

CHAPTER – 18

TOO MUCH WATER, TOO LITTLE WATER

Page No 147:

Question 1: How can unclean or dirty water harm our body?

Answer:

Unclean and dirty water contains harmful micro-organisms. Drinking such contaminated water can cause various diseases like cholera, diarrhoea and typhoid.

Question 2: Have you ever got dirty or unclean water in your area? What was the reason for this?

Answer:

***Disclaimer:** This question requires the students to share their own experiences and observations. Keeping this in mind, it is strongly recommended that the students prepare the answer on their own.*

Question 3: Do you know anyone who has fallen sick because of such water? Talk about this.

Answer:

***Disclaimer:** This question requires the students to share their own experiences and observations. Keeping this in mind, it is strongly recommended that the students prepare the answer on their own.*

Question 4: When the guest came to Suguna's house, they offered him a cold drink, because they thought he should not drink such water. What do you think Suguna's family must be doing for their own drinking water?

Answer:

Suguna lived in Nallamada, a village in Andhra Pradesh. Suguna's family must be either boiling the water before drinking or adding chlorine tablets to the water. Boiling kills various disease-causing microbes present in water and chlorination purifies water, making it fit for drinking.

***Disclaimer:** This is a sample answer. The answer of the students may vary.*

Question 5: The guest said he did not take cold drinks. Why do you think he said this?

Answer:

The guest said so because he preferred water to cold drinks for quenching his thirst.

***Disclaimer:** This is a sample answer. The answer of the students can vary from this.*

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Question 1: Have you ever faced a shortage of water in your house? When?

Answer:

***Disclaimer:** This question requires the students to share their own experiences and observations. Keeping this in mind, it is strongly recommended that the students prepare the answer on their own.*

Question 2: What did you do then?

Answer:

***Disclaimer:** This question requires the students to share their own experiences and observations. Keeping this in mind, it is strongly recommended that the students prepare the answer on their own.*

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Question 1: Have you ever played in water? Where and when?

Answer:

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Question 2: Are there times when you are not allowed to play in water? What are the reasons for this?

Answer:

Some of the reasons why we are not allowed to play with water are:

1. It leads to wastage of water.
2. It may affect our health as it causes fever, cold, etc.
3. It is a limited natural resource, which is difficult to replenish once wasted.

Question 3: The water park had a lot of water to play in, but the nearby village did not have water even to drink. Discuss.

Answer:

The water park might be using the water found in the water bodies of the nearby village. It might also be using groundwater to fill up their pools. The continuous wastage of water by the water park for entertainment might have caused water scarcity in the nearby village.

Question 4: If you go to a water park, find out from where the water comes to the park.

Answer:

***Disclaimer:** The purpose of this section is to encourage the students to observe their surroundings and interact with others. It is highly recommended that the students prepare the answer on their own.*

Page No 150:

Question 1: Why was Raziya worried when she read the newspaper?

Answer:

Raziya read a news item about sewage water getting mixed with the water in the drinking water pipes, thereby contaminating the drinking water in the area. Raziya was worried because consumption of contaminated water leads to various health diseases such as cholera, diarrhoea, etc.

Question 2: Raziya asked that all the water that was filled the previous day should be thrown. Could this water have been used for something else? What kind of things?

Answer:

The water that was thrown away could have been used for gardening, cleaning the toilet, etc.

Question 3: In what way did she plan to clean the water?

Answer:

She planned to clean the water by boiling it. Boiling kills all the germs present in the water and makes it fit for drinking.

Question 4: Do you know of different ways to clean the water? Describe them.

Answer:

Different ways to clean water are:

1. **Boiling** It is the process of heating water at high temperature (100°C). Boiling kills all disease causing microorganisms present in contaminated water, thereby cleaning it.
2. **Water chlorination** It is the process of adding chlorine tablets to water. Chlorination kills harmful microbes present in contaminated water and makes it fit for drinking.
3. **Use of water purifiers such as RO (Reverse Osmosis)** In RO, the contaminated water is forced to pass through a semi-permeable membrane. This membrane holds back large particles such as contaminants and impurities and allows the water (free from impurities) to pass freely. In this way, all the impurities are removed from the water.

Question 5: Suppose, Raziya had not read the news and everyone had drunk the water without boiling it, what could have happened?

Answer:

If people had drunk the contaminated water, they might have fallen sick and suffered from water-borne diseases such as diarrhoea, cholera, typhoid, etc.

Question 6: Where Deepak lives, everyone has to stand in a queue to fill water from the common public tap. In Raziya's house, water comes all day in the tap. Why is this?

Answer:

Deepak was a poor boy and his mother worked as a domestic servant in Raziya's house. Perhaps, he lives in a *chawl*, which is a 4 or 5 story building with single-room flats. In such a place, there is a common tap for the whole society. Even through this tap, water flows only in the early mornings and in the evenings. Thus, people have to stand in a queue to collect water.

Raziya perhaps lives in a high-society building where water is available throughout the day because of some water conservation system. Such systems include water reservoirs, tanks etc. that supply water to the people of the society all day long.

Question 7: Raziya read news about the water in the newspaper. Have you read any news about water in the newspapers? What kind of news?

Answer:

***Disclaimer:** The purpose of this section is to make the aware of their surroundings. Keeping this in mind, it is strongly recommended that the students prepare the answer on their own.*

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Question 1: Look through the newspapers of the last one month. Look for all news-items related to water. Cut them out. Stick all the cuttings together on a big paper to make a big collage. Talk about what you have collected. Discuss in the class.

Answer:

Disclaimer: *The purpose of this section is to make the students interact actively with their surroundings. Keeping this in mind, it is strongly recommended that the students perform the activity on their own.*

Page No 153:

Question 1: Why do the drinking water places get dirty?

Answer:

Drinking water places get dirty due to spitting and sometimes bathing and washing clothes and utensils. It may also happen if public toilets and garbage dumps are located nearby.

Question 2: What can we do to keep these places clean?

Answer:

The ways in which we can keep the drinking water places clean are as follows:

- Solid or liquid wastes should not be thrown into the water bodies.
- Sewage water should be properly treated before disposing it in the rivers.
- Industrial wastewater containing various effluents should be properly treated.
- Washing and bathing should not be done in these places.
- Public toilets and garbage dumps should be located away from these places.

Question 3:

✳ How often (once a day, once in two days, etc.) are the containers or *matkas* and ladles cleaned? Who cleans them?

✳ How many children are there in your school? How many taps, *matkas* or hand pumps are there? Are these sufficient for children?

✳ Who cleans the places near the water?

✳ Where does the water that is spilt go?

Answer:

Disclaimer: *The purpose of this section is to make the students interact actively with their surroundings. Keeping this in mind, it is strongly recommended that the students should perform the activity and write the solutions on their own.*

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Question 1: What can be done to keep the toilets clean?

Answer:

- Regular cleaning of the toilets using toilet cleaners
- Flushing the toilet after every visit
- Using separate pair of slippers for toilets

Question 2: What can each of us do for this?

Answer:

- We should never forget to flush the toilet after each visit.
- We should regularly clean the toilets using toilet cleaners.
- We should use air fresheners in the toilets.

Question 3: Have you seen toilets at bus stands or railway stations? How are they different from the toilets at home?

Answer:

The toilets at bus stands or railway stations are usually not very clean. They are used by everyone. Whereas, the toilets at home are privately owned and clean.