

Social Studies

(A Textbook of Social Studies)



With the blessings of :
Our Parents

Social Studies

4
(A Textbook of Social Studies)

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Preface

The topic of our society has many different facets. Our social existence starts in the family and eventually encompasses the entire planet. The "**Social Studies**" series has been carefully created for grades 1 to 5 to foster topic understanding and improve goal-oriented abilities.

While framing this series, we had in mind not only the requirements of the syllabus but also the problems faced by the students and the teachers. Keeping this in mind, we have incorporated the key features of this series:

Sincere efforts have been made through pictures, diagrams, and maps.

- ✿ **Key Highlights** talk about the core of the chapter.
- ✿ **Let's Start** with gives a kick start start to the chapters.
- ✿ **Fact File** teaches a unique fact related to the chapter which develops curiosity among the learners.
- ✿ **Let's Think** is a section which develops the learners' socio-emotional intelligence, enhancing conceptual, and creative thinking.
- ✿ **Word Treasure** contains the meaning of the difficult words.
- ✿ Well developed exercises ensures that the learners can understand the concept of the chapter.
- ✿ **HOTS Questions** arouse a child's curiosity taking it to High Order Thinking Skills.
- ✿ **Value Based** Questions are very unique as the learners learn politeness, gratitude, care and love, sympathy, generosity, kindness, friendship, devotion, honesty, patriotism, unity, teamwork, equality, courage, determination, perseverance, harmony, love for all creatures, and self-reliance are just a few of these values that have been selected for amplification.
- ✿ **Activity Zone** hones the co-scholastic skills of the learners.
- ✿ **Flow Chart** helps the learners to revise the chapter in one shot.

We have tried to present the series in a creative way and our aim is served when it meets the requirements of our students and teachers. Further suggestions for the improvement of the book are warmly welcomed.

– Publishers

DETAILED CONTENTS

S. No.	Chapter Name	Do You Know?	Key Words	Let's Wrap Up	Exercises	Discuss	HOTS	Activity Zone	Life Skills	Map Work	Teacher's Corner
1.	India : An Introduction	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
2.	The Northern Mountains	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching; Crossword Puzzle	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
3.	The Northern Plains	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
4.	The Great Indian Desert	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
5.	The Southern Plateau	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Odd one out	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
6.	The Coastal Plains and Islands	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	To give exact location of the place	To assist the teachers
7.	The Climate of India	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching; Crossword Puzzle	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	—	To assist the teachers
8.	Soil of India	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	—	To assist the teachers
9.	Forests and Wildlife	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	—	To assist the teachers
10.	Water Resources	To provide important information about the chapter	Difficult words	Summary of the chapter	Fill in the blanks; Short Question-Answer; MCQs; True/False; Matching	To learn while discussing	Questions based on thinking skills of the children	To hone the co-scholastic abilities of the children	To equip the children to deal with situations in real life	—	To assist the teachers

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India : An Introduction



Location of India in the South Asia

India is a beautiful country. It is our **motherland**. It is the seventh largest country in the world after Russia, Canada, China, USA, Brazil and Australia. It is the second most populous country in the world. India is blessed with diversity in landforms. It is a land of big plains, catching hills, high mountains, spread plateaus, forests, islands and a large desert. It has a long coastline. Many rivers flow through the country. India is located in the **southern** part of the continent of **Asia**.

India stretches for about 3,214 kilometres from Kashmir in the

North to Kanyakumari in the South and for about 2,933 kilometres from Gujarat in the West to Arunachal Pradesh in the East. Kanyakumari is the southern most tip of the mainland and Indira Point is the tip in the southern most Andaman and Nicobar islands.

The southern part of India is a peninsula. It is surrounded by the Bay of Bengal in the East, the Arabian Sea in the West and the Indian Ocean in the South.

In the North, India is well protected by very high mountain ranges.

Do You Know?

Indian Ocean is the only ocean which has been named after a country.



The land frontier of India is about 15,200 kilometres long. The coastline of the mainland is about 6,100 kilometres long. The total length of the coastline of India, including the scattered islands, is about 7,500 kilometres. It shares common land boundaries with Pakistan, Afghanistan, China, Nepal, Bhutan, Myanmar and Bangladesh.

The island nations of Sri Lanka and Maldives are our neighbours across the sea.

POLITICAL DIVISIONS

India got its freedom from the British rule on 15th August 1947. India is a union of 29 states and 7 Union Territories, including the National Capital Territory of Delhi. The offices of the Government of India are situated in New Delhi. A Union Territory is an administrative division of India ruled directly by the Central Government, unlike the states which are ruled by the State Governments.

Rajasthan is the largest and Goa is the smallest state in terms of area.

Uttar Pradesh is the most populated, whereas Sikkim the least populated state. Seven states in the North-eastern India are called the **Seven Sisters**. These are Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. India's population is about 1.2 billion. The people of India belong to different religions, tribes and races. They speak different languages, wear different dresses and eat different foods. But for India, they are all one.



Political divisions of India

STATES AND UNION TERRITORIES OF INDIA

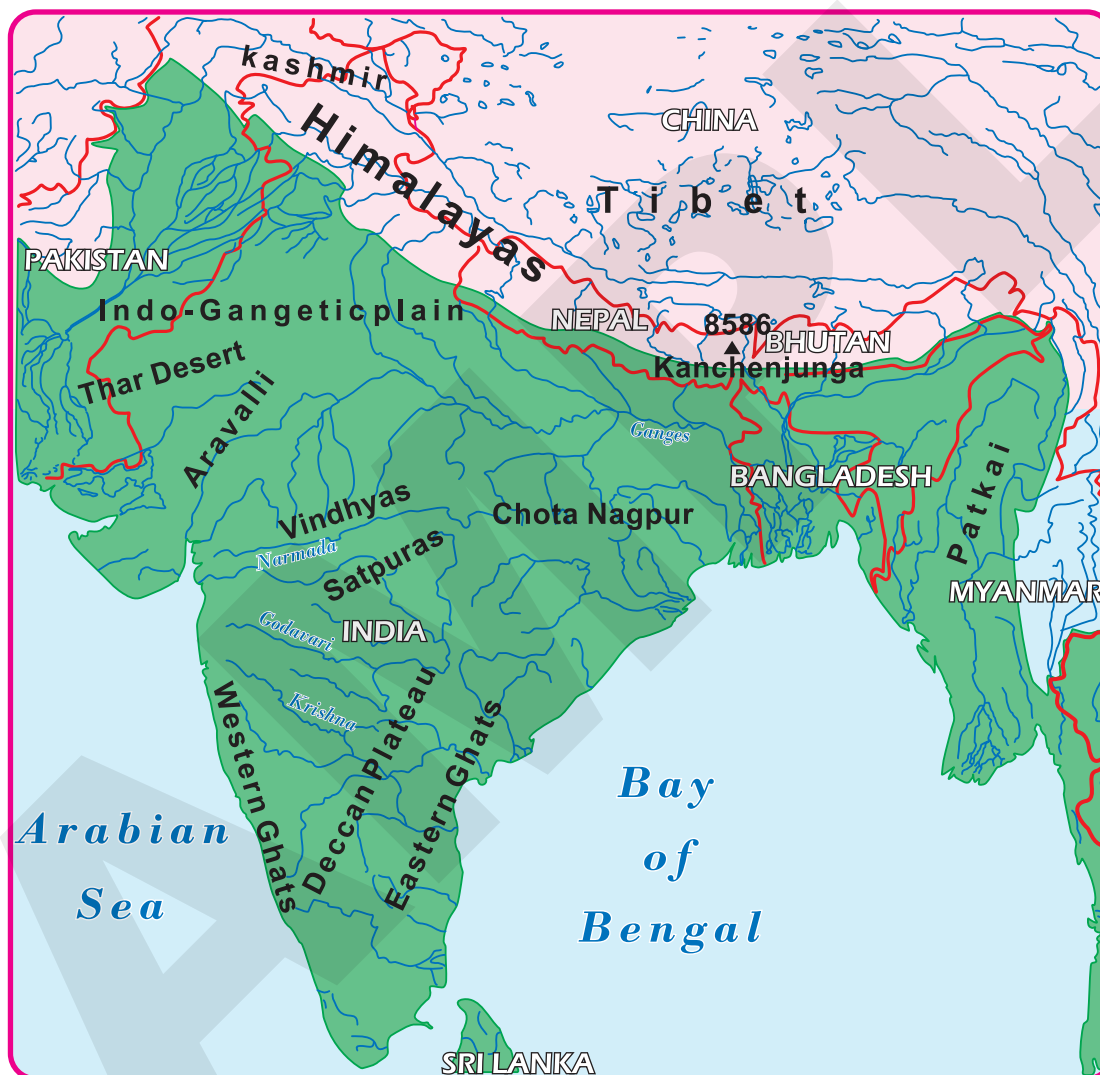
STATE	CAPITAL	
1. Andhra Pradesh	Amravati	
2. Arunachal Pradesh	Itanagar	
3. Assam	Dispur	
4. Bihar	Patna	
5. Chhattisgarh	Raipur	
6. Goa	Panaji	
7. Gujarat	Gandhinagar	
8. Haryana	Chandigarh	
9. Himachal Pradesh	Shimla	
10. Jammu & Kashmir	Srinagar; Jammu	
11. Jharkhand	Ranchi	
12. Karnataka	Bengaluru	
13. Kerala	Thiruvananthapuram	
14. Madhya Pradesh	Bhopal	
15. Maharashtra	Mumbai	
16. Manipur	Imphal	
17. Meghalaya	Shillong	
18. Mizoram	Aizawl	
19. Nagaland	Kohima	
20. Odisha	Bhubaneshwar	
21. Punjab	Chandigarh	
22. Rajasthan	Jaipur	
23. Sikkim	Gangtok	
24. Tamil Nadu	Chennai	
25. Tripura	Agartala	
		26. Uttar Pradesh Lucknow
		27. Uttarakhand Dehradun
		28. West Bengal Kolkata
		29. Telangana Hyderabad
UNION TERRITORY	CAPITAL	
1. Andaman & Nicobar Islands	Port Blair	
2. Chandigarh	Chandigarh	
3. Dadra & Nagar Haveli	Silvassa	
4. Daman & Diu	Daman	
5. Lakshadweep	Kavaratti	
6. National Capital Territory of Delhi	Delhi	
7. Puducherry	Puducherry	



PHYSICAL FEATURES

The land surface of India is not uniform. It varies from one place to another. India can broadly be divided into the following physical divisions:

- ◇ The Northern Mountains
- ◇ The Northern Plains
- ◇ The Great Indian Desert
- ◇ The Southern Plateau
- ◇ The Coastal Plains and the Islands



Physical divisions of India



- | | | |
|-----------|---|--|
| plateau | : | land with a large flat top which rises abruptly from the surrounding areas |
| physical | : | outer look or appearance of a thing |
| peninsula | : | a piece of land surrounded by water on three sides |

Let's Wrap Up

- ✦ India is the seventh largest country in the world.
- ✦ India is a large country located in the southern Asia. The southern part of India is surrounded by water on three sides.
- ✦ Pakistan, Afghanistan, China, Nepal, Bhutan, Myanmar, Bangladesh, Sri Lanka and Maldives are our neighbours.
- ✦ India has 29 states and 7 Union Territories.
- ✦ Seven states in the North-eastern India are called the Seven Sisters.
- ✦ India can be divided into five physical divisions.



A. Fill in the blanks with the words given in the box.

seventh Maldives Goa 3214 Chhattisgarh

1. Raipur is the capital of
2. India is the largest country in the world in terms of area.
3. India stretches for about kilometres from the North to the South.
4. Our neighbours across the sea are Sri Lanka and
5. is the smallest state in terms of area.

B. Write short answers for the following questions.

1. Which sea lies to the West of India?
2. How can we say that the southern part of India is a peninsula?
3. Where are the offices of the Central Government of India based?

C. Answer the following questions.

1. Which are the Seven Sisters?
2. How is a Union Territory different from a state?
3. Write the names of major physical divisions of India.

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The water body along the eastern coast of India is
 - a. Bay of Bengal ☐
 - b. Arabian Sea ☐
 - c. Indian Ocean ☐
 - d. Pacific Ocean ☐

2. How many Union Territories are there in India?

a. 7

☐

b. 12

☐

c. 28

☐

d. 31

☐

3. India is located in

a. Africa

☐

b. Asia

☐

c. Europe

☐

d. Australia

☐

4. Which of these states is not a part of the Seven Sisters?

a. Manipur

☐

b. Tripura

☐

c. West Bengal

☐

d. Mizoram

☐

5. The least populated state in India is

a. Goa

☐

b. Sikkim

☐

c. Haryana

☐

d. Mizoram

☐

E. Write 'T' for true and 'F' for false statements.

1. Indian Ocean lies in the South of India.

☐

2. India is protected by big plains in the North.

☐

3. India is a union of 25 states and 7 Union Territories.

☐

4. From the West to the East, India is about 2933 kilometres.

☐

5. Silvassa is the capital of Lakshadweep.

☐

Discuss

How did India get its name?



HOTS

Moorti is planning to spend his summer vacations in a Union Territory which should be an island. Can you suggest him few names?



Activity Zone

Memorize the names of states and their capitals and play a game with your friend. Start the game with the list given in the chapter by taking name of state from top and its capital.

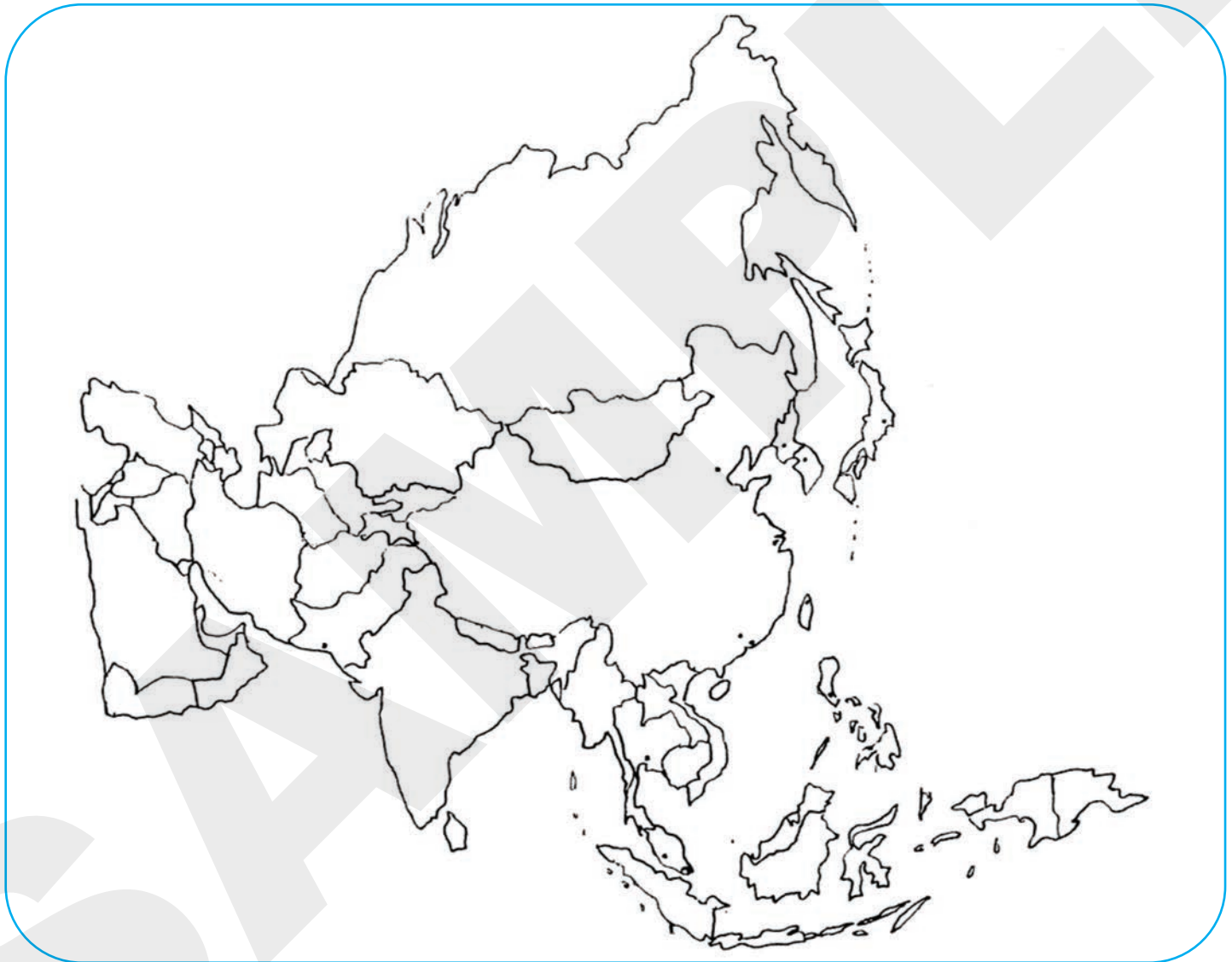


Life Skills

Discuss with your friends the pros and cons of dividing big states into smaller states.



On the given outline map of Asia, mark India and its neighbouring countries.



Teacher's Corner

Discuss in the class about the moments when all Indians are united, like wartime or cricket match.

The Northern Mountains

The Northern and North-eastern part of India have a long range of mountains. This chain of mountains is called the **Himalayas**.



The Northern Mountains



The Himalayas

The word 'Himalaya' in Sanskrit means the "**abode of snow**". These mountain ranges are shaped like an arc which extend from Jammu & Kashmir in the North to Arunachal Pradesh in the East for a length of about 3,000 km. In the North-eastern region, the Himalaya mountains run towards the South along the India-Myanmar border. Here, the mountain ranges are not very high and are called the Purvachal or the North-eastern Hills.

The Himalayas are the highest mountain range in the world. They act as a huge wall along the northern boundary of India.

A large part of the Himalayan Range is covered with snow throughout the year. Nine out of ten highest mountain peaks in the world are in the Himalayan Range. The world's highest peak **Mt. Everest** (8,848 m high) is located here. It is situated in Nepal.

Mount K2 (named by Henry Godwin-Austen) is the second highest peak in the world. It is located in the Karakoram mountain ranges, that lie to the North-west of the Himalayas. **Kanchenjunga**, **Nanga Parbat** and **Nanda Devi** are the other higher peaks in India.



The beauty of these high mountains has always attracted people all over the world. Many of them tried to climb the mountain peaks.

After so many unsuccessful attempts, Tenzing Norgay of India and Edmund Hillary of New Zealand reached the top of Mt. Everest in 1953. Bachendri Pal is the first Indian woman to climb it in 1984.



Edmund
Hillary



Tenzing
Norgay



Bachendri
Pal

Do You Know?

Junko Tabei of Japan is the first woman to climb Mount Everest.

Himalaya mountains consist of three mountain ranges that run alongside each other. They are :

- ◆ The Great Himalayas (Himadri)
- ◆ The Middle Himalayas (Himachal)
- ◆ The Lesser Himalayas (Shiwalik)

The Great Himalayas (Himadri) are the highest mountain ranges situated in the northern part of Himalayan range. They remain covered with snow throughout the year. There are many snow fields which give birth to the glaciers. These glaciers are sources to many Himalayan rivers like **Indus**, **Ganga**, **Yamuna** and **Brahmaputra**.

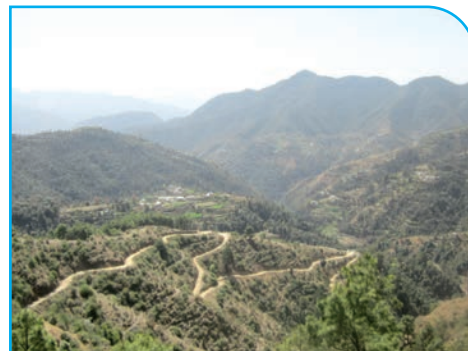
The Middle Himalayas (Himachal) are located the South of the Great Himalayas. They are not very high. There are many low areas, called **valleys**, in the Middle Himalayas. Many rivers flow through these valleys. **Orchards** of plums and apples are common in these valleys.



Glacier



Orchard of Apples



Shiwalik Hills



The Middle Himalayas also have sacred places like **Badrinath**, **Kedarnath** and **Amarnath**. The slopes of the Himachal are covered with valuable forests of **pine**, **willow**, **oak** and **deodar**. Many beautiful hill stations like **Shimla**, **Mussoorie**, **Ranikhet** and **Nainital** are situated here.

The Lesser Himalayas (Shiwalik) are located in the extreme South. They are the lowest and the slopes of these hills are covered with thick and valuable forests which are full of animals. The Shiwalik range slopes down to merge with the foot hills of the Himalayas, called the '**terai**' region.

The Purvachal ranges are located in the North-east. They are not very high. They are covered with thick forests. The North-east range includes the **Garo**, **Khasi**, **Jaintia**, **Naga**, **Lushai** and **Mizo** hills.

LIFE IN THE REGION

The living conditions in this region are diversified. This region is well suited to the climatic conditions. It includes Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal and the North-eastern states.

Jammu & Kashmir (J & K)

The beauty of Jammu & Kashmir is well described in history books. Jahangir, the Mughal emperor called it the "**Heaven on the Earth**". The natural beauty of the Kashmir Valley makes it very attractive for tourists. Jammu & Kashmir has two capitals. Srinagar is the capital in summer and Jammu in winter. The main languages spoken here are **Kashmiri**, **Dogri**, **Ladakhi** and **Urdu**.

The Shalimar gardens were built by the Mughal emperor **Jahangir**. The **Wular** and the **Dal** are famous lakes in the state. The beauty of **houseboats** and **shikaras** is a prominent feature of tourism.

Kashmir is cool in summer and very cold in winter. The people of Kashmir use **kangri** (a small pot with burning coal) to keep themselves warm. Many



Shikaras on the Dal Lake in Srinagar

men and women wear **phiran** (a woollen garment) and salwar. People drink **kahwa**, a special type of tea. The main festivals celebrated here are Eid and Shivratri.

In the summer season, most people work in the fields. They grow **rice**, **maize**, **rajma**, **vegetables**, **fruits** and **saffron**. In the winter season, they stay



People of Kashmir



Ladakh

state. People in Ladakh rear **yak** and **sheep**. Ladakhis follow **Buddhism** and speak **Ladakhi**.

at home and make handicrafts from wood and papier-mache. Some weave silk and woollen clothes. Kashmiri shawls and carpets are very famous all over the world. It is a very famous tourist place. Some places of tourist attraction are **Srinagar**, **Pahalgam**, **Gulmarg**, **Vaishno Devi temple** and **Amarnath caves**.

Ladakh is in the North-eastern part of the

Do You Know?

Kashmir is also called the 'Orchard of India' because of its huge varieties of fruits like apple, plum, walnut, pear, apricot etc.

Himachal Pradesh

The lifestyle of people of Himachal Pradesh is almost the same as that of Kashmir. Most people are engaged in farming activities. They grow **rice**, **maize**, **barley**, **fruits** and **vegetables**. They rear cattle like sheep and goats. The capital city of the state is Shimla.

Men wear kurta, pyjama and coat. Women wear long kurta with salwar. Also, men wear embroidered caps and women wear scarves called **dhazu**.

Dussehra is the main festival of Himachal Pradesh. Most people speak **Pahari**, **Punjabi** and **Kinnauri**. The major tourist centres are **Shimla**, **Dalhousie**, **Kullu** and **Manali**.



Kullu Festival



Uttarakhand

Uttarakhand includes Garhwal and Kumaon hill ranges. Farming is the main economic activity of people. **Mussoorie**, **Nainital** and **Almora** are popular hill stations. Other famous tourist attractions and pilgrim places include **Haridwar**, **Ranikhet**, **Badrinath**, **Kedarnath**, **Gangotri** and **Yamunotri**. Dehradun is the capital of Uttarakhand.



Haridwar

Sikkim and West Bengal



People of Sikkim

Sikkim is a small state of Eastern Himalayas. It has high mountains and deep valleys. The people here belong to three main tribes namely **Lepcha**, **Bhutia** and **Nepali**. The women wear **boku** and colourful jewellery made from beads. Sikkim is famous for **orchid** flowers. Gangtok is the capital city of the state.

Darjeeling is a popular hill station in West Bengal. It has many tea gardens which produce tea of good quality. The main economic activity of the people is tea cultivation. Kolkata is the capital city of West Bengal.



Tea Gardens in Darjeeling

North-eastern States

The North-eastern part of India consists of seven states. These are called the **Seven Sisters**. People in these states have their own identity. They have their own customs, dresses and languages. Most of them are farmers and craftsmen.



People of Meghalaya



People of Nagaland



Kanchenjunga, the third highest peak in the world, is located in Sikkim.

Arunachal Pradesh is the largest state in the North-east. This state has a small population. Itanagar is the capital city. People here live in **stilt** houses. These protect the people from rain and snakes. Brahmaputra river enters India through this state.

Do You Know?

The word Arunachal means the 'Land of Rising Sun'.

Farming and weaving are the main occupations of people in **Manipur**. They also make many beautiful articles from bamboo, cane and leather. The Manipuri dance is very popular. It is one of the famous classical dance of India. The capital of Manipur is Imphal.

River Brahmaputra has made **Assam** very fertile. **Rice** and **jute** are the main crops. Tea is grown on the lower slopes of the hills. Dispur is the capital and **Guwahati** is the largest city in

Assam. Manas and Kaziranga are the famous wildlife sanctuaries that attract many tourists. The people of the state speak **Assamese**. **Bihu** is the famous dance form of Assam.



Bihu Dance in Assam

Meghalaya means the 'Abode of clouds'. It gets the heaviest rainfall in the country. Mostly, tribal people live in this state. They belong to **Garo**, **Khasi** and **Jaintia** tribes. They grow **rice**, **jute**, **potatoes**, **sugarcane**, **pineapples** and **oranges**. Shillong is the capital city which is also a popular hill station.

The word **Mizoram** means the 'Land of hill people'. Aizawl is the capital city. Agriculture is the main occupation of the people. Most Mizos are **literate**. Most of them know English.

The capital of **Nagaland** is Kohima. **Rice**, **maize**, **millets** and **oranges** are grown here. The people of Nagaland wear **shawls** of different designs. They are accustomed of exposing their traditional culture on shawls.

Tripura is surrounded by Bangladesh from three sides. Agartala is its



Manipuri Dance



capital city. Rice and jute are the main crops. The Bamboo is also grown here. It is used to make handicraft items.

IMPORTANCE OF HIMALAYAN MOUNTAIN RANGES

The Himalayan mountain ranges are useful for us in many ways. Some of them are :

- ◇ They act like a wall on our northern borders and protect India from enemies.
- ◇ They protect us from the very cold winds of the North.
- ◇ They check the monsoon coming from the South which causes heavy rainfall.
- ◇ Rivers originating from the Himalayas never become dry.
- ◇ Passes and gaps in the mountains help in crossing them.
- ◇ The forests provide timber and herbs.
- ◇ There are many wildlife sanctuaries in the Himalayan forests.



glacier	:	slow moving river of ice
valleys	:	low areas surrounded by hills or mountains
pass	:	a narrow path over or through the mountain
orchard	:	a place where fruits are grown
boku	:	a long skirt worn by women in Sikkim

Let's Wrap Up



- ✦ The Himalayan mountain ranges are located in the North and the North-eastern parts of India.
- ✦ These mountain ranges are arc-shaped.
- ✦ Himalayas have many parallel ranges.
- ✦ The highest mountain ranges are called Himadri or the Great Himalayas.
- ✦ In the South of the Great Himalayas are situated the Middle Himalayas or Himachal.
- ✦ In the South of Himachal are located the low mountains called the Shiwalik.
- ✦ The mountain region in the North includes Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal and the North-eastern states.
- ✦ The Himalayan mountain ranges are useful for us in many ways.



A. Fill in the blanks with the words given in the box.

Snow valleys North-east Karakoram Nepal

1. Mt. Everest is situated in
2. K2 is located in the range.
3. Himalaya means the Abode of
4. Low areas surrounded by hills or mountains are called
5. Khasi Hills are in the part of India.

B. Write short answers for the following questions.

1. Which is the second highest peak in the world ?
2. Where are the Himalayas located?
3. Who conquered Mt. Everest for the first time?

C. Answer the following questions.

1. How do the Himalayas protect us from enemies?
2. Discuss the life of people in Himachal Pradesh.
3. Mention some advantages of the Himalayas.

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. Which Mughal emperor called Kashmir the "Heaven on the Earth"?
a. Babur ☐ b. Akbar ☐
c. Jahangir ☐ d. Shahjahan ☐
2. First Indian woman to climb Mt. Everest was
a. Bachendri Pal ☐ b. Santosh Yadav ☐
c. Tenzing Norgay ☐ d. Arti Saha ☐
3. The Southern area of Shiwalik range is known as
a. Mishmi ☐ b. Terai region ☐
c. Forest ☐ d. Kashmir ☐
4. Boku is a popular
a. language ☐ b. dress ☐
c. hill station ☐ d. drink ☐

5. Garhwal and Kumaon hill ranges are in
 a. Himachal Pradesh ☐ b. Sikkim ☐
 c. Uttarakhand ☐ d. Jammu & Kashmir ☐

E. Write 'T' for true and 'F' for false statements.

- The height of the Himalayan mountains is same everywhere. ☐
- Shalimar gardens were built by Shahjahan. ☐
- People of Ladakh follow Buddhism. ☐
- Darjeeling is a popular hill station in Meghalaya. ☐
- Tripura is surrounded by Bangladesh on three sides. ☐

F. Match the columns.

Column A

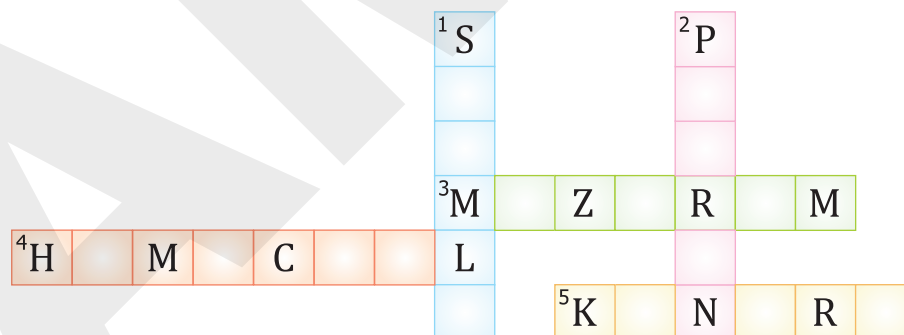
- Assam
- Sikkim
- Uttarakhand
- Jammu & Kashmir
- Himachal Pradesh

Column B

- Phiran
- Dhazu
- Guwahati
- Badrinath
- Boku

G. Complete the crossword puzzle with the help of given clues.

- The capital city of Himachal Pradesh
- A woollen garment used in Jammu and Kashmir
- It means the "land of the hill people"
- Other name of the Middle Himalayas
- Small pot with burning coal, used in Jammu and Kashmir



Discuss

How were the Himalayas formed?

HOTS

Some of the rivers are perennial, whereas the others are seasonal. Why is it so?



Activity Zone

Collect the pictures of the people of North-east in their traditional dresses and paste them in your scrapbook.

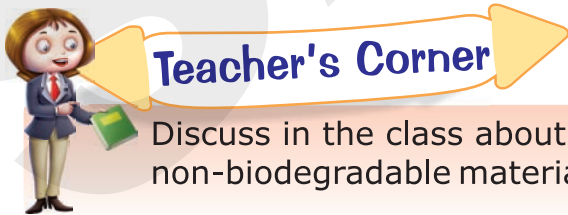


Life Skills

Make a model of a valley with clay with the help of your art teacher.



On the given outline map of India, mark the following :
Himalayan mountains, Yamuna river, Brahmaputra river, Shimla, Srinagar, Mt. Everest and Kanchenjunga



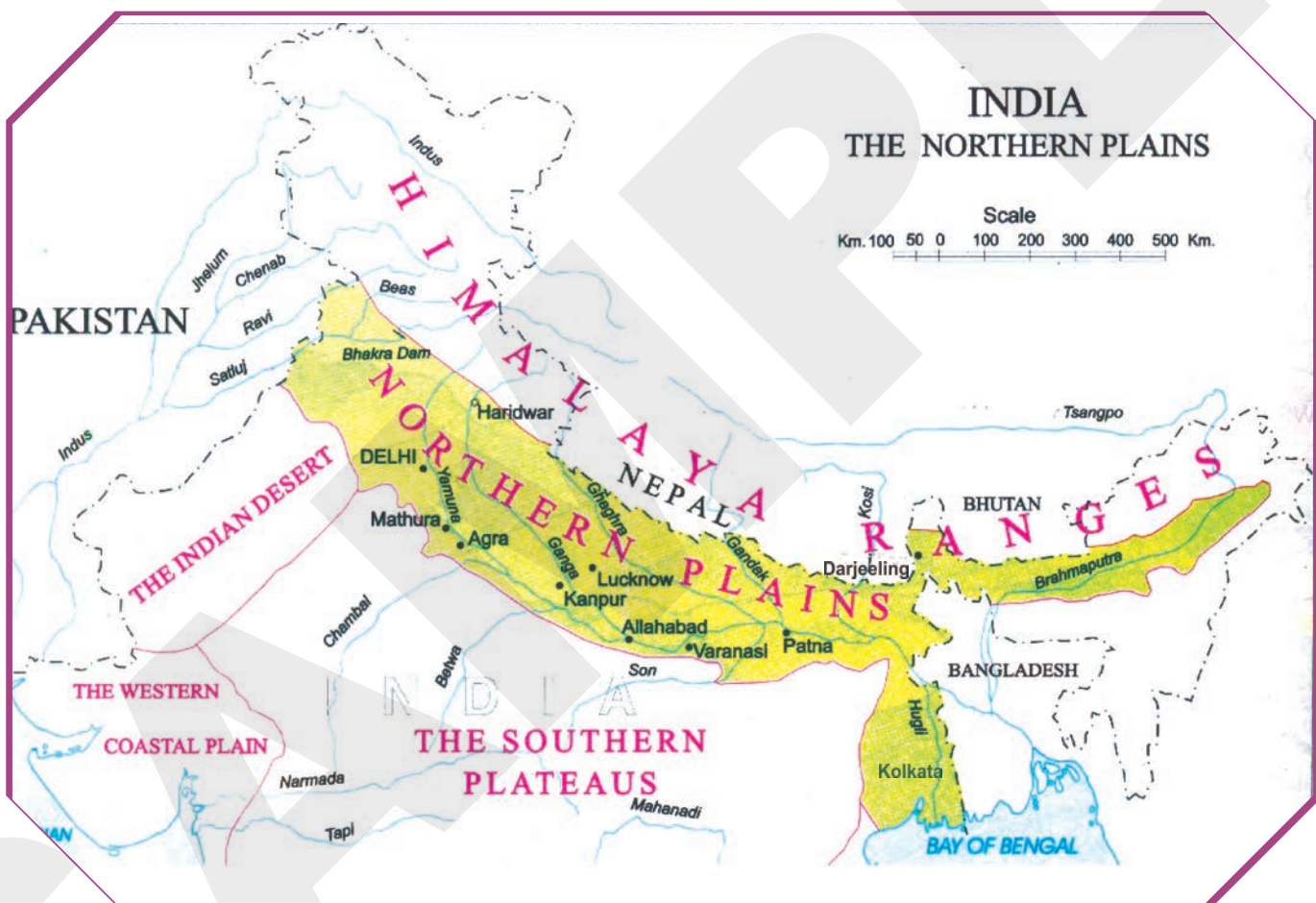
Teacher's Corner

Discuss in the class about the mountaineers polluting the Himalayas by leaving non-biodegradable materials like plastic.

3

The Northern Plains

The Northern Plains are located towards the South of the Himalayan region. They occupy the major part of the northern India. It is a large flat area which extends from Punjab in the West to Assam in the East. It includes the states of Punjab, Haryana, Delhi, Uttar Pradesh, Bihar, West Bengal, Assam and Tripura.



The Northern Plains of India

Many rivers originating in the Himalayas flow through the Northern Plains. Among them are the **Ganga**, the **Brahmaputra** and the **Satluj** are the most important ones. These rivers carry water throughout the year. These rivers also bring numerous broken pieces of rock, sand and silt with them. They are spread over the land especially during the floods. The fine



silt deposited along the river banks is called **alluvium**. The alluvial soil is soft, light and very fertile. It is very good for growing a number of crops. The area watered by a river and its tributaries is called its **basin**. Three rivers : Satluj, Ganga and Brahmaputra, have played an important part in shaping of the Northern Plains.

Do You Know?

The Northern Plains region is called the "Food Bowl of India."

THE SATLUJ BASIN

The Satluj basin is located in the western part of the Northern Plains. The river Satluj and its tributaries flow down this basin. The river Beas is the main tributary of the river Satluj. Both of these rivers join the river Indus in Pakistan. The **Bhakra Dam** has been built across the river Satluj. It provides electricity and water for irrigation. This mainly benefits Punjab and Haryana.



Rivers Beas and Satluj join the river Indus.



Bhakra Dam

THE GANGA BASIN

The Ganga basin lies between the Satluj in the West and the Brahmaputra in the East. It gets water from rivers Ganga, Yamuna and their tributaries. River Ganga originates from the **Gangotri glacier** in the Himalaya mountains. **Yamuna** is the main tributary of the Ganga. The Yamuna joins the Ganga at Prayag near Allahabad. This place is known as the **Sangam**. The Ganga, along with its tributaries, flows through the Northern Plains.

The river Ganga flows very swiftly in the mountains and enters the plains at Haridwar. Rivers like **Ghaghara**, **Gomti**, **Gandak** and **Kosi** come from the



Himalayas and join the Ganga. Rivers like **Chambal**, **Betwa** and **Son** join the Ganga from the South.

The river Ganga flows through Uttarakhand, Uttar Pradesh, Bihar and West Bengal. In West Bengal, it splits into two main branches. One branch is called the **Hugli** that flows through West Bengal. Kolkata, the second biggest city of India, is situated on the bank of this river. The other branch is called the **Padma**, that flows into Bangladesh and then joins the river Brahmaputra.

THE BRAHMAPUTRA BASIN

The easternmost part of the Northern Plains is shaped by the Brahmaputra basin. The Brahmaputra is the longest of the three great rivers of north India. It originates in Tibet where it is called the **Tsangpo**. It enters India through Arunachal Pradesh and flows through Assam before entering Bangladesh. The Brahmaputra and the Ganga form the largest delta in the world before falling into the Bay of Bengal. This is called the **Sunderbans Delta**.



A Tiger in Sunderbans Delta

These rivers flow through a very fertile part of India. Many cities have developed along the banks of these rivers. Some of them are industrial cities.



The Brahmaputra is known as the Jamuna and Meghna in Bangladesh.

LIFE IN THE REGION

Punjab

Punjab lies in the **Satluj** basin. The land here is fed by the rivers **Satluj**, **Beas** and **Ravi**. They provide water to irrigate the farmlands. Wheat, rice and sugarcane are the main crops grown here. The farmers of Punjab use modern machines such as tractors and harvesters for farming.



Golden Temple

Chandigarh is the capital of Punjab. It is a planned city. Amritsar is famous for the **Golden Temple**. It is very sacred to Sikhs. Other important cities are Jalandhar, Ludhiana and Patiala. **Guruparv**, **Baisakhi**, **Lohri** and **Diwali** are the main festivals celebrated in Punjab. People speak **Punjabi** and **Hindi**. **Bhangra** and **Gidda** are the popular folk dances. The people of Punjab like to eat **makke ki roti**, **sarson ka saag**, **dal**, **curd** and **lassi**.



Bhangra

Haryana

Haryana is the neighbouring state of Punjab. It lies to its South. The Yamuna and the Satluj rivers provide water for irrigation. Wheat, rice and sugarcane are the main crops grown here. Farmers use tractors, tube wells and water pumps. Many people are engaged in cattle rearing and dairy farming. The people of this state mainly speak **Haryanvi** and **Hindi**. Chandigarh is the capital city.

Do You Know?

Kurukshetra, the place where the battle of Mahabharata was fought between Kauravas and Pandavas, is in Haryana.

Delhi

National Capital Territory of Delhi or New Delhi is the capital of India. It is the seat of administration of our Union Government. Delhi is a great historical city. It has many famous monuments such as the Red Fort, Jama Masjid, Qutub Minar, India Gate, Lotus Temple, Akshardham Temple and Jantar Mantar. It is like a "**Mini India**". People from different parts of India live here.



Lotus Temple
in Delhi

Uttar Pradesh

Uttar Pradesh is the most populated state in India. Lucknow is its capital city. Other important cities are Meerut, Agra, Kanpur, Allahabad and Varanasi. The world famous **Taj Mahal** is in Agra.

The main crops grown here are wheat, rice, sugarcane, pulses and oilseeds. People of the state speak various dialects of **Hindi** and **Urdu**. **Holi**, **Dussehra**, **Diwali**, **Eid** and **Christmas** are the main festivals celebrated here.



Taj Mahal in Agra,
Uttar Pradesh



Bihar

Patna is the capital city of Bihar. It is the land of two great religious men **Buddha** and **Mahavira**. **Bodhgaya** and **Pavapuri** are the places associated with them. **Har Mandir Saheb** in Patna is the birth place of Guru Gobind Singh Ji. Rice is the major crop of the state. Wheat, sugarcane and jute are also grown here. **Hindi**, **Bhojpuri**, **Maithili** and **Urdu** are widely spoken in the state. **Diwali**, **Dussehra**, **Chhat**, **Eid** and **Teej** are the main festivals celebrated here.



West Bengal

West Bengal is known for the fertile plains made by the **Ganga** and the **Brahmaputra**. Since West Bengal has a coastline, fishing is an important occupation of the people. Rice and jute are the main crops of the state. Jute is used to make ropes, bags and carpets. Kolkata is its capital city. The people of the state speak **Bangla**. Sweets of West Bengal such as **Rasogulla** and **Sandesh** are popular all over India. They are fond of painting, music, dance and literature. **Durga Puja** and **Kali Puja** are the popular festivals celebrated here.



Howrah Bridge at Hugli

Assam

Assam is rich in mineral oil. **Digboi** was the first place where oil was drilled in 1889. The valley of Assam state is very fertile because of the river Brahmaputra. Rice and jute are the main crops grown here. **Tea** is grown in plenty on the lower slopes of the hills. Dispur is the capital and **Guwahati** is the largest city. The people of the state speak Assamese. They celebrate **Bihu**, a harvest festival.



Tea Garden

Tripura

Tripura is a tribal state. It is surrounded by **Bangladesh** on the **three sides**. Agartala is the capital city. Rice and jute are the main crops. Bamboo is also grown in plenty which is used in making handicrafts.

The Northern Plains are thickly populated because of its fertile soil which is rich in mineral salts. Major food crops are grown here. Industries like coal, jute and cement are scattered over the whole region. There are many factories in these cities. The wastes generated from the factories and the houses are released into the rivers and make the water **dirty**. This must be stopped immediately so that our rivers remain free from pollution.



Key Words

plain	: low level land
silt	: fine sand and mud carried by a river and deposited on its banks
tributary	: small river that flows into a larger one
delta	: triangle-shaped land formed when a river splits into several smaller rivers before entering the sea
harvester	: a machine used to cut crops



Let's Wrap Up

- ✦ The Northern Plains are located to the South of the Himalaya mountains.
- ✦ The Northern Plains extend from Punjab to Assam. This region comprises the fertile basins of three rivers : Satluj, Ganga and Brahmaputra.
- ✦ Punjab, Haryana, Delhi, Uttar Pradesh, Bihar, West Bengal, Assam and Tripura form the big part of the Northern Plains.
- ✦ Farming is the main occupation of the people. All major varieties of crops are grown.



Exercises

A. Fill in the blanks with the words given in the box

harvest Jute Indus Northern alluvium

1. Rivers Beas and Satluj join the river in Pakistan.
2. The region of Plain Region is called the "Food Bowl of India".
3. The fine silt deposited along the river banks is called
4. is used to make ropes, bags and carpets.
5. Bihu is a famous festival of Assam.

B. Write short answers for the following questions.

1. Name the branch of the river Ganga in Bangladesh.
2. Which is the largest delta in the world?
3. Name the state surrounded by Bangladesh on three sides.



C. Answer the following questions.

1. How do the Himalayan rivers have enough water throughout the year?
2. What is the location and extent of the Northern Plains?
3. Write the names of the states included in the Northern Plains.

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. Bhakra dam has been built across the river
a. Ganga ☐ b. Satluj ☒
c. Yamuna ☐ d. Brahmaputra ☐
2. Chhat is a popular festival of
a. Delhi ☐ b. West Bengal ☒
c. Bihar ☐ d. Tripura ☐
3. The Northern Plains extend from Punjab to
a. Haryana ☐ b. Kerala ☒
c. Assam ☐ d. Gujarat ☐
4. The Northern Plains occupy the major part of the
a. northern India ☐ b. southern India ☒
c. eastern India ☐ d. western India ☐
5. Kolkata is situated on the bank of river
a. Hugli ☐ b. Padma ☒
c. Brahmaputra ☐ d. Ganga ☐

E. Write 'T' for true and 'F' for false statements.

1. Golden Temple is very sacred to Muslims. ☐
2. Kanpur is the capital of Uttar Pradesh. ☐
3. River Beas is the main tributary of the river Brahmaputra. ☒
4. Uttar Pradesh is like a 'Mini India'. ☐
5. River Ganga meets river Yamuna at Prayag. ☐

F. Match the columns.

Column A

1. River Ganga
2. Kolkata
3. River Brahmaputra
4. Punjab and Haryana
5. Gidda

Column B

- a. River Hugli
- b. Tsangpo
- c. Punjab
- d. Gangotri
- e. Chandigarh



Discuss

Why are the Northern Plains densely populated?



Bihar is a flood prone area. Flood comes every year in Bihar. Suggest some measures so that the flow of water is controlled.



Activity Zone

Collect information about the historical places in the Northern Plains.



Life Skills

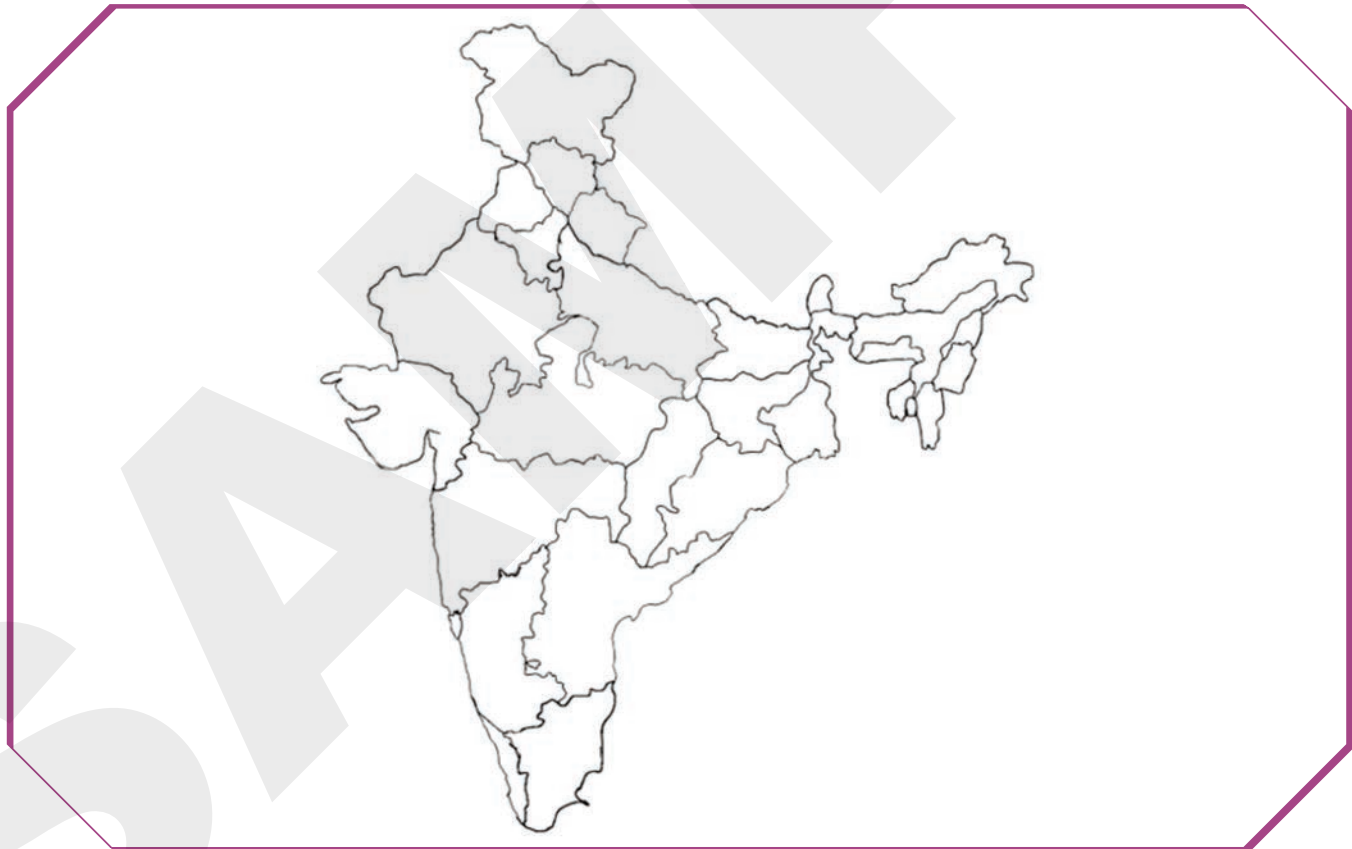
Discuss the methods of reducing the pollution of our rivers with your friends.



Map Work



On the given outline map of India, mark the following :
River Satluj, Kolkata, Bay of Bengal, Patna, Delhi, Lucknow and Agartala



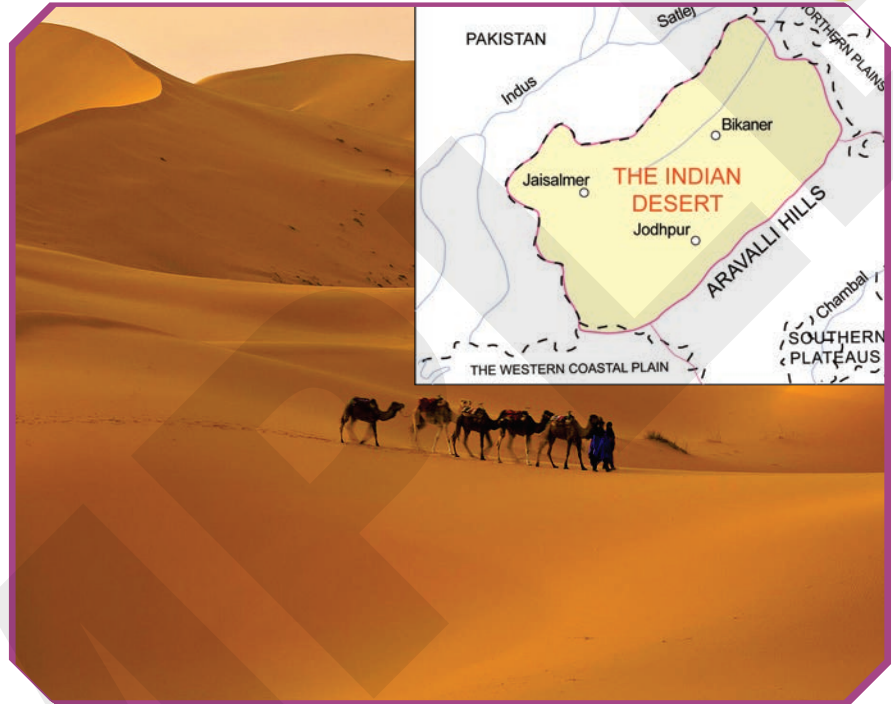
Teacher's Corner

Discuss in the classroom about the diversity found in different parts of Northern Plains.

4

The Great Indian Desert

Desert is a large flat sandy area in which very few plants grow. There is a very little rainfall in the area. "Thar Desert" or the Great Indian Desert lies to the West of Aravalli hills. It is about 800 kilometres long and 500 kilometres wide. It stretches from the **Rann of Kachchh** in Gujarat to the borders of Haryana. It covers a major part of Rajasthan. The important cities covered by the desert include Barmer, Jaisalmer, Jodhpur, Ganganagar, Suratgarh and Bikaner.



The Great Indian Desert

The deserts are mainly covered with sand. However, at some places one may find rocks and small sand hills. These hills are called **sand dunes**. The strong winds in the desert can move the sand dunes from one place to another. **Dust storms** are the common phenomena in the deserts.

The desert region remains hot and dry throughout the year. In summer, the days are very hot and the night are cool. In winter, the days are warm and the night are very cold. This is because the sand heats and cools quickly. There is a little rainfall. Thus, there are hardly any trees or bushes. The only plants that can survive on little water grow here, e.g. : **date-palm, thorny shrubs, cactus, keekar and babool**. There is always a shortage of water because of absence of permanent rivers. Thus, at many places, village women have to cover long distances to fetch water for daily use.

At some places, the underground water comes to





the surface. One can see date-palm trees and grasses growing there. Such a spot in the deserts is called an **Oasis**. Jaisalmer is one such Oasis. Recently, the Indian government has constructed the **Indira Gandhi Canal** to bring the water from river Satluj to some parts of the desert. Some parts of the sandy desert have already began to look green with trees and crops of many types. The canal is bringing happiness in the lives of farmers as they are now growing different crops such as wheat, jowar and bajra. The government has setup country's largest **wheat farm** at **Suratgarh**.

LIFE IN THE REGION

People in the desert have adapted to live with hostile weather conditions where some places are as hot as fire and some are as cold as ice. The people inhabit the lands wherever little water is available there to practice agriculture and other activities.

Life in the desert region is very tough. People mostly rear sheep, goat, camels and cattle. Some people travel from one place to another in search of food for themselves and their live-stocks. Such people are popularly called **banjaras**.

Camel is a very usefull animal in desert. It can survive without food and water for many days. People in the desert travel on camels or in the carts pulled by camels. The camel is called the "**Ship of Desert**". Camels provide milk and camel hair is used to make clothes. Its skin is used to make tents and leather jackets. It is also used to plough the fields and draw water from the wells.

Most of the houses in the desert region have flat roofs and small windows. The walls are made thick to keep the heat out and let the house remain cool.

The people of Rajasthan wear colourful clothes. Rajasthani women wear **ghagharas**, **cholis** and **odhnis**. Men wear **dhotis**, **kurtas** and **big turbans**.



Wheat farm



People of Rajasthan

Do You Know?

A group of people moving with a large number of camels is called a **caravan**.



The main festivals of Rajasthan are **Gangaur**, **Teej**, **Holi**, **Dussehra**, **Diwali** and **Eid**.

Jaipur is the capital city. It is called the "**Pink City**". Other big towns and cities are Ajmer, Kota, Udaipur, Jodhpur, Jaisalmer and Bikaner.

Do You Know?

Udaipur is also known as the '**City of Lakes**'.

The craftsmen of Rajasthan are expert in making beautiful tags, jewellery and decorative items. Rajasthan is famous for its beautiful temples, palaces and forts. Many forts and palaces were built by the **Rajput Kings** who ruled in this region years ago. Despite the tough life at desert, tourists from worldwide visit Rajasthan every year.



storms	:	very strong winds
sand dunes	:	a mound of loose sand
oasis	:	a place in desert which has fresh underground water
live-stocks	:	domestic animals raised for home use or profit

Let's Wrap Up

- ✦ Desert is a region that receives almost no rainfall and hence has little vegetation.
- ✦ Plants like date palm, thorny shrubs, cactus etc., which require less water, grow here.
- ✦ Camels are commonly used in the desert for transportation.
- ✦ Oasis are spots in the deserts where underground water reaches the surface.
- ✦ Government has started many developmental projects for improvements in deserts.
- ✦ People of this region like to wear colourful clothes and celebrate many festivals.
- ✦ This state is known for its historical places, temples, forts and monuments.



A. Fill in the blanks with the words given in the box.

colourful Jaipur flat rainfall Aravalli

1. Thar Desert lies to the West of hills.
2. There is very little in deserts.
3. Most of the houses in the desert region have roofs.
4. is called the Pink City.
5. The people of Rajasthan like to wear dresses.

B. Write short answers for the following questions.

1. What is the other name of the Great Indian Desert?
2. Name a famous canal of Rajasthan.
3. Which animal is also called the "Ship of Desert"?

C. Answer the following questions.

1. Why is life tough in desert area?
2. What is an Oasis?
3. What are the different uses of camels?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. Small pockets of water in deserts are called
a. Sand dunes ☐ b. Sand storms ☐
c. Oasis ☐ d. Bawli ☐
2. Which of the following is not a city of Rajasthan?
a. Jaisalmer ☐ b. Chandigarh ☐
c. Udaipur ☐ d. Jaipur ☐
3. Thar Desert is mainly located in
a. Punjab ☐ b. Rajasthan ☐
c. Delhi ☐ d. Gujarat ☐
4. The sand heats and cools
a. quickly ☐ b. slowly ☐
c. permanently ☐ d. never ☐
5. Udaipur is known as the City of
a. Rivers ☐ b. Forts ☐
c. Temples ☐ d. Lakes ☐



E. Write 'T' for true and 'F' for false statements.

1. Camel skin is used to make tents and leather jackets.
2. Human beings are also responsible for the creation of deserts.
3. Indira Gandhi Canal brings water from the river Satluj.
4. Many big rivers pass through the Indian deserts.
5. The summer is hot and winter is cold in plains.



Discuss

Why do you think the life in the Thar Desert is undergoing a change in recent days.



HOTS

When most part of Rajasthan is facing the wrath of the Sun, Mount Abu is very cool. How is it possible?



Activity Zone

Make a model of an oasis with the help of sand, tray, small grass and camel toys.



Life Skills

Thar Desert is a drought prone area. Discuss in the classroom how the effects of drought can be minimised.



Map Work



On an outline map of India, mark and label the following :
Great Indian Desert, Satluj river, Jaisalmer, Aravalli mountain range, Pakistan, Rann of Kachchh, Indira Gandhi Canal and Haryana.



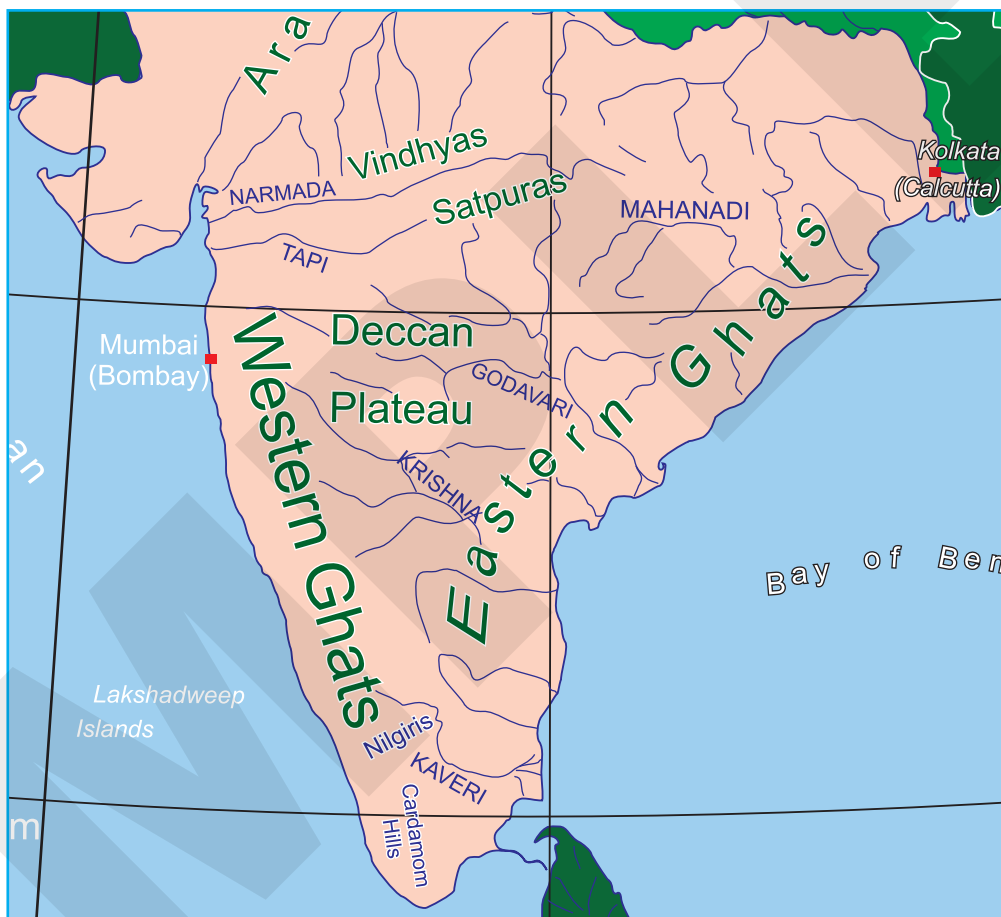
Teacher's Corner

Tell the students about the bravery of famous Rajputs like Prithviraj Chauhan.

The Southern Plateau

A **plateau** or **tableland** is an area of flat land located higher than the land around it. It may have one or more sides with slopes. The height of the plateau often varies from one place to another.

The Southern Plateau is located to the South of the Northern Plains. It covers nearly half of the area of India. It is triangular in shape with a broad base in the North and a narrow apex in the South. It stretches for about 1,600 km from the North to the South and 1,400 km from the East to the West.



The Southern Plateau

Do You Know?

Tibetan Plateau is the highest plateau in the world.

The Southern Plateau is made up of the ancient igneous and metamorphic rocks. It is the oldest part of the Indian sub-continent. It is surrounded by hills from all sides. The Aravalli Hills and the Rajmahal Hills are located in the North-west and the North-east respectively. The Eastern Ghats and the Western Ghats are the eastern and western boundaries of the Southern Plateau respectively.



Most of the rivers flowing here are not as large as those in the Northern Plains. But they flow with great speed and form **waterfalls** on their way. Jog Falls in Karnataka is the highest waterfall in India.

This plateau is divided by the river Narmada into two parts :

- ◆ The Central Highland
- ◆ The Deccan Plateau

THE CENTRAL HIGHLAND

The Central Highlands are surrounded by the Aravalli Hills in the North-west, the Vindhya Range in the South and the Chotanagpur Plateau to the East. The Malwa Plateau is in the centre. The Satpura Range is between rivers Narmada and Tapi. Aravalli range is one of the oldest mountain ranges in the world.

Some of the rivers of the Central Highlands join the Ganga and Yamuna from the South. Chambal, Betwa and Son are few of its rivers. **Black soil** is found in this region. It is good for crops such as cotton and sugarcane.

Chotanagpur Plateau covers Jharkhand, the western Odisha and the North-eastern Chhattisgarh. These regions are full of minerals such as **coal**, **bauxite** and **mica**. The main mining centres are **Jharia**, **Giridih**, **Bokaro** and **Raniganj**.

THE DECCAN PLATEAU

The Deccan Plateau is located to the south of Satpura range. It extends upto to the southern tip of peninsular India. The highest peak of this region is **Anai Mudi**. It is located in Kerala. It is surrounded by the Western and Eastern Ghats. These ghats meet each other at the Nilgiri Hills. The Western Ghats include the Sahyadri, Nilgiris, Anamalai and Cardamon Hills. Rivers such as **Mahanadi**, **Godavari**, **Krishna** and **Kaveri** originate from the Western Ghats and flow towards the East.

The Eastern Ghats are broken into smaller hill ranges by rivers coming from the Western Ghats. Most of them fall into the Bay of Bengal. **Godavari** is the longest river among the rivers of the Deccan Plateau. Rivers **Narmada** and **Tapi** flow towards the West and fall into the Arabian Sea.

LIFE IN THE REGION

The lifestyle and culture of the people in plateau region is quite interesting and unique.

One can find out that the clothes they wear, the food they eat, the housing and the celebrations they have, are incredible. This region covers the states of **Odisha**, **Chhattisgarh**, **Jharkhand**, **Madhya Pradesh**, **Maharashtra**, **Andhra Pradesh**, **Karnataka**, **Tamil Nadu** and **Telangana**.

Madhya Pradesh



Khajuraho Temple

Madhya Pradesh lies in the centre of India. It is a landlocked state. Bhopal is its capital city. Other big cities in the state include Gwalior, Indore and Jabalpur. Pachmarhi is a beautiful hill station. The Kanha National Park and the the Bandhavgarh National Park are the famous **tiger reserves**. **Khajuraho** temples made by the **Chandela rulers** are the world famous. Panna city has diamond mines. Wheat and cotton are the main crops grown here.

Chhattisgarh

Chhattisgarh lies to the South of the Chotanagpur Plateau. Raipur is its capital city. The major crops grown here include rice, linseed, betel and watermelon. Bilai is famous for its steel plant. The state is rich in minerals. **Coal**, **iron** and **manganese** are mined here.

Jharkhand

Jharkhand is rich in minerals and forest resources. Ranchi is its capital city. There are big industries here because of availability of plenty of resources like **iron**, **coal** and **manganese**. Other big cities of the state are Jamshedpur, Bokaro and Dhanbad. River **Damodar** flows through the state.

Do You Know?

India's largest steel plant is located in Bokaro.

Odisha

Odisha is situated in the North-eastern part of the Indian peninsula. Bhubaneshwar is its capital city. Cuttack is a major industrial city. Odisha



Sun Temple of Konark

is famous for its beautiful temples such as Lingaaraja Temple, Jagannath Temple, Sun Temple etc. **Rathayatra** of Puri and the Sun Temple of Konark attract many tourists. **Paradip** is a famous port in Odisha. Agriculture is the mainstay of economy. Rice and jute are the main crops. Odisha is famous for its textile and silver work. **Odissi** is a famous classical dance form of Odisha. Most of the people speak **Odia**.

Maharashtra

Maharashtra is located in the North-western part of the Deccan Plateau. Maharashtra is a plateau of plateaus. Its western upturned rims rise to form the Sahyadri Range, parallel to sea coast and its slopes gently descend towards the East and the South-east.



Ajanta and Ellora caves

Rivers like **Godavari** and **Krishna** flow through the state. Mumbai is the capital of Maharashtra.

The lava soil or black soil is good for growing cotton, sugarcane, groundnut and millet. Some fruits like mangoes, oranges and bananas are also grown here.

Maharashtrian men mostly wear **shirt** and **dhoti** while women wear **saree** tied in a unique way. People speak **Marathi** and **Konkani**. The main festivals are **Ganesh Chaturthi**,

Navratri, **Diwali** and **Christmas**.

Lavani is a popular folk dance. **Tamasha**, a type of dance drama, is very popular here. Important tourist centres of the state are caves of **Ajanta**, **Ellora**, **Elephanta**, **Kanheri** and **Karla**, **Mahabaleshwar**, **Matheran** and **Panchgani**.

Karnataka

Karnataka lies to the South of Maharashtra. It has very old history. Bengaluru (earlier Bangalore) is the capital of the state. It is a major hub of the information technology. Other big cities are Mysuru (Mysore) and Mangaluru (Mangalore). Rivers **Krishna**, **Tungabhadra** and **Kaveri** flow through the state.

Farming is the main occupation of the people of Karnataka. They grow cotton, sugarcane, coffee, spices and jowar. **Teak** and **sandalwood** trees are well-known forest products. Aeroplane, watches, electric goods and silk are some famous industries. **Kolar mines** are famous for gold. The people speak **Kannada** here. Men usually wear a **lungi** and **shirt** while women wear colourful **silk sarees**. Handicraft items made of sandalwood are very famous. Karnataka is known for its heritage monuments and **Eco-tourism** destinations.

Andhra Pradesh

Andhra Pradesh lies to the North-east of Karnataka. It is bounded on the North by Odisha and Chhattisgarh, on the South by Tamil Nadu, on the East by the Bay of Bengal and on the West by Maharashtra and Karnataka.

Amravati is the capital of the state. Agriculture is the main occupation of the people of Andhra Pradesh. They grow sugarcane, jowar, tobacco, rice and groundnut. It is the largest producer of tobacco in India.

People mostly speak **Telugu** here. Urdu is also spoken in Hyderabad. **Kuchipudi** is the most popular dance form. Andhra Pradesh is famous for **bidri work** on brass and copper.

The **Charminar** and **Salarjung Museum** are popular tourist attractions. The **Venkateswara Temple** at Tirupati is a pilgrimage centre.

Dussehra and **Eid** are the important festivals celebrated in the state.



Kuchipudi

Telangana

Telangana is one of the 29 states in India. It is bordered by the states of Maharashtra to the north and north-west chhattishgarh to the north, Karnataka to the west and Andhra Pradesh to the east and south.

Hyderabad is the capital of Andhra Pradesh. The economy of Telangana is mainly driven by agriculture. Rice is the major food crop. Other important crops are cotton, sugarcane, mango and tobacco.

People mostly speak Telugu here. Urdu is also spoken in Hyderabad. Perini Thandavam is an ancient dance form from Telangana. Charminar,



Golconda fort, Hussain sagar are some of the famous tourist attraction in Telangana. Bonalu, Bathukamma Panduga and Vijaya Dashami are some important festivals celebrated in the state.

Tamil Nadu

Tamil Nadu lies to the south of Andhra Pradesh. It is bounded on the North by Andhra Pradesh and Karnataka, on the South by the Indian Ocean, on the East by the Bay of Bengal and on the West by Kerala. It is famous for its temples. The main temple towns are **Kanchipuram**, **Madurai**, **Thanjavur** and **Tiruchirappalli**. Chennai, the capital city of Tamil Nadu, also has many temples. Tamil Nadu is famous for its silk sarees. **Kanchipuram** and **Madurai** are the main silk weaving centres.



Bharatnatyam

Farming is the main economic activity of the state. Rice, sugarcane, cotton and groundnut are the main crops grown here. **Tea** and **coffee** are grown along the slopes of the Nilgiri Hills.

Bharatnatyam is the most popular dance form. People mostly speak Tamil. **Pongal** is the most popular festival. People like to eat **rice**, **idli**, **dosa**, **upma**, **sambhar** and **curd**.



lava	: molten matter thrown out by a volcano
ghats	: mountain chains near the sea
peninsula	: piece of land surrounded by water on three sides
plateau	: flat land on a raised surface
bidri work	: inlaying of silver on a brass or copper base

Let's Wrap Up

- ✦ The Southern Plateau is triangular in shape. River Narmada divides it into two parts : the Central Highlands and the Deccan Plateau.
- ✦ Chotanagpur Plateau is rich in minerals.
- ✦ The Deccan Plateau stretches from the Satpura Range to the southern tip of India.
- ✦ The Southern Plateau includes Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu and Telangana.



Exercises

A. Fill in the blanks with the words given in the box.

Odisha Godavari Chotanagpur Black

1. soil is good for growing cotton and sugarcane.
2. The Plateau is rich in mineral resources.
3. river is the longest in the Deccan Plateau.
4. Paradip is a famous port in

B. Write short answers for the following questions.

1. What is the capital of Chhattisgarh?
2. Name the main rivers of the Central Highland that join the Ganga and the Yamuna.
3. In which state is the Salarjung museum situated?

C. Answer the following questions.

1. How are rivers of the Southern Plateau different from the Northern Plains?
2. Name the states covered by the Southern Plateau.
3. Why do most of Deccan rivers flow from the West to the East?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. Cuttack is a major industrial city of
a. Odisha ☐ b. Uttarakhand ☐
c. Chhattisgarh ☐ d. Maharashtra ☐
2. The Eastern and Western Ghats meet each other at the
a. Raisina Hills ☐ b. Anamalai Hills ☐
c. Nilgiri Hills ☐ d. Rajmahal Hills ☐
3. Jog Falls is situated in
a. Kerala ☐ b. Tamil Nadu ☐
c. Andhra Pradesh ☐ d. Karnatka ☐
4. From the East to the West, the Southern Plateau stretches for
a. 1,400 km ☐ b. 1,600 km ☐
c. 1,700 km ☐ d. 1,900 km ☐

E. Write 'T' for true and 'F' for false statements.

1. The Rajmahal Hills are on the western side of Deccan Plateau. ☐
2. Most of the rivers except two flow into the Bay of Bengal. ☐

3. Karnataka is famous for bidri work on brass and copper.
4. Dams are built across the rivers to store water for irrigation.

F. Circle the odd one out in each row.

- | | | | |
|-----------------|---------------------|------------------|----------|
| 1. Kanchenjunga | Sahyadri | Anamalai | Nilgiri |
| 2. Krishna | Ganga | Godavari | Mahanadi |
| 3. Odissi | Odiya | Rath Yatra | Ranchi |
| 4. Bhopal | Kanha National Park | Khajuraho Temple | Odia |



Discuss How does a plateau differ from a mountain?



Deepa's grandparents live in Madhya Pradesh. She is planning to spend her winter vacations with them. Which important places she can visit there and why?



Activity Zone

Collect the names of religious places located in the Southern Plateau. Categorise them into two parts : those you have seen and those you have not seen.



Life Skills

Make a list of the things that you should not do when you are in a National Park.



Map Work



On an outline map of India, locate the Southern Plateau. Also denote the following : Eastern Ghats, Chotanagpur Plateau, Anai Mudi, River Kaveri, Aravalli Hills and Panna.

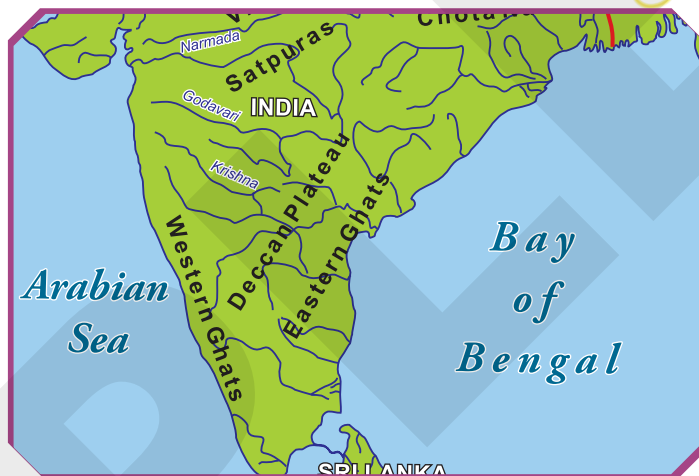


Teacher's Corner

Discuss in the classroom why the climate of the plateau region is different from that of Northern Mountains.

The Coastal Plains and Islands

The Southern part of India, which is triangular in shape, is surrounded by the water bodies on three sides : Arabian Sea in the West, Bay of Bengal in the East and the Indian Ocean in the South. Such a mass of land, which is surrounded on three sides by water, is called a **Peninsula**. All round the peninsula lies the **coast**. A coast is a place where water of the sea meets the land.



The Coastal Plains

The Deccan Plateau is surrounded by a narrow coastal plain towards the West, called the Western Coastal Plain and towards the East, called the Eastern Coastal Plain. These plains extend along the coast for around 6,000 km, from Gujarat in the West to West Bengal in the East. They meet at Kanyakumari. All along the coast, fishing is carried on a large scale.

WESTERN COASTAL PLAINS

The Western Coastal Plain is located between the Western Ghats and the Arabian Sea. It begins from Gujarat in the North and ends at Kanyakumari in the South. It passes through Maharashtra, Goa, Karnataka and Kerala. The



Lighthouse on Konkan Coast

western coastline is at its broadest between the **Gulf of Kachchh** and the **Gulf of Khambhat**.

The Western Coastal Plain is divided into two main parts. The northern part is called the **Konkan Coast** and the southern part is called the **Malabar Coast**. Konkan coast is very narrow and rocky. The hills go up to the sea shores in many places. **Lighthouses** have been built along the coast to warn ships against rocks in water.



Mumbai, the **commercial capital** of India, is located on this coast. The Konkan Coast is rich in oil deposits. The Malabar Coast has a large number of **lagoons**, backwaters and raised beaches. Lagoons, locally called **kayals**, are small and shallow saltwater lakes or ponds that cut themselves off with one another by canals. These are used for transporting goods.

The climate here is hot and humid throughout the year. People grow tobacco, banana, rice, coffee, sugarcane, cloves, cashew nuts and pepper. Coconut trees are found all along the Malabar Coast. The export of fresh and dry fish is an important packaging industry.

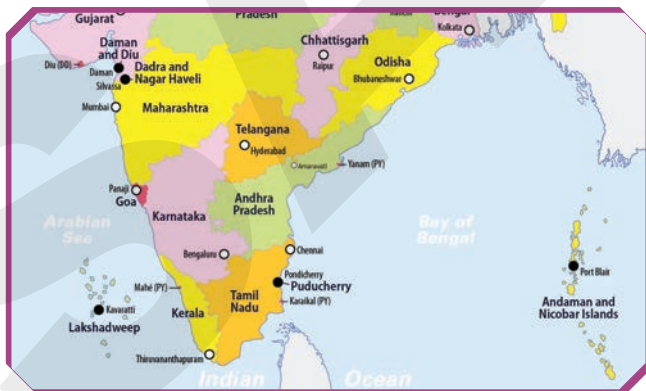
EASTERN COASTAL PLAINS

The Malabar Coast receives heavy rainfall. The Eastern Coastal Plain lies between the Eastern Ghats and the Bay of Bengal. It begins from West Bengal in the North and ends at Kanyakumari in the South. It is broader than the western coastline. The Eastern Coastal Plain is divided into two parts. The northern part of this coastline is called the **Northern Circars** and the coastline stretching from Andhra Pradesh to Kanyakumari is called the **Coromandel Coast**.



Coromandel Coast

The deltas formed by the rivers **Godavari**, **Krishna**, **Kaveri** and **Mahanadi** on the eastern coast are fertile. **Chilka lake**, India's largest lagoon, lies in Odisha in these coastal plains. There are many important harbours along this coast, like harbours of Chennai and Vishakhapatnam. The beautiful **Marina Beach** is also located on this coast in Chennai.



Groups of Islands

THE ISLANDS

There are two groups of islands which are also a part India. The Lakshadweep group is in the Arabian Sea and the Andaman & Nicobar Islands are in the Bay of Bengal. An island is surrounded on all sides by sea.

Andaman & Nicobar Islands

Andaman & Nicobar Islands is a group of over 500 islands. Some of them are still uninhabited. This group of islands is like an arc in which the Andaman islands are in the North, while the Nicobar islands are in the South. They are separated by the **10 Degree Channel**. The southern tip of this group is **Indira Point**. Port Blair is the capital city.



Lakshadweep Islands

The Lakshadweep Islands are near the Malabar Coast of India. There are over 30 islands in this group. They have a flat surface. People here are mostly farmers or fishermen. Kavaratti is the capital of this Union Territory.

Do You Know?

Lakshadweep Islands have been formed due to large amount of coral deposits. Such islands are called **atolls**.

LIFE IN THE ISLANDS

Most of the islands are covered with the thick forests. The people here live in houses built in their old and traditional way. **Barren Island**, the only active volcano in South Asia, is located in Andaman Island.

Many years ago, when the British ruled over India, these islands were called **Kala Pani**. Freedom fighters of India and outlaws were imprisoned in a jail called **Cellular Jail** in Port Blair.



Cellular Jail

LIFE IN THE COASTAL PLAINS

The life of the people at the Eastern and the Western Coastal Plains depends on the climatic condition and the topographical location.

Both the Eastern and Western Coastal Plains cover some parts of the eastern states like Karnataka, Kerala, Odisha, West Bengal and Tamil Nadu, Telangana and the western states like Goa, Maharashtra and Gujarat.



LIFE IN THE EASTERN COASTAL PLAINS

West Bengal

West Bengal is situated in the Eastern Coastal Plains. The soil of the region is very fertile. The main crops grown here are rice and jute. Kolkata is the capital city. There are many jute and textile mills here. Fish and rice is their **staple** diet.

Odisha

Odisha is situated at the Eastern Coast. Puri and Bhubaneshwar are the temple-towns. Odisha is also famous for its handicraft items. **Chilka lake**, with its bird sanctuary, is a famous tourist destination.



Chilka Bird Sanctuary

Andhra Pradesh

Rivers **Godavari** and **Krishna** form deltas in the coastal areas of Andhra Pradesh. Farming is the main occupation. Rice is the main crop grown here. **Vishakhapatnam** is an important seaport. It has a ship- building yard, an iron and steel plant and an oil refinery.

Tamil Nadu and Puducherry



Vivekananda Memorial

The **Kaveri** river forms delta along the Coromandel Coast in Tamil Nadu. Rice is the main crop grown here. Chennai is famous for **cotton** and **silk** sarees. The silk sarees from Kanchipuram, a city near Chennai, are very famous. The **Marina beach** at Chennai is the longest beach in India.

Kanyakumari in Tamil Nadu is the Southernmost tip of the Indian mainland. Oceans like the Bay of Bengal, the Arabian Sea and the Indian Ocean meet here. **Vivekananda Memorial** is also situated here. Puducherry, a Union Territory, lies towards the South to Chennai. It was earlier under French rule. It is famous for Aurobindo Ashram and Matri Mandir.

Telangana

Telangana is situated on the Deccan Plateau, in the central stretch of the eastern seaboard of the Indian Peninsula. It covers 114,840 square kilometres (44,340 sq mi). The region is drained by two major rivers, with about 79% of the Godavari River catchment area and about 69% of the Krishna River catchment area, but most of the land is arid.[4] Telangana



is also drained by several minor rivers such as the Bhima, the Maner, the Manjira and the Musi.

LIFE IN THE WESTERN COASTAL PLAINS

Karnataka

The major coastal areas in Karnataka are mostly covered by thick **teak** forests. Coconuts and a variety of spices are grown here. Mangaluru (Mangalore) is an important seaport along the coast. We have already read about the people, dresses and festivals of Karnataka in the previous chapter.

Gujarat

Gujrat lies in the North-West of India. The people of Gujarat are mostly traders and farmers. The main crops are cotton, jowar, bajra, wheat and sugarcane. Dairy farming is popular in and around **Anand**. **Amul**, famous for dairy products, is situated here. Petroleum and natural gas have been found in Ankleshwar.

The **port of Kandla** is used to export and import goods. Salt is made in the coastal areas by drying sea water.

Ahmedabad is the largest city and has many textile mills. Sabarmati Ashram, the home for Gandhiji for many years, is situated here. Gandhinagar is the capital city of Gujarat. **The Gir National Park** is home to the Asiatic Lion.

Gujarati is spoken by most of the people. Men wear **churidar pyjama** and **kurta**. Women wear **saree** or **lehenga**. **Raas-garba** is a popular folk dance.

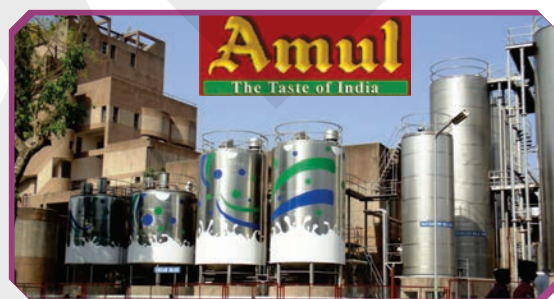
Maharashtra

Maharashtra is situated on the Konkan coast. Mumbai is the capital of Maharashtra. It is the largest seaport of India and an important centre for business and industry.

Major food grains and fruits are grown in Maharashtra. The large deposits of petroleum have been found at the seabed near Mumbai. This region is called **Bombay High**.

Goa

Goa lies towards the South of the state of Maharashtra. It has many beautiful beaches. Panaji is the capital of Goa. Majority of the people are farmers and fishermen. The main



Amul Plant



St. Xavier's Church



crops grown here are rice, coconut, cashew nut and mangoes. Goa is rich in iron ore deposits. **St. Xavier's Church, Mahalakshmi Temple** and **Fort Aguada** are famous tourist places.

Kerala

Kerala is in the extreme South of the Malabar Coast. Thiruvananthapuram is the capital city of Kerala. The major crops grown here are rice, coconut, rubber, cocoa, coffee and spices. Kerala is the most **literate** state of India. Malayalam and English are the main languages. **Kathakali** and **Mohiniattam** are the main classical dance forms. **Onam** is a popular **harvest** festival. **Snakeboat races** are held during Onam.



Kathakali Dance



Snakeboat Race

Do You Know?

Kerala is also known as 'God's own country'.

Key Words

- lagoons : a lake that is separated from the sea by rocks or sand
- canal : a long, narrow stretch of water
- beach : a vast area along the sea coast consisting of sand, pebbles and gravel brought down by the action of water

Let's Wrap Up

- ✦ The Southern part of India is triangular in shape surrounded by water on three sides.
- ✦ The Deccan Plateau separates the Western Coastal Plain from the Eastern Coastal Plain.
- ✦ The Western Coastal Plain is divided into two main parts : the Konkan Coast and the Malabar Coast.
- ✦ The Eastern Coastal Plain is divided into Northern Circars and the Coromandel Coast.
- ✦ There are two groups of islands : the Lakshadweep Islands in the Arabian Sea and Andaman and Nicobar Islands in the Bay of Bengal.



A. Fill in the blanks with the words given in the box.

Konkan coast Eastern Malabar

1. The southern part of Western Coastal Plain is called the Coast.
2. The sea coast along Maharashtra is known as
3. A is a place where water of the sea meets the land.
4. The rivers form deltas along the Coastal Plains.

B. Write short answers for the following questions.

1. Where does the Eastern Coastal Plain lie?
2. Name the southern tip of Andaman and Nicobar Islands.
3. What is Bombay High?

C. Answer the following questions.

1. What is the extent of the Coastal Plains of India?
2. What is the main use of rocky islands off the coast?
3. What are the main differences between Eastern Coastal Plains and Western Coastal Plains?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The largest seaport in India is
a. Kandla ☐ b. Mumbai ☐
c. Kolkata ☐ d. Vishakhapatnam ☐
2. Onam is a famous festival of
a. Maharashtra ☐ b. Bihar ☐
c. Kerala ☐ d. Andhra Pradesh ☐
3. Chilka lake is in
a. Odisha ☐ b. Madhya Pradesh ☐
c. Uttarakhand ☐ d. Tamil Nadu ☐

E. Write 'T' for true and 'F' for false statements.

1. Barren Island is the only active volcano in India. ☐
2. Lighthouses have been built along the Konkan Coast to warn ships against rocks in water. ☐
3. The Konkan Coast is rich in coal deposits. ☐
4. The southern part of India is circular in shape. ☐



F. Match the columns.

Column A

1. Lagoons
2. St. Xavier's Church
3. Cellular Jail
4. Mohiniattam
5. Lakshadweep

Column B

- a. Arabian Sea
- b. Kerala
- c. Kayals
- d. Goa
- e. Port Blair



Discuss

How is a long coastline advantageous for us?



HOTS

India has a big coastline. Do you think that India has utilized it to its maximum? Why do you think so?



Activity Zone

Have you ever been on a beach? Make a model of it with the help of your art teacher.



Life Skills

Discuss in the class that why some islands of Andaman and Nicobar are still not inhabited even today.



Map Work



On an outline map of India, mark the following :
Vishakhapatnam, Coromandel Coast, Gulf of Kachchh, Arabian Sea, Lakshadweep, Kanyakumari, Konkan Coast and Port Blair



Teacher's Corner

Tell the children about the tribes which are on the verge of getting extinct in the Andaman and Nicobar Islands. Discuss the causes and solutions.

The Climate of India

Weather is the atmospheric condition of a particular day or the very near future. **Climate** of a place is the regular pattern of weather conditions for a long period of time. India is a vast country. It has different types of



The Himalayas influence the climate of India.

landforms like mountains, plateaus and plains. Some areas are near the coast while others are away from it. All these features determine the climate of our country. The climate varies from one region to another.

Some parts of the country are extremely cold while others are warm in the same months. In the same way, some regions receive heavy rainfall while others are dry.

Some parts of the country are flooded while others see famine for the want of rain. Some parts enjoy the same climate throughout the year while it is very hot in summer and very cold in winter at other places. Clothing and food of a place largely depend on the climate of the place.

The climate of our country is mainly shaped by the Himalayan ranges and the monsoon winds. The other important factors that determine the climate are the location of India near the equator and the long seacoast. Thus, it is true that the climate of India differs from place to place. Despite this, every part of India experiences the same cycle of seasons.

The Indian climate can be divided into three main seasons : **summer season**, **rainy season** and **winter season**.

SUMMER SEASON

The summer season in India starts from April and lasts till the end of June. The Sun rays fall directly overhead in the summer. It becomes so hot in the Northern Plains that people do not dare to come out of their homes.



In the summer, the days are longer than nights. In the North India, hot and dry wind, called **loo**, blows across the desert region in the months of May and June. Dust storms are common in summer. Many people die from '**sunstroke**'.

There is an acute shortage of water. In acute summer, many people move to the lower Himalayan regions where the weather is cool and pleasant. Nainital, Mussoorie, Darjeeling and Shimla are some of the famous hill stations.

The southern part of India is less hot than the Northern Plains. It is because the cool sea breeze, which blows from the sea, lowers the temperature. We enjoy **mangoes**, the "**King of Fruits**" in summers.

RAINY SEASON

The rainy season is also known as **monsoon season**. In India, it begins in mid-June and last till september. The monsoon winds blow from the Arabian Sea and the Bay of Bengal towards the land. They carry a lot of moisture and bring heavy rain to the most parts of the country in the months of June, July and August. The monsoon first arrives in Kerala and by the middle of June. By the middle of July, the whole country experiences a heavy rainfall. **Mawsynram** in the Khasi Hills in Meghalaya gets the heaviest rainfall in the world.

The desert areas like Rajasthan and Gujarat get very little rain. The average annual rainfall in our country is about 120 centimetres. The coasts of Tamil Nadu receive rain in winter season. The rainy season lasts



Dust Storm



A Hill Station



Rainy Season in Mawsynram



till September. The rainy season is very important as the farmers in India largely depend on monsoon to irrigate their fields.

Do You Know?

The climate of India is greatly affected by two seasonal winds : the North-east Monsoon and the South-west Monsoon.

WINTER SEASON

The winter season begins from mid November. The days are shorter than nights. North India experiences severe cold during this season. January is the coldest month in the North India. In this season, strong winds from the West called the "**western disturbances**", cause light rainfall in the plains and snowfall in the mountains. They are followed by very cold weather and **fog**.



Winter in North India

Do You Know?

The lowest temperature recorded in India is -45°C at Kargil in Ladakh region.



Winter in South India

In south India, the winter is moderate. The weather is cool and pleasant. The winter season is generally dry throughout the country except along the Tamil Nadu coast, which gets heavy rainfall in winter. People here do not require woollen clothes. The winter season lasts from November to February. Winter is a season of apples, oranges and green leafy vegetables.

Thus, the cycle of seasons continues year after year all over the country. Change in season brings a change in life-style, clothing and food habits of the people living there. This makes our lives enjoyable, interesting and happy.



Do You Know?

- ◆ Indian Meteorological Department (IMD), also referred to as the "Met Department", an agency of the Government of India, is the principal agency responsible for meteorological observations, weather forecasting and seismology.
- ◆ Mount Abu has the unique flavour of being the only hill station in the desert of Rajasthan.
- ◆ Spring and Autumn are the two short seasons in our country that fall in between the main seasons.



weather	:	the heat, coldness, wetness or other conditions of the air
climate	:	the average weather conditions in an area
season	:	each of the different divisions of the year
coast	:	seashore; the land along the water
moisture	:	water vapours

Let's Wrap Up

- ✦ The climate of India is influenced by the Himalayan Ranges, monsoon winds, the nearness to the equator and long coastline.
- ✦ The three main seasons in India are : summer, rainy season and winter.
- ✦ The hot, dry and unbearable wind called 'loo' blows across the desert region in the northern India in summer.
- ✦ The monsoon winds bring rain to the most parts of the country.



A. Fill in the blanks with the words given in the box.

monsoon summer loo winter moderate

1. The Sun rays fall directly overhead in the
2. The winter season is in the southern India.
3. The winds blow from the Arabian Sea and Bay of Bengal.
4. The season lasts from November to February.
5. The hot, dry wind that blows across desert region is called

B. Write short answers for the following questions.

1. In which season there is acute shortage of water ?
2. Where do the monsoon winds come from?
3. What is the average annual rainfall in our country?

C. Answer the following questions.

1. Name the factors that influence the climate of India.
2. What is the difference in the winter climate between the North and South India?
3. What is the role of western disturbances in the winter season?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The state of the atmosphere at a particular place at a particular time is called
a. climate ☐ b. weather ☐
c. monsoon ☐ d. autumn ☐
2. Which of the following places is not a hill station?
a. Shimla ☐ b. Darjeeling ☐
c. Mussoorie ☐ d. Kolkata ☐
3. The winter season lasts from
a. November to February ☐ b. February to April ☐
c. March to June ☐ d. March to May ☐
4. The main seasons of India are
a. summer ☐ b. winter ☐
c. rainy season ☐ d. all of these ☐
5. The coldest month in the North India is
a. February ☐ b. December ☐
c. January ☐ d. March ☐

E. Write 'T' for true and 'F' for false statements.

1. Chandigarh is a famous hill station. ☐
2. Delhi receives less rainfall than Meghalaya. ☐
3. Dust storms are very common during the winter. ☐
4. Tamil Nadu receives rain in summer. ☐
5. Winter season in India starts from July. ☐



F. Match the columns.

Column A

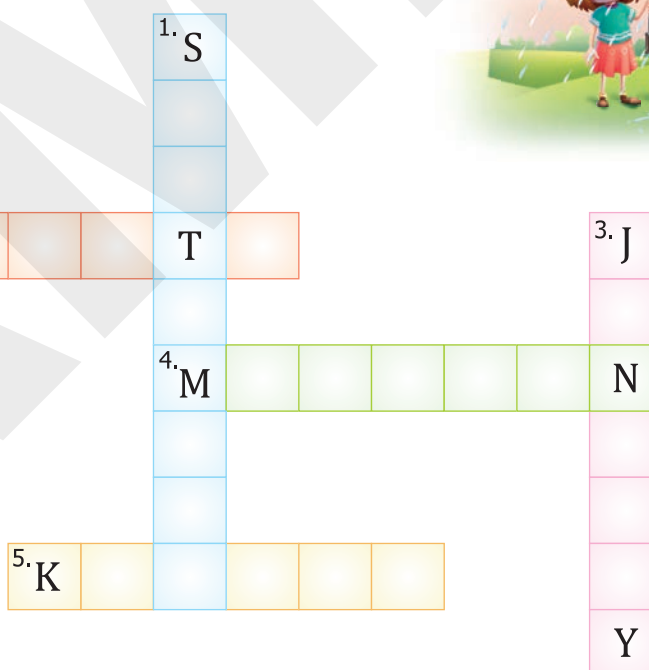
1. Rajasthan
2. Mawsynram
3. Shimla
4. Monsoon
5. Tamil Nadu

Column B

- a. The place that gets the heaviest rainfall
- b. The state which receives little rain
- c. Wind that brings rainfall
- d. The state which receives rain in winter
- e. A famous hill station

G. Complete the crossword puzzle with the help of given clues.

1. The rainy season lasts till this month.
2. It is the average weather condition in an area.
3. It is the coldest month in the North India.
4. These winds bring rainfall to the most parts of India.
5. Monsoon first arrives in this state in India.





Discuss

How is climate different from weather?



HOTS

Monu's grandparents go to live with his uncle in Bengaluru during winter every year. They do not even carry their winter clothes with them. Why is it so?



Activity Zone

Make a list of fruits and vegetables that we eat in summer and winter season. Are there any fruits and vegetables that are seen throughout the year?

Summer Season	Winter Season
♦	♦
♦	♦
♦	♦
♦	♦
♦	♦



Life Skills

How do you quench your thirst in summer? Some drink 'sharbat' made from fruits available in their region. Apart from being excellent thirst-quenchers, they protect our body from heat. Try to make 'sharbat' of raw mangoes with the help of your mom.



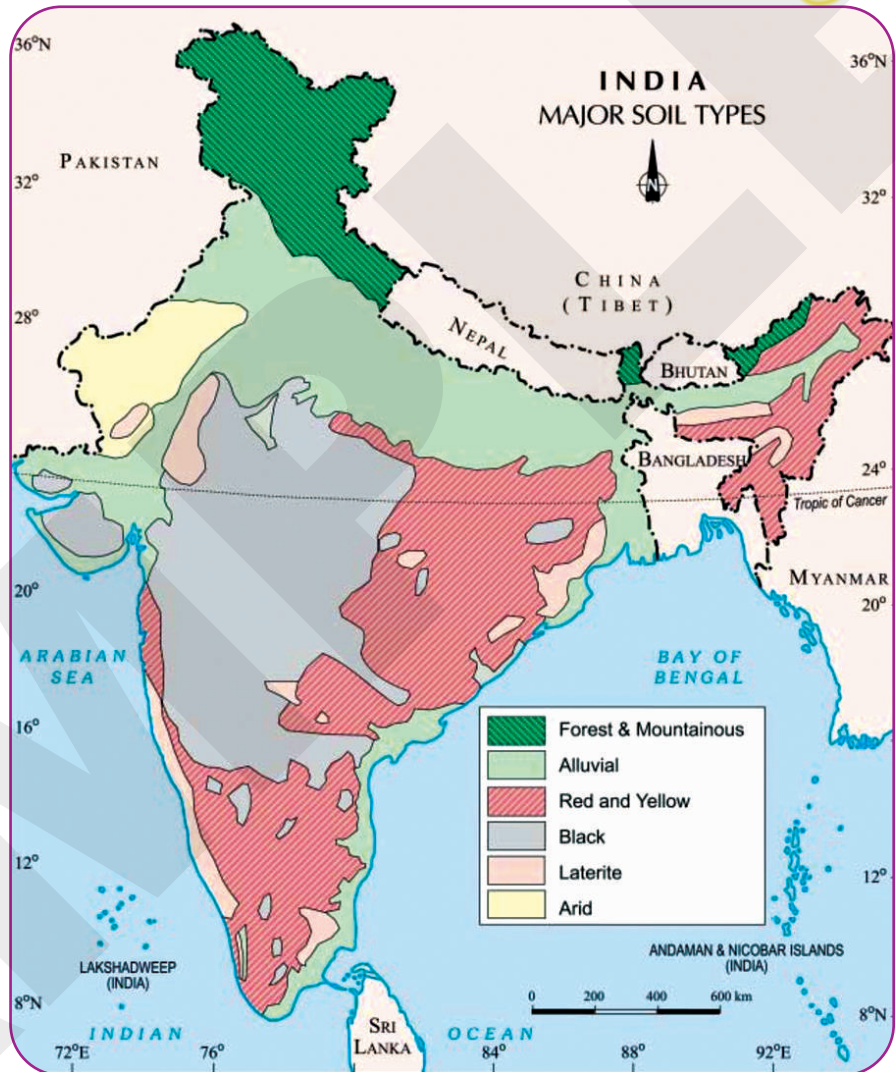
Teacher's Corner

Discuss in the class about the precautions that children should take when they go out in the Summer months.

All living things on the Earth, including human beings, depend on soil for food. Soil is one of the most important natural resources. It is formed by the breaking up of large pieces of rocks into smaller ones due to the action of natural forces. The formation and quality of a soil depend upon the land and climate of a place. Soil is formed over thousands of years. The broken pieces of rocks are carried away by the agents of nature like running **water** and **wind**.

Soil is the uppermost layer of the Earth's crust. Its thickness and fertility vary from place to place.

India is blessed with different types of soil. The Northern Plains and deltas of the rivers in the South India have very fertile soil.



Types of Soil in India

Do You Know?

Soil is nature's water filter. Healthy top soil can reduce the concentration of any pesticide in drainage water by 99.9%.

TYPES OF SOIL

Alluvial Soil

The rivers coming from the Himalaya and the Deccan Plateau bring a large amount of broken rock materials like sand and silt with them. This material is deposited on the river banks. The soft and light material is called alluvial soil. It is very **fertile** for growing variety of crops. The main crops grown in such soils are rice, wheat, sugarcane, jute and pulses.



Alluvial Soil

Black Soil

The land of the North-western part of the Deccan Plateau is rocky and uneven. It is made up of **lava rocks**. The rocks deep inside the surface of the Earth are very hot and remain mostly in the molten state. This molten material on cooling forms the lava rocks. The soil formed by the lava rocks is generally black in colour. This type of soil is called black soil. **Sugarcane, wheat, millet** and **cotton** are grown in this soil.

Do You Know?

Black soil is also known as **Black Cotton Soil**.

Red soil

In the rest of the Deccan Plateau, the soil is less fertile and **reddish** in colour due to the presence of **iron**. The red soil, which is not very fertile, is also called **laterite** soil. Mostly, **groundnut** and **millet** are grown here.



Desert Soil

Sandy Soil or Desert Soil

Desert soil is infertile due to lack for Nitrogen and humus in it. Crops such as **wheat, gram, cotton, millet, dates** and **fruits**, can be grown wherever water has been made available through irrigation. The soil in the desert areas of Rajasthan is **sandy soil**.



Mountain Soil

The soil on the hill slopes is very thin and poor. It is **coarse** with big pieces of stone. Most of the fine rock particles are washed away by the rains.

This soil is useful for planting fruit trees. Fruit farms are called **orchards**. The slopes are cut into **terraces** to grow rice and maize.

SOIL EROSION

The large variety of soils helps us to grow many crops in India. Where the soils are not fertile, we add **manures** and **fertilizers** to make them fit for growing crops. Now, our farmers have learnt to look after the soil and grow more crops to meet the needs of the country. The process of carrying away of the fertile layer of soil by natural agents like running water and wind is called **soil erosion**.



Soil Erosion

SOIL CONSERVATION

The following steps must be taken to conserve the soil :

- ◇ Cutting down of trees should be controlled.
- ◇ Many more trees should be planted especially along the hill slopes.
- ◇ Fields should always be under some crop or grasses.
- ◇ Dams and reservoirs should be made across rivers.



rock	:	a large mass of stones
soil erosion	:	the process of wearing and carrying away of soil
soil conservation	:	prevention of soil erosion

Let's Wrap Up

- ✦ The formation of soil depends upon the land and climate of a place.
- ✦ The mountains and deserts are not fit for cultivation.
- ✦ We have a variety of soils : alluvial, black, red etc., in India.
- ✦ We must keep our soil fit for farming.
- ✦ We should protect our soils from soil erosion by planting many more trees.



A. Fill in the blanks with the words given in the box.

terraces lava orchards Red Soil

- 1. is formed over thousands of years.
- 2. The soil which is not very fertile, is also called laterite soil.
- 3. Fruit farms are called
- 4. The molten material forms the rocks on cooling.
- 5. The slopes are cut into to grow rice and maize.

B. Write short answers for the following questions.

- 1. What forms the uppermost layer of the Earth's crust?
- 2. In which part of India is sandy soil found?
- 3. What is soil erosion?

C. Answer the following questions.

- 1. How is soil formed?
- 2. How is alluvial soil formed?
- 3. What is the difference between red and black soil?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

- 1. Black soil is made up of
 - a. lava rocks ☐
 - b. slit ☐
 - c. stones ☐
 - d. bricks ☐
- 2. Desert soil is mainly found in the
 - a. Deccan Plateau ☐
 - b. Rajasthan ☐
 - c. West Bengal ☐
 - d. Northern Plains ☐
- 3. Soil formation is process .
 - a. slow ☐
 - b. fast ☐
 - c. medium ☐
 - d. super fast ☐
- 4. Removal of topmost layer of soil by running water and wind is
 - a. Soil conservation ☐
 - b. Desert soil ☐
 - c. Alluvial soil ☐
 - d. Soil erosion ☐
- 5. Sugarcane, wheat, millets and cotton are grown on soil.
 - a. desert ☐
 - b. black ☐
 - c. red ☐
 - d. mountain ☐



E. Write 'T' for true and 'F' for false statements.

1. We should plant trees to prevent soil erosion.
2. Soil is found only in the upper layer of the Earth.
3. Desert soils are generally made of clay.
4. The soil on the hill slopes is very thin and poor.
5. Alluvial soils are found in the Northern Plains.

F. Match the columns.

Column A

1. Rock
2. Red soil
3. Fruit farms
4. Land of Deccan Plateau
5. Soil erosion

Column B

- a. Orchards
- b. Rocky and uneven
- c. Removal of topmost soil by wind
- d. A large mass of stones
- e. Red colour



Discuss

How can we prevent soil erosion?



HOTS

Why is the natural phenomenon like weathering necessary for soil formation?



Activity Zone

Make a chart showing the different types of soil and the crops which can be grown in them.



Life Skills

Fill a tray with sand and slowly pour a jar of water in it. Fill another tray with sand. This time pour the water in it quickly. What happens to the sand in both the cases?



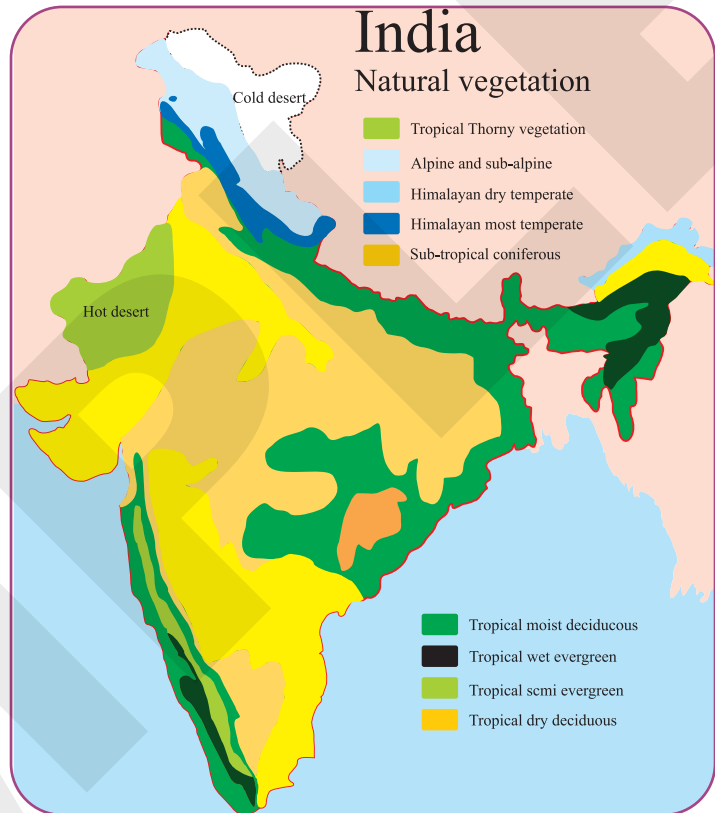
Teacher's Corner

Tell the students how more use of fertilisers degrade the quality of soil in long run.

Forests and Wildlife

India is one of the world's richest countries in terms of its vast array of biological diversity and nearly eight percent of total number of the species in the world is found here. The trees and plants in the forests grow on their own. The forests are natural vegetation provided by nature to us. The large areas of land covered by trees and plants are called **forests**.

Forest are useful to us in many ways. Like soil, forests are also an important natural resource. They provide us wood and timber which is used for houses, furniture, windows, doors etc. We get many other useful things such as resins, gums, lac, honey and herbs. Forests are useful in protecting the soil from being eroded. Forest are gifts of nature, hence they are known as **natural vegetation**.



Types of Forests in India

Do You Know?

There are about 45,000 plant species and about 75,000 animal species in India. Many of these species are facing danger of extinction because of environmental pollution and degradation.

TYPES OF FORESTS

The area under forests in India has been decreasing as we cut down trees to reclaim land for farming. Less than one-fourth of land is presently covered with forests. There are five main types of forests in India.



Evergreen Forests

In hot and very wet parts of India, especially along the mountain slopes, there is a dense growth of trees with many creepers.

These trees do not shed their leaves and remain green throughout the year. These forests are called evergreen forests.

Ebony, rosewood, sal and **teak** are found in abundance in these forests. **Sandalwood** and **bamboo** also grow here. Such evergreen forests are mostly found in areas of heavy rainfall like Andaman and Nicobar Islands, Odisha, on the slopes of the Western Ghats and on the hills of North-east India.



Evergreen Forests



Deciduous Forests

Deciduous Forests

Deciduous forests are also called the **monsoon forests**. The trees of these forests have broad leaves which fall during the summer season. **Sal, teak, sheesham** and **peepal** are some of the common trees found in these forests.

Deciduous forests are mostly found in Madhya Pradesh, Andhra Pradesh, Bihar and Odisha.

Dry Forests

The dry forests are found in areas with very little rainfall. Common trees are **cactus, kikar, babul** and **prickly pear**. The most parts of Rajasthan and the dryer parts of the South Punjab, Gujarat and Madhya Pradesh have dry forests.



Dry Forests

Coniferous Forests or Mountain Forests

The coniferous forests are found in the higher slopes of the Himalayas and in the Nilgiri Hills in the South. These forest are mostly covered with tall and cone-shaped trees, with needle-shaped leaves. These trees grow in cold climate.

The most common coniferous trees are **pine**, **oak**, **fir**, **spruce**, **deodar** and **birch**. The wood of these trees is soft and is used for making furniture.



Coniferous Forests

Tidal Forests

The tidal forests are found in the marshy land of the deltas. These forests are commonly flooded by sea water. The most common trees found in these forests are **mangrove** and **sundari**.

The tidal forests in the delta of the Ganga and Brahmaputra in West Bengal are called **sunderbans** because of the **sundari** trees found here.



Tidal Forests

CONSERVATION OF FORESTS

The population of our country (India) is increasing at a very fast rate. Though, it is desirable to have one-third of a country under forests but unfortunately our country has only one-fourth of its area under forests. So, it is important to plant more trees to conserve our forests.

The interdependence between animals and plants in an area is called **ecosystem**. When trees are cut down, it disturbs the ecosystem.

Plants absorb carbon dioxide given out by animals and in turn give out oxygen which is important for our survival.

The top layer of soil becomes loose due to **deforestation** and is easily carried away by wind and water. Landslides and floods are frequent in deforested areas. Forests attract rainfall too.



Chipko Movement

The **chipko movement** under the leadership of Sunderlal Bahuguna aims at preserving our forests.

This is called **chipko movement** because the people of the villages refused to allow trees to be cut down by hugging them. The other popular movements to encourage

plantation of more trees are **Vanamahotsav** and **Social Forestry**. A large number of trees are planted every year during programmes. The latest in these programmes is to encourage children and their parents to plant more trees and look after them.

CONSERVATION OF WILDLIFE



National Park and Sanctuary of India

Indian forests contain a rich variety of wild animals and birds. Lions, elephants, rhinoceros, deer, crocodiles, leopards boary and snakes are some of the animals found in the forests.

Our wildlife is facing acute danger of extinction because of hunting of animals for pleasure. Therefore, the rich wildlife of India needs to be protected from these greedy hunters. Our government has declared certain forests as the protected areas.

Do You Know?

According to the reports of the Forest Survey of India, Madhya Pradesh, Arunachal Pradesh and Chhattisgarh stand first, second and third respectively in having the highest forest area respectively.

The protected areas are called **reserves** or **wildlife sanctuaries**. No one is allowed to hunt animals in these sanctuaries.



Wildlife in Indian Forests

There are more than 150 sanctuaries in India. Tourists from all over the world visit these wildlife sanctuaries. The most famous Sanctuaries are the **Kaziranga National Park** in Assam, the **Corbett National Park** in Uttarakhand, **Gir Forests** in Gujarat, **Kanha National Park** in Madhya Pradesh and **Periyar** in Kerala. The largest sanctuary is in West Bengal and is called the **Sunderbans**. This sanctuary is famous for its Bengal tigers.

Key Words

forests	:	large areas of land covered by trees
wild	:	not tamed; not taken care of by people
shelter	:	a covering that shields or protects
sanctuaries	:	protected areas to conserve wildlife

Let's Wrap Up

- ✦ Forests are useful to us in a variety of ways.
- ✦ There are five types of forests in India : Evergreen, Deciduous, Coniferous, Dry and Tidal.
- ✦ Trees helps in soil conservation.
- ✦ The Chipko Movement and Vanamahotsav aim at preserving forests.
- ✦ Deciduous trees shed their leaves once a year.
- ✦ Wildlife Sanctuaries and National Parks have been established to protect our wildlife.



A. Fill in the blanks with the words given in the box.

ecosystem conservation forests Dry soft

1. Babul, cactus and kikar are found in Forests.
2. The trees of Coniferous Forests have wood.
3. Forests help in soil
4. When trees are cut down, it disturbs the
5. The Chipko Movement aims at preserving our

B. Write short answers for the following questions.

1. What are forests?
2. Name two wildlife sanctuaries.
3. What are Deciduous Forests?

C. Answer the following questions.

1. Name different types of forests found in India.
2. What do you understand by "Chipko Movement"?
3. How can we conserve our forest?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The Evergreen Forests are found in areas which receive
 a. heavy rainfall ☐ b. scanty rainfall ☐
 c. moderate rainfall ☐ d. no rainfall ☐
2. The most important tree of the Tidal Forests is
 a. Ebony ☐ b. Sundari ☐
 c. Teak ☐ d. Deodar ☐
3. The "Chipko Movement" was launched under the leadership of
 a. Medha Patkar ☐ b. Sunderlal Bahuguna ☐
 c. Chandra Mohan Singh Negi ☐ d. Salim Ali ☐
4. Which wildlife sanctuary is famous for Bengal tigers?
 a. Periyar ☐ b. Corbett ☐
 c. Sunderbans ☐ d. Kanha ☐
5. The Dry Forests are mostly found in
 a. Assam ☐ b. West Bengal ☐
 c. Rajasthan ☐ d. Bihar ☐

E. Write 'T' for true and 'F' for false statements.

1. The interdependence between animals and plants in an area is called ecosystem. ☐
2. Deciduous Forests are also called the Monsoon Forests. ☐
3. The Chipko Movement and Vanamahotsav aim at preserving forests. ☐
4. Dry Forests are found in Haryana. ☐
5. Coniferous Forests are found in Sunderbans Delta. ☐

F. Match the columns.

Column A

1. Kanha
2. Corbett National Park
3. Kaziranga
4. Periyar
5. Gir Forests

Column B

- a. Assam
- b. Kerala
- c. Gujarat
- d. Uttarakhand
- e. Madhya Pradesh

Discuss

What is the difference between a national park and a sanctuary?

HOTS

Mangrove Forests were abundant in Kerala about a century ago. Now, they are found in patches along the coastal districts of the state. Kumarakom in Kottayam district is perhaps the best known preserve of mangroves. How did it happen?

Activity Zone

Discuss in groups about the "Chipko Movement" in the classroom.

Life Skills

Write some steps about conservation of forests and why wildlife is essential for our national prosperity.

Teacher's Corner

Discuss in the classroom why it is necessary to conserve the flora and fauna.

Our Earth is unique because three-fourths of its surface is covered with water. That is why, it is called **Water Planet**. Water is one of the most important gifts of nature. Life is not possible on the Earth without water.

We use water in many ways. One of the important uses of water is for irrigating crops in the fields. Farmers need plenty of water for irrigation. We use water in our daily life for drinking, cooking, bathing, washing etc.

Water on the Earth is present in the form of oceans, seas, rivers, lakes and springs. Water is also found in the depths of the Earth as underground stream and sub-soil water. It is evident from the fact that nearly **70 per cent** of our **body weight** is due to water.

Our water resources are limited. Our main source of water is rain. But rains in our country are not very regular. We get most of the rainfall in the months of June to September. Sometimes, rainfall is very scanty and many areas do not receive much rainfall. So, we cannot depend only on rains for our irrigation. In order to provide a continuous supply of water to farmers, various irrigation projects have been developed by the government. Today, we have the largest irrigation network in the world.

CANALS

Canals are the most important source of irrigation in India. Canals are man-made channels which are dug to take water to far off fields where there is not enough water. The states of Punjab, Haryana, Uttar Pradesh, West Bengal, Andhra Pradesh and Tamil Nadu have a good network of canals. Canals irrigate vast areas of land in our country. Some of the important canals of our country are the **Western Yamuna, Ganga, Ghaggar** and **Gandak canal** in Uttar Pradesh, the **Indira Gandhi Canal** in Rajasthan and the **Periyar** and **Mettur canals** in Tamil Nadu.



Indira Gandhi Canal

WELLS AND TUBE WELLS

Wells and tube wells are used in areas where underground water is easily available. Wells and tube wells are important means of irrigation in the fertile Northern Plains.

Where the water is not too deep, **Persian wheels** are used to draw out water from wells. Tube wells draw water from the ground with the help of a motor run by diesel or electricity. They are mostly used in Uttar Pradesh, Punjab, Haryana, Gujarat etc.

TANKS

Tanks are commonly used in the hilly or plateau regions where wells and canal cannot be easily dug. They are generally used to irrigate fields in the states of Andhra Pradesh, Tamil Nadu and Karnataka. Tanks are dug by the people to store rain water.

DAMS AND MULTIPURPOSE PROJECTS

Another method of providing a regular supply of water to the fields is building dams across river. Dams are the barriers made of cement and steel to block the flow of river water. These dams are used to store water. They help to control floods, generate electricity, provide fishing grounds and waterways for navigation. The electricity generated from water is called **hydroelectricity**. Since dams are useful in various ways, they are



Bhakra Nangal Dam

also called the **multipurpose projects**. The **Bhakra Nangal Dam**, built on the river **Satluj**, is one of the **highest** dams in the world. It is 518 metre long and 226 metre (high). The dam has created a huge **Govind Sagar Lake**. It is the biggest man-made lake in the world. The **Hirakud Dam** built across the river Mahanadi is the **longest** dam in the world.

Now-a-days, the construction of dam has become very difficult because it costs several crore of rupees and a lot of time.

More over, it destroys the lives of several thousand people. A big dam destroys vast area of forests too. Therefore, it is need of the hour to go for smaller projects which are cheaper and faster to build and which do not



destroy our natural resources. Nature has given us plenty of water. Even then, there is a shortage because we have misused and polluted our water resources to a great extent. In many areas of our country, people have to bring water from long distances to meet their domestic needs. Therefore, we should **conserve** our water resource, effectively and efficiently.

Do You Know?

Indira Gandhi Canal is one of the largest canals in the world.



irrigation	: watering the crops
tanks	: natural or man-made depressions where water gets collected
dams	: a large storing of water on river
canal	: an artificial waterway or artificially improved river

Let's Wrap Up



- ✦ Water is one of the most important gifts of nature.
- ✦ Water is used for drinking, washing, cleaning and cooking our food.
- ✦ An important use of water is to irrigate the crops.
- ✦ Canals, dams and lakes are constructed to irrigate these crops.
- ✦ Dams are called multipurpose projects because they are useful in many ways.
- ✦ The Hirakud Dam, built across the river Mahanadi, is the largest dam in the world.



A. Fill in the blanks with the words given in the box.

Bhakra Nangal Dam Govind Sagar Lake Tanks Wells
tube wells

1. Wells and are the important means of irrigation in the northern fertile plains.
2. The built on the river Satluj is one of the highest dams in the world.

3. Persian wheels are used to draw water from
4. is the biggest man-made lake in the world.
5. are dug by the people to store rain water.

B. Write short answers for the following questions.

1. What is a canal?
2. Which is the largest dam in the world?
3. What do you mean by hydroelectricity?

C. Answer the following questions.

1. What are the different uses of water?
2. What are the main sources of irrigation in India?
3. What do you mean by multipurpose projects?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. Electricity generated from water is called
 a. Hydroelectricity ☐ b. Solar electricity ☐
 c. Thermal electricity ☐ d. Hydro energy ☐
2. The biggest man-made lake in the world is
 a. Chilka lake ☐ b. Dal lake ☐
 c. Moti lake ☐ d. Govind Sagar lake ☐
3. Persian wheel is used draw out water from
 a. wells ☐ b. tanks ☐
 c. canals ☐ d. rivers ☐
4. The length of Bhakra Nangal Dam is
 a. 518 metre ☐ b. 218 metre ☐
 c. 2190 metre ☐ d. 320 metre ☐
5. Which country has the largest irrigation network in the world?
 a. China ☐ b. India ☐
 c. USA ☐ d. Bangladesh ☐

E. Write 'T' for true and 'F' for false statements.

1. The Bhakra Nangal Dam has created a huge lake called Govind Sagar Lake. ☐
2. Tanks are used to irrigate fields in Jammu & Kashmir. ☐
3. A big dam destroys vast area of forests too. ☐
4. Nearly 70 percent of our body weight is due to water. ☐
5. Most of the rainfall we get is in the months of July to November. ☐



F. Match the columns.

Column A

1. Indira Gandhi Canal
2. Hirakud Dam
3. Nagarjuna Sagar Dam
4. Bhakra Nangal Dam
5. Sirhind Canal

Column B

- a. Mahanadi river
- b. Krishna river
- c. Uttar Pradesh
- d. Largest canal
- e. Satluj river



Discuss

What are the advantages and disadvantages of multipurpose projects ?



HOTS

Find out the details of Sardar Sarovar Dam which is being built on the river Narmada. Famous actor Aamir Khan is also involved in it.



Activity Zone

- ★ Draw beautiful pictures of multipurpose projects of India showing various uses of water on a chart.
- ★ Find out the information about the irrigation system of your district or state.



Life Skills

Rain water harvesting is the process of collecting rain from roof tops and directing it to an appropriate location and storing it for future use. On an average, one spell of rain for two hours is enough to save 8,000 litres of water. Is it possible or not?



Teacher's Corner

Encourage the students to speak on different ways of conservation of water.

The substances that are found deep inside the Earth are called **minerals**. Some minerals are also obtained from the bottom of the sea.

Minerals are our treasures. They are very useful to us in our daily needs. They play an important role in the economy of a country. They are used as sources of raw material and metals such as kerosene, coal, petrol, iron, copper etc.

Minerals are often found in the soil and rocks beneath the Earth's surface. A rock that contains large quantity of mineral is called a **mineral ore**. Deep holes have to be dug to take out these minerals. These pits are called the **mines**. Digging out mineral ores from the Earth is called **mining**.

TYPES OF MINERALS

There are more than three thousand different minerals. On the basis of composition, minerals are classified mainly as metallic or non-metallic minerals.

Minerals are two types :

♦ Metallic Minerals

Metallic minerals contain metals in raw form. Metals are hard substances. Iron ore, manganese ore, gold, silver, copper and lead are the examples of metallic minerals.

Iron is used to make nails.

Tungsten is used in light bulbs.

Quartz is used in watches.

Graphite is used as the 'lead' of a pencil.



Silica is used to make mirrors.

China clay is used to make flower vases.

Talc is used to make talcum powder.

Silica is used to make glass.

◆ Non-metallic Minerals

Non-metallic minerals do not contain metals. Limestone, mica and gypsum are examples of such minerals.

Metallic Minerals

Iron

Iron is not found in pure form. It is found mixed with soil, rocks, clay or sand. This form is called an **iron ore**. India has about one-fourth of the world's iron ore deposits. It is used for making many things for our daily use. It is used for making utensils, machines, tools, rail tracks, railway engines, coaches, automobile, ships and other things. It is also used in the construction of houses. It is found in Jharkhand, Madhya Pradesh, Chhattisgarh, Karnataka and Goa. Big iron and steel factories are located at **Jamshedpur, Bokaro, Rourkela, Bhilai, Durgapur, Bhadravati** and **Salem**.



Iron



Copper



Manganese



Mica

Copper

Copper is mainly found in Rajasthan, Bihar and Jharkhand. Copper was the first metal used by the early man. It is used in making electric wires and other electrical items. **Khetri** in Rajasthan has the largest copper fields in India.

Manganese

India is one of the largest producer of manganese in the world. **Madhya Pradesh** alone has about half of the manganese deposits in the country. Pure manganese is used for making steel and glass.

Mica

Mica is widely used in making electrical goods, wireless sets and medicines. India is the largest producer of mica in the world. Mica is mainly found in **Jharkhand, Bihar, Rajasthan** and **Andhra Pradesh**.

Gold

Gold is a bright yellow soft precious metal. India is not very rich in gold reserves. Most of our gold comes from the **Kolar** gold fields in **Karnataka**. Kolar gold fields are the **deepest** mines in the world.

Do You Know?

A mixture of two or more metals is called an **alloy**.



Gold

Non-metallic Minerals

Coal

Coal is one of the most valuable gifts of nature. It is formed over millions of years from dead remains of plants. Commonly known as "**Black Diamond**", it is used mainly as fuel. It is a major source of electricity in India. It is used in railways and factories. Coal mines are mainly located in **Madhya Pradesh**, **Jharkhand** and **West Bengal**. The Jharia coal fields in Jharkhand and the Raniganj coal fields in West Bengal are well known. Some of the important coal mines are in Giridih, Jharia, Bokaro and Karampura.



Coal



Bombay High

Petroleum

Petroleum is known by several names such as **crude oil**, **fossil fuel**, **black gold** or **liquid gold**. It is found at great depth in some types of rocks.

Very deep wells are dug for pumping out the crude oil. The region where oil wells are located is called an **oil field**. The important oil wells are found in



Digboi in Assam, Ankleshwar in Gujarat and in Andhra Pradesh. One big oil field has recently been found under the sea-bed of the coast of Mumbai. This is called **Bombay High**. Oil fields have also been explored in the basins of the Krishna, Kaveri and Godavari rivers.

Do You Know?

Mumbai High alone accounts for about 60% the country's total oil production.

The crude oil is pumped out and refined in oil refineries. When it is purified in a refinery, it gives petrol, diesel, kerosene, spirit etc. Big oil refineries are located at **Guwahati, Chennai, Vishakhapatnam, Haldia, Barauni, Mathura, Vadodara, Kochi** etc.



Mathura Oil Refinery

Petroleum is mainly used as **fuel**. It is also used for lubrication and making printing ink and medicinal oils. It provides paraffin wax which is used to make candles and polish.

Do You Know?

Digboi in Assam is the oldest oil refinery in India.

CONSERVATION OF MINERALS

Minerals are exhaustible resources. The Earth has only a limited amount of various minerals. Unfortunately, man has been exploiting these



minerals in a thoughtless way. Some of the minerals are now left in very small quantities. Therefore, we must be careful in the use of mineral resources.

We must use them for good reason. Whenever possible, we should make use of **solar energy**. We should be very careful while using our precious mineral resources. We should try to replace them with **non-conventional** sources of energy like the solar energy, the wind energy and the water energy. In that way, our mineral resources can last longer.

Key Words

ore	:	mineral from which metal can be obtained
iron ore	:	iron mixed with clay or soil, impure form of iron
black diamond	:	popular name of coal
black gold	:	another name of petroleum
paraffin wax	:	raw material to make candles

Let's Wrap Up

- ✦ Minerals are very useful in our daily needs.
- ✦ Gold is very precious metal.
- ✦ Coal is one of the most valuable gifts of nature.
- ✦ Minerals are exhaustible resources.
- ✦ We should conserve our mineral resources.

Exercises

A. Fill in the blanks with the words given in the box.

Madhya Pradesh energy exhaustible Iron Jharkhand

1. Jharia coal fields are in
2. alone has about half of the manganese deposits in the country.
3. is not found in pure form.
4. We should make use of solar
5. Minerals are resources.



B. Write short answers for the following questions.

1. What is mining?
2. Name three minerals used in our daily life.
3. Give two examples of metallic and non-metallic minerals each.

C. Answer the following questions.

1. What are the different uses of iron?
2. Why do we use mica and where it is found?
3. Differentiate between metallic and non-metallic minerals.

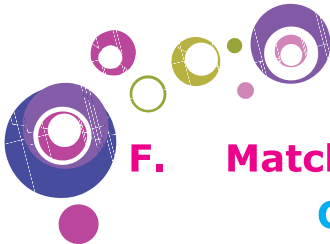
D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. One big oil field has been recently found under the sea-bed of the coast of
a. Bihar ☐ b. Mumbai ☐
c. Patna ☐ d. Bengal ☐
2. Petrol is known by
a. liquid gold ☐ b. solid gold ☐
c. yellow gold ☐ d. black gold ☐
3. Mica is used in electrical goods, wireless sets and
a. mobile ☐ b. clothes ☐
c. camera ☐ d. medicines ☐
4. Pure manganese is used for making steel and
a. glass ☐ b. spoon ☐
c. plate ☐ d. bowl ☐
5. Coal is also known as
a. Black Diamond ☐ b. Grey Diamond ☐
c. Yellow Diamond ☐ d. Red Diamond ☐

E. Write 'T' for true and 'F' for false statements.

1. India is the largest producer of iron in the world. ☐
2. Large quantity of iron ore is found in Japan, China, India and Bhutan. ☐
3. Uttar Pradesh and West Bengal have a lot of coal deposits. ☐
4. India is not very rich in gold reserves. ☐
5. Gold is a precious metal. ☐



F. Match the columns.

Column A

1. Petroleum
2. Gold
3. Mica
4. Copper
5. Iron

Column B

- a. Precious metal
- b. Iron ore
- c. Black gold
- d. Metal
- e. Electrical goods



Discuss

Why should we conserve our mineral resources?



HOTS

"Save Oil : It is precious." Can you suggest some ways of how to conserve our mineral resources.



Activity Zone

Visit a thermal or hydro power house, whichever is nearer, with your teacher and observe how electricity is produced.



Life Skills

Your friend uses petrol mercilessly, e.g. whenever he has to go to fetch milk, he uses his bike. How will you make him realise his mistake?



Teacher's Corner

Discuss in the classroom the difference between renewable and non-renewable sources of energy.

Livestock and Human Resources

LIVESTOCK

Animals have been good friends of human beings from the ancient times. Man has been able to tame a large number of animals for different works in course of time. Dog was perhaps the first animal to be tamed by the early man. Animals that we rear for pleasure or profit are called **livestock**. They include cows, buffaloes, sheep, goats, bulls, camels, horses, mules and donkeys.



Livestock

Some of them are domesticated for milk and meat. Some of them provide us raw materials like wool, leather and bones. Other animals are used for transport and agricultural purposes.

Since, India is an agricultural country, some animals are very useful to our farmers. **Oxen** are used to plough and level fields. They are also used to draw carts and to carry our food grains from the farms to the markets.

Do You Know?

India has the largest number of cattle in the world.

Uses of wastes of animals

Animal manure is added to the soil to improve its fertility. Now-a-days, we are using cow dung for producing **biogas**. Biogas is used in villages to cook food.



Biogas Plant

WHITE REVOLUTION

Animals that give us milk are called **milch animals**. Milk is so important for our health that the Government of India has started various programmes to increase its supply. The **White Revolution** and the **Operation Flood** are such programmes.

The great increase in milk production is called White Revolution. The White Revolution was started from a town in the state Gujarat called **Anand**. High milk-yielding breeds of cattle like Red Sindhi, Mewadhi, Murrah and Ongole are reared in India.

Do You Know?

Amul, derived from the Sanskrit word amulya, means invaluable, is a dairy cooperative based at Anand (Gujarat).

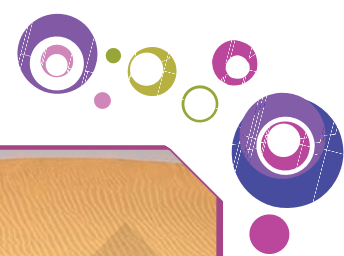
Meat is a rich source of proteins. Eggs of hens and ducks are also rich in proteins. Hoofs and horns of some animals are used to make various small articles like combs, buttons, knives and glue.



Pisciculture

Fish is another rich source of protein. It is the chief food of the people living in the coastal areas. The rearing of fish in artificial tanks is known as **pisciculture**.

It is becoming popular in different parts of our country. Our government has started a programme called the **Silver Revolution** to increase the production of fish.



Camels are very useful in dry desert areas. Camel is known as the "**Ship of Desert**".

In the mountains and hilly regions, mules and donkeys are used for carrying loads in thick forests of Assam and Meghalaya. Elephants are tamed to work in the forests.

The hair of some animals like sheep, goats and camels are used for making



Camel : Ship of the Desert

wool. Wool is used for making shawls, carpets, woollen clothes and blankets. The sheep with high quality wool are reared in Jammu and Kashmir and Himachal Pradesh.

Large number of goats are found in Bihar, Uttar Pradesh, Uttarakhand, Rajasthan and Madhya Pradesh. The



Woollen Products

skins of some animals are used for making leather goods like shoes, belts, jackets and bags.

About one-fifth of world's cattle live in India but their quality is not very good. Our government has taken different steps to improve the quality of the cattle. Various **Gosadans** and **Goshala** have been established to keep the cows in ideal situations.

Some veterinary hospitals have been opened in villages to treat sick animals. The doctors who treat animals are called **veterinary doctors**.

Good quality of food is given to such animals. New breeds of various cattle have been introduced. All these steps lead to an increase in milk, meat and eggs production.



Veterinary Hospital

HUMAN RESOURCES

All the natural resources are meaningful only when they are used properly. But who can use these resources properly? Our country is



blessed with a large variety of natural resources. However, resources do not make a country great. Human beings are the most important resource of a country.

There is a close relationship between the economic growth of a country and its human resources.

If the country is underpopulated, its natural resources cannot be fully utilized. But if the country is over populated, it proves a burden on the available natural resources. So, it is the quantity of the people which determines the growth of a country.

After independence, India has made tremendous progress in almost all the fields : in agriculture, industry, education and health. Our agricultural production has increased many times. We need not import food grains anymore.

After independence, many industries and factories have been built where we produce almost all the things we require in our day-to-day life.

There has been also a great expansion of educational institutions and health services.

POVERTY

Prosperity has definitely increased in India. But still we cannot say that we have managed to do away with poverty. Still, about half of the population of the country is poor. The main reason for this poverty is the rapidly (at a fast speed) growing population of India.

At present, India's population is more than 145 crore. India is the most populous country in world. In spite of many programmes, India's population is still growing rapidly every year. More than 60,000 children are born everyday. It is rightly said that India produces one Australia every year.

Many states in India like Uttar Pradesh, Bihar and Maharashtra have population more than many countries of the world. The large number of people here are **uneducated** and **unemployed**.



Poverty in India

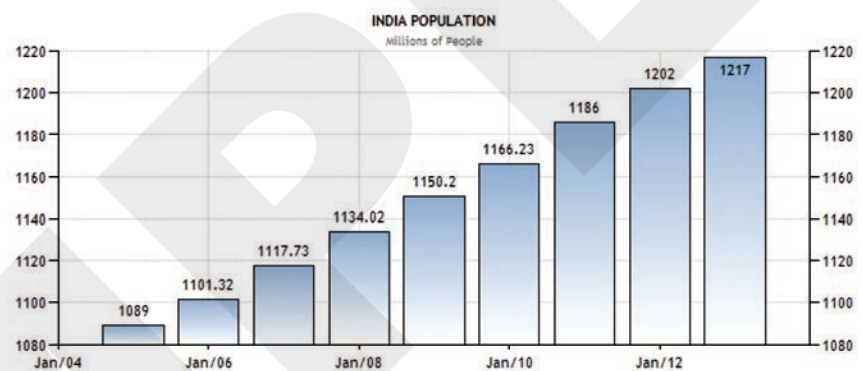


Our human resources are an asset but this rapidly increasing population has caused various problems for the development of our country. Large families find it difficult to feed and educate all their children. Lack of education forces their children to stay at home. This leads to poverty and illiteracy.

Rapid population growth has also created problems such as the shortage of clothing, housing, drinking water, transportation, health and employment.

It has severely affected the economic growth of our country. Therefore, our efforts should be aimed at fighting poverty. The government is taking first step in this regard is to bring down the birth rate by family planning.

Every family should adopt the norm of a small family. Nuclear families should be given incentives. The spread of education is the another important measure which should be given priority to eradicate poverty. Only healthy, hardworking and intelligent people can make better use of our natural resources and contribute to the progress and development of the nation.



Population growth in India



livestock	: cattle and sheep kept on a farm
human resource	: people of a country
poverty	: condition of being poor
staple food	: a regular and basic part of everyday food

Let's Wrap Up

- ✦ Human beings are the most important resources of a country.
- ✦ Population growth has created many problems for India.
- ✦ Every family should adopt the norm of a small family.
- ✦ The government is taking steps to solve these problems.



A. Fill in the blanks with the words given in the box.

animals dog milch China pisciculture

- 1. Animals that give us milk are called animals.
- 2. is the most populous country in the world.
- 3. The rearing of fish in artificial tanks is called
- 4. A veterinary doctor treats
- 5. was perhaps the first domesticated animal.

B. Write short answers for the following questions.

- 1. Give an example of high yielding breed of cattle.
- 2. What is Silver revolution?
- 3. Which animals are used to plough and level field?

C. Answer the following questions.

- 1. What is livestock?
- 2. What problems are caused by the rapid growth of population?
- 3. Why are human beings considered the most important natural resources?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

- 1. The rearing of fish in artificial tank is called
a. Pisciculture ☐ b. Livestock ☐
c. Horticulture ☐ d. Fishiculture ☐
- 2. is the "Ship of Desert".
a. Sheep ☐ b. Camel ☐
c. Cow ☐ d. Horse ☐
- 3. Cattle and sheep kept on a farm are called
a. Livestock ☐ b. Agriculture ☐
c. Pisciculture ☐ d. Horticulture ☐
- 4. The increase in milk production is called
a. White Revolution ☐ b. Green Revolution ☐
c. Livestock ☐ d. Blue Revolution ☐
- 5. India is the most populous country.
a. first ☐ b. third ☐
c. second ☐ d. fourth ☐



E. Write 'T' for true and 'F' for false statements.

1. Amul means 'priceless' in Sanskrit.
2. The doctor who treats animals is called animal's doctor.
3. There is a close relationship between the economic growth of a country and its human resources.
4. Human beings are the second most important resource of a country.
5. Poverty is the condition of poor people.

F. Match the columns.

Column A

1. Poverty
2. India
3. Milch animals
4. Silver Revolution
5. Camel

Column B

- a. The "Ship of Desert"
- b. Animals which gives milk
- c. Increase the production of fish
- d. Condition of being poor
- e. Second most populous country



Discuss

How can the quality of cattle be improved ?



HOTS

It is not the number, but the quality of the human resource which is the most important for the development of a country. Do you agree? Why?



Activity Zone

Make a chart showing various livestock and show the diagrammatic representation of their uses.



Life Skills

"India's population is increasing day by day." Suggest some ways to control the population of our country.



Teacher's Corner

Discuss in the classroom how India's population can be a boon, if it is used properly like China.

Our Agriculture and Industries

India is an agricultural country. About two-thirds of the Indian population is engaged in agricultural activities. Agriculture provides food for people and also raw materials for industries. At the time of independence, our food production was not enough. So, we used to import food grains from other countries. Now, we produce enough food for ourselves and also export to other countries.

This big success in the food production was possible only through **Green Revolution**. The use of better seeds, better fertilizers, better machines and irrigation have made our country self reliant in food grains and the other agricultural products. Now-a-days, the advanced tools and implements like tractors, harvesters etc. are used.



Agricultural practices in India



India has two agricultural seasons : the **Kharif Season** and the **Rabi Season**. The kharif season begins with the arrival of monsoon. Rice, jowar, jute, urad and cotton are major crops of kharif season.

The rabi season begins when the rains end and autumn comes. Wheat, mustard, maize, grams, pulses, sugarcane and linseed are major crops of rabi season.



Kharif Crops



Rabi Crops

Rice, wheat and millet are main food grains of the people. India ranks first in the world in the production of **groundnut** and **tea**.

India stands second in the world in the production of **rice**, **jute**, **sugarcane** and **oilseeds**. **Wheat** is our major crop of India.



Wheat is the basic food for 35% of the world's population.

In India, irrigation of the land is the biggest problem. Water is needed in plenty to grow good crops. The best source of water is rain but we cannot depend directly on it. Therefore, other means of irrigation, like canals, dams, tanks, wells and tube-wells have also been built to provide water irrigation throughout the year.

Our government has encouraged the formation of co-operative societies to get the people work together. These co-operative societies buy fertilizers and seeds in large amount at cheaper rates from the manufacturers and then sell to farmers at very low rates. Agricultural colleges have been built up to teach modern methods of farming. Fertilizer factories have been set up to provide fertilizer at a reasonable cost.



Our government has also set up the Food Corporation of India and other organizations too, to buy food grains directly from farmers. Thus, farmers get a good price for their crops.

INDUSTRIES

Before independence, there were very few industries in India. But now, India has many small-scale and large-scale industries. There are some industries which produce everything from needle to ship and an aeroplane.

Converting raw materials into a processed product with the help of skilled human effort is called an **industry**. There are three types of industries : cottage, small-scale and large-scale industries.

Industries that are carried on at home or in which very few people work are called **cottage industries**. For example : weaving clothes, making of shawls, blankets and toys, making handicrafts etc.

The industries which need more money and people than cottage industries, are called **small-scale industries**. Here, the workers work in the small factories. Examples of small-scale industries are hosiery, utensils, plastic goods etc.



Cottage Industries



Small-scale Industries

Do You Know?

The world's cheapest car, Nano is produced by Tata Motors.



Another kind of industry, which employs thousands of people and needs a lot of money for machines and raw materials are called the **large-scale industries**.

Textile mills, iron and steel plants and industries that produce cars, ships, engines, heavy electrical items etc., are the examples of **large-scale industries**.



Large-scale Industries

Our industries depend upon raw materials, power, machines and workers.



The first steel plant was set up at Kulti (West Bengal) in 1974.

RAW MATERIAL

We get rubber, wood, lac etc., from the forests in the form of raw materials.

From the farms, we get cotton, jute, sugarcane etc. From the Earth's crust, we get a lot of minerals which are used as raw materials to produce many things. For example : petrol, diesel, kerosene etc., are produced from crude oil.

MACHINES

Industries require big machines to help them in producing different things.

A large amount of money is required to buy these machines. The banks provide loans to the people who want to set up industries so that they can buy the machines. To run these machines, the workers, technicians and engineers are also needed.

POWER

All industries require power to run the machines. Most machines are run by electricity, petrol or diesel.

Different large-scale industries have been set up at different places in India.

For example : We have steel plants in Jamshedpur, Bhilai, Durgapur, Rourkela and Bokaro.

Heavy electrical goods are produced by the Bharat Heavy Electricals Limited (BHEL) at Bhopal, Tiruchirapalli and Hyderabad. The Railway engines are made at Chittaranjan and Varanasi. Ships are built at Vishakhapatnam, Mumbai and Cochin. Aeroplanes are manufactured at Bengaluru and Kanpur.



Hindustan Aeronautics

In many ways industries are of great help to us and make our lives comfortable. But, they also pollute water and air. However, many developed countries have adopted cleaner methods of production, thereby using wind power and hydro-electricity.



import	:	to get something from abroad
export	:	to send something to abroad to earn foreign exchange
rabi season	:	it starts at the end of rain
kharif season	:	it starts with arrival of monsoon

Let's Wrap Up

- ✦ India is basically an agricultural country. About 70 percent of its people depend on agriculture.
- ✦ India has two main agricultural seasons :
 - a. The kharif season
 - b. The rabi season
- ✦ Wheat, rice, sugarcane, cotton and tea are grown in our country.
- ✦ Our government has encouraged farmers to use pesticides to protect their crops.
- ✦ Our industries depend upon materials, power, machines and workers.

E. Write 'T' for true and 'F' for false statements.

1. Industries require big machines to help them to produce different things.
2. Weaving clothes is an example of a large-scale industry.
3. Agricultural colleges have been set up to teach modern method of farming.
4. Ships are built at Chittaranjan and Varanasi.
5. Even before independence, there were many small-scale and large-scale industries in India.



F. Match the columns.

Column A

1. Cottage Industry
2. Small-scale industry
3. Large-scale industry
4. Aeroplane
5. Railway engines

Column B

- a. Utensils and hosiery
- b. Shawls and blanket
- c. Cars and ships
- d. Chittaranjan
- e. Bengaluru

Discuss

How did Indian agriculture get benefitted because of Green Revolution?

HOTS

Why are the people of mineral-rich states mostly poor?

Activity Zone

Make a list of various food grains and oilseeds. Also classify them into Rabi and Kharif crops.

Life Skills

Organise a visit to a small-scale industrial unit and observe the stages by which the raw materials are processed into finished products.

Teacher's Corner

Tell the children about the Kisan Call Centre established by the government of India from where farmers can get any information by dialing on a toll-free number (1800-180-1551).

Means of Transport

Transport plays a vital role in modern life. Man is a social animal. We move from one place to another for various reasons. We go to meet our relatives and friends living on the other places. We travel to attend social functions like marriages. Sometimes, we have to travel for study and employment purpose. Thus, travel has become a necessity. Today, every distance is achievable because of the improved means of transportation.

In the olden days, people travelled on foot or on the back of animals. The invention of **wheel** brought out major changes in transport system. With the passage of time, people improved the wheel to fit in various carts and vehicles. Their efforts gave way to the fast moving means of transport that we see around us. Today a latest supersonic aircraft can travel around the world within eighteen hours.

There are three types of means of transport. These are : land transport, water transport and air transport.

LAND TRANSPORT

Land transport is the most widely used means of transport. It includes roadways and railways.

Road Transport

India has one of the largest network of roads in the world. Roads can be :

- ◆ metalled (pucca or permanent roads)
- ◆ unmetalled (kuchcha or temporary roads)

Fast means of transport like scooter, car, jeep, bus, autorickshaw and truck need permanent (pucca)



Means of Transport



Means of Road Transport



or metalled roads. These are also called **black-topped** roads. Such roads are made of stone and coal tar. These are very common in towns and cities. India is known to have the largest network of roadways.

We have a large network of metalled roads in our country. The permanent roads connect all the important cities.

Different types of metalled roads are :

1. **National Highways**; which connect the state capitals and important cities in India.
2. **State Highways**; which connect the important towns within a state.
3. **District Roads**; which connect the important towns of a district with the district headquarters in the state.

Some roads connect our land borders with the rest of the country. They are called **border roads**. The **highest** road in the world is the Leh-Manali road. It runs from Manali in Himachal Pradesh to Leh in the Ladakh region of Kashmir.



National Highway



Leh-Manali Road

Do You Know?

The National Highway No. 7 is the longest route in India. It covers 2325 km running from Varanasi to Kanyakumari.

Temporary roads are found in villages. The carts driven by the animals like ox, camel, bullock, buffalo, mule, ass etc. and cycles are the means of transport on temporary (kutchra) roads. These roads are made from dirt and mud. Bicycle and bullock carts are the common types of vehicles in the villages.

Rail Transport

Railway transport is the most popular means of transport in India. It is the safest and quickest type of land transport for long-distanced travel.

In India, the first train was started in 1853 in Thane (Maharashtra). Today, India has the largest railway network in Asia and one of the largest in the world.



Indian Railways



Indian Railways help in carrying heavy and bulky goods. These include coal, minerals, food grains, fertilizers, cement and many other goods. The **longest** railway route is between Jammu Tawi in the North to Kanyakumari in the South. It takes less than two days travel. Some trains like Rajdhani and Shatabdi Express run at speeds of around 140 km/hr.

Local trains are used for the movement within a big city.



Delhi Metro

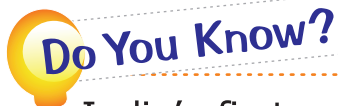


Mumbai Local



Kolkata Tram

Many big cities have **Metro trains**. These trains run either on elevated tracks or under the ground. Mumbai has a dense network of efficient **suburban trains** that is the chief means of local transport in the city. It is called the "**life line of Mumbai**".



India's first monorail was started in Mumbai on 1st February 2014. It is 8.8-km-long line between Wadala and Chembur.

AIR TRANSPORT

Aeroplanes are the **fastest** means of transport. All the important cities of our country are connected by airways. Travel by air is comfortable but costly. The aeroplanes are available in different shapes and sizes today. Small planes carry less passengers. Helicopters can land in small areas and are useful in mountains and terrains. Airways are useful during disasters for providing rescue operations. We can reach to the places where it is not possible to reach by roads and rail, i.e. : jungles, deserts and mountains areas.

An **International Airport** is a place from where flights take off to different countries. Some of the International Airports in India are Indira Gandhi International Airport, Chhatrapati Shivaji Airport, International Airport and Meenambakam Airport.



Aeroplane



Helicopter

Do You Know?

The first air service in the world was operated between London and Paris in 1919.

WATER TRANSPORT

Waterways are the **cheapest** means of transportation. **Boats, steamers** and **ships** are means of water transport. Rivers like the Ganga and the Brahmaputra are used for water transport. It is used for transporting heavy and bulky goods. **Passenger ships** carry people. **Cargo ships** transport goods. **Tanker ships** carry petroleum and oil. The main seaports in India are at Kochi, Mumbai, Vishakhapatnam, Kandla, Chennai, Mangalore, Kolkata and Paradip.

A developed water transport system greatly helps a country in international trade because it is comparatively cheap. The advanced means of transport have made our lives comfortable. The fastest means of transport has shrunk the enormous world into a small town.



Cruise Ship



Cargo Ship

Key Words

supersonic	:	faster than the speed of sound
kuchcha road	:	roads made of mud
pucca road	:	roads made of coal tar and concrete
disaster	:	calamity
port	:	place from where ships are loaded and unloaded
international	:	trade between two countries

Let's Wrap Up

- ✦ The invention of wheel brought out major changes in transport system.
- ✦ We can divide means of transport into three parts : land transport, air transport and water transport.
- ✦ We have a large network of roads in our country.
- ✦ Railways help in carrying heavy and bulky goods.
- ✦ Air transport provides the fastest means of transport.
- ✦ Water transport is slow but a cheap means of transport.
- ✦ The progress of a country depends on its efficient transport system.



A. Fill in the blanks with the words given in the box.

railways seaport state 1853 Cargo

1. India has the largest network of in Asia.
2. ships transport goods.
3. The first railway train was started in in India.
4. Highways connect the important towns within a state.
5. Paradip is a famous

B. Write short answers for the following questions.

1. Name the different means of transport.
2. What are border roads?
3. Which is the cheapest means of transport?

C. Answer the following questions.

1. How has the development in transport affected our life?
2. How is a National Highway different from State Highway?
3. What are the advantages of air transport?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The fastest means of transport is
a. roadways ☐ b. waterways ☐
c. railways ☐ d. airways ☐
2. The most common mean of transport is
a. Railways ☐ b. Roadways ☐
c. Waterways ☐ d. Airways ☐
3. Chhatrapati Shivaji International Airport is in
a. Mumbai ☐ b. Bengaluru ☐
c. Kolkata ☐ d. Jaipur ☐
4. The complete underground metro rail is in
a. Delhi ☐ b. Kolkata ☐
c. Mumbai ☐ d. Chennai ☐

5. Tanker ships carry

a. iron



b. fruits



c. oil



d. coal



E. Write 'T' for true and 'F' for false statements.

1. Land transport is the most widely used means of transport.
2. The longest rail route is between Amritsar and Kanyakumari.
3. Indian Airlines flight can travel round the world in 18 hours.
4. State Highways connect important towns within the state.
5. The invention of fire brought major changes in transport system.



Discuss

What can be done to control the traffic volume on road?



HOTS

Though travel on rail is comfortable, Roadways have many advantages over Railways. How?



Activity Zone

Collect the pictures of different means of transport and paste them in a scrapbook in the order of their invention.



Life Skills

Which means of transport will you prefer to see the "Leaning Tower of Pisa"? Try to gain information on the formalities that one has to fulfill before entering the territory of other country.



Teacher's Corner

Make the children enact a scene at a railway station.

Sending and receiving messages is called **communication**. When we share our thoughts, ideas and feelings with our friends, relatives and other people, we say we are communicating. We communicate with each other for different purposes. We communicate by talking or writing. There are many ways to communicate with each other.

We do it by writing letters, talking on the telephone and through newspapers and magazines.

Communication is not restricted to an individual. We can communicate with many people at a time. We can even communicate with people living in the other distant countries with the help of developed **communication system**.

A good communication system serves many purposes. It :

- ◆ unites people and creates awareness.
- ◆ has different means of communication in the form of print/audio/video.
- ◆ has both personal and impersonal means of communication.
- ◆ sends and receives messages and makes the use of information in different fields.
- ◆ links the people globally.

PERSONAL COMMUNICATION

Sending or receiving messages to and by the individuals is called personal communication.

When we live in proximity, we can talk and communicate in person. But when we live in different cities or countries, we need other means of communication.



Different Means of Communication



Postman distributing letters

Now-a-days, the postal system is the most **common** and the **cheapest** means of communication. In India, public postal service was opened in 1837. Now, we have the largest postal network (about 1.5 lakh post offices) in the world.

A simple way to communicate with friends or relatives is to write a letter and post it in a letter box. A postman collects the letters. From there,

these letters are delivered to the addressees by bus, train or aeroplane. Complete address and PIN code is necessary for a letter to reach the right person quickly. Aerogrammes are used to send mails to foreign countries. **Speed Post Service** helps to deliver the letters quickly than the ordinary post. Courier services also help in quick delivery of letters.

We can buy postcards, inland letters, envelopes or stamps from the post office. We can also send parcels and even money through the post office.

Do You Know?

October 9 is observed as the Post Office Day.

Telephone Communication

Telephone is the **quickest** means of communication. It provides instant two-way communication so that people in different cities and countries can talk to each other.

We can even talk to the people in far off cities or countries through Subscriber Trunk Dialing or **STD** and International Subscriber Dialing or **ISD**.



Telephone Communication

Do You Know?

The ISD code of India is 0091 or +91.



Telegraph and Telex Communication

Telegraph and telex messages are used frequently in some parts of the world. Telegram messages are sent by **Morse Code**. A telex is a printed message sent by a telex machine. The message is typed by the sender and is printed out automatically at the receiving end. Telegrams are the urgent messages sent in lesser time than postal mail.

Fax, the abbreviated form of **Facsimile Machines**, are used widely in offices and homes. They are connected to telephone lines and can transmit printed messages or images.



Fax Machine

Do You Know?

The first telegraph line was opened in 1851 between Kolkata and Diamond Harbour.



Use of Mobile Phone

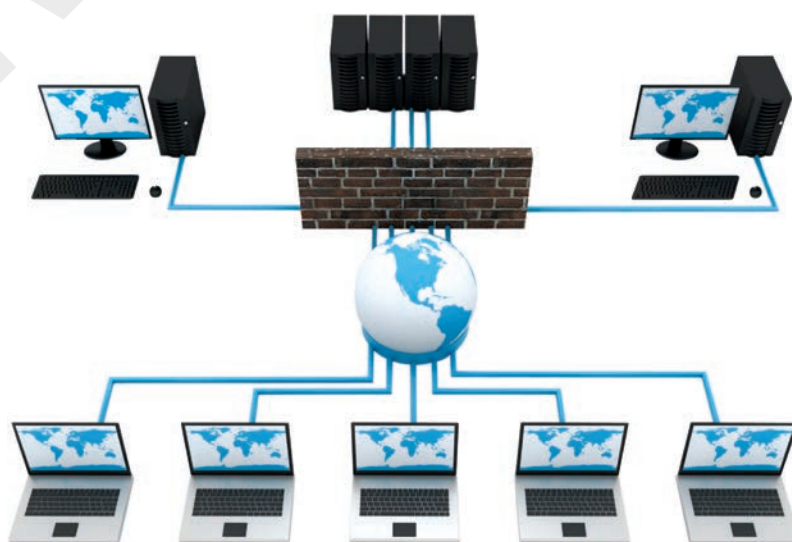
Satellite Phones

Mobile phones are the instruments which can be carried anywhere by the subscriber. Mobile phone has become an integrated part of our life. There has been a significant improvement in the telephone services in India in the last few years.

Internet Communication

The computers can also be used for sending and receiving messages, information and pictures. It is possible to communicate very fast via **Internet**. E-mail or electronic-mail works within the Internet with the help of a **modem**.

The Internet and the World Wide Web (**www**) has enhanced our ability to find, manage and share information in offices and houses.



Internet Communication



Sitting at home, we can find solution of our problems on the net. It is very useful for students as they no longer need to rely on textbooks only. They can get information using the Internet and different Website. It is one of the fastest and low cost method of communication. That is why, it has become so popular.

iPhone

It was launched in 2007. It functions as a camera phone, portable media player, text messenger and has e-mail and web browsing facilities. It also has advanced video recording facilities.



Do You Know?

facebook is a social networking website founded by Mark Zuckerberg and others.

MASS COMMUNICATION

To convey a message to a large number of people, we use newspapers, radio or television. These are called means of mass communication. There are two types of means of mass communication. They are :

- ◆ **Electronic Media**: Radio, television and cinema
- ◆ **Print Media** : Newspapers, magazines, journals and pamphlets

Both these media are important means of mass communication.

Newspaper is one of the most common and cheapest means of spreading information. We can find people waiting for a newspaper in the morning. It brings news, views, opinions, information and many other items of interest from within the country and abroad. In India, newspapers are published in many languages.

Do You Know?

Bengal Gazett was the first newspaper published in India in 1780.

Advertisements also have a strong impact on the people. They are used not only to sell products but also to spread social awareness.

Radio and **television** are the most effective means of mass communication. Even illiterates can listen to radio or watch programmes on television. The television is an audio-visual instrument. We can hear the sound and watch the picture on a television. Now, we can listen the news, discussions and have entertainment at home.



Our national radio network is called **Akashvani** or **All India Radio**. There are over 200 radio stations in India that relay programmes daily in Hindi, English and all other regional languages covering 90 per cent of the country's area. **FM broadcasting** is very popular in India these days.

Cinema is a very popular means of entertainment in India. India produces a large number of feature films. People find films interesting as they both entertain and educate.

SATELLITE COMMUNICATION

Satellites have made communication easier and faster all over the world. They orbit around the Earth for a long period. They pick up signals from the Earth and transmit them back instantly. These signals are received on radio or television sets. Satellites make it possible for us to watch live programmes. Satellite pictures help us to forecast the weather.



Satellite Communication

The world seems very small today because of the widespread means of communication.



proximity	:	nearness
courier	:	a private service that delivers the mail fast
parcel	:	goods wrapped up in single package
subscriber	:	a person who pays regularly to receive a service
Internet	:	international computer network
satellite	:	an object sent into space to collect information

Let's Wrap Up

- ✦ We use different means of communication for different purposes.
- ✦ Sending or receiving messages to and by individuals is known as personal communication.
- ✦ Letters and telephones are the personal means of communication.
- ✦ When we have to convey a message to a large number of people, we use newspapers, radio and television. These are called means of mass communication.
- ✦ Computer can store information. We can communicate through computers via e-mail.



A. Fill in the blanks with the words given in the box.

Morse Akashvani Postal system Print Communication

- 1. Sending and receiving messages is called
- 2. Newspaper is an example of media.
- 3. Telegram messages are sent bycode.
- 4. Our national radio network is called
- 5. is the cheapest means of communication.

B. Write short answers for the following questions.

- 1. Which services are provided by a Post Office?
- 2. Write the names of any two news channels.
- 3. How can students get information these days apart from text books?

C. Answer the following questions.

- 1. What are the features of a good communication system?
- 2. How is a telephone better than a letter?
- 3. How do satellites help us in our daily life?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

- 1. Which of the following is not an example of print media?
a. Journal ☐ b. Radio ☐
c. Newspaper ☐ d. Pamphlets ☐
- 2. Our national radio network is called
a. Akashvani ☐ b. Doordarshan ☐
c. Radio Vani ☐ d. Radiodarshan ☐
- 3. Which is the cheapest means of postal communication?
a. Postcard ☐ b. Envelope ☐
c. Inland letter ☐ d. Speed post ☐
- 4. STD stands for
a. Standard Trunk Dialing ☐ b. Speedy Trunk Dialing ☐
c. Subscriber Trunk Dialing ☐ d. Subscribe Trunk Dial ☐
- 5. Which one of the following is a means of mass communication?
a. Mobile ☐ b. Letter ☐
c. E-mail ☐ d. Radio ☐

E. Write 'T' for true and 'F' for false statements.

- 1. A good communication system serves many purposes. ☐
- 2. When we live in proximity, we can talk and communicate in person. ☐
- 3. An Internet connection is necessary for sending an e-mail. ☐

4. We should send letters without writing PIN code.
5. Communication satellite travel very fast in space.

F. Match the columns.

Column A

1. Facebook
2. Aerogrammes
3. ISD
4. iPhone
5. Morse Code

Column B

- a. Telegram
- b. 2007
- c. Mark Zuckerberg
- d. International Calls
- e. Letters to foreign countries



Discuss

How can we communicate through a newspaper?



HOTS

Roshanganj is a remote village in Bihar. Most of the people are illiterate here. Which means of mass communication should they use to entertain and educate themselves? Give reasons.



Activity Zone

Make a visit to the nearby post office and find the cost of the following.

S.N.	Item	Amount
1.	Postcard	
2.	Inland letter	
3.	Stamp of maximum price	
4.	Money order form	



Life Skills

Try to learn the functioning of satellite with the help of your teacher.



Teacher's Corner

Discuss in the classroom about the pros and cons of social media.

There is a need of every country to run the system peacefully for the community. It needs a body or a system called **Government** to look after the welfare of its citizens. The government protects our boundaries, maintains law and order and maintains amicable relations with our neighbours. It ensures welfare and progress of the society. India is a vast country. We have adopted the federal system of government. India consists of 29 states and 7 Union Territories including the National Capital Territory of Delhi. Hence, it is called the Indian Union.

A single government cannot govern a big country like India properly from one place. Therefore, powers have been distributed between the Centre and the State Governments to prevent conflicts. Both, the Union Government and the State Government, rule the country side by side. Their powers and duties are divided. Our **constitution** has already decided about the field of activities at each level of governments.



Central Government

President

Vice-President

Prime Minister

Lok Sabha
(L.M.P.)

Rajya Sabha
(R.M.P.)



State Government

Governor and Chief Minister

Legislative Assembly

Member of
Legislative Assembly
(M.L.A.)

Member of
Legislative Council
(M.L.C.)





The Union Government deals with **security of India**, **relations with other countries** and **finance**. The State Government deals with **protection of life** and **property**, **agriculture**, **education** and other matters. The State Government can always seek the help of Union Government in critic situations.

Do You Know?

The constitution of India is the lengthiest and bulkiest written document of the world.

UNION OR CENTRAL GOVERNMENT

The Union Government does three main things :

- ◇ make laws
- ◇ implement laws and
- ◇ provide justice

The Indian **Parliament** or **Sansad** makes laws for the whole country. The Indian Parliament has three wings :

1. the Lok Sabha
2. the Rajya Sabha and
3. the President of India

Lok Sabha or Lower House

The Lok Sabha is the main source of political power in the country. There are **545 members** in the Lok Sabha. The members of Lok Sabha are elected by the people of India who are more than **18 years** of age. A citizen who is more than **25 years** of age can contest the election. The candidate, who gets the maximum number of votes, is declared elected. The members of the Lok Sabha are elected for a period of **five years**.



Session in Lok Sabha

Rajya Sabha or Upper House

The Rajya Sabha is the permanent house of parliament. There are 250 members in the Rajya Sabha. Its members are not directly elected. They are elected by the members of the **State Legislative Assemblies** for a period of **six years**. Some members of the Rajya Sabha are also **nominated** by the President of India.



The President

The President of India is elected by the members of **Lok Sabha**, **Rajya Sabha** and the **State Legislative Assemblies** for a period of **five years**. He is the **executive head** of the country.

Many political parties participate in the elections of Lok Sabha. The winning candidates of each party elect their leader.

The leader of the majority party is invited by the President to work as the **Prime Minister** of India. Other ministers are appointed on the advice of the Prime Minister.

The Prime Minister and other ministers form the **Union Council of Ministers**. They run the Union Government and are responsible for smooth functioning of the Parliament.

We have an independent judicial system in our country. The **Supreme Court** is the highest court of justice in India. It is situated in New Delhi. The President appoints the Chief Justice of India and the other judges of the Supreme Court. Decisions given by Supreme Court cannot be challenged by any other court.

The Rashtrapati Bhawan, the Sansad Bhawan, the Central Secretariat and the Supreme Court are located in New Delhi.

Do You Know?

- ◆ The Supreme Court of India has a Chief Justice and 28 other Judges.
- ◆ H.J. Kania was the first Chief Justice of independent India.

STATE GOVERNMENT

Every state in India has a separate government. It is responsible for the welfare of the people in the state only. State Government looks into matters like **education**, **agriculture**, **irrigation**, **law and order**, **health** etc.

People of the state elect the members of the **State Legislative Assembly** for a period of **five years**. **Legislative Councils** are also present in some states. They are like Rajya Sabha at the centre.

The **Governor** is the head of the government in a state. He is appointed by the President of India. The President of India has the power to dissolve any State Assembly on the recommendation of the Governor.

He is the main link between the State Government and Union Government. The state also has Council Ministers appointed by the Governor. The state



has courts at many levels like Lower Court, District Court and a High Court. The High Court is the highest court of justice at the state level. The judges are appointed by the President of India.



Supreme Court

The Supreme Court has the power to review the decisions of the High Courts. The District Courts work at the district level. A large number of employees called **Government Employees** at various levels, work in different departments of the State and Union Governments.

Do You Know?

- ◆ India is called a Republic because it has an elected head of State.
- ◆ The President of India gives his resignation to the Vice-President of India.



nominated	:	to suggest formally
majority party	:	the political party that gets the maximum number of seats in an election
Constitution	:	fundamental law of a country that makes the system to run the administration and services properly
Union Government	:	the government formed at centre that controls the country

Let's Wrap Up

- ✦ There are 29 states and seven Union Territories in India, including the National Capital Territory of Delhi.
- ✦ We have government at two levels : Centre and State.
- ✦ Powers have been distributed between the centre and the state to prevent conflicts.
- ✦ The Indian Parliament has three wings : the Lok Sabha, the Rajya Sabha and the President of India.



A. Fill in the blanks with the words given in the box.

President 6 High Court executive 250

1. Rajya Sabha has members.
2. The Chief Justice of India is appointed by the of India.
3. The President of India is the head of the country.
4. The members of Rajya Sabha are elected for years.
5. The is the highest court in a state.

B. Write short answers for the following questions.

1. Name the three wings of the Indian Parliament.
2. Who elect the members of the Rajya Sabha?
3. Who forms the Councils of Ministers?

C. Answer the following questions.

1. What does the state Government do?
2. How is the President of India elected?
3. What is the role of a Governor in the state?

D. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. The highest court of justice in India is
a. President ☐ b. Supreme Court ☐
c. International Court of Justice ☐ d. High Court ☐
2. To be a member of Lok Sabha, one must have completed of age.
a. 35 yrs ☐ b. 25 yrs ☐
c. 21 yrs ☐ d. 18 yrs ☐
3. The Union Government does not deal with
a. education ☐ b. security ☐
c. finance ☐ d. friendly relations ☐
4. The state government deals with
a. relation with neighbours ☐ b. economy ☐
c. security ☐ d. agriculture ☐
5. The body that looks after the welfare of the citizens is called
a. Parliament ☐ b. Government ☐
c. Panchayat ☐ d. Governor ☐



E. Write 'T' for true and 'F' for false statements.

1. The President of India is elected by the members of Lok Sabha and Rajya Sabha.
2. The Lok Sabha is also called the Upper House.
3. The Central Government can govern the country alone sitting in Delhi.
4. A government ensures welfare and progress of the society.
5. The Governor is the link between the State Government and Union Government.



F. Match the columns.

Column A

1. President
2. Prime Minister
3. Supreme Court
4. Union Territories
5. Eligible Voter

Column B

- a. 7
- b. 18 yrs
- c. Executive head of India
- d. New Delhi
- e. Leader of majority party



Discuss

Why do we need a government?



HOTS

Mr. Pandey never cares to vote. He thinks that it is useless as the government does not care for him. What do you think?



Activity Zone

Write the names of the following :

1. Present President of India
2. Present Prime Minister of India
3. Present Chief Justice of India

.....
.....
.....



Life Skills

Watch the proceedings of the lower house on Lok Sabha TV and try to replicate it in your classroom.



Teacher's Corner

Tell the students about the discretionary powers of the President.

Revision Test Paper - I

(Based on Chapters 1 to 8)

A. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

- The capital of Lakshadweep is
 a. Silvassa ☐ b. Aizawl ☐
 c. Kavaratti ☐ d. Gangtok ☐
- Which word means 'Land of the hill people'?
 a. Mizoram ☐ b. Manipur ☐
 c. Meghalaya ☐ d. Assam ☐
- Which basin lies between the Satluj in the West and the Brahmaputra in the East?
 a. Satluj basin ☐ b. Ganga basin ☐
 c. Brahmaputra basin ☐ d. None of these ☐
- The largest wheat farm is at
 a. Jaipur ☐ b. Udaipur ☐
 c. Jaisalmer ☐ d. Suratgarh ☐
- Pachmarhi is a hill station in
 a. Karnataka ☐ b. Odisha ☐
 c. Chhattisgarh ☐ d. Madhya Pradesh ☐

B. Match the columns.

Column A

- Meghalaya
- Himalaya
- Tsangpo
- Gangaur
- Jog Falls

Column B

- Brahmaputra
- Festival
- Karnataka
- Shillong
- Abode of snow

C. Write 'T' for true and 'F' for false statements.

- The land surface of India is uniform everywhere. ☐
- Sikkim is the least populated state of India. ☐
- Tea is grown in plenty on the lower slopes of the hills. ☐
- In winter, the days are very hot and the nights are cool in deserts. ☐
- Bhilai is a famous steel plant in Chhattisgarh. ☐

Model Test Paper - 1

(Based on chapters 1 to 8)

A. Answer the following questions.

1. How is a Union Territory different from a state?
2. How are the Himalayan mountain ranges important for us?
3. Why do most of the rivers of Deccan Plateau flow West to East?
4. How is a long coastline advantageous for us?
5. Why should we conserve our forests?

B. Fill in the blanks.

1. includes the Garhwal and Kumaon hill ranges.
2. The is called the "Food bowl of India".
3. Forests help in soil
4. Kerala is in the extreme South of Coast.
5. The interdependence between animals and plants in an area is called

C. Give one word for each of the following.

1. Only ocean named after country
2. First Indian woman to climb Mt. Everest
3. Area watered by a river and its tributaries
4. Only active volcano in India
5. The barriers made of cement and steel to block the flow of river water

D. Circle the correct words.

1. Dussehra / Teej is the main festival of Himachal Pradesh.
2. Bihar/Haryana is the land of two great religious men Buddha and Mahavira.
3. Salarjung Museum is in Tamil Nadu / Andhra Pradesh.
4. The coasts of Tamil Nadu receive rain in summer / winter.
5. Black/Red soil is made up of lava rocks.

E. Locate the following on an outline map of India.

1. Delhi
2. The Great Himalayas
3. Eastern Coastal Plains
4. River Ganga
5. Mawsynram

Revision Test Paper - 2

(Based on Chapters 9 to 16)

A. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.

1. India is the second most populous country after
 a. China ☐ b. USA ☒
 c. Pakistan ☐ d. Indonesia ☐
2. White Revolution is related to
 a. wheat ☐ b. fish ☐
 c. pulses ☐ d. milk ☐
3. What connect state capitals and important cities in India?
 a. Border Roads ☐ b. District Roads ☐
 c. State Highways ☐ d. National Highways ☐
4. Post Office Day is observed on
 a. October 9 ☐ b. September 5 ☐
 c. August 15 ☐ d. January 18 ☐
5. ISD stands for
 a. Indian Standard Date ☐
 b. International Standard Dialing ☐
 c. International Subscriber Dialing ☐
 d. Immediate Subscriber Dialing ☐

B. Match the columns.

Column A

1. Wheat and mustard
2. Amul
3. First steel plant
4. Cargo ships
5. Morse code

Column B

- a. Dairy cooperative
- b. Telegram
- c. Transport goods
- d. Rabi crops
- e. Kulti

C. Write 'T' for true and 'F' for false statements.

1. Digging out minerals from the Earth's crust is called mining. ☐
2. Converting raw materials into a processed product with the help of skilled human effort is called a mine. ☐
3. The kharif season begins with the arrival of winter. ☐
4. India has the second largest railway network in the world. ☐
5. Only literates can listen to radio or watch programmes on television. ☐

Model Test Paper - 2

(Based on chapters 9 to 16)

A. Answer the following questions.

1. Why should we conserve mineral resources?
2. Why are human beings considered the most important natural resources?
3. What is the role of the Central Government?
4. What is Mass Communication?
5. How do our culture and heritage unite India?

B. Fill in the blanks.

1. is added in the soil to improve its fertility.
2. ranks first in the world in the production of groundnut and tea.
3. are used to send mails to foreign countries.
4. is the main source of power in the country.
5. Krishnadeva Raya was a famous ruler of the Empire.

C. Give one word for each of the following.

1. These ships carry petroleum and oil
2. Industries which employ thousands of people and need a lot of money for machines and raw materials
3. The President of India gives his resignation to him
4. Guidelines for the government
5. The founder of Aligarh Muslim University

D. Circle the correct words.

1. Silver / white revolution is related to increase the production of fish.
2. Road / Rail transport is the safest and quickest type of land transport for long distance transport.
3. Our national radio network is called Doordarshan / Akashvani.
4. The President / Prime minister and other ministers form the Union Council of Ministers.
5. Hindi/English is widely used for the official work in India.

E. Locate the following on an outline map of India.

1. Kolar gold mines
2. Bombay High
3. Kolkata
4. Bengaluru
5. Mount Abu