

Exploring Society: India and Beyond

**Social Science Textbook for
Grade 7 | Part 1**



0781

विद्यया ऽ मृतमश्नुते



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NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

First Edition

April 2025 Chaitra 1947

PD 1500T BS

© **National Council of Educational
Research and Training, 2025**

₹ 65.00

*Printed on 80 GSM paper with NCERT
watermark*

Published at the Publication Division
by the Secretary, National Council
of Educational Research and
Training, Sri Aurobindo Marg, New
Delhi 110 016 and printed at Universal
Offsets, B-3, Sector-67, Noida (U.P.)
201301

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Foreword

The National Education Policy 2020 envisages a system of education in the country that is rooted in Indian ethos and its civilisational accomplishments in all fields of knowledge and human endeavour. At the same time, it aims to prepare the students to engage constructively with the opportunities and challenges of the 21st century. The basis for this aspirational vision has been well laid out by the National Curriculum Framework for School Education (NCF-SE) 2023 across curricular areas at all stages. By nurturing students' inherent abilities across all the five planes of human existence, (pañchakośhas), the Foundational and the Preparatory Stages set the stage for the further learning at Middle Stage. Spanning Grade 6 to Grade 8, the Middle Stage serves as a critical three year bridge between the Preparatory and Secondary Stages.

The NCF-SE 2023, at the Middle Stage, aims to equip students with the skills that are needed to grow, as they advance in their lives. It endeavours to enhance their analytical, descriptive, and narrative capabilities, and to prepare them for the challenges and opportunities that await them. A diverse curriculum, covering nine subjects ranging from three languages—including at least two languages native to India—to Science, Mathematics, Social Sciences, Art Education, Physical Education and Well-being, and Vocational Education promotes their holistic development.

Such a transformative learning culture requires certain essential conditions. One of them is to have appropriate textbooks in different curricular areas, as these textbooks will play a central role in mediating between content and pedagogy—a role that will strike a judicious balance between direct instruction and opportunities for exploration and inquiry. Among the other conditions, classroom arrangement and teacher preparation are crucial to establish conceptual connections both within and across curricular areas.

The National Council of Educational Research and Training, on its part, is committed to providing students with such high-quality textbooks. Various Curricular Area Groups, which have been constituted for this purpose, comprising notable subject-experts, pedagogues, and practising



teachers as their members, have made all possible efforts to develop such textbooks. The Social Science textbook for Grade 7—*Exploring Society: India and Beyond Part 1*—has been prepared for the second year of the middle stage. It carries forward the themes and approach of Grade 6; the focus is on core concepts and major developments. It endeavours to keep the students engaged in learning through illustrations, maps and pictures laid out in an attractive design. There are abundant reflective exercises and activities embedded in the text to support exploration, discovery and meaning-making. The thematic approach with a multidisciplinary lens continues, helping students to understand ideas and concepts holistically. The text integrates the values we desire our students to develop, is rooted in the Indian cultural context and introduces global perspectives in an age-appropriate manner. For all practical purposes, it has, to my mind, succeeded in its curricular goals: first, to foster natural curiosity among students through a proper selection of content, and second, through a pedagogical approach in line with the recommendations of NCF-SE 2023.

However, in addition to this textbook, students at this stage should also be encouraged to explore various other learning resources. School libraries play a crucial role in making such resources available. Besides, the role of parents and teachers will also be invaluable in guiding and encouraging students to do so.

With this, I express my gratitude to all those who have been involved in the development of this textbook and hope that it will meet the expectations of all stakeholders. At the same time, I also invite suggestions and feedback from all its users for further improvement in the coming years.

Dinesh Prasad Saklani

Director

National Council of Educational
Research and Training

March 2025
New Delhi



Letter to the Student

Dear Student,

You have now entered the second year of the Middle Stage. In Social Science, this year we will further explore about our country, India, across all the five themes we began with last year. You will also get glimpses of our interactions with the rest of the world in the past as well as the present. As you are older now, there will be a little more independent reading, writing and doing. This year too we have tried to keep the text to a minimum—the book has lots of colourful maps, pictures and illustrations.


Since good education should promote understanding and reflection, we have created opportunities for you to explore, discover, think, create, ask questions and propose answers.

Look for the ways in which each theme brings together multiple inputs from several disciplines—whether history, geography, political science or economics. This brings us closer to real life and helps us understand the events of today better.

Finally, we will start exploring some of the people, places and ideas that strengthened India's foundations, as well as delve into some of the aspects of society today. You will observe that the threads of the past continue to be part of today's tapestry and give us the design for strengthening it for tomorrow.

A number of people put their hearts and heads in the preparation of this textbook. It has given us all great joy, and we offer it to you with the hope you will experience some of this joy when you discover new horizons or figure out an original answer to some of the challenging questions we sometimes like to throw at you!

We need to add an important detail. In this textbook, every part of it—text, side box, image or map—can be subject to evaluation and assessment. There are however four exceptions:

- 
- *The quotation or quotations on the first pages of chapters.* Some are straightforward, others offer deep thought. Do not worry if you do not understand them at the first reading; they are meant to stimulate you or inspire you.
 - *Wherever we have mentioned in the text, “You need not remember this”.*
 - *The diacritical signs on some Sanskrit words—do look at ‘Your Journey through this Textbook’ in the next few pages to understand what we mean.*
 - *The Glossary (at the end of the textbook).*

No evaluation should bear on these four aspects.

Your Journey through this Textbook

This is your second year in the Middle Stage. You are now fairly familiar with the approach to the study of Social Science. This year we will take our journey of exploring Bharat further. We continue to ask questions and explore answers—How did people live in the past? What does our country, India or Bharat, look like? What do her mountains, rivers, and plains look like? Why does the weather behave the way it does? ... and so on. In some chapters, Bhavisha and Dhruv, friends of ours (we hope you will also become friends), will accompany us with their time machine.

This textbook has interesting features. As you flip through it, you will see colourful illustrations, including pictures, maps and drawings of many kinds. Let us give you a quick tour of the book and its features. Your teacher will also guide you through it.

Each chapter begins with an **inspiring quotation** from a renowned person or text. Read it and let it stay with you. Some of these quotations are profound thoughts. Don't worry if you do not understand right away; you can return to them later, and they can also be discussed in the class. Here's an example —

The Rise of Empires

There cannot be a country without people and there is no kingdom without a country.

Kauṭilya in Arthaśāstra

CHAPTER 5

The **main text** is written in simple language. You will learn about people and places in India and beyond.

Technical words are explained in the margin right next to the text. They are also listed in the **glossary** (or mini-dictionary) at



<p>Needs: In economics, a need is something that a person requires to survive, such as food, water, clothing, and shelter</p> <p>Wants: In economics, a want is something that a person desires but is not essential for survival.</p>	<h3>What is a Market?</h3> <p>A place where people buy and sell goods is called a market. It is also known as bazaar, haat (in Hindi), and <i>mārukatté</i> (in Kannada). What is it called in your region? This can be at a physical place or, as is becoming popular today, online. Goods and services become available to individuals, households, and businesses through markets. For a long time, people have relied on markets to fulfil their needs and wants for goods and services. In addition, markets connect people, traditions, and ideas.</p> <p>Let's see an example of a market from 16th century India.</p>
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the end of the textbook. In addition, we have included a few words you may not be familiar with. Do consult the glossary often.

The Big Questions ?




1. What makes India's climate so diverse?
2. What are the monsoons? How are they formed?
3. What is the effect of climate on economy, culture and society?
4. How can understanding the climate help us to prepare for natural disasters?
5. What is climate change? What are its consequences?


‘The Big Questions’, just two or three, give you an idea of what you are going to explore in the chapter.

As we move through the chapter you will find some sections called **‘Let’s Explore’**, **‘Think About It’**, **‘Let’s Remember’** which propose activities, in-text exercises, recall of concepts learnt earlier or will invite further reflection.

LET’S EXPLORE

Warfare apart, what other methods do you think the rulers might have used to expand their empires? Pen your ideas and share them with your class.





THINK ABOUT IT

What might happen if the king considered himself to have divine powers? How would he rule over the people?

LET'S REMEMBER



In your Grade 6 Science textbook, Curiosity, you read about different types of thermometers used for measuring the temperature—the clinical thermometer and the laboratory thermometer. You also learnt about temperature scales. One of them is the Celsius scale; another is the Fahrenheit scale. If, for instance, we have a cool temperature of 15 degrees Celsius (noted as 15°C), it is the same as 59 degrees Fahrenheit (noted as 59°F).

‘Don’t Miss Out’ brings out intriguing or fun facts that will trigger your curiosity.



DON'T MISS OUT

The famed Sanskrit grammarian Pāṇini lived around the 5th century BCE, during the time of the Nandas. He is known for composing the *Aṣṭādhyāyī*, an ancient text that lists the rules of Sanskrit grammar in 3,996 short *sūtras*.



Fig. 5.8. An India post stamp commemorating Pāṇini

ancient Indian text) in a way that's easy to remember and pass on.

Tapestry of the Past
5 – The Rise of Empires

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Before we move on...



- All religions in India have their sacred places dotted over the landscape. In Buddhism, Jainism and Sikhism, such places are usually associated with some of the great figures in these belief systems.
- Hinduism has dense networks of pilgrimage sites, covering the entire geography of India. The practice of pilgrimage is interwoven with the lives of people, as it serves the individual development and spiritual growth, but also the socio-economic purposes of trade expansion and pan-Indian cultural integration.
- In many Hindu, tribal and folk traditions, the very land is perceived as sacred.
- Our sacred places are being polluted owing to widespread neglect and a lack of concern. It is our duty to protect our national heritage, as our Constitution also reminds us.

At the end of every chapter, **‘Before we move on’** sums up some of the core ideas that the chapter tried to convey. A choice of exercises, questions or projects follow.

Finally, on the first page of every chapter, you will find a **QR code** leading you to interesting videos, puzzles, games, stories, and so on, which are related to the content of the chapter and will lead you to further explorations. Do scan it, or take an adult's help to scan it, and browse through the material.

Your teacher will be with you on this journey of exploring this textbook. We hope you will read parts of it with your parents or guardians too. Maybe you can try out some of the activities with them!

We wish you an enjoyable journey through Social Science and its rich insights into human life and society.



A note on the pronunciation of Sanskrit words

Since this textbook is in English, we use the Roman alphabet. But we will also encounter some words in Sanskrit and a few other Indian languages. The Roman alphabet cannot make their pronunciation clear without some additional marks or signs, such as dashes, dots or accents, called 'diacritical signs' or 'diacritics'. You can ignore all these signs if you wish, and you don't need to remember them. However, as we are using only a few simple signs, you will find it easy to get used to them. You will also find that they help you pronounce Sanskrit words fairly correctly.

Here is how they work:

- A short dash (called 'macron') over a vowel makes it long. For instance, *dāna* is pronounced 'daana'; *līlā* is pronounced 'leelaa'; *sūtra* is *sootra*.
- *śh* and *ṣh* are pronounced more or less as 'sh' in 'shall' (there is a slight difference, since they correspond to श and ष in the Devanagari script, but you can ignore it in practice). So *śhāstra* is pronounced 'shaastra'; *kṣhīra* is 'ksheera'.
- Consonants with a dot below them (*ḍ*, *ṭ* and *ṇ* mainly) are 'hard', i.e. pronounced by hitting the tongue on the palate; without a dot, they are soft, with the tongue on the teeth. (As a rough comparison, in the preceding English word 'teeth', the first 't' is hard, while the final 'th' is soft.) Examples of hard consonants: *Āryabhaṭa*, *gaṇa*, *paṭhana* (studying), *pīṭha*, *goṣṭhī* (association, assembly), *dhanāḍhya* (rich), *aṇu* (atom).

- Finally, *r* is the Devanagari letter ऋ. We choose to write it as *ṛi*, although in some parts of India it is also pronounced as *ṛu*. So we write ‘Rig Veda’, for instance.

For those who wish to know the precise correspondence between the Devanagari alphabet and the Roman script in our system, the tables of short and long vowels are as follows:

Devanagari	Roman script
अ	<i>a</i>
इ	<i>i</i>
उ	<i>u</i>
ऋ	<i>ṛi</i>
ए	<i>e</i>
ओ	<i>o</i>
Devanagari	Roman script
आ	<i>ā</i>
ई	<i>ī</i>
ऊ	<i>ū</i>
ऋ	<i>ṛī</i>
ऐ	<i>ai</i>
औ	<i>au</i>

And the table of consonants:

Guttural	क	ka	ख	kha	ग	ga	घ	gha	ङ	ṅa	ह	ha
Palatal	च	cha	छ	chha	ज	ja	झ	jha	ञ	ña	य	ya
Cerebral	ट	ṭa	ठ	ṭha	ड	ḍa	ढ	ḍha	ण	ṇa	र	ra
Dental	त	ta	थ	tha	द	da	ध	dha	न	na	ल	la
Labial	प	pa	फ	pha	ब	ba	भ	bha	म	ma	व	va
Sibilants	श	śha	ष	ṣha	स	sa						

CONSTITUTION OF INDIA

Part III (Articles 12 – 35)

(Subject to certain conditions, some exceptions
and reasonable restrictions)

guarantees these

Fundamental Rights

Right to Equality

- before law and equal protection of laws;
- irrespective of religion, race, caste, sex or place of birth;
- of opportunity in public employment;
- by abolition of untouchability and titles.

Right to Freedom

- of expression, assembly, association, movement, residence and profession;
- of certain protections in respect of conviction for offences;
- of protection of life and personal liberty;
- of free and compulsory education for children between the age of six and fourteen years;
- of protection against arrest and detention in certain cases.

Right against Exploitation

- for prohibition of traffic in human beings and forced labour;
- for prohibition of employment of children in hazardous jobs.

Right to Freedom of Religion

- freedom of conscience and free profession, practice and propagation of religion;
- freedom to manage religious affairs;
- freedom as to payment of taxes for promotion of any particular religion;
- freedom as to attendance at religious instruction or religious worship in educational institutions wholly maintained by the State.

Cultural and Educational Rights

- for protection of interests of minorities to conserve their language, script and culture;
- for minorities to establish and administer educational institutions of their choice.

Right to Constitutional Remedies

- by issuance of directions or orders or writs by the Supreme Court and High Courts for enforcement of these Fundamental Rights.



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Constitution of India

Part IV A (Article 51 A)

Fundamental Duties

It shall be the duty of every citizen of India —

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- * (k) who is a parent or guardian, to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

Note: The Article 51A containing Fundamental Duties was inserted by the Constitution (42nd Amendment) Act, 1976 (with effect from 3 January 1977).

*(k) was inserted by the Constitution (86th Amendment) Act, 2002 (with effect from 1 April 2010).



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THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)




Acknowledgements

The National Council of Educational Research and Training (NCERT) acknowledges the guidance and support of the esteemed Chairperson and members of the National Curriculum Frameworks Oversight Committee for their invaluable contributions in overseeing the translation of NCF-SE 2023 perspectives into the textbook. NCERT is also deeply grateful to the Chairperson, Co-Chairperson, and members of the National Syllabus and Teaching-Learning Materials Development Committee for their continuous guidance and thorough review of the textbook. Furthermore, NCERT extends its heartfelt thanks to the Chairpersons and members of the Curricular Area Groups (CAGs) for Social Science and for Economics, as well as other relevant CAGs, for their support and guidelines on the cross-cutting themes.

The participation and contributions from members of the Social Science and Economics CAGs have been indispensable. Additional thanks are due to the Chairpersons and members of other CAGs involved in integrating cross-cutting themes into this textbook.

The unstinted efforts and exemplary dedication of the Social Science team of Program Office, NSTC—Suparna Diwakar, Bhawna Paliwal, Divya Indra Chatterjee, Riddhi Garg, Purva Bhatt—in assisting the making of this textbook at every stage, are gratefully acknowledged. We are also much obliged to Shweta Rao of the Banyan Tree for her outstanding contribution to the textbook's appealing design and visual quality, and her steadfast work throughout the entire process. We are also indebted to Seema Shukla Ojha, *Professor* of History in NCERT's Department of Education in Social Sciences and member-convener of the CAG Social Science for Grade 7, for her constant assistance and advice; and to MV Srinivasan, NCERT's Department of Education in Social Science and member-convener of the CAG Economics and Head of NCERT's Publication Division, for his patient guidance and inputs. We are glad to record our appreciation of Srishti Chauhan, *Young Professional* (EAC-PM), NITI Aayog, for her close collaboration throughout.

The Council is thankful to Anju Gandhi, M Pramod Kumar, Fanindra Sharma, Nidhi M Shastri, Shravan S K, Siddhartha A Bhargava, Swasti Sharma and Tarun Choubisa and other members of the Programme Office, NSTC, for their valuable inputs.



The illustrators — Albert Shrivastava, Ashutosh Kambli, Attri Chetan, and Prashant Singh — deserve commendation for their innovative designs, and sketches, which have significantly enriched the visual quality of the textbook. The contribution made by the cartographers Arkaprovo Das, Ekta Gupta and Pawan Kumar (for tolerating our ever-changing demands to make the maps come alive for students) is much appreciated. The generosity of VN Prabhakar in sharing photographs of historical sites from his personal collection is acknowledged with gratitude.

The contributions of Soumma Chandra, *Editor* (contractual); Deepti Garg and Pragya Dubey, *Proofreaders* (contractual), Publication Division are also appreciated. The NCERT gratefully acknowledges the contributions of Pawan Kumar Barriar, *In charge*, DTP Cell; Bittu Kumar Mahato and Vipin Kumar Sharma, *DTP Operators* (contractual), Publication Division, NCERT for all their efforts in laying out this book.



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Vasudhaiva Kutumbakam:
The whole world is one family

Geographical Diversity of India

CHAPTER

1

To us, by its very geography, the country [India] appears to be quite distinct from other countries, and that itself gives it a certain national character.

— Sri Aurobindo

Fig. 1.1. Jog Falls in Karnataka. Notice the plateau and the waterfalls. The power of the waterfall is converted into electricity (hydroelectricity; 'hydro' means water) through special turbines.



The **Big**
Questions ?

1. What are some key geographical features of India?
2. How does India's geographical diversity affect our lives?



0781CH01

In 1984, Rakesh Sharma, the first Indian astronaut to go into space, spoke with the then Prime Minister of India, Indira Gandhi. When she asked him, “How does India look from space?”, he replied, “*Sāre jahān se achchha*”—better than the whole world. (This is the title of a well-known poem of the early 20th century.)

LET'S EXPLORE



Look at the map of India at the end of this book. What are you able to observe? Recall your lesson on different types of landforms—mountains, plains and plateaus. Which landforms can you identify on the map? What do the different colours on the map mean? (*Hint: The legend on the map shows the heights of each area.*)

As you go through this chapter, remember to refer periodically to the physical map.

India is the seventh-largest country in the world, and a part of Asia. Along with its neighbours—Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, and Myanmar—it forms the region known as the Indian Subcontinent (subcontinent, since it is part of the continent of Asia). Often, for the purpose of discussion, we refer to five regions—the great mountain zone, the plains of the Ganga and the Indus, the desert region, the southern peninsula, and the islands. In this chapter, we will ‘fly’ over these zones, providing you with a bird’s-eye view of these features and offering glimpses of what things look like in close-up at some of these places. It would be difficult to go into all the details at this stage since, as you will soon see, India is large and diverse.

The Himalayan Mountain range stands as a natural barrier in the north, while the Thar Desert and the Arabian Sea mark its western limits. To the south, the Indian Ocean and to the east, the Bay of Bengal form a natural boundary. These geographical features create a separation between India and the rest of the continent and have played a crucial role in shaping India’s climate, culture, and history.

LET'S EXPLORE

- Do you recall your lesson on latitudes and longitudes? Look at the map. Can you read, approximately, the latitude and longitude where India lies?
- Identify the above features on India's physical map.

Let us now journey together from the Himalayas to the islands in the Indian Ocean, and onward to the east of India. The diverse colours on the map already give us a sense of the geographical diversity. Familiarise yourself with the legend on the map. The different colours indicate the altitudes.

The Himalayas

Look at the length of the Himalayan Range on the map. It is like a massive wall. From the legend, can you guess the altitude at different points of the Himalayas?

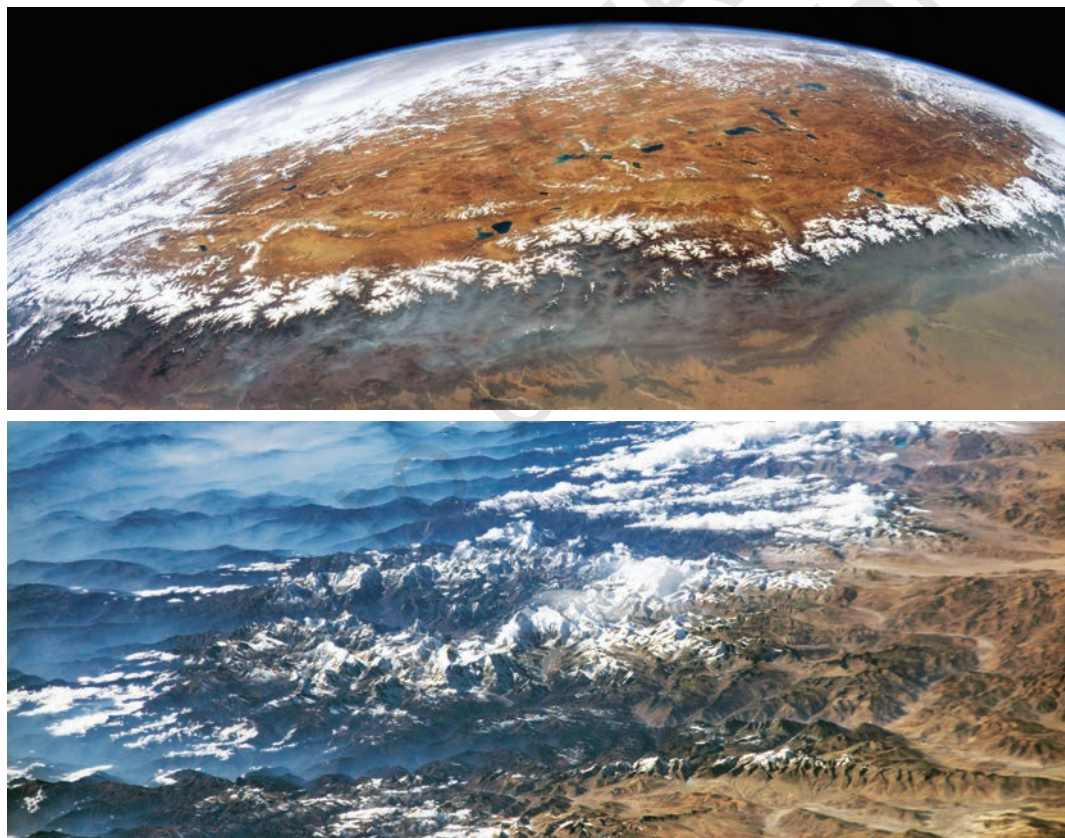


Fig. 1.2. These are satellite images of the Himalayan range. Note that the length of the range is about 2500 km.



LET'S REMEMBER

The Himalayas seem to touch the sky. In fact, many of its peaks are over 8000 metres in height and are together called the 'Eight Thousanders'. This mountain range stretches across six countries in Asia: India, Nepal, Bhutan, China, Pakistan, and Afghanistan. Can you name the highest mountain in the world?

In the summer, the snow on the mountains melts and feeds major rivers, such as the Ganga, Indus, and Brahmaputra. These rivers and their tributaries provide water for drinking, farming, and industrial use, connecting with the lives of hundreds of millions of people. Hence, the Himalayas are sometimes called the 'Water Tower of Asia'. The Himalayas are also important to many cultures and belief systems. The mountains themselves are considered sacred, and temples and monasteries have been built within them, attracting monks and spiritual seekers from around the world who come to pray and meditate.



DON'T MISS OUT

The Bhagirathi River, a major tributary of the Ganga, originates from Gaumukh ('Cow's Mouth'), in Uttarakhand. It is the edge



Fig. 1.3. Gaumukh

of the Gangotri Glacier. This glacier is one of the largest in the Indian Himalayas. It is considered sacred and attracts many pilgrims. Gaumukh is also a popular trekking destination. Next time you see the Ganga, remember—its journey began there!

How the Himalayas were formed ... an interesting story

A long, long time ago, India was part of a much bigger landmass called 'Gondwana', where its neighbour was Africa! At some point, it broke away and slowly started moving north. About 50 million years ago, it reached the landmass of Eurasia and collided with it. As India pushed against Eurasia, the land between them crumpled and rose up—just like how a carpet wrinkles when you push it. That's how the mighty Himalayan mountains were formed!

Amazingly, India is still pushing into Asia today, very slowly—about five centimetres each year, which is much slower than the rate at which your hair grows. This means the Himalayas are still growing taller, just a tiny bit each year—about five millimetres, but over a millennium, that adds up to five metres!

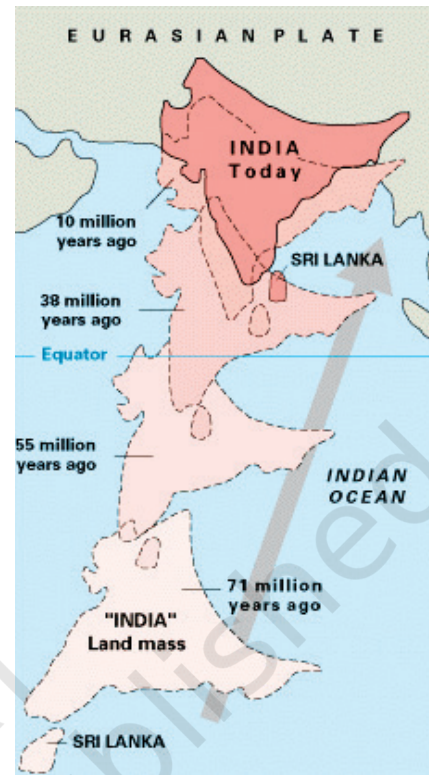


Fig. 1.4. India's journey to Eurasia



Fig. 1.5. Folded layers of Himalayan rock



DON'T MISS OUT

The word 'Himalaya' is a combination of two Sanskrit words—*hima*, meaning 'snow', and *ālaya*, meaning 'abode' or 'dwelling'—thus, 'abode of snow'.

The Himalayas are broadly categorised into three main ranges:

- The **Himadri** (the Greater Himalayas) are the highest and most rugged part of the range, home to towering peaks like Mount Everest and Kanchenjunga. This region remains snow-covered throughout the year. Life here is tough, and there are not many human settlements.
- The **Himachal** (the Lower Himalayas) lie south of the Greater Himalayas and have a more moderate climate, allowing rich biodiversity and human habitation. Popular hill stations, such as Nainital (Uttarakhand), Darjeeling (West Bengal), Shimla (Himachal Pradesh), and Mussoorie (Uttarakhand), are located in this region.
- The **Shivalik** Hills (the Outer Himalayas) form the outermost and lowest range, consisting of rolling hills and dense forests. These foothills are rich in wildlife, serving as a transition zone between the Himalayas and the Gangetic Plains (also called the Northern Plains).

LET'S EXPLORE

Can you locate the names of the states in the different parts of the Himalayas? Take the help of both the physical and political maps for this exercise.

DON'T MISS OUT



Fig. 1.6. Kath-kuni House, Himachal Pradesh

The traditional house construction method in the western Himalayan region is known as '*kath-kuni*' or '*dhajji-dewari*' style of houses. A combination of locally available stone and wood is used, which not only keeps the house warm but also resists damage in the event of mild earthquakes.



DON'T MISS OUT

The Great Himalayan National Park in Himachal Pradesh has a wide diversity of flora and fauna. The park has been declared



Fig. 1.7. 1.Great Himalayan National Park Conservation Area. 2. Himalayan monal (male). 3. A monastery in Ladakh. 4. The Beas river in Himachal Pradesh. 5. Snow Leopard 6. A display of produce in a local market in the Himalayas. 7. Rhododendron—a type of sherbet is made out of this flower.

a World Heritage Site by UNESCO. The biodiversity of the park is being preserved by the government as well as the village communities that live inside the park.

The cold desert of India

The word ‘desert’ immediately evokes an image of a hot place. However, there are also cold deserts, and we have one in India. Ladakh is a cold desert where winter temperatures drop below -30°C . There is very little rainfall, and the landscape is rugged,



Fig. 1.8. Moonland, Ladakh

with rocky terrain, deep valleys, and lakes such as Pangong Tso (tso means lake).

The terrain here resembles that of the moon; hence, it is called ‘moonland’. Geologists explain the formation of this terrain, as we saw earlier, by the fact that the mountains were ‘folded’ when the Indian landmass collided with Eurasia. This folded portion was part of an ocean, and so the rocks in this area



Fig. 1.9. Yaks are very important for the lives of people in the Himalayas. They are reared for their milk, meat, wool and dung, and are also used for transport.



Fig. 1.10. Pangong Tso, Ladakh. This lake has salty water, unlike most other lakes. The saltiness is a result of the minerals that dissolve from the surrounding mountain areas.

are made largely of sand and clay. Wind and rain have eroded the mountains into the shapes you see in the photograph.

Despite the harsh conditions, Ladakh is home to unique wildlife like snow leopards, ibex, and Tibetan antelopes. The Ladakhi people lead a simple life. The region is known for its ancient monasteries and colourful festivals such as Losar and the Hemis Festival.

The Gangetic Plains

As we move southwards from the Himalayas, we reach the vast and fertile Gangetic Plains. These plains have been an important part of the history and civilisation of India. These plains are nourished by mighty rivers originating from the Himalayas, providing a vital lifeline: water. The Ganga, Indus, and Brahmaputra river systems, along with their extensive network of tributaries, enrich the soil with minerals, making the region highly fertile and ideal for agriculture. The rivers bring with them minerals that enrich the soil, enabling abundant agriculture. The rivers are also a source for generating electricity. A large proportion of India's population lives in these plains.



Fig. 1.11. Modern agricultural practices in the plains



Fig. 1.12. Aerial view of Delhi with the river Yamuna on top right



Fig. 1.13. Multi-cropping in Uttar Pradesh



Fig. 1.14. Rural women working in a paddy field in West Bengal

The flat land of the Northern Plains has allowed for the development of an elaborate transportation network. Road and railway networks facilitate the movement of people and goods over long distances. As you will see in the Tapestry of the Past chapters, the Ganga, the Brahmaputra and other rivers have been used for millennia for travel and trade.



Fig. 1.15. Modes of transport in the Gangetic plains



DON'T MISS OUT

Most rivers are named after goddesses—Ganga, Yamuna, Kaveri, etc. The name of Brahmaputra, however, means ‘the son of Brahma’. This river gets bigger during summer instead of drying up! Can you guess why?

LET'S EXPLORE

Notice the concentration of lighting in the plains. What could be the reason for this concentration?



Fig. 1.16. Satellite image of the Gangetic plains



Fig. 1.17. The Northern plains grey langur sits on a wooden beam in Bandhavgarh National Park, Madhya Pradesh



Fig. 1.18. The majestic tiger that was on the verge of extinction. Project Tiger has supported the return of the tiger to its habitats.



Fig. 1.19. The Indian gharial; an adult is between 2.5 and 4.5 m long. This reptile is on the verge of extinction. There are laws that prohibit harming it or hunting it.



Fig. 1.20. A peacock and peahen — the Indian peacock is our national bird

The Great Indian Desert or Thar Desert

If we move westward on the map, you will notice a yellowish area. This area is the Thar Desert. What do you see? A vast stretch of golden dunes, rugged terrain, and a wide-open sky?



Fig. 1.21. A traveller among the sand dunes of the Thar Desert.

LET'S EXPLORE



What is the shape of a sand dune? While mountains are made of rock and their shape is fixed, why do you think sand dunes also have a similar shape, even though they are made of sand?



Fig. 1.22. Jaisalmer, the 'Golden City', located in the middle of the Thar desert in India. The Jaisalmer fort is a UNESCO World Heritage site.

Sand dunes are formed when the wind shifts and shapes the sand into hill-like formations. Sometimes these rise as high as 150 metres.

The Thar is a vast arid region. Most of it lies within India, spanning the states of Rajasthan, Gujarat, Punjab, and Haryana. The desert acts as a natural barrier due to the harsh conditions that deter human and animal movement—including very high daytime temperatures and cold nights, as well as a lack of access to water.

People living in the Thar have adapted their way of life to the place and what it offers; food habits, clothing and lifestyle are suited to these harsh conditions.



*Fig. 1.23.
Camel
vendor at
the Pushkar
Mela (at
the edge of
the Thar
Desert)*



DON'T MISS OUT



Fig. 1.24. (Left) Women fetching water from a source far away from home. (Right) Rainwater harvesting structure in a hamlet.

Water is scarce in the desert. Women often need to travel long distances every day to fetch water for their families. So, the traditional method for cleaning utensils is to scour them with sand until they are clean. A little water can be used for a light rinse. The water used for rinsing is reused for purposes like watering a plant. So, the next time you leave the tap running, remember the people of the Thar Desert. Rajasthan is also famous for its ingenious water conservation methods, including *taanka* or *kunds*. These are special water collection systems that store rainwater, often for drinking purposes.

The Aravalli Hills

LET'S EXPLORE



Let's go back to the map. Trace your path slowly from the Thar Desert towards the east. Do you see the Aravalli Hills?

The Aravallis are among the oldest mountains in the world, some 2.5 billion years old! The range has many peaks and ridges. Although its highest peak, Mount Abu, towers at over 1700 m, most of its hills are between 300 and 900 metres high. Isn't it fascinating that a drive of about 4 and a half hours can take us



Fig. 1.25. (Left) A part of the Aravallis; just beyond this range, the Thar Desert begins. (Right) A part of the Aravallis seen from space.

from Mount Abu in the Aravallis to Jodhpur in the Thar Desert, a drive into a completely different geography?

LET'S EXPLORE

Look at the political map in the textbook and identify the states that the range spans. Did you see Delhi, Rajasthan, Haryana and Gujarat?



The Aravallis play a vital role in shaping the geography and climate of northwestern India. One of its most important functions is acting as a natural barrier, preventing the Thar Desert from expanding further eastward. You will read more about this later.

The Aravallis, rich in minerals like marble, granite, zinc, and copper, have supported mining and construction activities for centuries. In fact, evidence from its ancient mines at Zawar has shown that over eight centuries ago, Indians were the first in the world to master the delicate process of extraction of zinc. Historic forts, such as Chittorgarh, Kumbhalgarh, and Ranthambore, are located here.



Fig. 1.26. Kumbhalgarh Fort surrounded by the Aravallis; this location in the hills proved to be an excellent deterrent to the enemy.

The Peninsular Plateau



LET'S REMEMBER

A plateau is a landform that rises up from the surrounding land and has a more or less flat surface; some of its sides are often steep slopes.

Peninsula:
A peninsula is a piece of land that is surrounded by water on three sides.

India has several plateaus; the most important one is the triangular peninsular area in the middle and south of the country.

It is also a very old land formation! Since this region is a **peninsula**, surrounded by water on all three sides by the Arabian Sea, the Bay of Bengal, and the Indian Ocean, it is called a peninsular plateau.

The plateau is bordered by two mountain ranges, the Western Ghats and Eastern Ghats. The Western Ghats are taller and run along the western coast like a wall, with many beautiful waterfalls flowing down their steep sides during the monsoon season.



DON'T MISS OUT

The Western Ghats have been declared a UNESCO World Heritage Site. They are home to many rivers and have a rich biodiversity. The northern portion of the Western Ghats are also known as the Sahyadri Hills.

The Eastern Ghats are lower and broken into smaller hills along the eastern coast. Between these mountain ranges lies the Deccan Plateau, a vast area of flat highlands.

Rivers like the Godavari, Krishna, and Kaveri flow across the plateau from west to east. These rivers are important for farming and provide water to millions of people.

LET'S EXPLORE

Look at the physical map of India given at the end of the book. Notice the direction of the flow of the rivers.





Fig. 1.27. Dense forests of Chhattisgarh, home to many tribal communities

This plateau is rich in minerals, forests, and fertile land, making it vital for India's economy. It tilts a little to the east, so a few of the rivers in this region flow towards the Bay of Bengal. East-flowing rivers like the Godavari, Krishna, and Mahanadi originate here, providing water for farming, industries, and hydroelectric power. There are west-flowing rivers (Narmada, Tapti) too, which drain into the Arabian Sea.

Dense forests on the plateau are home to tribal communities, including the Santhal, Gond, Baiga, Bhil, and Korku. These tribes have distinct languages, traditions, and ways of life closely connected to Nature.

LET'S EXPLORE

Tribal communities are largely spread over the states of Jharkhand, West Bengal, Odisha, Assam, Madhya Pradesh, Chhattisgarh, Maharashtra, Telangana, and Gujarat. Examine the physical and political maps at the end of this book to locate the states and connect them to their location on the physical map.

Plateaus are home to many beautiful waterfalls in India, as rivers flow over their uneven and rocky surfaces. These waterfalls not only attract tourists but also help in hydroelectric power generation and provide water for irrigation.





Fig. 1.28. Powerhouse Waterfalls at Periyakanal, near Munnar, Kerala



Fig. 1.29. Lion-tailed macaque in the Western Ghats



Fig. 1.30. King cobra of the Western Ghats



Fig. 1.31. This is an insectivorous plant, meaning it feeds on insects, found in the Western Ghats. It catches small insects in sticky traps and digests them!



Fig. 1.32. Coal mines in the plateau; an important resource, especially in the production of electricity. Coal is a fossil fuel, the use of which contributes to global warming.



Fig. 1.33. Mumbai, on the west coast, is India's financial centre

India's Amazing Coastlines

India's coastline is dotted with beautiful beaches, rocky cliffs, and lush green forests. Some beaches have golden sand while others have black rocks. Some islands have coral reefs while others are covered in thick jungles. India's coasts are full of surprises! The Indian coastline is over 7500 km long.

LET'S EXPLORE

- Look at the physical map of India in your school atlas or wall map and find the names of five rivers that flow into the Bay of Bengal. Find out India's coastal states and discuss the difference between the western and eastern coastal plains.
- Do you know what it is called when these rivers split into multiple streams near the coast? Discuss with your teacher in class to find out!

The West Coast of India

The West Coast of India stretches from Gujarat to Kerala, passing through Maharashtra, Goa, and Karnataka. Most rivers here originate in the Western Ghats, flow swiftly, and form estuaries. The coastline is shaped by alluvial deposits from short rivers and features coves, creeks, and estuaries, with the Narmada and Tapti estuaries being the largest.





Fig. 1.34. An aerial view of a part of the west coast. Note how close the hills of the Western Ghats are to the Arabian Sea.

The west coast has many important ports and cities. These have been the centres of economic activity for millennia.

The East Coast

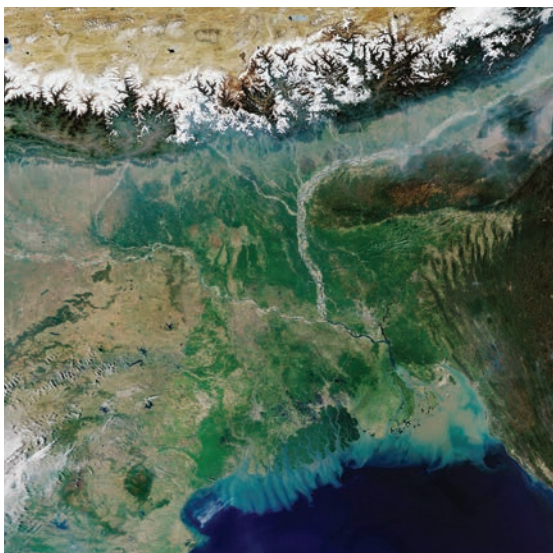


Fig. 1.35. Satellite view of the East Coast of India.

The East Coast lies between the Eastern Ghats and the Bay of Bengal, stretching from the Ganga delta to Kanyakumari. It has wide plains and major river deltas, including Mahanadi, Godavari, Krishna, and Kaveri. Important water bodies like Chilika Lake and Pulicat Lake (a lagoon, which is a body of water separated from larger bodies of water by a natural barrier) are found here.

Deltas are landforms formed at the mouth of a river when it deposits sediments into a larger body of water, such as an ocean, a lake, or another river. Over time, these sediments build up, forming a triangular or fan-shaped area. The Godavari, Krishna, Kaveri and Mahanadi rivers create fertile deltas, making the land ideal for farming.

Indian Islands

The Indian Islands refer to the group of islands scattered across the Indian Ocean, the Arabian Sea, and the Bay of Bengal, which form part of India's territory. India has two major island

groups—Lakshadweep in the Arabian Sea and the Andaman and Nicobar Islands in the Bay of Bengal. These islands have unique wildlife, beautiful beaches, coral reefs, and volcanoes. Several ancient tribes made these islands their home tens of thousands of years ago.

Lakshadweep islands

Lakshadweep is an archipelago (a group of islands) located in the Arabian Sea, close to the Malabar coast of Kerala. It is made up of 36 islands made of coral. Not all islands are inhabited by people. India controls a vast marine area, allowing for fishing, resource exploration, and environmental protection.

Andaman and Nicobar islands

This archipelago comprises more than 500 large and small volcanic islands, divided into two distinct groups—the Andaman and the Nicobar Islands. Their location is very important.



Fig. 1.36. Coral reef in the Lakshadweep Islands



Fig. 1.37. Coral reef in the Andaman Islands



Fig. 1.38. A floating dock (a small port) of the Indian Navy near the Andaman Islands.



Fig. 1.39. An aerial view of the active volcano on Barren Island, the only one in India

They are like the outposts of India, keeping an eye on the ocean. It is home to a variety of flora and fauna. The Andaman Islands are also significant from a historical point of view — many of our freedom fighters were jailed there under the most severe conditions in a prison complex called ‘Cellular Jail’. It has been preserved to remind us of the tremendous sacrifices that our forefathers made so we could be free. We will discuss this some more in higher classes.



DON'T MISS OUT

Barren Island (Fig. 1.39 above) in the Andaman and Nicobar Islands is the only active volcano in India. It sometimes erupts, sending smoke and lava into the sky!

The Delta in West Bengal and the Sundarbans



Fig. 1.40. Mangroves of the delta in the Sundarbans of West Bengal

As we travel back from the islands towards the eastern side of the Himalayas via the Bay of Bengal, we come to the Sundarbans. This is located in the delta of the Ganga, Brahmaputra (you saw them earlier in the chapter) and their tributaries. This delta has a unique combination of the river, sea and land. About half of it is located in India, and the rest is in

Bangladesh. This is also a UNESCO Heritage site. The Sundarbans are home to many species, including the Royal Bengal Tiger.

Note: Do remember to look at the map and identify where the delta is.



Fig. 1.41. Left to right, top to bottom: Seven Sisters Waterfalls, Meghalaya, India; The Shad Suk Mynsiem festival is celebrated by the Khasi people as a form of gratitude towards nature; Living roots bridge near Nongriat village, Cherrapunjee, Meghalaya

The hills of the Northeast

Stay on the map as we move towards the hills of the Northeast, our final destination for now. Can you see Garo, Khasi, and Jantia marked on the map? These hills, part of the Meghalaya Plateau, are known for their lush greenery, heavy rainfall, and breathtaking waterfalls. This region experiences one of the highest rainfalls in the world, making it rich in forests, unique wildlife, and fertile land.



DON'T MISS OUT



Mawlynnong Village, situated in the East Khasi Hills of Meghalaya, is renowned as the 'cleanest village in Asia'. This picturesque village is famous for its well-maintained cleanliness, bamboo dustbins, and eco-friendly living practices. The village is also known for its living root bridges, which are created by weaving tree roots over the course of many years.

Fig. 1.42. Living root bridges showcase the craftsmanship of the tribes of the Northeast.



Before we move on ...

- India gives its name to the subcontinent it is a part of.
- It has many diverse geographical features, ranging from the snowy Himalayas to the heat of the Thar Desert. The plains are watered by a large number of rivers. There is also a peninsular plateau with the Arabian Sea on the west and the Bay of Bengal in the east.
- These diverse geographic features have created a variety of conditions with respect to soil, flora, fauna, life and economic opportunities, and honed a rich culture.
- These geographical features have played an important role in shaping our civilisation.

Questions and activities

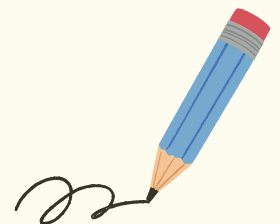
1. What, in your opinion, are two important geographical features of India? Why do you think they are important?

2. What do you think India might have looked like if the Himalayas did not exist? Write a short note or sketch a drawing to express your imagination.
3. India has been called a 'mini-continent'. Based on what you've read, why do you think this is so?
4. Follow one of India's big rivers from where it starts to where it meets the ocean. What are the different ways in which people might utilise this river along its journey? Discuss in groups in your class.
5. Why is the southern part of India referred to as a peninsular plateau?
6. Which UNESCO Heritage Site mentioned in this chapter did you find more interesting? Write a short paragraph to describe what about it is interesting.
7. Look at the two maps of India, physical as well as political, given at the end of this book. Identify the place you are at now. Which physical feature of India would you use to describe its location?
8. Food preservation techniques differ from place to place across India. They are adapted to local conditions. Do a class project. Gather different methods of preserving food. Hint: Drying vegetables when they are in season for use during the off-season.
9. Despite having such different regions (mountains, deserts, plains, coasts), India remains one country. How do you think our geography has helped unite people?

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!



Understanding the Weather

CHAPTER

2

A change in the weather is sufficient to create the world and oneself anew.

Marcel Proust, French novelist



Fig. 2.1

The **Big Questions** ?

1. How can we measure and monitor the weather around us?
2. How do weather predictions help us prepare for events like heavy rain, storms, drought and heat waves?



0781CH02

Weather and its Elements

You wake up one winter morning and shiver. You reach for thick clothes to keep yourself warm. In the summer, you choose clothes that keep you cool and comfortable. You are responding to your body's signals; your body is sensing the weather.

What is weather?

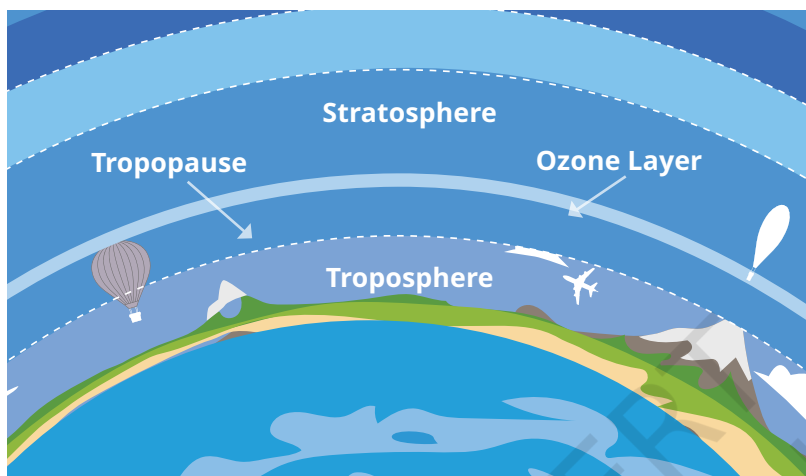


Fig. 2.2

Weather is a state of the Earth's atmosphere at a particular time and place. But what is an atmosphere? In simple terms, it is the layer of gases that surround some planets—in the case of our Earth, we call these gases 'air'. The Earth's atmosphere may be compared to a cake

with several layers. The layer closest to the surface of the Earth is called the 'troposphere', and that is where all land-based plants and animals (including humans!) live and breathe. It is also where almost all weather phenomena, which we will explore in this chapter, take place. The troposphere extends to a height of 6 to 18 kilometres from the ground; it is less thick at the poles (where the cold air contracts) and thicker in the tropical zone (where the warmer air expands). You will study more about the other layers in your Science classes.

We use many words to describe the weather—hot, cold, rainy, cloudy, humid, snowy, windy, and so on. They describe the different ways in which we experience the elements of weather.

LET'S EXPLORE

What are some of the words in your local language that you use to describe the weather? Hot, cold, warm, chilly, crisp, pleasant, and so on, are commonly used terms in English.



The elements of weather are:

- **Temperature:** How hot or cold the atmosphere is.
- **Precipitation:** Any form of water, such as rain, snow, **sleet** or **hail**, that falls from the sky.
- **Atmospheric Pressure:** The weight of the air above us, felt on the Earth's surface.
- **Wind:** The movement of air, including its speed and direction.
- **Humidity:** The amount of **water vapour** in the air.



THINK ABOUT IT

Let us imagine that Krishnan from Chennai is speaking with Amir in Kashmir. Krishnan tells Amir that it has become chilly in Chennai after it rained the previous night. Amir asks him how cold it is. How will Krishnan explain to Amir how cold it is? After all, what is cold for Krishnan may be quite pleasant for Amir!

As you can see, it would be difficult for Krishnan to convey his sense of chilliness to Amir unless there is a commonly agreed way to measure the temperature. It is the same with other elements of the weather. In this chapter, we will learn how we measure the weather using common standards.

LET'S EXPLORE

What do you think could be some other reasons to measure the weather more precisely? (Hint: Think how knowing the weather a few hours or a few days in advance would help you plan some activities.)

From early times, humans have closely observed Nature and learnt to read her signals to **forecast** the weather. Observing birds flying low, ants carrying eggs, squirrels gathering nuts, frogs croaking loudly, or even the opening and closing of pine cones, provided valuable information about coming rain or storms. This knowledge has been passed down from generation to generation. Even today, in many parts of India, people use traditional ways to predict the weather, especially the arrival of the monsoon.

Sleet:

Frozen or partly frozen rain.

Hail:

Small, hard balls of ice that fall from the sky like rain.

Water vapour:

Water vapour is water in gaseous instead of liquid form.



Forecast:

To predict or find out in advance (in our case, the weather).

Observing Nature's clues



Fig. 2.3.1. Ants shifting their eggs to higher ground is a natural behaviour that indicates an expected change in the weather, especially heavy rain.

Fig. 2.3.2. A frog croaking in a forest of the Western Ghats, in expectation of rain.



Meteorology:

Meteorology is the systematic study of weather and its evolution. This study is the basis for weather forecasting.



Fig. 2.3.3. The opening and closing of pine cones are natural mechanisms driven by environmental humidity. Pine cones close in humid conditions to protect their seeds, and open in dry conditions to release them, ensuring they spread in favourable weather.

LET'S EXPLORE



Talk to elders in your neighbourhood and ask them how they predict the weather. What signs do they observe? Document any sayings in your regional language that refer to weather prediction.

In the last few centuries, scientists have worked out methods to measure and monitor the elements of the weather with great precision. Based on those inputs, **meteorologists** try to predict how the weather will behave in a particular region after a few hours or a few days, or even a few weeks. How do they do it? Do they just look up at the sky and guess? No, they've got some cool gadgets, a few of which we will now look at.

Weather Instruments

a) Temperature

LET'S REMEMBER



In your Grade 6 Science textbook, *Curiosity*, you read about different types of thermometers used for measuring the temperature—the clinical thermometer and the laboratory thermometer. You also learnt about temperature scales. One of them is the Celsius scale; another is the Fahrenheit scale. If, for instance, we have a cool temperature of 15 degrees Celsius (noted as 15°C), it is the same as 59 degrees Fahrenheit (noted as 59°F).



Fig. 2.4.1. Snow melts quickly when it's warm.



Fig. 2.4.2. Cloudy weather—it's getting cold.



Fig. 2.4.3. In winter, coconut oil turns solid.



Fig. 2.4.4. Curd takes longer to set in cold weather.

Ambient:
Of the
immediate
surroundings.

Statistics:
The technique
of gathering
and analysing
information
or data in
order to be
able to detect
patterns,
understand
events or make
predictions.

There are several types of thermometers. Some simply measure the **ambient** temperature; others record the maximum and minimum temperatures during a day. Thermometers often use a coloured liquid which expands when the temperature increases. However, more and more, digital thermometers are preferred as they are more precise and can record more data.

Indeed, temperature recordings can be used to collect some useful **statistics**, including:

- **Range of temperature** or the maximum temperature minus the minimum temperature during a particular period of time (usually 24 hours).
- **Mean daily temperature** or the maximum temperature plus the minimum temperature of the day divided by two.

DON'T MISS OUT



- The India Meteorological Department was set up in 1875. Its motto is *ādityāt jāyate vṛiṣhti*, which means, “From the sun arises rain.” The phrase comes from the ancient text *Manusmṛiti*, and the complete sentence reads, “From the sun arises rain, from rain comes food, and from food, living beings originate.”
- Can you think of a reason why rain arises from the sun?



Fig. 2.5

LET'S EXPLORE



- Here's a chart of the temperatures of a city in Madhya Pradesh. What is the maximum temperature recorded in the week shown here? What is the minimum? Calculate the range.

Date	Maximum Temperature (in °C)	Minimum Temperature (in °C)
28.02.2025	29	16
01.03.2025	30	15
02.03.2025	31	17
03.03.2025	32	18
04.03.2025	30	17
05.03.2025	28	14
06.03.2025	29	15

→ Remember the conversation between Krishnan and Amir? If Krishnan said it was 20°C in Chennai and he was feeling a little cold, he and Amir would have a measure they could understand. What do you think Amir's reaction to Krishnan's statement might be?

b) Precipitation

If the news says that a particular place received 30 mm of rainfall in a day, what does it mean? How is rainfall measured?

The amount of rainfall is measured with the help of an instrument called a **rain gauge** (Fig. 2.6). When it rains, the water falls into a funnel and is collected in a cylinder. A scale is attached to the cylinder to measure the depth of rainwater collected. For example, when the height of the water collected is 5 mm, we say that the area received 5 mm of rainfall.

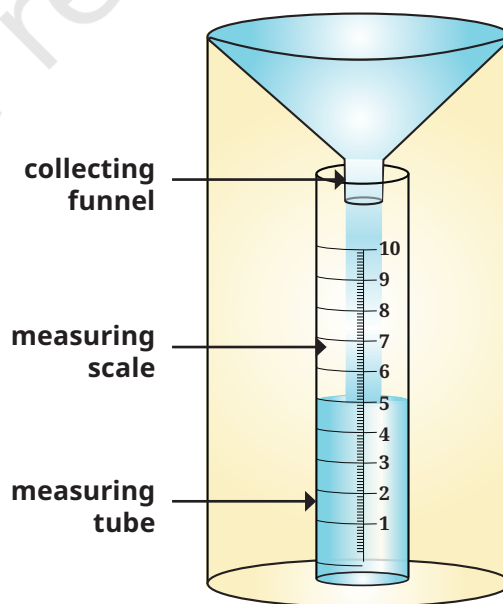


Fig. 2.6. Rain gauge

LET'S EXPLORE



Make a rain gauge as shown in the diagram above. Place the rain gauge in an open area, away from objects that might obstruct rain. Ensure that the rain gauge is on a flat surface and will not tilt or topple with the wind. Using the measuring scale, record the amount of rainwater collected at the same time every day, for a month. (If there is snow, allow it to melt before taking the measurement.) Calculate the average rainfall for every week in that month and comment on the variation from week to week.

c) Atmospheric pressure

Our bodies are quite aware of temperature and rainfall. But you may also have experienced that the weather sometimes feels 'heavy', as before a thunderstorm. This is related to atmospheric pressure, which is the pressure exerted by the weight of the air above and around us.

The atmospheric pressure is higher near the sea coast and lower as we go higher up into the mountains. When you climb a mountain, the air gets thinner than in the plain below. As a result, the air pressure is lower, and there is less oxygen available for

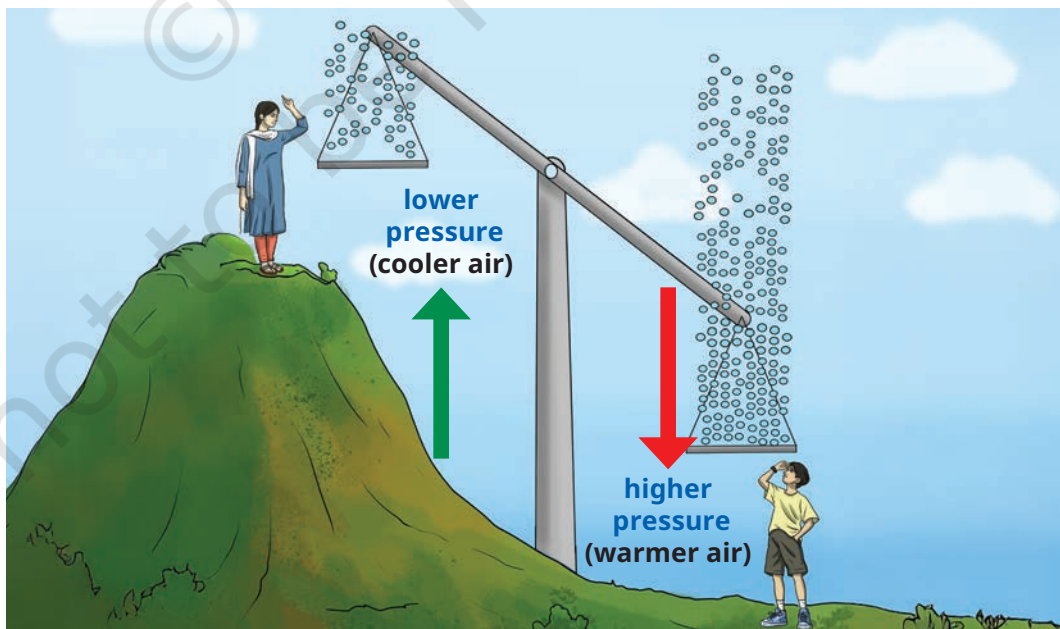


Fig. 2.7

your lungs to take in. With less oxygen getting into your blood, your body has to work harder to keep you moving! That's why people sometimes feel breathless, dizzy or tired at high altitudes. This does not mean that the atmospheric pressure is always high in the plains below or on the coast. In fact, it sometimes drops dramatically, resulting in what meteorologists call a 'depression' or 'low-pressure system', which can sometimes develop into a storm or even a cyclone.



THINK ABOUT IT

Why do you think it would be important to measure atmospheric pressure? Who are the people most likely to use such measurements?

The instrument used to measure atmospheric pressure is called a **barometer**. As with thermometers, there are several types of barometers. The unit they display is generally the **millibar** (abbreviated as mb). The normal atmospheric pressure at the sea coast is around 1013 mb; a pressure below 1000 mb indicates a depression.



THINK ABOUT IT

People who journey to places at a high altitude are advised to make pauses on the way to allow the body to **acclimatise**. Our army personnel serve in high-altitude places like Khardung la in Ladakh, which is over 5600 metres above sea level. It is hard to imagine how they live and work in places where the oxygen level is so low—the atmospheric pressure there is generally about 650 millibars!

Acclimatise:
Adjust to a
new climate
or new
condition

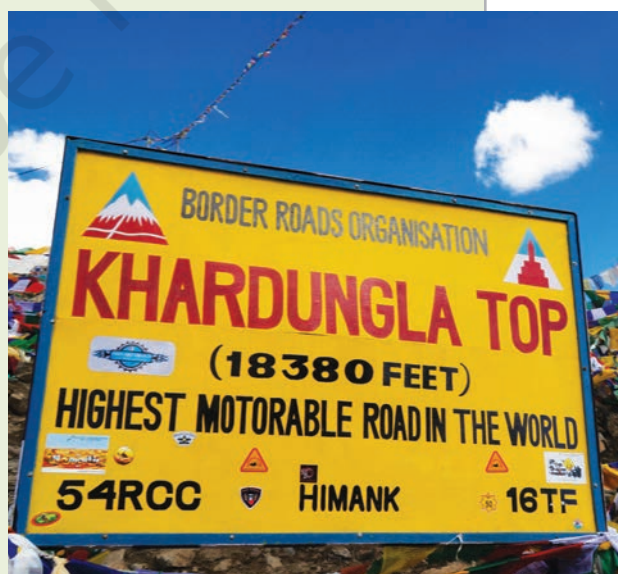


Fig. 2.8

d) Wind

Wind is the movement of air from areas of high pressure to areas of low pressure. Speed and direction are two important factors when we describe the wind.



THINK ABOUT IT

Have you seen seeds like these flying in the wind? What would happen to the seeds if there was no wind?



Fig. 2.9

The wind is an important element of the weather. Its direction and speed help in weather forecasting. Besides, air pilots and sailors need to be aware of wind data, as the wind has a great influence on flying or sailing. Farmers also use the wind direction to predict where rain might come from. Also, a greater wind speed will cause the soil to dry faster.

So, how do we measure this direction and speed? A wind vane (or weather vane) has a rotating arm with a pointer at one end and a tail at the other. When the wind blows, the tail is pushed, and the pointer turns in the direction of the wind. It responds even to a light breeze.



Fig. 2.10. Left: Wind vane on the tarmac. Right: Anemometer

This wind vane on the tarmac is called a ‘wind sock’. It gives pilots an indication of the direction of the wind during take-off and landing. Similar socks are used in industries that release ash or gases.

The simplest instrument to measure the wind direction and speed is the **anemometer**. It has three or four metal cups that rotate on a vertical shaft when the wind blows—the stronger the wind, the faster the rotation. A meter attached at the bottom counts how many times the anemometer spins in a certain period of time and calculates the wind speed in kilometres per hour (km/h).

e) Humidity

Humidity is the last element of the weather on our list. It refers to the amount of water vapour present in the air. It also depends on factors like temperature, wind, pressure and location.

LET'S EXPLORE

Where do you think humidity is likely to be more, Kochi or Jaipur? You might guess that Kochi has higher humidity than Jaipur because it is located near the sea. But how will we know for sure? If we had to compare the humidity level between Kochi and Mangaluru, how would we do it? Discuss with your classmates.



We can answer these questions more precisely by learning how to measure humidity.

Before we move forward, we need to remember our Science lesson from Grade 6 about the states of water. This will help us to understand how humidity is measured.

LET'S REMEMBER



- When water evaporates, it causes a cooling effect.
- If the amount of water in the air is already high (more humidity), water evaporates slowly. That is typically the case on a rainy day.

Humidity of the air is measured as **relative humidity**: air that would contain absolutely no water vapour (which is impossible in natural conditions) is rated at 0%, while air saturated with water vapour will have a humidity of 100%. In practice, dry weather has a relative humidity range between 20% and 40%, while humid weather usually falls between 60% and 80% relative humidity.



THINK ABOUT IT

If the humidity in Delhi is at 52% while in Kochi it is 84%, in which of the two places are wet clothes likely to dry faster? And where are you likely to sweat more, assuming the temperature is the same in both places?

But how do we measure such numbers? This is done through an instrument called a **hygrometer**. Again, there are several types of hygrometers, depending on the principle they are based on. The measurement of humidity is of great importance in many industrial processes, such as food processing. Museums also monitor humidity as they need to maintain a dry environment to preserve their exhibit.

Weather Stations

As you can see, we need several instruments to measure the weather at a particular place and time. A weather station brings all these instruments together, making it easy to measure and track the weather. Readings of all the measurements are taken at regular intervals, which helps in mapping and forecasting the weather.



Fig. 2.11

An automated weather station

An **Automated Weather Station (AWS)** is a self-operating system that uses various sensors to measure and record weather data, such as temperature, humidity, wind speed and direction, precipitation, and atmospheric pressure. Such stations are widely used in fields like agriculture, aviation, navigation, environmental monitoring, and so on, providing accurate and timely weather information without the need for human intervention.

DON'T MISS OUT



In 2023, the National Disaster Management Authority set up an AWS at a glacial lake of Sikkim at an altitude of more than 4800 metres above sea level. The AWS provides early information about upcoming weather conditions.



Fig. 2.12. AWS at a glacial lake of Sikkim

Predicting the Weather

Meteorologists collect data using these instruments over long periods of time. They study the data and use scientific

methods to try and predict the weather. Such predictions are very important nowadays, as climate change makes extreme weather, such as droughts, floods, cyclones, etc., more frequent.

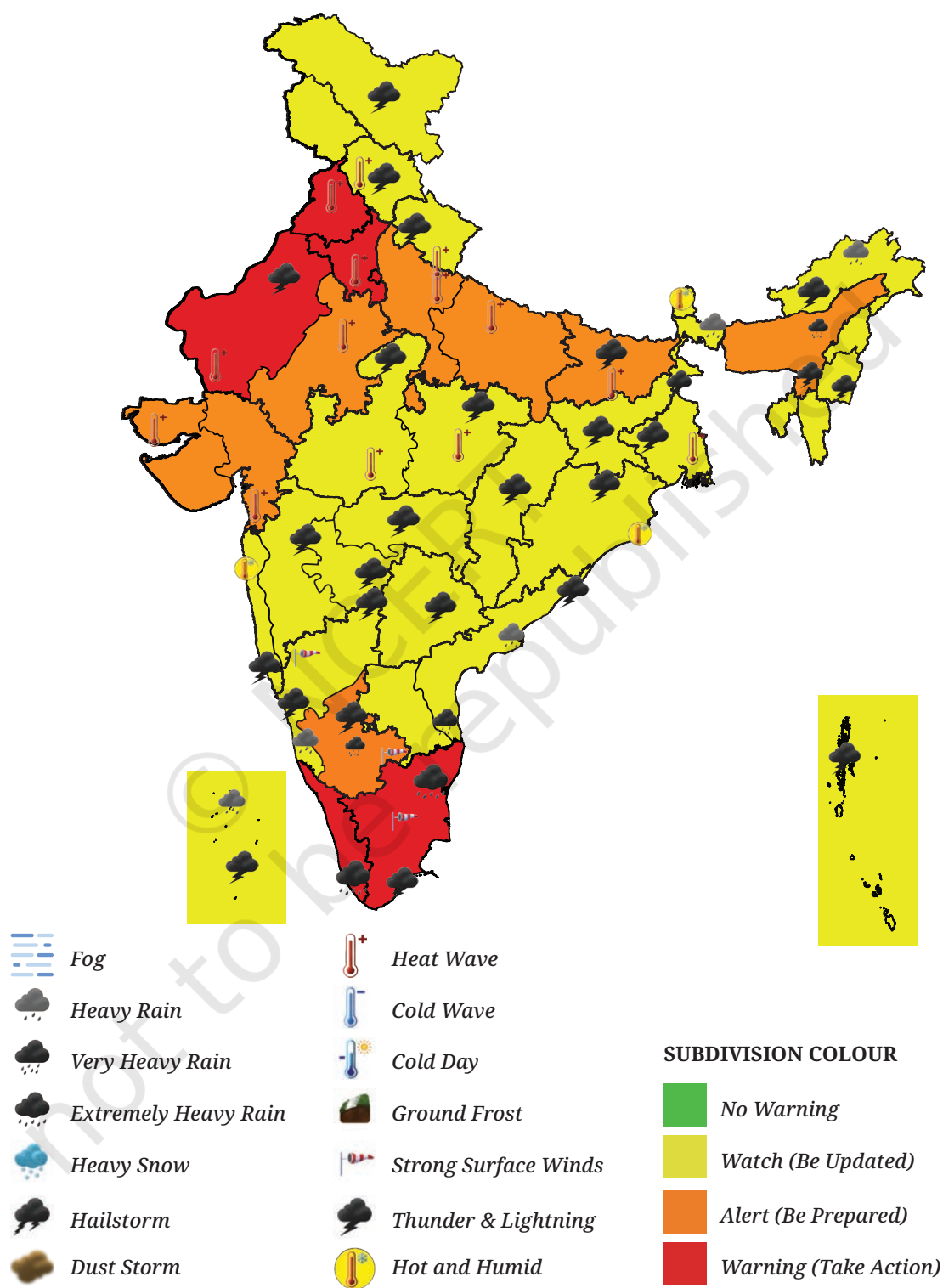


Fig. 2.13. India: weather warning for India on 19 May 2024

Accurate predictions help us to be ready for such events. They also enable local governments to mobilise resources and prepare for any disasters. For example, if stormy weather is expected at sea, fishermen are warned about venturing out in their boats, or an entire coastal area might have to be evacuated if a cyclone is expected.

LET'S EXPLORE

Discuss, in pairs, different situations in which weather predictions are helpful. Make a list, and after you have completed it, share it and discuss it with the pair sitting next to you. How many different categories of situations have you been able to identify?

Look carefully at the map of India above. This map was issued by the India Meteorological Department on 19 May 2024. Study the icons and connect them to the conditions shown on the map.

LET'S EXPLORE

- What do you observe happening on that day? What are the various weather conditions that the IMD is alerting people to?
- Which states have warning signs?
- Which parts of India are likely to be free from severe weather?
- Which states are likely to face heat wave conditions?
- What are the causes for warning in Tripura and Lakshadweep?

Before we move on ...

- Temperature, humidity, precipitation, wind and atmospheric pressure together define the weather at a particular place.
- The condition of these elements is measured using special instruments. Data collected from these help us to monitor and predict the weather.



- In different times or situations, one of the elements is dominant — for example, rainfall in July, the temperature in May and December, atmospheric pressure when a cyclone is moving, and wind when a loo (strong, hot and dusty winds that blow in north India in summers) is blowing, or forest fires are spreading.
- Weather is closely linked to climate. We will discuss this in the next chapter.

Questions and activities

1. Match the instrument with the weather element it measures.

Instrument used		Element of the Weather	
(1)	Hygrometer	(a)	Precipitation
(2)	Anemometer	(b)	Atmospheric pressure
(3)	Barometer	(c)	Wind direction and speed
(4)	Thermometer	(d)	Humidity
(5)	Rain gauge	(e)	Temperature

2. Jyotsna is deciding what clothes to pack for her school trip to Mumbai in June. She looks at the weather forecast, which predicts 29°C and 84% humidity. What would be your advice to her?
3. Imagine that a small group of students is setting up a rain gauge.

Here are some options for the site.

1. The school vegetable garden.
2. The terrace of the school building.
3. Open ground with elevated platform.
4. Compound wall of school.
5. Verandah of the school laboratory.

Discuss in your group and finalise the site. Write down the reasons for your decision.

4. Below is a chart taken from IMD, Jammu and Kashmir. Looking at the data available, write a short script to report the weather conditions in different parts of Jammu and Kashmir on the date shown. (Hint: Cover the temperature range, maximum and minimum temperatures, humidity, precipitation, etc.)

DAILY WEATHER PARAMETERS
Jammu & Kashmir (EVENING)
DATE: 01-02-2024

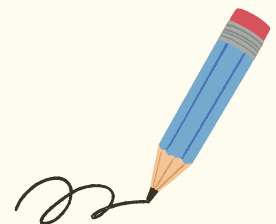
Station	max temperature of date			min temperature of date			from 0830 to 1730 hrs (mm/cm)		24 hrs R/F ending 0830 of date (mm/cm)		relative humidity	
	ACT	NOR	DEP	ACT	NOR	DEP					0830	1730
	(°C)	(°C)	(°C)	(°C)	(°C)	(°C)	R/F (mm)	S/N (cm)	R/F	S/N	(%)	(%)
SRINAGAR	6.5	8.9	-2.4	0.2	-0.7	0.9	TR	0.0	13.4	2.4	89	89
QAZIGUND	3.2	8.5	-5.3	-0.4	-2.1	1.7	11.8	10.0	36.2	22.0	97	90
PAHALGAM	1.1	5.6	-4.5	-4.1	-6.1	2.0	6.0	8.0	19.4	23.0	96	96
KUPWARA	5.1	8.5	-3.4	-0.7	-2.3	1.6	0.5	0.0	21.9	10.0	97	94
KUKERNAG	2.6	6.6	-4.0	-1.4	-2.4	1.0	12.0	8.0	35.2	30.0	96	97
GULMARG	-2.6	1.4	-4.0	-7.6	-7.6	0.0	8.2	6.35	35.2	35.0	76	100
MUZAFARABAD	8.5	-	-	5.6	-	-	-	-	25.8	-	93	-

Note: ACT means actual; NOR means normal; DEP is departure from normal; R/F is rainfall; S/N is snowfall; TR means trace amount.

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!



Climates of India

kāle varṣhatu parjanyaḥ pṛthivī sasyaśālīnī

deśhoyam kṣhobharahitah brāhmaṇāsantu nirbhayāḥ

May the rains be timely, may the Earth be lush with vegetation

May this country be free from turmoil, may good people be fearless!

– Subhāshita



Fig. 3.1

The Big Questions ?

1. What makes India's climate so diverse?
2. What are the monsoons?
How are they formed?
3. What is the effect of climate on economy, culture and society?
4. How can understanding the climate help us to prepare for natural disasters?
5. What is climate change? What are its consequences?



0781CH03

Weather, Seasons and the Climate

‘Climate’ is a word people use in everyday conversations. But, quite often, what they really mean is ‘weather’, and not ‘climate’. What’s the difference? ‘Weather’ is what we experience every hour or day: it might be raining, or there could be bright sunshine, a lot of wind, etc. The weather keeps changing. Climate, on the other hand, is the pattern of weather an area or a region experiences over a long period of time—several decades at least. This pattern varies from region to region.

Before we come to the various types of climates, let us briefly stop to introduce seasons. Seasons occur as the Earth revolves around the Sun. Each season lasts for a few months and recurs every year. As we know, there are several seasons in the year—spring, summer, monsoon, autumn and winter—that occur in a cycle. Are seasons related to the weather or to the climate? The answer is: to both.

The weather changes with the season, that is, it can be dry and hot in the summer months, or humid and rainy during the monsoon. Further, the pattern of seasons in a region is closely connected with the climate. There are four main seasons across most regions of the world—spring, summer, autumn and winter. However, India receives rainfall during a specific period of the year—the ‘rainy season’ or monsoon—along with the other four.



Fig. 3.2

Traditionally, in many parts of India, the year is divided into six seasons or *ṛitus*—*vasanta* (spring), *grīṣma* (summer), *varṣhā* (rainy season), *śharad* (autumn), *hemanta* (pre-winter), *śhiṣhir* (winter). Specific rituals and festivals are associated with these six *ṛitus*, such as Vasanta Pañchamī or Śharad Pūrṇima.

If we observe the world around us, we will notice that human, plant and animal life are in rhythm with the *ritus* or seasons. The crops we grow, the food we eat, the clothes we wear, and so on, change with the season. Depending on the region, some trees and shrubs bloom with the onset of *vasanta* or spring, in some places they shed their leaves or change their colour as *śharad* or autumn approaches and some animals develop thick fur in the cold winter months.

LET'S EXPLORE

- Which are your favourite seasons? Write a short essay explaining your reasons.
- Discuss in groups of three or four and find out whether there are specific events connected to the seasons in your region. Collect information about them—songs, feasts with specific types of food, practices in different seasons, etc. Document these and share your discoveries with your class.
- Do you know which trees in your area change colours before the onset of winter? Are there trees that shed their leaves around this time? Why do you think this happens? Find out and document the local names of these trees.

Usually, the climate remains stable over long periods of time. However, scientists have been recording changes in the climates of the world in the recent decades. Studies show that many of these changes have been caused by human actions.

Let us recapitulate:

- Weather is what we experience from day to day—windy, rainy, hot, dry, etc.
- Seasons recur every year and the weather of a place is different in every season.
- Climate is the long-term pattern in a particular region. There are many types of climates in the world. We will now survey the main types found in India.



Types of Climates in India

We have often seen how India is a land of diversity. This is equally true of its climate:

- In the north, the Himalayan mountains have an alpine climate with cold, snowy winters and cool summers (the word ‘alpine’ comes from the Alps, a mountain range of Europe). That’s probably where you will see the thickest clothing in India!
- Lower in the Himalayas, and in many hilly areas of India, the climate is often said to be temperate, as the winters are moderately cold and the summers not too hot. That is where we find many ‘hill stations’, much frequented by people seeking relief from the heat in the plains below.



Fig. 3.3

- In the northern plains, the climate is subtropical, with very hot summers and cold winters. This is where most of India’s wheat is grown.
- In the west, the Thar Desert has an arid climate featuring extremely hot days, cool nights, and very little rainfall. People there have had to develop unique ways to collect and save water.
- The western coastal strip receives heavy rainfall during monsoon months, creating a tropical wet climate, which is favourable to the growing of rice and spices.
- The central Deccan Plateau has a semi-arid climate with hot summers, mild winters and moderate rainfall during the rainy season.
- Eastern India and the southern peninsula experience a tropical climate with a mild winter and distinct wet and dry periods controlled by monsoon winds (more on them soon).

Note: You will understand later the meaning of the terms ‘tropical’ and ‘subtropical’, which are related to two special parallels of latitude called the ‘tropics’.

Factors Determining the Climate

What creates those different climates? There are many factors at work. Some are general ones — on the scale of the planet — while others are regional or even local. Let's examine a few.

a) Latitude

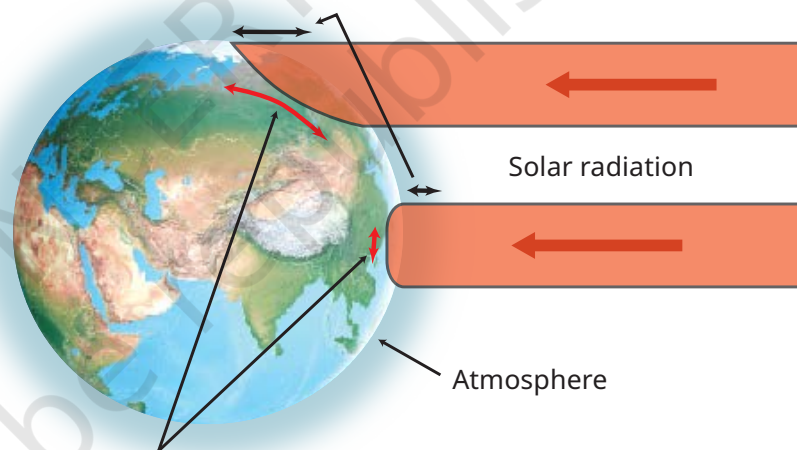
LET'S REMEMBER



We studied about latitudes in Grade 6. Do you remember that latitudes measure the distance from the Equator, increasing as we move away from it (either northward or southward)? While the climate around the Equator is extremely hot, as the latitude increases it becomes temperate and then cold or frigid. Why is this so?

Places near the Equator, that is, at low latitudes, are warmer, while those near the poles (high latitudes) are colder. This happens due to the angle at which the sun's rays hit a particular area. At the Equator, the rays are nearly perpendicular, and so all their energy is focused on a smaller area of the Earth's surface. In the

polar regions, the rays are inclined or oblique, and the energy is distributed over a larger surface. Moreover, they have to pass through more of the Earth's atmosphere, as the diagram shows, which further dissipates their energy. As a result, the polar regions receive less heat than the equatorial zone. We can see this in India too: Kanniyakumari and the Nicobar Islands being close to the Equator are warm or hot almost throughout the year, whereas places in the north, such as Srinagar, are much cooler.



At the equator exposure to the sun's rays is concentrated, but near the poles it is dispersed over a wide area

Fig. 3.4

b) Altitude

We mentioned hill stations above, which are popular tourist centres because of their cooler climate. India has many including Munnar, Theni, Udhagamandalam (Ooty), Madikeri, Mahabaleshwar, Mount Abu, Shimla, Nainital, Darjeeling, Tawang, Shillong, etc. We know they are located at a higher altitude than the plains below, but how does that explain their cooler temperature? You will later learn the full answer in your Science classes.

To keep things simple for now, the temperature decreases as the altitude increases because:



Fig. 3.5

1. The atmospheric pressure, and therefore the air density, decreases as the altitude increases (as we saw in the chapter 'Understanding the Weather'), and as the air gets less dense, it gets cooler.
2. The sun heats the surface of the Earth, and so the farther away from the surface, the less hot the air will be. The Himalayas are so high that many peaks maintain a temperature below water's freezing point, keeping them covered in snow.

LET'S EXPLORE

Udhagamandalam (Ooty) and Coimbatore are almost at the same latitude. The range of summer temperatures in Ooty is 10–25° while that in Coimbatore is 25–38°. Why do you think there is such a difference in temperature between these two places?

c) Proximity to the sea

Temperatures in coastal areas do not vary much; the summers are not too hot and the winters are not too cold. That is because the sea acts as a moderator for the temperature. This diagram sums up the phenomenon, and your Science textbook explains this further while discussing the heating and cooling of land and water in coastal regions. The result is that those

regions tend to be more temperate. As you move inland from the coast, the temperatures get more extreme—summer temperatures will be higher and winter temperatures lower. For instance, Mumbai and Nagpur are located at a similar latitude, but Mumbai, being near the sea, has cooler summers (around 32°C) and milder winters (around 18°C), while Nagpur, away from the coast, experiences up to 44°C in summer and about 10°C in winter. As you can see, Mumbai's range of temperature (i.e. the difference between the maximum and the minimum) is about 14°C while the range at Nagpur reaches 34°C.

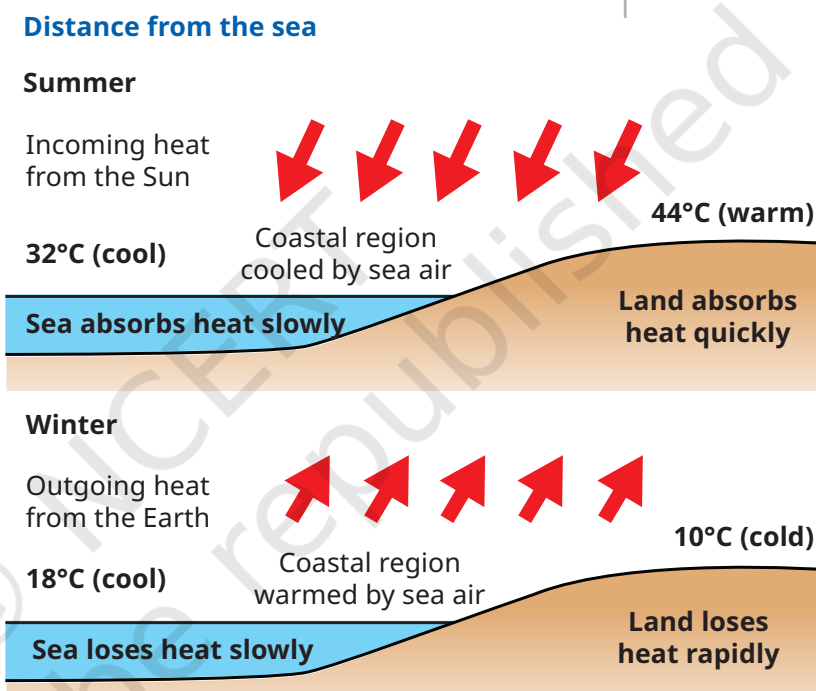


Fig. 3.6

d) Winds

Wind can move masses of warmer or cooler air. States like Punjab, Haryana, Rajasthan and Madhya Pradesh often receive winds blowing from the west. Having travelled over the deserts of Arabia to Afghanistan, they bring dry and hot air that causes severe heat waves in summer. In winter cold winds from across the Himalayas creep into the Himalayan foothills, resulting in cold waves.

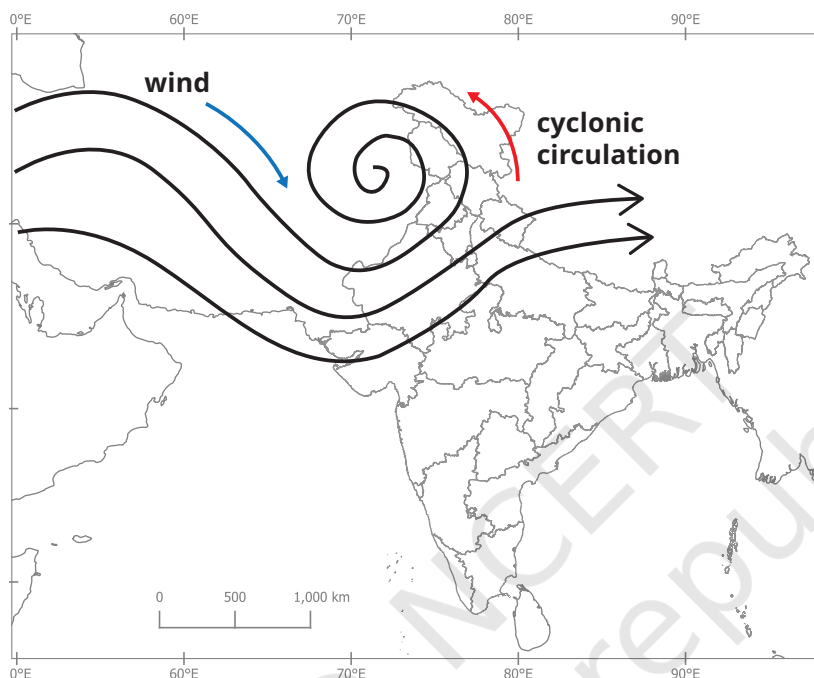


Fig. 3.7

Winds affect not only temperature, but also humidity, and in turn, precipitation. We saw dry winds coming from distant deserts; in contrast, winds coming from the sea bring moisture over the land, which may result in rainfall. We will soon see the case of the monsoon winds.

LET'S REMEMBER



In your Grade 6 Science textbook '*Curiosity*' you studied the water cycle! "The water from the ocean and the Earth's surface evaporates into the atmosphere as vapour and returns as rain, hail or snow...."

Topography:

The totality of the physical surface features of an area. This may include mountains, hills, valleys, slopes, coasts, etc.

e) Topography

Finally, the **topography** of a region also plays an important role in determining its climate. For instance, the Himalayas and the Karakoram ranges protect, to some extent, the Indian

subcontinent from the winds of the cold deserts of Central Asia. The nearly flat topography of the Thar desert, on the other hand, has nothing to protect it from hot and dry winds. In the next section, we will see the role of the Western Ghats in India's southwest monsoon.

Putting it all together...

The climate of any region is determined collectively by all the above factors. Describing the climate involves a description of the patterns of temperature, precipitation (rain or snowfall, occurrence of fog or mist) and wind conditions in a region over three decades or more.

A microclimate is a climate localised in a small area, which differs from the climate in the surrounding region. It has a



Fig. 3.8. Aravallis and urban heat islands

unique pattern of temperature, humidity, precipitation, etc., in a small geographical area.

For instance, enclosed valleys and some forests have microclimates of their own. So do 'urban heat islands', that is, some cities that have a large number of buildings and other concrete structures and very little vegetation; all this traps the heat and they are often much warmer than the surrounding region.

Microclimates can influence the local flora and fauna, the crops grown, and impact human health and well-being.

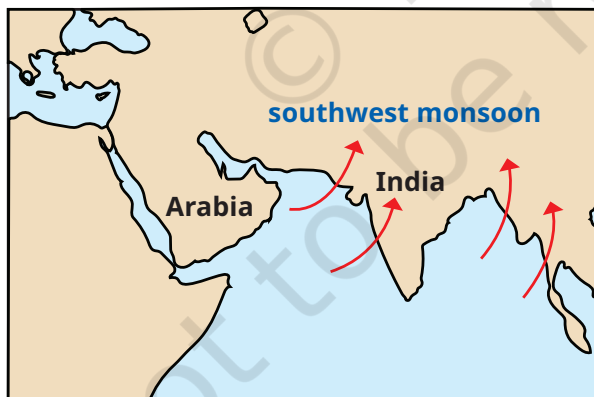
The Monsoons

The monsoon season is central to life in India. During the monsoon months, the rivers fill up, the soil is soaked with water, crops grow and life thrives. Strictly speaking, the word ‘monsoon’, which comes from the Arabic word *mausim*, meaning ‘season’, refers to seasonal winds over a large area of the Indian Ocean and surrounding regions, including Australia, Africa and South Asia.

There is a yearly pattern to the monsoons. Their mechanism is complex, but based on the simple fact that land heats up or cools down faster than the ocean. Monsoons bring out the fundamental relationship between temperature, pressure and wind movement.

To put it simply, as summer begins, the Asian landmass heats up, creating a powerful low-pressure system over it. Since air always flows from high pressure to low pressure, winds are drawn from the cooler, high-pressure ocean towards the hot land. These ocean winds carry moisture that condenses over the warmer land and falls in the form of heavy monsoon rains. (That is why ‘monsoon’ commonly refers to the seasonal rains rather than the winds.)

A. Summer



B. Winter

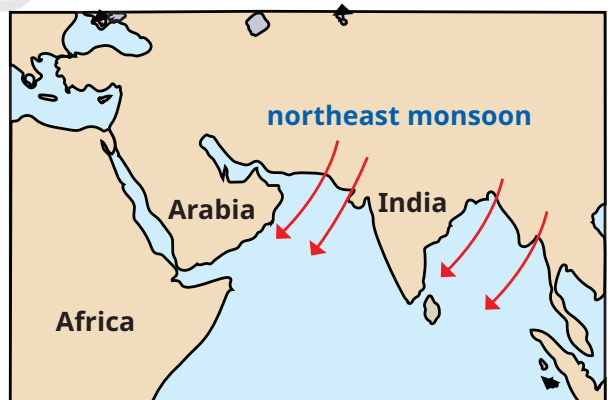


Fig. 3.9

The pattern reverses in winter, when the landmass cools down more rapidly than the ocean. Now the land has a high-pressure system while the ocean remains warmer with relatively lower pressure. This causes the winds to blow in the opposite direction—from the land towards the ocean—bringing dry conditions to much of Asia.

Coming to India, the monsoon rains typically advance from the southern tip of India in early June, moving northward over several weeks until they cover the entire subcontinent by mid-July. It is not a smooth progression, though the Western Ghats (remember our brief survey of topography) act as a natural barrier; their western slopes receive much rainfall, while the Deccan plateau to the east receive less, and often with interruptions. This is commonly called the summer or southwest monsoon ('southwest' reflecting the direction the winds come from).

As winter approaches, the winds reverse and blow from the land to the ocean, as we just saw. These are dry winds that bring cold weather to south India, but a part of them, passing over the Bay of Bengal, collect some moisture and bring rainfall to parts of east and south India. This is called the winter or northeast monsoon.



DON'T MISS OUT

- Mawsynram, located in Meghalaya, receives the highest average annual rainfall in the world, about 11,000 mm (which is the same as 11 metres!).

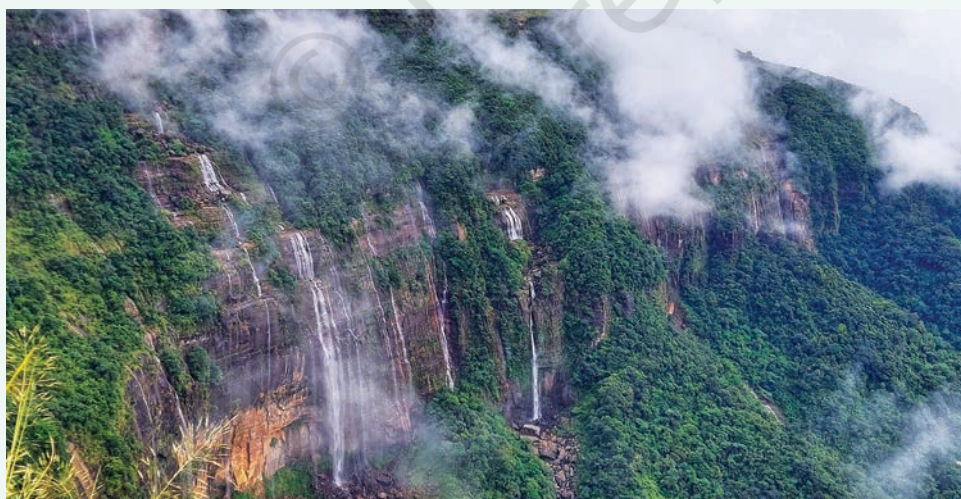


Fig. 3.10.

- The monsoons have inspired many *ragās* in both Carnatic and Hindustani classical music. *Meghamalhār* and *amruthavarshini* are names of a couple of them.



LET'S EXPLORE

Since the ability to predict the monsoon rainfall has been an important aspect of life in India, our ancestors observed Nature around them carefully. They developed local traditional knowledge through their experience. This traditional knowledge is an important heritage we must preserve. For example, fishermen on the Konkan coast predict the onset of the monsoon when fishes that normally stay under water are seen at the surface; in parts of southern India monsoon is said to arrive within 50 days after the Golden Shower tree (*Cassia fistula*) blossoms. Some communities also believe that when crows build their nests high on tree-tops, it indicates less rainfall, whereas if the nests are lower, rainfall is likely to be heavy. Make a list of such local knowledge about rain, fog, snow or hail in your area.

Climate and our Lives

Our lives are deeply connected with the climate and dependent on it. The impact of climate is visible in local cultures for instance, and India has many festivals associated with seasons and agricultural activities.



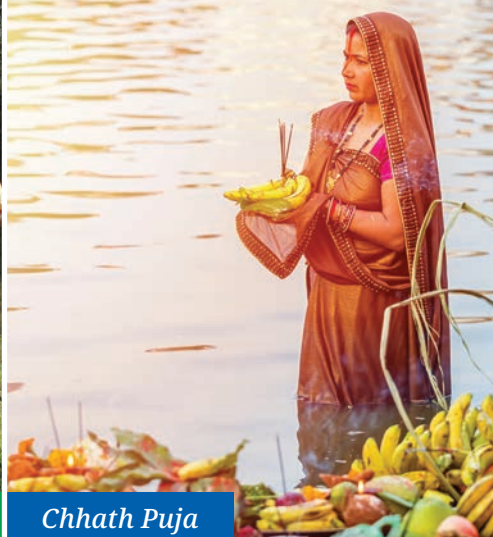
LET'S EXPLORE

Reach out to your grandparents or elders in your neighbourhood. Ask them about the traditional festivals and dances they remember from their childhood and youth, especially those related to agriculture and rain. What rituals did they participate in? Then organise a cultural fest with your friends. You can showcase some of the dances, songs and activities your elders shared with you. Whether it is a dance, harvest ritual, or a simple story about a prayer to rain gods, try to bring these traditions to life for your classmates.

The climate also has a direct impact on the economy. For instance, you may have heard the phrase 'monsoon failure', which refers



Bihu



Chhath Puja



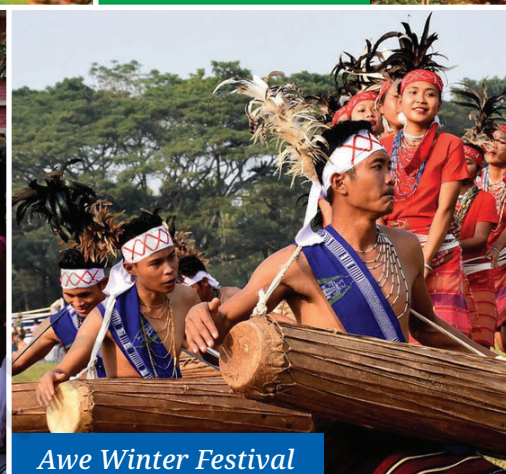
Makar Sakranti



Baisakhi



Pongal



Awe Winter Festival



Hemis



Losoong festival



Gudi Padwa



Lohri



Onam

Fig. 3.11

to poor rainfall during the monsoon season; in such a case, the agriculture suffers, people (women, generally) have to walk long distances in search of water, and agricultural labourers are likely to migrate to the cities; food (grains, vegetables and fruits, to begin with) becomes costlier, fuelling inflation. Industrial activity also often depends on a predictable weather and the availability of water. The world over, we can easily detect such connections between the climate and socioeconomic conditions. Those conditions get especially strained when climate disasters strike.

Climates and Disasters

India's diverse weather patterns can bring about extreme conditions such as cyclones, floods, landslides and other such climate-related disasters. These events affect people's lives, disrupt agriculture, damage infrastructure and disturb local economies.

a) Cyclones

Every year, the Indian coastline, especially the eastern coast, witness several cyclones. In past years, some of them have been highly destructive, resulting in the loss of human and animal life, damaging property and infrastructure, uprooting trees and causing soil erosion. The India Meteorological Department (IMD) keeps track of coming cyclones and provides information on their formation, evolution, place of landing, etc.



DON'T MISS OUT



Fig. 3.12

The National Disaster Response Force (NDRF) is specially trained to respond to natural as well as human-made disasters. NDRF battalions are located at 12 different locations in India. The NDRF has played a key role in rescue and evacuation during disasters like cyclones, landslides and floods.

How are cyclones formed? We saw that in some special situations, the atmospheric pressure near the sea becomes lower than the surrounding areas, creating a low-pressure system. This is an invitation to the air from surrounding areas to come into the low-pressure area, and the air from the sea moves in, bringing with it moisture and rain. When the low-pressure system is intense and the wind speeds are high, this may result in a cyclone.

As winds collect moisture, they form clouds and rotate inwards towards the centre of the depression. This centre, which is cloudless, is called ‘the eye of the cyclone’.



THINK ABOUT IT

What are clouds? White lumps in the sky, you might say. But what are they made of? The answer is simple—water. But not just any water; clouds are masses of water droplets, ice crystals, or a mixture of both, that are suspended in the atmosphere.

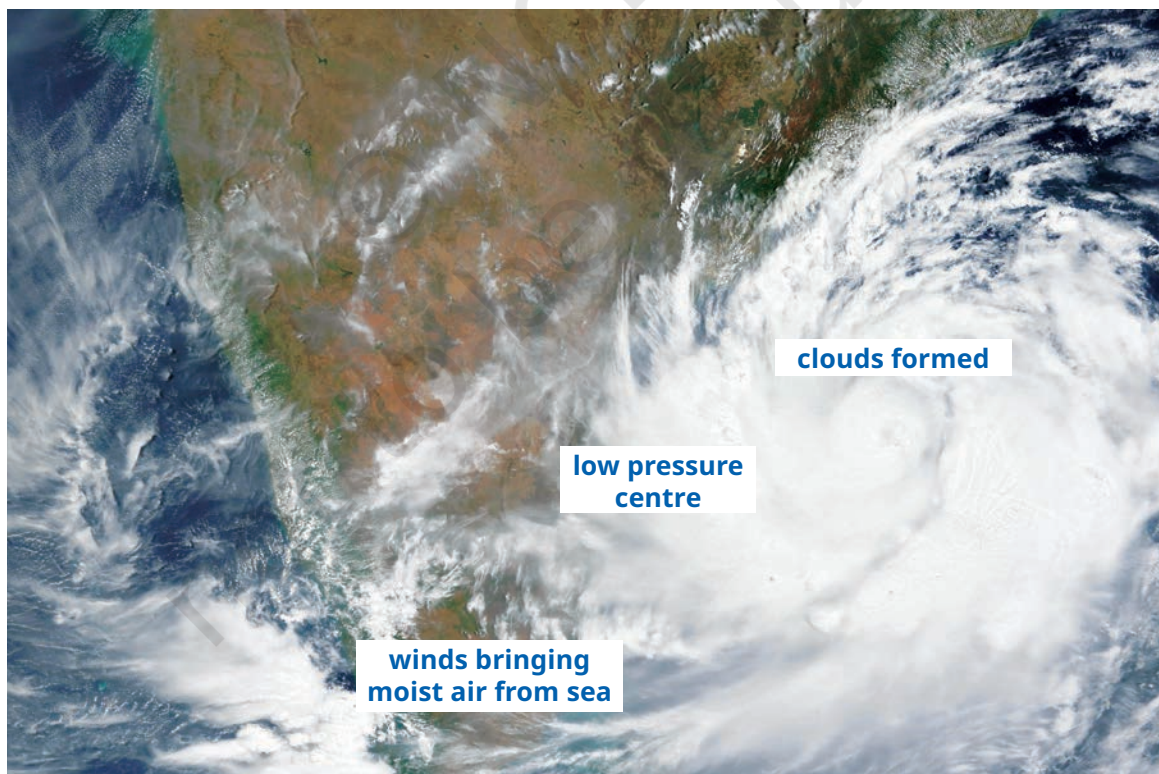


Fig. 3.13. Cyclone Fani



Fig. 3.14. Eye of the storm

b) Floods

A flood occurs when water overflows into normally dry land. This could be due to heavy rainfall generating huge run-off water that the land cannot absorb, or due to excessive accumulation of water in bodies like rivers and lakes, until the water overflows or their banks are breached. Floods occur frequently during the monsoons. States such as Uttar Pradesh, Bihar, Kerala, Andhra Pradesh and Assam are particularly vulnerable to floods.



LET'S EXPLORE

Have you seen or read about floods? Look at the physical map of India. Discuss in pairs why you think floods occur in the areas mentioned above.

In the Himalayan regions, on the other hand, floods occur when glacial lakes overflow. Glacial lakes form a barrier of rocks and ice to hold their water, which often comes from melting glaciers. If the glaciers melt too fast (as is increasingly the case) or if there is too much rainfall, the build-up of pressure can cause the water



Cyclone



Landslide



Forest Fire



Flood

Fig. 3.15

to break through the barrier — this is called a glacial burst and it often has devastating consequences for people and property.



DON'T MISS OUT

In 2013, Uttarakhand experienced a sudden glacial burst caused by continuous heavy rain over several days. Many landslides followed. Areas around one of India's important sacred sites, the Kedarnath temple, were completely destroyed. Several villages were washed away in the floods, along with many roads and bridges. Altogether about 6,000 people, many of them pilgrims, lost their lives.

Many cities experience flooding when there is heavy rainfall. This may be due to an overburdened drainage system or poorly planned construction encroaching on the waterways and blocking the flow of water. Besides, urban surfaces of concrete or asphalt do not allow water to be absorbed by the earth.

c) Landslides

A landslide is the sudden collapse of rock, soil, or debris, often triggered by heavy rain, earthquakes or volcanic activity. Landslides are common in hilly and mountainous regions such as Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh, as well as the Western Ghats and hilly regions. These events often occur during the monsoon.

In those regions, the chances of landslides have increased due to human activities such as the cutting down of forests, building infrastructure without following approved methods and the construction of too many buildings that block the natural flow of water.

d) Forest fires

Forest fires are uncontrolled fires that spread rapidly across vegetation, often fuelled by dry climatic conditions, droughts or high winds. Human carelessness is another frequent cause. Forest fires are common in states with large forested or grassland areas such as Uttarakhand, Himachal Pradesh, Madhya Pradesh and Chhattisgarh, as well as mountain ranges such as the Western Ghats. Apart from destroying large areas of forest, fires harm wildlife, degrade the ecosystem, spoil the air quality and displace local communities. The consequences are therefore both environmental and economic.

LET'S EXPLORE



- Observe Fig. 3.15. Describe the effects they may have on people, plants, animals and economic life.
- In groups of four or five, identify in each of the above disasters the part of natural causes and the part of human causes. Compare your conclusions.
- Discuss in the same groups series of preventive measures that could help avoid the above disasters.

Climate Change

Climate change refers to significant, long-term changes in the climate. This may be on the scale of the planet or on a regional scale, and it involves shifts in temperature, precipitation and weather events. In past millennia (we can go back millions of years, in fact), natural processes drove climate change. Since the 19th century, however, climate change has been largely driven by human activities, particularly the burning of **fossil fuels**, deforestation, environmentally harmful industrial practices, and production and patterns of excessive or wasteful consumption.



Fossil fuels: Sources of energy that were formed from the remains of plants and animals that died millions of years ago and were buried deep under layers of soil and rock or under the sea, where heat and pressure slowly turned them into coal, petroleum oil and natural gas.

Fig. 3.16

Resilience:

The capacity to withstand or recover quickly from difficulties.

Mitigation:

The adoption of steps to help slow down global warming and reduce the causes of climate change.

Sustainable:

Something which can be maintained over a long period of time.

Why does the burning of fossil fuels affect the climate? In the Earth's natural carbon cycle, carbon dioxide (CO₂) and other gases are released gradually into the atmosphere and trap heat from the Sun. This natural 'greenhouse effect' warms Earth enough to support life. However, human activities like industry, transportation, and agriculture have released enormous amounts of these 'greenhouse gases' in just a few centuries. This sudden increase traps extra heat, causing rapid global warming and disrupting the climate patterns that plants, animals, and human societies have adapted to over thousands of years.

In India, rising temperatures are perceptible in many regions. Early in 2025, for instance, the country's average temperature was 1 to 3°C above normal, as a result of which the winter was much shorter and milder than usual. This affects not only agricultural production but also many small-scale industries. This is only one example showing how a warmer planet will present us with increasing challenges.

Understanding the relationship between the causes of climate change and disasters can help us to prepare better for these challenges. It also supports the need for more environment-friendly practices and building **resilience** and adaptation in communities. Governments worldwide, including India's, attempt to promote measures of climate **mitigation**, such as cutting down on greenhouse gas emissions, planting trees, boosting renewable energy and improving energy efficiency, promoting **sustainable** lifestyles, etc. But these often clash with a desire for economic growth and increased consumption.



Before we move on ...

- India's diverse climate is shaped by its geography, including mountains, deserts, and plateaus.
- Weather is short-term, seasons recur on a yearly basis, and climate reflects long-term patterns over decades.
- Factors such as latitude, altitude, proximity to the sea, wind and topography determine the climate.
- Monsoons are vital for agriculture, influencing crop cycles and livelihoods.

- Climate is connected with cultural traditions, festivals, agriculture and economic activity.
- Understanding the climate helps prepare for natural disasters like floods and cyclones.
- Climate change leads to extremes of weather or temperature and can have severe consequences on the natural and human worlds.

Questions and activities

1. Match the climatic factors with their effects:

Column A	Column B
(1) Latitude	(a) Brings wet air to India during summer
(2) Altitude	(b) Creates different climates in the north and south
(3) Proximity to the ocean	(c) Keeps higher places cooler
(4) Monsoon winds	(d) Moderates the temperature

2. Answer the following questions:

- a) What is the difference between weather and climate?
- b) Why do places near the ocean have milder temperatures than places far away from it?
- c) What role do monsoon winds play in affecting India's climate?
- d) Why is Chennai warm or hot throughout the year, while Leh is cold?

3. Look at a map of India given at the end of this book. Identify the climate for these cities—Leh, Chennai, Delhi, Panaji and Jaipur.

- Is the place near the sea, in the mountains, or in the desert?
- How do these factors affect the climate there?

4. Draw the monsoon cycle in summers and winters on a map of India.
 - Label where the winds blow in summer and winter
 - Show the direction of winds during the monsoon
5. Make a colourful poster showing festivals in India linked to farming and weather (e.g., Baisakhi, Onam). Add pictures or drawings of these festivals.
6. Imagine you are a farmer in India. Write a short diary entry about how you would prepare for the rainy season.
7. Identify a natural disaster (e.g., cyclone, flood, landslide, or forest fire) and write a short essay that includes the causes and impacts. Suggest actions that individuals, communities and the government can take to reduce the impact.

New Beginnings: Cities and States

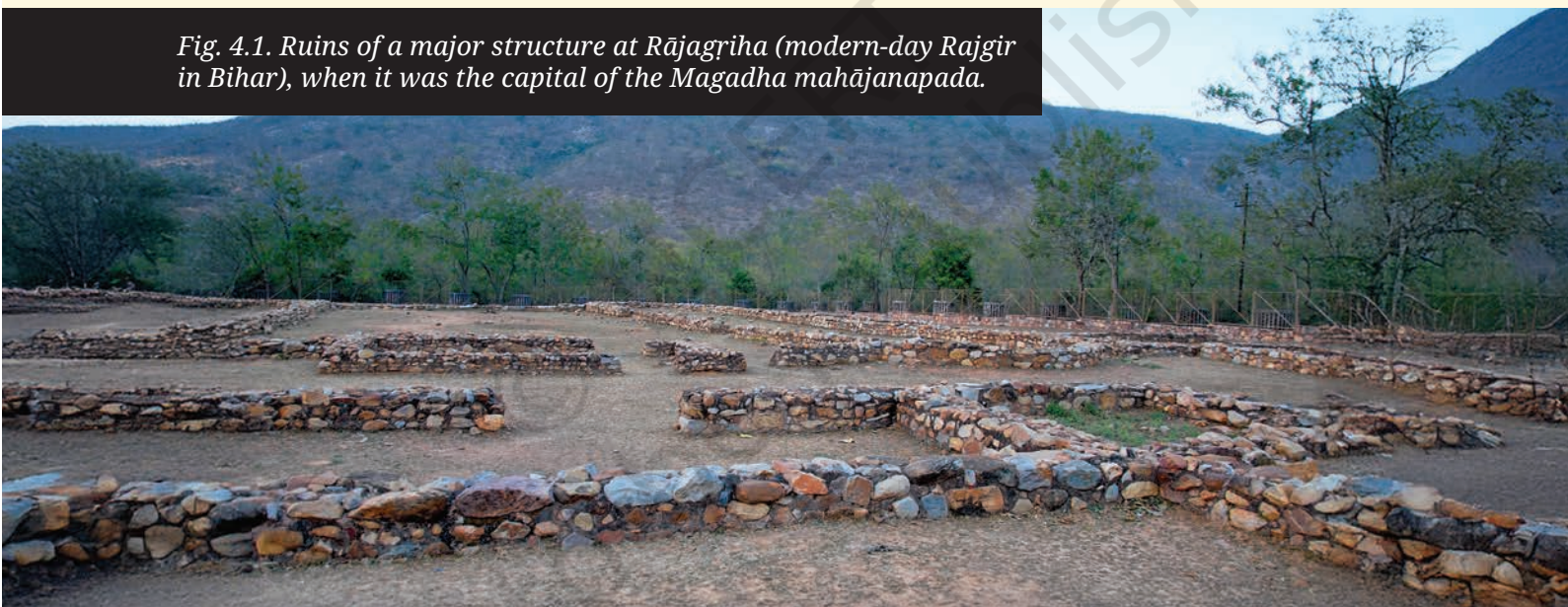
CHAPTER

4

The kingdom shall be protected by fortifying the capital and the towns at the frontiers. The land should not only be capable of sustaining the population but also outsiders in times of calamities. ... It should be beautiful, being endowed with cultivable land, mines, timber forests, elephant forests, and good pastures rich in cattle. It should not depend [only on] rain for water. It should have good roads and waterways. It should have a productive economy, with a wide variety of commodities

– Kauṭilya, Arthaśhāstra

Fig. 4.1. Ruins of a major structure at Rājagriha (modern-day Rajgir in Bihar), when it was the capital of the Magadha mahājanapada.



The Big Questions ?

1. What is meant by ‘Second Urbanisation of India’?
2. Why were the janapadas and mahājanapadas an important development in India’s early history?
3. What kind of system of governance did they evolve?



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Let us recall that in the early 2nd millennium BCE (that is, over a few centuries after 2000 BCE), the Indus/Harappan/Sindhu-Sarasvatī civilisation, which we called India's 'First Urbanisation', disintegrated. Some of its cities were abandoned; in others, some people continued living there, but reverting to a rural or village lifestyle. They had to, since all the components of the Harappan urban order had disappeared: elaborate structures, both private and public; crowded streets and busy markets; different communities with specialised occupations (metalsmiths, potters, builders, weavers, craftspeople, and so on); a writing system; a sanitation system; the presence of an administration; and, behind it all, a larger state structure with a ruling class at the head. And for a whole millennium, urban life remained absent from India, though there may have been a few towns here and there in north India.

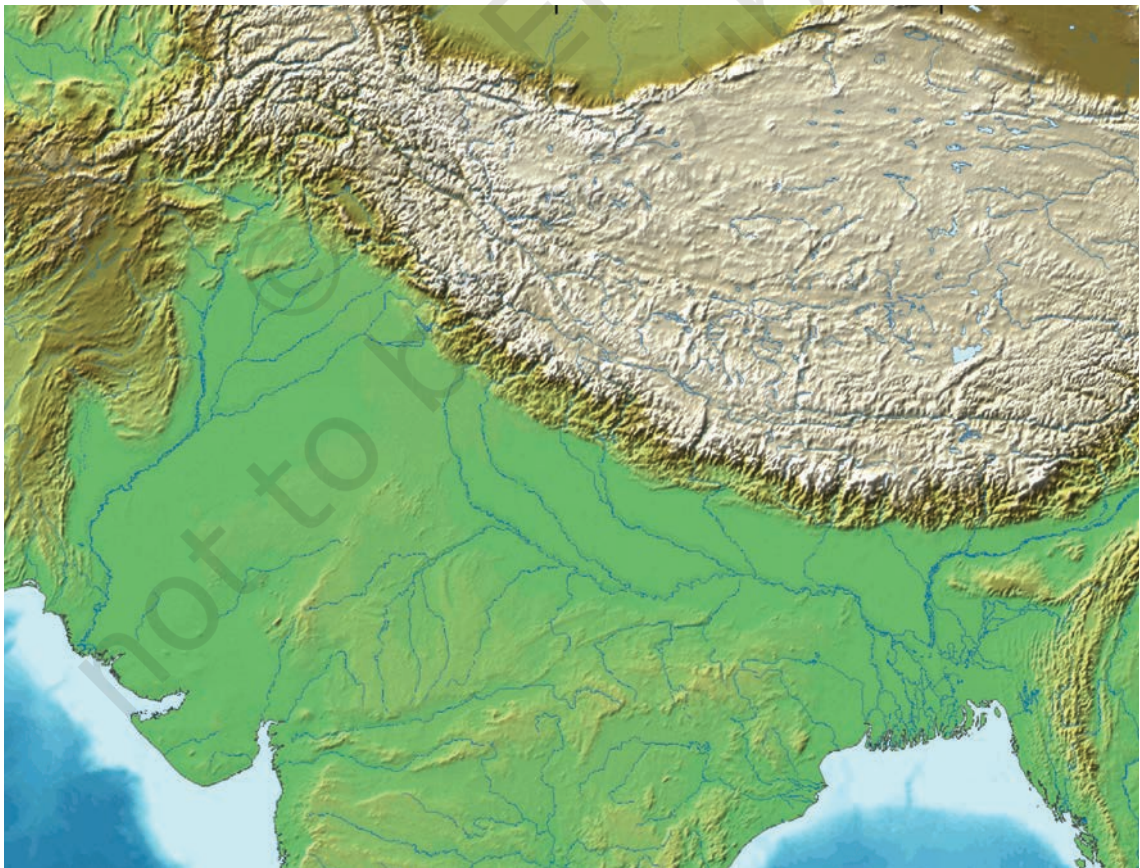


Fig. 4.2. The fertile Gangetic plains helped the mahājanapadas to grow and prosper.

Indeed, there were important regional cultures, which we need not study here.

Then, in the 1st millennium BCE, a vibrant new phase of urbanisation began in the Ganga plains, parts of the Indus (or Sindhu) basin and neighbouring regions, gradually spreading to other parts of the Subcontinent. How do we know this? Mainly from two sources: (1) archaeological excavations that have confirmed the existence of those ancient urban centres, and (2) ancient literature describing them—late Vedic, Buddhist and Jain literatures are full of references to these new urban centres.

This new phase is often called India's 'Second Urbanisation'—which, incidentally, has continued right up to today! Let us see how this phase emerged.

Janapadas and Mahājanapadas

Towards the end of the 2nd millennium BCE, regional cultures gradually reorganised themselves in north India. As people formed clans or groups, probably sharing a common language and common customs, each clan came to be associated with a territory or *janapada* led by a *rājā* or ruler. ('*Janapada*' is a Sanskrit word which means 'where the people (*jana*) have set foot (*pada*),' that is, have settled down.)

The *janapadas* grew as trade networks expanded and connected them. By the 8th or 7th centuries BCE, some of those early states had merged together; the resulting bigger units were known as *mahājanapadas*. Although the texts have different lists of them, the more frequent list gives the names of 16 *mahājanapadas*, extending from Gandhāra in the northwest to Anga in the east and to Aśhmaka in central India, close to the Godavari River (see map). There may have been a few more, along with some smaller *janapadas* continuing independently.



THINK ABOUT IT

Notice how many of the *mahājanapadas* are concentrated in the Ganga plains. There are several possible reasons for this, including the growth of agriculture in the fertile Ganga plains, the availability of iron ore in the mountains and hills (see below about iron), and the formation of new trade networks.



LET'S EXPLORE

- The most powerful of these new states were Magadha, Kosala, Vatsa and Avanti. Looking at the map, can you identify their capitals? Also, how many can you match with Indian cities of today?
- Compare this map with the map of the regions mentioned in the Mahābhārata (see Fig. 5.4 in the chapter 'India, That Is Bharat' in Grade 6) and list the names common to both maps. What do you think this implies?

Moat:
A deep, wide ditch surrounding a fort or a fortified city and filled with water.

The map (Fig. 4.3) shows the *mahājanapadas*' capitals. Most were fairly large well-fortified cities, with a **moat** running outside the fortifications as further defence. Often, the gateways through the rampart walls would be deliberately kept narrow, so guards may control the movement of people and goods entering or leaving the city. It is fascinating to note that most of those ancient capitals continue to be living cities today—'modern' cities that are often 2,500 years old!

Early Democratic Traditions

Each *janapada* had an assembly or council, called *sabhā* or *samiti*, where matters concerning the clan would be discussed. (Remember, from the chapter on 'India's Cultural Roots', that the words *sabhā* and *samiti* first appear in the Vedas, India's most ancient texts.) We may assume that most of the members were elders in the clan. The *rājā* was not expected to rule independently or arbitrarily;

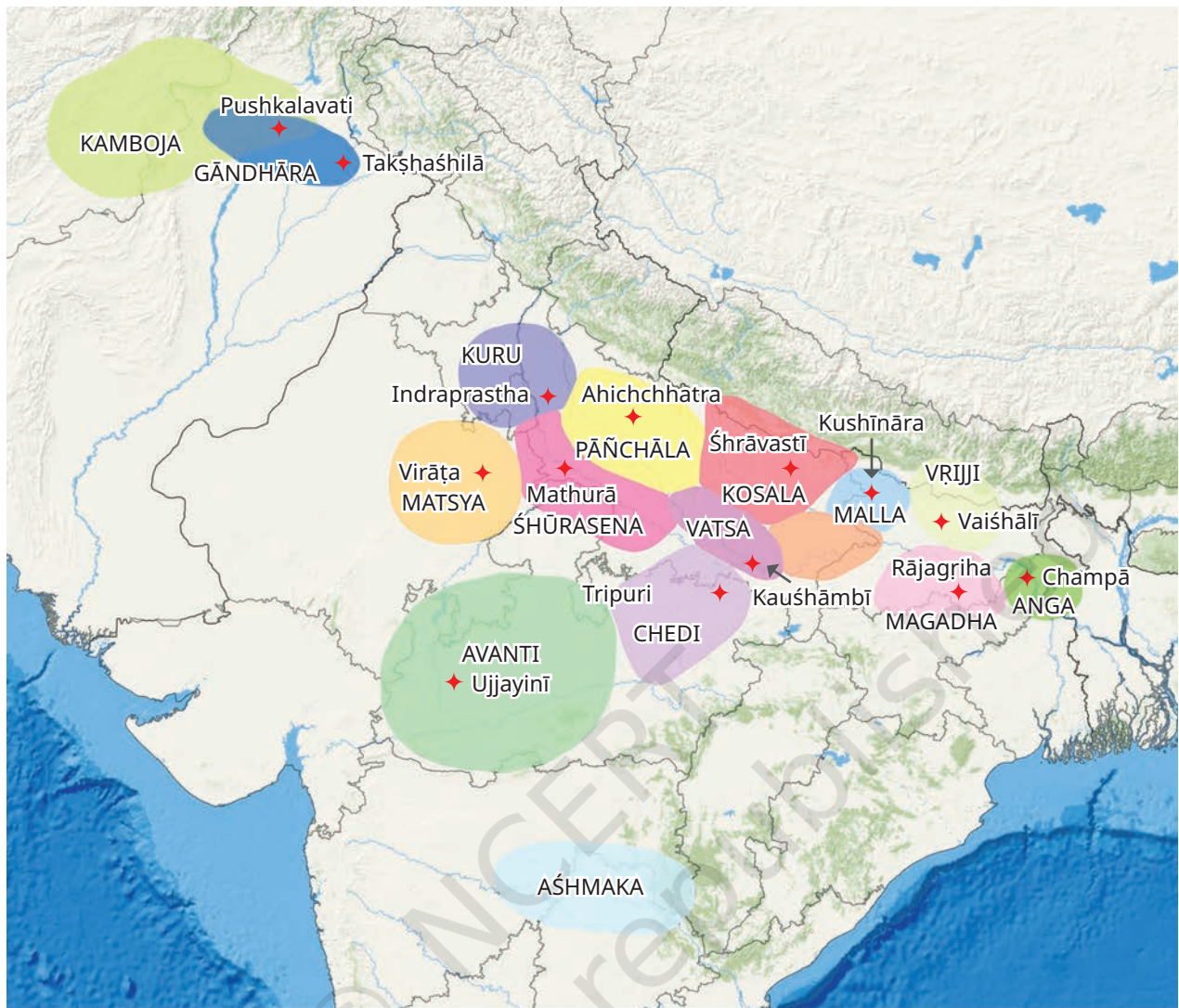


Fig. 4.3. Map of the sixteen mahājanapadas. Note that their borders are approximate.

a good ruler was supposed to take the advice from those assemblies, apart from the ministers and administrators. Indeed, according to some texts, an incompetent ruler could be removed by the assembly. Of course, while such mentions are significant, it does not mean that this was an established law; let us remember that the data we have for such remote periods is incomplete.

In their political systems, the *mahājanapadas* expanded the basic principles of the *janapadas*. Some were, in effect, monarchies, in the sense that the *rājā* was the ultimate authority, supported by ministers and an assembly of

elders. His position was hereditary, in the sense that a *rājā* would usually be the son of the previous one. The king would collect taxes or revenue, maintain law and order, get impressive fortifications built around their capital, and maintain an army to defend the territory or wage war with neighbouring ones, as the case may be. Magadha (located in part of today's Bihar), Kosala (in part of today's Uttar Pradesh) and Avanti (in part of today's Madhya Pradesh) were among the most powerful such states.

However, at least two *mahājanapadas*, Vajji (or Vṛijji) and the neighbouring Malla, had a different system: the *sabhā* or *samiti* had more power and took important decisions through discussion, and, if necessary, through vote. Surprisingly, this included the selection of the *rājā*! This means that those *mahājanapadas*, which were called *gaṇas* or *sanghas*, were not monarchies—their functioning might be called democratic, since members of the assembly were the ones to select the ruler and take major decisions. In fact,



Fig. 4.4. Ruins of a complex at Kauśhāmbī, capital of the Vatsa mahājanapada

scholars have often called them ‘early republics’, as they are indeed one of the earliest such systems in the world.

More Innovations

The age of the *janapadas* and *mahājanapadas* was an age of profound change, which would impact Indian civilisation until present times. In the chapter ‘India’s Cultural Roots’ in Grade 6, we saw the emergence of several new schools of thought—late Vedic, Buddhist, Jain in particular, and their respective literatures. Those schools disseminated their teachings and literature through scholars, monks and nuns travelling across India or people undertaking pilgrimages. Indian art also underwent a renewal; it will blossom in the age of empires.

Urbanisation does not happen without technologies. Let us remember that the Harappan civilisation mastered copper and bronze metallurgy. Now, in this Second Urbanisation, a major shift in technology involved iron metallurgy. In several regions of India, the techniques of extracting and shaping iron were actually perfected from the early 2nd millennium BCE, but it took a few centuries for iron to become a part of daily life. By the late 2nd millennium BCE, iron tools had become widespread, facilitating agriculture on a bigger scale. Iron also made better weapons than bronze, lighter and sharper—swords, spears, arrows, shields, etc. As it happens, there is some evidence of warfare between neighbouring *mahājanapadas*—how frequent or how intense it was, of course, is impossible to tell. Such military campaigns, but occasionally alliances too, gave rise to new kingdoms and empires, which we will turn to later in our journey.

Another innovation was the first use of coins in India, made necessary by growing trade. Very soon, coins were exchanged across different regions and even with other parts of the world. The first Indian coins were made of



silver, a soft metal into which symbols could be ‘punched’; they are called ‘punch-marked coins’. Later, coins of copper, gold and other metals were also made. Generally, a *mahājanapada* issued its own coins, but coins from neighbouring regions were used as well as exchanged in trade.

LET’S EXPLORE



Fill up the following table with a Yes (or tick mark) or No (or cross mark) in each square, which provides an interesting comparison between these two phases of Indian civilisation.

	First Urbanisation	Second Urbanisation
Ganga plains		
Monasteries		
Literature		
Trade		
Warfare		
Copper/bronze		
Iron		

The Varṇa–Jāti System

We saw earlier how human societies grew more complex with the rise of civilisation. Whenever this happens, a society organises itself in several groups based on class, occupation or some other criteria. For instance, there could be different groups concerned with governance, administration, religion, education, trade, town-planning, farming, crafts, arts and all kinds of other professions.



Fig. 4.5. A panel of the Sanchi stūpa depicting a smithy (or metal workshop), where different workers bring firewood, water, stoke the fire, beat the iron, etc.



Fig. 4.6. A few punch-marked coins from various ancient cities of north India.



LET'S EXPLORE

- Why should a complex society divide itself into such groups? Think about several possible factors why this happens.
- List other such professions you expect in a complex society of the 1st millennium BCE.

In an ideal society, all those groups would complement each other and work in harmony. But most of the time, these divisions also lead to inequalities: some groups acquire more wealth, power or influence than others. In other words, while equality is an ideal that human societies have often aspired to, very few, if any, have ever achieved it.

In India, the society was organised in a two-fold system. One category was the *jāti*, a group or community of people with a specific professional occupation closely tied to their livelihood. The skills that defined a particular *jāti*—for instance, skill in agriculture, metallurgy, commerce or any craft — was generally transmitted from generation to generation. Often, a *jāti* would get further subdivided into sub-*jātis*, each of which developed customs and traditions of its own, for instance concerning marriage, rituals or food habits.

Along with the *jāti*, there is another category, that of *varṇa*, a concept that emerged from Vedic texts. There were four *varṇas*: Brahmins were engaged in preserving and spreading knowledge, and in the performance of rituals; Kshatriyas were expected to defend the society and the land, and to engage in warfare if necessary; Vaishyas were supposed to increase the society's wealth through occupations of trade, business or agriculture; finally, Shudras were the artisans, craftspeople, workers or servants.



DON'T MISS OUT

You may have heard the English word 'caste'. It comes from a Portuguese word, *casta*, as Portuguese travellers to India in the 16th century CE tried to make sense of Indian society. While a few scholars consider 'caste' to refer to *varṇas*, most take it to apply to *jātis*; yet others consider 'caste' to refer to the whole *varṇa-jāti* system.

There is historical evidence, both in texts and inscriptions, that in the early period individuals and communities changed their professional occupations if circumstances demanded. For instance, a long drought or some natural calamity could force a community of farmers to migrate to a city and take up other occupations, or some Brahmins would turn to trade or even military activities. This complex system structured Indian society, organised its activities, including economic ones, and therefore gave it some stability. In time, however, the system became rigid and led to inequalities and discrimination towards the lower *jātis* or some communities excluded from the *varṇa-jāti* system. This process will be studied in a higher grade.

The *varṇa-jāti* system has had a deep impact on Indian society, and generations of scholars have studied its countless aspects. There is a broad agreement that the system was significantly different (more flexible, in particular) in earlier periods and became more rigid with the passage of time, in particular during the British rule in India. Let us also keep in mind that while *varṇa-jāti* has been an important mechanism at work in Indian society, it is not the only one; there have been many others, some of which we will explore later, especially in the theme 'Our Cultural Heritage and Knowledge Traditions'.



THINK ABOUT IT

Inequalities within society can exist in many forms. Have you encountered any incident where you or anyone you know might have been made to feel different from others? Do you think equality is desirable in a society? If so, why? Have you come across people or initiatives that lessened inequalities?

Developments Elsewhere in India

In this 1st millennium BCE, important communication routes opened up for purposes of trade, pilgrimage, military campaigns, etc. Two routes became widely used and are often mentioned in the literature: the Uttarapatha and the Dakṣhiṇapatha. The first connected the northwest regions to the Ganga plains, all the way to eastern India; the second started from Kauśhāmbī (near Prayagraj), then a capital of



Fig. 4.7. Śiśhupalgarh (today a suburb of Bhubaneswar, first excavated in 1948): one of the gateways into the city, through the fortifications; the moat, full of water, is visible outside the gateway. Notice the narrowing in the gateway, for control of movement of people and goods.

one of the *mahājanapadas*, and crossed the Vindhya Range of hills to proceed all the way south. We will return to these routes when we explore the formation of empires in India.

Many lateral roads also connected with other parts of India, especially the important ports on the western and eastern coasts, which were vibrant centres of trade. In the eastern region, major cities emerged, such as Śhishupalgarh (today Sisupalgarh, part of Bhubaneswar), which was the capital of the Kalinga region and followed a strict square ground plan, with imposing fortifications and broad streets.

In the Subcontinent's southern regions, cities began emerging from about 400 BCE, although recent excavations claim to find some signs of commercial activities going further back. Around this time, three kingdoms emerged—the Cholas, the Cheras and the Pāṇḍyas.

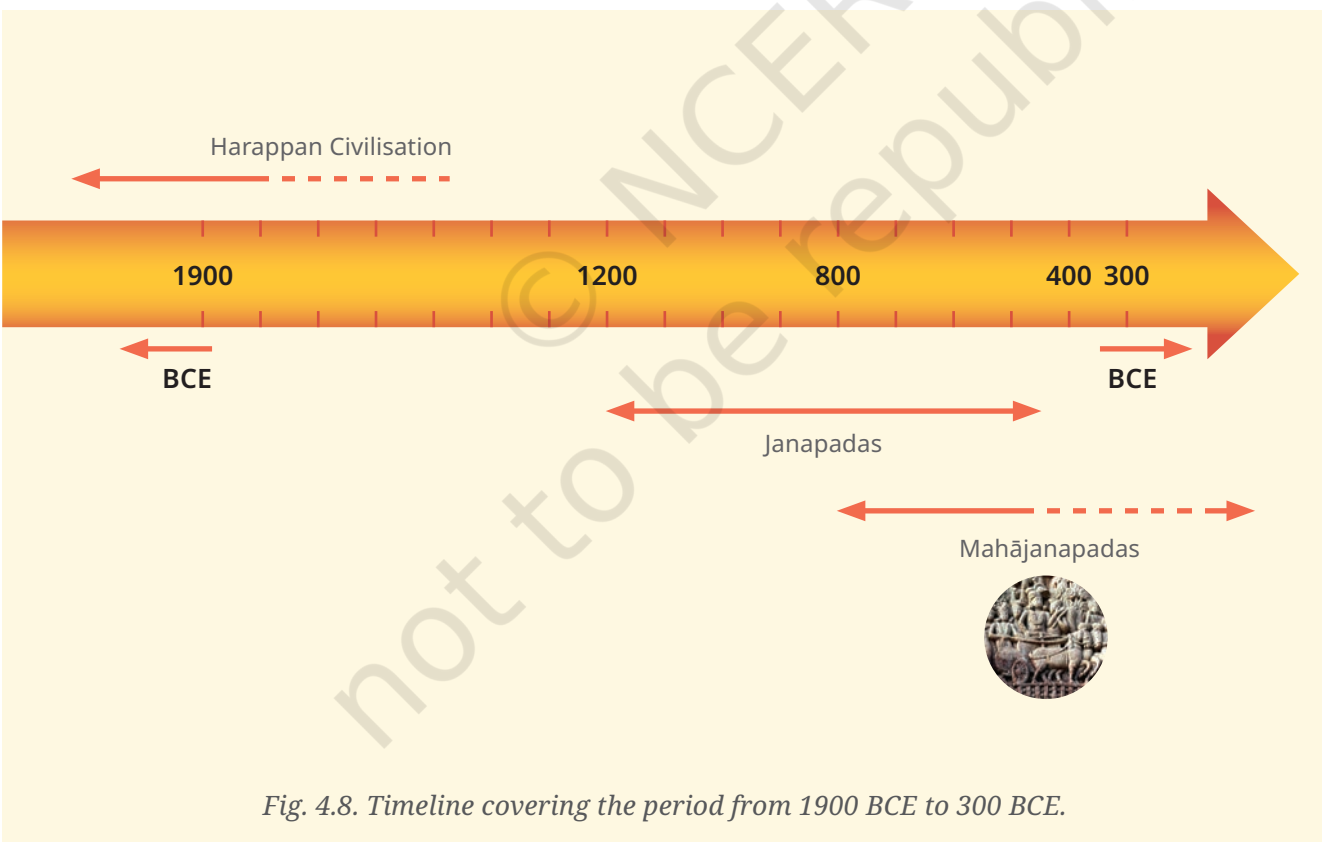


Fig. 4.8. Timeline covering the period from 1900 BCE to 300 BCE.



Fig. 4.9. Shell and gemstones industries at the site of Kodumanal (near Erode, Tamil Nadu)

Apart from archaeological evidence, the most ancient Tamil literature mentions those kingdoms and several of their kings.

Because the southern regions are rich in resources such as precious and semiprecious stones, gold, and spices, they profitably traded not only with the rest of India but also with kingdoms and empires overseas.

By 300 or 200 BCE, almost the entire Subcontinent, including regions in the Northeast, was one vibrant interconnected land; goods and culture travelled from region to region, and often beyond India to parts of Central and Southeast Asia.

About the same time, the *mahājanapadas* ceased to exist, leaving the place to fresh developments that were going to reshape India.

Before we move on ...



- From the end of the 2nd millennium BCE, *janapadas* rose in parts of north and central India; they were smaller states with a *rājā* at the head taking counsel from an assembly of elders.
- The 16 *mahājanapadas* were the first organised states of the 1st millennium BCE; they witnessed the Second Urbanisation of India, which spread in all directions from the Ganga region, all the way to south India. By 300 BCE or so, the *mahājanapadas* ceased to exist.
- In the same period, a vast network of roads connected north and south, east and west, and eventually all regions of the Subcontinent. People, goods, ideas and teachings travelled along all those roads.

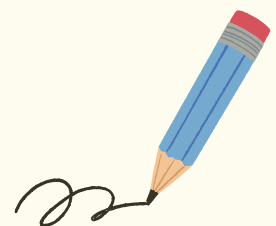
Questions and activities

1. Consider the quotation at the start of the chapter and discuss in several groups. Compare your observations and conclusions on what Kaṭilya recommends for a kingdom. Is it very different today?
2. According to the text, how were rulers chosen in early Vedic society?
3. Imagine you are a historian studying ancient India. What types of sources (archaeological, literary, etc.) would you use to learn more about the *mahājanapadas*? Explain how each source might contribute to your understanding.
4. Why was the development of iron metallurgy so important for the growth of urbanism in the 1st millennium BCE? You may use points from the chapter but also from your knowledge or imagination.

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!

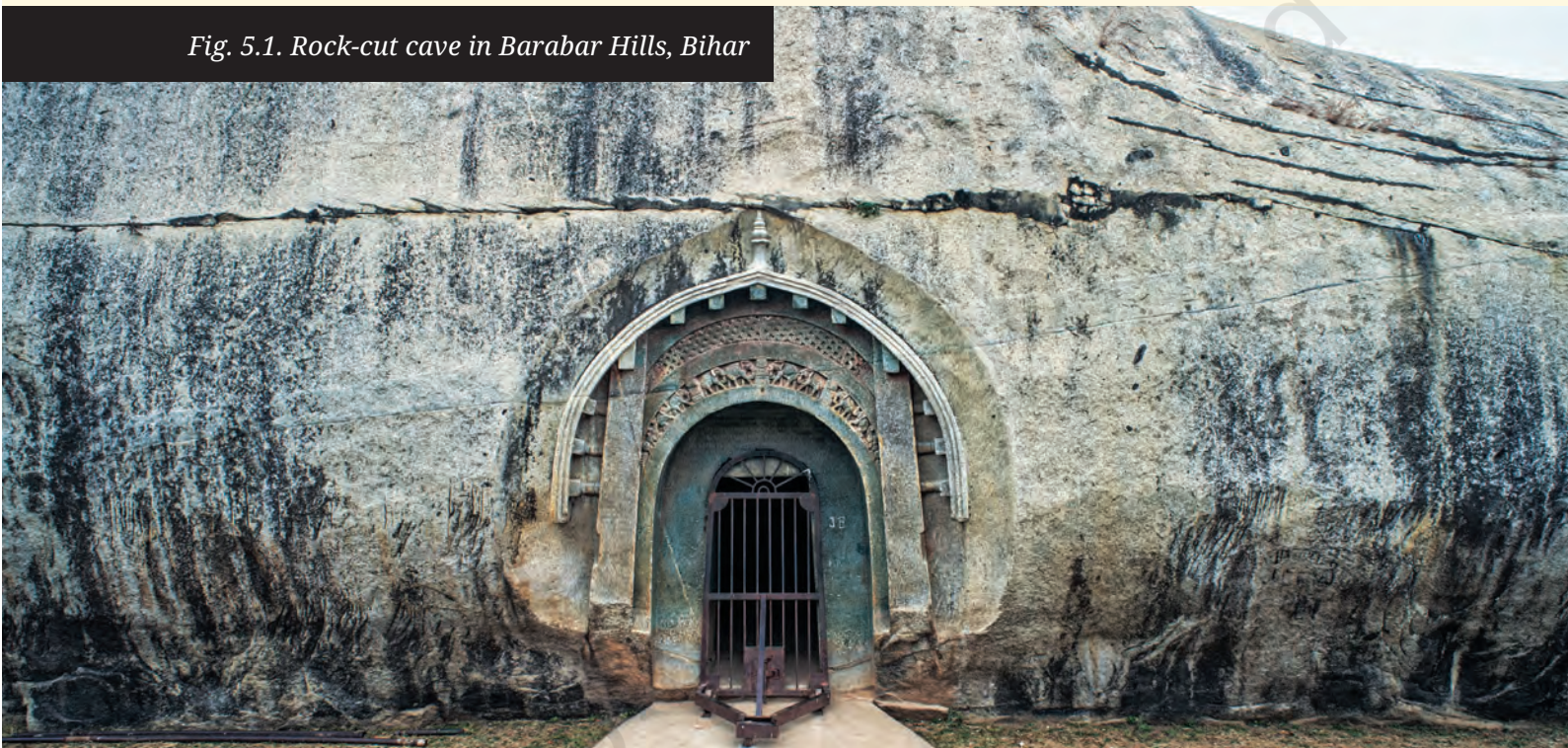


The Rise of Empires

There cannot be a country without people and there is no kingdom without a country.

Kauṭilya in Arthaśhāstra

Fig. 5.1. Rock-cut cave in Barabar Hills, Bihar



The Big Questions ?

1. What is an empire?
2. How did empires rise and shape Indian civilisation?
3. What factors facilitated the transition from kingdoms to empires?
4. What was life like from the 6th to the 2nd century BCE?



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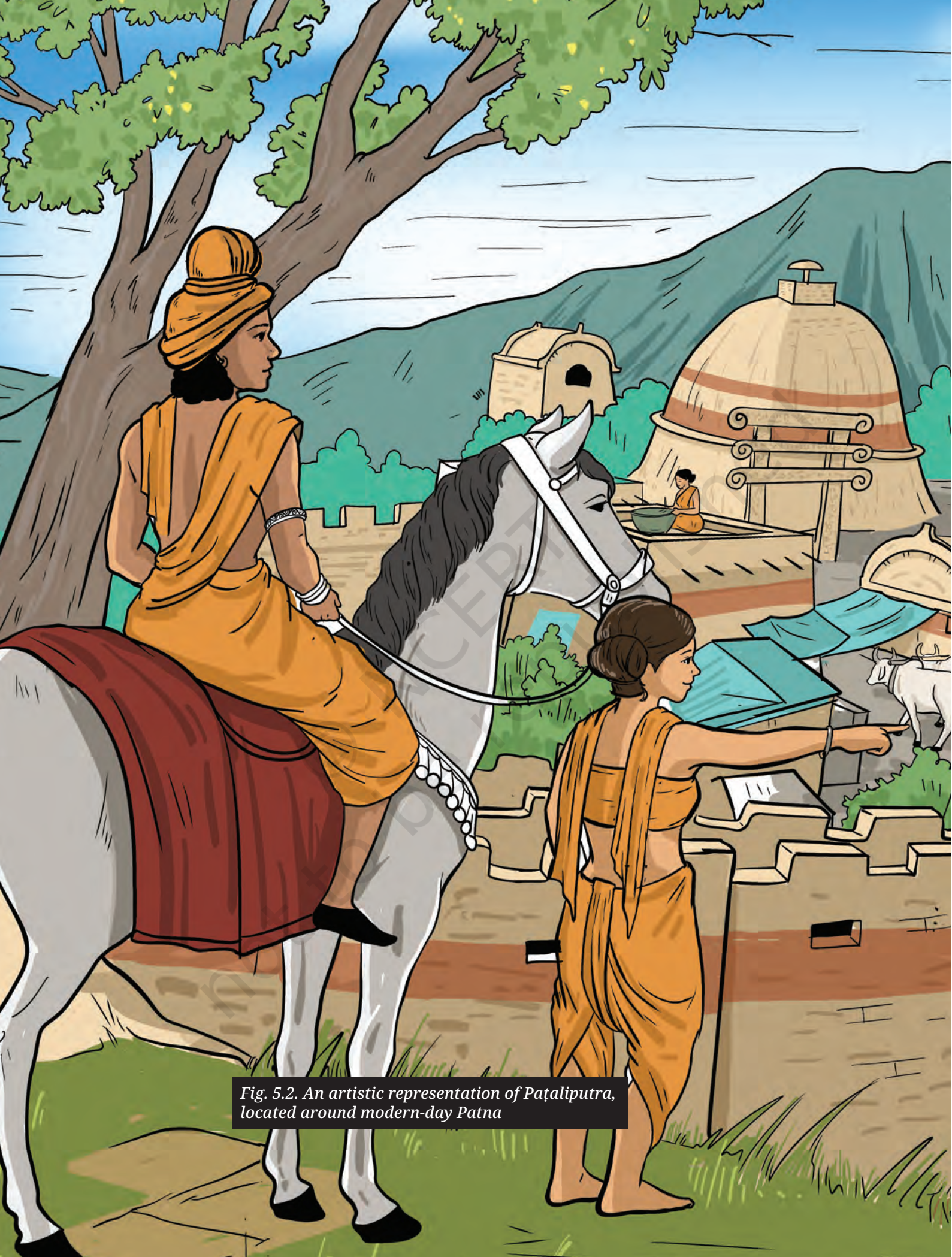
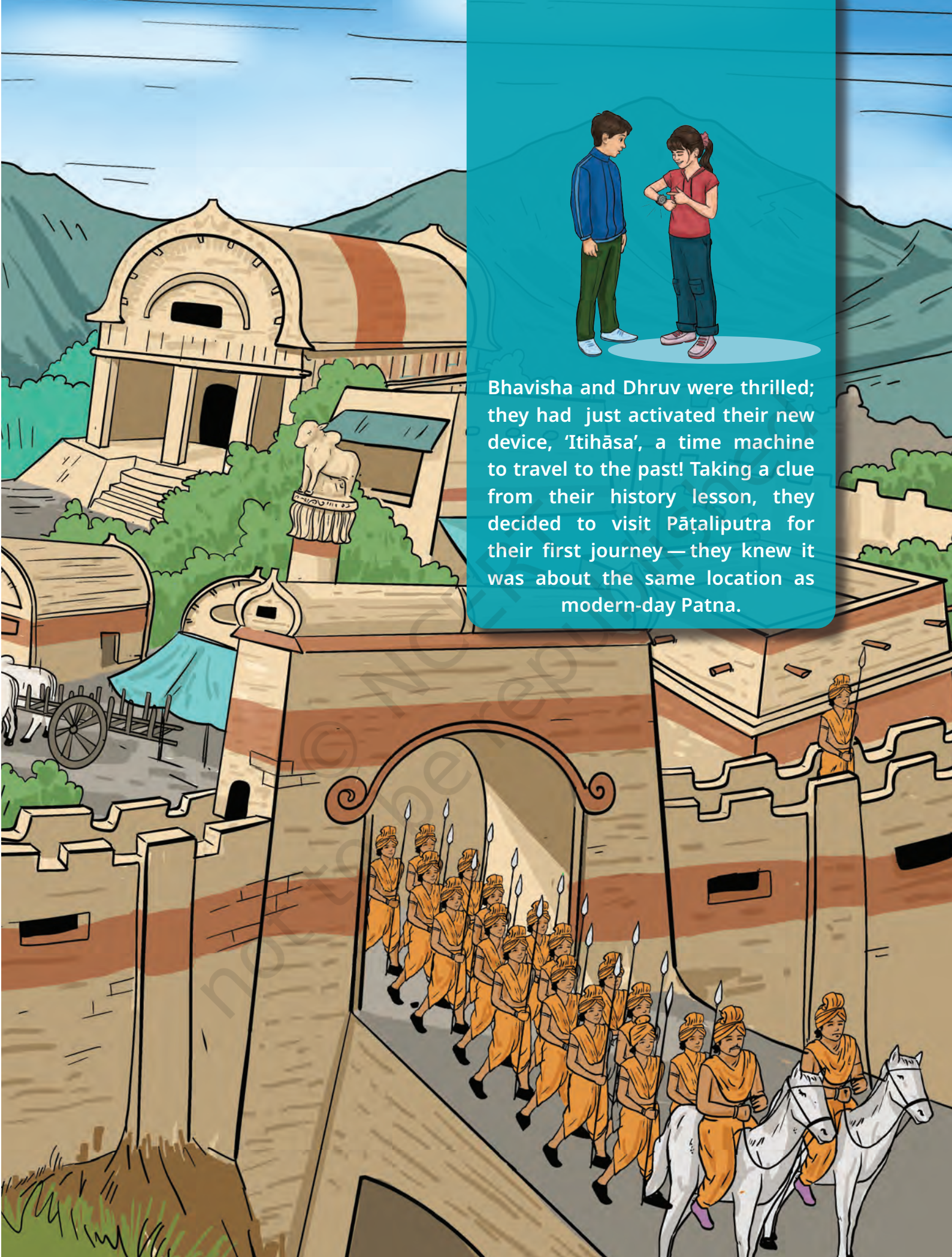


Fig. 5.2. An artistic representation of Pataliputra, located around modern-day Patna



Bhavisha and Dhruv were thrilled; they had just activated their new device, 'Itihāsa', a time machine to travel to the past! Taking a clue from their history lesson, they decided to visit Pāṭaliputra for their first journey — they knew it was about the same location as modern-day Patna.



Landing on the outskirts of the great city, a little dizzy, they saw a girl talking to a person on horseback dressed in strange clothes. As he left, she turned to them, and they asked her for her name.

“My name is Ira, daughter of Kanhadas, the ironsmith. Welcome to Pāṭaliputra!”

“Glad to meet you, Ira. Our names are Bhavisha and Dhruv.”

“Sshh! Keep your voices down! Do you see those soldiers marching past? They’re heading to battle against a neighbouring kingdom that has been troubling us. Our king avoids war when he can, but he also protects his people when needed. My father helped forge many of the swords they carry, and my uncle is one of the soldiers in the group. I just came to see him off... I don’t know when he’ll return.”

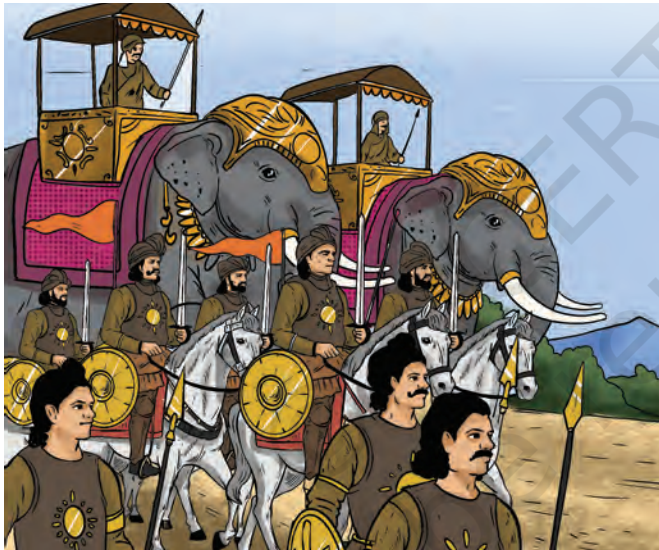


Fig. 5.3

(The group watches as an impressive procession of soldiers crosses a sturdy drawbridge leading out of the city, some on horseback and the army chiefs on elephant back. Then, the three children cross the same drawbridge to enter the city.)

“What kind of bridge is this?” asked Bhavisha. “And is it a river below?”

“This bridge keeps us safe,” explained Ira. “It’s lifted

whenever there is a danger of attack on the city. And no, it’s not a river, it’s a moat; once the drawbridge is lifted, it makes it more difficult to approach the fortifications. Can you see those hills and forests in the distance? They provide us with timber, herbs, and many other valuable resources. Elephants for the army are also captured from the forest and trained for the army.”

“What is the opening in that hill?” asked Dhruv.

“It’s a cave. Our king is getting it carved out for a community of monks. I hope we can visit it when it’s finished!”

(As they move through Pāṭaliputra, they take in its splendour—towering wooden ramparts with watch towers, majestic palaces and buildings, lively streets. Ira gestures towards a bustling market filled with traders from distant lands.)

“You must visit our main market before you leave! Our king welcomes travellers from all over, so you’ll get silk from China, spices and gems from the south, fine clothes from different regions—there’s nothing you won’t find in Pāṭaliputra!”

“What are those people over there doing?” asked Dhruv.

“Oh, these are street acrobats; they build human pyramids, sing and dance, or act in short plays to entertain people. Sometimes, they perform in front of the king!”

“Your king sounds very powerful,” remarked Bhavisha. “Does he rule the region around Pāṭaliputra?”

“Much more than that!” answered Ira. “He rules over a vast land, far, far beyond this city. His authority extends over many villages, towns and kingdoms. My uncle told me that it takes close to two months on horseback to reach the borders of the territory!”

“That sounds bigger than just a kingdom... What do you call it?”

“It is called an Empire,” Ira stated with evident pride.

What is an Empire?

The word ‘empire’ comes from the Latin ‘imperium’, which means ‘supreme power’. Simply put, an empire is a collection of smaller kingdoms or territories over which a powerful ruler or group of rulers exert power, often after waging war against the smaller kingdoms. The smaller territories still had their own rulers, but they were all **tributaries** to the emperor, who ruled the whole territory from a capital, usually a major centre of economic and administrative power.

In ancient Sanskrit texts, words commonly used for ‘emperor’ made this clear; they included *samrāj*, meaning ‘the lord of all’ or ‘supreme ruler’; *adhirāja* or ‘overlord’; and *rājādhirāja* or ‘king of kings’.

Tributary:
A tributary, in our case, is a ruler or a state that has submitted to an emperor and pays tribute—that is, money, gold (or other precious metals), grain, livestock, elephants or other valuable goods produced in their kingdom and is given to the emperor as a sign of submission, loyalty or respect. A synonym for ‘tributary’ is ‘vassal’, and another way to express this is to say that the tributary or vassal kingdoms accepted the emperor’s overlordship.

Indian history is full of empires. They rose, expanded, lasted for a while, declined, and disappeared. In fact, the last empire that ruled the Subcontinent existed less than a century ago! But now is not the time to tell that story; we start at the other end of time, so we may understand how empires functioned in the distant past and how they deeply impacted India's evolution at all levels—political, economic, social, and cultural.

Features of an empire



LET'S EXPLORE

- Empires extended over vast areas and had diverse people with differing languages, customs and cultures. How do you think the emperors made sure that they lived in harmony? Discuss in groups and share your thoughts with the class.
- Looking at the many challenges involved in managing an empire, why should a king be so keen to expand his kingdom into an empire and become an emperor? Here are a few possible answers; see if you can think of a few more:
 - An ambition to 'rule the entire world', a metaphor for controlling large territories and ensuring that they would be remembered for **posterity**;
 - A wish to bring large areas under control and gain access to their resources to build economic and military strength;
 - A desire for great wealth for himself and for the empire.

Posterity: The generations to come.

In return for tribute and loyalty, emperors generally allowed regional kings or chiefs to continue to govern their areas.



Fig. 5.4.1. Trained armies were deployed to conquer neighbouring kingdoms, maintain control over them and defend the empire's borders.



Fig. 5.4.2. Fortified settlements would be built in strategic places, such as the empire's borders.

Fig. 5.4.3. To expand into an empire, a kingdom might first wage war against neighbouring territories so as to conquer them.



Fig. 5.4.4. Rulers endeavoured to control rivers and trade networks as that would give them control over precious resources, apart from tax revenue from the trade.



Fig. 5.4.5. With many smaller kingdoms warring for control, the one with access to stronger military power and surplus resources would eventually become the overlord.



LET'S EXPLORE

Warfare apart, what other methods do you think the rulers might have used to expand their empires? Pen your ideas and share them with your class.



Trade, trade routes and guilds

Conducting military campaigns, especially in distant lands, is not as simple as it might seem. Maintaining an army is a costly affair: soldiers need to be fed, clothed, equipped with weapons, and paid; elephants and horses need to be cared for; roads or ships have to be built, and so on. All this requires considerable economic power, control over the workforce, and access to resources.

We can now understand that economic activity—especially production and trade—is one of the keys to maintaining an empire and ensuring people's welfare and quality of life, which a good ruler should be concerned with. Therefore, establishing and controlling **trade routes** all over the empire's territory and beyond is of great importance. That way, the goods traded will grow in quantity and variety, and more trade means more income for the producers and increased tax collections for the ruler.

Returning to the case of ancient India, what would have been the traded goods? There is plenty of evidence on this, at least, both from the literature and archaeological excavations—textiles, spices, agricultural produce, luxury items such as gems and handicraft products, and various animals were among the main items of trade. All this brisk trade was not limited to India; many Indian goods travelled towards distant countries by land or sea.

More often than not, traders were not just isolated individuals carrying out their own business. They soon understood the benefits of joining forces and creating **guilds** (*śhrenīs*). Guilds were powerful associations of traders, craftsmen, moneylenders or agriculturists. As far as evidence shows, a guild had a head (who was usually elected) and executive

officers who were supposed to have all kinds of ethical qualities. Two things made traders' guilds a remarkable institution. First, they brought together people who ended up being collaborators



Fig. 5.5. Some important trade routes from about 500 BCE onward and major cities marked on them. Notice the Uttarapatha and the Dakṣhiṇapatha routes.

rather than competitors, as they realised that sharing resources and information on markets, supply and demand, workforce, etc., was to everyone's benefit. Second, as an ancient text put it, "Cultivators, traders, herdsman, moneylenders, and artisans have authority to lay down rules for their respective classes"; in other words, guilds had the autonomy to create their own internal rules, and the king was not to interfere with them (and why should he, if trade flourished?).

Guilds spread over large parts of India and endured for centuries. Even after they ceased to exist formally, their spirit continued to influence India's trade and business activities, sometimes even to this day. The institution of guilds provides an excellent example of the **self-organising abilities** of Indian society. The ancient village unit, with its various committees and councils, provides another. Indeed, an enlightened ruler would let people organise themselves and refrain from interfering if the local institutions worked satisfactorily.

LET'S EXPLORE

- Observe the map of the trade routes. Identify geographical features that helped the traders travel across the Subcontinent.
- What modes of transport on those roads do you think were available at the time?

The Rise of Magadha

The period between the 6th and the 4th century BCE was one of profound change in north India. We briefly visited the sixteen *mahājanapadas* earlier — those large kingdoms of north and central India with their assembly system. One of them, Magadha (modern-day south Bihar and some adjoining areas), rose in importance and set the stage for the fusion of many kingdoms into India's first empire. Powerful early kings, such as Ajātaśhatru, played a crucial role in establishing Magadha as a dominant centre of power.





DON'T MISS OUT

Two of the most famed religious figures of the world—Siddhārtha Gautama, who became known as the Buddha, and Vardhamāna, better known as Mahāvīra—lived in the time of King Ajātaśatru. Revisit their teachings in the Grade 6 textbook's 'India's Cultural Roots' chapter.

Magadha was located in the resource-rich Ganga plains, with fertile land, abundant forests for timber, and elephants. Also, remember how the use of iron transformed other technologies, such as agriculture and warfare. Iron ore and other minerals from the nearby hilly regions proved crucial for the expansion of the kingdom. The use of iron ploughs to till the land increased agricultural produce, and lighter and sharper iron weapons strengthened the capabilities of the army.



Fig. 5.6. An elaborate panel from the Sanchi Stūpa depicting soldiers riding elephants, horses, or on foot, waging battle and laying siege to Kusinārā (today Kushinagar), a city of north India, to recover relics of the Buddha (seen carried away on an elephant in the left part of the panel).



LET'S EXPLORE

- Take a close look at the panel given above. How many types of weapons can you identify? What different uses of iron can you make out?
- In the left part of the panel, a parasol (*chhattra*) is kept over the casket containing the Buddha's relics. Why do you think this was done?

The production of surplus food grains allowed more people to focus on the arts and crafts, which were in demand inside and outside the empire's borders. The Ganga and Son rivers provided a geographical advantage for trade, as they could be used for transportation. The flourishing trade boosted the empire's income and contributed to Magadha's rise.



Fig. 5.7. A punch-marked silver coin of Mahāpadma Nanda

Around the 5th century BCE, Mahāpadma Nanda rose to prominence in Magadha and founded the Nanda dynasty. He successfully unified many smaller kingdoms and extended his empire across parts of eastern and northern India. As the economy thrived, he began issuing coins, demonstrating his economic power. We also learn from Greek accounts that the Nanda dynasty maintained a large army.

From various accounts of the Nanda dynasty, it appears that its last emperor, Dhana Nanda, though very rich, became highly unpopular as he oppressed and exploited his people. This paved the way for the Nanda empire to be conquered and absorbed into what would become one of the largest empires India ever knew—the Maurya empire.



DON'T MISS OUT

The famed Sanskrit grammarian Pāṇini lived around the 5th century BCE, during the time of the Nandas. He is known for composing the *Aṣṭādhyāyī*, an ancient text that lists the rules of Sanskrit grammar in 3,996 short **sūtras**.



Fig. 5.8. An India post stamp commemorating Pāṇini

Sūtras:
Sutras are concise, carefully crafted phrases that capture knowledge and important ideas (from ancient Indian text) in a way that's easy to remember and pass on.

The Arrival of the Greeks

While events unfolded in Magadha, located in the eastern part of the subcontinent, what was happening in the northwestern region? This area was home to smaller kingdoms along an ancient route connecting to the Mediterranean. Among them, according to Greek accounts, were the Pauravas, led by their king, Porus.

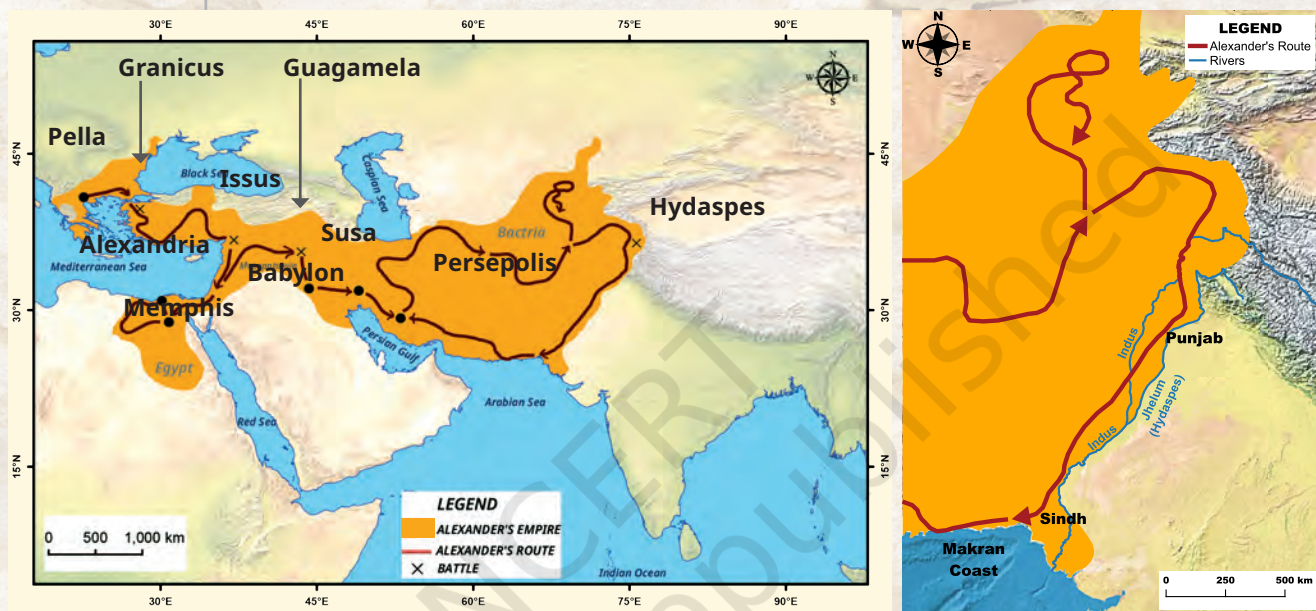


Fig. 5.9

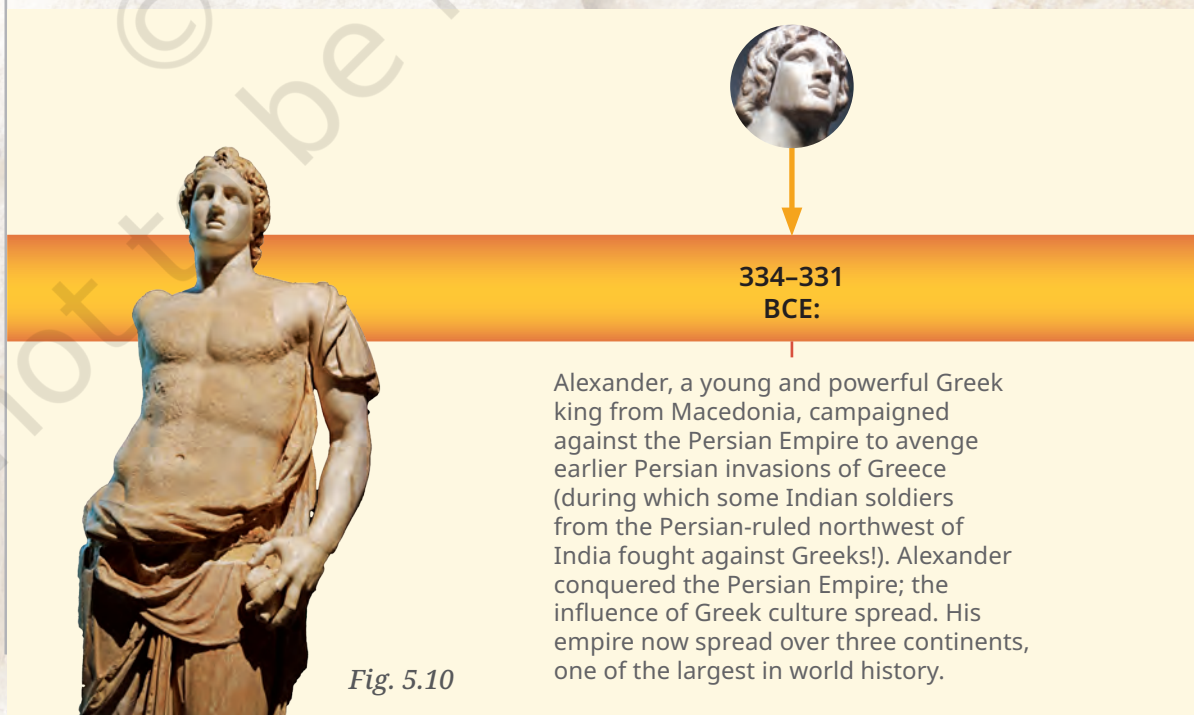


Fig. 5.10



DON'T MISS OUT

The **satraps** were governors of provinces of Persian and Greek empires who were left behind by the overlord (like Alexander) to manage the far-off territories. These satraps had significant power and freedom despite being mere officials of the rulers. Can you guess how it was possible for them to exercise such power?



THINK ABOUT IT

Why do you think Alexander wanted to rule over the entire world? What would he have gained from it?

LET'S EXPLORE

When, after the battle, Alexander asked Porus how he wished to be treated, Porus answered, "Like a King." Alexander then left Porus at the head of his kingdom, as satrap. With the help of your teachers, find more details on the battle between Porus and Alexander. Enact a play of this battle scene using your imagination in addition to what you have discovered.



327-325
BCE

Eager to reach the "end of the world", Alexander pushed on further east and brought his campaign to India, defeated Porus in Punjab and, encountering fierce resistance from local tribes and rulers, massacred the population of several cities. Greek records mention that in a few battles, "women fought side by side with their men." Alexander himself was seriously wounded in a battle. Tired and homesick, his soldiers lost the will to fight and refused to move deeper into India, towards the Ganga River. Alexander and part of his army retreated to Persia, but through the coastal route in the south and Iran's harsh desert regions, resulting in heavy losses to his troops out of thirst, hunger and disease.

Back in Persia, Alexander faced rebellions and political turmoil. After he fell ill and died in Babylon at the age of 32, his immense empire was soon divided between his generals and the satraps, who created their own kingdoms.

324-323
BCE



Alexander's dialogue with the Gymnosophists

Alexander heard of a group of Indian sages whom the Greeks called 'Gymnosophists' or 'naked philosophers' (probably because they wore very little clothing), who were renowned for their wisdom. Alexander challenged them with tricky questions in the form of riddles, warning that he would put those who gave wrong answers to death. However, the Gymnosophists responded to his questions calmly and intelligently. Alexander was impressed and, in the end, spared them all. Over the centuries, different versions of this story have been told, making it one of the most fascinating encounters in history!



Fig. 5.11. A Greek coin probably showing Alexander on horseback attacking Porus on his elephant.

According to one account, Alexander asked, "Which is stronger, life or death?" One of the sages replied, "Life, because it endures while death does not." Alexander then asked, "How can a man be most loved?" "If he is most powerful and yet does not inspire fear," came the reply, perhaps as a hint to the mighty ruler!

Historians view such exchanges as a meeting of two great traditions—Greek and Indian philosophies.

The Mighty Mauryas



After that brief sojourn to the northwest, let us return to Magadha, where we witnessed the decline of the Nanda empire. Around 321 BCE, just a few years after Alexander left India with his army, a new dynasty and new empire emerged: the Maurya Empire founded by Chandragupta Maurya. It quickly absorbed the Nanda empire's territories and went on expanding beyond.

As per many accounts, Chandragupta managed this feat with the help of an able mentor named Kauṭilya, who used his knowledge of politics, governance and economics to create an empire that remains one of the greatest in Indian history.

The story of Kauṭilya

According to Buddhist texts, Kauṭilya—sometimes referred to as Chāṇakya or Viṣṇugupta—was a teacher at the world-renowned Takṣhaśhila (modern-day Taxila) university. His legendary tale begins in the court of Dhana Nanda, who as we saw, had become highly unpopular.

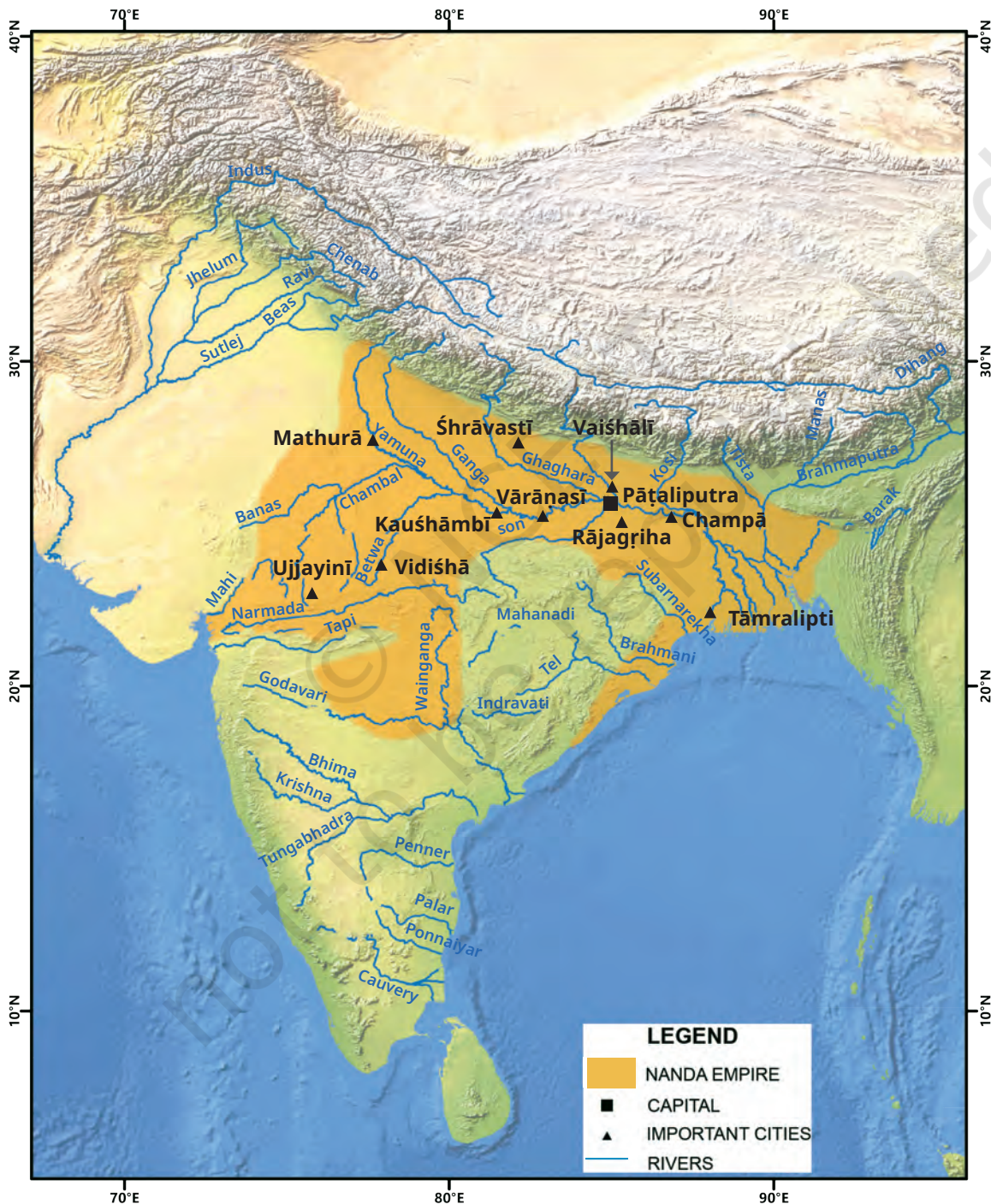


Fig. 5.12. Nanda Empire



Fig. 5.13. Maurya Empire

Observing this, Kauṭilya advised Dhana Nanda to change his ways or witness the collapse of his empire. Angered, Dhana Nanda insulted Kauṭilya and threw him out of his court. This led to Kauṭilya's vow to end the 'evil Nanda' rule.

The rise of Chandragupta Maurya

There are many stories about the origin and adventures of Chandragupta Maurya, but their common theme is that he



Fig. 5.14. Megasthenes in the court of Chandragupta Maurya
(A 20th-century painting by Asit Kumar Haldar)

overthrew the Nandas and took control of Magadha to establish his rule, with Pāṭaliputra as his capital. Do you remember that Magadha had many advantages because of its geography, an established economic system and a flourishing trade? These, combined with the advice of the master strategist, Kauṭilya, helped Chandragupta Maurya gradually expand his empire. He defeated the Greek satraps left behind by Alexander in the northwest and integrated the region into an empire that stretched from the northern plains to the Deccan plateau.

After Chandragupta Maurya defeated the Greeks, he maintained a diplomatic relationship with them and hosted in his court a Greek historian and diplomat, Megasthenes, who wrote about his travels in India in his book *Indika*—the first such written account—unfortunately lost except for some excerpts quoted by later Greek scholars.

Kauṭilya's concept of a kingdom

Kauṭilya had a clear vision of how a kingdom (*rājya*) should be established, managed and consolidated. In his famous work *Arthaśāstra* (literally, 'the science of governance and economics'), he listed directives in many areas like defence,

Kauṭilya's Saptāṅga



the king (*swāmi*)



[the group of] councillors,
ministers and other high
officials (*amātya*)



the territory of the state
along with the population
inhabiting it (*janapada*)



the fortified towns and cities
(*durga*)



the treasury or the wealth of
the kingdom (*koṣha*)



the forces of defence and
law and order (*daṇḍa*), and



the allies (*mitra*)

Fig. 5.15

economics, administration, justice, urban planning, agriculture and people's welfare. One of his most important political concepts is the *saptānga* (see fig 5.15) or the seven parts that constitute a kingdom.

According to Kauṭilya, the *saptānga* together must create a settled, well-protected, and prosperous kingdom to be maintained both through warfare and through alliances for peace, as the case may be. He emphasised the importance of law and order in society, which necessitated a strong administration. He also detailed many laws to deal with corruption and specified punishments for any activities that went against the wellbeing of the people.



THINK ABOUT IT

- ❖ Kauṭilya says, “A king shall increase his power by promoting the welfare of his people, for power comes from the countryside which is the source of all economic activity. [The king] shall show special favours to those in the countryside who do things which benefit the people, such as building embankments or road bridges, beautifying villages, or helping to protect them.”
- ❖ Why do you think it was important to take special care of the countryside? (*Hint: Think back to what you have learnt at the beginning of this chapter*)

Kauṭilya's central philosophy of governance is in tune with Indian values: “In the happiness of his subjects lies the king's happiness; in their welfare his welfare. He shall not consider as good only that which pleases him but treat as beneficial to him whatever pleases his subjects.” In other words, however powerful a king may be, he must give first place to the people's interests.

LET'S EXPLORE

Organise a group discussion in your class and compare the features of Kauṭilya's idea of an empire with a modern nation.



The King Who Chose Peace

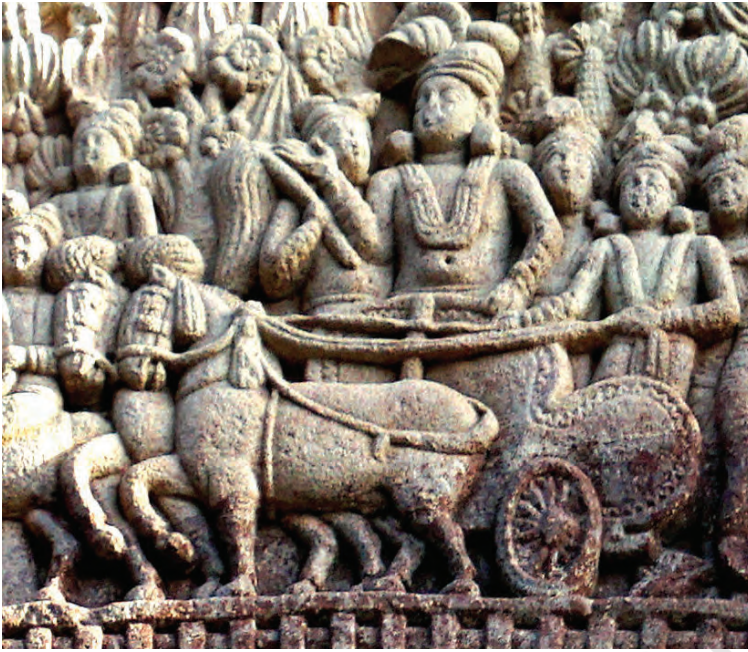


Fig. 5.16. Aśhoka visiting the Ramagrama stūpa in Nepal (from a panel at the Sānchi stūpa)

Another king of the Maurya dynasty was Aśhoka (268–232 BCE), Chandragupta's grandson, who came to be credited with major administrative and religious achievements.

At the beginning of his reign, Aśhoka was quite ambitious. He had inherited a vast empire but further expanded it to cover almost the entirety of the Indian subcontinent, except for the southernmost region, but including present-day Bangladesh and Pakistan

and parts of present-day Afghanistan. One encounter, however, is said to have changed the path of his life. According to one of his **edicts** he once marched on Kalinga (modern-day Odisha), where he waged a ferocious war. Seeing the enormous amount of death and destruction on the battlefield, Aśhoka chose to give up violence and, to the greatest extent possible, adopt the path of peace and non-violence that the Buddha taught.

Edict:
An official declaration issued by authorities or, in our case, a king.



THINK ABOUT IT

Aśhoka, in his edicts, tells the story of the Kalinga war. He could have chosen not to mention it and maintain his image as a peaceful, benevolent king for future generations. Why do you think he admitted to this destructive war?

Emissary:
Someone sent on a special mission, often of a diplomatic nature.

Embracing Buddhist teachings, Aśhoka sent **emissaries** to Sri Lanka, Thailand, Central Asia and beyond to spread the message of the Buddha far and wide.

Historians have sometimes called Aśhoka a ‘great communicator’ since he issued in many parts of his empire edicts engraved on rocks or pillars that contained his messages for the people and encouraged them to follow dharma. Most of these edicts were inscribed in Prakrit, which was the popular language in many parts of India and written in the Brahmi script (Brahmi is the mother of all regional scripts of India).

We have referred to the Prakrit language written in Brahmi script. What does this mean? Very simply, a language is what we speak, while script is what we write a language in. Can you think of examples of this in our everyday life?



Fig. 5.17. A few of the many Aśhokan edicts across the Subcontinent

In his edicts, Aśhoka called himself ‘Devanampiya Piyadasi’; the first word means ‘Beloved of the Gods’; the second, ‘one who regards others with kindness’. And indeed, the language of the edicts makes it clear that he was interested in depicting himself as a benevolent and compassionate ruler. Let us see a few examples of this.

Although some southern kingdoms were not part of the Mauryan kingdom, Aśhoka supported their overall wellbeing. He claimed to provide medical care for people and animals even beyond his

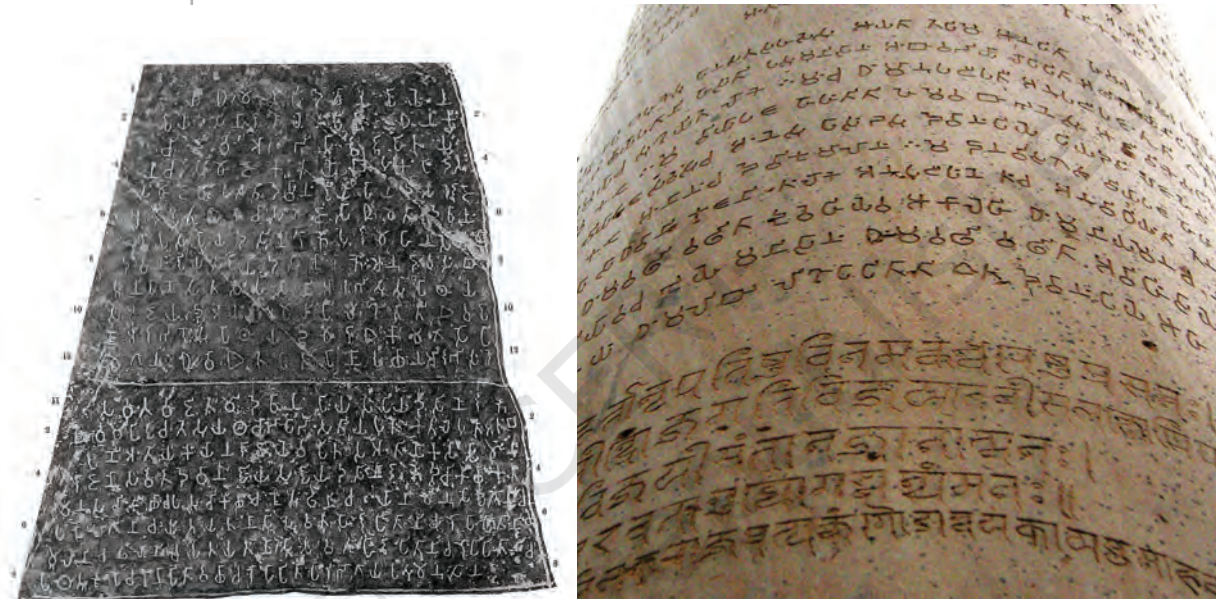


Fig. 5.18. (Left) A reproduction of a part of Aśhoka's rock edict at Girnar, Gujarat. (Right) Detail of the Topra Aśhokan pillar at Feroz Shah Kotla, Delhi

empire, prohibited hunting and cruelty to animals, and ordered medical treatment for them when necessary. If so, Aśhoka was an early contributor to nature conservation and wildlife preservation. He said he had established rest houses and wells at regular intervals along the main roads of his empire and got fruit and shade trees planted. He also claimed to encourage all sects (the different schools of thought present in his time) to accept each other's best teachings and study them.

Although we need not take all of Aśhoka's claims literally, it is clear that in line with Kautilya's philosophy of governance, he paid attention to the welfare of his subjects and made efforts to reach out to them.



DON'T MISS OUT

You read about the word ‘dharma’ (*dhamma* in Prakrit) in Grade 6. Its essence cannot be easily captured. In simple terms, dharma means moral law or someone’s religious or ethical duties towards family, community or country. At a deeper level, however, dharma extends to living according to the order of the universe or *ṛitam*. This includes doing one’s duty truthfully, following rules of righteous conduct and leading a life in harmony with the cosmic order. Dharma is, therefore, duty, law, truth, order and ethics—all of it together!

LET’S EXPLORE

Aśhoka details instructions on the conduct of his officials and mentions ways to ensure that they practised fairness in one of his edicts. Read the translation below and share your thoughts on whether those ways would have been successful in helping manage his empire and how.

“By order of the Beloved of the Gods—the officers and city magistrates [...] are to be instructed thus:

[...] You are in charge of many thousands of living beings. You should gain the affection of men. All men are my children, and just as I desire for my children that they should obtain welfare and happiness both in this world and the next, the same do I desire for all men. [...] You should strive to practice impartiality. [...] The root of all this is to be even-tempered and not rash in your work. [...] This inscription has been engraved here in order that the city magistrates should at all times see to it that men are never imprisoned or tortured without good reason. [...] And for this purpose, I shall send out on tour every five years, an officer who is not severe or harsh; who, having investigated this matter..., shall see that they carry out my instructions.”



The Maurya empire continued for half a century after Aśhoka's death. However, his successors were unable to hold the empire together, and many of the smaller kingdoms broke off and became independent. Around 185 BCE, India started on another phase of her journey. Bhavisha and Dhruv will join us on this journey in the next chapter.

Life in the Mauryan period

Cities like Pāṭaliputra were bustling centres of governance and commerce. They had palaces, public buildings, and well-planned streets. With a well-organised taxation system and brisk trade, the treasury remained strong, fuelling the empire's growth and prosperity. Officials of the administration of the empire, merchants and artisans played key roles in the city life.



DON'T MISS OUT

The Sohagaura copper plate inscription, dating back to the 4th–3rd century BCE, is one of India's earliest known administrative records. Discovered in Sohagaura, Uttar Pradesh, it is written



Fig. 5.19

in Prakrit using the Brahmi script and is believed to have been issued during the reign of Chandragupta Maurya. The inscription mentions the establishment of a granary to store grain as a precaution against famines, highlighting the state's efforts to ensure food security and support its people during times of crisis.

Megasthenes' account also throws some light on the society of that time. A substantial proportion of the population was engaged in agriculture, which was an important source of revenue for the empire. Two crops were sown in a year, as rain fell in both summer and winter. This ensured that famines were

rare and people had ample food. Granaries were well stocked for any eventualities. Even if war raged nearby, farmers were protected from it, and agriculture was not disturbed.

Blacksmiths, potters, carpenters, jewellers and other artisans lived in the cities. The cities were well-planned and had signage on the streets. Communication happened through couriers who carried messages from place to place. The houses were made of wood and could be up to two storeys tall. The streets had vessels of water stored at regular intervals in case of fire.

Later accounts describe the cotton dresses people wore—a lower garment that reached below the knee halfway down to the ankles and an upper garment that they threw over their shoulders. Some wore leather shoes with designs and thick soles to make them look taller.

LET'S EXPLORE

Wear the hat of a historian. Look carefully at the artefacts presented on the spread on the next page. What conclusions can you draw about people and life during the Mauryan era?

Fig. 5.20 has many messages for us, apart from the beauty and perfection of the sculpture, and is a fine example of Mauryan art. This capital (a word which, here, means 'top portion' or 'head') was the top of a pillar that Aśhoka got erected at Sarnath, near Varanasi, where the Buddha gave his first teaching. The four lions symbolise the royal power; on the ring below, four powerful animals (an elephant, a bull, a horse and one more lion) are depicted, along with the *dharmachakra* or wheel of dharma, which symbolises the Buddha's teachings.



Fig. 5.20. The Mauryas were renowned for their highly polished stone pillars, as can be seen in this capital of the Sarnath pillar.

Some Contributions of the Mauryas

Life and people



Fig. 5.21. Terracotta figurine of a dancing girl (notice her elaborate headdress, hairstyle and jewellery).



Fig. 5.22. Terracotta figurine of a female deity.

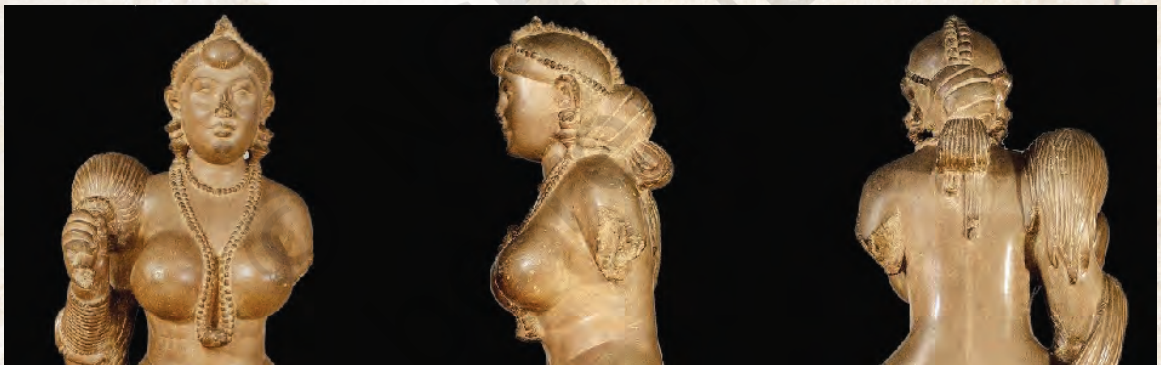


Fig. 5.23. Female deity (yakshī) holding a fly whisk.



Fig. 5.24. Terracotta of Saptamātrikās or seven mother goddesses (a continuing tradition).



Fig. 5.25. Head of a terracotta horse (notice the elaborate design of the bridle).

Art and architecture



Fig. 5.26. As one of India's oldest stone structures, the Great Stūpa at Sanchi is among the finest examples of Indian architecture. Note that the original structure was made of bricks and was later enlarged using stone. Aśhoka is said to have constructed many such stūpas, chaityas, and vihāras for worship, study, and meditation.



Fig. 5.27. Rock sculpture of a life-size elephant at Dhauili (in present-day Odisha, near Bhubaneswar), which symbolises the Buddha—intelligent, powerful, patient, and calm. An edict of Aśhoka was engraved on a rock nearby.



सत्यमेव जयते

Fig. 5.28

This image may be familiar to some of you. Indeed, this capital was chosen as India's national emblem, to which was added the Sanskrit motto *satyameva jayate* or "truth alone triumphs" (see the national emblem on the left). Besides, the *dharmachakra* is depicted at the centre of our national flag, as you may also have noticed. The motto comes from the Muṇḍaka Upaniṣhad; in full, it reads *satyameva jayate nāṇṛitam*, that is, "truth alone triumphs, not falsehood".



LET'S EXPLORE

Notice the different symbols on the coins. Can you guess what any of the symbols in the coins below might mean?



Fig. 5.29.1. A hoard of Mauryan punch-marked coins,

Fig. 5.29.2. A punch-marked coin of Aśhoka



DON'T MISS OUT

The big, round hemispherical structure in the centre of the stūpa is called the *aṇḍa*. It represents the universe and is often built to house sacred relics. People walk around it in a circle as a form of worship (*pradakṣhiṇa*).

The Fragile Nature of Empires

You will hear in higher grades about past mighty empires elsewhere in the world, such as the Roman, the Persian, the Ottoman, the Spanish, the Russian, the British empires, and so on. All of them are long gone, but historians keep debating the causes of their decline.

One of those causes, as we saw, is the temptation for some of the empire's regions to try and become independent. This could happen if, for example, the emperor needed more resources for long military campaigns or in times of drought; local rulers would be burdened with increasing demands for tribute, leading to resentment. Or if a powerful emperor was followed by one perceived to be weak, local kings or chieftains might simply decide to take a chance and stop paying tribute. Also, the larger an empire, the more difficult it is to hold it together, as Alexander experienced; far-off territories are often the first to split away from the empire. Finally, economic crises caused by natural calamities (such as a long drought or floods) could also shake an empire's structure.

Empires are, therefore, something of a paradox. On the one hand, they can bring about political unity, as the Mauryan empire did to almost the entire Subcontinent, and reduce or eliminate warfare among the smaller kingdoms—indeed, a well-managed empire could lead to greater prosperity than smaller, warring kingdoms. On the other hand, empires have almost always been established through war and have maintained their existence

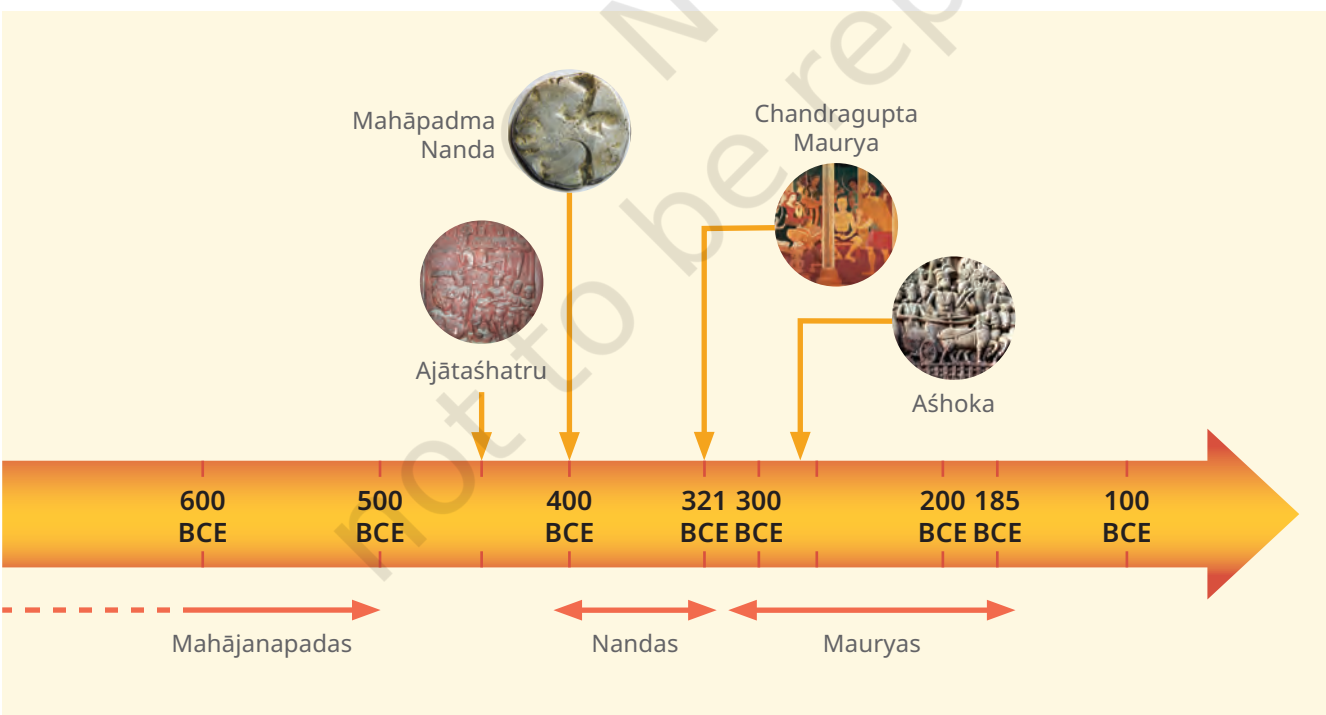


Fig. 5.30

through force and repression. This makes them fragile at their core and unstable over time.



Before we move on ...

- An empire is a large territory made up of many smaller kingdoms or territories. Emperors expanded their kingdoms mostly to gain fame, amass power, including military power, and control resources and economic life.
- The first empires of India emerged in regions blessed with abundant natural resources, rivers for irrigation and transport, and the production of a variety of goods for trade.
- Alexander's campaign in northwest India had a limited political impact but opened the door for Indo-Greek cultural contacts.
- The Mauryas created a vast empire with a legacy that lasted centuries. Their legacy includes strengthening trade routes and economic systems, extensive use of coins for trade, well-designed urban settlements, and an elaborate system of administration. They also promoted art and architecture.
- Aśhoka was keen to advertise his achievements and project the image of a benevolent ruler who encouraged his subjects to follow dharma.

Questions and activities

1. What are the features of an empire, and how is it different from a kingdom? Explain.
2. What are some important factors for the transition from kingdoms to empires?
3. Alexander is considered an important king in the history of the world —why do you think that is so?
4. In early Indian history, the Mauryas are considered important. State your reasons.
5. What were some of Kautilya's key ideas? Which ones of these can you observe even today in the world around us?

6. What were the unusual things about Aśhoka and his empire? What of that has continued to influence India and why? Write your opinion in about 250 words.

7. *Thus speaks the Beloved of the Gods, the king Piyadasi: My officers of Dhamma are busy in many matters of public benefit, they are busy among members of all sects, both ascetics and householders. I have appointed some to concern themselves with the Buddhist Order, with brahmans and Ājīvika..., with the Jains..., and with various sects. There are many categories of officers with a variety of duties, but my officers of Dhamma are busy with the affairs of these and other sects.*

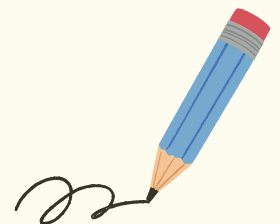
After reading the above edict of Aśhoka, do you think he was tolerant towards other religious beliefs and schools of thought? Share your opinion in the classroom.

8. The Brahmi script was a writing system that was widely used in ancient India. Try to learn more about this script, taking help from your teacher wherever required. Create a small project and include what you have learnt about Brahmi.
9. Suppose you had to travel from Kauśhāmbī to Kāveripattanam in the 3rd century BCE. How would you undertake this journey, and how long would you expect it to take, with reasonable halts on the way?

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!



The Age of Reorganisation

By continuous living tradition and a vital power of rejuvenescence, this land has readjusted itself through unnumbered transformations.

— Jagdish Chandra Bose (1917)

Fig. 6.1.1. A glimpse of the art from the age of reorganisation



The Big Questions ?

1. Why is the period that followed the Maurya empire sometimes called the 'Age of Reorganisation'?
2. What were the values or principles that guided emperors of that period?
3. How did foreign invaders assimilate into Indian society and contribute to cultural confluence?



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Bhavisha and Dhruv had recovered from their journey to the Maurya empire and were itching for another adventure. They decide to use Itihāsa again and landed in a new historical period. They came across a collection of art pieces, each one quite different from the other. (See Fig. 6.1.1) They wondered—could these artefacts belong to multiple kingdoms rather than just one? They guessed right. In this chapter we will travel over a fairly long period. Here we go...



Fig. 6.1.2.

Very little is known about Aśhoka's successors to the throne. It is generally accepted, however, that the last Maurya emperor was assassinated around 185 BCE by his commander-in-chief Puṣhyamitra Śhunga. This led to a breakup of the empire—hardly half a century after Aśhoka, as we mentioned in the last chapter. Many new kingdoms emerged across the subcontinent, which, often, were earlier tributary kingdoms under the

overlordship of the Maurya empire. The northwest region became weak, exposing it to invasions from outside the subcontinent.

This period is also known as the 'age of reorganisation' by some scholars as the existing regions were being reorganised into new kingdoms that were constantly competing to become powerful. The map of India changed significantly in that age, as did people's lives.

LET'S EXPLORE



Create a timeline on a sheet of paper marking the period from the first year of the 2nd century BCE and ending in the last year of the 3rd century CE. How many years does this period cover? As we progress through the chapter, mark the key individuals, kingdoms and events on the timeline.

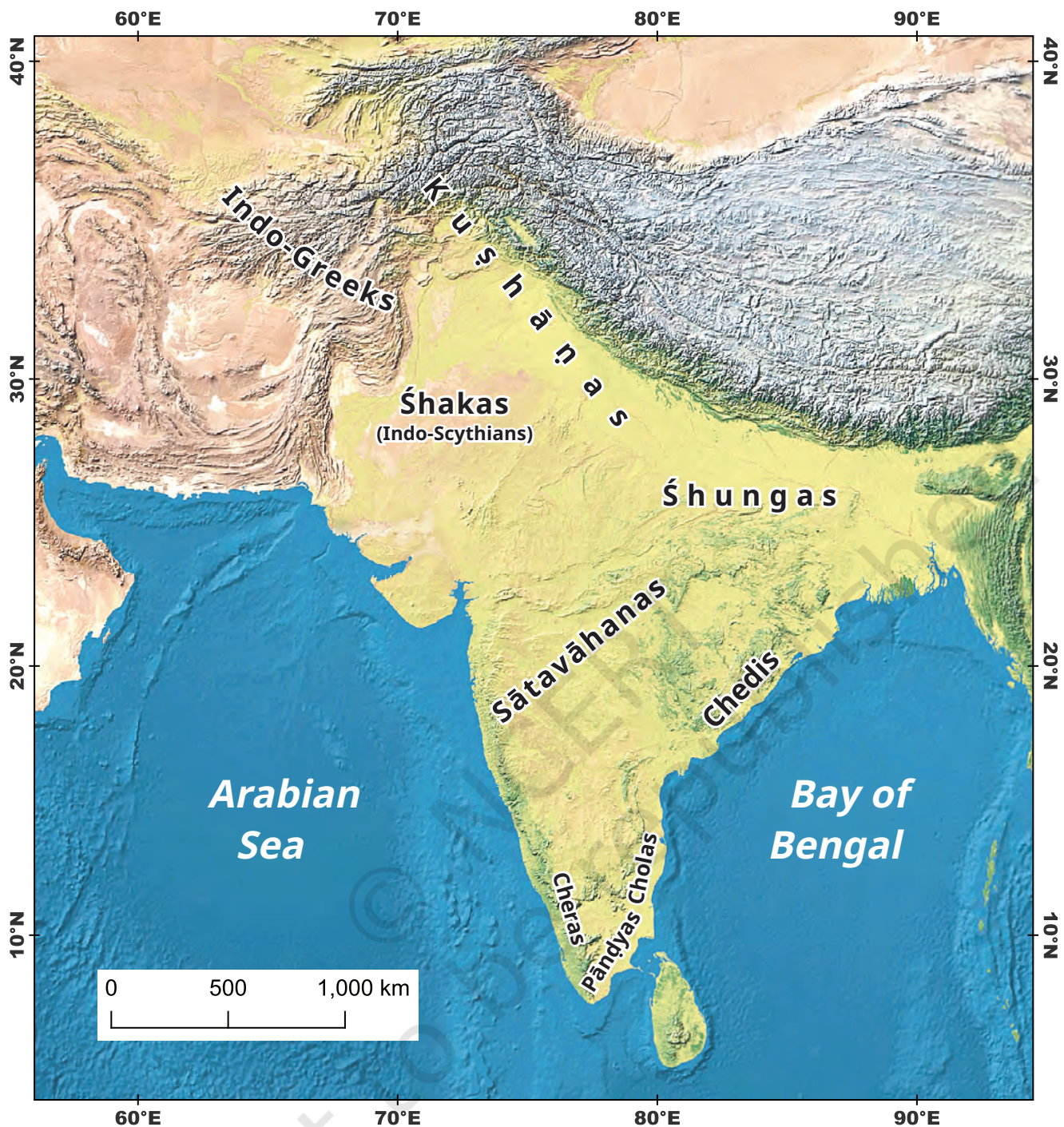


Fig. 6.2. Prominent dynasties of India during the age of reorganisation



LET'S REMEMBER

While working on the timeline, did you notice the transition from BCE to CE? Remember what you learned in the Grade 6 chapter 'Timeline and Sources of History' about how time is measured in history.

Matrimonial alliance :

An alliance arranged through a marriage, generally between two members of royal families.

In practice, this would often mean a king offering his daughter for marriage into the royal family of a neighbouring kingdom, with the intention of cementing an alliance between the two kingdoms.

LET'S EXPLORE

In the previous chapter, you studied the map of the Maurya empire (see page 100). Above is a map of the post-Maurya period. How many kingdoms can you count in the area that were previously under the control of the Maurya empire?



The 'new' kingdoms now competed for territorial control. Peaceful methods like **matrimonial alliances** between neighbouring kingdoms, or the use of force in warfare, were means of gaining control. Remember that there was constant wrestling for control over areas along the borders, as gaining control over them was important to keep the kingdom safe from attacks.

Together with those political events, there was a burst in the development of art, architecture and literature, and enriching cultural exchanges. We will get a peek into this in the following sections.

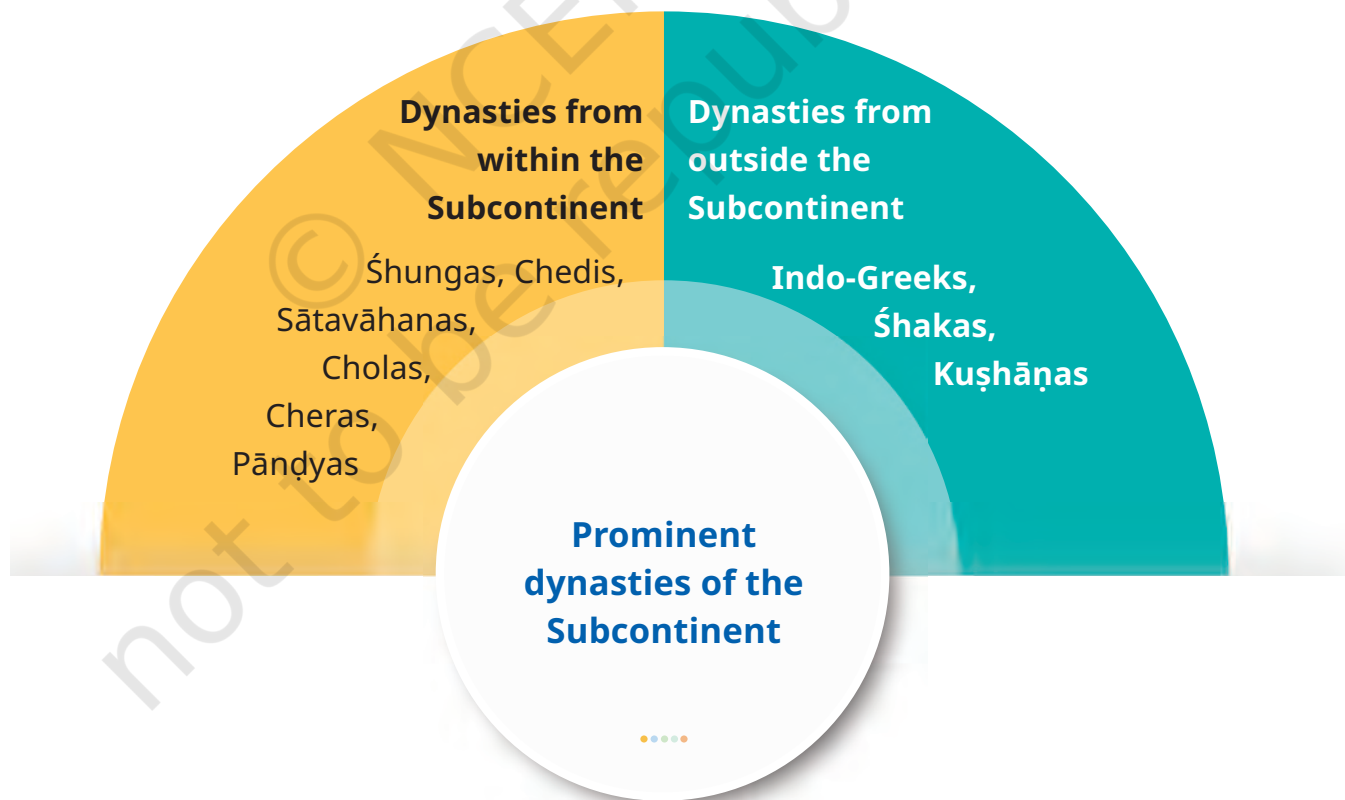


Fig. 6.3

Surge of the Śhungas

Pushyamitra Śhunga founded the Śhunga dynasty, which ruled over parts of north and central India. He performed the *aśhvamedha yajña*, a Vedic ritual, to establish himself as a most powerful ruler. Although his empire was smaller than the previous Maurya Empire (compare their two maps), he kept it safe from potential invaders and maintained friendly relations with the Greeks, after some initial military campaign against them. But, again, the empire did not last long after him—a century later, it was gone.

The period witnessed the revival of Vedic rituals and practices, but other schools of thought nevertheless continued to flourish.



DON'T MISS OUT

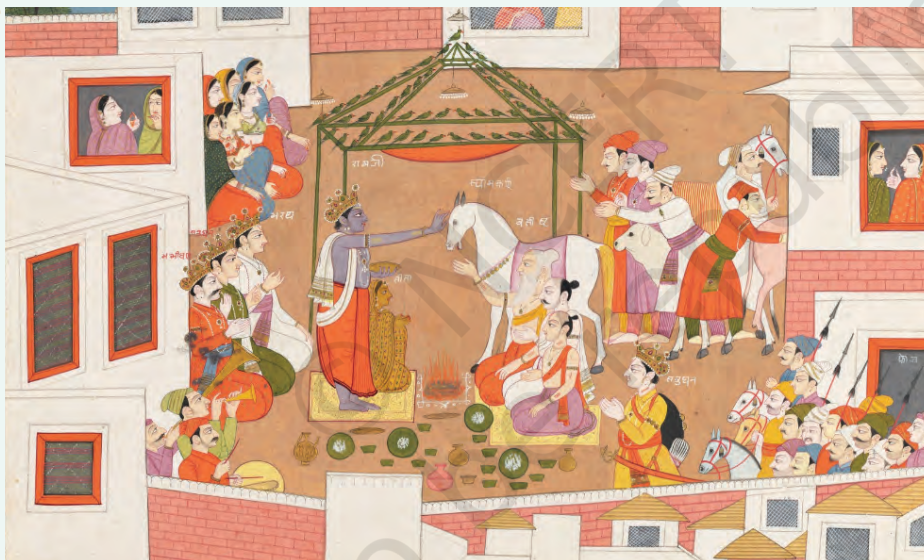


Fig. 6.4. Scene from the *Rāmāyaṇa* in which King Rāma is seen performing the *aśhvamedha yajña* (19th century painting, National Museum)

The *aśhvamedha yajña* was a Vedic ritual conducted by many rulers to declare their position as the king. In this ritual, a horse accompanied by soldiers was left to wander freely. Any territory that the horse crossed unchallenged was considered to become a part of the king's empire. If any ruler stopped the horse, it led to a battle to determine supremacy.

Sanskrit emerged as one of the preferred languages for philosophical and literary works. Do you recall some aspects of the *Yoga Sūtras* in your Physical Education and Well-being classes in Grade 6? These *Yoga Sūtras* were compiled by Patañjali during this period.

The Śhungas patronised literature, art and architecture. The Bharhut Stūpa (in present-day Madhya Pradesh) presents us with beautiful examples of Śhunga art. It was probably built during the time of Ashoka, but the Śhungas added beautifully carved railings and reliefs depicting stories from the Buddha's life. These are considered some of the earliest examples of Buddhist art.



Fig. 6.5.1. Railings at the Bharhut Stūpa. Fig. 6.5.2. Carving of Lakshmi on a railing. Fig. 6.5.3. A group of singers and dancers. 6.5.4. Elephants holding up the wheel of dharma

Some Śhunga Contribution to Art



Fig. 6.6.1. Pillar with a Greek warrior. Fig. 6.6.2. Male figure. Fig. 6.6.3. Woman with a child. Fig. 6.6.4. Woman with a fan. Fig. 6.6.5. A vase. Fig. 6.6.6. Female figure with hair ornaments, terracotta. Fig. 6.6.7. Royal family. Fig. 6.6.8. Bronze bangles covered with a thin layer of gold. Fig. 6.6.9. Comb of ivory. Fig. 6.6.10. Beads of a necklace.

LET'S EXPLORE

Below is a panel from the Bharhut Stūpa. Look at the two figures on the right. What are they doing? Can you guess their profession? Notice their attire. What does this tell us about them? List other details that you notice in the panel and discuss your findings in class.



Fig. 6.7. A panel from the Bharhut Stūpa

LET'S EXPLORE

Look closely at the pictures in the collage in Fig 6.6 (on the previous page). In a note, write down your observations on the clothes, the jewellery, and other objects of daily use.

The Sātavāhanas

From the limited evidence available, the Śhungas seem to have waged wars with many of their neighbouring regions. This may have included the Sātavāhanas, who ruled large parts of the Deccan from the 2nd century BCE onward, to the south of the Śhunga Empire. Sometimes referred to as 'Andhras', the Sātavāhanas were a powerful dynasty and their empire largely comprised of present-day Andhra Pradesh, Telangana and Maharashtra, with different capital cities at different times—the most famous were Amrāvati and Pratiṣṭhāna (Paithan). Trade and commerce appear to have flourished in the Sātavāhana kingdom.

Coins issued by the Sātavāhana rulers have been found in various regions of India, from Gujarat to Andhra Pradesh — India's western and eastern coasts. Indeed, many coins depicted ships, suggesting that maritime trade was an important part of economic life. The type of ship depicted on the coin above suggests advanced shipbuilding and navigation technologies.

Agriculture flourished in the Krishna-Godavari river system, which provided economic stability to the kingdom. The Sātavāhanas had active trade networks that reached as far as the Roman Empire and included an exchange of goods like spices, textiles, sandalwood, and luxury items like gold-plated pearls, ivory, etc. Imports included glass and perfumed ointments. Tolls and taxes on trade added revenue to the kingdom.

Economic prosperity and a relatively peaceful political period facilitated the development of literature, art and culture, to which the Sātavāhanas made significant contributions.



Fig. 6.8. A Sātavāhana coin bearing the image of a seafaring ship with two masts. Notice how the masts of the ship are prominently depicted with intersecting lines, possibly representing sails; the wavy lines below represent oceanic waters.



Fig. 6.9. The Naneghat Caves near Pune, located close to a major trade route, were used for collection of tolls and taxes, and as resting places for traders.

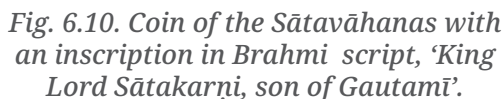


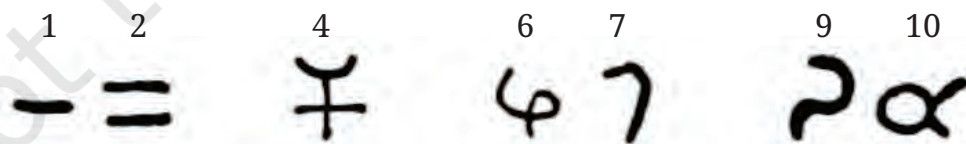
Fig. 6.10. Coin of the Sātavāhanas with an inscription in Brahmi script, 'King Lord Sātakarni, son of Gautamī'.

In the Sātavāhana tradition, princes were often named after their mothers. Thus Gautamīputra Sātakarṇi was named after his mother, Gautamī Balaśhrī. She was a powerful queen who donated land to Buddhist monks and had an important inscription carved in Nāśhik, showing her influence in the kingdom.

What, according to you, could the tradition of using the mother's name at the beginning of a king's name signify?

Another set of inscriptions found in the Naneghat caves near Pune (Fig. 6.9) focuses on a Sātavāhana widow queen who, remarkably, performed several Vedic rituals, including the *aśhvamedha yajña*. The inscriptions mention Vedic gods like Indra, Chandra, and Sūrya. We also get a glimpse of the queen's donations (*dāna*): land, cows, horses, elephants, silver coins, and other items to priests, guests, workers, scholars, and monks.

These inscriptions are in the Brahmi script and include a few numerals (that is, symbols for numbers) which, at times, resemble today's shapes, as shown below. This is one of the many evidences showing that modern numerals ultimately originated in India.



In the above series of numerals, which ones look somewhat like our modern numerals? Which ones don't?

The Sātavāhanas were devout followers of Vāsudeva (another name for Kṛiṣṇa), although they also patronised other schools of thought, which flourished during their rule. For instance, Sātavāhana kings often granted tax-free agricultural land to Vedic scholars, Jaina and Buddhist monks, helping them to pursue their studies and practices.



Fig. 6.11. The Karla caves (near Lonavala in present-day Maharashtra) to which the Sātavāhanas contributed during their reign. These caves were made for Buddhist monks. Notice the magnificent pillars and the stone replica of a stūpa in the centre — all of it carved out of a rocky hillside!



Fig. 6.12. A yaksha (a minor deity associated with nature) from the Pitalkhora caves, Maharashtra, carved in the Sātavāhana period.



THINK ABOUT IT

This sculpture of a yaksha from Pitalkhora carries an inscription on its hand, *kanhadāsena hiramakarena kāṭa* meaning ‘made by Kanahadasa, a goldsmith’. Is it not interesting to see that a goldsmith could also craft a sculpture made of stone? What do you think this tells us about people’s professions at the time?

In the 3rd century CE, the Sātavāhana Empire fragmented into smaller independent kingdoms. Several factors contributed to its disintegration, the most significant one being weak central

control and a gradual economic decline. Once again, this will pave the way for regional powers to assert or reassert their dominance and establish new kingdoms.

Coming of the Chedis

Let us go back a little. Do you remember the Kalinga war mentioned in the previous chapter? After the decline of the Maurya Empire, Kalinga rose as a prominent power under the kings of the Chedi dynasty.

Khāravela, one of their main rulers, was a devoted follower of Jain teachings; he was sometimes called *bhikṣhu-rāja* or monk-king, although he respected all schools of thoughts. Near Bhubaneswar, the famous Udayagiri-Khandagiri caves, likely developed for Jain monks, feature intricate panels and statues, and spacious rooms carved into the rock, showcasing the skill of the craftsmen. The design and craftsmanship of these caves make them notable examples of ‘rock-cut architecture’, a style of architecture that we will turn to in higher classes.



Fig. 6.13.1. Udayagiri caves near Bhubaneswar. Fig. 6.13.2. The Hāthīgumphā inscription. Fig. 6.13.3. Carved panel showing a scene from the Rāmāyaṇa

One of the caves prominently displays the Hāthīgumphā inscription, written in Brahmi script, which records King Khāravela's accomplishments year after year, including his victorious military campaigns and his benevolent works for the welfare of his people. Khāravela also proudly declares that he created a 'council of ascetics and sages' from a hundred regions and is 'accomplished in extraordinary virtues, respecter of every sect and repairer of every temple'. Once again, a ruler takes pride in extending his protection to all schools of thought. This is a fundamental part of what we may call the 'Indian ethos'.



THINK ABOUT IT

Notice the regularity of the rock-cut chambers sculpted nearly two millennia ago. How did artisans achieve such precision with just a chisel and a hammer? Picture yourself as a sculptor in that era, shaping stone into art with your own hands. What tools would you use?

Kingdoms and Life in the South

In India's southern region, this period, between the 2nd or 3rd century BCE and the 3rd century CE, saw the rise to prominence of three powerful kingdoms—the Cheras, the Cholas and the Pāṇḍyas—which often competed with each other for control over the South, while also contributing to the region's growth in trade and culture. Let's remember how Aśhoka's empire stopped at those south Indian kingdoms (which he mentions in his edicts), which suggests that they remained independent even at the height of Mauryan power. And although Khāravela claims that he defeated an alliance of south Indian kings that threatened his own territory, the location of that battle is unknown and he does not seem to have invaded the southern region.



THINK ABOUT IT

In the map given on next page, you may notice different symbols alongside the names of the kingdoms. What do these symbols represent? Think about how they highlight the unique identities of the kingdoms.

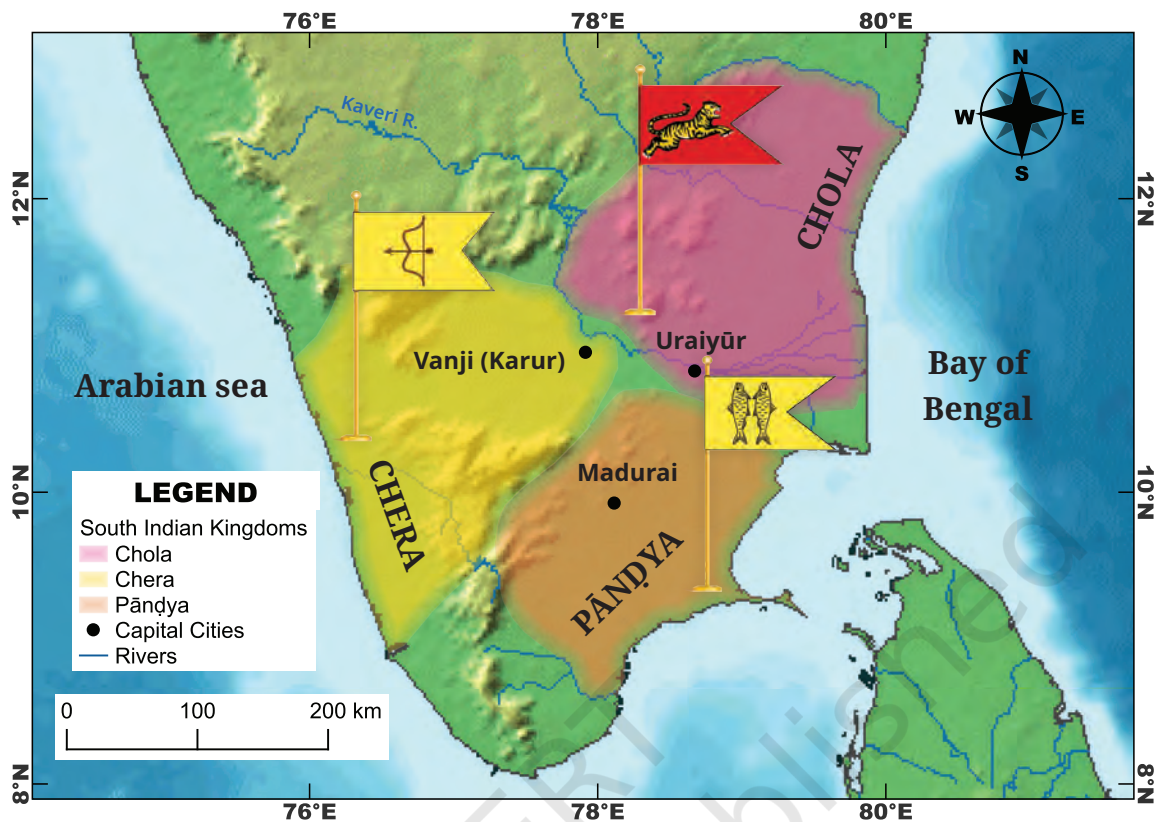


Fig. 6.14. Kingdoms in the South (note that borders are approximate and fluctuated in time).

That period saw the advent of many poets whose works, collectively known as ‘Sangam literature’, defined the entire era: it came to be known as the ‘Sangam Age’. The word *sangam* is derived from the Sanskrit *sangha*, which translates to ‘association’ and ‘coming together’—in this context, referring to an assembly of the poets. The Sangam literature, the oldest in south India, consists of several collections or anthologies of poems and is much consulted by historians who investigate the society and culture of the times. Primarily, Sangam poetry expresses with great skill and delicacy personal emotions such as love or societal values like heroism and generosity.

The Cholas

The Sangams refer to three ‘crowned kings’ — the Cholas, Cheras and Pāṇḍyas. The Cholas were a powerful dynasty that ruled parts of south India from the 3rd century BCE to the 13th century CE. The Chola king Karikāla is said to have defeated a combined force of the Cheras and Pāṇḍyas and established his supremacy.

Silappadikāram: The Tale of the Anklet

This famous epic, composed soon after the Sangam collections, tells the story of Kaṇṇagi, who lived happily with her husband Kovalan in the prosperous Chola capital city of Puhār (identified with Kāveripattinam seen earlier). However, Kovalan fell in love with a dancer and eventually lost all his wealth over her. Realising his mistake, he returned to Kaṇṇagi, who forgave him. They then travelled to Madurai, the capital of the Pāṇḍya kingdom, hoping to rebuild their lives.



Fig. 6.15. Statue of Kaṇṇagi, Chennai

To start anew, Kaṇṇagi gave Kovalan one of her anklets to sell; however, he was falsely accused of theft and executed by the Pāṇḍya king. Devastated, Kaṇṇagi proved his innocence by revealing her second anklet. The king, realising his mistake, died of shock. Kaṇṇagi then cursed Madurai, invoking the god of fire who destroyed the city. She then walked further west to the Chera kingdom, where she was honoured as a goddess. Even today, Kaṇṇagi is worshipped in Tamil Nadu and Kerala.

Silappadikāram's exquisite poetry thus centres on the principles of justice and the ruler's dharma to protect it. It also takes us through cities rich in traded goods, through three kingdoms, and also through several schools of thought.



THINK ABOUT IT



Observe the statue of the king. How is he depicted? What do his posture, clothing, and expression say about his power and status?

Fig. 6.16. Statue of King Karikāla at the Grand Anicut Memorial Park in Tamil Nadu

Karikāla undertook many projects for the benefit of the people. Among them is the Kallaṇai or Grand Anicut, a complex water diversion system located at a geographically strategic point just downstream of the Srirangam island. It helped to divert waters from the Kāveri to the central and southern parts of the Kāveri delta. This enabled more land to be brought under cultivation, earning this area the name ‘rice bowl of the South’. Restored several times in the course of time, it is still in use and helps millions of people in Tamil Nadu by providing water for irrigation and thus supporting agriculture in the region.



Fig. 6.17. A view of the Kallaṇai or Grand Anicut

The Cheras

Also known as the Keralaputra (sons of Kerala), the Cheras ruled over the western parts of Tamil Nadu and Kerala, with their capital at Vanji, present-day Karur in Tamil Nadu. They played an essential role in shaping the region's cultural and economic history, encouraging the growth of Tamil literature and patronising Sangam poets.

The Cheras were known for their extensive trade connections with the Roman Empire and West Asia, exporting many goods from India to the outside world. The kingdom became a hub for the export of spices, timber, ivory and pearls.



THINK ABOUT IT

Have you ever wondered how historians uncover the trade relations between two distant kingdoms many centuries ago? Let's take a moment to brainstorm and discuss how this information comes to light.

The Chera kings issued a number of coins under their reign. Do you notice the royal emblem of Cheras on one such coin given below?



Fig. 6.18. Coins under Chera Kings

The Pāṇḍyas

The Pāṇḍyas' rule over parts of Tamil Nadu and the surrounding regions, with their capital at present-day Madurai, goes back several centuries BCE. Successive kings expanded the Pāṇḍyan kingdom. In his work *Indika*, Megasthenes mentions this kingdom as a prosperous one, with a strong administration and involved in active trade with distant powers like the Greeks and Romans, apart from much internal trade (Khāravela, for instance, states that he gets hundreds of pearls brought from the Pāṇḍya kingdom). The Pāṇḍyas were also an important naval power of the subcontinent. The later Pāṇḍyas also contributed greatly to the art, architecture, and overall prosperity of the region.



THINK ABOUT IT

The Pāṇḍyas were known for their pearls. Why do you think pearls were an important article of trade during these times?

The Pāṇḍyas left many inscriptions in which their kings asserted their great concern for their subjects' welfare and their encouragements to all schools of thought and belief.

Invasions of the Indo-Greeks



Fig. 6.19. The Heliodorus pillar near Vidisha

Having completed our brief journey into south India, it is time to return to the north, where a very different kind of development is about to occur. So far, we have only visited a few native dynasties; yet the same period also witnessed the arrival of invaders who entered through the northwest frontier and took control of the northwestern, northern, and central regions of the Subcontinent.

Let us first examine the legacy of Alexander's brief campaign in the Indus plains. While retreating from the areas he had conquered, he left satraps behind. Over time, these

regional rulers established their independent domains and came to be known as 'Indo-Greeks'.

After the decline of the Mauryas, the areas in the northwestern regions (roughly present-day Pakistan and Afghanistan) were an easy target for the Indo-Greeks. However, while they arrived as conquerors, they were much influenced by the rich local culture. This cultural interaction led to a blend of Greek and Indian elements in governance, art, language, and daily life, shaping the cultural landscape of the region.

The Heliodorus pillar, near Vidisha (Madhya Pradesh), is a notable example of such connections. It is named after an Indo-

Greek ambassador, who in his inscription praises Vāsudeva as the ‘god of gods’. The inscription also states, “Three immortal precepts (footsteps) [...] when practised lead to heaven: self-restraint, charity, consciousness.”

During excavations in north India, archaeologists have found many Indo-Greeks coins, which have provided most of the information we have about these rulers. Those coins were made of gold, silver, copper and nickel often portraying a king on one side and Greek deities on the other. However, some coins, instead, depicted Indian deities like Vāsudeva-Kṛiṣṇa and Lakṣhmī.

The rule of the Indo-Greeks ended with the invasions of the Indo-Scythians or Śhakas (see a little below).

LET’S EXPLORE

What do you think might have been the meaning of having deities like Vāsudeva-Kṛiṣṇa or Lakṣhmī on some Indo-Greek coins?



Fig. 6.20. An Indo-Greek silver coin with Vāsudeva-Kṛiṣṇa on one side



DON’T MISS OUT

The Śhakas (sometimes called Indo-Scythians) also invaded the northwest of the Subcontinent and ruled from the latter part of the 2nd century BCE to the 5th century CE. Their kingdoms rose to power after the Indo-Greeks, and they were in power until the arrival of the Kuṣhāṇas (see below). It was during this period that the Śhaka Samvat calendar was developed. It is 78 years behind the Gregorian calendar (except from January–March, when it is behind by 79 years). It was adopted as the Indian National Calendar in 1957.

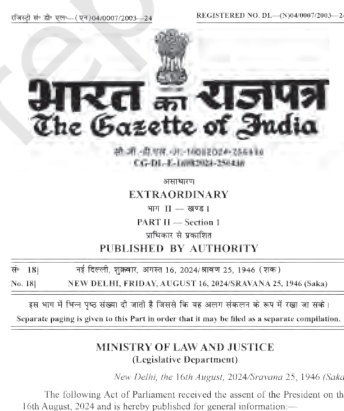


Fig. 6.21. Notice how dates are provided in both the Gregorian and Śhaka Samvat eras on this official publication of the Government of India.

The Emergence of the Kuṣhāṇas

The Kuṣhāṇas, originally from central Asia, entered India probably in the 2nd century CE. At its peak, their empire extended from central Asia to large parts of northern India. Their rule marked a period of extensive cultural intermixing and had a profound impact on the history of the Indian subcontinent.

When he was not busy with his military campaigns, Kaṇiṣhka encouraged art and culture, leading to the development of new artistic styles.



Fig. 6.22. Headless statue of King Kaṇiṣhka

LET'S EXPLORE

Carefully observe this massive statue (1.85 m high) and notice the clothing, weapon, and footwear. What does it tell us about this figure?

This famous 'headless' statue is of King Kaṇiṣhka, probably the most powerful ruler of the Kuṣhāṇa dynasty. The Brahmi inscription on the statue reads, '*mahārāja rājadhirāja devaputra kaṇiṣhka*', that is, 'The great king, king of kings, son of God, Kaṇiṣhka'.

LET'S EXPLORE



Observe the coins carefully. Who, besides the emperor, appears on the coin?



Fig. 6.23. Coins of Kaṇiṣhka

On the first coin, Kāṇiṣhka is shown holding a spear, titled 'King of Kings', while the other side features Buddha with the inscription BOΔΔO (Buddha) in Greek script. On the second coin, an emperor appears on one side, and Śhiva with the bull Nandi on the other. Let's reflect on the following:

- Why would a powerful ruler feature Buddha and Śhiva on his coins? What does it say about his values and priorities?
- Can you find modern examples of such symbolic currency?

The Kuṣhāṇas held control over significant sections of the Silk Route (on the next page), and during their reign, trade grew, connecting India with other parts of Asia and the West.

Continuing the trend set under the Indo-Greek rulers, Kuṣhāṇa art and architecture, exemplified by the Gāndhāra and Mathurā schools of art, are celebrated for their fusion of Indian and Greek styles. The sculptures feature a variety of deities reflecting the peaceful co-existence of various schools of thought. This era saw the rise of representations of deities—like Sūrya or the sun god—which looked more similar to humans and the increase in the development of religious art, laying the groundwork for later temple architecture in the subcontinent.

The Gāndhāra style, which emerged in the western regions of Punjab, blended Greco-Roman elements with Indian features. Most sculptures and artefacts from this tradition were crafted in intricate detail from grey-black schist stone. In particular, sculptors produced many fine Buddha images with realistic anatomy and flowing robes.

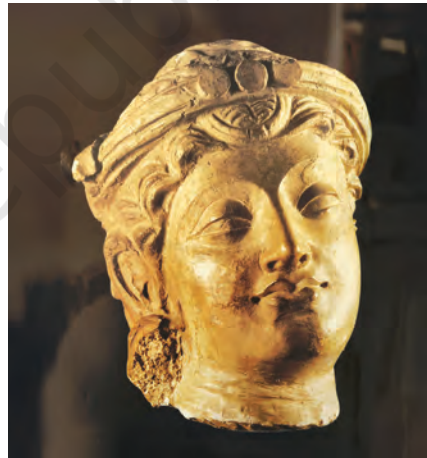


Fig. 6.24. Head of a bodhisattva (or future Buddha) from the Gāndhāra School of Art. Note the fusion of Indian and Greek features.



THINK ABOUT IT

Do you know where Gāndhāra is? Does it remind you of a character from the epic Mahābhārata?

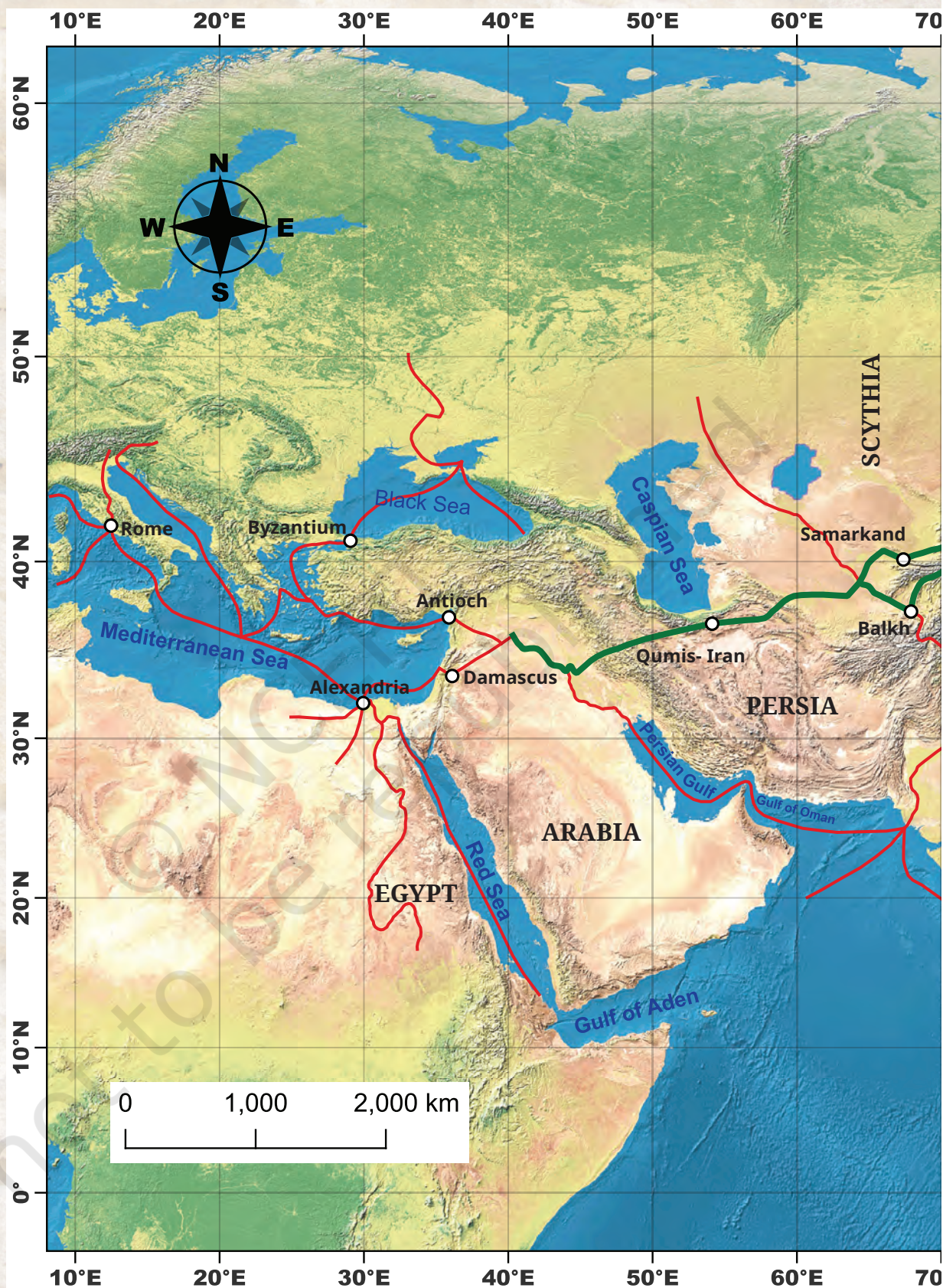
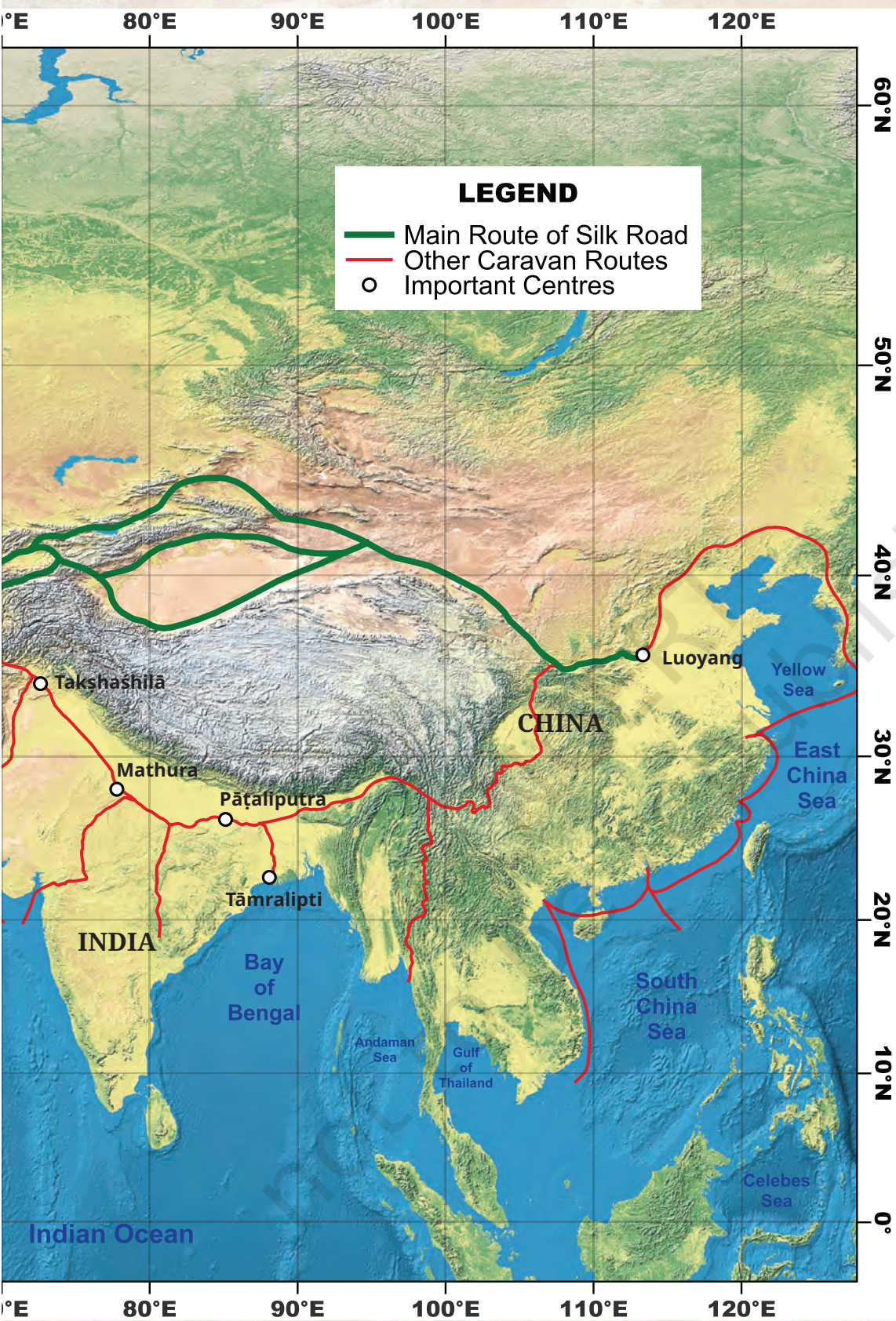


Fig. 6.25. Some of the trade routes of the ancient world. The network marked in green shows the Silk Route connecting China with the Mediterranean world and passing through central Asia, Persia, etc.



The Mathurā style developed in the Mathura region of present-day Uttar Pradesh and is known for its distinct Indian style. Unlike the Gāndhāra style, it primarily used red sandstone for its sculptures and reflects less influence from Greco-Roman aesthetics. This art form is known for its depictions of Indian deities, including Kubera, Lakṣhmī, Śhiva, Buddha, *yakṣhas* and *yakṣhiṇīs* and generally produced fuller figures with smooth modelling.



Fig. 6.26. Kubera, God of 'wealth' from the Mathura School of Art. Did you miss the prominent moustache? The moustache is a distinguishing feature of some Indian sculptures.

LET'S EXPLORE

Now that you are familiar with the basic characteristics of the Mathurā and Gāndhāra styles of art, study the pictures of artefacts given in Fig. 6.27 on the right page and try to identify which school of art each artefact belongs to. Write your observations with justifications and discuss your answers with your classmates.

Despite the political conflicts and power struggles, the period saw remarkable cultural exchange and assimilation. This shared heritage is evident in art and architecture, where styles interacted, but with a dominance of Indian themes (especially Hindu and Buddhist ones). It was also the age when Sanskrit literature flourished, with, in particular, the composition of major Indian texts such as the Mahābhārata and the Rāmāyana (refer to the chapter “Unity in Diversity, or ‘Many in the One’ ” in your Grade 6 textbook).

Recognising these connections encourages us to view this ‘Tapestry of the Past’ not as confined to any one kingdom or ruler, but as a dynamic process that works through interaction and assimilation over time.

1



2



3



4



5



6



Fig. 6.27.1. A scene of the death of Buddha. Fig. 6.27.2. Bodhisattva Maitreya.
Fig. 6.27.3. Śhiva linga being worshipped by Kuṣhāna devotees.
Fig. 6.27.4. A Nāga between two Nāgīs, with an inscription referring to the eighth year of Kaṇiṣhka's reign. Fig. 6.27.5. Kartikeya, the god of war, and Agni, the god of fire. Fig. 6.27.6. Standing Buddha.

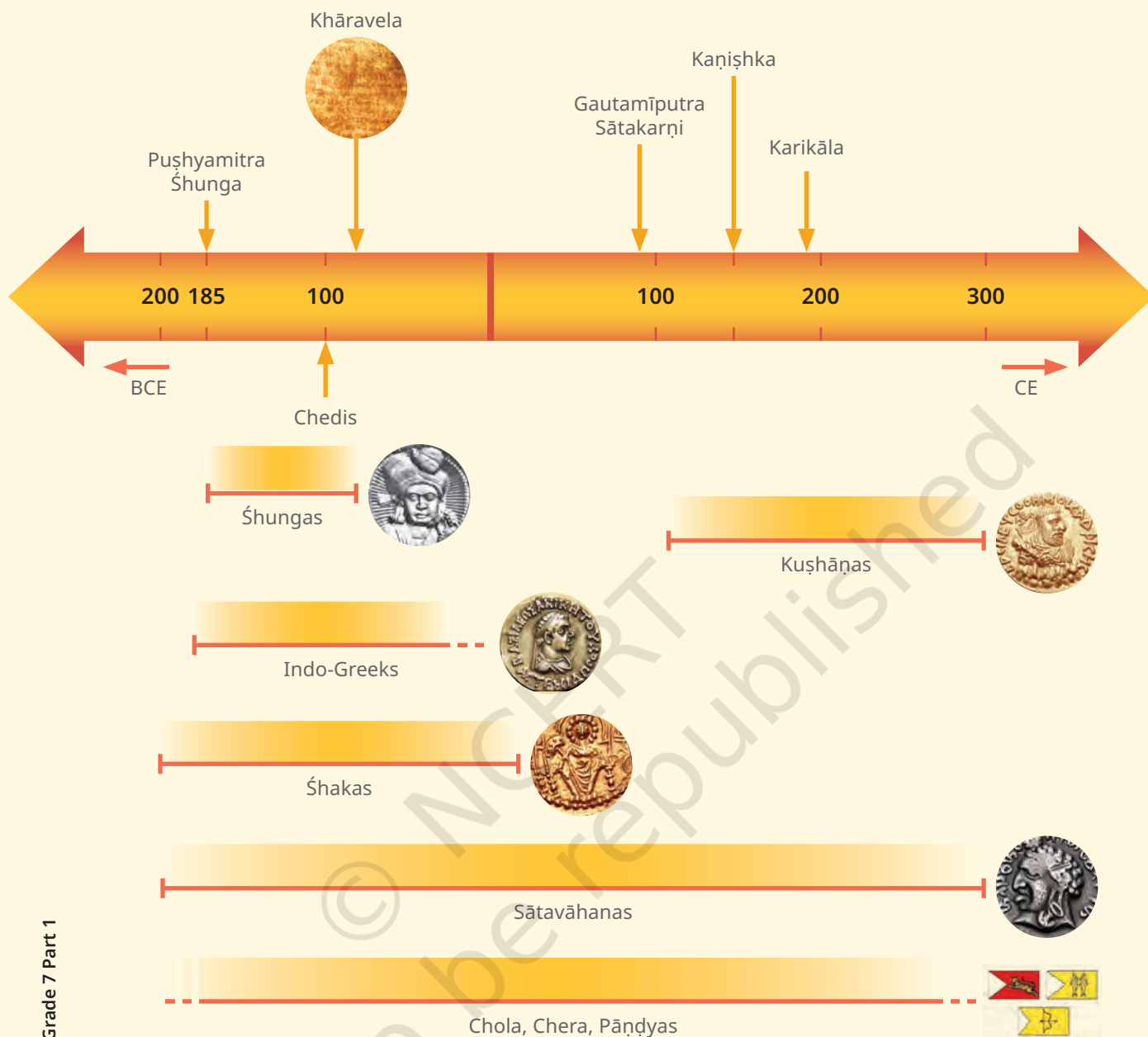


Fig. 6.28

Before we move on ...



- The period after the disintegration of the Maurya empire was characterised by the emergence of many big and small kingdoms across the Subcontinent.
- The internal conflicts were coupled with foreign invasions, which together led to a period of reorganisation of political powers.

- This period witnessed a dialogue of various cultures that absorbed each other's influence to create new styles of art, architecture, coinage, etc., with ultimately a dominance of Indian themes and flourishing Sanskrit literature.
- This time was also marked by remarkable developments in trade activities, both internal and external.

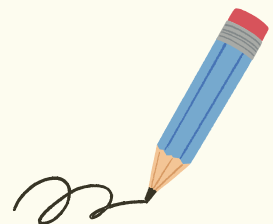
Questions and activities

1. Why was the post-Maurya era also known as the era of reorganisation?
2. Write a note on the Sangam literature in 150 words.
3. Which rulers mentioned in this chapter included their mother's name in their title, and why did they do so?
4. Write a note of 250 words about one kingdom from this chapter that you find interesting. Explain why you chose it. After presenting your note in class, find out what kingdoms have been the most selected by your classmates.
5. Imagine you have the chance to create your own kingdom. What royal emblem would you choose, and why? What title would you take as the ruler? Write a note about your kingdom, including its values, rules and regulations, and some unique features.
6. You have read about the architectural developments of the post-Maurya era. Take an outline of the Indian subcontinent and mark the approximate locations of some of the ancient structures mentioned in this chapter.

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!



The Gupta Era: An Age of Tireless Creativity

Neither force nor mere diplomacy can eliminate evil; nor is righteousness upheld by flattery alone. It is wisdom and knowledge that truly strengthen a kingdom — not indulgence in luxuries.

— Kālidāsa in *Raghuvansham*

Fig. 7.1. Landscape of Ajanta caves, dating from the 2nd century BCE to about 480 CE



The Big Questions?

1. Who were the Guptas? Why is the Gupta period sometimes called the 'classical age' in Indian history?
2. What was happening in the rest of the subcontinent at this time?
3. Who were some great figures of this period, and why do their stories matter today?



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Dhruv and Bhavisha had just returned from their journey to the Pāṇḍya kingdom. They had seen the splendid markets, taken a short trip on a ship, and met some Roman traders buying pearls. Now they were itching to use Itihāsa again and jump a few centuries. “What would that be like?” they wondered. “Will the cities be the same? What about the people and society—would they have changed? What kind of governance would they have? Would there be new literature, new art?” They could not wait to find out and were soon whisked away to ...

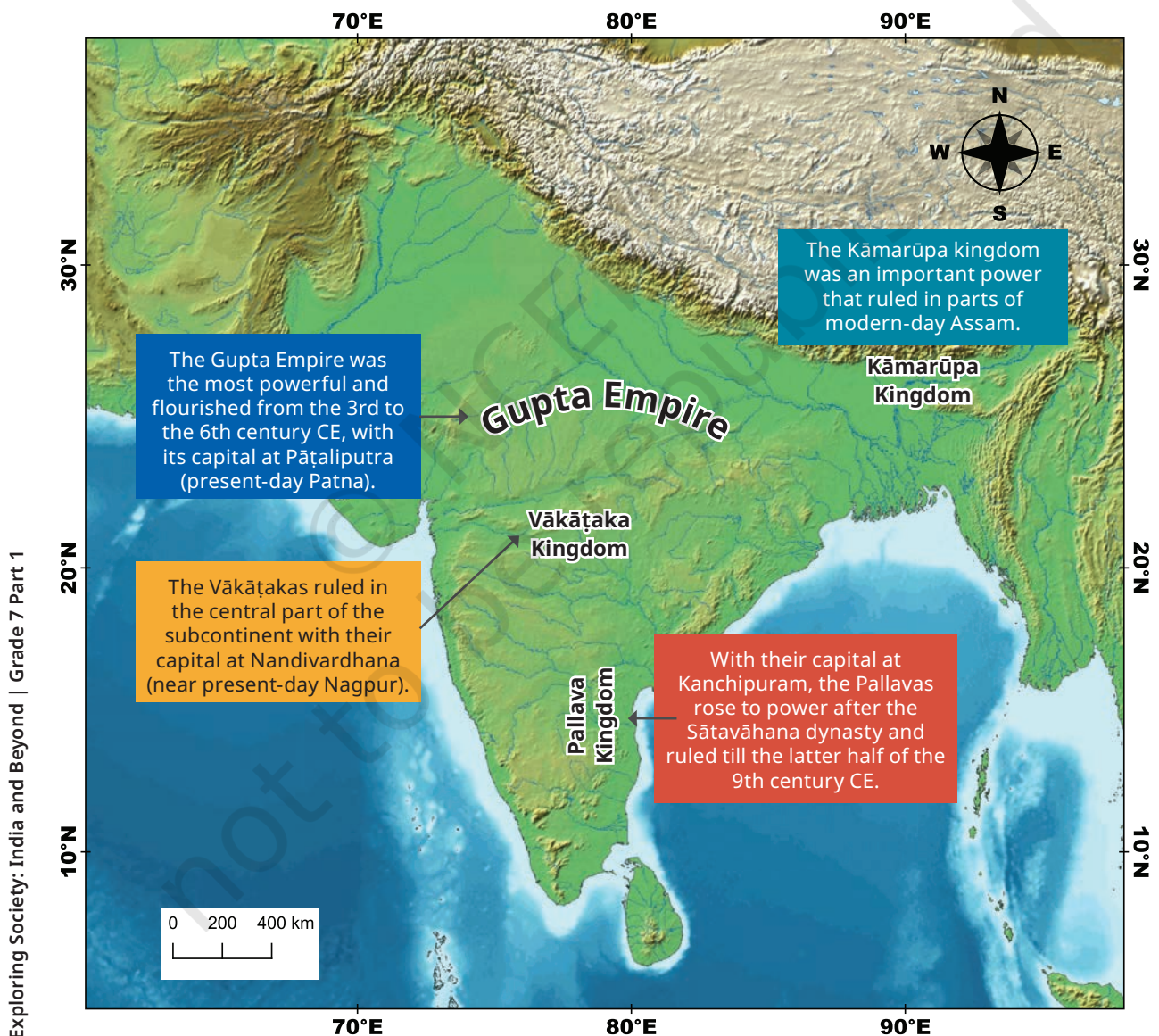


Fig. 7.2. Empires and kingdoms during the period from 3rd to 6th century CE.

Bhavisha: My head is spinning. There are so many kingdoms and empires. How am I ever going to remember all of this?

Dhruv: Do not worry, Bhavisha! Let us understand what is happening, and we'll remember it.

Bhavisha: Is there anything in this period that we can see back home?

Dhruv: Let us use our time machine and find out!

Bhavisha activates 'Itihāsa', and they jump to Mehrauli (in Delhi), where the famous Iron Pillar of Delhi stands.

They overhear a tour guide nearby, who was explaining the significance of this pillar.



Fig. 7.3. Iron Pillar, Mehrauli, Delhi

Tour Guide: This **Iron Pillar** of Delhi is over 1,600 years old and still stands tall without rusting. It is a testament to the advanced metallurgical skills of ancient India.

Bhavisha: 1,600 years old and not rusting! Let us go and see it.

Bhavisha: Look! Is this the famous 'iron pillar'?

Dhruv: Oh wow! There is something written on it, but I cannot read it.

Bhavisha: I wonder who made this? And why? Let's hear what the guide uncle has to say about this.

Tour Guide: *The 6-tonne pillar was erected during the reign of Chandragupta II, a ruler of the Gupta dynasty. It was probably erected first in front of the Udayagiri caves (Madhya Pradesh) and brought to Delhi a few centuries later. It was dedicated to Viṣṇu, and its inscriptions celebrate the king's achievements.*

Both: *That is so fascinating! We would love to learn more about this king and his empire.*

Let us begin this exciting journey into the history of the Gupta Empire!



DON'T MISS OUT

Picture leaving a bicycle out in the rain for just one year—it would soon show signs of rust. Yet this ancient pillar, standing under the open sky for centuries, remains unaltered. Scientists have tried to uncover its secret, and they believe it is because a unique thin layer, created by the special iron used and oxygen from the air, forms on the surface of the iron, protecting it from corrosion.

A New Power Emerges

By the 3rd century CE, the Kuṣhāṇa Empire, which spread over the north and northwest of the Subcontinent, started to weaken. New kingdoms emerged, setting the stage for a fresh period of consolidation, and the new actor on this stage was the Gupta dynasty.

There are various theories on the origin of the Guptas. However, it is widely believed that they emerged in a region near present-day Uttar Pradesh as regional rulers. Over time, they rose to prominence and established a powerful empire. The Gupta period is considered remarkable in Indian history and is marked by significant developments in many areas. The fields of art, architecture, literature and science flourished, particularly during the time of Chandragupta II, and that legacy continues even today.

The inscription on the iron pillar in Delhi speaks of a king named ‘Chandra’, who has been identified with Chandragupta II (not to be confused with Chandragupta Maurya from the Maurya dynasty, whom we met earlier). Chandragupta II, also known as ‘Vikramāditya’, was one of the renowned rulers of the Gupta dynasty. He was a devotee of Viṣṇu and his mount (*vāhana*) Garuḍa often appears on many inscriptions.



DON'T MISS OUT

Have you noticed the ‘II’ in Chandragupta II’s name? Historians added this number because there was another ‘**Chandragupta**’ before him—his grandfather! (This tradition of naming the first son after his grandfather is followed by some Indian families even today.) Chandragupta I, as he is referred to, played a crucial role in the early expansion of the Gupta Empire; he is remembered for his coins and strategic alliances, which helped him consolidate his power and lay the foundation for a strong empire.



Fig. 7.4. Gold coin featuring King Chandragupta I with his queen, Kumāradevī; on the reverse side, a seated goddess identified as Lakṣmī

The warrior king

The *prayāga praśhasti*, a pillar inscription in Prayagraj, praises the achievements of Samudragupta, Chandragupta II’s father. According to the author of the inscription—the court poet Harisena—the king’s ambition was to be ‘*dharaṇi-bandha*’ or to ‘unify the Earth’. To this end, he fought many wars, defeating

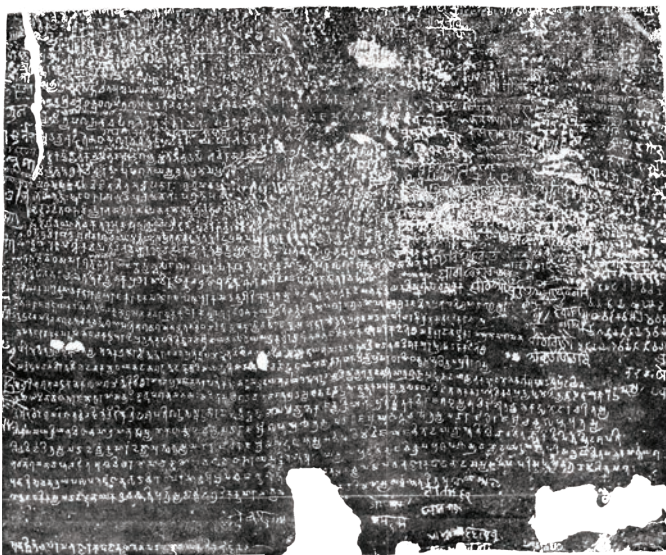


Fig. 7.5. An inscription by Harisena

kings, taking over their kingdoms and expanding his empire. Many defeated kings were reinstated and offered tribute to Samudragupta, while others, fearing his might, submitted without protest.

Harisena also wrote about how the king supported art, learning and trade, making his kingdom rich and successful. Samudragupta himself is portrayed as a veena player in one of the coins he minted (Fig. 7.6).



THINK ABOUT IT

Why do you think kings chose to proclaim their achievements in the form of inscriptions?



Fig. 7.6. A seated Samudragupta, playing the veena; on the reverse side, goddess Lakṣmī



LET'S REMEMBER

Ambitious kings sometimes performed the *aśhvamedha yajña* to build mighty empires and leave a legacy for the future. Such a significant event was commemorated by minting special coins like the one shown in Fig 7.7.



Fig. 7.7. This coin depicts the sacrificial horse of the aśhvamedha yajña; the reverse depicts the queen holding a chauri (fly whisk).

Some literary sources give us descriptive information about rulers, kingdoms and the people. The *Viṣṇu Purāṇa*, for instance, specifies the key regions of the empire: “The Gupta dynasty will rule over Anugaṅga (the middle-Gangetic basin), Prayāga (present-day Prayagraj), Sāketa (Ayodhya), and Magadha (approximately Bihar) and all the surrounding regions.” But at its peak, the Gupta Empire covered a larger area than this — most of present-day north and west India, along with parts of central and east India.

LET’S EXPLORE

In the Grade 6 chapter ‘Timeline and Sources of History’, we listed multiple sources that help us understand the past. Compile a list of the sources we have referred to so far in the chapter. What did we learn from each source?

Imagine what it would have entailed to move a whole army of soldiers, elephants, horses, cooks, and other support staff, as well as the supplies to feed them all. Clearly, the tributary kings must have been asked to provide for these.

LET’S EXPLORE

Take a political map of India and locate the present-day states and Union territories where the Guptas ruled (see Fig. 7.8). Mark these states on the map and count how many you found. Then, compare your findings with your friends to see if everyone got the same number or discovered something different!



Fig. 7.8. The Gupta Empire's extent. Note that the Vākātakas were the allies of the Guptas. The Guptas claim to have conquered parts of the east coast, down to the Pallavas, whom they may have briefly subdued.

A Traveller's Account of Indian Society in the Gupta Age

Chinese traveller Faxian (pronounced as Fa-Shi-Anne) visited India in the early 5th century CE. He set out on this long and difficult pilgrimage to visit sacred Buddhist sites, learn from renowned Indian scholars and collect manuscripts of Buddhist texts so he could take them back to China. Faxian travelled extensively across India, observing her culture, governance and society, and recorded his experiences and observations for the people of his homeland — and for us too — since his travelogue has survived to this day!

Below is an excerpt from his travelogue, where he records his observations of the society in the Gupta era.

The people are numerous and happy [...] they have no need to register households or attend to officials. [...] Those who farm royal land pay a portion of their grain. [...] The king's guards and attendants have salaries [...] The cities are the greatest in the Middle Kingdom [i.e. the Gangetic plains], and the inhabitants are rich, prosperous, and practice kindness and righteousness. Heads of Vaishya families [i.e. merchants or traders] establish houses for charity and medicines [...] the poor, orphans and the sick are cared for [...] doctors provide treatment, and the needy receive food and medicines. [...] The city has many wealthy Vaishya elders and foreign merchants, with beautiful homes [...] The lanes are kept in good order.

– A Record of Buddhistic Kingdoms (AD 399–414) (Translated by J. Legge)

LET'S EXPLORE

Read the excerpt from Faxian given above and identify the key features of the society he describes. Write down your observations and compare your notes with your friends — you might be surprised to see how differently others interpret the same text!



Outcastes:
Someone who has been rejected from a social or cultural group; in this case, a category of people considered socially too low to be part of the varṇa system.

Excerpts from historical accounts like Faxian's are valuable sources, but they reflect only the writer's perspective and focus at one point in time and for a limited portion of the society they describe. Let us not, however, forget that elsewhere in his travelogue, Faxian also describes the harsh treatment of the *chanḍālas*, who were regarded as **outcastes** and lived outside the city limits.

Just as you may have perceived the excerpt from Faxian's travelogue differently from your friends, a group of historians may examine the same source and draw varied interpretations from it. Historians then look at more sources to corroborate their understanding. This reminds us of the need to assess multiple sources, perspectives and interpretations before drawing conclusions.

Glimpses of the Gupta Empire

Governance and administration

Let us observe the map in Fig. 7.8. You will notice that many kingdoms coexisted during the same period. Some of them may have been at war with each other in their ambition to expand their control. Recall what we saw earlier about Kauṭilya's ideas on ruling a kingdom. He advised rulers to form alliances (*mitra*) as one of the components of the *saptāṅga*.

New kings ... new titles

Inscriptions and coins provide valuable insights into the titles adopted by Gupta rulers, such as '*mahārājadhirāja*', '*śamrāt*', and '*chakravartin*'. These titles reflected their claim to supreme authority and emphasised their superiority over earlier rulers who used simpler titles like '*rājan*' and '*mahārāja*'.

The Gupta rulers used various strategies, including military conquests, diplomacy, and alliances, to expand and consolidate their vast empire. The last method included matrimonial alliances. A well-known example is that of Prabhāvatī Gupta,

daughter of Chandragupta II, who was married to a prince of the Vākāṭaka kingdom — the Guptas’ neighbours to the south. Tragically, the Vākāṭaka prince died early, making her the **regent ruler** of the kingdom. During her reign, she ensured that the ties between the Vākāṭakas and the Guptas remained strong. One of her inscriptions describes her as a ‘mother of two kings’, referring to her two sons who ascended the Vākāṭaka throne. As a devotee of Viṣṇu like her father, Prabhāvatī is also associated with the construction of seven temples dedicated to this god and his avatars. Some of these temples are in Ramagiri (Ramtek hill) in present-day Maharashtra.

Regent Ruler: A regent temporarily governs a kingdom for a monarch unable to do so until they can.

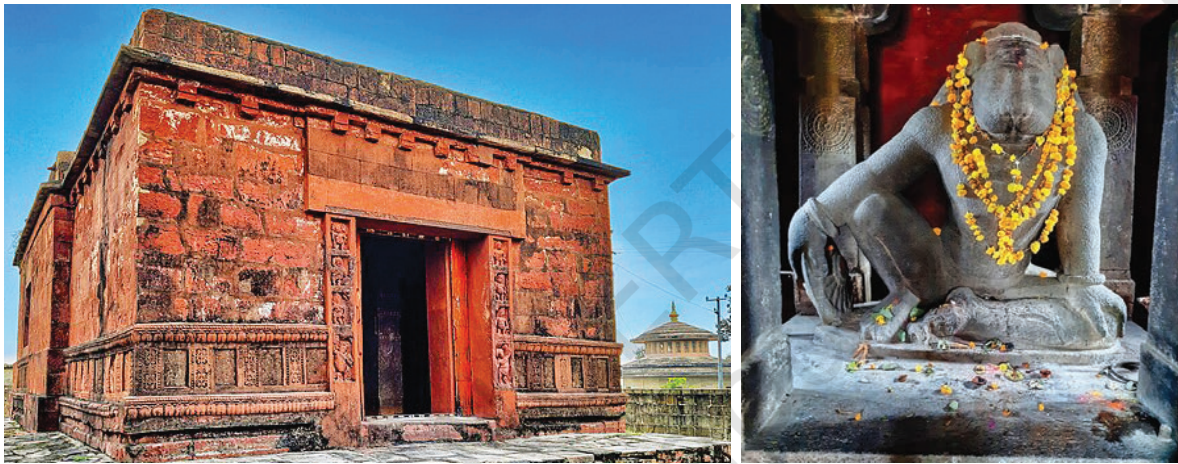


Fig. 7.9. The Kevala Narasimha temple dedicated to Narasimha, one of the avatars of Viṣṇu; according to some historians, this temple was constructed by Prabhāvatī Gupta’s daughter in her memory



LET’S EXPLORE

Observe the painting of Prabhāvatī Gupta sitting in her court (Fig. 7.10). Take note of the details—her attire, posture, the people around her, and the setting of the court. What do these elements tell you about her life, role, and the time she lived in? Discuss your observations in groups and share your insights with the class.

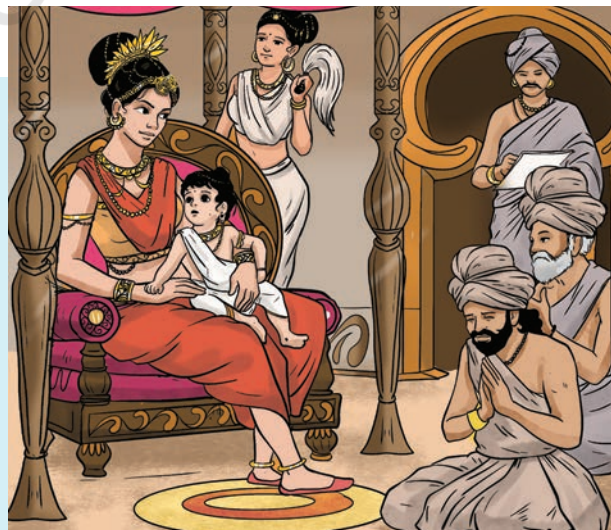


Fig. 7.10. An artist’s reimagination of Prabhāvatī Gupta sitting in her court

The Gupta Empire had a well-organised system of administration. Instead of controlling everything from a central authority, they divided the empire into provinces and granted land to local rulers, priests and chieftains. These land grants were carefully inscribed on copper plates to keep accurate records — many of which have been discovered by archaeologists in recent times. This system helped ensure proper tax collection and allowed the Gupta rulers to govern efficiently while still giving local leaders some control over their regions.

Thriving trade

The primary source of revenue of the Gupta's was land tax. Other sources included fines, taxes on mines, irrigation, trade and crafts. This revenue was used for administration, maintaining the army, building temples and infrastructure, and supporting scholars and artists.

As we see once again, for such an empire to sustain itself, it had to promote a vibrant internal and external trade. In the Gupta era, India traded with the Mediterranean world, Southeast Asia and China, exporting textiles, spices, ivory and gemstones. The Indian Ocean trade network connected Indian ports to distant markets. One significant stop on the way to the Mediterranean markets was Socotra Island, strategically located in the Arabian Sea. Archaeological evidence, such as pottery, inscriptions in the Brahmi script, and designs such as a Buddhist *stūpa*, has established the presence of Indian traders there over several centuries, apart from traders from Egypt, Arabia, Rome and Greece. This small island carries evidence of the rich cultural exchanges that trade promoted in the Indian Ocean.

New Ideas and Wonders: The Classical Age

As we saw, Gupta rulers were devout followers of Viṣṇu; this is often reflected in their coins and inscriptions. However, they also supported other traditions and schools of thought. They patronised Buddhist institutions, including the renowned Nālandā university and several other Buddhist *viḥāras* (monastery). Their approach was inclusive and open. We will explore these institutions further in higher grades.



Fig. 7.11. Remains of Nalanda University

Indeed, the prolonged period of peace and stability during the Gupta period promoted notable achievements in various fields, leading some historians to label this period the 'classical age' of India. It was also the time when knowledge from previous eras was consolidated and compiled into numerous texts. Sanskrit literature flourished, with Kālidāsa's works and many major Purāṇas. Āryabhaṭa and Varāhamihira recorded major advancements in mathematics and astronomy, while medical texts compiled and refined medical theories and practices. Metallurgy also progressed, as we saw with the rust-resistant Iron Pillar. This stability strengthened the economy, allowing the state to support scholars, artists, and scientists, leading to cultural and intellectual growth.

Chandragupta II kept himself surrounded by many learned men, poets and artists, and his patronage of such diverse talent enriched his court greatly.

Let us take a look at some of the remarkable figures of this period.

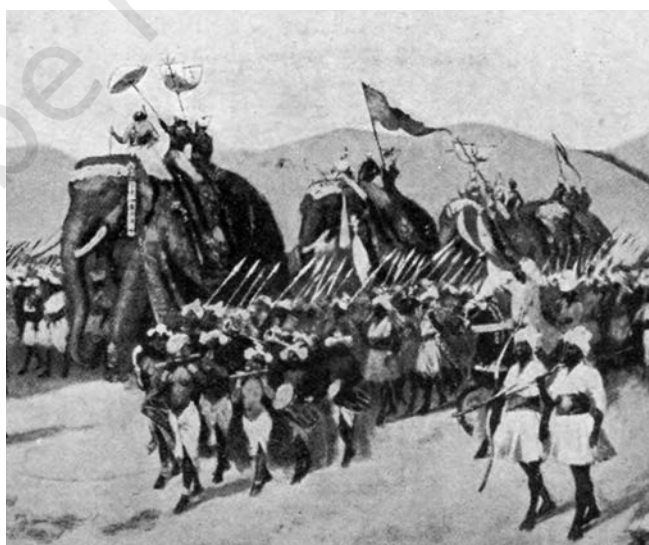


Fig. 7.12. Chandragupta II goes to war (an artist's imagination from the 1920s)

Āryabhaṭa: He lived in Kusumapura (near present-day Patna), a famous centre of learning, around 500 CE and authored a short treatise of mathematics and astronomy called *Āryabhaṭīya*. He gave formulas to calculate the motions of the Sun, the Moon and the planets, and proposed that the Earth spins on its axis, which explains the alternation of day and night. He gave the length of a year as 365 days, 6 hours, 12 minutes, and 30 seconds, just a few minutes off from the modern value (365 days, 5 hours, 48 minutes, and 45 seconds). Āryabhaṭa also provided a fair estimate of the size of the Earth and a correct explanation for solar and lunar eclipses. His work became the foundation for further scientific advances in India and beyond. In mathematics, Āryabhaṭa described a number of techniques of calculation and equation-solving, some of which you learn at school without knowing that they were first formulated 1500 years ago!



Fig. 7.13

Varāhamihira: He was a mathematician, astronomer and astrologer from the same period. He lived in Ujjayinī, a city famous for its tradition of learning and scholarship. His encyclopedic work, *Bṛihat Samhitā*, covered a wide range of subjects from astronomy and astrology to weather forecasting, architecture, town planning and even farming. His ability to observe the world, apply logical reasoning, and combine it with traditional knowledge made him a pioneer in science.

LET'S EXPLORE

Let's join Bhavisha and Dhruv with their time machine in the time of the Guptas. You are getting an opportunity to meet Āryabhaṭa and Varāhamihira—what would you ask them? Divide the class into two groups and create a series of questions for an interview with them.



Fig. 7.14. The yaksha's message to the clouds – a scene from *Meghadūtam*.

Kālidāsa: Little is known about Kālidāsa's life; legends suggest that he was once ridiculed by others, which motivated him to work hard and transform his life. He is renowned for his contributions to Sanskrit literature and exquisitely refined poetry. One of his celebrated compositions is *Meghadūtam*, or 'The Cloud Messenger'. It tells the story of a *yaksha* (minor deity), who, after being banished from his home by his master, sends a message to his beloved through a passing cloud. Apart from the many emotions of love, the poem describes in great detail the landscapes and weather of north India on its journey to the beloved.



DON'T MISS OUT

Codified:
Arranged or
written in an
organised
and
systematic
way.

Did you know that Āyurveda got **codified** during the Gupta period? This Indian traditional system of medicine has much older roots, going back several centuries BCE. Texts like the *Charaka Saṃhitā* and *Suśruta Saṃhitā*, which laid the foundation for Ayurvedic practices still in use today, were compiled and given their final shape during the Gupta period. They deal with a wide range of topics—the cataloguing and diagnosing of diseases, their treatments, the importance of diet in maintaining good health, the preparation of medicines, and surgical techniques advanced for their time. Importantly, Āyurveda emphasises holistic healing and a deep connection between the mind, body, and nature.

The Quest for Beauty

The Gupta rulers created a supportive environment where creativity and craftsmanship thrived; some of the iconic works of history were produced during this time. Many key centres of art emerged during these times, including Sārnāth (near Varanasi in present-day Uttar Pradesh), known for its exquisite sculptures of the Buddha, and the awe-inspiring Ajanta caves (in present-day Maharashtra). The rock-cut caves and detailed carvings of deities at Udayagiri (Madhya Pradesh) are another example of this abundant artistic production. ‘Gupta art’, as it is sometimes called, set high standards of aesthetics and beauty that left a lasting impact. (See Figures 7.15 to 7.18)

LET'S EXPLORE



Take a close look at the samples of Gupta sculptures shown in Fig 7.15.1. and 7.15.2. By looking at the attributes, can you guess which deities are depicted here? Write your observations in the space provided and share your thoughts during the class discussion!

The Decline of the Guptas

By the 6th century CE, the Gupta Empire began showing signs of decline as the later rulers faced challenges from external invasions. The fierce Hūṇa tribe from central Asia repeatedly attacked the empire, weakening its control over north India. At the same time, the rise of powerful regional rulers led to internal conflicts. However, was this truly the end, or the beginning of a period that marked a turning point in Indian history? We will explore this question in the next part of this book.

Meanwhile in the South and Northeast ...

Let us go back to the map in Fig. 7.8. While the Guptas ruled in the north, the Pallavas emerged as a powerful dynasty in the south, gradually consolidating their power in parts of present-day Tamil Nadu, Karnataka, Telangana and Andhra Pradesh. Their origins are not clearly known, but they appear to have been a tributary power under the Sātavāhanas, whom we encountered in the previous chapter, and to have gained power as the Sātavāhanas declined.

The Pallavas were also great patrons of art and architecture. Most of them were devotees of Śhiva and are credited with constructing magnificent temples and rock-cut caves, some of which we will visit when we explore classical Indian architecture. The capital of the Pallavas, Kāñchipuram (in present-day Tamil Nadu), often known as the ‘city of a thousand temples’, developed as one of the major centres of learning in the south. The establishment of *ghaṭikās* — centres of learning that emerged during the reign of the Sātavāhanas — fostered an environment for education and intellectual growth.

In the northeastern region, the Kāmarūpa kingdom, ruled by the Varman dynasty, extended over the Brahmaputra valley (broadly, present-day Assam) and northern parts of present-day Bengal and Bangladesh. An ancient name for the Brahmaputra valley of Assam is Prāgjyotiṣha, mentioned in the Rāmāyaṇa and Mahābhārata; the latter text mentions Bhagadatta, king of

Various aspects of Gupta art



Fig. 7.15.1 to 7.15.3. In the 3rd image, these terracotta sculptures from the Gupta period (Ahichchhatra, western Uttar Pradesh) depict India's sacred rivers, Ganga and Yamuna. Their vāhanas distinguish them: Ganga stands on a makara (a mythical creature akin to a crocodile), while Yamuna stands on a tortoise. Water flows over their heads, and the pot is another reminder of their manifestation as rivers.



Fig. 7.16. (Left) Deogarh (Uttar Pradesh), (Right) Viṣṇu on Śheṣhānāg from Daśhāvatāra temple

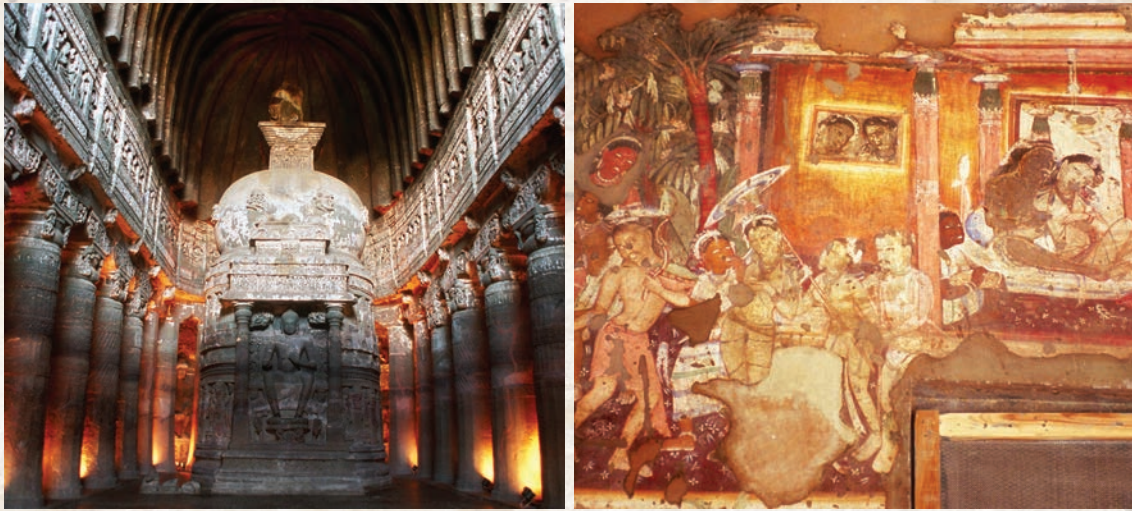


Fig. 7.17. The renowned Ajanta Caves were carved out during this period with the support of the Guptas and Vākāṭakas. Left: An elaborate cave replicating a temple with a central stūpa from which a seated Buddha emerges (note the arched roof imitating wooden beams). Right: A painting of Bodhisattva Padmapāṇi.



Fig. 7.18.1. to 7.18.3. Udayagiri Caves and a Gupta-era temple near Sanchi are both located in Madhya Pradesh. Arjuna and Karṇa in battle — A sculpted depiction from the Mahābhārata

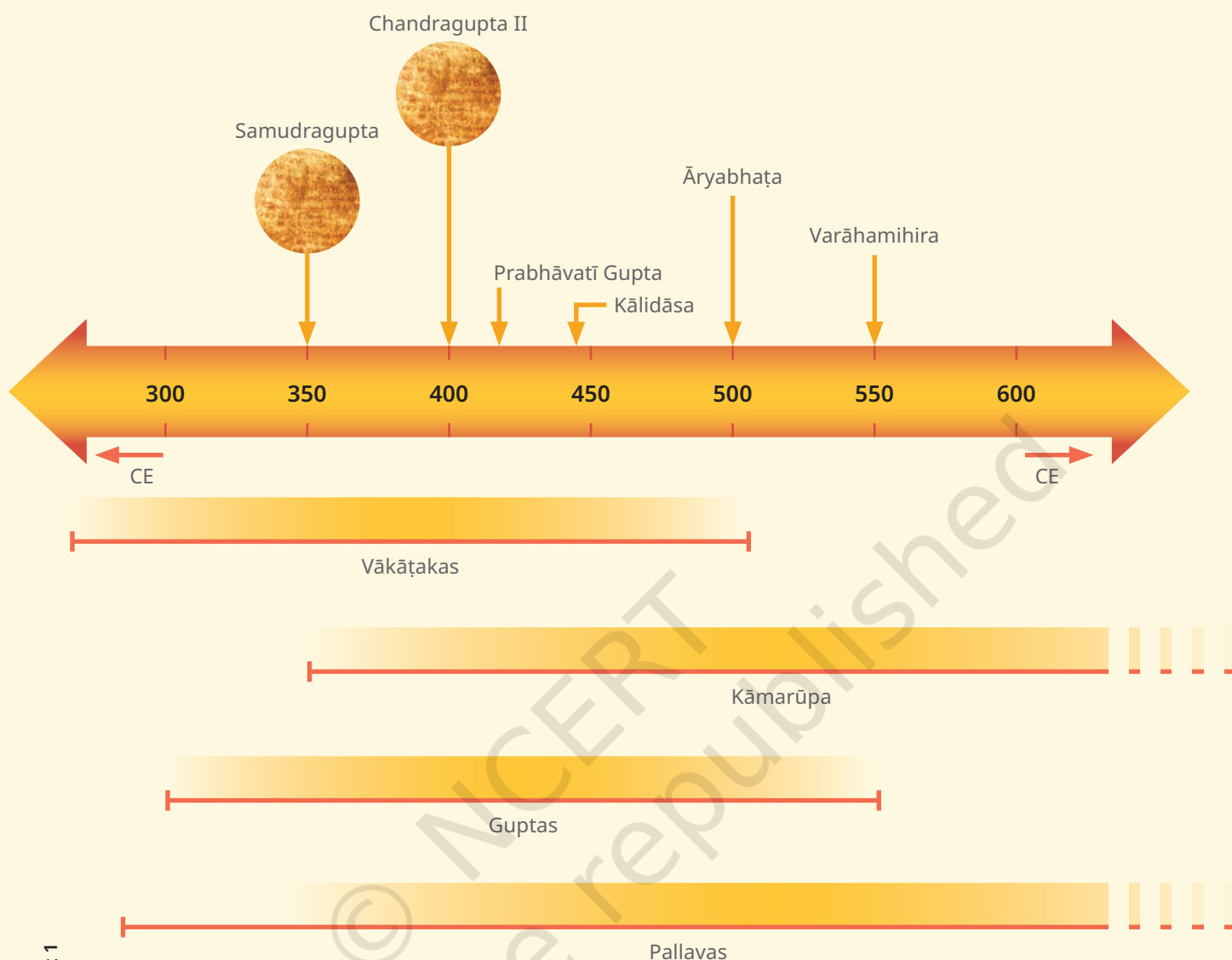


Fig. 7.19

Prāgjyotiṣha (modern-day Assam), as fighting on the side of the Kauravas in the Great War, and some historical rulers claimed him among their ancestors. Be that as it may, the Kāmarūpa kingdom was a prominent cultural and political centre; temples and monasteries flourished as hubs of learning.

Both the Pallavas and Kāmarūpa are mentioned in the *prayāga praśasti* we saw earlier. During his southern campaigns, Samudragupta defeated a Pallava ruler but did not take over the region. Instead, he let the local kings, including the Pallavas,

keep their thrones as long as they accepted his rule and paid tribute. This helped maintain peaceful relations. Under similar conditions, in the northeast, Samudragupta defeated the ruler of Kāmarūpa but did not take direct control. By now, we have seen this pattern recur quite a few times.

The Gupta period was a time of remarkable progress. Its influence stretched far beyond the empire, shaping art, science, literature, and governance for centuries. Advances in mathematics, astronomy, medicine and metallurgy, among other fields, laid the foundation for future scientific and technological growth, while beautiful temples and Sanskrit literature continue to inspire today. The Guptas created a stable and prosperous society, setting a model for future rulers. Their legacy is still alive in India's culture, traditions, and way of life, marking this era as one of the high points in Indian history.

Before we move on ...

- The Gupta kings consolidated their power through military campaigns, land grants and matrimonial alliances to ensure stability in the empire.
- The period saw remarkable contributions in the fields of art, literature, science and mathematics.
- Other than the Guptas, dynasties like Vākātakas, Pallavas, and Varmans ruled in their respective regions, making this period full of cultural and intellectual vibrancy.



Questions and activities

1. Imagine you receive a letter from someone living in the Gupta Empire. The letter starts like this:
“Greetings from Pāṭaliputra! Life here is vibrant and full of excitement. Just yesterday, I witnessed ...” Complete the letter with a short paragraph (250–300 words) describing life in the Gupta Empire.

2. Which Gupta ruler was also known as the 'Vikramāditya'?
3. "Periods of peace support the development of various aspects of sociocultural life, literature, and the development of science and technology." Examine this statement in the light of the Gupta empire.
4. Recreate a scene from a Gupta ruler's court.
Write a short script, assign roles like the king, ministers, and scholars, and enact a role play to bring the Gupta era to life!
5. Match the two columns:

Column A	Column B
(1) Kānchipuram	(a) Known for vibrant cave paintings that depict the Jātaka tales.
(2) Ujjayinī	(b) Famous for rock-cut caves featuring intricate carvings of Hindu deities, especially Viṣṇu.
(3) Udayagiri	(c) Capital of the Guptas.
(4) Ajanta	(d) Known as 'a city of a thousand temples'.
(5) Pāṭaliputra	(e) A prominent centre of learning in ancient India.

6. Who were the Pallavas and where did they rule?
7. Organise an exploration trip with your teachers to a nearby historical site, museum, or heritage building. After the trip, write a detailed report describing your experience. Include key observations about the site's historical significance, the architecture, artefacts, and any interesting facts you learned during the visit. Reflect on how the trip enhanced your understanding of history.

How the Land Becomes Sacred

Ether, air, fire, water, earth, planets, all creatures, directions, trees and plants, rivers and seas, are organs of the supreme Lord's body.

– *Bhāgavata Purāṇa*



Fig. 8.1

The Big Questions ?

1. What is 'sacredness'?
2. How does the land become sacred?
3. How do sacred sites and pilgrimage networks connect with the life and culture of the people?
4. What role did sacred geography play in the cultural integration of the Indian Subcontinent?



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LET'S EXPLORE



Do any of the pictures look familiar to you? Can you name similar places found in your neighbourhood?

What is 'Sacredness'?

Sacredness can have many meanings. In the limited context of this chapter, sacredness is finding something of deep religious or spiritual significance, worthy of respect and reverence, holy or divine. But what is this 'something'? It can be a special location or shrine that evokes such deep feelings, high thoughts or emotions. It can also be, as we will see in this chapter, a journey of a special kind (often called a 'pilgrimage'), the route the journey takes, or even the very land covered.

Sacredness, therefore, is not just connected with religion and spirituality, but also with geography, all sorts of traditions, and, in the case of India, with something more that we will discover soon.

Let us focus on sacred places first. You will find that almost every school of thought and religion in India has its own sacred places.



Fig. 8.2

The places in these pictures are revered by followers of Islam, Christianity, Judaism and Zoroastrianism—religions that originated outside India. People visit or congregate in these places for prayer and worship. Followers from other faiths also visit them, as can be seen at the Dargah Sharif of Ajmer (Rajasthan) or the Velankanni Church in Tamil Nadu. People go on **pilgrimages** to these **shrines** on special occasions.

Naturally, when we turn to religions that originated in India, we find that they have many more sacred sites. In the case of Buddhism, those are often places that were visited by the Buddha or where his relics are kept. Among them is the Great Stūpa at Sanchi (Madhya Pradesh), which is a **relic stūpa** (you saw this in the chapter on ‘The Rise of Empires’), and the Mahabodhi Stūpa in Bodh Gaya (Bihar), where, according to Buddhist tradition, the Buddha attained enlightenment. They are important sites for pilgrims; Bodh Gaya, for instance, receives more than four million visitors every year.

In Sikhism, *takhts* are seats or centres of spiritual authority—for example, the Takht Sri Patna Sahib (in Patna), the Akal Takht (part of the Golden Temple at Amritsar, see Fig. 8.3), and Takht Sri Keshgarh Sahib (at Anandpur). Sikhs aspire to undertake pilgrimages to these



Fig. 8.3

places at least once in their lifetimes, as they are associated with important Sikh Gurus and therefore have special significance. In addition, Sikh tradition records pilgrimages conducted by several Gurus, such as Guru Nanak, to places like Haridwar, Prayag, Mathura, Varanasi, Ayodhya, Puri and many more, besides a few Muslim shrines.

Pilgrimage:

A journey to a sacred place that is significant within a religion or belief system.

Shrine:

A place regarded as holy because of its associations with the divine, a sacred relic, or a spiritual figure.

Relic:

A part of a saint's or other spiritual figure's body or sometimes to one of their belongings kept as an object of reverence.

Tirtha:
Literally, a place where one can cross a river or other body of water. Symbolically, it becomes a place where one can cross from the ordinary worldly life to a higher, spiritual life. Such places are held in high reverence and regarded as sacred.

India has, for ages past, been a country of pilgrimages. All over the country, you find these ancient places, from Badrinath, Kedarnath and Amarnath, high up in the snowy Himalayas down to Kanyakumari in the south. What has drawn our people from the south to the north and from the north to the south in these great pilgrimages? It is the feeling of one country and one culture.

—Jawaharlal Nehru, 1961

Pilgrimages

Many Indians undertake *tīrthayātrās* or pilgrimages to various sacred sites (*tīrthas*) during their lifetime. This ancient and continuous tradition of pilgrimage is not just a physical journey but also an inner journey that requires a specified code of conduct.

For at least 3,000 years, and with no modern means of transportation available, Indians have been crisscrossing the Subcontinent, resulting in its entire geography being considered sacred. We will return to this soon.

Here's an excerpt from the writings of Dharampal, a historian and thinker:

"I was travelling from Gwalior to Delhi ... when I met a group of people ... about twelve of them, some three or four women and seven or eight men ... They said that they had been on a pilgrimage, three months long, up to Rameswaram, among other places. They came from two different villages north of Lucknow. They had various bundles of things and some earthen pots with them ... They had taken all the necessities for their food—atta, ghee, sugar—with them ... I asked them, 'You are going to Delhi now?' 'Yes!'", they replied. "You will stop in Delhi?" "No, we only have to change trains there. We're going to Haridwar! ... We don't have time ... We have to go to Haridwar. And then we have to get back home."

LET'S EXPLORE

- Read the excerpt. What are your observations? Locate the route the group must have taken from Rameswaram to Haridwar. Why do you think the group was going straight to Haridwar instead of stopping at Delhi?
- In ancient times, when people were travelling from Madurai in Tamil Nadu to Varanasi in Uttar Pradesh, what languages would they come across? How would they communicate with people in those places? Where would they stay? What food would they eat?



In the Jain tradition, the *tīrthas* are associated with places where the **Tirthankaras** attained liberation or where significant events of their lives occurred. Trees, ponds, hills and mountains that the Tirthankaras visited or meditated at are also considered sacred. Examples of such places include Mount Abu, Girnar and the Śhatruṅjaya hill in Saurashtra (Gujarat).

Another example is the pilgrimage to Sabarimala temple (Kerala), dedicated to the deity Ayyappa, which draws over ten million devotees every year. This hilltop shrine was traditionally reached by an immensely difficult trek through hills and forests. Such a challenging approach, common to many hilltop or mountain shrines all over the country, symbolises the difficulties of the inner path, with natural landmarks along the route being considered sacred.

Tirthankara:
Literally, someone who makes a *tīrtha*, that is, who guides the crossing from ordinary to higher life. In Jainism, the Tirthankaras are the supreme preachers of dharma.

Fig. 8.4. Pandharpur wārī, an 800-year-old tradition in Maharashtra. Wārī means a pilgrimage that is held regularly, in this case annually. Pilgrims walk in large groups for 21 days to the famous Vithoba temple in Pandharpur.



More sacred sites

Hindu and many folk and tribal belief systems go further. In Grade 6 we learnt that in such belief systems, people regard elements of Nature, such as mountains, rivers, trees, plants and animals, and sometimes stones too, as sacred. In Hinduism, for instance, this includes countless geographical sites or features of Nature, such as specific mountains, rivers and forests, which are regarded as particularly divine and are worshipped as deities; many rivers are regarded as *devīs*, while some species of trees, animals and plants are particularly holy.

This tradition comes from the perception of a divine presence in all of Nature. Ultimately, the whole of planet Earth is considered sacred — she is Mother Earth or Bhūdevī.



Fig. 8.5. In this image, Viṣṇu in the form of his boar avatar crushes a demon and saves Bhūdevī (Mother Earth), shown here sitting on his elbow (from the Belur temple, Karnataka)

Here are a few more examples of such traditions:

- The Niyam Dongar hill in the Niyamgiri Range of Jharkhand is sacred to the Dongria Khond tribe. They believe that the hill is the abode of Niyam Raja, the supreme deity who provides everything they need for sustenance. Cutting trees here is prohibited and considered a sign of disrespect to the deity.
- In the early 2000s, the Government of Sikkim identified several sacred mountains, caves, lakes, rocks and hot springs that were to be protected against all forms of damage.
- In the Nilgiris of Tamil Nadu, the Todas, a tribal community, regard many mountain peaks as sacred and associate them with their gods. To them, this sense of sacredness extends to many plants (which often become part of their rituals), Shola forests, wetlands, and even specific stones and individual trees.

Becoming Aware of Sacred Geography

Some sacred places are marked on the map (Fig. 8.6) given on the next page. Though spread all over India, they are also interconnected. For example, some Hindus aspire to do the *chār dhām yātrā*, and those four sites appear to have been deliberately located in the southern, northern, eastern and western corners of India! A similar aspiration exists with respect to the 12 *jyotirlingas*, which are considered highly auspicious. The 51 *Shakti pīṭhas*, too, cover the entire map of India (even parts of present-day Bangladesh and Pakistan). And there are many more regional networks.

These networks crisscross India's length and breadth, creating a sacred geography. As a result, the land itself becomes sacred.

There is a story about the 51 *Shakti pīṭhas*. Shakti, the divine mother in the form of Satī, and her consort, Śhiva, were insulted by her father. An angry Satī immolated herself. Shiva was so livid that he took her body and refused to allow the last rites. Śhiva's anger was dangerous for the world and the cosmos. So Viṣṇu used his chakra to cut up Satī's body. The *Shakti pīṭhas* are the places across the Subcontinent where the body parts of the divine mother fell one by one. The symbol behind the story is clear: the whole land becomes the body of the divine mother.

LET'S EXPLORE

Note the locations of the *chār dhām*. What do you think it implied for the people when they travelled north-south and east-west?

While visiting the major sacred places connected to their respective faiths, pilgrims would naturally cover the geography of India. They would come across diverse languages, customs, clothing and foods along the way, but would notice the commonalities too.

The 12 *jyotirlingas* are sacred shrines dedicated to Śhiva, a major deity of Hinduism. Each shrine has its own unique mythology and name.



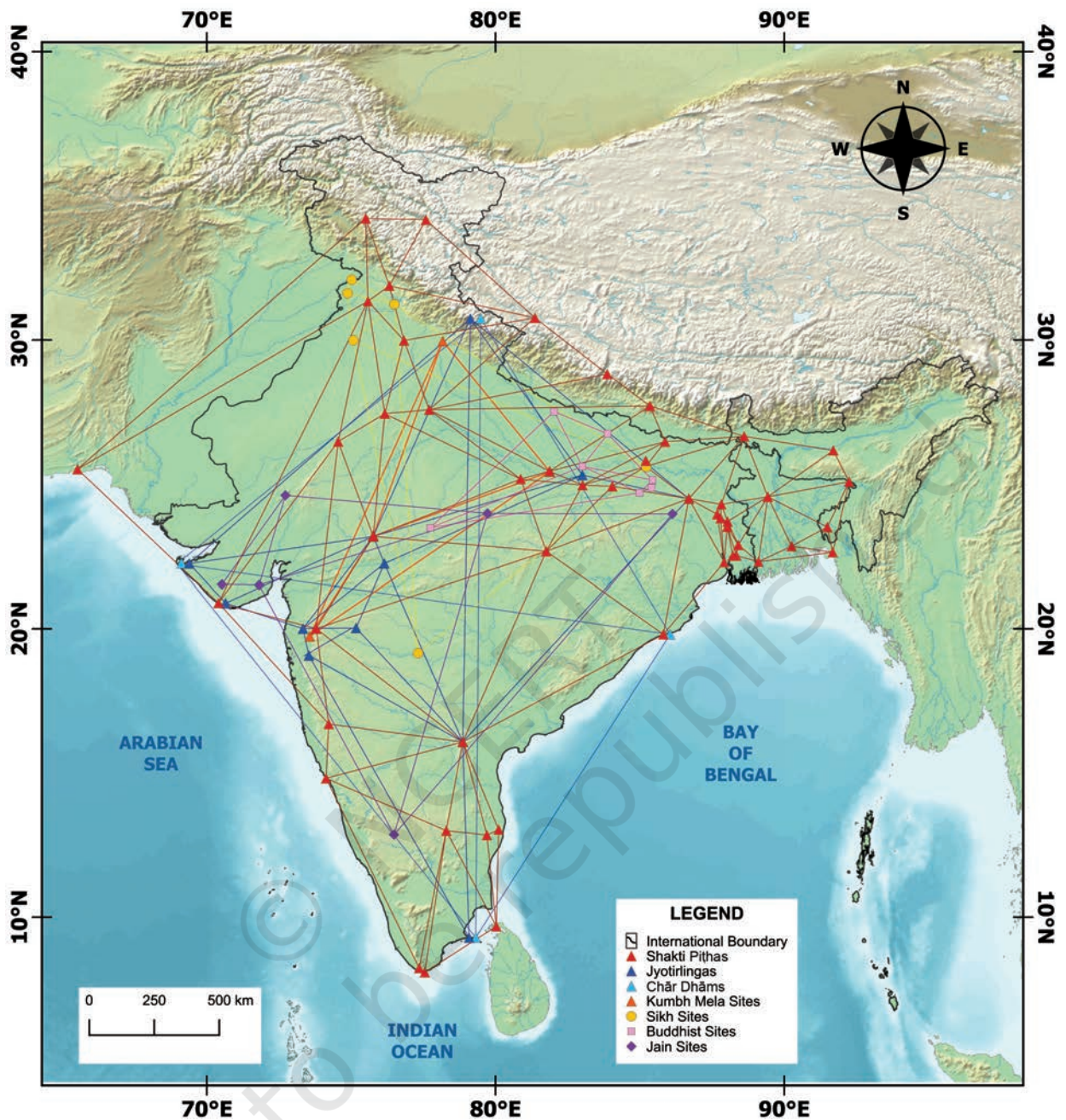


Fig. 8.6. A map showing a few networks of traditional *tīrthas*.

LET'S EXPLORE

Can you identify the names of a few traditional *tīrthas* given in the map above? You can refer to the political map at the end of the book for help.

Why did people travel such long distances? Apart from religious motivations, some, like merchants and traders, travelled to exchange goods; others travelled to discuss, debate and popularise their beliefs or to learn and study from eminent teachers in different parts of the country. However, though they were travelling for different purposes, their routes often converged. Discussions and debates, sharing of goods, experiences, and tales, enriched everyone. New ideas emerged, and old ones were adapted. This complex process became a major factor in the cultural integration of the Indian Subcontinent.

Sacred Ecology

Tīrthas are usually located on the banks of a river or a lake, in a forest or on a mountain. As we saw above, the natural landscape itself is thus seen or perceived as sacred space, or *punyakṣhetra*. This perception has helped us to protect and preserve Nature, since we are not distinct from her. So geography, culture and spirituality fuse together in these *kṣhetras*.

Rivers and *sangams* (confluence of rivers)

Rivers have been worshipped in India since Vedic times. The *naḍistuti sūkta* of the Ṛigveda is a hymn (*sūkta*) in praise of (*stuti*) rivers (*naḍī*) that invokes 19 major rivers of ancient northwest India. Even today, many rituals involving water invoke the presence of some of the most important rivers of India:

*gange cha yamune chaiva godāvarī sarasvatī
narmade sindhu kāverī jalesmin sannidhiṃ kuru*

Ganga, Yamuna, Godavari, Sarasvati, Narmada, Sindhu, and Kaveri, may you manifest in this water.

Those rivers have been lifelines for the Indian civilisation. Their sources, tributaries and the places they flow through are often regarded as sacred too, and are visited by many pilgrims. In local languages, these rivers are referred to with respect—for instance, ‘Ganga ji’ or ‘Yamuna ji’.



DON'T MISS OUT

- ❖ Prayagraj hosts the **Kumbh Mela** every six years. Prayag is located at the confluence of three rivers — Ganga, Yamuna and the invisible Sarasvati. A few years ago, UNESCO listed the Kumbh Mela as an ‘intangible heritage of the world’.
- ❖ An estimated 660 million people participated in the Kumbh Mela of 2025. What proportion of the population of India is this?

Kumbh Mela

The *Kumbh Mela* originates in the legend of *amṛita manthana*. The *devas* and *asuras* (i.e., more or less, gods and demons), traditional enemies, for once joined forces in churning the cosmic ocean to extract *amṛita*, the divine nectar that would give them immortality. To prevent the *asuras* from getting the *amṛita*, Viṣṇu, in the form of Mohini, a beautiful lady, snatched the pitcher or *kumbha* which contained the *amṛita*. In the process, a few drops fell over four places — Haridwar, Prayagraj, Nashik, and Ujjain. These are the places where the Kumbh Mela has been held, and a dip in the rivers there during a prescribed period is considered most auspicious.



Fig. 8.7



THINK ABOUT IT

How do you think these sacred places are connected with the people's economic lives and activities? Draw a mind map to trace these connections. (*Hint: The pictures above can provide some clues.*)



Fig. 8.8

Mountains and Forests

All over the world, mountains are often associated with legends, deities or heroes. Also mountains are seen as a symbolic gateway from earth to heaven because of their height. That is why many *tīrthas* and temples in India are located on hilltops, as the physical journey to these peaks is seen as a symbolic journey to reach the divine. People would undertake arduous walks through mountain trails to those sites and shrines, which tested not only their physical abilities but also their mental strength. Today, such places are often accessible through roads and other modes of transport.



Mount Kailash



Vaishno Devi Temple, Katra



Tiruvannamalai, Tamil Nadu



Lord Balaji, Tirumala hills

Fig. 8.9

Trees, Forests and Sacred Groves

In many parts of India, trees are adorned with offerings like turmeric and *kumkum*. One species of fig tree commonly called ‘peepul’ (or ‘pipal’), ‘bo tree’ or ‘bodhi tree’ (*aśvattha* in Sanskrit) is sacred to Hinduism, Buddhism, Sikhism and Jainism. In fact, its botanical name is *Ficus religiosa* (literally, in Latin, the ‘religious’ or sacred fig tree).



Fig. 8.10. The tree in the Mahabodhi Temple at Bodh Gaya is often cited as a direct descendant of the original tree under which, according to Buddhist tradition, the Buddha attained enlightenment — hence the names ‘bodhi tree’ and ‘Bodh Gaya’.

In Grade 6 we read about the two epics of India, the Mahābhārata and Rāmāyaṇa. These texts have vivid descriptions of pilgrimages undertaken and places visited, and of sacred rivers, forests and mountains. In almost every region of India, numerous rural and tribal traditions claim that the heroes of these texts passed through their locality, with shrines often marking such passages. Such legends allowed a wide diversity of communities to make the two epics their own.



Fig. 8.11. A shrine in Bastar, Chhattisgarh, celebrating Rāma's passing through the area



Fig. 8.12. A seal from Mohenjo-daro

Observe this seal from Mohenjo-daro. Can you recognise the leaves at the top? As you can see, the peepul tree has been an important part of India's cultural geography for millennia.



THINK ABOUT IT

Many parts of the peepul tree have medical uses: the leaves are used to treat some skin ailments while the bark is useful for stomach ailments. Since it stays green almost through the year, it provides food and shelter to many types of birds and other animals.

Over time, many rural and tribal communities across India decided to protect and preserve some natural forests from harmful activities such as hunting, tree felling or mining. They saw those forests as the abodes of deities—for example, Ryngkew or Basa in Meghalaya. Such special forests are called 'sacred groves' in English (see the table below for a few names in regional languages) and, thanks to their sacred status, have come to shelter great biodiversity of flora and fauna. Many sacred groves are also home to small water bodies and thus help in water conservation.

There were many thousands of sacred groves in India. Sadly, these numbers have been shrinking as people have started encroaching on them for various purposes, from agriculture to industry. Still, sacred groves continue to be protected in many regions of India.



Fig. 8.13. Kalkai temple, Mulshi, Maharashtra



Fig. 8.14. Mawphlong, Shillong



Fig. 8.15. From the sacred groves of the Bhils



Fig. 8.16. Udaiyankudukadu Karumbayiramkondan, Tamil Nadu

Given below are the names of a few sacred groves in a few regional languages of India. Can you add to this?

Malayalam	<i>kāvu</i>
Tamil	<i>kovilkādu</i>
Kannada	<i>devare kādu</i>
Marathi	<i>devarāī</i>
Khasi (Meghalaya)	<i>khlaw kyntang</i>
Hindi (Himachal Pradesh)	<i>dev van</i>
Jharkhand	<i>sarnā</i>
Chhattisgarh	<i>devgudi</i>
Rajasthan	<i>oraṇ</i>

In Tamil Nadu, local chronicles highlight the relationship between the deity of a sacred grove, Nature and humans. One such chronicle in the Thanjavur District states that the groves' deities protect fruit bats, which are regarded as sacred – spotting one of them is considered auspicious. Besides, bats play a critical role in the pollination of flowers and in the dispersal of seeds. Sacred groves thus evolve a harmonious relationship between the deity, the ecosystem, and humans.

From pilgrimage to trade

Pilgrims encounter traders and merchants along their journey. This interaction benefits both groups. Pilgrims need various items, which traders can provide. As a result, the pilgrimage routes and the trade routes often overlap. Some traders might also double as pilgrims, taking their wares to distant towns and cities while visiting sacred sites and shrines.



Fig. 8.17

What routes did those traders use in ancient India? Revisit the map of trade routes (Fig. 5.5) in the chapter 'The Rise of Empires'. Uttarapatha was a major trade route connecting the north-western and eastern parts of the Subcontinent; the Dakṣhinapātha went from Kaushāmbī through Ujjayinī (Ujjain) to Pratiṣṭhāna (Paithan). As you know, some of the goods traded along these routes included precious stones like shells and pearls, coins, gold and diamonds, as well as cotton, spices, and sandalwood.

LET'S EXPLORE

Take a sheet of transparent paper that can be used for tracing. Trace a map of the trade routes from the chapter 'The Rise of Empires'. Place it on top of the map of the important *tīrthas*. What do you observe?



Sacred Geography beyond India

The concept and practice of sacred geography are not unique to India. Ancient Greece had many sacred landmarks, from mountains to sacred groves. The Native Americans used to have a special bond with Nature, which they viewed as sacred. The Maoris, the indigenous people of New Zealand, regard the Taranaki Maunga mountain as their ancestor and therefore as sacred; after many representations by the Maoris, a law recently granted this mountain the rights and responsibilities of a human being — an acknowledgement of the Maori worldview. The elders of the community represent the voice of the mountain or river threatened with destruction. This ensures that the sacred places are not exploited and degenerated.

Restoring and conserving the sacred



THINK ABOUT IT



Fig. 8.18

Look carefully at these pictures of places and animals that are considered sacred. The Yamuna in the north, the Mahanadi in the east or the Kaveri in the south are all sacred rivers. How come they have become so polluted? Are there sacred places in your locality or region that have been similarly polluted or degraded by human activity? Whose responsibility is it to preserve the sanctity of our sacred places? Discuss in class.

A harmonious relationship that once existed between people and the sacred geography sustained Indian civilisation over millennia, creating values that were shared all over the Subcontinent. But today it is under great strain.

Sacred geography continues to be relevant today. When there is a conflict in our relationship with Nature, when a river is overexploited to the point of disappearance, or a sacred mountain is challenged with competing ideas of development, people have spoken up to protect their environment, their deities and values. At a time when sustainability has become a global issue, a worldview that embeds sacred geography has a significant contribution to make.

Before we move on ...

- All religions in India have their sacred places dotted over the landscape. In Buddhism, Jainism and Sikhism, such places are usually associated with some of the great figures in these belief systems.
- Hinduism has dense networks of pilgrimage sites, covering the entire geography of India. The practice of pilgrimage is interwoven with the lives of people, as it serves the individual development and spiritual growth, but also the socio-economic purposes of trade expansion and pan-Indian cultural integration.
- In many Hindu, tribal and folk traditions, the very land is perceived as sacred.
- Our sacred places are being polluted owing to widespread neglect and a lack of concern. It is our duty to protect our national heritage, as our Constitution also reminds us.



Questions and activities

1. Read the following statement by a well-known environmental thinker, David Suzuki:
“The way we see the world shapes the way we treat it. If a mountain is a deity, not a pile of ore; if a river is one of the veins of the land, not potential irrigation water; if a forest

is a sacred grove, not timber; if other species are biological kin, not resources; or if the planet is our mother, not an opportunity—then we will treat each other with greater respect. Thus is the challenge, to look at the world from a different perspective.”

Discuss in small groups. What do you think this statement means? What implication does it have for our actions with respect to the air, water, land, trees and mountains around us?

2. List the sacred sites in your region. Enquire into why they are considered sacred. Are there stories connected with these sacred places? Write a short essay of 150 words. (*Hint: You could speak to elders in your family and community, discuss with your teacher, read books and articles, etc., to gather relevant information.*)
3. Why do you think natural elements like rivers, mountains and forests are considered sacred for the people? How do they contribute to our lives?
4. Why do people visit a tīrtha or other sacred sites?
5. How did the ancient pilgrimage routes help in fostering trade during those times? Do you think the sacred sites help in developing the economy of the region?
6. How do sacred places influence the culture and traditions of the people living near them?
7. From the various sacred sites of India, select two of your choice and create a project explaining their significance.
8. What is the two-fold significance of a tīrthayātrā or a pilgrimage?

From the Rulers to the Ruled: Types of Governments

A ruler's duties in the internal administration of the country are three-fold: *rakṣha* (protection of the state from external aggression), *pālana* (maintenance of law and order within the state), and *yogakṣhema* (safeguarding the welfare of the people).

Kauṭilya in Arthaśhāstra
(translation by L.N. Rangarajan)

Fig. 9.1. Inside the Indian Parliament



The Big Questions ?

1. What are the different types of government?
2. Where do governments get their power from?
3. How does a country's government interact with the people?
4. Why does democracy matter?



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What is Government?

What are its Functions?

In Grade 6, we learned what government is and explored some of its roles.

The government plays an important role in our lives. This role includes:

- maintaining law and order in society;
- ensuring peace, stability, and security for the people;
- managing relationships with other countries;
- taking care of national defence;
- delivering essential goods and services (education, healthcare, infrastructure);
- managing the economy and economic activities;
- working for the welfare and improving people's lives.

LET'S EXPLORE

- Do you remember this picture from your Grade 6 textbook?
- The government also has many other roles. Try to list them.



Fig. 9.2

In Grade 6, we learned that India has a democratic form of government. Like India, many countries have a democratic government; but some countries have other forms of governments. Even all democratic governments are not exactly the same. In this chapter, we will learn about various forms of government, how they differ from each other, and how they function.

What is Democracy?

As we studied in Grade 6, 'democracy' is best understood as 'rule of the people.' This means that the source of power and authority in a democracy are the people of the country. Let's understand this with the example of a school.

A school example

A school is full of activities and things that must be done. Many day-to-day tasks need to be managed, and things need to be organised. For example, there are timetables to be made and followed, sports activities to be organised, food to be served during lunch time (also called the mid-day-meal), utensils to be cleaned, speakers to be decided for the morning assembly, and activities to be arranged for 'No Bag Days'. The list is very long in terms of all that needs to be done in the school.

With so many things to be done, the Head Teacher realised that a Student Committee should be appointed so that students can be part of making the relevant rules to get all this done, then help in implementation of the rules, and ensure that the rules are being followed. The question before the Head Teacher was — who will be part of the committee?

The Head Teacher discussed this in the assembly. She proposed that it would be good if some students can take responsibility for these tasks. A student committee should be formed. Hearing this, the students got excited and started arguing.

Naghma: Students in Grade 12 are the most senior; we will take care of everything.

Shobha: But you will finish school in a few months. The students in Grade 11 should take care of everything.

Gurpreet: If the students of only one grade will take care of everything, then how will they know about the problems that other grades face?



Fig. 9.3

Representative:

A person who is chosen to act or make decisions on behalf of another person or group of people

In this exciting situation, the students finally came to three options:

- Everyone in the school becomes part of the committee and takes responsibility.
- The Head Teacher chooses the students herself for the committee.
- The students choose their representatives through voting, and the chosen **representatives** become the members of the committee.

**LET'S EXPLORE**

Which of the three methods do you think is most effective? Why?

The first method may seem appealing, but if every student in the school is part of the committee, it will be difficult to reach decisions and manage implementation effectively. In the second method, since the Head Teacher selects the students for the committee, many students will not have a role and won't have a way to ensure that their voices are heard regarding what they need and want. However, in the third method, students from each grade can choose one representative from among themselves—someone they believe will effectively advocate for their class's needs. This representative will serve on the committee, meaning that the student committee will consist of representatives from each grade. This approach is a democratic way to choose representatives and form a committee.

Functions of Government

Previously, we discussed the various roles that a government plays in our lives, similar to the responsibilities of a student committee in a school. Just like the school committee, a government must create necessary rules, implement them, and ensure that everyone follows these rules. These three responsibilities are known as the functions of government.

The creation of rules is called the **legislative function**; these rules serve as the framework for running the country. The implementation of these rules and the administration of the country according to them is known as the **executive function**. Finally, ensuring that the rules are followed is referred to as the **judicial function**.

Democracy is defined as the ‘rule of the people’. This means that, similar to the third method of electing representatives in a school, in a democracy, the people select their representatives to govern them. However, not every country uses the same method for choosing these representatives. We will explore this topic in more detail in the following sections.



DO YOU KNOW?



Fig. 9.4. An 1896 **mural** by the painter Vedder called ‘Government’ from the Library of Congress, USA.

Abraham Lincoln, a U.S. president in the late 19th century, described democracy as a ‘government of the people, by the people, for the people’, a phrase still widely used today.

Mural:
A large painting or artwork created directly on a wall or a ceiling

What Makes Governments Different?

The government of any country evolves over time. Since countries have their own history, culture, and aspirations, it is natural that governments of different countries are different. Let's look at some aspects that can make one form of government different from another. These differences will become clearer when we look at various types of government later in the chapter.

Key differences between governments

Who gets to decide that 'this is the government'?

1. **Who gets to decide that 'this is the government'?** This is the most basic difference across many types of government. Who or what says that 'this is the government of our country'? That is, who or what gives the government its authority and power? For example, in a democracy like India, it is the people of the country who decide and are the source of authority, while in a theocracy, the source of authority is religious beliefs and the head of a religious institution.

How is the government formed?

2. **How is the government formed?** In a democracy, a government is formed usually through some kind of election. While in kingdoms which have kings or queens, the kind that you have read about in other chapters, usually someone from within the family continues to rule and decide how the government will be set up. There are other ways of forming a government, and even in democracies there can be different kinds of elections.

What are the different parts of the government and what do they do?

3. **What are the different parts of the government and what do they do?** Any government has many parts and systems, and these vary across different types of government. For example, the three functions of government referred to earlier—legislative, executive, and judiciary—can be performed by totally independent bodies or by the same body. The system to decide how the government will work can be written down in a book of fundamental rules of the country, called the 'constitution', which is what happens in most

democracies. Or it can be decided by the king or queen, as it happens in ‘monarchies’ — governments of kings or queens.

4. **What is the government working for? What goals is it trying to achieve?** Governments are designed to work towards certain values and ideals. Some governments, like the government of India, are designed to work towards equality and prosperity for all, while some other governments may be designed only for the prosperity of some families or groups.

What is the government working for? What goals is it trying to achieve?

There are differences between different forms of government based on these four major aspects, but there could be other kind of differences. So, let us now look at some types or forms of government.

Democratic Governments around the World

Democracy is the most popular form of government in the modern world. In this part of the chapter, we will see that there are different kinds of democratic governments. Before we get into the differences, we should know that there are some fundamental principles of any democracy.

Fundamental principles of democracy

Equality in a democracy means that every person has the right to be treated equally. It also means that everyone should have equal access to facilities like education and health, and that everyone is equal before the law.



Freedom in democracy means that citizens have the right to make their own choices and express their opinions.



Representative participation means that every person has a right to choose and elect their representatives. This is done through the process of elections. Elected representatives become a part of the legislature.





Universal adult franchise grants every citizen (above a certain age) the right to vote to choose their representative.



Fundamental rights of a citizen, such as—right to equality, right to freedom of speech and expression, and right against exploitation—are all provided and protected in a democracy.



Independent judiciary ensures that every citizen's fundamental rights are protected, and that laws are followed by the citizens and also by all the parts of the government.

It is useful to remember that even these fundamental principles have evolved over time. For example, India provided universal adult franchise (meaning the right to vote in elections to all adults) from the very beginning of the Indian republic in 1950; on the other hand, in Switzerland, women got the right to vote only in 1971.

Clearly, the above principles are ideals; not all democracies are able to put them in practice. But equally clearly, it is important for the citizens to keep these ideals in front of them.

Different forms of democratic governments

Let us now understand the different forms of democratic governments around the world.

1. Direct democracy

This is a form of democracy where all the citizens of a country are directly responsible for all the rules, regulations and functions. They participate in all the decisions directly.

In contemporary times, some kinds of this form are followed in a few countries, like Switzerland. The limitation of this form of government is that it is very hard to carry out in practice, particularly in larger countries—just as we saw in our school story: if everyone becomes a part of the

committee, then decision-making and working on all tasks smoothly will be difficult.

2. Representative democracy

This is the form of democratic government in which the people elect their representatives through universal adult franchise, just like in India. In this form of democracy, the people do not directly govern, but the government is always **accountable** to the people.

Elections are an integral part of representative democracy through which people can express changes in their choices as well. To accomplish this, elections happen in regular and fixed intervals of time. In India we have general elections every five years, while in the United States of America they occur every four years.

Accountability:
Accountability in democracy means that the government is answerable to the people who have elected them.



DON'T MISS OUT

As we stated in the beginning, democracies have evolved over time, and so have their characteristics. Even today, there are a lot of differences in the functioning of these democracies. It is useful to remember that when these countries adopted democracies, they may not have had all the principles of democracy as we understand them today. For example, effective Universal Adult Suffrage in the UK happened in 1928 and in the USA by 1965.

Country	Year when democracy was established
USA	1787
Switzerland	1848
India	1947
Germany	1949
Kenya	1964
Nepal	2008



Fig. 9.5. Voting in India

Most of the democracies today are representative democracies. But every democracy functions differently. Here are the two forms of representative democracy.

a. **Parliamentary democracy**

In this form of government, the members of the executive are also part of the legislature. For example, in India, the prime minister and the council of ministers are also members of the parliament.

The council of ministers are accountable to the legislature and continue working as long as they have the confidence of the legislature. In India, the council of ministers can continue working while they have confidence of the Lok Sabha.

In this form of government, people elect the legislature but not the executive. Selected members of the legislature become ministers.

b. **Presidential democracy**

In this form of government, the executive works independently of the legislature. The president is elected by the people. The president does not need to have the confidence of the legislature for his/her position.

In some countries like India, states within the country such as Rajasthan or Kerala have their own governments, but they are not completely independent. They are still governed by a larger national government, the Union Government of India.

The different forms of democratic government have different structures. You can understand the basic differences from the table 9.1 on the facing page.

What do these terms mean?

- **Executive:** The executive is the organ of the government which is responsible for implementing the law. But the process of its election is different in different countries.

Different forms of democratic government			
Institution	Executive	Legislature	Judiciary
India	prime minister and the council of ministers	Lower House (Lok Sabha) is more powerful than Upper House (Rajya Sabha)	independent from executive and legislature (separation of power)
USA	president	equal power between Upper House (Senate) and Lower House (House of Representatives)	independent from executive and legislature (separation of power)
South Korea	president	single house (National Assembly)	independent from executive and legislature (separation of power)
Australia	prime minister and the council of ministers	equal power between Upper House (Senate) and Lower House (House of Representatives)	independent from executive and legislature (separation of power)
A			
B			

Table 9.1 Different forms of democratic government

- **Legislature:** The legislature is the body of the government which is responsible for making laws. It is known by different names in different countries. In India, it is called Parliament; in the USA, it is called Congress. In most democracies, it has two houses, the Upper House and the Lower House.

- **Upper House and Lower House:** In most countries, the Lower House is elected by direct voting and is generally more powerful than the Upper House, which is formed either by election or nomination. These Houses are known by different names in different countries. In India, the Lower House is called the Lok Sabha, and the Upper House is called the Rajya Sabha.
- **Separation of Power** means that the three organs of the government—Legislature, Executive, and Judiciary—work independently and do not interfere in each other's functions.



LET'S EXPLORE

- Fill the blank columns under Country A and Country B in table 9.1 given on the previous page by taking two different countries of your choice.
- Analyse the table and discuss amongst yourselves the similarities and differences in all the examples.

The exercise must have given you an understanding that different forms of democratic governments have different ways of formation, structures and functioning. Along with this, the relationships between the three organs of government also differs. But as we read in the beginning, some characteristics, like equality, freedom and universal adult franchise remain the same in all democracies.



LET'S EXPLORE

- After studying the above examples, list the core principles of a democratic government. Based on your understanding, do the activity given below:
- You have to form a Student Committee in your school. Make a plan and execute it in a democratic manner, ensuring that:
 - ◆ Functions of the committee are well defined
 - ◆ The election process of the committee members is democratic

A Peek into History

Early republics

A republic is a form of government in which the head of state is elected and is not a hereditary monarch.

This was the case in at least two of India's ancient *mahājanapadas*, as you might recall from the chapter 'New Beginnings: Cities and States'. In the Vajji (or Vṛjji) *mahājanapada*, the Lichchhavi clan, in particular, practised collective decision-making, and leaders were chosen based on merit rather than birth. Key positions were filled through elections, and representatives from various clans met regularly to address issues and develop solutions to ensure the people's welfare. As a result, such states have been called early republics.

Indeed, the voice of the common people has been valued and upheld in India through the ages, even when the power was in the hands of a king or queen. A remarkable example from the Chola period is seen in the Uttaramerur inscriptions from the 10th century CE in Tamil Nadu, which provide us with details about the election of members to the village *sabhā* (local administrative body). We learn about the election process, including sealed ballot boxes, qualifications of members, their duties, and also the conditions that could lead to their dismissal.



Fig. 9.6. Chola period inscriptions on the walls of Vaikuntha Perumal temple, Uttaramerur, Tamil Nadu

Slave:
A person who is forced to work for and obey another and is considered to be their property.

Subjugate:
To take control of people or a place by using force and make the people obey.

For instance, members would be immediately removed if found to have indulged in any corruption.

There were republics in other parts of the world too. In the 5th and 4th centuries BCE, Rome and Greece had republics. In some regions of Greece, free men could vote, but women, workers and **slaves** could not. Other areas had a system where only a small, privileged group could vote or make decisions.

Other Forms of Government

In the previous sections we saw that democracy is the most popular form of government in today's world, and that there are different forms of democracy as well. Let us now look at other forms of governments, and understand their basic structures.

1. Monarchy

As we saw in chapters of 'Tapestry of the Past', *mahājanapadas* were headed by kings, who were guided by the *sabhā* or *samiti* and were expected to take decisions and advice of these institutions seriously. As empires were built and expanded across India, kings began to gain immense power. Yet, they relied on a council of ministers and a network of officials to help them govern the empire. In many cases, the king also sought the advice of learnt scholars on matters related to *dharma*. Of course, there were also examples of kings who used their power to **subjugate** their people.

In some parts of the world, kings had all the power; they made the laws, enforced them, and also decided the punishments. In some cases, they claimed to have received divine power from God.

However, in many parts of India, the power of the *raja* was neither absolute nor beyond question. The king was



Fig. 9.7. Adoration of the pillar of Sanchi Stūpa

expected to make decisions while staying within the limits of *rājadharma*; this meant ruling according to dharma and ensuring the welfare of all people. This was an ideal that kings did not necessarily achieve.



THINK ABOUT IT

What might happen if the king considered himself to have divine powers? How would he rule over the people?



DON'T MISS OUT



Fig. 9.8. A 17th-century Rajput miniature painting depicting Bhīṣma lying on a bed of arrows, teaching Yudhiṣṭhira while Kṛiṣṇa sits at the head, witnessing the moment.

In the Shānti Parva of the Mahābhārata, when Bhīṣma, the wise elder of the Kuru dynasty, lies on a bed of arrows awaiting his death, he teaches Yudhiṣṭhira, the eldest Pāṇḍava, at great length on good governance, justice, and the moral responsibilities of a raja. A raja is not just a ruler; the welfare of his people is his highest priority. He must apply the law without bias to ensure fairness and equality. He must not get attached to power, as it fosters ego and corruption. He must seek guidance from wise advisors to ensure just and well-informed decisions. The raja must understand that his authority is temporary and bound by dharma.

King Chandrāpīḍa wanted to build a temple to his deity, but the hut of a stubborn cobbler stood in the way. When the builders complained to the king that he did not even allow them to take measurements, the king blamed them for not asking the cobbler's permission first. The king received the cobbler, who explained that his humble hut was like a mother to him and as precious to him as the palace was to the king: "The misery people feel when their homes are forcibly taken away can be described only by a god who has fallen from his celestial car or by a king who has lost his kingdom!" Nevertheless, the cobbler expressed his readiness to let go of his hut if only the king would come and respectfully ask for his permission — which the king did, giving him adequate money as compensation. "For those who desire happiness, there should be no false pride," concludes the text, while the cobbler praised the king's commitment to dharma, even towards a lowly subject!

– From *Rājatarāṅgiṇī* by the Kashmiri scholar Kalhaṇa (12th century CE)

Sovereign: Sovereign indicates that the source of power of a country is independent from external influence.

Monarchs: Kings or queens who inherit their position from their family, usually passing it from one generation to the next within the royal family.

2. Monarchies today

A monarchy is the type of government that is ruled by a monarch. Kings and queens are called monarchs, who exercise their **sovereign** power. **Monarchies** are usually hereditary; typically, the eldest son of the ruling monarch becomes the next king.

Today we have two types of monarchy:

a. Absolute monarchy

In an **absolute monarchy** the monarch has complete control in the making of laws,

ensuring that they are followed and **adjudicating** when they are not. Saudi Arabia is an example of an absolute monarchy; here the king holds all power and governs according to Islamic law. However, he appoints a council that advises and assists him on governance; but he is not bound by the council's advice.

Adjudicating:
Judging a case
when there is
a dispute

b. Constitutional monarchy

Let us consider an example of a different kind of monarchy. The United Kingdom or Britain is also a monarchy. The head of the state is the king or queen, but he or she has only nominal power and the real power of the executive is exercised by the prime minister. The legislative power is exercised by the parliament.

This means that all the laws are made by the elected parliament, and executive power is exercised by the Council of Ministers led by the prime minister. So while Britain has a king, it really is, today, a parliamentary democracy. This kind of monarchy is called a constitutional monarchy.



Fig. 9.9. King Charles III in a ceremonial coach during the visit of a foreign dignitary.

2. Theocracy

A theocracy is a form of government where the country is ruled by the rules of religion and religious leaders.

Iran, whose full official name is 'Islamic Republic of Iran' has a unique political system combining elements of both a theocratic and democratic governance. Their constitution is based on the fundamental principles of Islam, the country's official religion. The Supreme Leader, who has the ultimate authority over the legislature, executive and judiciary, is selected by a group of Islamic clerics and his term is for life. There are also an elected president and a parliament that take care of everyday governance. The intent of the republic is to establish a society based on Islamic norms.

Other theocracies currently in existence include Afghanistan and Vatican City.

3. Dictatorship

A dictatorship is a form of government in which one person, or a small group possesses absolute power—they do not have any limits imposed on them by a constitution or law. The 20th century witnessed many examples of dictators who created extremely difficult circumstances for the people; we will only see two of them here.

- Soon after Adolf Hitler was appointed Chancellor of Germany in 1933, he passed laws that gave him full power and eliminated the opposition. He was now a dictator. Convinced of the superiority of his people, he believed that Germany should rule the world and dominate 'inferior races'. He was responsible for the killing of at least six million Jews (this is known as the 'Holocaust') as well as hundreds of thousands of Roma and other groups of people. In fact, he was the cause for World War II in the years 1939–1945,



Fig. 9.10. Caricature of Adolf Hitler

which resulted in immense loss of life and property in many countries.

- Idi Amin was a military dictator in Uganda. He was directly responsible for the merciless killing of thousands of people. Many Indians whose ancestors had migrated to Uganda a few generations before were forced to flee the country.



Fig. 9.11. Caricature of Idi Amin

Caricature:

A drawing that makes someone look funny or foolish because some part of the person's appearance is exaggerated



DON'T MISS OUT

The Roma, or Romani people; were originally nomads. Based on their linguistic and cultural characteristics, scholars have determined that they originated in India. They first settled in parts of eastern Europe but have now migrated to several countries of the world.



Fig. 9.12

Story of Shane

Shane lives in North Korea which has a set of defined rules for his everyday living. He is currently serving in compulsory military service in which he is expected to serve in the military till the time government decides. There are also rules about how his hair should be cut and the clothes he should wear. He cannot access the global internet, and so is unaware of the world outside his own country. The government watches his every action closely and he is also expected to report about anyone who tries breaking any of the defined rules. One day he met a tourist who asked him, “Why do all of you have the same haircut here?” To this Shane responded, “We all want to explore new styles, but the government decides the way we should keep our hair.”



LET'S EXPLORE

- Does Shane's country look like a democracy?
- How do you think Shane's everyday life would be?
- Would you like to live in such a country? Explain why.

4. Oligarchy

The word 'oligarchy' is of Greek origin, where *oligos* means a few and *árkhō* means to rule or command. It is a type of government where a small, powerful group makes all the important decisions; usually they are wealthy families or influential people.

In some places in ancient Greece, aristocratic families ruled as oligarchies. In modern times, **political commentators** have observed that even some democracies show signs of oligarchy when a small group of politicians and wealthy businesspeople hold too much influence in governance.

Political commentators:
People who analyse and share their opinions about political events

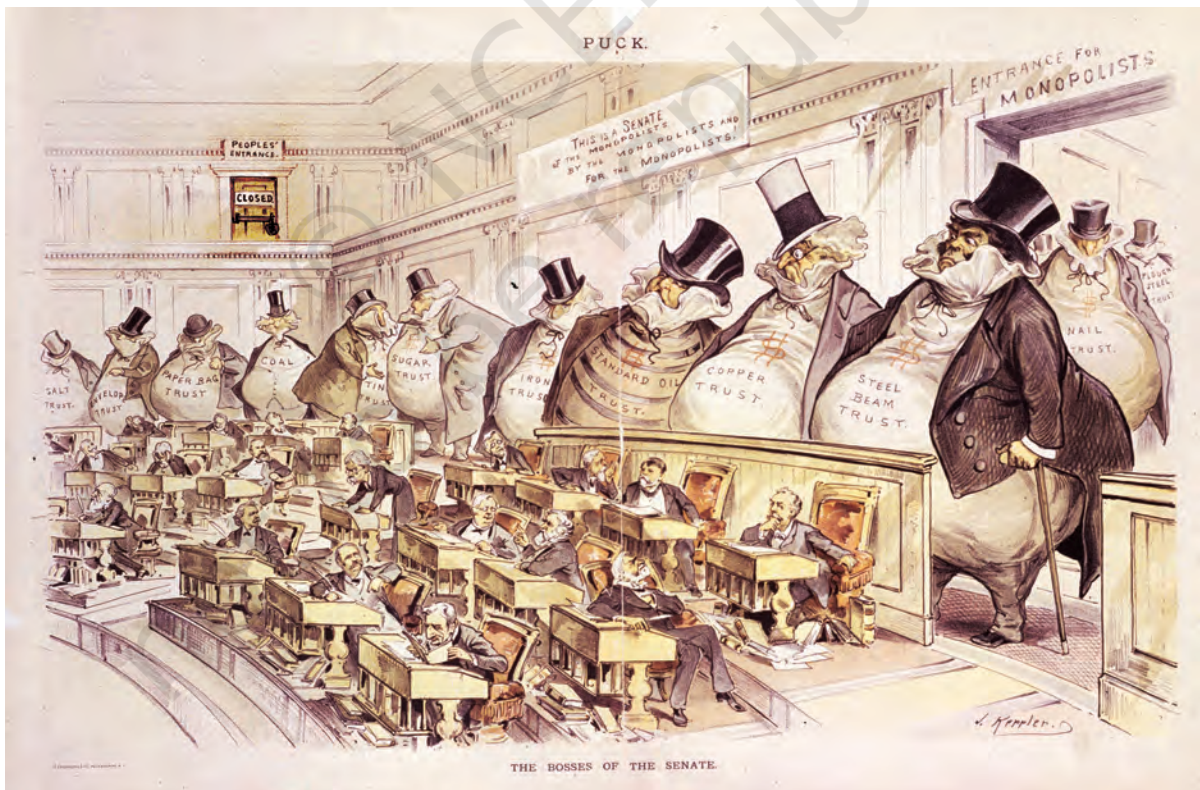


Fig. 9.13. A cartoon from 1889 depicting an oligarchic situation.

LET'S EXPLORE

- Look carefully at the picture in Fig. 9.13 on the previous page. It depicts an elected body in the USA in the late 19th century. The people shown in the cartoon are all elected members. What do you observe? What do you see at the top left-hand corner of the cartoon? Who do you think is making decisions in this elected body?
- Can a democracy turn into an oligarchy? What can people do to keep democracy strong?



Why Democracy Matters

These different types of governments show us that democracy is not the only way in which countries are governed. But in most countries, democracy is considered to be a better form of government than others. Let us do a quick comparison to understand this better.

Consider the characteristics below in different forms of government and fill in the blank boxes with Yes or No:

Characteristics	Democracy	Dictatorship	Absolute Monarchy	Oligarchy
Universal Adult Franchise	Yes	No	No	No
Equality amongst citizens				
Freedom of speech				
Separation of powers				
Wellbeing and Prosperity of all citizens				

Table 9.2 Characteristics of different forms of government



LET'S EXPLORE

You have learnt the basic characteristics of various forms of governments. Do a small role play of the various forms in your classroom:

- Enact democracy
- Enact monarchy
- Enact dictatorship
- What do you find to be the most suitable form of government?

You have read about different forms of government above and how the form of government defines the lives of its citizens. In the previous table, we could see that the representation of people's choices and rights varies across the different forms.

In a genuine democracy, the people can lead their everyday lives in the way they want. They can choose what to speak, what to wear, what beliefs to follow, and how to express themselves. All of this can be done in a democracy until and unless it harms someone else's rights.

In a democratic government, the people choose their government. The government is accountable for protecting the rights of its people and is responsible for providing basic needs to its citizens. If the government does not perform its functions properly, the people can change their representatives through elections. This ensures that there is a constant check of what the government does. Thus, the values and ideals of the government in a democracy should focus on the well-being of all its people.

Our country is a democracy, and you can see many of the features of a democracy in our lives every day. It is therefore no wonder that more than half of the countries in the world have adopted democracy and democratic forms of government.

It is important to keep in mind, however, that even democracies have their problems. Issues such as corruption, wealth disparity, excessive control by a few over democratic institutions, erosion of the judiciary's independence, manipulation of information

channels, and several more, can cause hurdles in achieving the ideals of democracy. What can we do as individuals, and as a society, to remain vigilant and minimize these issues and hurdles?

Before we move on ...



- Government plays an important role in running a country. Different types of governments across the world have different answers to the following questions: Who decides “This is the government”? What are the parts of the government and what do they do? Who or what is the government working for? What values and ideals should the government follow?
- The most popular form of government in the world today is democracy. Democratic governments across the world have variations, including direct democracy and representative democracy.
- There are two types of representative democracy—presidential and parliamentary democracy. India is a parliamentary democracy.
- Other types of government include monarchy, theocracy, dictatorship and oligarchy.
- Democracy matters, but there are serious challenges to democracy that citizens need to remain vigilant about.

Questions and activities

1. Write names of the various types of government that you have learnt in the chapter.
2. Which type of Government does India have? And why is that called that type?
3. You read that an independent judiciary is present in all types of democracies. State any three reasons why you think it is important for the judiciary to be independent.
4. Do you think democratic government is better than other forms of government? Why?

5. These are some practices in a few different countries. Can you match the practice with the type of government?

S. No	Practice in the country	Type of Government
I.	All citizens are treated equally before law	Dictatorship
II.	The government refers to the religious leader for each and every decision it takes.	Monarchy
III.	After the queen's death, her son became the new king.	Democracy
IV.	The ruler is not bound to follow any Constitution. He makes all the decisions as per his choice.	Theocracy

6. Below is a list of countries. Find out the types of government these countries have:

S. No	Country	Type of Government
1	Bhutan	
2	Nepal	
3	Bangladesh	
4	South Africa	
5	Brazil	

7. What are possible hurdles in a democracy in achieving its values and ideals? How can they be overcome?
8. Democracy is different from monarchy and dictatorship. Explain.

The Constitution of India — An Introduction

CHAPTER 10

I would like to point out that if we are able to act according to the Constitution which has been adopted..., I am sure we shall be able very soon to make our country great. This is a goal which is within our power to reach, but its realisation would require hard physical and mental labour and above all great moral regeneration.

We have prepared a democratic Constitution. But the successful working of democratic institutions requires in those who have to work with them willingness to respect the viewpoint of others, capacity for compromise and accommodation.

— Dr. Rajendra Prasad, first President of India

Fig 10.1. Glimpses from the Republic day Parade



The Big Questions ?

1. What is a constitution, and why do we need one?
2. How was the Indian Constitution prepared?
3. How did our freedom struggle and civilisational heritage influence the Constitution?
4. What are the key features of the Constitution of India? Why is it still relevant, even though it was written more than seventy years ago?



0781CH10

Helium
is a gas that
doesn't react
with paper or
ink, helping to
preserve the
Constitution
over time.

It was yet another chilly January morning in Delhi, much like every Republic Day. Ma's voice echoed through the house, "Wake up! It's time, or you'll miss the parade!" Papa, already up, switched on the television to Doordarshan and called out, "Kumar, Niharika, come quickly! The parade has started!" The children jumped out of their warm beds, rushing to sit in front of the television, eager not to miss even a moment of the Republic Day Parade.

The sight of the majestic marching bands, vibrant displays, and the unfurling of the tricolour at Kartavya Path filled the room with pride and excitement.

This day carries a deep significance—it marks the coming into effect of the Indian Constitution on 26 January 1950.

The book in the picture is our Constitution. To keep it safe, it is carefully preserved in a **helium**-filled glass case in Parliament. But what exactly is a constitution, and why is it so important?



Fig. 10.2. The Constitution of India carefully preserved in a helium-filled glass case



LET'S REMEMBER

Recall that in Grade 6, we saw the meaning of the word 'constitution'—a document that lays down the basic principles and laws of a nation. In small groups of three, list all the questions that come to your mind about a country's constitution.

The Constitution of India is the document that many of the important officials of our country pledge to uphold. The president takes an oath to preserve, protect, and defend it. The prime minister, council of ministers, and judges promise to follow its provisions.

What Is a Constitution?

A simple answer is that it is a document that spells out a nation's basic principles and laws. It lays out:

- the framework of the three organs of the government (legislature, executive, and judiciary) and their roles and responsibilities;
- checks and balances amongst the three organs of government to ensure fairness, responsibility and accountability;
- the rights and duties of the citizens;
- an outline of the long-term goals and aspirations of the nation.

Why do we need a constitution?

LET'S EXPLORE

Imagine that your school has reached the final tournament in kabaddi at the state-level. The opponent is a strong team that has won the tournament two years in a row. They are aiming to win a third time, a hat-trick. The match is on, and a player from your team has just got one of the players from the other team 'out'; then a dispute breaks out. The player from the other team insists that she had already crossed into her team area before your team player caught her. The referee has seen that the player from the other team was indeed 'out'. To settle the dispute amicably, she pulls out a little official rulebook. The team captains confer with the referee and look at the rules. They then agree that the player was indeed 'out', and your team has won the state-level trophy.



Discuss in your group what might have happened if there was no official rulebook that the referee and the team captains could refer to. What is required to ensure everyone agrees to abide by the rulebook? What might happen if the team captains did not agree to refer to the rulebook at all?

Think of a game that you play often and list the rules you follow. Each group will then present their set of rules to the rest of the class. Listen to each presentation, discuss the rules, and work together to decide on a common set of rules for the game. What challenges do you face in reaching a consensus on rules that everyone agrees with?

What could be the 'rulebook' for a country? How would it be made?

Our Constitution is something like a rulebook for the country.



DON'T MISS OUT

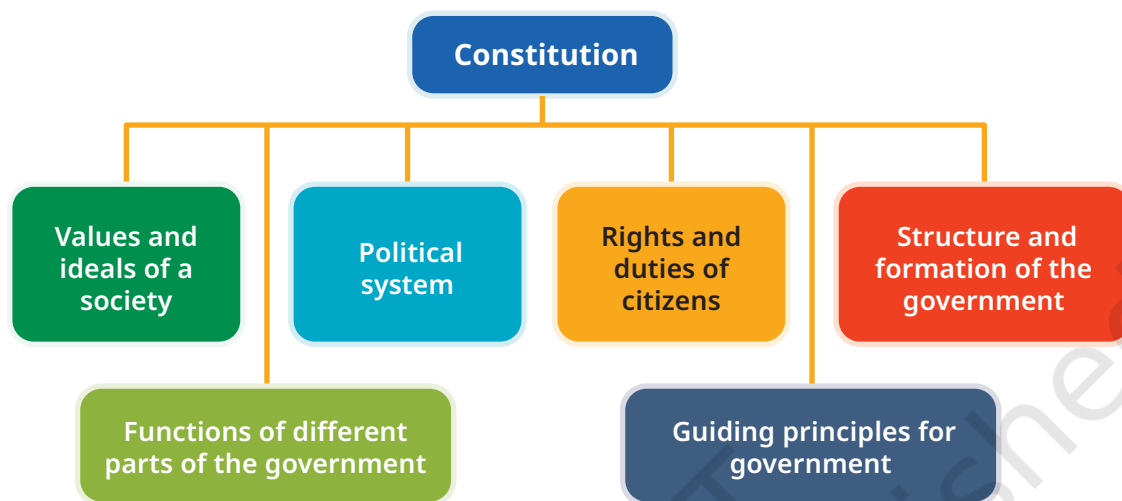
Just as your textbook has many sections and chapters, the Constitution of India has 25 parts and 12 schedules. Each part has sections within it. It is the world's largest written constitution. When it came into effect, it had 22 Parts and 8 schedules. You don't need to remember these numbers, but can you guess why they have increased since 1950?

The basic rules and principles in a constitution determine what kind of government will be there, how it will be formed, and how it will function. This includes many principles we saw in the previous chapter, such as how the legislature, executive and judiciary are formed and how they work. A constitution describes, for example, how laws are to be made and implemented, who elects the executive, how the judiciary is made, and what rights and duties individual citizens have.

Many constitutions, including the Indian Constitution, also state the values and ideals the country is committed to — for instance,

equality and justice for all, fraternity, pluralism and freedom. In fact, it is these values and ideals that usually form the basis for the laws and principles in a constitution.

Some of the important things that most constitutions contain:



Writing the Constitution of India



I wish your labours success, and invoke Divine blessings that your proceedings may be marked not only by good sense, public spirit, and genuine patriotism, but also by wisdom, toleration, justice, and fairness to all; and above all with a vision which may restore India to her pristine glory, and give her a place of honour and equality amongst the great nations of the world.

— Dr. Sachidananda Sinha,
*President of the Constituent Assembly at the start of
the process of the writing of the Constitution*

While India was struggling for independence from British rule, it was necessary to start planning for how we would govern ourselves. There were many important questions to be answered in a large, culturally diverse and complex country like India: What type of government should we have? What rules and principles should guide us? Who should have the right to vote? How should we decide on disputes?

To answer these and many other questions, a Constituent Assembly was formed in 1946, initially with 389 members (later reduced to 299 after the Partition of India), of which 15 were women. These members represented India's diverse regions, professions, and social groups.

How was our Constitution developed?

The Indian Constitution was developed and written by the Constituent Assembly over a period of almost three years. It was formed on 9 December 1946, with its members elected by the legislative assemblies of the provinces (whose members had been, in turn, elected by the people). Dr. Rajendra Prasad was the Chairman of the Constituent Assembly. The work was completed on 26 November 1949, and the resulting document was adopted as the Constitution of India on 26 January 1950, which is why we celebrate this day annually as Republic Day.

The initial text of the Constitution was prepared by a Drafting Committee chaired by Dr. B.R. Ambedkar, an eminent social reformer and the first Law and Justice minister of independent India (Fig. 10.3).

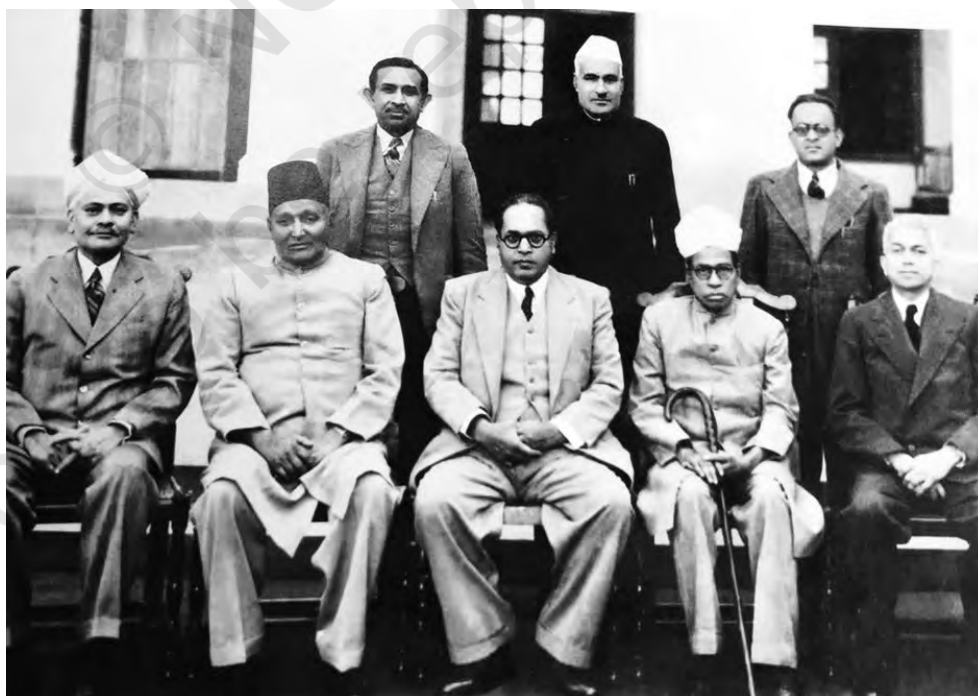


Fig. 10.3. Dr. B.R. Ambedkar (seated, centre) with a few other members of the Drafting Committee.

LET'S EXPLORE



In small groups, try to find out the names of people from your region who may have participated in the making of the Constitution. What sources can you use to gather this information? (Hint: Look for books in your school or local library. You could also ask your teacher, parents and other elders in the neighbourhood. Explore <https://sansad.in/ls/about/constituent-assembly>)

What Shaped and Influenced the Indian Constitution?

While the Constitution was developed by the Constituent Assembly, it had many influences. The experience, ideas and ideals of the Indian freedom movement were a significant influence. India's civilisational heritage and culture also played a key role. Useful learnings from constitutions of other countries were also considered.

Influence of the Indian Freedom Movement

Many key ideals and values of the Indian freedom struggle were enshrined in the Constitution. The Constitution was the cornerstone for an independent India. A number of leaders of India's freedom movement were members of the Constituent Assembly and, therefore, carried their experience and ideas from the freedom struggle to the Constitution.

Some of these values and ideals are: equality of all, justice for all, freedom, fraternity, preservation of India's cultural heritage, and the idea of using the Constitution as a tool for and means of achieving these values and ideals.

The experience and learnings from the freedom struggle also provided answers to many of the 'how' and 'what' questions:



Fig. 10.4.1. Workings of the Constituent Assembly



Fig. 10.4.2. and 10.4.3. Workings of the Constituent Assembly

- How do we make sure that every adult citizen has a right to vote?
 - How do we ensure that the powers of the executive, legislature and judiciary are kept separate?
 - How do we guarantee that every individual's fundamental rights are respected?
- What should be the process if we want to amend the Constitution?
 - What should be the relationship between the Central and State governments? And so on.
- We will get glimpses of how all these have been structured in the Constitution later in this chapter.

India's civilisational heritage and history



LET'S REMEMBER

In the chapter on “Unity in Diversity, or ‘Many in the One’” in Grade 6, we studied what makes India one country and the underlying unity that embraces the diversity.

This idea of India being one country is embedded in the Constitution.

Some fundamental principles are embedded in our culture — acceptance of the idea that people could have different points of view, Nature as sacred, the pursuit of learning and knowledge, respect for women, the concepts of *vasudhaiva kutumbakam* (“the world is one family”) and *sarve bhavantu*

sukhinah (an invocation for the well-being of all creatures). All these principles find a place in our Constitution though you might find them expressed a little differently.



LET'S REMEMBER

Earlier, we described various types of governance systems that we experimented within India—from the *janapadas*, *sanghas*, rulers and their councils, Kautilya's concept of *saptāṅga*, *rājadharmā* and so on. On the whole, there has been a great emphasis on the duties and role of the people in governance.

It was, therefore, quite natural that the Constitution makers would incorporate these ideas of our civilisational heritage into our Constitution—‘Fundamental Duties’, for instance, are part of it.

Learnings from across the world

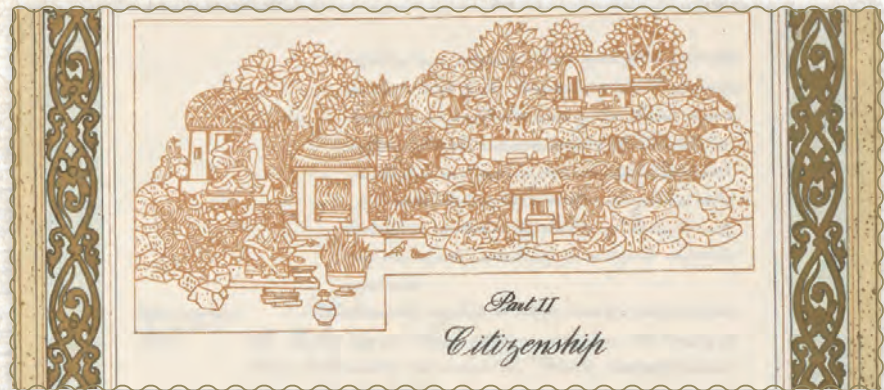
In addition, in the Indian tradition of *ā no bhadraḥ kratavo yantu viśhwataḥ*—“Let noble thoughts come to me from every side”—the Constitution makers studied the constitutions of France, USA, UK, Ireland, Australia, and other countries that have a democratic system, to explore their usefulness for our context. For example, the ideals of ‘liberty, equality, fraternity’ were adopted from France’s constitution (which enshrined them from the French Revolution of 1789); the idea of the Directive Principles of State Policy (which we will study shortly) was inspired by the Irish Constitution; and the American Constitution helped shape the concept of an independent judiciary.



Fig. 10.5. This ‘Declaration of the Rights of Man and of the Citizen’, which focused on equality, liberty and justice for all, was formulated during the 1789 French Revolution. It helped the spread of such ideals in many parts of the world; many constitutions (including the French one) adopted or adapted its values and principles.

Some illustrations in the Constitution of India

Fig. 10.6. A scene from an ancient gurukula



Part II
Citizenship



Fig. 10.7. A scene from the Rāmāyaṇa: Rāma's conquest of Lanka and recovery of Sītā



Fig. 10.8. A scene from the Mahābhārata: Kṛiṣṇa propounding the Gītā to Arjuna

Part IV
Directive Principles of State Policy



Fig. 10.9. A scene from Orissan sculptures

Part XI
Relations between the Union and the States



Fig. 10.10. An image of Natarāja

Fig. 10.11. Scenes from a Mahabalipuram bas-relief: Bhagīratha's penance and the descent of Gangā

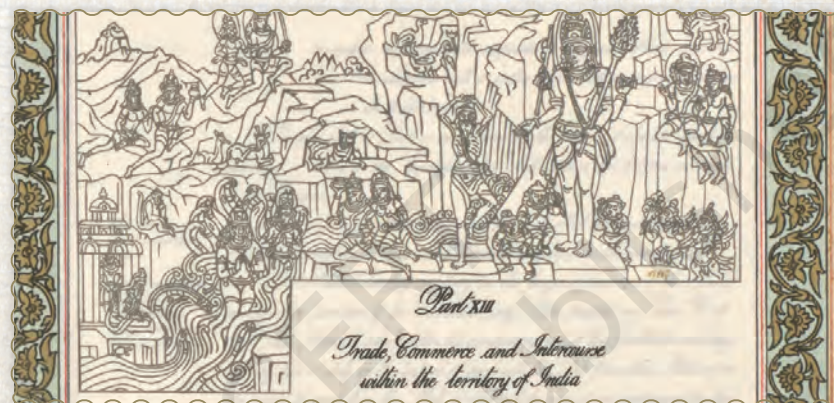


Fig. 10.12. A scene with Akbar and Mughal architecture

Fig. 10.13. A scene depicting Nālandā, one of India's ancient universities



Key Features of the Constitution of India

Before we get acquainted with the main features of the Constitution, let us revisit some of the concepts we saw in Grade 6.



LET'S REMEMBER

- There are three organs of government—legislature, executive and judiciary—and the ‘separation of powers’ is essential to their effective working.
- The legislature makes the laws.
- The law is implemented by the executive, which is headed by the prime minister.
- The judiciary ensures that all laws made are in accordance with the Constitution. It also decides whether a law has been broken and what punishment is necessary.
- We have a three-tier system of government—central, state and local (Panchayati raj system).
- Some functions and responsibilities are reserved for the central government, and others are assigned to the state government.

The Constitution addresses these points comprehensively. It clearly defines the roles, functions, responsibilities, and accountability measures for each organ of government. The electoral system has been laid down to ensure that every eligible citizen of the country is enabled to vote.

Other core aspects of the Constitution are the Fundamental Duties, Fundamental Rights and the Directive Principles of State Policy. The infographic (Fig. 10.14) provides us with examples of a few of the Fundamental Duties and Rights (which are listed in full in the beginning of all NCERT textbooks). The Directive Principles of State Policy (DPSP, as they are popularly called) represent the essence of the social and economic vision that the framers of the Constitution had for India. The examples we present in the infographic illustrate the principles they wanted governance to follow.



DON'T MISS OUT

Directive Principles are goals that the government should try to achieve. They reflect the direction they wished the country take to make India better for all; for example, everybody in the country must have a good standard of living. But if the government does not make efforts to follow this, one cannot go to a judge and complain about it. The DPSP are more like guidelines than strict rules. Fundamental Rights, on the other hand are promises that must be kept. If someone treats you unfairly because of who you are, you can actually go to court and the judge can help you.

The people who wrote our Constitution created this system on purpose. They wanted some rights that could be demanded immediately (Fundamental Rights) and some bigger goals (Directive Principles) that might take time to achieve as our country progressed.

LET'S EXPLORE

Read the quotation given below. Which article of the Constitution do you think she was referring to? Why do you think she said that the equality of women was not a new concept for India? Discuss in the class.



Sir, the women of India are happy to step into their rightful heritage of complete equality with men in all spheres of life and activity. I say so because I am convinced that this is no new concept which has been postulated for the purposes of this Constitution, but is an ideal that has long been cherished by India, though social conditions for some time had tragically debased it in practice. This Constitution affirms that ideal and gives the solemn assurance that the rights of women in law will be wholly honoured in the Indian Republic.

— Begum Aizaz Rasul, 22 November 1949,
during the Constituent Assembly's debates

- Right to Equality (Article 14. Equality before law)
- Right to Freedom (Article 21. Protection of life and personal liberty)
- Right against Exploitation
- Article 21-A. (Right to education)

Fundamental Rights

Directive Principles of State Policy

- Article 41: Welfare Government
- Article 44: Uniform Civil Code
- Article 38: Social, Political, and Economic Justice
- Article 48-A: Environment and Wildlife Protection
- Article 49: Protection of monuments, places, and objects of national importance
- Article 47: Nutrition, standard of living, and public health

Fundamental Duties

- to abide by the Constitution and respect its ideals and institutions, the National Flag, and the National Anthem;
- to defend the country and render national service when called upon to do so;
- to value and preserve the rich heritage of our composite culture;
- to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- if a parent or guardian, to provide opportunities for education to his or her child or, as the case may be, ward between the age of six and fourteen years;

Fig 10.14. A glimpse of how the parts of the Constitution are organised

The Constitution is a Living Document

Our Constitution makers realised that a need for new laws and rules would emerge over time. For example, 'Part IV-A: Fundamental Duties' was added in 1976. However, we must remember that any changes (called 'amendments') to the Constitution are rigorously debated in the Parliament before they are accepted. Some require a debate in legislative assemblies as well. Many times, opinions are sought from the general public. Some changes can also be initiated by popular movements.

LET'S EXPLORE

- There was a time when people were not allowed to fly the national flag at their homes. This changed in 2004 when a citizen felt it was his right to express pride in his country and challenged the rule in court. The Supreme Court agreed, saying that flying the flag is part of the Fundamental Right to Freedom of Expression. We can now fly the tricolour with pride, keeping in mind that it should never be dishonoured.
- We studied the Panchayati Raj System in Grade 6. This was not a part of the original Constitution; it was integrated in it in 1992 with the 73rd Constitutional Amendment Act.
- Can you find out the amendments made to the Constitution in the past ten years?

The government also creates opportunities for people to provide feedback on proposed laws or changes in rules. See the highlighted portion on the next page.



DON'T MISS OUT

The Indian Constitution is not just a legal document but also a work of art. Calligrapher Prem Behari Narain Raizada wrote its text by hand, while Nandalal Bose and his team illustrated its pages with scenes from Indian history, from Mohenjo-daro to the freedom movement (see Figs. 10.6 to 10.13).



Inviting comments on draft amendments to the Aadhaar Authentication for Good Governance Rules, 2020

Government invites feedback on amendments to the Aadhaar Authentication for Good Governance Rules, 2020 to enable performance of Aadhaar authentication by entities other than Ministries and Departments of the Central Government and State Governments for prescribed purposes.

Home / Aadhaar IT Rules

SUBMISSION CLOSED

ABOUT

In line with Government's commitment to make Aadhaar people-friendly and enable its voluntary use to perform Aadhaar authentication under any law or as prescribed, it is proposed to provide for preparation of the proposal for performance of such authentication by entities other than Government Ministries and Departments for prescribed purposes.

Through an amendment enacted in 2019 to the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, it was provided under section 4(4) of the Act that entities may be allowed to perform authentication if the Unique Identification Authority of India (UIDAI) is satisfied that the requesting entity is compliant with standards of privacy and security specified by regulations and is permitted by law to offer authentication services or seeks authentication for a prescribed purpose. Pursuant to this amendment, the said purposes were prescribed by the Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Rules, 2020. These rules provided that Aadhaar authentication by requesting entities may be allowed in the interest of good governance, preventing leakage of public funds, promoting ease of living of residents and enabling better access to services for them, for the purposes of usage of digital platforms to ensure good governance, prevention of dissipation of social welfare benefits and enablement of innovation and the spread of knowledge.

The amendments now proposed to the rules will provide for preparation of the proposal for performance of Aadhaar authentication by entities other than Ministries and Departments of the Central Government and State Governments for prescribed purposes. Further, it is proposed to include the promoting of ease of living of residents and enabling of better access to services for them as one of the prescribed purposes.

The draft amendments are placed on the Ministry's website at <https://www.meit.gov.in/content/draft-amendments-aadhaar-authentication-good-governance-rules-2020-enable-performance>. The text of the rules as they would stand after effecting the amendments (with the amended portions of the text shown in colour) is also placed at <https://www.meit.gov.in/content/draft-amendments-aadhaar-authentication-good-governance-rules-2020-enable-performance>.

Feedback is invited from the public on these draft amendments. Submissions will not be attributed to individuals publicly and will be held in fiduciary capacity to enable persons submitting the feedback to provide the same freely.

Timeline:

Start Date: 20th April 2023

End Date: 20th May 2023

Fig 10.15

Understanding the Preamble: The Guiding Values of the Constitution of India

The Constitution's core values are the guiding principles for policies and decision-making, which the government is expected to follow. Citizens are also expected to practise them to the best of their ability. These guiding values are present across the Constitution, but their essence is written in the Preamble. So, let us study the Preamble, which is a fitting end to this chapter.

PREAMBLE OF THE INDIAN CONSTITUTION

WE, THE PEOPLE OF INDIA

The Constitution has been drawn up and enacted by the people through their representatives, and not handed down to them by a king or any outside powers.

SOVEREIGN

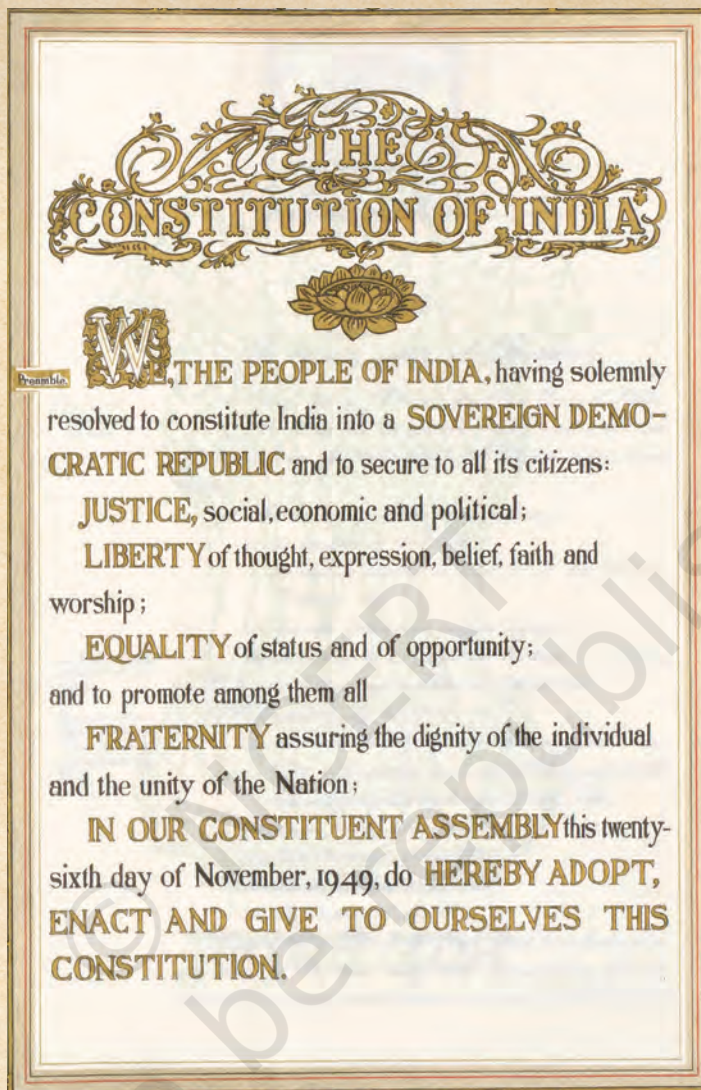
The people have supreme right to make decisions on internal as well as external matters. No external power can dictate the government of India.

SOCIALIST

Wealth is generated socially and should be shared by the society. Government should regulate the ownership of land and industry to reduce socio-economic inequalities.

SECULAR

Citizens have complete freedom to follow any religion. But there is no official religion. Government treats all religious beliefs and practices with equal respect.



DEMOCRATIC

A form of government where the people enjoy equal political rights, elect their rulers and hold them accountable. The government is run according to some basic rules.

FRATERNITY

All of us should behave as if we are members of the same family. No one should treat a fellow citizen as inferior.

REPUBLIC

The head of the state is an elected person and not a hereditary position.

JUSTICE

Citizens cannot be discriminated on the grounds of caste, religion and gender. Social inequalities have to be reduced. Government should work for the welfare of all, especially of less advantaged groups.

LIBERTY

There are no unreasonable restrictions on the citizens in what they think, how they wish to express their thoughts and the way they wish follow up their thoughts in action.

EQUALITY

All are equal before the law. The social inequalities have to be ended. The government should ensure equal opportunity for all.

Note: The terms 'Socialist' and 'Secular' were added in the Preamble through the 42nd Constitutional Amendment in 1976

Fig. 10.16. Preamble of the Indian Constitution

LET'S EXPLORE



Below is the list of features given in the Preamble. Read them closely from the image above and write down examples of the application of these values in daily life around you. Two have been completed to help you with the exercise.

Features of the Preamble	How we see them in our daily lives
Sovereign	
Secular	A person does not have to take permission from the State to practice the rituals of their religion if the practice does not interfere with anyone else's day-to-day life.
Republic	
Justice	The State provides equal opportunity to all in jobs, regardless of gender, caste, religion, etc.
Liberty	
Equality	
Fraternity	

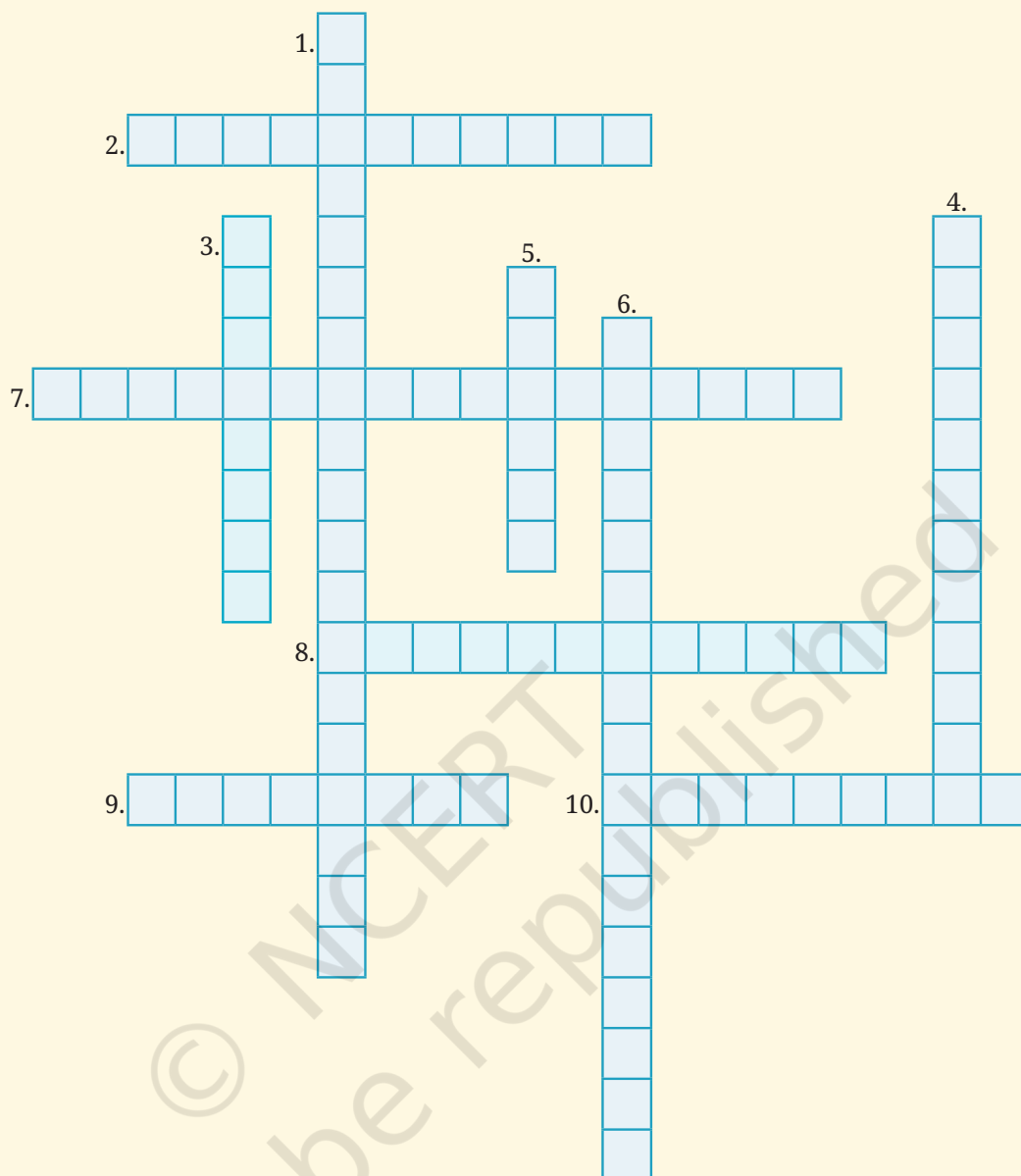


Before we move on ...

- The Constitution of India is a guiding book or 'rulebook' which protects the rights of all citizens. Citizens are also expected to follow the fundamental duties of the Constitution.
- The rich civilizational heritage of India, the freedom struggle and good practices from the constitutions of other countries served as the building blocks of the Indian Constitution.
- Its key features define the social, economic, and political structure of the country and its parliamentary form of government.
- It is a living document that can be improved as per the country's needs.

Questions and activities

1. “The Constituent Assembly had representatives from diverse backgrounds in India.” Why do you think it was important to have a diverse set of representatives from all over India?
2. Read the statements below carefully and identify which key features / values in the Constitution of India are reflected in each statement.
 - a. Sheena, Rajat, and Harsh are standing in a line. They are excited to cast their first vote in the general elections.
 - b. Radha, Imon, and Harpreet study in the same class in the same school.
 - c. Parents must make arrangements to ensure their children’s education.
 - d. People of all castes, genders, and religions can use the village well.
3. It is said that ‘All citizens in India are equal before the law’. Do you think this is a fact? If yes, why? If not, why not? Formulate your arguments.
4. You have learnt that ‘India is the only country that provided universal adult franchise to its citizens from the beginning.’ Can you explain why India did it?
5. How did the freedom struggle inspire the making of the Constitution of India? How did India’s civilisational heritage inspire some of the key features in the Constitution of India? Explain.
6. Do you think we, as a society, have achieved all the ideals of the Constitution? If not, what can we each do as citizens to move our country closer to these ideals?
7. Read the clues carefully to solve the crossword on the next page to uncover important concepts from the Indian Constitution.

**Across**

2. The branch of government that makes laws.
7. The part of the Constitution that outlines the duties of citizens towards the country.
8. The highest court in India that protects the Constitution.
9. A system where the head of state is elected, not hereditary.
10. The process by which the Constitution can be changed over time.

Down

1. The group of people who wrote the Indian Constitution.
3. The statement at the beginning of the Constitution that tells us the values it upholds.
4. The document that lays out the rules and laws of a country.
5. The gas used to preserve the original Constitution safely.
6. Basic rights given to every citizen, like freedom and equality.

From Barter to Money



The importance of money flows from it being a link between the present and the future.

*– John Maynard Keynes
20th century economist*



Fig. 11.1

The Big Questions ?

1. How did exchange take place before money?
2. Why did money come into existence?
3. How has money transformed into various forms over time?



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In the theme “Tapestry of the Past”, you read about the crops that people grew, such as food grains or goods they made like carnelian beads. How do you think they exchanged these goods for things that they needed?

Barter System:
a way of exchanging goods and services without using money.

Money:
the common tool that everybody accepts and uses in order to make or receive payments in exchange for goods and services.

Transaction:
a piece of business that is done between people, especially an act of buying or selling.

Commodities:
Products or goods that can be traded, bought and sold.

People exchanged goods or services for other goods and services. This system is called the **barter system**. How did this work? Suppose you need a pencil and have an extra eraser. Meanwhile, your classmate forgot to bring their eraser but has an extra pencil. You could exchange your extra eraser for the extra pencil that your classmate has. Wouldn't this satisfy your and the classmate's needs? This is how the barter system works.

Today, we use coins and notes to buy and sell things. People also use their mobile phones and computers for such **transactions**.

The barter system was the earliest form of exchange. There is a lot of evidence of it from around the world. People used **commodities** such as cowrie shells, salt, tea, tobacco, cloth, cattle (cows, goats, horses, sheep), seeds, etc.

Fig. 11.2.1. Stone Money: Giant discs of rock – called Rai stones – were used as money on the Yap Island, in the Pacific Ocean country of Micronesia.



Fig.11.2.2. The Aztec copper Tajadero (Spanish word for chopping knife) was a form of money used in Central Mexico and parts of Central America.

Fig. 11.2.3. Tevau (Red feather coil made from birds' feathers) used as money on the Solomon Islands.



Why Do we Need Money?

LET'S EXPLORE



Imagine that you are a farmer and that people use a barter system where you live. You need a whole variety of things—a pair of new shoes, a sweater, and medicines for your grandmother. But you only have an ox that you can

spare. How would you be able to exchange the ox for all the different things you need from different people or places? What difficulties are you likely to face?

For one, you would have to find someone who needed an ox. Now, swapping your ox for a pair of shoes would hardly be a fair exchange! You may have had to go through a series of exchanges—for example, find someone to exchange your ox for several bags of wheat. You would then have to transport all that wheat to several places; first, find someone willing to exchange a part of the wheat for shoes, another person for the sweater, and yet another for the medicines.



In each of these cases, a discussion would take place to arrive at the fair amount of wheat that you could exchange for shoes or for the sweater.



You would have to take the leftover bags of wheat and find a place to store them safely. The next time you needed something, you would have to carry the bags of wheat with you again!



THINK ABOUT IT

What are the different types of difficulties you encountered in the situation above?

In the farmer's story, imagine he finds someone who is willing to trade a pair of new shoes, a sweater, and

medicines—all in exchange for his ox. Do you think it would be easy to come across such a situation?

Just like the farmer, people who depended on the barter system would face many problems in making an exchange in their everyday lives. They would have to find someone who wants the exact item that they want to give, and in return are also able to offer exactly what the other party wants. This scenario is called **double coincidence of wants**.

Even if there are two people who want each other's goods and are also willing to make an exchange, other issues could arise—in what proportion should the two goods be exchanged? In such cases, it becomes difficult to compare the value of one good against another. If one of the people feels that the exchange is disadvantageous, they would not be interested in the exchange. This is because there is no **common standard measure of value**.



THINK ABOUT IT

What are the instances of double coincidence of wants in the above example?

Even if there are two people who want each other's goods and are also willing to make an exchange, other issues could arise—in what proportion should the two goods be exchanged? In such cases, it becomes difficult to compare the value of one good against another. If one of the people feels that the exchange is disadvantageous, they would not be interested in the exchange. This is because there is no common standard measure of value. In the situation given above, what are the cases where you could encounter the lack of a common standard measure of value?

Similarly, you cannot exchange only a part of the ox for a sweater; this is the problem of **divisibility**. Taking the ox everywhere is a problem and leads to the problem of **portability**. You solved part of the problem by exchanging

Double coincidence of wants: an economic concept that describes a situation where two people each have something the other wants and can exchange them directly.

Common standard measure of value: an agreed-upon worth for a transaction that helps in determining the value of goods and services in the economy.

Divisibility: The capacity of an object or material to be split into pieces or portions.

Portability: The ability of an object or material to be carried or moved from one place to another.

the ox for bags of wheat, but you cannot store the wheat for long; it would rot or get eaten by rats! Thus arises the problem of **durability**.



THINK ABOUT IT

What are the different ways in which money would make the above situation easier for the farmer?



DON'T MISS OUT

Durability:
Trait of an object or material that indicates its longevity and ability to withstand damage due to which it can be stored for a longer time period.

Although money has replaced traditional barter systems all around the world, there are some that still exist today! One of them is the Junbeel Mela (*jun* means moon in Assamese and *beel* means wetland), a three-day annual socio-cultural fair at Junbeel in Morigaon district of Assam. Interestingly, the mela begins with the Agni Puja or worship of fire, a prayer for universal wellbeing.



Fig. 11.3



Fig. 11.4

Beginning in the 15th century, the chiefs of the Tiwa, Karbi, Khasi, and Jaintia tribal communities of Assam and Meghalaya would gather every year to discuss political issues and to maintain friendly relationships. Members of these communities began to gather around this event and soon it turned into a fair, where people would bring their produce and began exchanging them among each other.

This continues to be an important socio-cultural event even today. Bartering begins early in the morning, with the trade of local products such as roots, vegetables, fruit, herbs, and spices. Also seen at the fair are handmade goods and artifacts, made from natural materials sourced



Fig. 11.5

from the forests of the hilly region. These are often exchanged with people from the plains for rice cakes, and other types of food that cannot be grown in the hills.

- **Book exchange:** Think of a fun club where you can trade your old books with friends! It's like a treasure hunt for stories. You bring books you've read and pick new ones from a big collection. For example, you might swap your exciting jungle adventure book for a friend's mystery story. It's a cool way to discover new adventures without spending any money!



Fig. 11.6

- One common example is the **exchange of old clothes** for new utensils, a practice that has persisted over the years. In this system, a vendor visits homes, offering

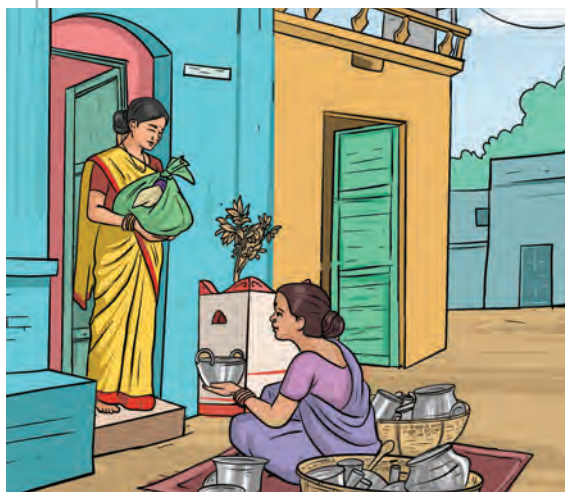


Fig. 11.7

households new utensils or other household items in return for their used clothes or fabrics. This exchange benefits both parties—households get rid of items they no longer need, while vendors collect materials that can be resold, repurposed, or recycled.

LET'S EXPLORE



The illustrations above show you some of the ways in which people practise barter today. Have you observed similar practices in your locality? What are the types of experiences people have in this process?

Basic Functions of Money

It is said that “necessity is the mother of invention.” As the types and numbers of things that were being exchanged grew, and the distances across which barter was beginning to take place became longer, it became clear that there was a need for a different system. A common *medium of exchange*



Fig. 11.8

would make trade easier and so, money came into existence. As more and more people began to use it for transactions—buying and selling goods and services—it became the accepted method of payment.

As we saw in the farmer’s story above, he could not store the wheat for long as it would rot or get eaten by rats.

If the farmer uses money instead of wheat as a medium of exchange, he can keep the money for a longer time and use it for making purchases later. So, money acts as a **store of value** that can be used later. Isn't it fascinating!

Money also serves as a **common denomination** that measures the value of goods and services, and enables the comparison of goods and services in terms of their prices.

For example, your parents pay money to the shopkeepers in exchange for various products. This money is used by the shopkeepers to pay salaries to their workers. The workers use the same medium to buy everyday essentials and other goods, pay their children's school fees, etc.



Fig. 11.9



THINK ABOUT IT

Suppose you need to buy a book. You have ₹50 in your pocket. You visit the bookshop in your neighbourhood where the shopkeeper tells you that the book is worth ₹100. What options do you have to buy the book today? Will you request the shopkeeper to allow you to make the rest of the payment later?

The fact that money is accepted as a way of making deferred payments makes money a **standard of deferred payment**.

The Journey of Money

LET'S EXPLORE

Look at the timeline given below. What are the changes in money that you observe?

Coinage

As you can see from the timeline, coins were among the earliest forms of money. During those times, rulers would issue coins that were used by the citizens of their respective kingdoms for transactions. So different kingdoms would have their own coinage. The **minting** and issue of coins was controlled entirely by the rulers. Over time, the coins of powerful rulers were accepted across various kingdoms and not just their own. This facilitated trade across geographies.

The coins were made from precious metals like gold, silver, and copper or their **alloys**. They were called *kārṣhāpaṇas* or *paṇas*. They had symbols punched on them called *rūpas*.

Minting:
The process of producing coins. A mint refers to a manufacturing facility that produces coins that are used as a nation's currency.

Alloy:
A metal made by combining two or more metallic elements. This makes the coin strong.

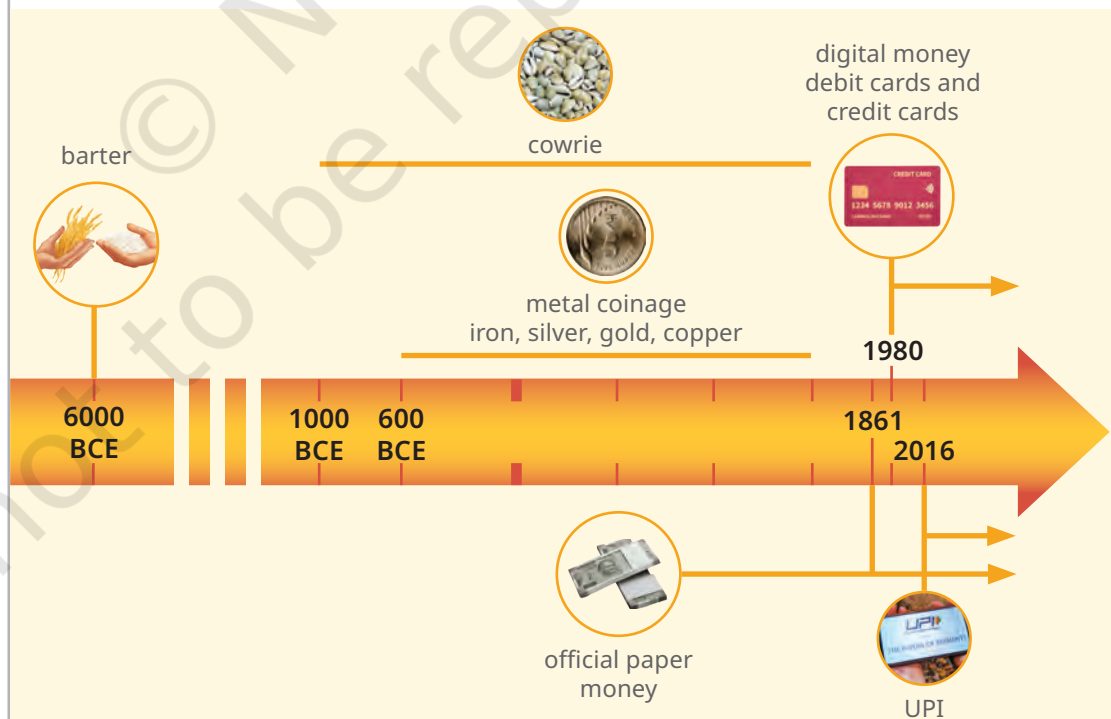


Fig. 11.10. Evolution of money in India - a broad timeline

Does this word sound familiar to a word we use for money today in India?



DON'T MISS OUT

- ◆ Is it not interesting that variations of the word 'paṇa' continue to be used in Tamil, Telugu, and Malayalam as *paṇam* and in Kannada as 'haṇa' for money?
- ◆ Alloys of silver and copper were used to mint coins. The coins we use today are also alloys consisting largely of iron. They contain other materials like chromium, silicon, and carbon in precise proportions. You will learn more about alloys in your science lessons.

In ancient times, the two sides of the coins—the head (**obverse**) and the tail (reverse)—had different kinds of symbols and motifs engraved on them. These included nature motifs like animals, trees and hills, and those of kings or queens, and deities.

For example, the coins of the Chalukyas had a *Varaha* image (avatar of Viṣṇu) on one side and decorated three-tiered parasol on the other.

Obverse:
the side
of a coin
or medal
bearing
the head
or principal
design.



Coinage from Chalukyas of Kalyana featuring Varaha (avatar of Viṣṇu) and Royal Parasol



Silver coin showing tiger emblem of Cholas (850–1279 CE)

Fig. 11.11

LET'S EXPLORE

The coins shown in Fig. 11.12 were found during excavations in Pudukkottai in Tamil Nadu. Their heads embossed are those of Roman kings. What conclusions can we draw from such a finding?



Fig. 11.12. Roman gold coins excavated in Pudukottai India

The use of coinage helped boost India's maritime trade with the world. For example, they were found in parts of Kerala and Tamil Nadu. This throws light on the trading activities of southern India with the rest of the world. Based on this finding, scholars conclude that the trade was in favour of India.



DON'T MISS OUT

1 anna was equal to 1/16 of a rupee! In 1947, one anna could buy a dozen bananas.



1 half
anna, 1942



1 quarter
anna, 1918



1 anna,
1943



1 paisa,
1945

Fig. 11.13

Today, we see coins of different sizes (shown below) for various denominations with both Hindi and English used on each coin. Special coins are also minted to mark important events for the nation.



DON'T MISS OUT

The ₹ sign was adopted by the Government of India in 2010. It was designed by Udaya Kumar from the Indian Institute of Technology, Bombay (Mumbai). The symbol is a mix of the Devanagari "Ra" and the Roman "R" with two parallel

horizontal stripes running at the top representing the national flag and also the “equal to” sign.



Coinage today



Coin with symbol marking India's 75 years of independence in 2021

Fig. 11.14

LET'S EXPLORE

Organise yourselves into groups of five students each. Take up a group project to collect old coins from family members, neighbours, shopkeepers, and so on. Document their various features—what are they made of, what is the year inscribed on the coins, what do you observe on the obverse and reverse sides of the coins. What can you guess from your observations? How would you know if your guesses are true?

While the barter system used non-metallic money as discussed above, coinage, that is metallic money, gave way to other forms of money!

Paper Money

LET'S EXPLORE

What do you think happened as coins began to be used for all types of exchanges, whether to buy vegetables or to buy some land? What problems could have come up?

As you may have imagined, it became difficult to carry a large number of coins. Storing the coins also became a problem. The search for a more suitable alternative ended

Currency:
System of money that is used in a particular country. For example, coins and paper notes that are used in India in terms of rupee is the Indian currency.

Denominations:
Units in which coins and paper notes are classified. For example, denominations of Indian currency include 50 paise, ₹1, ₹2, ₹5, ₹10, ₹20 coins and paper notes of ₹10, ₹20, ₹50, ₹100, ₹200, ₹500 and ₹1000.

with the use of paper money. Paper money or **currency** was first used in China and was introduced in India in the late 18th century.



Fig. 11.15. Uniface notes of Bank of Bengal (Left) and Ten rupee note from Bank of Bombay (Source: RBI)

While coins are used for smaller **denominations**, paper currency is used for higher denominations.

Today, most of the currency notes you see look like this ...



Fig. 11.16. Paper currency today

LET'S EXPLORE

Look at a 50 and a 100-rupee note. Can you identify the motifs depicting India's cultural heritage on the reverse side of the notes? Find out more about them.

→ Feel the surface of the notes. What special features of currency notes help visually impaired persons to identify the notes' denominations?



Fig. 11.17

Earlier in this chapter, we read that in ancient times coins were issued by rulers. Today, in India, we have a central authority called the Reserve Bank of India (RBI) that controls the issue of currency. It is not legal for anybody other than the RBI to issue currency.

New Forms of Money

As time has progressed and technology has advanced, other forms of money have come to be used today. Let's look at some of them.

Krishnappa sells seasonal fruit on a cart. Alongside the colourful fruit that he arranges neatly on his cart is a little card with a **QR code**.

His customers scan the QR code with their mobile phones and pay for their purchase digitally. The payment then goes directly into Krishnappa's bank account.



Fig. 11.18

Apart from tangible forms of money such as coins and paper notes, money has taken intangible forms that we cannot touch and feel. This is called digital money which is in electronic form. Have you observed other people around you making or receiving payments without using coins and notes? Different payment methods like debit cards, credit cards, net banking, UPI (Unified Payments Interface), etc., are also used for transactions. These mediums directly transfer money from one person's bank account into another. You will learn more about the modern methods of monetary transactions later.

QR Code: Stands for "quick-response" codes, these are collections of black and white squares, which are readable by devices like smartphones and QR scanners. They contain information about the receiver's bank account and are used for making monetary transactions.



Before we move on ...

- The barter system existed before money came into existence. A variety of commodities were used to facilitate exchange.
- The limitations of the barter system led to the development of money as a medium of exchange.
- Forms of money evolved through time, such as shells, coins, and paper currency. This evolution continues as we create new and easier ways to make and receive payments, including the QR code that you saw in the illustration above.

Questions and activities

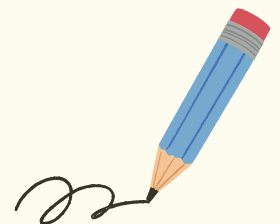
1. How does the barter system take place and what kinds of commodities were used for exchange under the system?
2. What were the limitations of the barter system?
3. What were the salient features of ancient Indian coins?
4. How has money as a medium of exchange transformed over time?
5. What steps might have been taken in ancient times so that Indian coins could become the medium of exchange across countries?
6. Read the following lines from the Arthaśhāstra.
“An annual salary of 60 *paṇas* could be substituted by an *āḍhaka* of grain per day, enough for four meals...” (One *āḍhaka* is equal to about 3 kg) What does this indicate about the value of one *paṇa*?
The fine for failing to help a neighbour was 100 *paṇas*. Compare this with the annual salary. What conclusion can you draw about the human values being encouraged through this?
7. Write and enact a skit to show how people may have persuaded each other to use cowrie shells (or other such items) as the medium of exchange.

8. The RBI is the only legal source that prints and distributes paper currency in India. To prevent illegal printing of notes and their misuse, the RBI has introduced many security features. Find out what some of these measures are and discuss them in class.
9. Interview a few of your family members and local shopkeepers, and ask them their preferences in making and receiving payments—do they prefer cash or UPI? Why?

Noodles

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*'Noodles' is our abbreviation for 'Notes and Doodles'!



Understanding Markets

CHAPTER

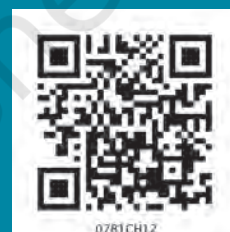
12

Prosperity emanates from the market that develops when people need goods and services that they can't create themselves.

– Adam Smith, 18th century economist

The Big Questions ?

1. What are markets and how do they function?
2. What is the role of markets in people's lives?
3. What role does the government play in markets?
4. How can consumers assess the quality of goods and services they purchase?



In the picture on the following page you will see people buying and selling goods — vegetables, fruits, clothes, groceries, mobile phones, refrigerators, and so on. These goods result from various types of economic activities — primary, secondary, and tertiary — that you studied in Grade 6. But how do these goods reach us?

Fig. 12.1

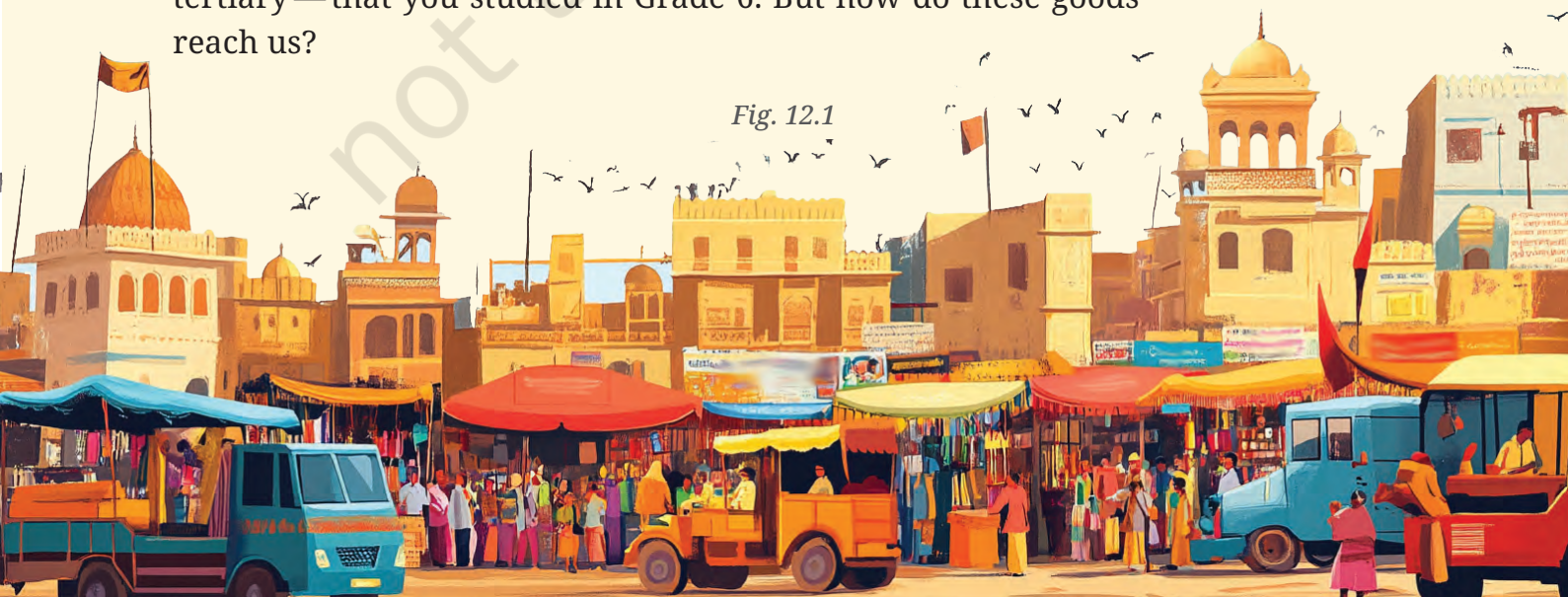




Fig. 12.2



Needs:

In economics, a need is something that a person requires to survive, such as food, water, clothing, and shelter

Wants:

In economics, a want is something that a person desires but is not essential for survival.

What is a Market?

A place where people buy and sell goods is called a market. It is also known as bazaar, haat (in Hindi), and *mārukatté* (in Kannada). What is it called in your region? This can be at a physical place or, as is becoming popular today, online. Goods and services become available to individuals, **households**, and **businesses** through markets. For a long time, people have relied on markets to fulfil their **needs** and **wants** for goods and services. In addition, markets connect people, traditions, and ideas.

Let's see an example of a market from 16th century India.

The Glorious Hampi Bazaar, Karnataka



Fig. 12.3. Hampi Bazaar today

Trade:
buying and selling or exchange of goods and services between people or countries

The Hampi Bazaar in Karnataka was one of the prosperous markets in the Vijayanagara Empire which was the centre of flourishing **trade**. The bazaar was located opposite the Virupaksha temple. The sheer abundance and prosperity of the city have been described in many foreign accounts.

The famous Portuguese traveller, Domingos Paes, called Hampi “the best-provided city in the world” due to the wide variety of products traded in the market— grains, seeds, milk, oil, silk, animals like cows, rabbits, horses, and even birds like quails and partridges. Another Portuguese traveller, Fernao Nuniz, wrote about the bazaar, “There were craftsmen, also, working in their streets, so that you

saw made there, golden jewels and gewgaws, and you will find all kinds of rubies and diamonds and pearls, with every other kind of precious stone for sale... sellers of cloths... they being of cotton... grass and straw in infinite abundance. I do not know who could describe it to be believed, so barren a country is this... it is a mystery how there should be an abundance of everything therein.”

LET'S EXPLORE

- Can you imagine what this bazaar must have looked like during its peak?
- Do you know of any old markets from your state? How would they be similar or different from today's markets? Discuss with elders in the family and community.

Let's learn more about markets and how they function!

LET'S EXPLORE

Observe the illustration. What are these people discussing? Imagine you and your partner as a buyer and a seller of guavas. Prepare a set of dialogues between both of you and present it in your class as a skit.



Fig. 12.4

Certain features are required for places to be called markets. As you observed in the figure 12.2 (on introductory big spread page number 248) every market has a buyer and a seller. They both need to agree on a **price** at which the transaction would take place. Price is an important feature in completing a transaction.

Price:

Price is the amount at which a buyer is willing to buy, and a seller is willing to sell particular goods or services.

Often the buyers and sellers negotiate and bargain to arrive at an acceptable price. What type of negotiation and bargaining took place in your skit?



THINK ABOUT IT

Can you think of a type of market where negotiation is less common and why?

Prices and Markets

What happens when there are many buyers and sellers in the market? How do prices respond to how buyers and sellers interact in the market?

In the figure given below, the seller wants to sell the guavas at ₹80 per kg. However, buyers may not be willing to buy at that price. If a buyer finds the price very high, he will ask for a price that he is willing to pay. The seller may not be willing to sell at the price offered by the buyer because it would not be profitable for him. The buyer and seller negotiate until a mutually agreeable price is reached. The transaction can then be completed. If such a point is not reached, i.e. the point where the buyer and the seller agree on a price, the transaction may not take place.

Let's see some scenarios below to understand this.

1. **What happens in case the seller fixes the price very high?**



Fig. 12.5

2. What happens in case the seller fixes the price very low?



Fig. 12.6

3. Over time the price of guavas is fixed at one that is just right, not very high for the buyer, not too low for the seller!

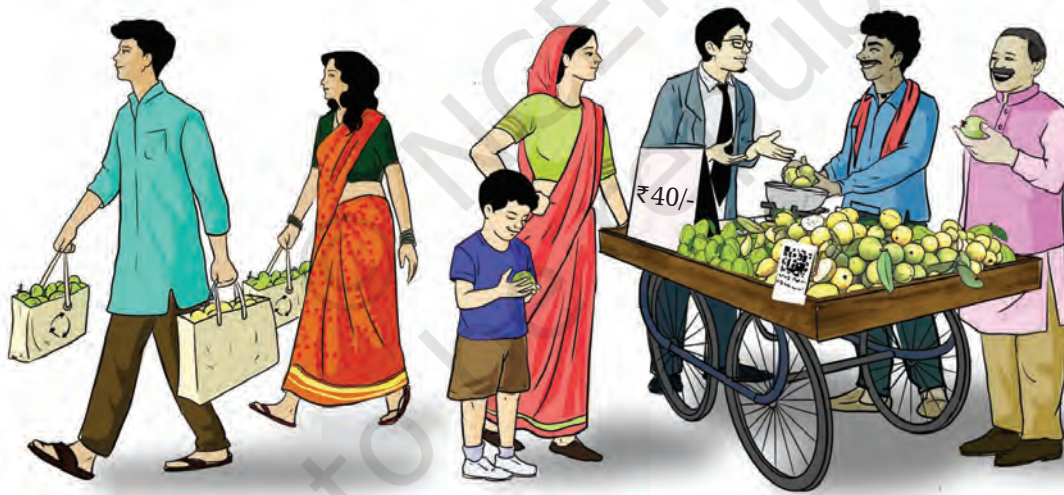


Fig. 12.7

Learning from all three scenarios, the seller can assess approximately what quantity of guavas are needed by the buyers and offer that quantity in the market in future.

Over time, the amount of goods offered by the sellers and the amount required by the buyers help determine the price of the goods that is just right, high enough for the seller, and low enough for the buyer.



THINK ABOUT IT

Vegetables are sold cheaper late at night at the weekly market compared to during the day. Why do you think this is so? Garment stores offer heavy discounts on woollen clothing at the end of the winter season. Why does this happen?

Markets Around Us

Markets are present everywhere and in various forms.

Physical and online markets

A physical market is where buyers can meet the seller physically, and purchase goods or services in exchange for money. This is the most common type of market. It includes weekly markets and haats where vendors sell vegetables, other essential items, and handicraft items lined up on a cart. Local markets with shops and buzzing with vendors selling street food, knick-knacks, and so on are also physical markets. There are also multi-storey buildings, i.e., malls in cities and towns spanning large areas with stores inside.

Today buyers and sellers need not necessarily meet in person to engage in a transaction. They can transact from a convenient location even thousands of kilometres away from each other.

They can use shopping applications (apps) or websites on a phone or a computer. These apps or websites are created by businesses that make available a wide variety of goods and services. We will read about how this works in a section below.

One can buy goods ranging from books, clothes, furniture, and grocery items to electronic items like TVs, mobile phones, and laptops, and get them delivered to their doorstep. **Manufacturers** can also buy components online to be used as

inputs for production of goods. Apart from goods, one

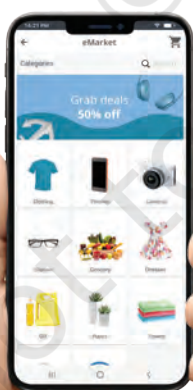
can also avail of services like online classes without having to step outside the home. Payments for such services can also be made online.

Inputs for production:

Materials or resources that are used in the production of goods and services.

Manufacturer:

A person or company that makes goods for sale



ADD TO CART

Fig. 12.8



THINK ABOUT IT

- ❖ What do you think are the pros and cons of online and physical shopping respectively? Explore this question from the point of view of both, sellers and buyers.
- ❖ Some services require in-person contact like tailoring and cannot be provided online. Can you suggest other services where physical markets are needed?

There are other types of markets that do not transact goods and services. One of them is the share or stock market.

Ask your family members, teachers, or members in your community about it. We will explore these concepts later in the year.



Fig. 12.9. Stock Market

Domestic and international markets

A market where goods and services are bought and sold within the geographical boundaries of the country is called a domestic market. For example, to print this book, paper was procured from big paper mills located all over India. The transaction between the buyer and the seller took place within the country.

International markets exist outside a nation's boundary; the sellers in one country **export** their products to another country, or the buyers in one country **import** products produced in another country. Thus, trade occurs across borders of countries.

Export:
Selling goods or services produced in one country to a buyer in another country.

Import:
Buying goods or services from other countries and bringing them into one's own country.

India's exports and imports around the world

India's exports:

1. **North America:** Outsourced services like software
2. **South America:** Chemical products
3. **Africa:** Pharmaceuticals
4. **Europe:** Engineering goods like machinery in food processing, boilers
5. **West Asia:** Refined petroleum products



India's imports:

1. **North America:** Aircraft and components
2. **South America:** Mineral ores like copper
3. **Africa:** Diamonds
4. **Europe:** Electrical equipment
5. **West Asia:** Crude petroleum, fertilizers
6. **South East Asia:** Vegetable oils

Fig. 12.10

DON'T MISS OUT

India was the world's largest importer of vegetable oils like palm oil, sunflower oil, and soybean oil in 2024. Most of the palm oil is imported from Malaysia, Indonesia, and Thailand.

Wholesale and Retail Markets

Several participants play their role in the smooth functioning of the markets.

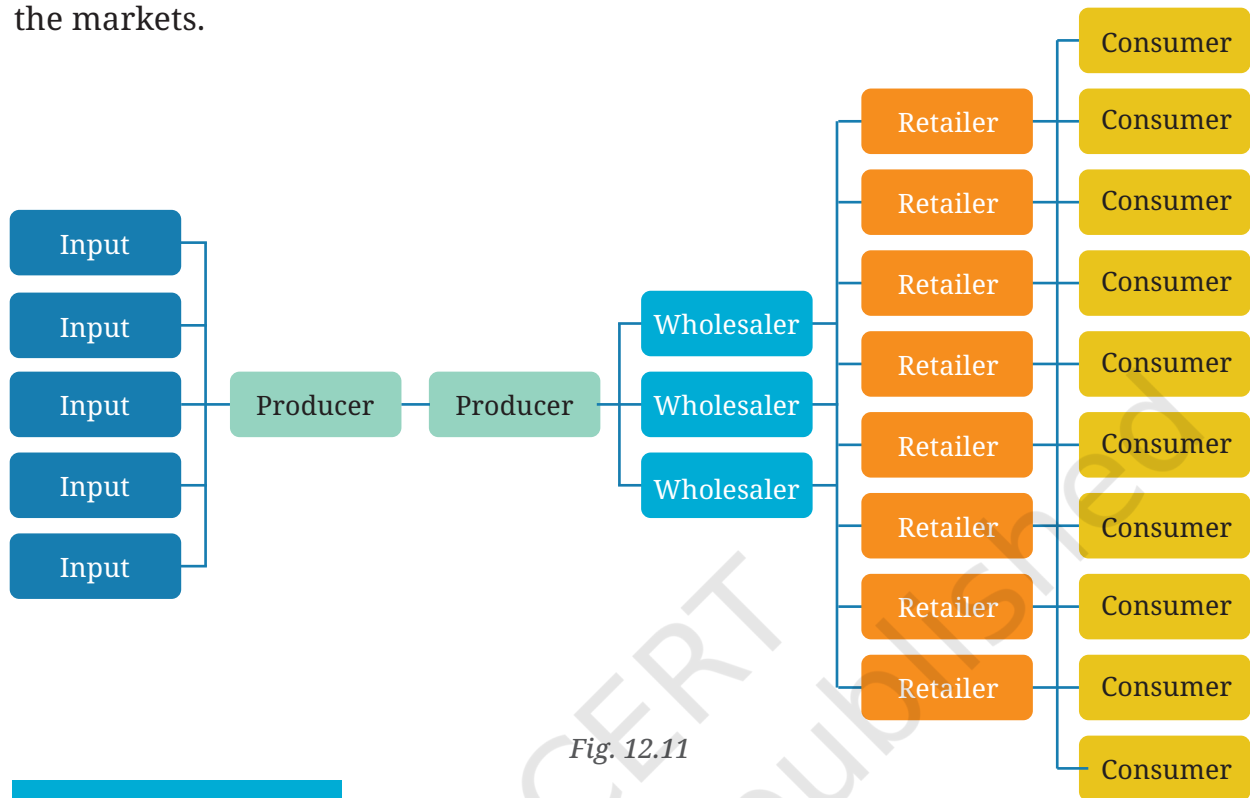


Fig. 12.11

LET'S EXPLORE

Observe the diagram and describe the flow of goods from the manufacturer/producer to the consumer. What is the role of the wholesaler and the retailer in the flow?



In the case of physical markets, wholesalers buy goods in large quantities from the producer or manufacturer of the product. For example, grains, vegetables, and fruits are bought by wholesalers directly from the farms. The produce is then stored in large warehouses called godowns. In the case of perishables, the warehouses



Fig. 12.12. Cold storage facility for vegetables

Cold storage:
Specialized warehouses or designed to maintain specific low temperatures to preserve perishable goods.

may also have **cold storage** facilities. They are then brought to markets called *mandīs*.



Fig. 12.13. Warehouse storing grains



Fig. 12.14. Large warehouses of wholesalers

Similarly, there exist wholesale markets for other commodities like chemicals, electronic items and components, construction materials, automotive parts, etc.



Fig. 12.15. Khari Baoli spice market, Old Delhi (spices and dry fruits)



Fig. 12.16. Flower market, Bengaluru

The wholesalers supply goods to the shops and stores located near households. These shopkeepers are called retailers. They sell goods to final consumers like us. Unlike wholesalers, retailers sell in smaller quantities, and the products are meant for consumption rather than resale. Retail stores also exist for services like salons, movie theatres, and restaurants. Retailers



Fig. 12.17. Johari Bazaar, Jaipur (gems and jewellery)

help increase the availability of goods and services to households. In some cases, it may be difficult for wholesalers to reach a large number of retailers because of distances and terrains. **Distributors** help to bridge this gap. Do you remember the middlemen for milk in the AMUL story from Grade 6?

However, the distribution channel is different in the case of online markets. Here manufacturers send bulk quantities of their products to the warehouse of the business that sells through online apps. Consumers buy the product from the online option (website or mobile application). These businesses are called aggregators. The **aggregator** then packs the products and delivers them to the online buyer.

Distributors:

Individuals or businesses who supply goods from manufacturers and wholesalers to retailers.

Aggregator:

Website or mobile application that organizes and combines offers from multiple sellers and sells them to consumers at one place.



Fig. 12.18. Garment shop



Fig. 12.19. Salon



Fig. 12.20. Mall



Fig. 12.21. Grocery store

Let's explore the chain of supply in physical markets for the **textile market in Surat, Gujarat**—Asia's oldest textile market, and the city famously known as a textile hub.

The Surat textile market consists of thousands of factories manufacturing cotton and synthetic textiles. In the case of cotton textiles, raw cotton is received here through cotton *mandis* from nearby states like Maharashtra, as well as from other parts of Gujarat. It is transformed into finished fabric or garments after processing at various stages—weaving on power looms, dyeing in processing units and so on. The product moves from one stage to another through markets—for woven fabric, for dyed fabric, and for finished products (sarees, or ready-made garments, for example).



Fig. 12.22.

The finished product from the fabric is traded by the manufacturing units in the wholesale market. The wholesalers are an important channel of supply as they oversee the distribution of products to small shopkeepers and big retail stores across the country and internationally. They also assess how much product is required by retailers. This helps maintain the stock of products with the manufacturers and ensures an uninterrupted supply of products to the end consumers.

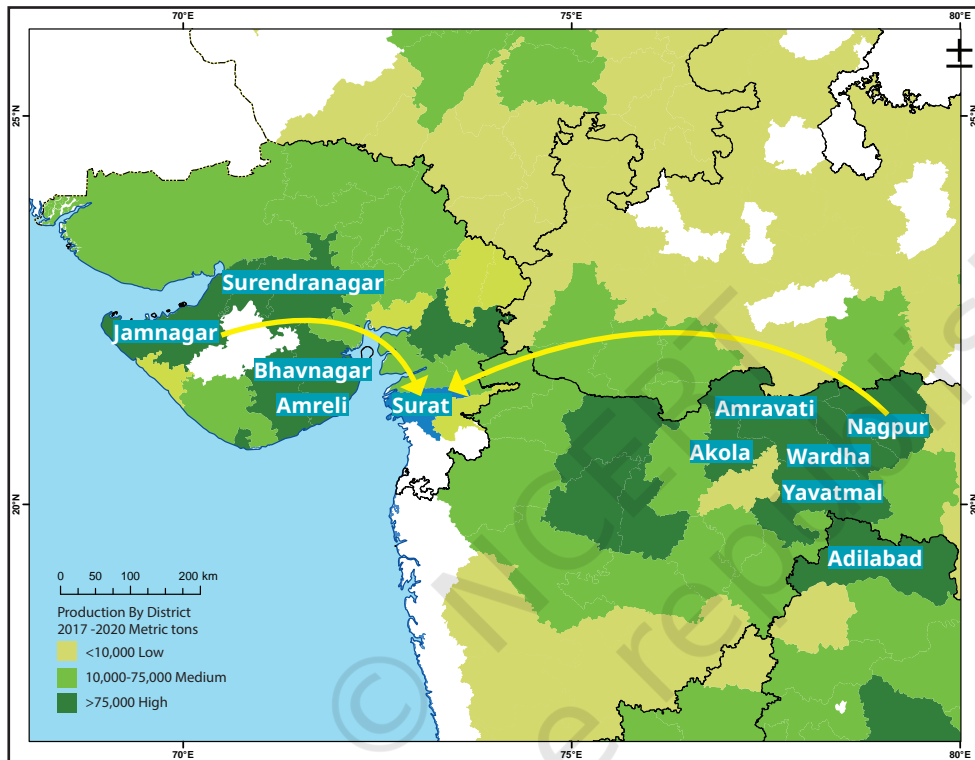


Fig. 12.23. Supply of raw cotton from surrounding cotton clusters to Surat

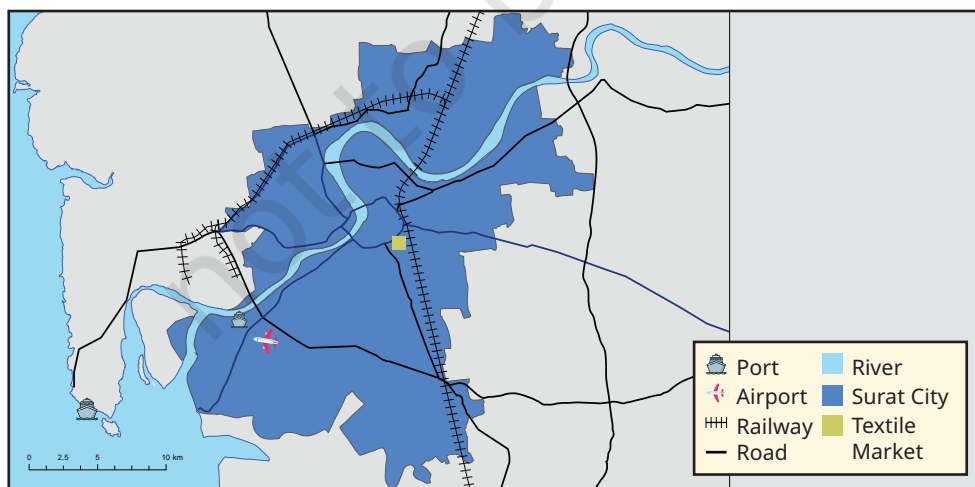


Fig. 12.24. Surat City Map



Fig. 12.25. A wholesaler's warehouse of fabric

LET'S EXPLORE



Ask your nearest retailer about a product, its place of origin, and the chain of suppliers in the process of the product reaching the shop. Trace this using a flow chart like Fig. 12.11 and share it in class.

DON'T MISS OUT



- Apart from textiles, Surat is home to the largest diamond industry in the world. Approximately 1.5 million artisans are involved in activities like cutting and polishing diamonds on a gigantic scale. Trade flourished here from the 16th century onwards. The city's location on the west coast led to the setting up of ports and road networks that continue to be important today. Communities of expert artisans and skilled persons have lived here for centuries; their skills have been passed on over generations making it a flourishing city.
- Can you spot the port, highway and railway network on the map in Fig. 12.24? How do you think they helped make Surat a trading hub?

The Role of Markets in People's Lives

As we can see from the sections above, markets play an important role in the economic life of the people. It facilitates transactions between producers and consumers. It helps individuals, households and businesses access goods and services that they need and cannot produce themselves.



THINK ABOUT IT

We have discussed different dimensions of markets. Can we imagine what life might be like without markets? What would happen if farmers did not bring rice, wheat, dal, vegetables and fruits to the market? What would happen if the producers of cloth in Surat could not procure inputs like cotton from markets?

In this section, we will explore a few other dimensions of the role of markets.

Aakriti is a professional artist who creates oil paintings on canvas. Her paintings are appreciated, but she finds it difficult to find buyers. She is worried about where to sell the paintings and what price she should offer them for. Unlike the case of guavas, there are fewer local buyers and sellers for artwork.

Can you think of other products which do not have a ready market? How does it affect those willing to buy or sell? What are the different ways in which artists can find buyers for their work today?

How markets benefit society

LET'S EXPLORE

Consumers prefer to buy refrigerators that use less electricity. When a large number of consumers begin to ask for refrigerators that use less electricity, what do you think happens in the network you saw in Fig. 12.11?



The producers get an indication as to what consumers would buy. They produce refrigerators which use less electricity. This benefits society through the production of energy-efficient refrigerators.

Although buying and selling is an economic activity that involves monetary exchange, interactions in the markets often move beyond just enquiring about the product or service or negotiations between parties.

Often, a relationship develops between buyers and sellers that continues even across generations. Some families have long-lasting trusted relationships with their tailor, jeweller, and doctor over decades. Many families in India maintain an account with the local grocer that is settled at the end of the month.

So, while the primary role of the market is to promote economic activities, it also has non-economic significance in many people's lives.

Mother's Market, *Ima Keithal* in the Meitei language of Manipur, is a unique market in Imphal. About 3000 women own and run all the shops in this market. They sell vegetables, clothes including traditional Manipuri attire, hand-loom and handicrafts, local produce, and daily essentials that people in the city and the surrounding areas require. On one hand, the market provides employment, becoming an important source of income for thousands of families; on the other hand, the market is a melting pot of cultures. People from different communities come together to exchange ideas and enjoy shared traditions.



Fig. 12.26. Ima Keithal of Imphal



DON'T MISS OUT

There are many traditions followed even today that go beyond just buying and selling. In south India, the sellers of haldi and kumkum (turmeric and vermilion) give a small quantity of haldi and kumkum separately, at no charge, as a mark of auspiciousness and good wishes to the buyer.



Fig. 12.27

LET'S EXPLORE

Have you observed any such practices in your community or neighbourhood? Describe the practice as a drawing or in a short paragraph.



Government's Role in the Market

Markets function through interactions of **demand** from buyers and **supply** by sellers. However, there are some situations in which this may not work very well. The government plays a crucial role in such situations. It monitors the interaction between consumers and producers, and fair determination of price.

Controlling prices for protecting buyers and sellers

The government **controls the prices of certain goods**. For example, it sets the maximum price that the seller can charge. Several essential goods and services, such as lifesaving drugs, have an upper limit on their prices. Another instance is where the government sets the minimum price at which essential agricultural products like wheat, paddy and maize can be sold. This ensures that farmers do not incur losses. The government also sets minimum wages for work done by employees so that employers make fair payments to them.

Demand:

Quantity of a product or service that consumers are willing and able to purchase at a particular price at a given time.

Supply:

Quantity of a product or service that sellers are willing and able to sell at a particular price at a given time.

However, the government needs to carefully implement such price limits. If the price is too low, producers would not have any motivation to produce. If the prices are too high, consumers would be disadvantaged.

LET'S EXPLORE



- Onions are an important part of the cuisine in most parts of India. In some seasons, the supply of onions comes down in the market. What do you think happens to the price of onions when this happens?
- What will happen if the people supplying onions do not bring the required quantities to the market? What do you think the government should do in this situation?

Ensuring quality and safety standards

The government has a role in ensuring the welfare of consumers and protecting them from unfair practices. The government ensures that manufacturers follow the required quality and safety standards while producing goods and delivering services. For instance, pharmaceutical companies manufacture medicines for treating diseases. The government sets procedures for approvals of medicines and conducts sample testing to check if the produced drug meets standards of quality. These regulations ensure the quality and safety of the drugs so that there is no risk to the consumers' health.

Mitigating the external effects of markets

Markets sometimes have significant effects beyond the selling and buying. For example, the markets for certain goods require production in factories that could pollute the environment. The government plays a crucial role in understanding and controlling such effects of markets. For example, what happens when the manufacturing of certain items, like single-use plastics, pollutes the environment and poses health risks to consumers? In such cases, the government intervenes by implementing strict regulations to mitigate these negative effects.

Similarly, the government puts in place systems to monitor the weights and measures of the packaged products to check the net quantity contained in the package.



THINK ABOUT IT

The practice of rulers protecting consumers is not a phenomenon of modern India. Kautilya's Arthaśhāstra includes instructions for the traders trading in clarified butter (ghee). It mentions that buyers shall be given 1 / 50 part more as **mānasrāva** to compensate for the reduction in quantity owing to (the ghee)...sticking to the measuring can.

Governments make rules to ensure markets work fairly and consumers are not exploited. However, too many rules can make it difficult for markets to function properly.

Providing public goods

Producers make and sell goods and services to be able to make a **profit**. However, there are some goods and services that producers do not expect to make a profit on; for example, public parks, roads, policing, and so on. In addition, you read about the rights that citizens have to certain welfare provisions in a previous chapter. So, the government provides these **public goods** and services.

Public goods:

Service or commodity that is accessible or available to all members of a society. Their present use does not diminish their availability for future use.



THINK ABOUT IT

- ◆ What are the other areas where you can see the government being involved in the markets?
- ◆ Are there areas where government intervention needs to be reduced? Discuss with family or relatives.

How can consumers assess the quality of products and services?

Markets enable access to a wide variety of goods and services to consumers. How will consumers decide what they would like to buy?



THINK ABOUT IT

There is a marbles competition in your neighbourhood with the team in the next street. You want to buy new marbles for the competition. You have ₹150 saved up. You go to a shop to buy the marbles. What are the qualities you would look for in the marbles so that you can win the competition?



Fig. 12.28

Did you think about the price, size of the marbles, strength and the attractive colours? As you can see, every consumer would need to assess the quality of products that they are buying.

In the following section, we will look at various ways in which this can be done.

Suppose your parent asks you to get a 1 kg packet of gram flour from the nearby grocer. There are different types of packets available at the shop such as the one shown below. Observe it carefully. How would you determine that the quality of gram flour meets the required standards?



Fig. 12.29

Did you notice the FSSAI logo?

FSSAI means Food Safety & Standards Authority of India and its symbol on the food packets and cartons indicates that food has been tested by the government and is safe to consume.



Government agencies provide such certifications that help buyers to assess product quality. Their presence on the product or its package confirms that the product fulfills the minimum quality standards.

Let's see what each of these labels mean:

- Just like FSSAI, there is Indian Standards Institution (**ISI**) **Mark** issued by the Bureau of India Standards (BIS). This symbol is generally present on electrical appliances, construction materials, automotive tires, paper, etc. This ensures quality and that the product is safe to use.
- Similarly, **AGMARK** (Ag for agriculture) is the certification mark for agricultural products like vegetables, fruits, cereals, pulses, spices, honey, etc.
- Electronics items like TVs, laptops, air conditioners, etc. have **BEE STAR rating**. BEE stands for Bureau of Energy Efficiency. These ratings are printed on the product package as stars. Higher stars indicate that the appliance uses less energy and electricity. This is good for consumers as the electricity bill would be lesser and good for the environment as well.



LET'S EXPLORE

Check out the BEE Star labels on the electronic devices in your home and make a chart of all the devices in an increasing order of their energy efficiency.

On the other hand, purchase decisions of buyers are influenced by the reputation of the product. This is built through word of mouth. Have your family members bought some product because their friends or relatives suggested it to them?



Online reviews and feedback from other consumers about products and services help us decide whether to buy or not while shopping online.



Fig. 12.30

Before we move on...



- Markets facilitate exchange between buyers and sellers at a mutually agreed price which is determined by the demand from buyers and supply by sellers.
- Markets have a chain of participants like manufacturers, wholesalers, distributors and retailers that enables supply of goods to the final consumers.
- Markets are also places for interaction as they bring people together and enable exchange of ideas and traditions.
- The government plays a regulatory role in the markets to promote quality standards for products and services and fair practices in the market. However, consumers can also assess the quality of products and services through certification marks on the products from government agencies and through online reviews.

Questions and activities

1. What are the main features of a market? Recall a recent visit to a market to purchase a product. What are the different features of a market that you observed during this visit?
2. Remember the epigraph from a famous economist at the beginning of the chapter? Discuss its relevance in the context of the chapter you have read.
3. In the example of buying and selling of guavas, imagine that the seller is getting a good price, and is able to make a profit. He will try to get more guavas from farmers to be able to sell them at the same price and increase his earnings. What is the farmer likely to do in this kind of a situation? Do you think he will start thinking about the demand for guavas in the next season? What is likely to be his response?
4. Match the following types of markets with their characteristics:

S.No.	Markets	Criteria
1	Physical market	Goods and services flow outside the nation's boundaries
2	Online market	Deals in bulk quantities
3	Domestic market	Serves the final consumers with goods and services
4	International market	Requires physical presence of buyers and seller
5	Wholesale market	Buyers and sellers meet virtually and can transact at any time
6	Retail market	Lies within the boundaries of a nation

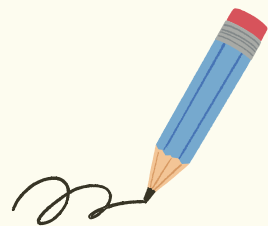
5. Prices are generally determined by the interaction between demand from buyers and supply by sellers. Can you think of products where prices are high despite lesser number of buyers demanding the product? What could be the reasons for that?

6. Look at the real life situation that a retail seller of vegetables encountered: A family came to shop for vegetables. The price of beans that the seller on the cart was offering was ₹30/kg. The lady started to bargain with the seller to bring the price down to ₹25/kg. The seller protested and refused to sell at that price saying he would make a loss at that price. The lady walks away. The family then goes to a super bazaar nearby. They buy vegetables in the super bazaar where they pay ₹40/kg for the beans that is neatly packed in a plastic bag. What are the reasons that the family does this? Are there factors that affect buying and selling which are not directly connected to price?
7. There are some districts in India that are famous for growing tomatoes. However, during some seasons, the situation is not good for farmers. With a large quantity of harvest, there are reports of farmers throwing away their produce and all their hard work going to waste. Why do you think farmers do this? What role can wholesalers play in such situations? What are the possible ways of ensuring that the tomatoes are not wasted, and the farmers are also not at a loss?
8. Have you heard about or visited a school carnival/fair organized by your school or any other school? Discuss with your friends and teachers about the kind of activities organized by students there. How do they conduct selling and negotiation with the buyers?
9. Choose any 5 products and check out the label with the certification signs discussed in the chapter. Did you find products that did not have a logo? Why do you think this is so?
10. You and your classmates have manufactured a soap bar. Design a label for its packaging. What in your opinion should be mentioned on the label for the consumer to know the product better?

Noodles

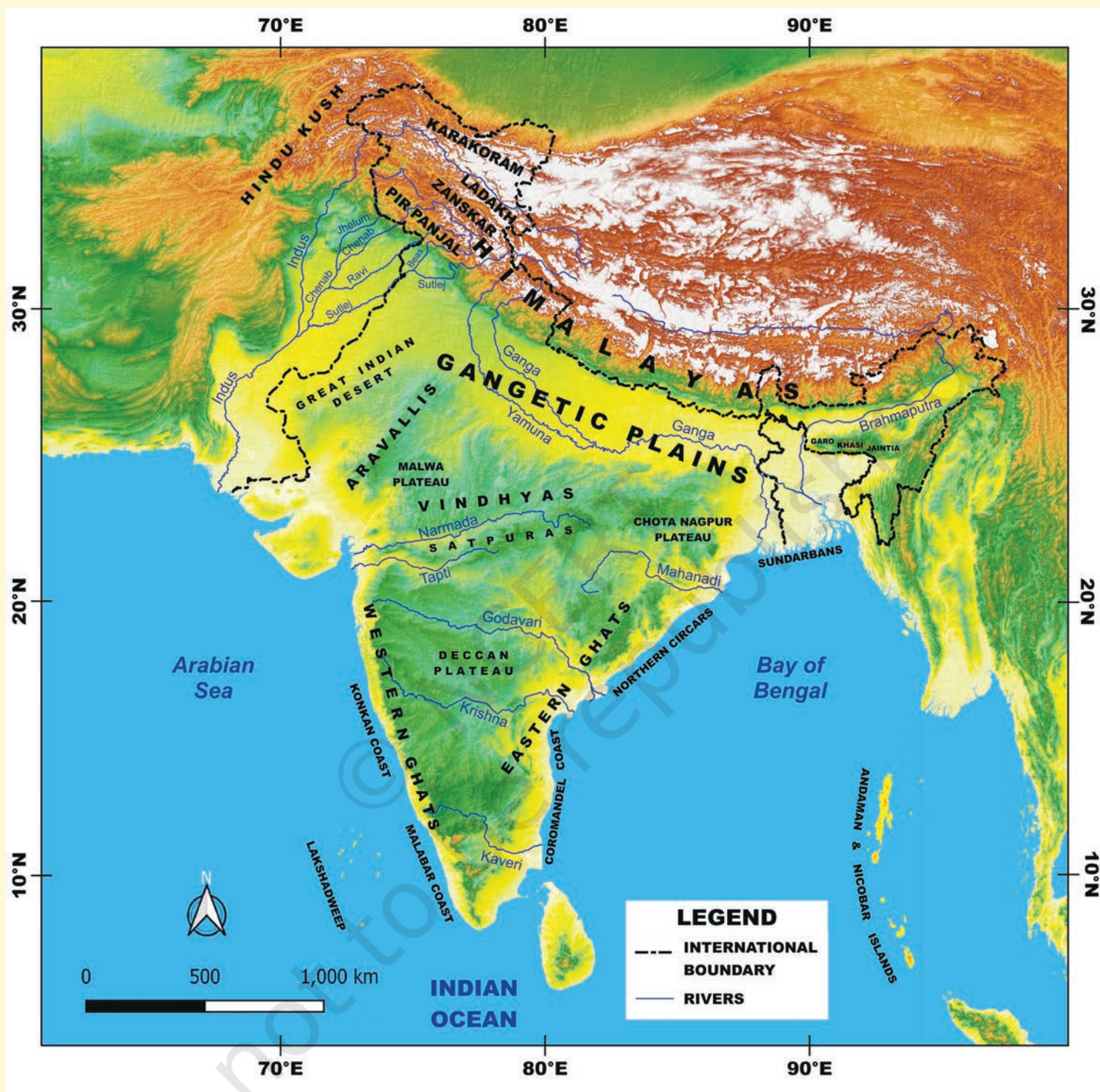
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*'Noodles' is our abbreviation for 'Notes and Doodles'!





https://pminewyork.gov.in/pdf/menu/Political_Map_of_India.pdf



Physical Map of India

Glossary

Abide: Accept or act in accordance with (a rule, decision, or recommendation)

Abode: A home or permanent place to live

Abundance: The situation in which there is more than enough of something

Accumulate: To collect a large number of things over a long period of time

Acrobats: A person who performs difficult movements of the body, especially in a circus

Advancement: The development or improvement of something

Advent: The fact of an event happening, an invention being made, or a person arriving

Aggression: Feelings of anger or antipathy

AGMARK: Stands for Agricultural Marketing, and it is a certification mark used in India to ensure the quality of agricultural products

Alliance: A group of countries, political parties, or people who have agreed to work together because of shared interests or aims

Alpine: Relating to high mountains

Amass : To get a large amount of something, especially money or information, by collecting it over a long period

Amendment: A change or changes made to the words of a text

Arbitrary: Not seeming to be based on any reason or plan, and sometimes seeming unfair

Arduous: Difficult, needing a lot of effort and energy

Artisans: Someone who does skilled work with their hands

Ascetics: Avoiding physical pleasures and living a simple life, often for spiritual reasons

Asphalt: A black, sticky substance, often mixed with small stones or sand, which forms a strong surface when it dries

Aspiration: Something that you hope to achieve

Assess: Evaluate or estimate the nature, ability, or quality of

Assurance: A promise; confidence

Auspiciousness: Suggesting a positive and successful future

Authority: An organisation or person with power or control, especially in governance

Automated: Carried out by machines or computers without needing human control

Automotive: Relating to road vehicles

Avenge: To harm or to punish the person responsible for doing something bad to you, your family, or friends, to achieve a fair situation

Bargain: Discussions between people in order to reach an agreement on something such as prices, wages, working conditions, etc.

Barren: Unable to produce plants or fruit

Barrier: Something that blocks the way or makes movement or progress difficult.

Battalion: A large body of soldiers or troops ready for battle

BEE: Bureau of Energy Efficiency

Benevolent: Kind and helpful

BIS: Bureau of India Standards

Botanical: Involving or relating to plants or the study of plants

Bulk: The mass or size of something large

Bustling: If a place is bustling, it is full of busy activity

Carve: To make something by cutting into a hard material, especially wood or stone, or to cut into a hard material to make something

Casket: A decorative box, especially one used to keep jewellery; also used in some traditions for burying someone who has passed away

Certification: The process of earning an official document, or the act of providing an official document, as proof that something has happened or been done

Chilly: Uncomfortably or unpleasantly cold
Churn: To move, or to make water, mud, etc. move around violently
Clans: A group of people who are together through family ties
Classical Age: A period in history marked by great cultural, artistic, scientific, and political achievements that set lasting standards
Commemorate: Recall and show respect for (someone or something)
Commodity: A substance or product that can be traded, bought, or sold
Compensate: To pay someone money in exchange for something that has been lost or damaged, or for some problem
Comprehensive: Including or dealing with all or nearly all elements or aspects of something
Confer: Have discussions or exchange opinions; another usage is to grant someone something (like conferring the Padma award)
Confluence: The place where two rivers flow together and become one larger river
Congregate: To come together in a crowd or group
Conquest: The act of conquering a country, area, or situation
Consumers: A person who purchases goods and services for personal use
Contemporary: Belonging to or occurring in the present
Context: The situation within which something exists or happens, or which can help explain it
Convenient: Suitable for your purposes and needs, and causing the least difficulty
Corrosion: The gradual destruction of a material, usually a metal, caused by a chemical reaction with its environment, like air or water, leading to deterioration
Council: A group of people who come together to consult, deliberate, or make decisions.
Creep: To move slowly, quietly, and carefully, usually to avoid being noticed

Crucial: Extremely important or necessary
Crumpled: Crushed or wrinkled into a messy or uneven shape.
Debased: Worse than before, especially morally; less valuable or deserving of less respect than before
Debris: Broken or torn pieces left from the destruction of something larger
Decades: A period of ten years, especially a period such as 2011 to 2020
Defend: Resist an attack made on (someone or something); protect from harm or danger
Defer: To postpone or delay something to a later time
Degenerate: Having lost the physical, mental, or moral qualities considered normal and desirable; showing evidence of decline
Descendant: A person who is related to you and who lives after you, such as your child or grandchild
Deter: To stop someone from doing something by making them afraid of the consequences.
Devastate: To destroy a place or thing completely or cause great damage
Devout: Believing strongly in a religion and obeying all its rules or principles
Diplomatic: Managing situations among people without upsetting anyone; usually involving the management of the relationships between countries
Disaster: (An event that results in) great harm, damage, or death, or serious difficulty
Disc: A flat, round object or shape, like a coin or a CD
Dishonour: A feeling of embarrassment and loss of people's respect, or a situation in which you experience this
Disintegrate: To break into many small pieces
Dispute: A disagreement or argument
Distinct: Clearly noticeable; that which certainly exists

Drawbridge: A bridge over a moat that can be raised or brought down in order to protect a castle from attack or to allow big boats to go under it

Drugs: Any natural or artificially made chemical that is used as a medicine

Dynasty: A dynasty is a family of rulers who lead a country or region for many generations. Power is usually passed from parents to their children.

Ecology: A subject that studies living things and their relationship with the environment

Efficiency: The quality of achieving the largest amount of useful work using the least amount of energy, fuel, effort, etc.

Emanates: To originate from

Embankment: An artificial slope made of earth and/or stones

Embossed: A raised or carved design on a surface, often found on coins or banknotes

Emerge: To appear by coming out of something or out from behind something

Enable: To make someone able to do something, or to make something possible

Encounter: To come across or experience something, often unexpectedly

Encroach: To use more of something (that does not belong to you) than you should, for example land

Enormous: Extremely large

Entail: Involve (something) as a necessary or inevitable part or consequence

Epigraph: A saying or a part of a poem, play, or book put at the beginning of a piece of writing or a film, to give the reader some idea of what the piece is about

Ether: The clear sky; the upper regions of air beyond the clouds

Evacuate: To move people from a dangerous place to somewhere safe

Eventuality: Something unpleasant or unexpected that might happen or exist in the future

Evolve: To gradually develop or change over time into something more advanced

Excavate: To dig up or uncover something from the ground, often during archaeological studies

Excerpt: A short section taken from a speech, book, film, etc.

Exploit: To use someone or something unfairly for your own advantage

Exquisite: Very beautiful and delicate

Facilitate: To make a process easier or smoother

Feast: A special meal with delicious food or a large meal for many people

Feat: Something difficult needing a lot of skill, strength, courage, etc. to achieve it

Fierce: Physically violent and frightening

Flattery: Excessive and insincere praise, given especially to further one's own interests

Flourish: To grow or develop successfully

Foreign accounts: Written records of the experience of foreigners in a country

Forge: Make or shape (a metal object) by heating it in a fire or furnace and hammering it; can also mean creating something strong or long-lasting

Fortify: To make a place stronger and ready for an attack

Foster: To encourage the development or growth of something

Fragmented: Consisting of several separate parts

Franchise: An authorisation granted by a government or company to an individual or group, allowing them to carry out specified commercial activities

Frigid: Extremely cold (usually related to weather conditions)

Frontier: The line where one country joins another; the border

Frost: The thin, white layer of ice that forms when the air temperature is below the freezing point of water, especially outside at night

FSSAI: Food Safety & Standards Authority of India

Funnel: An object that has a wide, round opening at the top, sloping sides, and a narrow tube at the bottom; used for pouring liquids or powders into containers with narrow necks

Gateway: An entrance through a wall, fence, etc., where there is a gate

Gauge: To calculate an amount, especially by using a measuring device

Gewgaws: A small decorative object or toy, usually one with no real value

Glacial: Made or left by a glacier (a mass of ice in cold mountainous regions)

Granary: A large building for storing grain

Gregorian Calendar: The system now used in most parts of the world to divide the 365 days of the year into weeks and months, and to number the years

Groves: A small group of trees, especially of one particular type

Handicraft: A skilled activity in which something is made in a traditional way with the hands rather than being produced by machines in a factory, or an object created by such an activity

Heliodorus: The name of an Indo-Greek ambassador who erected a pillar near Vidisha, indicating cultural exchange

Helium: A type of gas that is lighter than air, and does not react with other substances easily; it will not burn and is used in balloons and airships

Hereditary: Passing from a parent to a child through the genes

Heritage: Property that is or may be inherited; an inheritance

Holistic: Dealing with or treating the whole of something or someone and not just a part

Hub: The central or main part of something where there is most activity

Illustrate: To draw pictures for a book, magazine, etc.

Incidental: Happening as part of something more important

Incompetent: Lacking the necessary skill to do something well

Incur: To experience something, usually something unpleasant, as a result of actions you have taken

Inflation: A general rise in prices

Ingenious: Very clever and original, especially at solving problems or creating things.

Inland: In the middle of a country, away from the sea

Inscribe: Write or carve (words or symbols) on something, especially as a formal or permanent record

Insist: Demand something forcefully, not accepting refusal

Instance: A particular situation, event, or fact, especially an example of something that happens generally

Intangible: Something that cannot be physically touched, such as digital money or feelings

Intervention: Intentional action to change a situation, with the aim of improving it or preventing it from getting worse

Interweave: Weave or become woven together

Intricate: Having a lot of small parts that are arranged in a complicated or delicate way

Invoke: Call upon (a deity or spirit) in prayer, as a witness, or for inspiration

ISI: Indian Standards Institution

Kin: A group of persons of common ancestry

Legend: A key or guide on a map that explains the symbols, colors, or markings used; another meaning - a story about a famous person or place

License: An official document that gives you permission to own, do, or use something, usually after you have paid money and/or taken a test

Livid: Extremely angry

Logo: A design or symbol used to advertise products

Longevity: The ability of something to last a long time without breaking or being damaged

Long-lasting: Continuing for a long period of time

Lush: A lush area has a lot of green, healthy plants, grass, and trees

Magnificent: Very good, beautiful, or deserving to be admired

Majestic: Having or showing impressive beauty or scale

Mānasráva: Compensation for reduction in the quantity due to overflow or sticking to the measuring can as per the Arthaśhātra

Marching: Walk with a military bearing and a regular, measured tread

Maritime: Related to the sea, ships, or sailing

Massacre: An act of killing a lot of people

Matrimonial alliances: A matrimonial alliance is a strategic marriage between members of royal families to strengthen political ties, secure peace, expand influence, or form military and economic partnerships between different rulers or states.

Metallic: Made of or resembling metal

Meteorologists: Someone who studies meteorology (the scientific study of the processes that cause particular weather conditions)

Mighty: Very large, powerful, or important

Milder: Not violent, severe, or extreme

Millennia: A period of 1,000 years, or the time when a period of 1,000 years ends

Miniature: A thing that is much smaller than usual, especially a small replica or model

Moat: A long, wide drain-like structure that is dug all around a place, such as a fort, and usually filled with water, to make it more difficult to attack

Mobilise: To organise people or things for a specific purpose

Monasteries: Buildings, mostly Buddhist, where monks live, meditate, and follow religious practices.

Monitors: The job of watching or noticing particular things

Motif: A decorative image or design, especially one that is repeated or has symbolic meaning

Mutual: Feeling the same emotion, or doing the same thing to or for each other

Negotiation: The process of discussing something with someone in order to reach an agreement with them, or the discussions themselves

Noble: Moral in an honest, brave, and kind way

Norms: A usual or expected way of behaving in a society, group, or situation

Oath: A solemn promise, often invoking a divine witness, regarding one's future action or behaviour

Oblique: Having a sloping direction, angle, or position

Obverse: The front side of a coin or medal, usually bearing the main design

Occurrence: The fact of something existing, or how much of it exists

Onset: The moment at which something begins, and especially something uncomfortable or unpleasant

Opponent: Someone who competes with or opposes another in a contest, game, or argument

Oppress: To govern people in an unfair and cruel way and prevent them from having opportunities and freedom

Outposts: Distant settlements or military stations away from the main area.

Outsource: Obtain (goods or a service) by contract from an outside supplier

Overlord: A person in a position of power, especially in the context of the past

Oversee: To watch or organise a job or an activity to make sure that it is being done correctly

Packaged: Something sold in a pre-prepared container, usually made of paper or cardboard

Parade: A public procession, especially one celebrating a special day or event

Paradox: Sound contradictory

Participant: A person who takes part in something

Partridges: A kind of bird with a round body and a short tail

Pasture: A field or land covered with grass, where cows, etc. can feed

Patriotism: Devotion to and vigorous support for one's country

Patron: A person who gives financial or other support to a person, organisation, or cause

Patronising: Patronising means supporting or sponsoring someone or something, often with a sense of authority or superiority. When kings used to patronise someone, it meant they provided support, protection, or funding for activities like religion, art, literature, or trade.

Perceive: To come to an opinion about something, or have a belief about something

Perilous: Full of danger or risk

Perpendicular: At an angle of 90° to a horizontal line or surface

Pharmaceutical: Relating to the production of medicines

Phenomenon: Something that exists and can be seen, felt, tasted, etc., especially something unusual or interesting

Picturesque: Visually attractive, especially in a charming or scenic way.

Postulate: To suggest a theory, idea, etc., as a basic principle from which a further idea is formed or developed

Power: The ability or authority to make decisions, control resources, or influence others

Preamble: An introduction to a speech or piece of writing

Precipitation: Water that falls from the clouds towards the ground, especially as rain or snow

Predict: To say that an event or action will happen in the future, especially as a result of knowledge or experience

Preserve: Maintain (something) in its original or existing state

Privileged: Having or showing a special advantage

Proceedings: An event or a series of activities involving a set procedure

Procure: Obtain something with care and effort

Produce: To make something or bring something into existence

Profound: Very great; that you feel very strongly

Provision: The act of providing something

Proximity: The state of being near in space or time

Quails: A small, brown bird

Ramparts: A large wall built around a town, castle, etc. to protect it

Recapitulate: To repeat or give a summary of what has already been said, decided, etc.

Recycle: Convert used items for reuse, often to reduce waste

Reduction: The act of making something, or of something becoming, smaller in size, amount, degree, importance, etc.

Regulatory: Of or relating to a person or organisation whose job is to control an activity or process, or to the regulations themselves

Rejuvenescence: A renewal of youthfulness

Relics: An object, tradition, or system from the past that continues to exist; usually to refer to the remains of a renowned thinker or spiritual leader like the Buddha

Repression: The use of force or violence to control a group of people

Republic: A country that has an elected government and an elected leader; a form of government in which a state is ruled by representatives of the citizen body

Repurpose: To use something in a new or different way than its original purpose

Reputation: The opinion that people in general have about someone or something, or how much respect or admiration someone or something receives, based on past behaviour or character

Rescue: To help someone or something out of a dangerous, harmful, or unpleasant situation

Resent: To feel angry because you have been forced to accept someone or something that you do not like

Resources: Useful sources of money and materials that help to make life better

Retreat: To go away from a place or person in order to escape from fighting or danger

Revere: To very much respect and admire someone or something

Reverse: The back side (or tail side) of a coin or medal, opposite to the obverse

Righteousness: The quality of being morally right or justifiable

Rightful: A rightful position or claim that is morally or legally correct

Ritual: A way of doing something in which the same actions are done in the same way every time

Rock-Cut Architecture: Rock-cut architecture is when temples or other structures are made by carving or cutting into solid rock. Instead of building with bricks or stones, artists shape the rock itself to create things like caves, walls, or sculptures. It is like creating a temple or artwork directly from a mountain or a large rock!

Rugged: Rough and uneven, often used to describe land that is full of rocks and hills.

Sacred: That which evokes a sense of a divine presence

Sanctity: The state or quality of being holy, sacred, or saintly

Satrap: Someone who governed a province (= political area) in ancient Persia

Schedules: An appendix to a formal document or statute, typically in the form of a list, table, or inventory

Schist: A type of rock that breaks easily into thin layers, formed of mica or other minerals

Scour: To search thoroughly and carefully.

Self-Restraint: Control of your own actions

Shaft: A pole or a rod that forms the handle of a tool or weapon

Sheer: Used to emphasise how great, important, or powerful a quality or feeling is; nothing except

Siege: The surrounding of a place by an armed force in order to defeat those defending it

Silk Route: The Silk Road was an ancient network of trade routes that connected Asia, Europe, and Africa. It got its name because 'silk' — a valuable and luxurious fabric from China — was one of the main goods traded along these routes. The route played a major role in connecting different parts of the world.

Slave: A person who is legally owned by someone else and has to work for that person

Smith: A person who works with metals; eg. ironsmith, goldsmith

Societal: Relating to or involving society

Solemn: Serious and without any humour

Spare: Extra or more than what is needed at the moment

Spells: Periods or short durations of time

Splendour: Great beauty that attracts admiration and attention

Storey: Part of a building comprising all the rooms that are on the same level.

Strain: Worry or pressure caused by having too much to deal with

Sturdy: Physically strong and solid or thick, and therefore unlikely to break or be hurt

Substitute: A person or thing acting in place of another

Swap: To give something and receive something else in return

Tailoring: Making (clothes) to fit individual customers

Tangible: Something that can be touched or physically felt

Tarmac: A black material used for building roads, etc., here refers to the paved surfaces at an airport where aircraft operate

Testament: Proof

Tournament: (In a sport or game) a series of contests between multiple competitors, competing for an overall prize

Tragic: Very sad, often involving death and suffering

Transact: To do and complete a business activity

Transform: To completely change the appearance or character of something or someone, especially so that that thing or person is improved

Transition: A change from one form or type to another, or the process by which this happens

Transmit: To send or pass something from one person or place to another

Travelogue: A film, book, or illustrated lecture about the places visited by or experiences of a traveller

Tributary: A river or stream that flows into a larger river or a lake

Tribute: Wealth, of any kind, given as a sign of submission, loyalty or respect

Troposphere: The lowest region of the atmosphere, extending from the Earth's surface to a height of about 6–10 km

Turmoil: A state of confusion, uncertainty, or disorder

Unfurl: Spread out from a rolled or folded state, especially to be open to the wind

Uninterrupted: Without any pauses or interruptions

Venture: A project that is new and possibly dangerous, because you cannot be sure that it will succeed

Vibrancy: The quality of being energetic, exciting, and full of enthusiasm

Vibrant: Full of energy and life

Vital: Necessary for the success or continued existence of something; extremely important

Ward: A person, especially a child, who is legally put under the protection of a court of law or a guardian

Ware: Goods offered for sale

Weather: The conditions in the air above the Earth, such as wind, rain, or temperature, especially at a particular time over a specific area

Weaving: The act of making cloth by repeatedly crossing a single thread through two sets of long threads on a loom (= special frame)

Welfare: The health, happiness, and fortunes of a person or group

Whisk: A fan made of plants, horse, yak or other hair, attached to a handle to ward away flies (is also used in rituals); to take something or someone somewhere else suddenly and quickly

Word of mouth: Given or done by people talking about something or telling people about something

Images and maps from external sources

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- Fig. 12.25
- Fig. 12.28
- Fig. 12.30

3. AI generated images

- Fig. 12.1
- Fig. 12.14

Notes: (1) "ASI" stands for Archaeological Survey of India; (2) all Internet links have been as accessed in February 2025.