# Chapter 13: A River's Tale

## Question 1:



Look carefully at the picture of the river. Read the words given below. Use these words to make a story. Give a title to your story also. Boat, flowing water, blue, fish, water-plants, river, foul smell, big ship, oil, river banks, factories, washing clothes, animals, other work, change, city.

#### Answer 1:

Once upon a time, there was a river which had clear blue water and lots of fishes. Water plants were also there which provided a good atmosphere for the aquatic animals. But after some time a factory was started near the river and a city grew up near it. Goods that were required for the factory was supplied through the river with the help of big ship. There were oil spills and wastes from the factory were thrown into the river. People from the nearby cities also bathed their animals and washed clothes in the river. This made the river foul smelling and filthy forever. It was not a clean river now , it became a polluted river.

### Question 2:

Look at the picture again and answer the following questions.





- (1) What is the colour of the river where it begins?
- (2) At some places, there are many fish in the river, at others there are only a few and at some places there are dead fish. What could be the reason for this? Discuss.
- (3) What can be seen in the river before it reaches the village?
- (4) At which places did the colour of the water in the river change? Why did this happen? Discuss.
- (5) Which of the places shown in the picture would you like to live in? Why?
- (6) Would you like to change any of the things that you see in the picture? Why and how?

- (7) Have you seen people throwing different things into river or water bodies?
- (8) What could be done to keep rivers clean? Discuss.
- (9) If you wanted to drink some water, from which part of the river would you like to drink? Why?
- (10) In the last part of the picture the river flows into the sea. Have you ever seen the sea? Where? In a movie, or somewhere else?



- (11) Have you ever been near a river or sea? When?
- (12) Show with your hands, how the waves in the sea move.
- (13) Is the water from the sea drinkable? Why?
- (14) Do you think that there would be changes taking place in a river, pond or stream at different times of the year? What kind of changes would these be? Discuss.
- (15) Will there be the same amount of water in the ponds or rivers during the rainy season and in summer?

#### Answer 2:

- (1) Water has no colour. When we observe water in a river from a distance we find it to be bluish in colour.
- (2) Aquatic animals like fish need fresh water to survive. In places where river is not polluted, many fish live in the water. Similarly in areas where factory wastes and domestic wastes are poured in the river, it gets polluted and the polluted water kills the fish and water plants.
- (3) Large number of fish can be seen in the river before it reaches the village.
- (4) The colour of the water in the river changes near towns and villages because of pollution created by the people throwing waste in the river. The people throw the household waste, the factories dump the chemicals and their waste in the water which pollutes the water and makes it unfit for marine life and human consumption.
- (5) I would like to live in the place where the river starts as there the water is clean and pure and the environment is calm as it has many trees.
- (6) I would like to remove all the waste that is thrown in the water of the river and banks which are responsible for making the water polluted.
- (7) Yes, sometime people throw garbage, used garlands and flowers.
- (8) No waste material or unwanted things should be thrown in river. The mixing of drainage with river should be prevented.
- (9) I would like to drink some water at the place from which the river starts. The water at the beginning of the river is uncontaminated and pure for drinking.
- (10) Yes, I have seen the sea. I have seen it in movies and discovery channel also. I once saw the sea when I went to Chennai.
- (11) There is a river in my native place and I visit it when I go there. I saw a sea during my visit to Chennai.
- (12) The waves in the sea moves up and down.

- (13) The water from the sea is not drinkable as it has salt in it. As it is saline, it is unfit for human consumption.
- (14) Yes, there would be changes taking place in a river, pond or stream at different times of the year. The changes take place in the water level which would be maximum during the rainy season and would be lesser in the month of April and May.
- (15) No, there will not be the same amount of water in the ponds or rivers during the rainy season and in summer. Water level will be more in the rainy season and will be lesser in summer.

### Question 3:

Is there a pond, river or lake near your town or city? Find out-

#### Answer 3:

Yes, there is a pond near my city.

## Question 4:

Are there any changes in the water during summers, the rainy season and in winters?

#### Answer 4:

Yes, in summer the level of water is less, in rainy season water level is more and in winters the water level is medium.

## Question 5:

What are the different kinds of fish found there?

## Answer 5:

The different kinds of water animals like fish which are found. There are Katla, Rohu, etc. of various sizes.

### Question 6:

What kind of trees and plants grow around it?

### Answer 6:

Thick trees with grasses and bushy plants grow around it.

### Question 7:

What are the kinds of birds that come there?

#### Answer 7:

Different types of birds like swan, duck, crow, eagle etc. come there.

### Question 8:

Have you ever seen or read about floods? Where?

#### Answer 8:

Yes. I have read about floods which occurred in Mumbai and Bihar.

### Question 9:

What happens when there is a flood?

#### Answer 9:

All the things, houses, railway tracks, roads, cars etc. get immersed in water when there is a flood.

## Question 10:

Have you seen dirty water in a river or pond? Where?

### Answer 10:

Yes. I have seen dirty water in a river and in ponds in my village.

## Question 11:

How would you know if the water is dirty? If the water looks clean, can you be sure that it is alright to drink that water? Discuss.

### Answer 11:

If the water is dirty it looks muddy, yellowish in colour with leaves, twigs and germs etc in it with a foul smell. Even if the water looks clean, it is not safe to drink that as it may contain bacteria and germs.

## How does Water become Dirty?

### Question 12:

From where do you get your drinking water? A river or a lake? Do you think that like the river in the picture your river or lake can also be affected?

#### Answer 12:

I get drinking water from a river. Yes, river located in my town is affected by pollution. I can see dirt and leaves, twigs and other things thrown in river.

## What will you do?

### Question 13:

Fill about half of each bottle or glass with water. Make sure that all have the same amount of water. Now, one by one, put each of the things in the water. For example – haldi in the first glass, oil in the second glass, soda in the third glass until you have one thing in each glass. Mix each thing in the water and see what happens. Write your observations in the table. What did you observe? Put ( $\checkmark$ ) mark in the right places.

Things	Dissolved (mixed) in water	Did not dissolve in water	Colour of water changes	Colour of water does not change
Sugar				
Salt				
Lemon juice				
Haldi				
Soap water				
Flour				
Dal				
Sherbet				
Cooking soda				
Oil (Mustard, Til or any other)				

#### Answer 13:

Things	Dissolved (mixed) in water	Did not dissolve in water	Colour of water changes	Colour of water does not change
Sugar				
Salt				
Lemon juice				
Haldi	~			
Soap water	<b>/</b>			
Flour		<b>/</b>		
Dal		~		
Sherbet				
Cooking soda				
Oil (Mustard, Til or any other)				

## Question 14:

Now on the basis of your observations tell – Do all things dissolve in water?

## Answer 14:

No, all things do not dissolve in water.

## Question 15:

Does the colour of the water always change?

### Answer 15:

No, the colour of the water does not change always. It's colour changes only when something having colour is added to it

### Question 16:

Did oil dissolve in water? How can you say whether it has dissolved or not?

#### Answer 16:

No, the oil does not dissolve in water. Things which are insoluble in water either come up or settle down. For Example – Oil floats on water.

### Question 17:

Colour of the water may not change even after some things are dissolved in it. Would you say that these are absent in water?

#### Answer 17:

No, the things which are dissolved in water are always present in the water but the colour may or may not change depending upon the think that is mixed in water.

### Question 18:

Imagine how it would be if things like sugar, salt, lemon juice, sherbet, etc., could not dissolve in water!

### Answer 18:

If things like sugar, salt, lemon juice, sherbet, etc. could not be dissolved in water, cooking food and preparing things like cold drinks, coffee, tea etc. will not be possible and things would have been tasteless.

### Question 19:

Imagine how it would be if things like stones, chalk, plastic and garbage would dissolve in water!

### Answer 19:

If things like stones, chalk, plastic and garbage would dissolve in water, it would make water dirty and unfit for consumption.

## Question 20:

How is drinking water cleaned in your house?

#### Answer 20:

The drinking water in our house is cleaned by using water filters or boiling etc.

## Question 21:

Find out the many different ways of cleaning water at home.

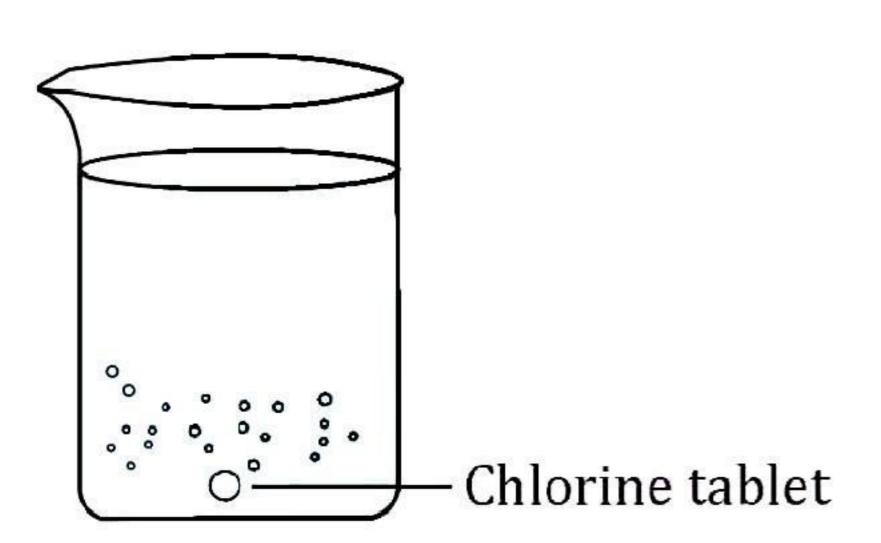
#### Answer 21:

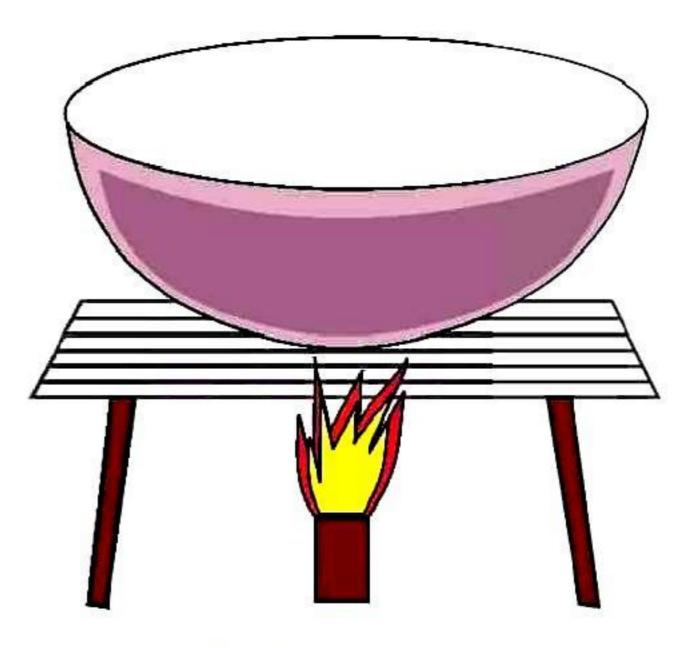
We can add alum to the clean water, we can boil water or can filter water. The method of evaporation can also be followed in cleaning dirty water.

## Question 22:

Draw pictures showing any two ways of cleaning the water.

## Answer 22:





Boiling of water