main source of water on earth and for the underground water is rain. The water of the rain, if conserved can increase the groundwater level. But this is not due to lack of water conservative techniques.
- (iv) Agricultural activities: India is a country which depends on agriculture. The land used for cultivation has increased. So, the consumption of water for agriculture has increased. Irregular rainfall has increased the consumption of groundwater. This has increased the depletion of groundwater.

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**#637886**

People obtain groundwater through .....and.....

**Solution**

- Groundwater is the water found underground in the cracks and spaces in soil, sand, and rock. It is stored in and moves slowly through geologic formations of soil, sand, and rocks called aquifers.
- Groundwater is the source of about 33% of the water that county and city water departments supply to households and businesses (public supply).
- People obtain groundwater through wells and hand pumps.

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**#637887**

Three forms of water are solid, \_\_\_\_\_ and \_\_\_\_\_.

**Solution**

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- Water can occur in three states: solid (ice), liquid, or gas (vapour).
  - Solid water—ice is frozen water. When water freezes, its molecules move farther apart, making ice less dense than water. This means that ice will be lighter than the same volume of water, and so ice will float in water. Water freezes at 0° Celsius, 32° Fahrenheit.
  - Liquid water is wet and fluid. This is the form of water with which we are most familiar. We use liquid water in many ways, including washing and drinking.
  - Water as a gas—vapour is always present in the air around us. You cannot see it. When you boil water, the water changes from a liquid to a gas or water vapour. As some of the water vapour cools, we see it as a small cloud called steam. This cloud of steam is a mini version of the clouds we see in the sky. At sea level, steam is formed at 100° Celsius, 212° Fahrenheit.
  - Hence Three forms of water are solid, liquid and gas.

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**#637888**

The water bearing layer of the earth is \_\_\_\_\_.

**Solution**

- An aquifer is an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt). Groundwater can be extracted using a water well.
- The Ogallala, also known as the High Plains Aquifer, is one of the largest underground freshwater sources in the world. It underlies an estimated 174,000 square miles of the Central Plains and holds as much water as Lake Huron.
- The study of water flow in aquifers and the characterization of aquifers is called hydrogeology.
- Hence The water-bearing layer of the earth is Aquifer.

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**#637889**

The process of water seepage into the ground is called \_\_\_\_\_.

**Solution**

- Process of seeping (flow or leak slowly through a porous material or small holes) of water into the ground is called infiltration. Infiltration is the process by which water on the ground surface enters the soil.
- Water not used by plants moves deeper into the ground. The top of the water in the soil, sand, or rocks is called the water table and the water that fills the empty spaces and cracks is called groundwater. Water seeping down from the land surface adds to the groundwater and is called recharge water.
- Hence The process of water seepage into the ground is called Infiltration.

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**#637891**

Which one of the following is not responsible for water shortage ?

- A Rapid growth of industries.
- B Increasing population
- C Heavy rainfall
- D Mismanagement of water resources

**Solution**

- Water is one of the most valuable resources on Earth. Rainwater fills reservoirs that supply drinking water, provide a habitat for fish to live, and nourishes the soil with water necessary for vegetation.
- Hence Heavy rainfall is not responsible for water shortage.
- So, the correct answer is 'Heavy rainfall'.

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**#637892**

Choose the correct option. The total water

- A In the lakes and rivers of the world remains constant.
- B Under the ground remains constant.

C In the seas and oceans of the world remains constant.

D Of the world remains constant.

**Solution**

- The total water of the world remains constant because the water travels through a cycle and the net amount never changes. For example, The water which evaporates from various water bodies like lakes, rivers, ponds, etc form clouds and then they rain down filling up the same water bodies. They also go underground but in the end, they end up in a water body thus completing the water cycle.
- Hence The total water of the world remains constant.
- So, the correct answer is 'Of the world remains constant'.

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#637894

Make a sketch showing groundwater and water table. Label it.

**Solution**

