Chapter 2: Journey of a River

CONTENTS 11 exercises · 25 questions

2.1	Look at the image — Godavari river map questions	3 Q
2.2	The Many Ways I Support Lives — comprehension questions	4 Q
2.3	Write — Dams: problems and solutions	1 Q
2.4	Write — Pollution questions	2 Q
2.5	Discuss — Water bodies then and now	1 Q
2.6	Activity 3 — Dissolve in water / Do not dissolve in water	1 Q
2.7	Activity 4 — Healthy and unhealthy river (image-based)	1 Q
2.8	Write — Three things to protect water bodies	1 Q
2.9	Activity 5 — Match the Columns: Flood problems	1 Q
2.10	When a River Runs Dry — personal response questions	2 Q
2.11	Let us reflect — End-of-chapter questions	8 Q

Exercise 2.1 — Look at the image — Godavari river map questions

Q1 Name the states that Godavari flows through.

SOLUTION

The river map shows Godavari flowing through several Indian states.
From the map in the textbook, Godavari passes through:
Maharashtra (where it begins at Trimbakeshwar in the Western Ghats),
Chhattisgarh, Telangana, Odisha, and Andhra Pradesh (where it meets the Bay of Bengal).

Answer: Godavari flows through Maharashtra, Chhattisgarh, Telangana, Odisha, and Andhra Pradesh.

Q2 Name a dam and a wildlife sanctuary along the length of Godavari.

SOLUTION

From the river map in the textbook:
Dam: Sriram Sagar Project (SRSP) and Polavaram Dam are shown along the Godavari.
Wildlife sanctuary: Coringa Wildlife Sanctuary is shown near where Godavari meets the Bay of Bengal.
Kawal Tiger Reserve and Pench National Park are also near its path.

Answer: Dam: Polavaram Dam (or Sriram Sagar Project). Wildlife sanctuary: Coringa Wildlife Sanctuary.

Q3 Which other small rivers join Godavari in its journey?

SOLUTION

The river map shows smaller rivers (tributaries) joining Godavari.

From the map labels: the Manjira (Manjira) river and the Indravati river are shown joining Godavari.

The Sabari river is also shown as a tributary.

Answer: The Manjira (Manjira), Indravati, and Sabari rivers join Godavari as tributaries.

Exercise 2.2 — The Many Ways I Support Lives — comprehension questions

Q1 List three ways in which people are dependent on the river Godavari.

SOLUTION

According to the chapter, people depend on Godavari in many ways:
1. Drinking and household use — Godavari provides water to homes, schools and towns for drinking, cooking and washing.
2. Agriculture — Farmers use its water to grow crops; water is carried through pipes and canals to fields.
3. Industry and livelihoods — Factories near the river use its water, and people earn their living through fishing, farming and other occupations near the river.

Answer: 1. Drinking, cooking and washing water for homes and schools. 2. Irrigation for growing crops. 3. Water for factories and livelihoods (fishing, farming, etc.).

Q2 In which occupations are people engaged near the river Godavari?

SOLUTION

The chapter mentions that Godavari supports many livelihoods.
People near Godavari are engaged in farming (agriculture using river water), fishing in the river, working in factories that use river water, and carrying/transporting goods by river.
Tourism-related work (ecotourism in the forests along the river) is also mentioned.

Answer: People near Godavari work as farmers (agriculture), fishermen, factory workers, and in ecotourism.

Q3 Which crops do you see growing near the Godavari?

SOLUTION

This question refers to the image of fields near Godavari in the textbook.
The river flows through fertile land and is used for irrigation.
Common crops grown in the Godavari basin include rice, sugarcane, cotton, and various vegetables.
Note: The exact crops visible in the textbook image may vary — refer to the picture in your book.

Answer: Crops like rice, sugarcane, cotton, and vegetables are typically grown near Godavari using river water for irrigation. (Answers may vary based on the image in your book.)

Q4 Which crops grow in your region? Where does the water for irrigation come from?

SOLUTION

This is a personal/local question — answers will vary depending on where you live.

Model answer: In many parts of India, crops like wheat, rice, sugarcane, or vegetables are grown.

Water for irrigation comes from rivers, canals, ponds, wells, or rainwater depending on the region.

For example: In river-valley areas, canals from nearby rivers provide irrigation water.

Answer: Answers will vary by region. Model: Common crops include rice/wheat/vegetables; irrigation water comes from rivers, canals, or wells depending on the local area.

Exercise 2.3 — Write — Dams: problems and solutions

Q1 What problems can arise after a dam is built? How can they be solved?

SOLUTION

The chapter explains that dams block the river's flow and store water in a reservoir.

Problems caused by a dam:

1. Flooding of land — the reservoir floods forests, fields and villages, forcing animals and people to leave their homes.
2. Loss of forests and wildlife — animals lose their habitat when their land goes under water.
3. Displacement of people — families who lived near the river have to move elsewhere.

Solutions:

1. Plan dams carefully so that fewer forests and villages are affected.
2. Provide proper housing and support to people who have to relocate.
3. Create wildlife corridors or reserves to protect displaced animals.
4. Use water wisely so we need fewer large dams.

Answer: Problems: flooding of forests and villages, displacement of people and animals, loss of wildlife habitat. Solutions: careful planning, supporting displaced families, creating wildlife reserves, and using water wisely.

Exercise 2.4 — Write — Pollution questions

Q1 Where do the plastic wrappers and bags that we litter end up?

SOLUTION

When we litter plastic wrappers and bags on the ground or roads, rainwater washes them into drains.
From drains they flow into streams and rivers.
Eventually, much of this plastic reaches the river and then flows into the sea.
Plastic in rivers harms fish, turtles, and birds that may eat or get tangled in it.

Answer: Plastic wrappers and bags littered on land get washed by rainwater into drains, then into rivers, and finally into the sea, harming aquatic life along the way.

Q2 What kinds of soaps, shampoos or floor cleaners (natural or readymade) are used in your home? Where does the unclean water mixed with these cleaners go?

SOLUTION

This is a personal question — answers will vary by household.
Model answer: Most homes use readymade soaps, shampoos and floor cleaners (chemical-based).
Some homes use natural cleaners like neem powder, ash, or herbal soaps.
The unclean water mixed with these cleaners flows through the drain into the sewage system.
If not treated properly, this wastewater eventually enters rivers or other water bodies, polluting them.

Answer: Answers will vary. Model: Homes may use chemical or natural cleaners. The dirty water flows into drains, enters the sewage system, and if untreated, pollutes rivers and other water bodies.

Exercise 2.5 — Discuss — Water bodies then and now

Q1 Ask your parents or elders about the condition of water bodies near your home when they were your age. What is the status of those water bodies today?

SOLUTION

This is a family/community discussion activity — answers will vary.

Model answer: Elders often say that rivers, ponds and lakes near their homes used to be cleaner and fuller when they were young.

Today, many water bodies are polluted by waste, plastic and factory effluents, or have shrunk due to overuse and less rainfall.

This shows how human activities over the years have harmed our water bodies, and why we must protect them.

Answer: Answers will vary. Model: Elders typically recall cleaner, fuller water bodies in their youth. Today, many are polluted or reduced due to waste, overuse, and climate changes — highlighting the need to protect them.

Exercise 2.6 — Activity 3 — Dissolve in water / Do not dissolve in water

Q1 Take two clear glasses of water. Add a spoonful of sugar in one and a spoonful of cooking oil in the other. Stir both well and observe. What do you observe? Which one appears clear? Can you list a few things that dissolve in water and things that do not dissolve in water?

SOLUTION

Observation: The glass with sugar becomes clear — sugar dissolves completely in water and you cannot see it.
The glass with cooking oil does not become clear — the oil floats on top or forms droplets and does NOT dissolve.

Things that dissolve in water:
Sugar, salt, honey, vinegar, fruit juice, baking soda.

Things that do NOT dissolve in water:
Cooking oil, sand, chalk powder, plastic, wax, mud.

The key lesson: Harmful chemicals or dirty soapy water can dissolve in rivers and hide from view, making the water look clean but still unsafe.

Answer: Sugar dissolves — water stays clear. Oil does not dissolve — it floats/separates. Dissolve: sugar, salt, honey. Do not dissolve: oil, sand, chalk, plastic.

Exercise 2.7 — Activity 4 — Healthy and unhealthy river (image-based)

Q1 Look at the two images given below. Which river looks healthy and why? How do so many plants grow in water? What do you think happens when too many plants grow in a river?

SOLUTION

The textbook shows two images: one of a river with clean water and one covered by a 'green blanket' of plants.

Healthy river: The one with clean, clear water is healthy. It has good water quality, supports fish and other aquatic life, and the water is safe for people and animals.

How plants grow in water: Plants in water (like algae and water hyacinth) absorb nutrients — especially fertilisers that wash into the river from fields — and use sunlight to grow.

What happens when too many plants grow: When fertilisers cause plants and algae to grow very fast, they cover the river's surface like a 'green blanket'. This blocks sunlight from reaching below, uses up oxygen, and makes it hard for fish to breathe. The water also becomes unsafe for people to drink.

Answer: The river with clean water is healthy. Too many plants grow when fertilisers wash in, covering the surface like a green blanket. This blocks oxygen, chokes aquatic life, and makes water unsafe to drink.

Exercise 2.8 — Write — Three things to protect water bodies

Q1 Can you list three things you can do to protect the water bodies near you?

SOLUTION

Here are three actions we can take to protect rivers, ponds and lakes:

1. Do not throw plastic, garbage or waste into or near water bodies. Dispose of waste properly in dustbins.
2. Use eco-friendly soaps and cleaners so that less harmful water flows into rivers and drains.
3. Plant trees near river banks — roots hold the soil, slow down runoff, and prevent flooding and erosion.

Answer: 1. Do not litter or throw garbage near water bodies. 2. Use eco-friendly cleaners to reduce chemical pollution. 3. Plant trees near river banks to protect the soil and water.

Exercise 2.9 — Activity 5 — Match the Columns: Flood problems

Q1 Match the flood problems with what they affect.
(i) Dirty water — (a) Shelter for people, (b) Safe drinking, (c) Learning, (d) Travel and transport, (e) Lights, fans and phones, (f) People's health, (g) Food supply
(ii) Broken roads
(iii) Lost crops
(iv) No electricity
(v) Spread of diseases
(vi) Damaged homes
(vii) Schools shut

SOLUTION

Note: The activity says 'One problem could affect more than one thing.' Here are the main matches:

(i) Dirty water → (b) Safe drinking, (f) People's health
(ii) Broken roads → (d) Travel and transport
(iii) Lost crops → (g) Food supply
(iv) No electricity → (e) Lights, fans and phones
(v) Spread of diseases → (f) People's health, (b) Safe drinking
(vi) Damaged homes → (a) Shelter for people
(vii) Schools shut → (c) Learning

Answer: (i) Dirty water → (b) Safe drinking, (f) People's health. (ii) Broken roads → (d) Travel and transport. (iii) Lost crops → (g) Food supply. (iv) No electricity → (e) Lights, fans and phones. (v) Spread of diseases → (f) People's health. (vi) Damaged homes → (a) Shelter for people. (vii) Schools shut → (c) Learning.

Exercise 2.10 — When a River Runs Dry — personal response questions

Q1 What would you do if you had no water in your home for an entire day?

SOLUTION

This is a personal thinking question — answers will vary.
Model answer: If there was no water at home for a day, I would:
- Store and use the little water available very carefully for drinking first.
- Go to a neighbour, community tap, or water point to fetch water.
- Avoid activities that use a lot of water, like washing clothes or mopping floors.
- This experience would remind me how precious water is and to never waste it.

Answer: Answers will vary. Model: I would use stored water carefully for drinking, fetch water from a community source, and avoid wasting any — it would remind me how precious water is.

Q2 What if there was no water for a week? How would you bath, drink, cook or clean? Where would you go to find water?

SOLUTION

A week without water would be very difficult — answers will vary by location.
Model answer:
- Drinking: We would need to go to the nearest river, well, water tanker, or water ATM to get clean water.
- Bathing and cleaning: We would use as little water as possible — perhaps wipe with a damp cloth instead of bathing.
- Cooking: We would need clean water brought from outside — without it we cannot cook safely.
- If the shortage continued, families might have to move to places where water is available, as the chapter says happened during the 2019 Chennai water crisis.

Answer: Answers will vary. Model: We would fetch water from wells, water tankers or community taps, use water very sparingly for drinking and cooking first, and might even need to relocate if the shortage lasted long.

Exercise 2.11 — Let us reflect — End-of-chapter questions

Q1 Find out which river(s) flow through your state. (a) What are they used for? (b) Are there any dams on them?

SOLUTION

This is a local research question — answers will vary by state.
Model answer (for Maharashtra as an example):
Rivers flowing through Maharashtra include the Godavari, Krishna, Tapi, and others.
(a) They are used for drinking water, irrigation (growing crops), generating electricity (hydropower), and supporting industries and livelihoods.
(b) Yes, there are dams on them — for example, the Koyna Dam is on the Koyna river (a Krishna tributary) in Maharashtra.

Answer: Answers will vary by state. Model (Maharashtra): Godavari and Krishna flow through it. They are used for drinking, irrigation, and hydropower. The Koyna Dam is one example of a dam on these rivers.

Q2 Ask your grandparents or parents to share any story or festival related to rivers in your region and present it in the class.

SOLUTION

This is a family/community project — answers will vary.
Model answer: Rivers in India are deeply connected to culture and festivals.
For example, the Godavari Pushkaram is a festival held every 12 years on the banks of the Godavari, where people come from all over to take a holy dip.
The Ganga Aarti in Varanasi is another example of people celebrating and worshipping a river.
Ask an elder in your family for a story or festival specific to your local river and share it in class.

Answer: Answers will vary. Model: The Godavari Pushkaram is a major festival on the Godavari river. Ask elders about local river festivals or stories in your area and present them to the class.

Q3 Ask an elder in your family: (a) What was the condition of rivers when you were a child? (b) What has changed since then?

SOLUTION

This is a family discussion activity — answers will vary.
Model answer based on common experiences shared by elders:
(a) Elders often recall that rivers used to be much cleaner, with clear water they could swim in and drink from. River banks were green with trees, and the water was full of fish.
(b) Since then, pollution from factories and sewage, plastic waste, over-extraction of water, and deforestation have reduced the water level and quality in many rivers. Some rivers that once flowed year round have become seasonal.

Answer: Answers will vary. Model: (a) Rivers were cleaner and fuller — elders could swim and drink from them. (b) Today many rivers are polluted, have less water, or flow only seasonally due to pollution, deforestation, and overuse.

Q4 Why do you think people built houses and cities near rivers in the past? Are rivers still important today in the same way?

SOLUTION

People built houses and cities near rivers because rivers provided everything they needed:
- Fresh water for drinking, cooking and bathing.
- Water for growing crops and feeding animals.
- Fish and other food from the river.
- A route for travel and trade by boat.
- Fertile soil near river banks (good for farming).

Rivers are still very important today. They still supply drinking water, irrigation, and power (through dams). Many cities like Delhi (on the Yamuna), Varanasi (on the Ganga), and Nashik (on the Godavari) still depend on rivers.
However, today we also have pipes, canals, and technology to carry water far from rivers, so people are not always forced to live right next to one.

Answer: People built near rivers for fresh water, food, fertile soil, and transport. Rivers are still equally important today for drinking water, farming, electricity, and trade — many cities still depend on them.

Q5 If you could create one new rule to protect rivers in your city or village, what would it be?

SOLUTION

This is an open-ended creative question — answers will vary.
Model answer: My rule would be — 'No factory, household, or farm can release untreated waste or chemicals directly into any river or water body. All waste must be treated or recycled before disposal.'
This would stop pollution at its source and keep rivers clean for people, animals, and future generations.

Answer: Answers will vary. Model: No untreated waste or chemicals may be released into rivers. All waste must be treated before disposal to keep rivers clean for everyone.

Q6 Think about a time when you wasted water. What could you have done differently?

SOLUTION

This is a personal reflection question — answers will vary.

Model answer: I once left the tap running while brushing my teeth, wasting several litres of clean water.

What I could have done differently: Turn off the tap while brushing and only use water to rinse — this simple step can save several litres every day.

Other common ways to save water: not running taps unnecessarily, fixing leaking taps, reusing water from washing fruits and vegetables to water plants.

Answer: Answers will vary. Model: Leaving the tap running while brushing. I could have turned it off and only used water to rinse — saving several litres. Small changes in habits make a big difference.

Q7 Can you design a simple water filter using everyday materials? What would you include and why?

SOLUTION

A simple water filter can be made using layers of different materials that trap dirt and impurities.

Design: Use a plastic bottle (cut in half) as a funnel and place the following layers from top to bottom:

1. Cotton or cloth — traps large particles like leaves and insects.
2. Sand (fine) — filters smaller dirt particles.
3. Gravel or small stones — supports the sand layer and filters larger debris.
4. Activated charcoal (if available) — absorbs chemicals and bad smells.
5. Cotton or cloth at the bottom — keeps the layers in place.

Water poured from the top passes through all the layers and comes out cleaner at the bottom.

Note: This home filter removes visible dirt but does not make water fully safe to drink — it still needs boiling or purification.

Answer: Design: Layers of cloth, fine sand, gravel, and charcoal in a cut plastic bottle. Each layer filters out different-sized impurities. The filtered water is cleaner but should still be boiled before drinking.

Q8 Imagine you are planning a new city near a river. What steps would you take to: (a) keep the river clean, (b) prevent floods during heavy rains, (c) ensure there is always enough water for everyone, even during summers.

SOLUTION

(a) Keep the river clean:

- Build sewage treatment plants so that no untreated waste enters the river.
- Create a green buffer zone (trees and plants) along the river bank so runoff and waste don't

flow directly in.
- Ban plastic use near the river and set up waste collection points.

(b) Prevent floods during heavy rains:
- Plant trees and maintain forests around the city — tree roots soak up rainwater and slow runoff.
- Build channels or canals to carry extra rain water away safely.
- Avoid constructing buildings right on the river bank; keep a flood-safe distance.

(c) Ensure enough water in summers:
- Build a small reservoir or tank to store rainwater and river water during the monsoon for use in summer.
- Promote rainwater harvesting in homes and schools.
- Educate citizens to use water efficiently and not waste it.

Answer: (a) Build sewage treatment plants, plant trees on river banks, ban plastic near the river. (b) Plant trees to absorb runoff, build drainage channels, avoid building on flood plains. (c) Build reservoirs to store monsoon water, promote rainwater harvesting, and encourage water-saving habits.