

SOCIAL SCIENCE

OUR PASTS-I

TEXTBOOK IN HISTORY FOR CLASS VI



CONTENTS

Foreword	iii
Why Study History?	vii
1. WHAT, WHERE, HOW AND WHEN?	1
2. ON THE TRAIL OF THE EARLIEST PEOPLE	11
3. FROM GATHERING TO GROWING FOOD	22
4. IN THE EARLIEST CITIES	32
5. WHAT BOOKS AND BURIALS TELL US	43
6. KINGDOMS, KINGS AND AN EARLY REPUBLIC	54
7. NEW QUESTIONS AND IDEAS	65
8. ASHOKA, THE EMPEROR WHO GAVE UP WAR	75
9. VITAL VILLAGES, THRIVING TOWNS	87
10. TRADERS, KINGS AND PILGRIMS	99
11. NEW EMPIRES AND KINGDOMS	111
12. BUILDINGS, PAINTINGS AND BOOKS	122

IN THIS BOOK

LOOK OUT FOR THESE

Definitions

- You will find that each chapter is *introduced* by a young girl or a boy.
- Each chapter is divided into sections. Read, discuss and understand each section before proceeding to the next.

Source

- Some chapters contain *definitions*.
- Many chapters contain a portion from a *source*, clues from which historians write history. Read these carefully, and discuss the questions they contain.

Additional information

- Many of our sources are visual. Each *illustration* has a story to tell.
- You will also find *maps*. Look at these and try to locate the places mentioned in the lessons.

Elsewhere

- Many chapters contain boxes with interesting, *additional information*.
- All chapters end with a section titled *Elsewhere*. This tells you about something that was happening in another part of the world.

KEYWORDS

- At the end of each chapter, you will find a list of *keywords*. These are to remind you of important ideas/ themes introduced in the lesson.

SOME IMPORTANT DATES

- You will also find some *dates* listed at the end of each chapter.

Imagine

- In each chapter there are intext *questions and activities* that are highlighted. Spend some time discussing these as you go along.

Let's recall

- And there is a small section titled *Imagine*. This is your chance to go back into the past and figure out what life would have been like.

Let's discuss

- You will also find three kinds of activities listed at the end of each chapter — *Let's recall*, *Let's discuss*

Let's do

CHAPTER 1

WHAT, WHERE, HOW AND WHEN?

Rasheeda's question

Rasheeda sat reading the newspaper. Suddenly, her eyes fell on a small headline: "One Hundred Years Ago." How, she wondered, could anyone know what had happened so many years ago?



Finding out what happened

Yesterday: you could listen to the radio, watch television, read a newspaper.

Last year: ask somebody who remembers.

But what about long, long ago? Let us see how it can be done.

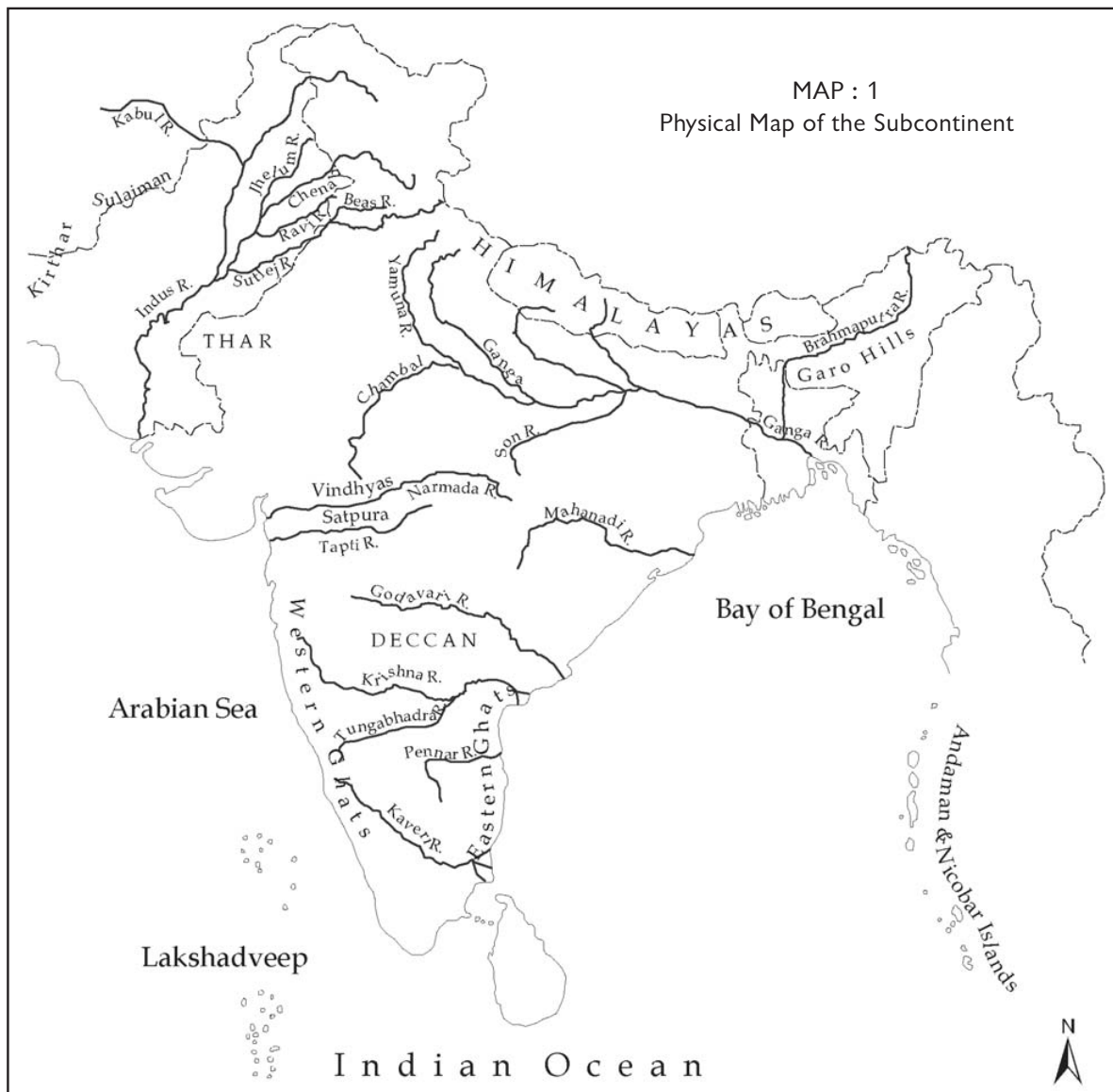
What can we know about the past?

There are several things we can find out — what people ate, the kinds of clothes they wore, the houses in which they lived. We can find out about the lives of hunters, herders, farmers, rulers, merchants, priests, crafts persons, artists, musicians, and scientists. We can also find out about the games children played, the stories they heard, the plays they saw, the songs they sang.

Where did people live?

Find the river Narmada on Map 1 (page 2). People have lived along the banks of this river for several hundred thousand years. Some of the earliest people who lived here were skilled *gatherers*, — that is, people who gathered their food. They knew about the vast wealth of plants in the surrounding forests, and collected roots, fruits and other forest produce for their food. They also *hunted* animals.

Now find the Sulaiman and Kirthar hills to the northwest. Some of the areas where women and men first began to *grow crops* such as wheat and barley about 8000 years ago are located here. People also began *rearing animals* like sheep, goat, and cattle, and lived in *villages*. **Locate the Garo hills to the north-east and the Vindhyas in central India.** These were some of the other areas where



agriculture developed. The places where rice was first grown are to the north of the Vindhya.

Trace the river Indus and its tributaries (tributaries are smaller rivers that flow into a larger river). About 4700 years ago, some of the earliest *cities* flourished on the banks of these rivers. Later, about 2500 years ago, cities developed on the banks of the Ganga and its tributaries, and along the seacoasts.

Locate the Ganga and its tributary called the Son. In ancient times the area along these rivers to the south of the Ganga was known as Magadha. Its rulers were very powerful, and set up a *large kingdom*. Kingdoms were set up in other parts of the country as well.

Throughout, people *travelled* from one part of the subcontinent to another. The hills and high mountains including the Himalayas, deserts, rivers and seas made journeys dangerous at times, but never impossible. So, men and women moved in search of livelihood, as also to escape from natural disasters like floods or droughts. Sometimes men marched in armies, conquering others' lands. Besides, merchants travelled with caravans or ships, carrying valuable goods from place to place. And religious teachers walked from village to village, town to town, stopping to offer instruction and advice on the way. Finally, some people perhaps travelled driven by a spirit of adventure, wanting to discover new and exciting places. All these led to the sharing of ideas between people.

Why do people travel nowadays?

Look at Map 1 once more. Hills, mountains and seas form the natural frontiers of the subcontinent. While it was difficult to cross these frontiers, those who wanted could and did scale the mountains and cross the seas. People from across the frontiers also came into the subcontinent and settled here.

Facing Page : This is a map of South Asia (including the present countries of India, Pakistan, Bangladesh, Nepal, Bhutan and Sri Lanka) and the neighbouring countries of Afghanistan, Iran, China and Myanmar. South Asia is often called a subcontinent because although it is smaller than a continent, it is very large, and is separated from the rest of Asia by seas, hills and mountains.

These movements of people enriched our cultural traditions. People have shared new ways of carving stone, composing music, and even cooking food over several hundreds of years.

Names of the land

Two of the words we often use for our country are India and Bharat. The word India comes from the Indus, called Sindhu in Sanskrit. **Find Iran and Greece in your atlas.** The Iranians and the Greeks who came through the northwest about 2500 years ago and were familiar with the Indus, called it the Hindos or the Indos, and the land to the east of the river was called India. The name Bharata was used for a group of people who lived in the northwest, and who are mentioned in the Rigveda, the earliest composition in Sanskrit (dated to about 3500 years ago). Later it was used for the country.

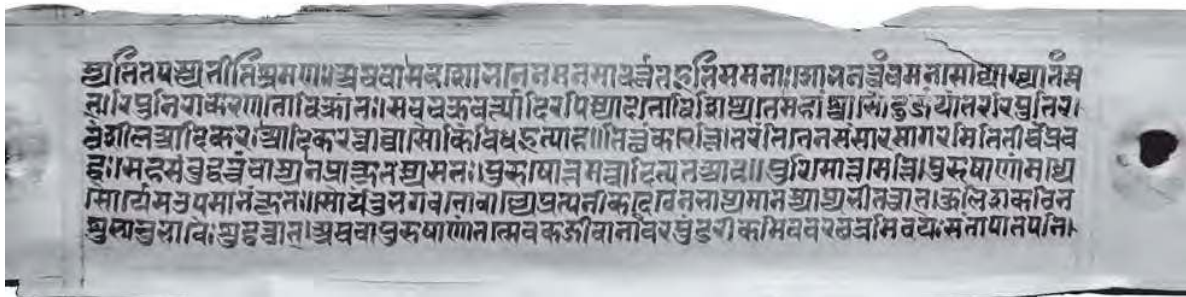
Finding out about the past

There are several ways of finding out about the past. One is to search for and read books that were written long ago. These are called *manuscripts*, because they were written by hand (this comes from the Latin word ‘*manu*’, meaning hand). These were usually written on palm leaf, or on the specially prepared bark of a tree known as the birch, which grows in the Himalayas.

Over the years, many manuscripts were eaten away by insects, some were destroyed, but many

A page from a palm leaf manuscript.

This manuscript was written about a thousand years ago. The palm leaves were cut into pages and tied together to make books. To see a birch bark manuscript, turn to page 45.

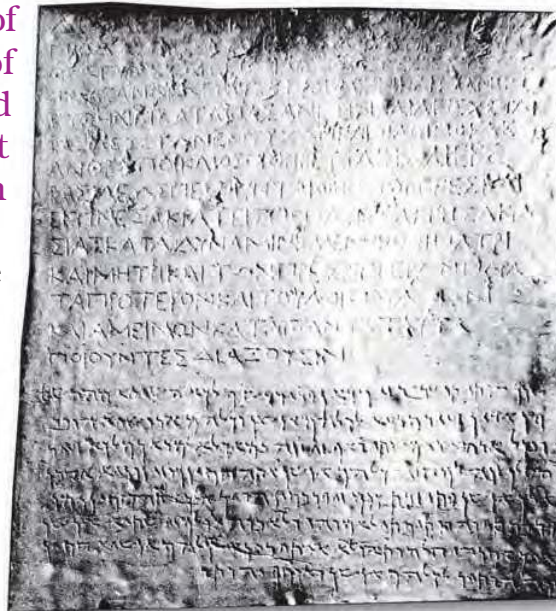


have survived, often preserved in temples and monasteries. These books dealt with all kinds of subjects: religious beliefs and practices, the lives of kings, medicine and science. Besides, there were epics, poems, plays. Many of these were written in Sanskrit, others were in Prakrit (languages used by ordinary people) and Tamil.

We can also study *inscriptions*. These are writings on relatively hard surfaces such as stone or metal. Sometimes, kings got their orders inscribed so that people could see, read and obey them. There are other kinds of inscriptions as well, where men and women (including kings and queens) recorded what they did. For example, kings often kept records of victories in battle.

Can you think of the advantages of writing on a hard surface? And what could have been the difficulties?

There were many other things that were made and used in the past. Those who study these objects are called *archaeologists*. They study the remains of buildings made of stone and brick, paintings and sculpture. They also explore and *excavate* (dig under the surface of the earth) to find tools, weapons, pots, pans, ornaments and coins. Some of these objects may be made of stone, others of bone, baked clay or metal. Objects that are made of hard, imperishable substances usually survive for a long time.



An old inscription. This inscription dates to about 2250 years ago, and was found in Kandahar, present-day Afghanistan. It was written on the orders of a ruler named Ashoka. You will read about him in Chapter 8. When we write anything, we use a script. Scripts consist of letters or signs. When we read what is written, or speak, we use a language. This inscription was written in two different scripts and languages, Greek (top) and Aramaic (below), which were used in this area.

Left : A pot from an old city.

Pots like these were used about 4700 years ago.

Right : An old silver coin. Coins such as this one were in use from about 2500 years ago.

In what ways is the coin different from the ones we use today?



Archaeologists also look for bones — of animals, birds, and fish — to find out what people ate in the past. Plant remains survive far more rarely — if seeds of grain or pieces of wood have been burnt, they survive in a charred form. **Do you think cloth is found frequently by archaeologists?**

Historians, that is, scholars who study the past, often use the word *source* to refer to the information found from manuscripts, inscriptions and archaeology. Once sources are found, learning about the past becomes an adventure, as we reconstruct it bit by bit. So historians and archaeologists are like detectives, who use all these sources like clues to find out about our pasts.

One past or many?

Did you notice the title of this book, *Our Pasts*? We have used the word ‘pasts’ in plural to draw attention to the fact that the past was *different* for different groups of people. For example, the lives of herders or farmers were different from those of kings and queens, the lives of merchants were different from those of crafts persons, and so on. Also, as is true even today, people followed different practices and customs in different parts

of the country. For example, today most people living in the Andaman Islands get their own food by fishing, hunting, and collecting forest produce. By contrast, most people living in cities depend on others for supplies of food. Differences such as these existed in the past as well.

Besides, there is another kind of difference. We know a great deal about kings and the battles they fought because they kept records of their victories. Generally, ordinary people such as hunters, fishing folk, gatherers, farmers or herders did not keep records of what they did. While archaeology helps us to find out about their lives, there is much that remains unknown.

What do dates mean?

If somebody asks you the date, you will probably mention the day, month and year, 2000 and something. These years are counted from the date generally assigned to the birth of Jesus Christ, the founder of Christianity. So, 2000 means 2000 years after the birth of Christ. All dates before the birth of Christ are counted backwards and usually have the letters BC (Before Christ) added on. In this book, we will refer to dates going back from the present, using 2000 as our starting point.

Letters with dates

BC, we have seen stands for 'Before Christ.'

You will sometimes find *AD* before dates. This stands for two Latin words, '*Anno Domini*', meaning 'in the year of the Lord' (i.e. Christ). So 2005 can also be written as AD 2005.

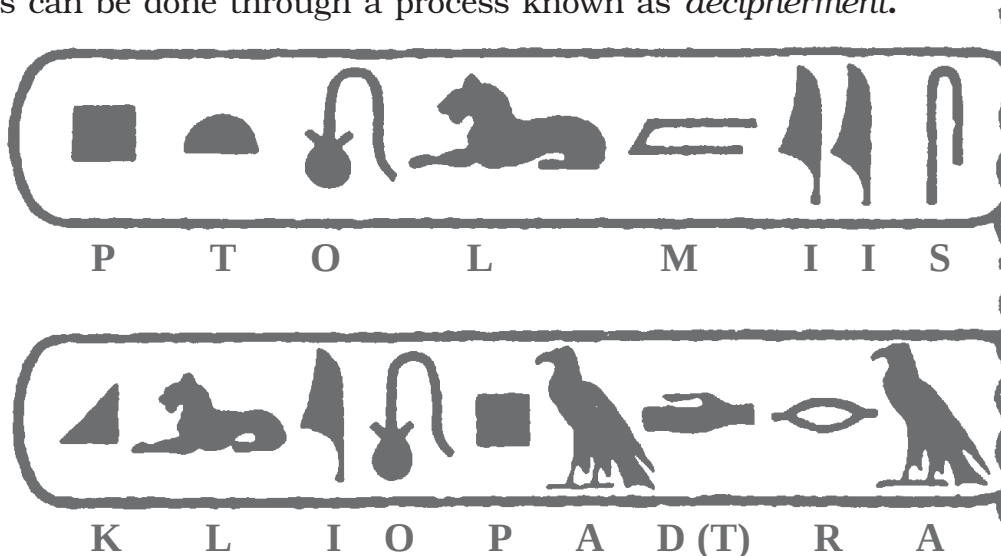
Sometimes *CE* is used instead of *AD* and *BCE* instead of *BC*. The letters *CE* stand for 'Common Era' and *BCE* for 'Before Common Era'. We use these terms because the Christian Era is now used in most countries of the world. In India we began using this form of dating from about two hundred years ago.

And sometimes, the letters *BP* meaning 'Before Present' are used.

Find two dates mentioned on page 3. Which set of letters would you use for them?

Elsewhere

We have seen that inscriptions are written on hard surfaces. Many of these were written several hundreds of years ago. All inscriptions contain both *scripts* and *languages*. Languages which were used, as well as scripts, have changed over time. So how do scholars understand what was written? This can be done through a process known as *decipherment*.



One of the most famous stories of decipherment comes from Egypt, a country in north Africa where there were kings and queens about 5000 years ago.

Rosetta is a town on the north coast of Egypt, and here an inscribed stone was found, which contained inscriptions in three different languages and scripts (Greek, and two forms of Egyptian). Scholars who could read Greek figured out that the names of kings and queens were enclosed in a little frame, called a cartouche. They then placed the Greek and the Egyptian signs side by side, and identified the sounds for which the Egyptian letters stood. As you can see, a lion stood for L, and a bird for A. Once they knew what the letters stood for, they could read other inscriptions as well.

Imagine

You have to interview an archaeologist. Prepare a list of five questions that you would like to ask her/him.

Let's recall



1. Match the following:

Narmada Valley

The first big kingdom

Magadha

Hunting and gathering

Garo hills

Cities about 2500 years ago

Indus and its tributaries

Early agriculture

Ganga Valley

The first cities

2. List one major difference between manuscripts and inscriptions.

KEYWORDS
travelling
manuscript
inscription
archaeology
historian
source
decipherment

Let's discuss



3. Return to Rasheeda's question. Can you think of some answers to it?

SOME IMPORTANT DATES

- ▶ the beginning of agriculture (8000 years ago)
- ▶ the first cities on the Indus (4700 years ago)
- ▶ cities in the Ganga valley, a big kingdom in Magadha (2500 years ago)
- ▶ the present (about 2000 AD/CE)

4. Make a list of all the objects that archaeologists may find. Which of these could be made of stone?
5. Why do you think ordinary men and women did not generally keep records of what they did?
6. Describe at least two ways in which you think the lives of kings would have been different from those of farmers.

Let's do



7. Find the word *crafts persons* on page 1. List at least five different crafts that you know about today. Are the crafts persons — (a) men (b) women (c) both men and women?
8. What were the subjects on which books were written in the past? Which of these would you like to read?

CHAPTER 2

ON THE TRAIL OF THE EARLIEST PEOPLE

Tushar's train journey

Tushar was going from Delhi to Chennai for his cousin's wedding. They were travelling by train and he had managed to squeeze into the window seat, his nose glued to the glass pane. As he watched trees and houses fly past, his uncle tapped his shoulder and said: "Do you know that trains were first used about 150 years ago, and that people began using buses a few decades later?" Tushar wondered, when people couldn't travel quickly from one place to another, did they spend their entire lives wherever they were born? Not quite.



The earliest people: why were they on the move?

We know about people who lived in the subcontinent as early as two million years ago. Today, we describe them as *hunter-gatherers*. The name comes from the way in which they got their food. Generally, they hunted wild animals, caught fish and birds, gathered fruits, roots, nuts, seeds, leaves, stalks and eggs. The immense variety of plants in a tropical land like ours meant that gathering plant produce was an extremely important means of obtaining food.

None of these things was easy to do. There are several animals that run faster than us, many that are stronger. To hunt animals or catch fish and birds, people need to be alert, quick, and have lots of presence of mind. To collect plant produce, you need to find out which plants or parts of plants are edible, that is, can be eaten, as many can be poisonous. You also need to find out about the seasons when the fruits ripen.

List the skills and knowledge that the children of these communities had.

Do you have these skills and knowledge?

There are at least four reasons why hunter-gatherers moved from place to place.

First, if they had stayed at one place for a long time, they would have eaten up all the available plant and animal resources. Therefore, they would have had to go elsewhere in search of food.

Second, animals move from place to place — either in search of smaller prey, or, in the case of deer and wild cattle, in search of grass and leaves. That is why those who hunted them had to follow their movements.

Third, plants and trees bear fruit in different seasons. So, people may have moved from season to season in search of different kinds of plants.

Fourth, people, plants and animals need water to survive. Water is found in lakes, streams and rivers. While many rivers and lakes are perennial (with water throughout the year) others are seasonal. People living on their banks would have had to go in search of water during the dry seasons (winter and summer). Besides, people may have travelled to meet their friends and relatives. Remember, they travelled on foot.

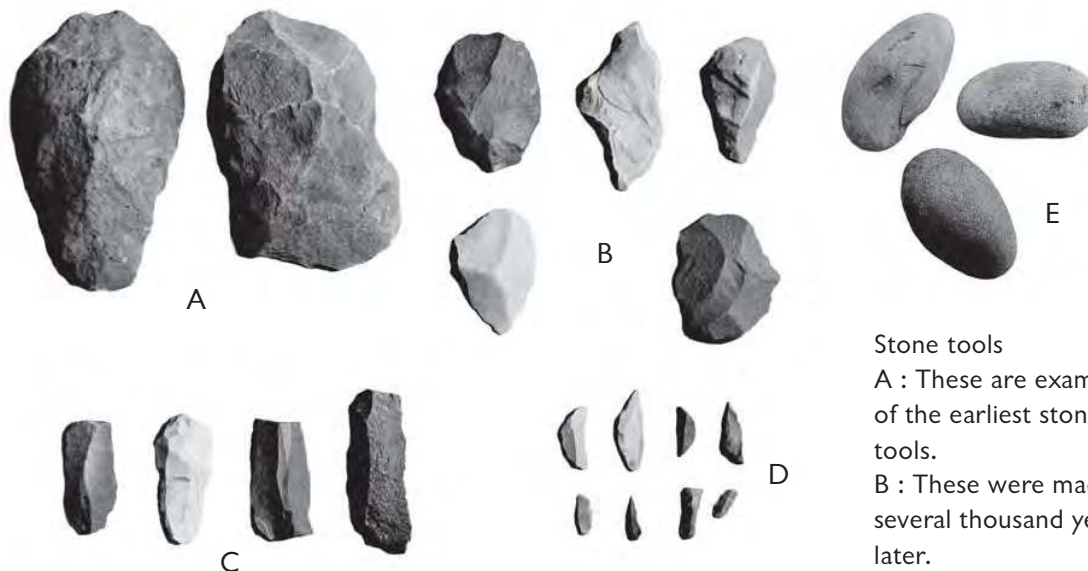
How do you come to school?

How long would it take you to walk from your home to school?

How long would it take you if you took a bus or rode a bicycle?

How do we know about these people?

Archaeologists have found some of the things hunter-gatherers made and used. It is likely that people made and used tools of stone, wood and bone, of which stone tools have survived best.



Stone tools

A : These are examples of the earliest stone tools.

B : These were made several thousand years later.

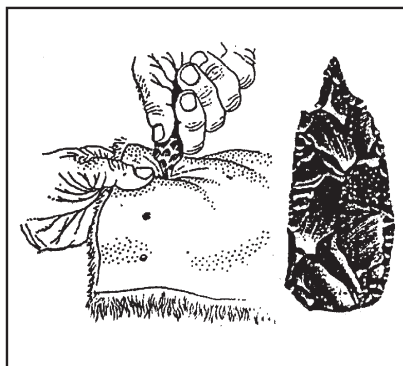
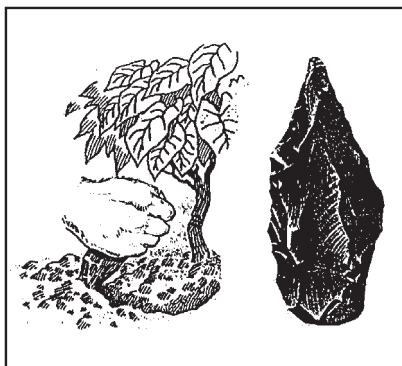
C : These were made later still.

D : These were made about 10,000 years ago.

E : These are natural pebbles.

Some uses of stone tools are given below. Make a list of what these tools were used for and try and decide which of these tasks could be performed using a natural pebble. Give reasons for your answer.

Some of these stone tools were used to cut meat and bone, scrape bark (from trees) and hides (animal skins), chop fruit and roots. Some may have been attached to handles of bone or wood, to make spears and arrows for hunting. Other tools were used to chop wood, which was used as firewood. Wood was also used to make huts and tools.



Stone tools may also

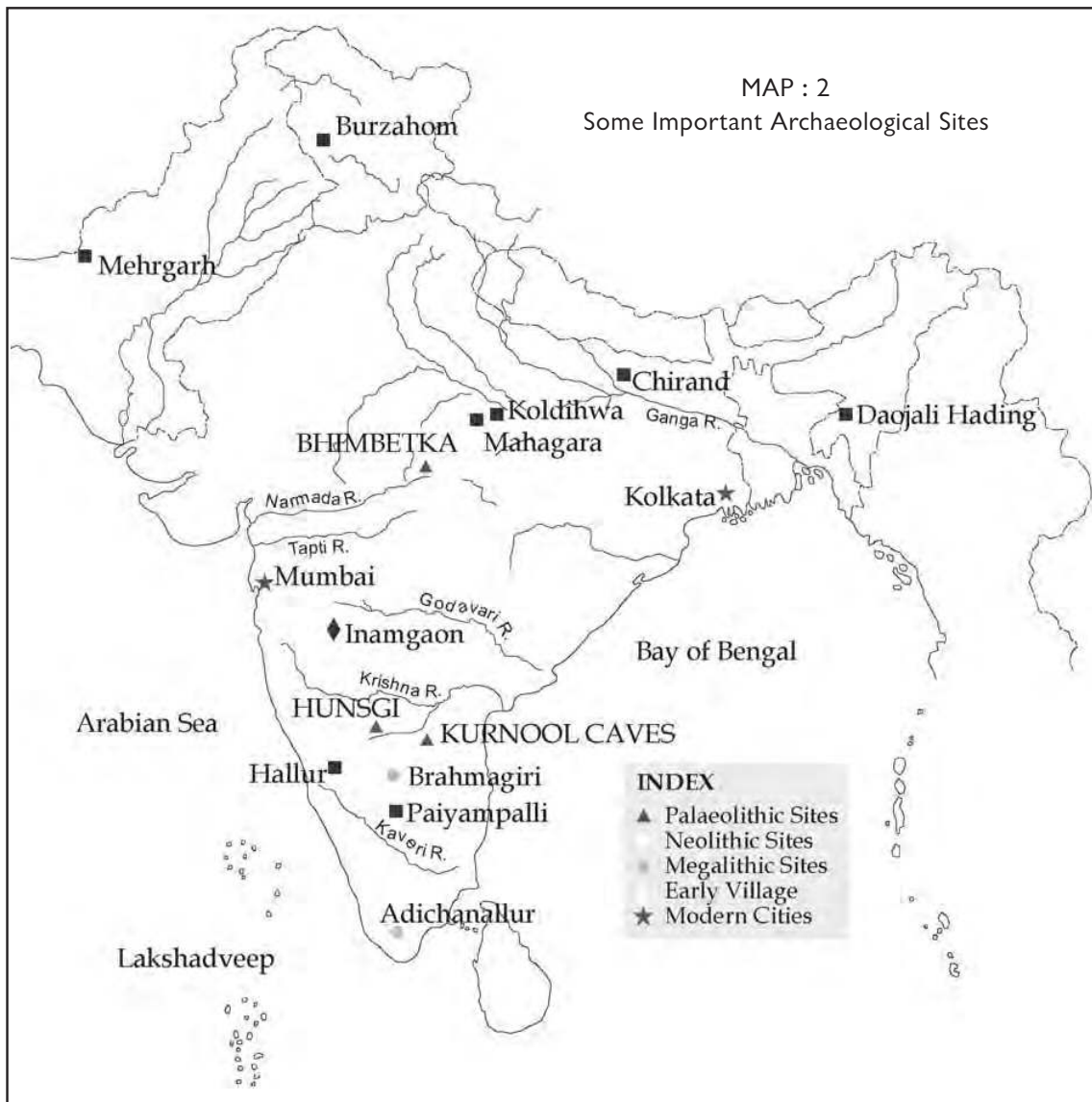
have been used for :

Left : Digging the ground to collect edible roots.

Right : Stitching clothes made out of animal skin.

Choosing a place to live in

Look at Map 2 below. All the places marked with red triangles are *sites* from which archaeologists have found evidence of hunter-gatherers. (Hunter-gatherers lived in many more places. Only some are shown on the map). Many sites were located near sources of water, such as rivers and lakes.



As stone tools were important, people tried to find places where good quality stone was easily available. Places where stone was found and where people made tools are known as *factory* sites.

How do we know where these factories were? Usually, we find blocks of stone, tools that were made and perhaps discarded because they were not perfect, and chips of waste stone left behind at these sites. Sometimes, people lived here for longer spells of time. These sites are called *habitation-cum-factory* sites.

If you had to describe the place you live in, which of the terms would you choose?

- (a) habitation
- (b) factory
- (c) habitation-cum-factory
- (d) any other

Bhimbetka (in present-day Madhya Pradesh). Some sites, known as habitation sites, are places where people lived. These include caves and rock shelters such as the one shown here. People chose these natural caves because they provided shelter from the rain, heat and wind. Natural caves and rock shelters are found in the Vindhyas and the Deccan plateau. These rock shelters are close to the Narmada valley. Can you think of why people chose to live here?



Sites

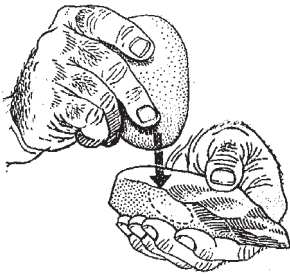
are places where the remains of things (tools, pots, buildings etc.) were found. These were made, used and left behind by people. These may be found on the surface of the earth, buried under the earth, or sometimes even under water. You will learn more about different sites in later chapters.

Making stone tools

Stone tools were probably made using two different techniques:

1. The first is called stone on stone. Here, the pebble from which the tool was to be made (also called the core) was held in one hand. Another stone, which was used as a hammer was held in the other hand. The second stone was used to strike off flakes from the first, till the required shape was obtained.

2. Pressure flaking: Here the core was placed on a firm surface. The hammer stone was used on a piece of bone or stone that was placed on the core, to remove flakes that could be shaped into tools.



How stone tools were made : one of the two techniques is shown in the illustration.
Try and identify it.

Finding out about fire

Find the Kurnool caves on Map 2 (page 14). Traces of ash have been found here. This suggests that people were familiar with the use of fire. Fire could have been used for many things: as a source of light, to cook meat, and to scare away animals.

What do we use fire for today?

A changing environment

Around 12,000 years ago, there were major changes in the climate of the world, with a shift to relatively warm conditions. In many areas, this led to the development of grasslands. This in turn

led to an increase in the number of deer, antelope, goat, sheep and cattle, i.e. animals that survived on grass.

Those who hunted these animals now followed them, learning about their food habits and their breeding seasons. It is likely that this helped people to start thinking about herding and rearing these animals themselves. Fishing also became important.

This was also a time when several grain bearing grasses, including wheat, barley and rice grew naturally in different parts of the subcontinent. Men, women and children probably collected these grains as food, and learnt where they grew, and when they ripened. This may have led them to think about growing plants on their own.

Names and dates

Archaeologists have given lengthy names for the time that we are studying. They call the earliest period the *Palaeolithic*. This comes from two Greek words, '*palaeo*', meaning old, and '*lithos*', meaning stone. The name points to the importance of finds of stone tools. The Palaeolithic period extends from 2 million years ago to about 12,000 years ago. This long stretch of time is divided into the Lower, Middle and Upper Palaeolithic. *This long span of time covers 99% of human history.*

The period when we find environmental changes, beginning about 12,000 years ago till about 10,000 years ago is called the *Mesolithic* (middle stone). Stone tools found during this period are generally tiny, and are called *microliths*. Microliths were probably stuck on to handles of bone or wood to make tools such as saws and sickles. At the same time, older varieties of tools continued to be in use.

Look at the illustration on page 13. Do you notice any difference in the tools belonging to these periods?

The next stage, from about 10,000 years ago, is known as the *Neolithic*. You will be learning about the Neolithic in Chapter 3.

What do you think the term Neolithic means?

We have also mentioned the name of some places. You will find the names of many more places in later chapters. Very often, we use present-day names of the places where people lived in the past, because we do not know what they called them.

Rock paintings and what they tell us



A painting from a rock shelter.

Describe the painting.

Many of the caves in which these early people lived have paintings on the walls. Some of the best examples are from Madhya Pradesh and southern Uttar Pradesh. These paintings show wild animals, drawn with great accuracy and skill.

Who did what?

We have seen that the earliest people hunted, gathered plant produce, made stone tools, and painted on cave walls. Is there any way of finding out whether women hunted, or men made stone tools, whether women painted or men gathered fruits and nuts? At present, we do not really know. However, there are at least two possibilities. It is likely that both men and women may have done many of these things together. It is also possible that some tasks were done only by women and others only by men. And again, there could have been different practices in different parts of the subcontinent.

Ostriches in India!

Ostriches were found in India during the Palaeolithic period. Large quantities of ostrich egg shells were found at Patne in Maharashtra. Designs were engraved on some pieces, while beads were also made out of them.

What do you think the beads could have been used for?

Where do we find ostriches today?

A closer look – Hunsgi

Find Hunsgi on Map 2 (page 14). A number of early Palaeolithic sites were found here. At some sites, a large number of tools, used for all sorts of activities, were found. These were probably

habitation-cum factory sites. In some of the other, smaller sites, there is evidence to suggest that tools were made. Some of the sites were close to springs. Most tools were made from limestone, which was locally available.

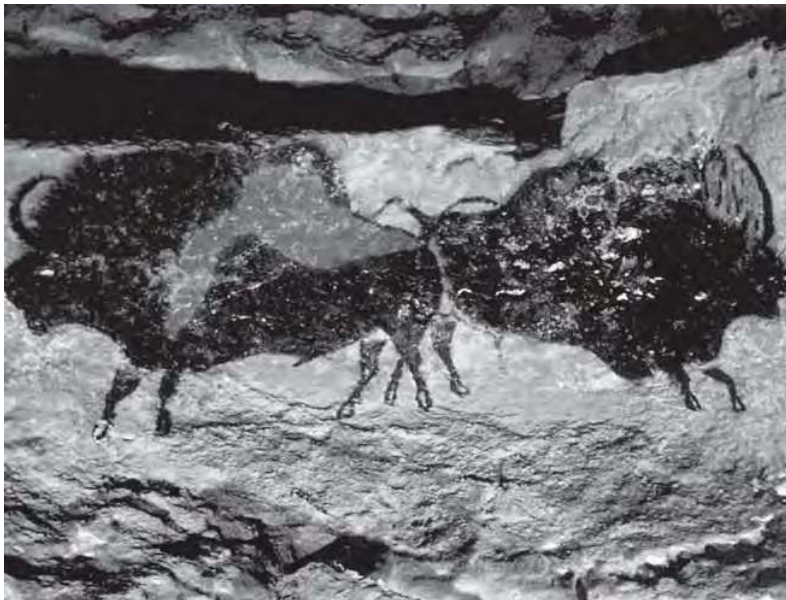
Can you think of a term for the second type of sites?

Elsewhere

Find France in your atlas. The painting below is from a cave in France. This site was discovered by four school children more than a hundred years ago. Paintings like this were made between 20,000 and 10,000 years ago. Many of these were of animals, such as wild horses, aurochs (an older, wild form of cattle), bison, woolly rhinoceros, reindeer and bear, painted in bright colours.

These colours were made from minerals like ochre or iron ore, and charcoal. It is possible that these paintings were done on ceremonial occasions. Or perhaps they were made for special rituals, performed by hunters before they went in search of prey?

Can you think of any other reasons?



KEYWORDS
hunter-gatherer
site
habitation
factory
Palaeolithic
Mesolithic
microliths

Imagine

You live in a rock shelter like the one shown on page 15 about 12,000 years ago. Your uncle is painting one of the inner walls of the cave and you want to help him. Will you mix the colours, draw the lines, fill in the colours? What are the stories he might tell you?

Let's recall



1. Complete the sentences:
 - (a) Hunter-gatherers chose to live in caves and rock shelters because _____.
 - (b) Grasslands developed around _____ years ago.
 - (c) Early people painted on the _____ of caves.
 - (d) In Hunsgi, tools were made of _____.
2. Look at the present-day political map of the subcontinent on page 136. Find out the states where Bhimbetka, Hunsgi and Kurnool are located. Would Tushar's train have passed near any of these sites?

Let's discuss



3. Why did the hunter-gatherers travel from place to place? In what ways are these similar to/different from the reasons for which we travel today?
4. What tools would you use today for cutting fruit? What would they be made of?
5. List three ways in which hunter-gatherers used fire (see page 16). Would you use fire for any of these purposes today?

Let's do



6. Make two columns in your notebook. In the left hand column, list the foods hunter-gatherers ate (see page 11). In the right hand column, list some of the foods you eat. Do you notice any similarities/differences?
7. If you had a natural pebble like the ones shown on page 13, what would you use it for?
8. List two tasks that are performed by both men and women at present. List another two that are performed only by women, and two that are performed only by men. Compare your list with that of any two of your classmates. Do you notice any similarities/differences in your lists?

SOME IMPORTANT DATES

- ▶ the Mesolithic period (12,000-10,000 years ago)
- ▶ the beginning of the Neolithic (10,000 years ago)

CHAPTER 3

FROM GATHERING TO GROWING FOOD



Neinuo's lunch

Neinuo was eating her favourite food — boiled rice, squash, pumpkins, beans and meat. Her grandmother had grown the squash, pumpkin and beans in the little garden plot at the back of her house. She remembered the food had been so different when she had been to Madhya Pradesh as part of a school trip. It was hot and spicy. Why was that so?

Varieties of foods

Today, most of our food such as fruit, vegetables, grain, milk and meat comes from plants that are grown and animals that are reared. Different plants grow in different conditions — rice, for example, requires more water than wheat and barley. This explains why farmers grow some crops in some areas and not in other areas. Different animals too, prefer different environments — for instance, sheep and goat can survive more easily than cattle in dry, hilly environments. But, as you saw in Chapter 2, women and men did not always produce their own food.

The beginnings of farming and herding

We have seen in Chapter 2 that the climate of the world was changing, and so were plants and animals that people used as food. Men, women and children probably observed several things: the places where edible plants were found, how seeds broke off stalks, fell on the ground, and new plants sprouted from them. Perhaps they began looking after plants — protecting them from birds and animals so that they could grow and the seeds could ripen. In this way people became farmers.

Women, men and children could also attract and then tame animals by leaving food for them near their shelters. The first animal to be tamed was the wild ancestor of the dog. Later, people encouraged animals that were relatively gentle to come near the camps where they lived. These animals such as sheep, goat, cattle and also the pig lived in herds, and most of them ate grass. Often, people protected these animals from attacks by other wild animals. This is how they became herders.

Can you think of any reasons why the dog was perhaps the first animal to be tamed?

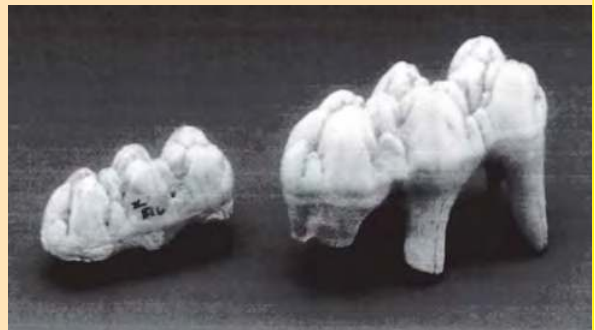
Domestication

is the name given to the process in which people grow plants and look after animals. Very often, plants and animals that are tended by people become different from wild plants and animals. This is because people *select* plants and animals for domestication. For example, they select those plants and animals that are not prone to disease. They also select plants that yield large-size grain, and have strong stalks, capable of bearing the weight of the ripe grain. Seeds from selected plants are preserved and sown to ensure that new plants (and seeds) will have the same qualities.

Amongst animals, those that are relatively gentle are selected for breeding. As a result, gradually, domesticated animals and plants become different from wild animals and plants. For example, the teeth and horns of wild animals are usually much larger than those of domesticated animals.

Look at these two sets of teeth. Which do you think belongs to a wild pig and which to a domesticated animal?

Domestication was a gradual process that took place in many parts of the world. It began about 12,000 years ago. Virtually all the plant and animal produce that we use as food today is a result of domestication. Some of the earliest plants to be domesticated were wheat and barley. The earliest domesticated animals include sheep and goat.





A new way of life

If you plant a seed, you will notice that it takes some time to grow. This may be for several days, weeks, months and in some cases years. When people began growing plants, it meant that they had to stay in the same place for a long time looking after the plants, watering, weeding, driving away animals and birds — till the grain ripened. And then, the grain had to be used carefully.

As grain had to be stored for both food and seed, people had to think of ways of storing it. In many areas, they began making large clay pots, or wove baskets, or dug pits into the ground. **Do you think hunter-gatherers would have made and used pots? Give reasons for your answer.**

‘Storing’ animals

Animals multiply naturally. Besides, if they are looked after carefully, they provide milk, which is an important source of food, and meat, whenever required. In other words, animals that are reared can be used as a ‘store’ of food.

Apart from food, what are the other things that could have been obtained from animals?

What are animals used for today?

Finding out about the first farmers and herders

Turn to Map 2 (page 14). You will notice a number of blue squares. Each marks a site from where archaeologists have found evidence of early farmers and herders. These are found all over the subcontinent. Some of the most important ones are in the north-west, in present-day Kashmir, and in east and south India.

To find out whether these sites were settlements of farmers and herders, scientists study evidence

of plants and animal bones. One of the most exciting finds includes remains of burnt grain. (These may have been burnt accidentally or on purpose). Scientists can identify these grains, and so we know that a number of crops were grown in different parts of the subcontinent. They can also identify the bones of different animals.

Look at the table below to see where evidence of grain and bones of domesticated animals have been found.

Grain and Bones	Sites
Wheat, barley, sheep, goat, cattle	Mehrgarh (in present day-Pakistan)
Rice, fragmentary animal bones	Koldihwa (in present-day Uttar Pradesh)
Rice, cattle (hoof marks on clay surface)	Mahagara (in present-day Uttar Pradesh)
Wheat and lentil	Gufkral (in present-day Kashmir)
Wheat and lentil, dog, cattle, sheep, goat, buffalo,	Burzahom (in present-day Kashmir)
Wheat, green gram, barley, buffalo, ox	Chirand (in present-day Bihar)
Millet, cattle, sheep, goat, pig	Hallur (in present-day Andhra Pradesh)
Black gram, millet, cattle, sheep, pig	Paiyampalli (in present-day Andhra Pradesh)
These are just some of the sites from which grain and bones have been found.	

Towards a settled life

Archaeologists have found traces of huts or houses at some sites. For instance, in Burzahom (in present-day Kashmir) people built pit-houses, which were dug into the ground, with steps leading into them. These may have provided shelter in cold weather. Archaeologists have also found cooking hearths both inside and outside the huts, which suggests that, depending on the weather, people could cook food either indoors or outdoors.

Draw a pit house.

Stone tools have been found from many sites as well. Many of these are different from the earlier Palaeolithic tools and that is why they are called *Neolithic*. These include tools that were polished to give a fine cutting edge, and mortars and pestles used for grinding grain and other plant produce. Mortars and pestles are used for grinding grain even today, several thousand years later. At the same time, tools of the Palaeolithic types continued to be made and used, and remember, some tools were also made of bone.



New stone tools.
Compare these with the
tools shown on page 13
(Chapter 2).
Can you see any
similarities or
differences?

Many kinds of earthen pots have also been found. These were sometimes decorated, and were used for storing things. People began using pots

for cooking food, especially grains like rice, wheat and lentils that now became an important part of the diet. Besides, they began weaving cloth, using different kinds of materials, for example cotton, that could now be grown.

Did things change everywhere and all at once? Not quite. In many areas, men and women still continued to hunt and gather food, and elsewhere people adopted farming and herding slowly, over several thousand years. Besides, in some cases people tried to combine these activities, doing different things during different seasons.



What do you think could have been stored in this jar?

What about other customs and practices?

Archaeology does not tell us directly about these. Scholars have studied the lives of present-day farmers who practise simple agriculture. They have also studied the lives of herders. Many of these farmers and herders live in groups called *tribes*. Scholars find that they follow certain customs and practices that may have existed earlier as well.

Tribes

Usually two to three generations live together in small settlements or *villages*. Most families are related to one another and groups of such families form a tribe.

- Members of a tribe follow occupations such as hunting, gathering, farming, herding and fishing. Usually, women do most of the agricultural work, including preparing the ground, sowing seeds, looking after the growing plants and harvesting grain. Children often look after plants, driving away animals and birds that might eat them. Women also thresh, husk, and grind grain. Men usually lead large herds of animals in search of pasture. Children often look after small flocks. The cleaning of animals and milking, is done by both men and women. Both women and men make pots, baskets, tools and huts. They also take part in singing, dancing and decorating their huts.

- Some men are regarded as leaders. They may be old and experienced, or young, brave warriors, or priests. Old women are respected for their wisdom and experience.
- Tribes have rich and unique cultural traditions, including their own language, music, stories and paintings. They also have their own gods and goddesses.
- What makes tribes different from many other societies you will be studying about is that land, forests, grasslands and water are regarded as the wealth of the entire tribe, and everybody shares and uses these together. There are no sharp differences between the rich and the poor.

Make a list of all the activities performed by men in tribal societies.
What do women do?

Are there any activities that are done by both men and women?

A closer look — (a) Living and dying in Mehrgarh

Find Mehrgarh on Map 2 (page 14). This site is located in a fertile plain, near the Bolan Pass, which is one of the most important routes into Iran. Mehrgarh was probably one of the places where women and men learnt to grow barley and wheat, and rear sheep and goats for the first time in this area. It is one of the earliest villages that we know about.

Archaeologists who excavated the site found evidence of many kinds of animal bones from the earliest *levels*. These included bones of wild animals such as the deer and pig. In later levels, they found more bones of sheep and goat, and in still later levels, cattle bones are most common, suggesting that this was the animal that was generally kept by the people.

Village

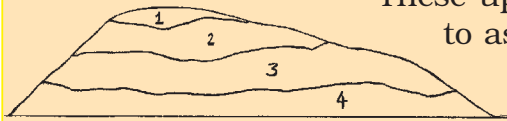
One of the distinctive features of a village is that most people who live there are engaged in food production.

Earlier and later levels

When archaeologists are digging at an excavation site, how do they know which level is earlier and which is later?

Look at the illustration.

Suppose people first start living on flat land (layer 4). Over the years, the surface will gradually rise, because people discard waste material, and generally stay and rebuild houses in the same place. After hundreds of years, this leads to the formation of a mound. So, when this mound is dug up, what is found from the *upper* layers of the mound is generally from a *later* time than what is found from the *lower* layers of the mound, which are older.

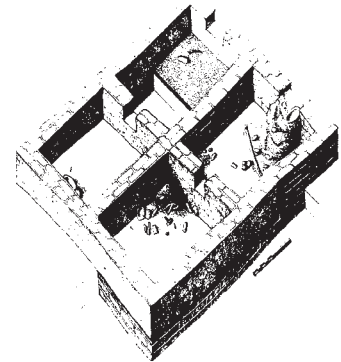


These upper and lower layers are often referred to as levels.

Look at layers 2 and 3. Which do you think is the earlier level?

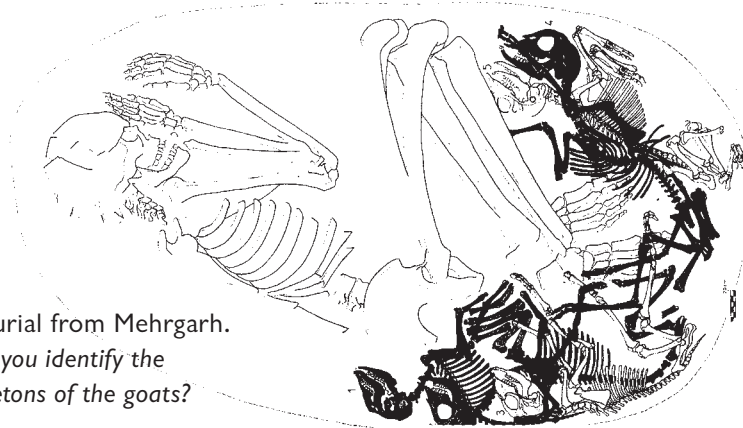
Other finds at Mehrgarh include remains of square or rectangular houses. Each house had four or more compartments, some of which may have been used for storage.

When people die, their relatives and friends generally pay respect to them. People look after them, perhaps in the belief that there is some form of life after death. Burial is one such arrangement. Several burial sites have been found at Mehrgarh. In one instance, the dead person was buried with goats, which were probably meant to serve as food in the next world.



A house in Mehrgarh. This is what a house in Mehrgarh may have looked like.

In what ways is this house similar to the one in which you live?



A burial from Mehrgarh.
Can you identify the skeletons of the goats?

KEYWORDS
domestication
farmers
herders
Neolithic
pots
tribes
village
houses
burials

A closer look — (b) Daojali Hading

Find Daojali Hading on Map 2 (page 14). This is a site on the hills near the Brahmaputra Valley, close to routes leading into China and Myanmar. Here stone tools, including mortars and pestles, have been found. These indicate that people were probably growing grain and preparing food from it. Other finds include jadeite, a stone that may have been brought from China. Also common are finds of tools made of fossil wood (ancient wood that has hardened into stone), and pottery.

Elsewhere

Find Turkey in your atlas. One of the most famous Neolithic sites, Catal Huyuk, was found in Turkey. Several things were brought from great distances — flint from Syria, cowries from the Red Sea, shells from the Mediterranean Sea — and used in the settlement. Remember, there were no carts — most things would have been carried on the backs of pack animals such as cattle or by people.

What do you think cowries and shells would have been used for?

Imagine

You are in charge of a small plot of land and have to decide what food crops to grow. What are the plants you would choose? Where would you get the seeds from? How would you plant them? How would you look after your plants? And when would they be ready for harvesting?

Let's recall



1. Why do people who grow crops have to stay in the same place for a long time?
2. Look at the table on page 25. If Neinuo wanted to eat rice, which are the places she should have visited?
3. Why do archaeologists think that many people who lived in Mehrgarh were hunters to start with and that herding became more important later?
4. State whether true or false:
 - (a) Millets have been found at Hallur.
 - (b) People in Burzahom lived in rectangular houses.
 - (c) Chirand is a site in Kashmir.
 - (d) Jadeite, found in Daojali Hading, may have been brought from China.

SOME IMPORTANT DATES

- ▶ Beginnings of domestication (about 12,000 years ago)
- ▶ Beginning of settlement at Mehrgarh (about 8000 years ago)

Let's discuss



5. List three ways in which the lives of farmers and herders would have been different from that of hunter-gatherers.
6. Make a list of all the animals mentioned in the table (page 25). For each one, describe what they may have been used for.

Let's do



7. List the cereals that you eat.
8. Do you grow the cereals you have listed in answer no. 7? If yes, draw a chart to show the stages in growing them. If not, draw a chart to show how these cereals reach you from the farmers who grow them.

CHAPTER 4

IN THE EARLIEST CITIES



Saving an old building

Jaspal and Harpreet were playing cricket in the lane outside their home when they noticed the people who were admiring the dilapidated old building that the children called the haunted house.

“Look at the architecture!” said one of the men.

“Have you seen the fine wood carving?” asked one of the women.

“We must write to the Minister so that she makes arrangements to repair and preserve this beautiful house.” Why, they wondered, would anybody be interested in the old, run down house?

The story of Harappa

Very often, old buildings have a story to tell. Nearly a hundred and fifty years ago, when railway lines were being laid down for the first time in the Punjab, engineers stumbled upon the site of Harappa in present-day Pakistan. To them, it seemed like a mound that was a rich source of ready made, high quality bricks. So they carried off thousands of bricks from the walls of the old buildings of the city to build railway lines. Many buildings were completely destroyed.

Then, about eighty years ago, archaeologists found the site, and realised that this was one of the oldest cities in the subcontinent. As this was the first city to be discovered, all other sites from where similar buildings (and other things) were found were described as Harappan. These cities developed about 4700 years ago.

Very often, old buildings are pulled down to make way for new construction. Do you think it is important to preserve old buildings?

What was special about these cities?

Many of these cities were divided into two or more parts. Usually, the part to the west was smaller but higher. Archaeologists describe this as the *citadel*. Generally, the part to the east was larger but lower. This is called the lower town. Very often walls of baked brick were built around each part. The bricks were so well made that they have lasted for thousands of years. The bricks were laid in an interlocking pattern and that made the walls strong.

In some cities, special buildings were constructed on the citadel. For example, in Mohenjodaro, a very special tank, which archaeologists call the Great Bath, was built in this area. This was lined with bricks, coated with plaster, and made water-tight with a layer of natural tar. There were steps leading down to it from two sides, while there were rooms on all sides. Water was probably brought in from a well, and drained out after use. Perhaps important people took a dip in this tank on special occasions.

Other cities, such as Kalibangan and Lothal had fire altars, where sacrifices may have been performed. And some cities like Mohenjodaro, Harappa, and Lothal had elaborate store houses.

These cities were found in the Punjab and Sind in Pakistan, and in Gujarat, Rajasthan, Haryana and the Punjab in India.

Archaeologists have found a set of unique objects in almost all these cities: red pottery painted with designs in black, stone weights, seals, special beads, copper tools, and long stone blades.





The Great Bath

Houses, drains and streets

Generally, houses were either one or two storeys high, with rooms built around a courtyard. Most houses had a separate bathing area, and some had wells to supply water.

How bricks were arranged to build walls in Harappan cities



Many of these cities had covered drains. Notice how carefully these were laid out, in straight lines. Although you cannot see it, each drain had a gentle slope so that water could flow through it. Very often, drains in houses were connected to those on the streets and smaller drains led into bigger ones. As the drains were covered, inspection holes were provided at intervals to clean them. All three — houses, drains and streets — were probably planned and built at the same time.

List at least two differences between the houses described here and those that you studied about in Chapter 3.

Life in the city

A Harappan city was a very busy place. There were people who planned the construction of special buildings in the city. These were probably the *rulers*. It is likely that the rulers sent people to distant lands to get metal, precious stones, and other things that they wanted. They may have kept the most valuable objects, such as ornaments of gold and silver, or beautiful beads, for themselves. And there were *scribes*, people who knew how to write, who helped prepare the seals, and perhaps wrote on other materials that have not survived.

Besides, there were men and women, *crafts persons*, making all kinds of things — either in their own homes, or in special workshops. People were travelling to distant lands or returning with raw materials and, perhaps, stories. Many terracotta toys have been found and a long time ago children must have played with these.

Make a list of the people who lived in the city.

Were any of these people listed as living in villages such as Mehrgarh?



Top : A street in Mohenjodaro with a drain.
Above : A well.

Far Left : A Harappan seal. The signs on the top of the seal are part of a script. This is the earliest form of writing known in the subcontinent.

Scholars have tried to read these signs but we still do not know exactly what they mean.

Left : Terracotta toys.





Top : Stone weights.
Notice how carefully and precisely these weights are shaped. These were made of chert, a kind of stone. These were probably used to weigh precious stones or metals.

Right : Beads.
Many of these were made out of carnelian, a beautiful red stone. The stone was cut, shaped, polished and finally a hole was bored through the centre so that a string could be passed through it.

Far right : Stone blades.

Bottom Right :
Embroidered cloth.
A stone statue of an important man found from Mohenjodaro shows him wearing an embroidered garment.

New crafts in the city

Let us look at some of the objects that were made and found in Harappan cities. Most of the things that have been found by archaeologists are made of stone, shell and *metal*, including copper, bronze, gold and silver. Copper and bronze were used to make tools, weapons, ornaments and vessels. Gold and silver were used to make ornaments and vessels.

Perhaps the most striking finds are those of beads, weights, and blades.



The Harappans also made seals out of stone. These are generally rectangular (See illustration on page 35) and usually have an animal carved on them.

The Harappans also made pots with beautiful black designs, such as the one shown on page 6.

Was metal used in the villages you learnt about in Chapter 3?

Was stone used to make weights?

Cotton was probably grown at Mehrgarh from about 7000 years ago. Actual pieces of cloth were found attached to the lid of a silver vase and some copper objects at Mohenjodaro. Archaeologists have also found spindle whorls,



Faience

Unlike stone or shell, that are found naturally, faience is a material that is artificially produced. A gum was used to shape sand or powdered quartz into an object. The objects were then glazed, resulting in a shiny, glassy surface. The colours of the glaze were usually blue or sea green.

Faience was used to make beads, bangles, earrings, and tiny vessels.



made of terracotta and faience. These were used to spin thread.

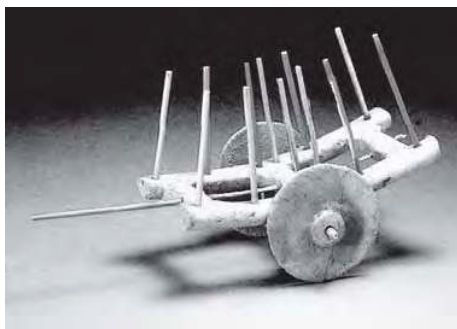
Many of the things that were produced were probably the work of *specialists*. A specialist is a person who is trained to do only one kind of work, for example, cutting stone, or polishing beads, or carving seals. Look at the illustration (page 36) and see how well the face is carved and how carefully the beard is shown. This must have been the work of an expert crafts person.

Not everybody could have been a specialist. We do not know whether only men were specialists or only women were specialists. Perhaps some women and men may have been specialists.

In search of raw materials

Raw materials are substances that are either found naturally (such as wood, or ores of metals) or produced by farmers or herders. These are then processed to produce finished goods. For example, cotton, produced by farmers, is a raw material that may be processed to make cloth. While some of the raw materials that the Harappans used were available locally, many items such as copper, tin, gold, silver and precious stones had to be brought from distant places.

The Harappans probably got copper from present-day Rajasthan, and even from Oman in



West Asia. Tin, which was mixed with copper to produce bronze, may have been brought from present-day Afghanistan and Iran. Gold could have come all the way from present-day Karnataka, and precious stones from present-day Gujarat, Iran and Afghanistan.

How were goods carried from one place to another?

Look at the illustrations. One shows a toy and the other is a seal.

Can you suggest what the modes of transport used by the Harappans were?

Did you come across illustrations of wheeled vehicles in earlier lessons?



Food for people in the cities

While many people lived in the cities, others living in the countryside grew crops and reared animals. These farmers and herders supplied food to crafts persons, scribes and rulers in the cities. We know from remains of plants that the Harappans grew wheat, barley, pulses, peas, rice, sesame, linseed and mustard.

A new tool, the *plough*, was used to dig the earth for turning the soil and planting seeds. While real ploughs, which were probably made of wood, have not survived, toy models have been found. As this region does not receive heavy rainfall, some form of *irrigation* may have been used. This means that water was stored and supplied to the fields when the plants were growing.

The Harappans reared cattle, sheep, goat and buffalo. Water and pastures were available around settlements. However, in the dry summer months large herds of animals were probably taken to greater distances in search of grass and water. They also collected fruits like

A toy plough.

Today, in many farming communities, only men use the plough. We do not know whether the Harappans followed such customs or not.



ber, caught fish and hunted wild animals like the antelope.

A closer look — Harappan towns in Gujarat

The city of Dholavira was located on Khadir Beyt in the Rann of Kutch, where there was fresh water and fertile soil. Unlike some of the other Harappan cities, which were divided into two parts, Dholavira was divided into three parts, and each part was surrounded with massive stone walls, with entrances through gateways. There was also a large open area in the settlement, where public ceremonies could be held. Other finds include large letters of the Harappan script that were carved out of white stone and perhaps inlaid in wood. This is a unique find as generally Harappan writing has been found on small objects such as seals.

The city of Lothal stood beside a tributary of the Sabarmati, in Gujarat, close to the Gulf of Khambhat. It was situated near areas where raw materials such as semi-precious stones were easily available. This was an important centre for making objects out of stone, shell and metal. There was also a store house in the city. Many seals and sealings (the impression of seals on clay) were found in this storehouse.

A dockyard at Lothal.
This huge tank may have been a dockyard, where boats and ships came in from the sea and through the river channel. Goods were probably loaded and unloaded here.



A building that was found here was probably a workshop for making beads: pieces of stone, half made beads, tools for bead making, and finished beads have all been found here.



Seals and sealings

Seals may have been used to stamp bags or packets containing goods that were sent from one place to another. After a bag was closed or tied, a layer of wet clay was applied on the knot, and the seal was pressed on it. The impression of the seal is known as a sealing.

If the sealing was intact, one could be sure that the goods had arrived safely.

Seals are used even today. Find out what they are used for.

The mystery of the end

Around 3900 years ago we find the beginning of a major change. People stopped living in many of the cities. Writing, seals and weights were no longer used. Raw materials brought from long distances became rare. In Mohenjodaro, we find that garbage piled up on the streets, the drainage system broke down, and new, less impressive houses were built, even over the streets.

Why did all this happen? We are not sure. Some scholars suggest that the rivers dried up. Others suggest that there was deforestation. This could have happened because fuel was required for baking bricks, and for smelting copper ores. Besides, grazing by large herds of cattle, sheep and goat may have destroyed the green cover. In some areas there were floods. But none of these reasons can explain the end of *all* the cities. Flooding, or a river drying up would have had an effect in only some areas.

KEYWORDS

city
citadel
ruler
scribe
crafts person
metal
seal
specialist
raw material
plough
irrigation

It appears as if the rulers lost control. In any case, the effects of the change are quite clear. Sites in Sind and west Punjab (present-day Pakistan) were abandoned, while many people moved into newer, smaller settlements to the east and the south.

New cities emerged about 1400 years later. You will read about them in Chapters 6 and 9.

Elsewhere

Find Egypt in your atlas. Most of Egypt is a dry desert, except for the lands along the river Nile.

Around 5000 years ago, kings ruled over Egypt. These kings sent armies to distant lands to get gold, silver, ivory, timber, and precious stones. They also built huge tombs, known as pyramids.

When they died, the bodies of kings were preserved and buried in these pyramids. These carefully preserved bodies are known as 'mummies'. A large number of objects were also buried with them. These included food and drink, clothes, ornaments, utensils, musical instruments, weapons and animals. Sometimes even serving men and women were buried with the rulers. These are amongst the most elaborate burials known in world history.

Do you think kings would have needed these things after death?



Imagine

You are travelling with your parents, about 4000 years ago, from Lothal to Mohenjodaro. Describe how you would travel, what your parents might carry with them, and what you would see in Mohenjodaro.

SOME IMPORTANT DATES

- ▶ Cotton cultivation at Mehrgarh (about 7000 years ago)
- ▶ Beginning of cities (about 4700 years ago)
- ▶ Beginning of the end of these cities (about 3900 years ago)
- ▶ The emergence of other cities (about 2500 years ago)

Let's recall



1. How do archaeologists know that cloth was used in the Harappan civilisation?
2. Match the columns

Copper	Gujarat
Gold	Afghanistan
Tin	Rajasthan
Precious stones	Karnataka
3. Why were metals, writing, the wheel, and the plough important for the Harappans?

Let's discuss



4. Make a list of all the terracotta toys shown in the lesson. Which do you think children would have enjoyed playing with the most?
5. Make a list of what the Harappans ate, and put a tick mark against the things you eat today.
6. Do you think that the life of farmers and herders who supplied food to the Harappan cities was different from that of the farmers and herders you read about in Chapter 3? Give reasons for your answer.

Let's do



7. Describe three important buildings in your city or village. Are they located in a special part of the settlement (e.g. the centre)? What are the activities that take place in these buildings?
8. Are there any old buildings in your locality? Find out how old they are and who looks after them.

CHAPTER 5

WHAT BOOKS AND BURIALS TELL US

Mary in the library

As the bell rang, the teacher asked the students to follow him, because they were going to the library for the first time. When Mary stepped inside, she found that the library was much larger than their classroom. And there were so many shelves, all full of books. In one corner was a cupboard filled with large, old volumes. Seeing her trying to open the cupboard, the teacher said, “That cupboard has very special books on different religions. Did you know that we have a set of the Vedas?” What are the Vedas? Mary wondered. Let us find out.



One of the oldest books in the world

You may have heard about the Vedas. There are four of them – the Rigveda, Samaveda, Yajurveda and Atharvaveda. The oldest Veda is the Rigveda, composed about 3500 years ago. The Rigveda includes more than a thousand hymns, called *sukta* or “well-said”. These hymns are in praise of various gods and goddesses. Three gods are especially important: Agni, the god of fire; Indra, a warrior god; and Soma, a plant from which a special drink was prepared.

These hymns were composed by sages (*rishis*). Priests taught students to recite and memorise each syllable, word, and sentence, bit by bit, with great care. Most of the hymns were composed, taught and learnt by men. A few were composed by women. The Rigveda is in old or Vedic Sanskrit, which is different from the Sanskrit you learn in school these days.

Sanskrit and other languages

Sanskrit is part of a *family* of languages known as Indo-European. Some Indian languages such as Assamese, Gujarati, Hindi, Kashmiri and Sindhi, and many European languages such as English, French, German, Greek, Italian and Spanish belong to this family. They are called a family because they originally had words in common.

Take the words ‘*matr*’ (Sanskrit), ‘*ma*’ (Hindi) and ‘mother’ (English).

Do you notice any similarities?

Other languages used in the subcontinent belong to different families. For instance, those used in the north-east belong to the Tibeto-Burman family; Tamil, Telugu, Kannada and Malayalam belong to the Dravidian family; and the languages spoken in Jharkhand and parts of central India belong to the Austro-Asiatic family.

List the languages you have heard about and try and identify the families to which they belong.

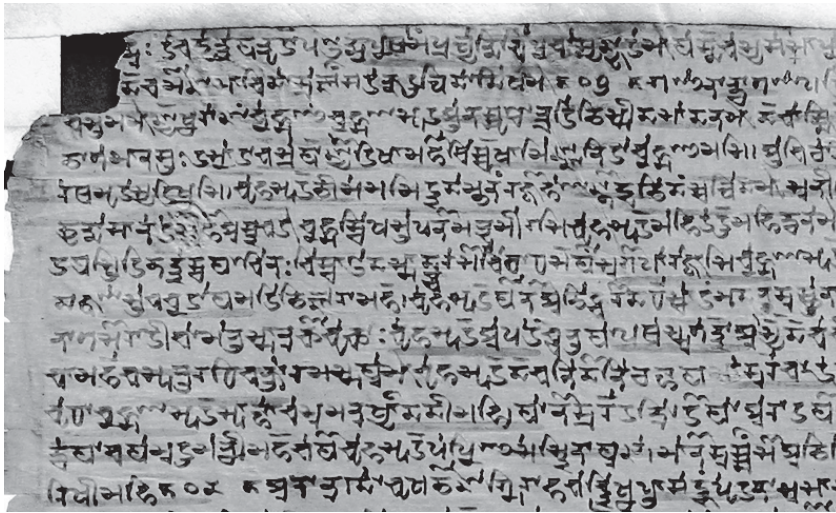
The books we use are written and printed. The Rigveda was recited and *heard* rather than read. It was written down several centuries after it was first composed, and printed less than 200 years ago.

How historians study the Rigveda

Historians, like archaeologists, find out about the past, but, in addition to material remains, they examine written sources as well. Let us see how they study the Rigveda.

Some of the hymns in the Rigveda are in the form of dialogues. This is part of one such hymn, a dialogue between a sage named Vishvamitra, and two rivers, (Beas and Sutlej) that were worshipped as goddesses.

Find the rivers on Map 1 (page 2), then read on:



A page from a manuscript of the Rigveda. This manuscript of the Rigveda, on birch bark, was found in Kashmir. About 150 years ago, it was used to prepare one of the earliest printed texts of the Rigveda, as well as an English translation. It is now preserved in a library in Pune, Maharashtra.

Vishvamitra and the Rivers

Vishvamitra: O rivers, come down from the mountains like two swift horses, like two shining cows that lick their calves.

You move like chariots to the sea, through the power of Indra. You are full of water and wish to unite with one another.

The rivers: We, who are full of water, move along the path the gods have made for us. Once we start flowing, we cannot be stopped. Why do you pray to us, o sage?

Vishvamitra: O sisters, please listen to me, the singer who has come from a distance with his chariots and carts. Let your waters not rise above our axles, so that we can cross safely.

The rivers: We will listen to your prayers so that you can cross safely. Historians point out that this hymn was composed in the area where these rivers flow. They also suggest that the sage lived in a society where horses and cows were valued animals. That is why the rivers are compared to horses and cows.

Do you think chariots were also important? Give reasons for your answer. Read the verses and find out what are the modes of transport that are mentioned.

Other rivers, especially the Indus and its other tributaries, and the Sarasvati, are also named in the hymns. The Ganga and Yamuna are named only once.

Look at Map 1 (page 2) and list 5 rivers that are not mentioned in the Rigveda.

Cattle, horses and chariots

There are many prayers in the Rigveda for cattle, children (especially sons), and horses. Horses were yoked to chariots that were used in battles, which were fought to capture cattle. Battles were also fought for land, which was important for pasture, and for growing hardy crops that ripened quickly, such as barley. Some battles were fought for water, and to capture people.

Some of the wealth that was obtained was kept by the leaders, some was given to the priests and the rest was distributed amongst the people. Some wealth was used for the performance of *yajnas* or sacrifices in which offerings were made into the fire. These were meant for gods and goddesses. Offerings could include ghee, grain, and in some cases, animals.

Most men took part in these wars. There was no regular army, but there were assemblies where people met and discussed matters of war and peace. They also chose leaders, who were often brave and skilful warriors.

Words to describe people

There are several ways of describing people — in terms of the work they do, the language they speak, the place they belong to, their family, their communities and cultural practices. Let us see some of the words used to describe people found in the Rigveda.

There are two groups who are described in terms of their work — the priests, sometimes called *brahmins*, who performed various rituals and the *rajas*.

These *rajas* were not like the ones you will be learning about later. They did not have capital cities, palaces or armies, nor did they collect taxes.

Generally, sons did not automatically succeed fathers as rajas.

Read the previous section once more and see whether you can find out what the rajas did.

Two words were used to describe the people or the community as a whole. One was the word *jana*, which we still use in Hindi and other languages. The other was *vish*. The word *vaishya* comes from *vish*. You will learn more about this in Chapter 6.

Several *vish* or *jana* are mentioned by name. So we find reference to the Puru *jana* or *vish*, the Bharata *jana* or *vish*, the Yadu *jana* or *vish*, and so on.

Do any of these names sound familiar?

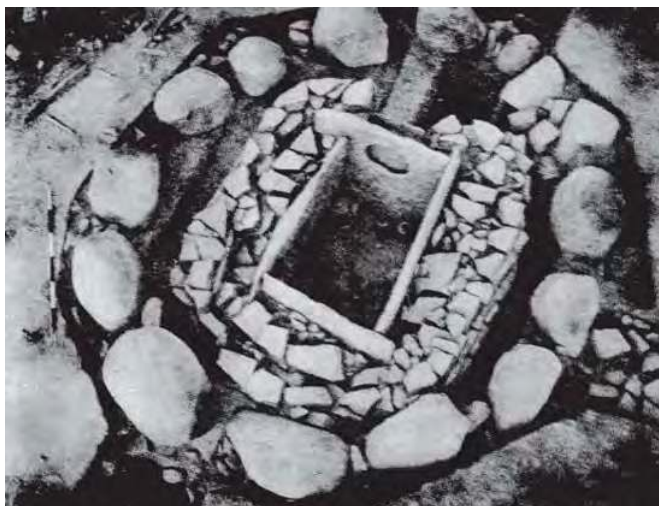
Sometimes, the people who composed the hymns described themselves as *Aryas* and called their opponents *Dasas* or *Dasyus*. These were people who did not perform sacrifices, and probably spoke different languages. Later, the term *dasa* (and the feminine *dasi*) came to mean *slave*. Slaves were women and men who were often captured in war. They were treated as the property of their owners, who could make them do whatever work they wanted.

While the Rigveda was being composed in the north-west of the subcontinent, there were other developments elsewhere. Let us look at some of these.

Silent sentinels—the story of the megaliths

Look at the illustration on the next page.

These stone boulders are known as megaliths (literally big stones). These were carefully arranged by people, and were used to mark burial sites. The practice of erecting megaliths began about 3000 years ago, and was prevalent throughout the Deccan, south India, in the north-east and Kashmir.



Top : This type of megalith is known as a cist. Some cists, like the one shown here, have port-holes which could be used as an entrance.

Some important megalithic sites are shown on Map 2 (page 14). While some megaliths can be seen on the surface, other megalithic burials are often underground.

Sometimes, archaeologists find a circle of stone boulders or a single large stone standing on the ground. These are the only indications that there are burials beneath.

There were several things that people did to make megaliths. We have made a list here. Try and arrange them in the correct order: digging pits in the earth, transporting stones, breaking boulders, placing stones in position, finding suitable stone, shaping stones, burying the dead.

All these burials have some common features. Generally, the dead were buried with distinctive pots, which are called Black and Red Ware. Also found are tools and weapons of iron and sometimes, skeletons of horses, horse equipment and ornaments of stone and gold.

Was iron used in the Harappan cities?



Iron equipment found from megalithic burials.

Left top : Horse equipment.

Left below : Axes.

Below : A dagger.



Finding out about social differences

Archaeologists think that objects found with a skeleton probably belonged to the dead person. Sometimes, more objects are found in one grave than in another. Find Brahmagiri on Map 2 (page 14). Here, one skeleton was buried with 33 gold beads, 2 stone beads, 4 copper bangles, and one conch shell. Other skeletons have only a few pots. These finds suggest that there was some difference in status amongst the people who were buried. Some were rich, others poor, some chiefs, others followers.

Were some burial spots meant for certain families?

Sometimes, megaliths contain more than one skeleton. These indicate that people, perhaps belonging to the same family, were buried in the same place though not at the same time. The bodies of those who died later were brought into the grave through the portholes. Stone circles or boulders placed on the surface probably served as signposts to find the burial site, so that people could return to the same place whenever they wanted to.

A special burial at Inamgaon

Find Inamgaon on Map 2 (page 14). It is a site on the river Ghod, a tributary of the Bhima. It was occupied between 3600 and 2700 years ago. Here, adults were generally buried in the ground, laid out straight, with the head towards the north. Sometimes burials were within the houses. Vessels that probably contained food and water were placed with the dead.

One man was found buried in a large, four legged clay jar in the courtyard of a five-roomed house (one of the largest houses at the site), in

the centre of the settlement. This house also had a granary. The body was placed in a cross-legged position.

Do you think this was the body of a chief?
Give reasons for your answer.

What skeletal studies tell us

It is easy to make out the skeleton of a child from its small size. However, there are no major differences in the bones of a girl and a boy.

Can we make out whether a skeleton was that of a man or a woman?

Sometimes, people decide on the basis of what is found with the skeleton. For instance, if a skeleton is found with jewellery, it is sometimes thought to be that of a woman. However, there are problems with this. Often, men also wore ornaments.

A better way of figuring out the sex of a skeleton is to look at the bone structure. The hip or the pelvic area of women is generally larger to enable child bearing.

These distinctions are based on modern skeletal studies.

About 2000 years ago, there was a famous physician named Charaka who wrote a book on medicine known as the Charaka Samhita. There he states that the human body has 360 bones. This is a much larger number than the 200 bones that are recognised in modern anatomy. Charaka arrived at this figure by counting the teeth, joints and cartilage.

How do you think he found out about the human body in such great detail?

Occupations at Inamgaon

Archaeologists have found seeds of wheat, barley, rice, pulses, millets, peas and sesame. Bones of a number of animals, many bearing cut marks that show they may have been used as food, have also been found. These include cattle, buffalo, goat, sheep, dog, horse, ass, pig, *sambhar*, spotted deer, blackbuck, antelope, hare, and mongoose, besides birds, crocodile, turtle, crab and fish. There is evidence that fruits such as *ber*, *amla*, *jamun*, dates and a variety of berries were collected.

Use this evidence to list the possible occupations of the people at Inamgaon.

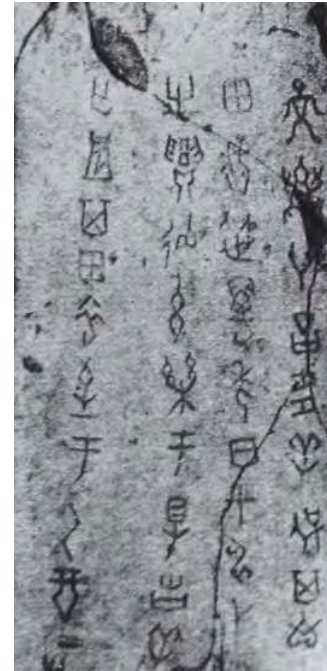
Elsewhere

Find China in your atlas. Around 3500 years ago, we find some of the first evidence of writing in China.

These writings were on animal bones. These are called oracle bones, because they were used to predict the future. Kings got scribes to write questions on the bones — would they win battles? Would the harvest be good? Would they have sons? The bones were then put into the fire, and they cracked because of the heat. Then fortunetellers studied these cracks, and tried to predict the future. As you may expect, they sometimes made mistakes.

These kings lived in palaces in cities. They amassed vast quantities of wealth, including large, elaborately decorated bronze vessels. However, they did not know the use of iron.

List one difference between the *raja* of the Rigveda and these kings.



Imagine

You live in Inamgaon, 3000 years ago, and the chief has died last night. Today, your parents are preparing for the burial. Describe the scene, including how food is being prepared for the funeral. What do you think would be offered?

KEYWORDS

Veda
language
hymn
chariot
sacrifice
raja
slave
megalith
burial
skeletal
iron

SOME IMPORTANT DATES

- ▶ Beginning of the composition of the Vedas (about 3500 years ago)
- ▶ Beginning of the building of megaliths (about 3000 years ago)
- ▶ Settlement at Inamgaon (between 3600 and 2700 years ago)
- ▶ Charaka (about 2000 years ago)

Let's recall



1. Match the columns

<i>Sukta</i>	Stone boulder
Chariots	Sacrifice
<i>Yajna</i>	Well-said
<i>Dasa</i>	Used in battles
Megalith	Slave

2. Complete the sentences:

- (a) Slaves were used for _____
- (b) Megaliths are found in _____
- (c) Stone circles or boulders on the surface were used to _____
- (d) Port-holes were used for _____
- (e) People at Inamgaon ate _____

Let's discuss



- 3. In what ways are the books we read today different from the Rigveda?
- 4. What kind of evidence from burials do archaeologists use to find out whether there were social differences amongst those who were buried?
- 5. In what ways do you think that the life of a *raja* was different from that of a *dasa* or *dasi*?

Let's do



6. Find out whether your school library has a collection of books on religion, and list the names of five books from this collection.
7. Write down a short poem or song that you have memorised. Did you hear or read the poem or song? How did you learn it by heart?
8. In the Rigveda, people were described in terms of the work they did and the languages they spoke. In the table below, fill in the names of six people you know, choosing three men and three women. For each of them, mention the work they do and the language they speak. Would you like to add anything else to the description?

NAME	WORK	LANGUAGE	ANYTHING ELSE

CHAPTER 6

KINGDOMS, KINGS AND AN EARLY REPUBLIC



Election day

Shankaran woke up to see his grandparents all ready to go and vote. They wanted to be the first to reach the polling booth. Why, Shankaran wanted to know, were they so excited? Somewhat impatiently, his grandfather explained: “We can choose our own rulers today.”

How some men became rulers

Choosing leaders or rulers by voting is something that has become common during the last fifty years or so. How did men become rulers in the past? Some of the *rajas* we read about in Chapter 5 were probably chosen by the *jana*, the people. But, around 3000 years ago, we find some changes taking place in the ways in which *rajas* were chosen. Some men now became recognised as *rajas* by performing very big sacrifices.

The *ashvamedha* or horse sacrifice was one such ritual. A horse was let loose to wander freely and it was guarded by the *raja*'s men. If the horse wandered into the kingdoms of other *rajas* and they stopped it, they had to fight. If they allowed the horse to pass, it meant that they accepted that the *raja* who wanted to perform the sacrifice was stronger than them. These *rajas* were then invited to the sacrifice, which was performed by specially trained priests, who were rewarded with gifts. The *raja* who organised the sacrifice was recognised as being very powerful, and all those who came brought gifts for him.

The *raja* was a central figure in these rituals. He often had a special seat, a throne or a tiger skin. His charioteer, who was his companion in the battle field and witnessed his exploits,

chanted tales of his glory. His relatives, especially his wives and sons, had to perform a variety of minor rituals. The other *rajas* were simply spectators who had to sit and watch the performance of the sacrifice. Priests performed the rituals including the sprinkling of sacred water on the king. The ordinary people, the *vish* or *vaishya*, also brought gifts. However, some people, such as those who were regarded as *shudras* by the priests, were excluded from many rituals.

Make a list of all those who would be present at the sacrifice. Which are the categories that are described in terms of their occupation?

Varnas

We have many books that were composed in north India, especially in the areas drained by the Ganga and the Yamuna, during this period. These books are often called later Vedic, because they were composed after the Rigveda about which you learnt in Chapter 5. These include the Samaveda, Yajurveda and Atharvaveda, as well as other books. These were composed by priests, and described how rituals were to be performed. They also contained rules about society.

There were several different groups in society at this time — priests and warriors, farmers, herders, traders, crafts persons, labourers, fishing folk, and forest people. Some priests and warriors were rich, as were some farmers and traders. Others, including many herders, crafts persons, labourers, fishing folk and hunters and gatherers, were poor.

The priests divided people into four groups, called *varnas*. According to them, each *varna* had a different set of functions.

The first *varna* was that of the *brahmin*. *Brahmins* were expected to study (and teach) the Vedas, perform sacrifices and receive gifts.

In the second place were the rulers, also known as *kshatriyas*. They were expected to fight battles and protect people.

Third were the *vish* or the *vaishyas*. They were expected to be farmers, herders, and traders. Both the *kshatriyas* and the *vaishyas* could perform sacrifices.

Last were the *shudras*, who had to serve the other three groups and could not perform any rituals. Often, women were also grouped with the *shudras*. Both women and *shudras* were not allowed to study the Vedas.

The priests also said that these groups were decided on the basis of birth. For example, if one's father and mother were *brahmins* one would automatically become a *brahmin*, and so on. Later, they classified some people as *untouchable*. These included some crafts persons, hunters and gatherers, as well as people who helped perform burials and cremations. The priests said that contact with these groups was polluting.

Many people did not accept the system of *varna* laid down by the *brahmins*. Some kings thought they were superior to the priests. Others felt that birth could not be a basis for deciding which *varna* people belonged to. Besides, some people felt that there should be no differences amongst people based on occupation. Others felt that everybody should be able to perform rituals. And others condemned the practice of untouchability. Also, there were many areas in the subcontinent, such as the north-east, where social and economic differences were not very sharp, and where the influence of the priests was limited.

Why did people oppose the system of *varnas*?

Painted Grey Ware.
Plates and bowls are the most common vessels made out of Painted Grey Ware. These are extremely fine to touch, with a nice, smooth surface. Perhaps these were used on special occasions, for important people, and to serve special food.



Janapadas

The *rajas* who performed these big sacrifices were now recognised as being *rajas* of *janapadas* rather than *janas*. The word *janapada* literally means the land where the *jana* set its foot, and settled down. Some important *janapadas* are shown on Map 4 (page 57).

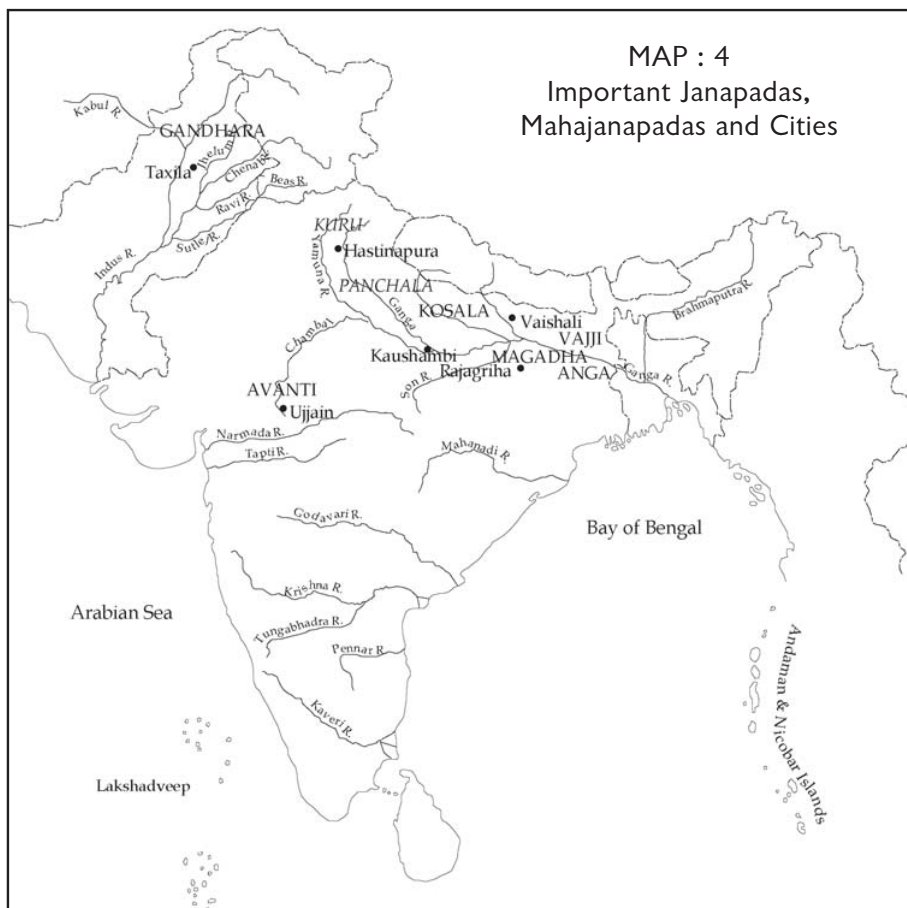
Archaeologists have excavated a number of settlements in these *janapadas*, such as Purana Qila in Delhi, Hastinapur near Meerut, and Atranjikhhera, near Etah (the last two are in Uttar Pradesh). They found that people lived in huts, and kept cattle as well as other animals. They also grew a variety of crops — rice, wheat, barley, pulses, sugarcane, sesame and mustard.

Is there a crop in this list that was not mentioned in Chapter 4?

They made earthen pots. Some of these were grey in colour, others were red. One special type of pottery found at these sites is known as Painted Grey Ware. As is obvious from the name, these grey pots had painted designs, usually simple lines and geometric patterns.

Mahajanapadas

About 2500 years ago, some *janapadas* became more important than others, and were known as *mahajanapadas*. Some of these are shown on Map 4. Most *mahajanapadas* had a capital city, many of these were *fortified*. This means that huge walls of wood, brick or stone were built around them.



Forts were probably built because people were afraid of attacks from other kings and needed protection. It is also likely that some rulers wanted to show how rich and powerful they were by building really large, tall and impressive walls around their cities. Also in this way, the land and the people living inside the fortified area could be controlled more easily by the king. Building such huge walls required a great deal of planning. Thousands, if not lakhs of bricks or stone had to be prepared. This in turn meant enormous labour, provided, possibly, by thousands of men, women and children. And resources had to be found for all of this.

The fortification wall at Kaushambi.

This is a picture of remains of a wall made of brick, found near present-day Allahabad (Uttar Pradesh). A part of it was probably built about 2500 years ago.



The new *rajas* now began maintaining armies. Soldiers were paid regular salaries and maintained by the king throughout the year. Some payments were probably made using punch marked coins (see the illustration on page 92). You will read more about these coins in Chapter 9.

List two ways in which the *rajas* of the *mahajanapadas* were different from those mentioned in the Rigveda.

Taxes

As the rulers of the *mahajanapadas* were (a) building huge forts (b) maintaining big armies, they needed more resources. And they needed officials to collect these. So, instead of depending on occasional gifts brought by people, as in the case of the *raja* of the *janapadas*, they started collecting regular *taxes*.

- Taxes on crops were the most important. This was because most people were farmers. Usually, the tax was fixed at 1/6th of what was produced. This was known as *bhaga* or a share.
- There were taxes on crafts persons as well. These could have been in the form of labour. For example, a weaver or a smith may have had to work for a day every month for the king.
- Herders were also expected to pay taxes in the form of animals and animal produce.
- There were also taxes on goods that were bought and sold, through trade.
- And hunters and gatherers also had to provide forest produce to the *raja*.

What do you think would have been provided by hunters and gatherers?

Changes in agriculture

There were two major changes in agriculture around this time. One was the growing use of iron ploughshares. This meant that heavy, clayey soil could be turned over better than with a wooden ploughshare, so that more grain could be produced. Second, people began transplanting paddy. This meant that instead of scattering seed on the ground, from which plants would sprout, saplings were grown and then planted in the fields. This led to increased production, as many more plants survived. However, it was back breaking work. Generally, slave men and women, (*dasas* and *dasis*) and landless agricultural labourers (*kammakaras*) had to do this work.

Can you think why kings would encourage these changes?

A closer look — (a) Magadha

Find Magadha on Map 4 (page 57). Magadha became the most important *mahajanapada* in about two hundred years. Many rivers such as the Ganga and Son flowed through Magadha. This was important for (a) transport, (b) water supplies (c) making the land fertile. Parts of Magadha were forested. Elephants, which lived in the forest, could be captured and trained for the army. Forests also provided wood for building houses, carts and chariots. Besides, there were iron ore mines in the region that could be tapped to make strong tools and weapons.

Magadha had two very powerful rulers, Bimbisara and Ajatasattu, who used all possible means to conquer other *janapadas*. Mahapadma Nanda was another important ruler. He extended his control up to the north-west part of the subcontinent. Rajagriha (present-day Rajgir) in Bihar was the capital of Magadha for several years.

Later the capital was shifted to Pataliputra (present-day Patna).

More than 2300 years ago, a ruler named Alexander, who lived in Macedonia in Europe, wanted to become a world conqueror. Of course, he didn't conquer the world, but did conquer parts of Egypt and West Asia, and came to the Indian subcontinent, reaching up to the banks of the Beas. When he wanted to march further eastwards, his soldiers refused. They were scared, as they had heard that the rulers of India had vast armies of foot soldiers, chariots and elephants.

In what ways were these armies different from those described in the Rigveda?

A closer look — (b) Vajji

While Magadha became a powerful kingdom, Vajji, with its capital at Vaishali (Bihar), was under a different form of government, known as *gana* or *sangha*.

In a *gana* or a *sangha* there were not one, but many rulers. Sometimes, even when thousands of men ruled together, each one was known as a *raja*. These *rajas* performed rituals together. They also met in assemblies, and decided what had to be done and how, through discussion and debate. For example, if they were attacked by an enemy, they met to discuss what should be done to meet the threat. However, women, *dasas* and *kammakaras* could not participate in these assemblies.

Both the Buddha and Mahavira (about whom you will read in Chapter 7) belonged to *ganas* or *sanghas*. Some of the most vivid descriptions of life in the *sanghas* can be found in Buddhist books.

Gana

Is used for a group that has many members.

Sangha

Means organisation or association.

KEYWORDS

raja
ashvamedha
varna
janapada
mahajanapada
fortification
army
tax
transplantation
gana or *sangha*
democracy

This is an account of the Vajjis from the Digha Nikaya, a famous Buddhist book, which contains some of the speeches of the Buddha. These were written down about 2300 years ago.

Ajatasattu and the Vajjis

Ajatasattu wanted to attack the Vajjis. He sent his minister named Vassakara to the Buddha to get his advice on the matter.

The Buddha asked whether the Vajjis met frequently, in full assemblies. When he heard that they did, he replied that the Vajjis would continue to prosper as long as:

- They held full and frequent public assemblies.
- They met and acted together.
- They followed established rules.
- They respected, supported and listened to elders.
- Vajji women were not held by force or captured.
- *Chaityas* (local shrines) were maintained in both towns and villages.
- Wise saints who followed different beliefs were respected and allowed to enter and leave the country freely.

In what ways was the Vajji *sangha* different from the other *mahajanapadas*? Try and list at least three differences.

Rajas of powerful kingdoms tried to conquer the *sanghas*. Nevertheless, these lasted for a very long time, till about 1500 years ago, when the last of the *ganas* or *sanghas* were conquered by the Gupta rulers, about whom you will read in Chapter 11.

Elsewhere

Find Greece and Athens in your atlas.

Around 2500 years ago, the people of Athens set up a form of government, which was called a democracy, which lasted for about 200 years.

All free men over the age of 30 were recognised as full citizens.

There was an assembly that met at least 40 times a year to decide on important matters.

All citizens could attend these meetings.

Appointments for many positions were made through lottery. All those who wanted to be chosen gave in their names, and then some were selected through lottery.

Citizens were expected to serve in the army and the navy.

However, women were not considered citizens.

Also, many foreigners, who lived and worked in Athens as merchants and crafts persons did not have rights as citizens.

Besides, there were several thousand slaves in Athens, who worked in mines, fields, households and workshops. They too were not treated as citizens.

Do you think this was a true democracy?

Imagine

You are peeping through a crack in the walls of the assembly of Vaishali, where a meeting is in progress to discuss ways to deal with an attack by the king of Magadha. Describe what you might hear.

Let's recall

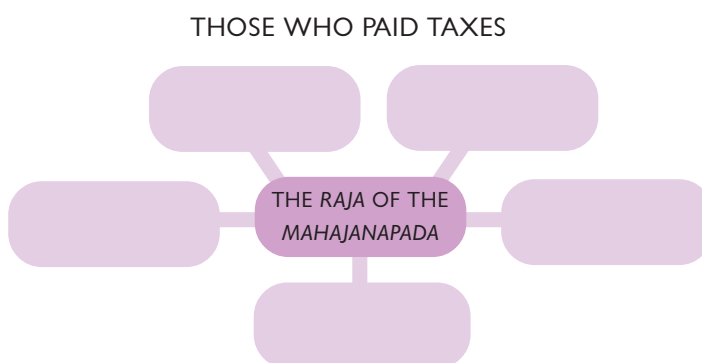


1. State whether true or false:
 - (a) *Rajas* who let the *ashvamedha* horse pass through their lands were invited to the sacrifice.
 - (b) The charioteer sprinkled sacred water on the king.
 - (c) Archaeologists have found palaces in the settlements of the *janapadas*.
 - (d) Pots to store grain were made out of Painted Grey Ware.
 - (e) Many cities in *mahajanapadas* were fortified.

SOME IMPORTANT DATES

- ▶ New kinds of *rajas* (about 3000 years ago)
- ▶ Mahajanapadas (about 2500 years ago)
- ▶ Alexander's invasion, composition of the Digha Nikaya (about 2300 years ago)
- ▶ End of the *ganas* or *sanghas* (about 1500 years ago)

2. Fill in the chart given below with the terms: hunter-gatherers, farmers, traders, crafts persons, herders.



3. Who were the groups who could not participate in the assemblies of the *ganas*?

Let's discuss



4. Why did the *rajas* of *mahajanapadas* build forts?
5. In what ways are present-day elections different from the ways in which rulers were chosen in *janapadas*?

Let's do



6. Find the state in which you live in the political map on page 136. Were there any *janapadas* in your state? If yes, name them. If not, name the *janapadas* that would have been the closest to your state, and mention whether they were to the east, west, north or south.
7. Find out whether any of the groups mentioned in answer 2 pay taxes today.
8. Find out whether the groups mentioned in answer 3 have voting rights at present.

CHAPTER 7

NEW QUESTIONS AND IDEAS

Anagha's school trip

This was the first time Anagha was going on a school trip. They boarded the train from Pune (in Maharashtra) late at night, to go all the way to Varanasi (in Uttar Pradesh). Her mother, who came to see her off at the station, told the teacher: "Do tell the children about the Buddha, and take them to see Sarnath as well."



The story of the Buddha

Siddhartha, also known as Gautama, the founder of Buddhism, was born about 2500 years ago. This was a time of rapid change in the lives of people. As you saw in Chapter 6, some kings in the *mahajanapadas* were growing more powerful. New cities were developing, and life was changing in the villages as well (see Chapter 10). Many thinkers were trying to understand these changes in society. They also wanted to try and find out the true meaning of life.

The Buddha belonged to a small *gana* known as the Sakya *gana*, and was a *kshatriya*. When he was a young man, he left the comforts of his home in search of knowledge. He wandered for several years, meeting and holding discussions with other thinkers. He finally decided to find his own path to realisation, and meditated for days on end under a *peepal* tree at Bodh Gaya in Bihar, where he attained enlightenment. After that, he was known as the *Buddha* or the Wise One. He then went to Sarnath, near Varanasi, where he taught for the first time. He spent the rest of his life travelling on foot, going from place to place, teaching people, till he passed away at Kusinara.

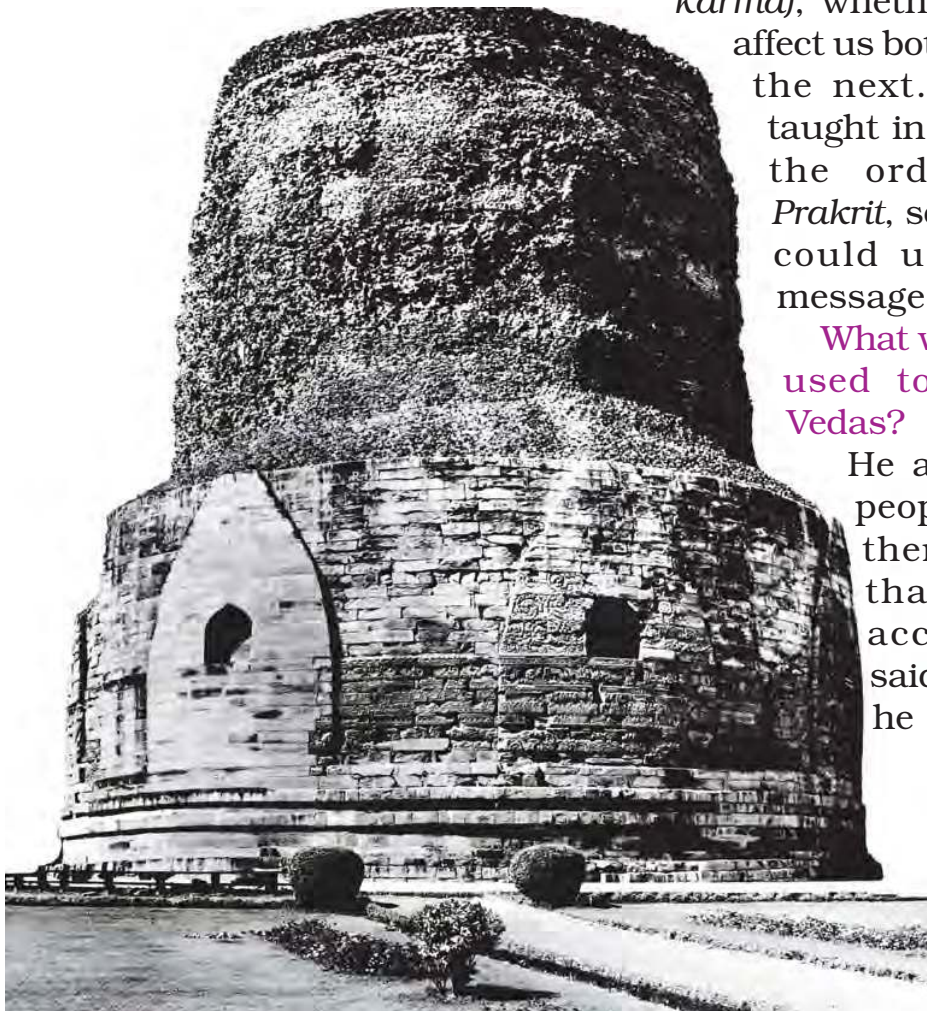
The stupa at Sarnath. This building, known as a stupa, was built to mark the place where the Buddha first taught his message. You will learn more about stupas in Chapter 12.

The Buddha taught that life is full of suffering and unhappiness. This is caused because we have cravings and desires (which often cannot be fulfilled). Sometimes, even if we get what we want, we are not satisfied, and want even more (or want other things). The Buddha described this as thirst or *tanha*. He taught that this constant craving could be removed by following moderation in everything.

He also taught people to be kind, and to respect the lives of others, including animals. He believed that the results of our actions (called *karma*), whether good or bad, affect us both in this life and the next. The Buddha taught in the language of the ordinary people, *Prakrit*, so that everybody could understand his message.

What was the language used to compose the Vedas?

He also encouraged people to think for themselves rather than to simply accept what he said. Let us see how he did this.



The story of Kisagotami

Here is a famous story about the Buddha.

Once there was a woman named Kisagotami, whose son had died. She was so sad that she roamed through the streets of the city carrying the child with her, asking for help to bring him back to life. A kind man took her to the Buddha.

The Buddha said: “Bring me a handful of mustard seeds, and I will bring your child back to life.”

Kisagotami was overjoyed and started off at once, but the Buddha gently stopped her and added: “The seeds must come from the house of a family where nobody has died.”

Kisagotami went from door to door, but wherever she went, she found out that someone or the other — father, mother, sister, brother, husband, wife, child, uncle, aunt, grandfather, grandmother — had died.

What was the Buddha trying to teach the sorrowing mother?

Upanishads

Around the time that the Buddha was preaching and perhaps a little earlier, other thinkers also tried to find answers to difficult questions. Some of them wanted to know about life after death, others wanted to know why sacrifices should be performed. Many of these thinkers felt that there was something permanent in the universe that would last even after death. They described this as the *atman* or the individual soul and the *brahman* or the universal soul. They believed that ultimately, both the *atman* and the *brahman* were one.

Many of their ideas were recorded in the Upanishads. These were part of the later Vedic texts. Upanishad literally means ‘approaching and sitting near’ and the texts contain conversations between teachers and students. Often, ideas were presented through simple dialogues.

The wise beggar

Here is a dialogue based on a story from one of the most famous Upanishads, the Chhandogya Upanishad.

Shaunaka and Abhipratarin were two sages who worshipped the universal soul.

Once, as they sat down to eat, a beggar came and asked for some food.

"We cannot spare anything for you," Shaunaka said.

"Learned sirs, whom do you worship?" the beggar asked.

"The universal soul," Abhipratarin replied.

"Ah! It means that you know that the universal soul fills the entire world."

"Yes, yes. We know that." The sages nodded.

"If the universal soul fills the whole world, it fills me too. Who am I, but a part of the world?" the beggar asked.

"You speak the truth, O young *brahmin*."

"Then, O sages, by not giving me food, you are actually denying food to the universal soul."

The sages realised the truth of what the beggar said, and shared their food with him.

How did the beggar convince the sages to share their food with him?

Most Upanishadic thinkers were men, especially *brahmins* and *rajas*. Occasionally, there is mention of women thinkers, such as Gargi, who was famous for her learning, and participated in debates held in royal courts. Poor people rarely took part in these discussions. One famous exception was Satyakama Jabala, who was named after his mother, the slave woman Jabali. He had a deep desire to learn about reality, was accepted as a student by a *brahmin* teacher named Gautama, and became one of the best-known thinkers of the time. Many of the ideas of the Upanishads were later developed by the famous thinker Shankaracharya, about whom you will read in Class VII.

Panini, the grammarian

This was also the time when other scholars were at work. One of the most famous was Panini, who prepared a grammar for Sanskrit. He arranged the vowels and the consonants in a special order, and then used these to create formulae like those found in Algebra. He used these to write down the rules of the language in short formulae (around 3000 of them!).

Jainism

The most famous thinker of the Jainas, Vardhamana Mahavira, also spread his message around this time, i.e. 2500 years ago. He was a *kshatriya* prince of the Lichchhavis, a group that was part of the Vajji *sangha*, about which you read in Chapter 6. At the age of thirty, he left home and went to live in a forest. For twelve years he led a hard and lonely life, at the end of which he attained enlightenment.

He taught a simple doctrine: men and women who wished to know the truth must leave their homes. They must follow very strictly the rules of *ahimsa*, which means not hurting or killing living beings. “All beings,” said Mahavira “long to live. To all things life is dear.” Ordinary people could understand the teachings of Mahavira and his followers, because they used Prakrit. There were several forms of Prakrit, used in different parts of the country, and named after the regions in which they were used. For example, the Prakrit spoken in Magadha was known as Magadhi.

Followers of Mahavira, who were known as *Jainas*, had to lead very simple lives, begging for food. They had to be absolutely honest, and were especially asked not to steal. Also, they had to observe celibacy. And men had to give up everything, including their clothes.

Jaina

The word Jaina comes from the term Jina, meaning conqueror.

Why do you think the term Jina was used for Mahavira?

It was very difficult for most men and women to follow these strict rules. Nevertheless, thousands left their homes to learn and teach this new way of life. Many more remained behind and supported those who became monks and nuns, providing them with food.

Jainism was supported mainly by traders. Farmers, who had to kill insects to protect their crops, found it more difficult to follow the rules. Over hundreds of years, Jainism spread to different parts of north India, and to Gujarat, Tamil Nadu and Karnataka. The teachings of Mahavira and his followers were transmitted orally for several centuries. They were written down in the form in which they are presently available at a place called Valabhi, in Gujarat, about 1500 years ago (see Map 7, page 113).

The sangha

Both the Mahavira and the Buddha felt that only those who left their homes could gain true knowledge. They arranged for them to stay together in the *sangha*, an association of those who left their homes.

The rules made for the Buddhist *sangha* were written down in a book called the Vinaya Pitaka. From this we know that there were separate branches for men and women. All men could join the *sangha*. However, children had to take the permission of their parents and slaves that of their masters. Those who worked for the king had to take his permission and debtors that of creditors. Women had to take their husbands' permission.

Men and women who joined the *sangha* led simple lives. They meditated for most of the time, and went to cities and villages to beg for food during fixed hours. That is why they were known as *bhikkhus* (the Prakrit word for beggar) and

bhikkhunis. They taught others, and helped one another. They also held meetings to settle any quarrels that took place within the *sangha*.

Those who joined the *sangha* included *brahmins*, *kshatriyas*, merchants, labourers, barbers, courtesans and slaves. Many of them wrote down the teachings of the Buddha. Some of them also composed beautiful poems, describing their life in the *sangha*.

List at least two ways in which the *sangha* described in this lesson was different from the one mentioned in Chapter 6. Were there any similarities?

Monasteries

To begin with, both Jaina and Buddhist monks went from place to place throughout the year, teaching people. The only time they stayed in one place was during the rainy season, when it was very difficult to travel. Then, their supporters built temporary shelters for them in gardens, or they lived in natural caves in hilly areas.

As time went on, many supporters of the monks and nuns, and they themselves, felt the need for more permanent shelters and so monasteries were built. These were known as *viharas*. The earliest

A cave hollowed out in the hills.

This is a cave in Karle, present-day Maharashtra. Monks and nuns lived and meditated in these shelters.



viharas were made of wood, and then of brick. Some were even in caves that were dug out in hills, especially in western India.

A Buddhist text tells us:

Just as the waters of rivers lose their names and separateness when they flow into the mighty ocean, so are *varna* and ranks and family forgotten when the followers of the Buddha join the order of monks.

Very often, the land on which the *vihara* was built was donated by a rich merchant or a landowner, or the king. The local people came with gifts of food, clothing and medicines for the monks and nuns. In return, they taught the people. Over the centuries, Buddhism spread to many parts of the subcontinent and beyond. You will learn more about this in Chapter 10.

The system of ashramas

Around the time when Jainism and Buddhism were becoming popular, *brahmins* developed the system of *ashramas*.

Here, the word *ashrama* does not mean a place where people live and meditate.

It is used instead for a *stage of life*.

Four *ashramas* were recognised: *brahmacharya*, *grihastha*, *vanaprastha* and *samnyasa*.

Brahmin, *kshatriya* and *vaishya* men were expected to lead simple lives and study the Vedas during the early years of their life (*brahmacharya*).

Then they had to marry and live as householders (*grihastha*).

Then they had to live in the forest and meditate (*vanaprastha*).

Finally, they had to give up everything and become *samnyasins*.

The system of *ashramas* allowed men to spend some part of their lives in meditation. Generally, women were not allowed to study the Vedas, and they had to follow the *ashramas* chosen by their husbands.

In what way was the system of *ashramas* different from life in the sangha?

What are the *varnas* mentioned here? Were all four *varnas* allowed to participate in the system of *ashramas*?

Elsewhere

Find Iran in your atlas. Zoroaster was an Iranian prophet. His teachings are contained in a book called the Avesta. The language of the Avesta, and the practices described in it are very similar to those of the Vedas. The basic teachings of Zoroaster are contained in the maxim “Good thoughts, Good Words and Good Deeds.” Here is a verse from the Zend Avesta:

“Lord, grant strength and the rule of truth and good thinking, by means of which one shall create peace and tranquillity.”

For more than a thousand years, Zoroastrianism was a major religion in Iran. Later, some Zoroastrians migrated from Iran and settled down in the coastal towns of Gujarat and Maharashtra. They were the ancestors of today’s Parsis.

Imagine

You want to go to listen to one of the preachers who lived about 2500 years ago. Describe your conversation with your parents as you try to persuade them to let you go.

Let’s recall



1. Describe the ways in which the Buddha tried to spread his message to the people.
2. Write whether true or false:
 - (a) The Buddha encouraged animal sacrifices.
 - (b) Sarnath is important because it was the place where the Buddha taught for the first time.
 - (c) The Buddha taught that *karma* has no effect on our lives.
 - (d) The Buddha attained enlightenment at Bodhi Gaya.

KEYWORDS

tanha
Prakrit
Upanishad
atman
brahman
ahimsa
Jaina
sangha
bhikkhu
vihara
monastery
ashrama

SOME IMPORTANT DATES

- ▶ Upanishadic thinkers, the Jaina teacher Mahavira and the Buddha (about 2500 years ago)
- ▶ Writing down of the Jaina texts (about 1500 years ago)

e. Upanishadic thinkers believed that the *atman* and *brahman* were ultimately one.

3. What were the questions that Upanishadic thinkers wanted to answer?
4. What were the main teachings of the Mahavira?

Let's discuss



5. Why do you think Anagha's mother wanted her to know the story of the Buddha?
6. Do you think it would have been easy for slaves to join the *sangha*? Give reasons for your answer.

Let's do



7. Make a list of at least five ideas and questions mentioned in this lesson. Choose three from the list and discuss why you think they are important even today.
8. Find out more about men and women who renounce the world today. Where do they live, what kinds of clothes do they wear, what do they eat? Why do they renounce the world?

CHAPTER 8

ASHOKA, THE EMPEROR WHO GAVE UP WAR

Roshan's rupees

Roshan clutched the crisp notes that her grandfather had given her on her birthday. While she badly wanted to buy a new cassette, she also wanted to just see and feel the brand new notes. It was then that she noticed that all of them had a smiling face of Gandhiji printed on the right, and a tiny set of lions on the left. What were the lions there for, she wondered.



A very big kingdom = an empire

The lions that we see on our notes and coins have a long history. They were carved in stone, and placed on top of a massive stone pillar at Sarnath (about which you read in Chapter 7).

Ashoka was one of the greatest rulers known to history and on his instructions inscriptions were carved on pillars, as well as on rock surfaces. Before we find out what was written in these inscriptions, let us see why his kingdom was called an empire.

The empire that Ashoka ruled was founded by his grandfather, Chandragupta Maurya, more than 2300 years ago. Chandragupta was supported by a wise man named Chanakya or Kautilya. Many of Chanakya's ideas were written down in a book called the Arthashastra.

The lion capital



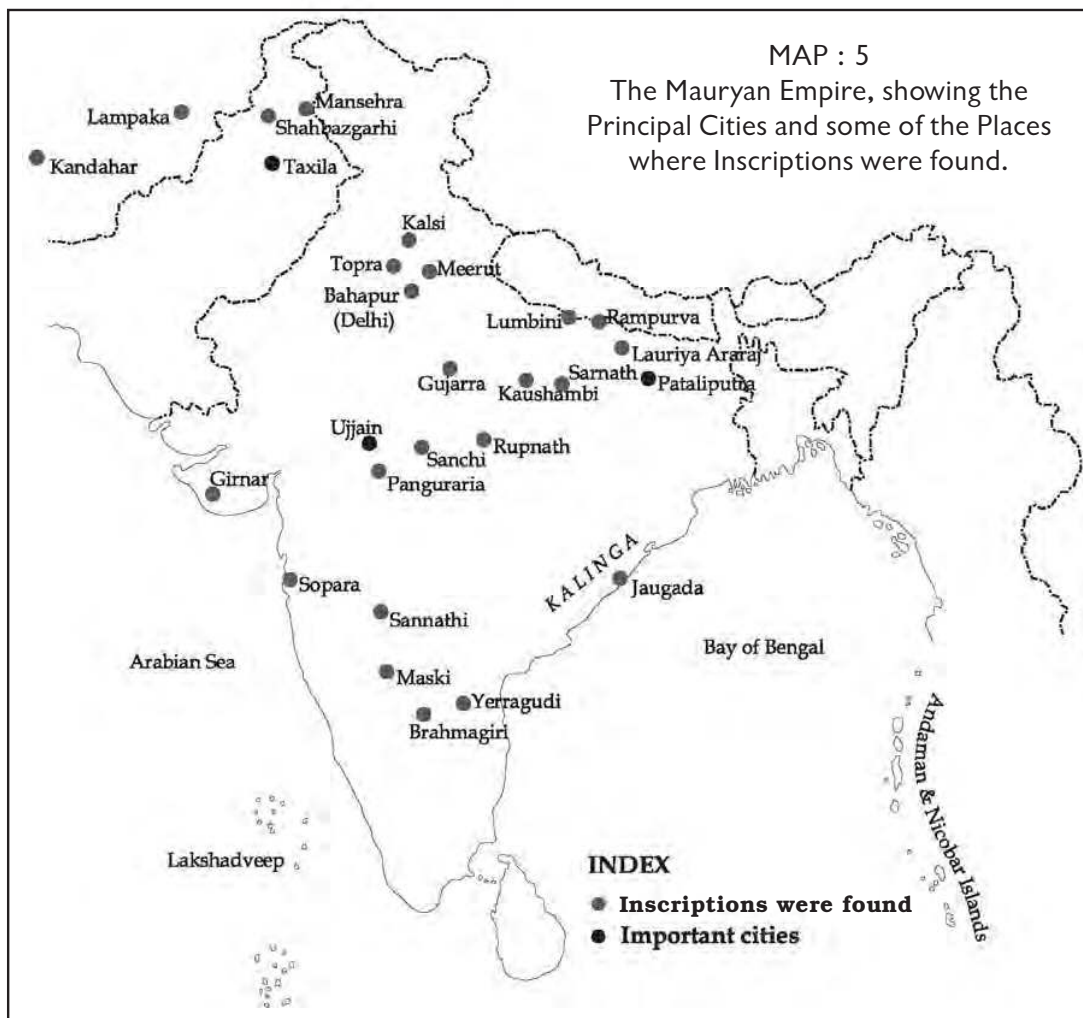
Dynasty

When members of the same family become rulers one after another, the family is often called a dynasty. The Mauryas were a dynasty with three important rulers — Chandragupta, his son Bindusara, and Bindusara's son, Ashoka.

The places where inscriptions of Ashoka have been found are marked with red dots. These were included within the empire. Name the countries where Ashokan inscriptions have been found. Which Indian states were outside the empire?

There were several cities in the empire (marked with black dots on the map). These included the capital Pataliputra, Taxila, and Ujjain. Taxila was a gateway to the northwest, including Central Asia, while Ujjain lay on the route from north to south India. Merchants, officials and crafts persons probably lived in these cities.

In other areas there were villages of farmers and herders. In some areas such as central India, there were forests where people gathered forest produce and hunted animals for food. People in different parts of the empire spoke different



languages. They probably ate different kinds of food, and wore different kinds of clothes as well.

How are empires different from kingdoms?

- Emperors need more resources than kings because empires are larger than kingdoms, and need to be protected by big armies.
- So also they need a larger number of officials who collect taxes.

Ruling the empire

As the empire was so large, different parts were ruled differently. The area around Pataliputra was under the direct control of the emperor. This meant that officials were appointed to collect taxes from farmers, herders, crafts persons and traders, who lived in villages and towns in the area. Officials also punished those who disobeyed the ruler's orders. Many of these officials were given salaries. Messengers went to and fro, and spies kept a watch on the officials. And of course the emperor supervised them all, with the help of members of the royal family, and senior ministers.

There were other areas or provinces. Each of these was ruled from a provincial capital such as Taxila or Ujjain. Although there was some amount of control from Pataliputra, and royal princes were often sent as governors, local customs and rules were probably followed.

Besides, there were vast areas between these centres. Here the Mauryas tried to control roads and rivers, which were important for transport, and to collect whatever resources were available as tax and tribute. For example, the Arthashastra tells us that the north-west was important for blankets, and south India for its gold and precious stones. It is possible that these resources were collected as tribute.

Tribute

Unlike taxes, which were collected on a regular basis, tribute was collected as and when it was possible from people who gave a variety of things, more or less willingly.

There were also the forested regions. People living in these areas were more or less independent, but may have been expected to provide elephants, timber, honey and wax to Mauryan officials.

The emperor and the capital city

Megasthenes was an ambassador who was sent to the court of Chandragupta by the Greek ruler of West Asia named Seleucus Nicator.

Megasthenes wrote an account about what he saw. Here is a part of his description:

“The occasions on which the emperor appears in public are celebrated with grand royal processions. He is carried in a golden palanquin. His guards ride elephants decorated with gold and silver. Some of the guards carry trees on which live birds, including a flock of trained parrots, circle about the head of the emperor. The king is normally surrounded by armed women. He is afraid that someone may try to kill him. He has special servants to taste the food before he eats. He never sleeps in the same bedroom for two nights.”

And about Pataliputra (modern Patna) he wrote:

“This is a large and beautiful city. It is surrounded by a massive wall. It has 570 towers and 64 gates. The houses, of two and three storeys, are built of wood and mud brick. The king’s palace is also of wood, and decorated with stone carvings. It is surrounded with gardens and enclosures for keeping birds.”

Why do you think the king had special servants to taste the food he ate?

In what ways was Pataliputra different from Mohenjodaro? (hint: see Chapter 4)

Ashoka, a unique ruler

The most famous Mauryan ruler was Ashoka. He was the first ruler who tried to take his message to the people through inscriptions. Most of Ashoka's inscriptions were in Prakrit and were written in the Brahmi script.

Ashoka's war in Kalinga

Kalinga is the ancient name of coastal Orissa (see Map 5, page 76). Ashoka fought a war to conquer Kalinga. However, he was so horrified when he saw the violence and bloodshed that he decided not to fight any more wars. He is the only king in the history of the world who gave up conquest after winning a war.

Ashoka's inscription describing the Kalinga war

This is what Ashoka declared in one of his inscriptions:

"Eight years after becoming king I conquered Kalinga.

About a lakh and a half people were captured. And more than a lakh of people were killed.

This filled me with sorrow. Why?

Whenever an independent land is conquered, lakhs of people die, and many are taken prisoner. Brahmins and monks also die.

People who are kind to their relatives and friends, to their slaves and servants die, or lose their loved ones.

That is why I am sad, and have decided to observe *dhamma*, and to teach others about it as well.

I believe that winning people over through *dhamma* is much better than conquering them through force.

I am inscribing this message for the future, so that my son and grandson after me should not think about war.

Instead, they should try to think about how to spread *dhamma*."

How did the Kalinga war bring about a change in Ashoka's attitude towards war?

('Dhamma' is the Prakrit word for the Sanskrit term 'Dharma').

What was Ashoka's dhamma?

Ashoka's *dhamma* did not involve worship of a god, or performance of a sacrifice. He felt that just as a father tries to teach his children, he had a duty to instruct his subjects. He was also inspired by the teachings of the Buddha (Chapter 7).

The Rampurwa bull.
Look at this finely
polished stone sculpture.
This was part of a
Mauryan pillar found in
Rampurwa, Bihar, and
has now been placed in
Rashtrapati Bhavan. It is
an example of the skill of
the sculptors of the time.



There were a number of problems that troubled him. People in the empire followed different religions, and this sometimes led to conflict. Animals were sacrificed. Slaves and servants were ill treated. Besides, there were quarrels in families and amongst neighbours. Ashoka felt it was his duty to solve these problems. So, he appointed officials, known as the *dhamma mahamatta* who went from place to place teaching people about

dhamma. Besides, Ashoka got his messages inscribed on rocks and pillars, instructing his officials to read his message to those who could not read it themselves.

Ashoka also sent messengers to spread ideas about *dhamma* to other lands, such as Syria, Egypt, Greece and Sri Lanka (see Map 6, pages 84-85). He built roads, dug wells, and built rest houses. Besides, he arranged for medical treatment for both human beings and animals.

Ashoka's messages to his subjects:

"People perform a variety of rituals when they fall ill, when their children get married, when children are born, or when they go on a journey.

These rituals are not useful.

If instead, people observe other practices, this would be more fruitful. What are these other practices?

These are: being gentle with slaves and servants.

Respecting one's elders.

Treating all creatures with compassion.

Giving gifts to brahmins and monks."

"It is both wrong to praise one's own religion or criticise another's.

Each one should respect the other's religion.

If one praises one's own religion while criticising another's, one is actually doing greater harm to one's own religion.

Therefore, one should try to understand the main ideas of another's religion, and respect it."

Pandit Jawaharlal Nehru, the first Prime Minister of India, wrote: "His edicts (instructions) still speak to us in a language we can understand and we can still learn much from them."

Identify the parts of Ashoka's message that you think are relevant today.

Below : The Brahmi script.

Most modern Indian scripts have developed from the Brahmi script over hundreds of years. Here you can see the letter 'a' written in different scripts.

Early Brahmi

Devanagari (Hindi)

Bengali

Malayalam

Tamil

Elsewhere

Somewhat before the time of the Mauryan empire, about 2400 years ago, emperors in China began building the Great Wall.



It was meant to protect the northern frontier of the empire from pastoral people. Additions to the wall were made over a period of 2000 years because the frontiers of the empire kept shifting. The wall is about 6400 km long, and is made of stone and brick, with a road along the top. Several thousand people worked to build the wall. There are watch towers all along, at distances of about 100-200 m.

In what ways do you think Ashoka's attitude toward neighbouring peoples was different from that of the Chinese emperors?

Imagine

You live in Kalinga, and your parents have suffered in the war. Messengers from Ashoka have just arrived with the new ideas about *dhamma*. Describe the dialogue between them and your parents.

Let's recall



1. Make a list of the occupations of the people who lived within the Mauryan empire.
2. Complete the following sentences:
 - (a) Officials collected _____ from the area under the direct control of the ruler.
 - (b) Royal princes often went to the provinces as ____

- (c) The Mauryan rulers tried to control _____ and _____ which were important for transport.
- (d) People in forested regions provided the Mauryan officials with _____
3. State whether true or false:
- (a) Ujjain was the gateway to the north-west.
- (c) Chandragupta's ideas were written down in the Arthashastra.
- (d) Kalinga was the ancient name of Bengal.
- (e) Most Ashokan inscriptions are in the Brahmi script.

KEYWORDS

empire
capital
province
dhamma
messenger
official

Let's discuss



4. What were the problems that Ashoka wanted to solve by introducing *dhamma*?
5. What were the means adopted by Ashoka to spread the message of *dhamma*?
6. Why do you think slaves and servants were ill-treated? Do you think the orders of the emperor would have improved their condition? Give reasons for your answer.

SOME IMPORTANT DATES

- Beginning of the Mauryan empire (more than 2300 years ago)

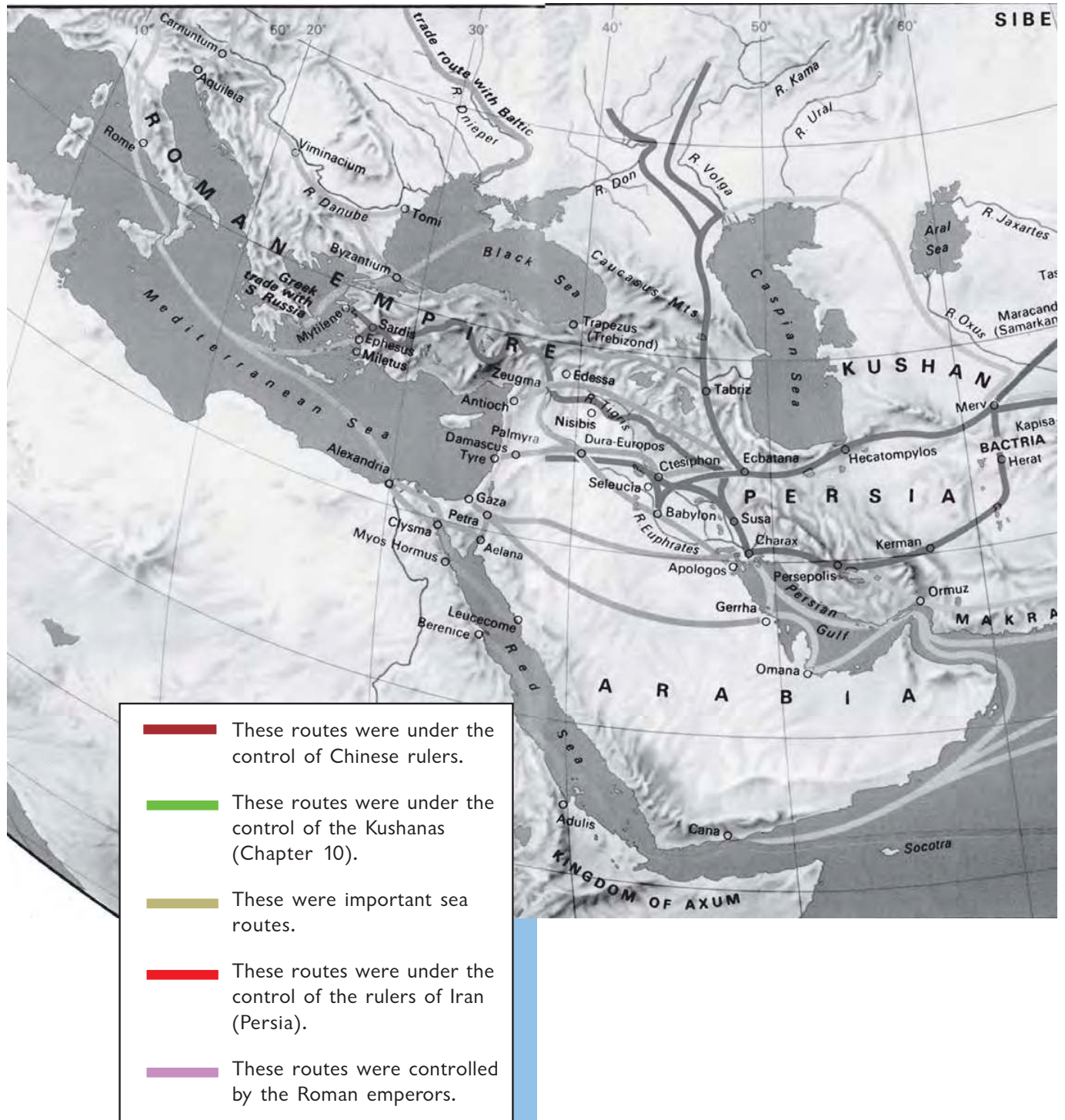
Let's do

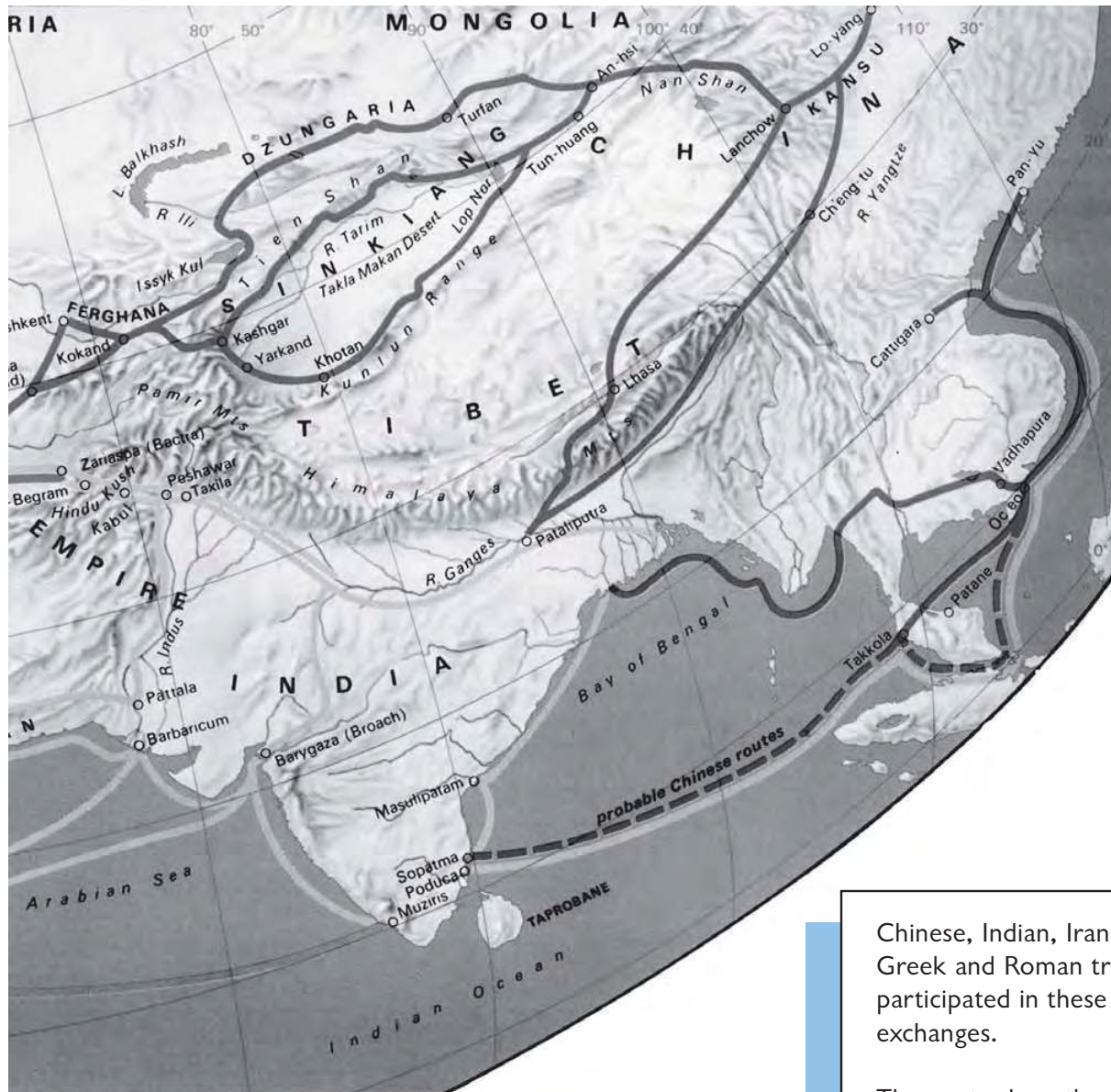


7. Write a short paragraph explaining to Roshan why the lions are shown on our currency notes. List at least one other object on which you see them.
8. Suppose you had the power to inscribe your orders, what four commands would you like to issue?

MAP : 6

Showing Important Trade Routes including the Silk Route





Based on *The Times Atlas of World History*,
(ed. Geoffrey Barraclough) Hammond Inc,
New Jersey, 1986, pp 70-71.

Chinese, Indian, Iranian, Arab,
Greek and Roman traders
participated in these
exchanges.

The ports along the coast of
south India were important
centres for the export of
pepper and other spices.

*Find Poduca (south India) on the
map. This was the Roman name
for Arikamedu (Chapter 9).*

LOOKING AHEAD

The Mauryan empire collapsed about 2200 years ago. In its place (and elsewhere) rose several new kingdoms. In the north-west, and in parts of north India, kings known as the Indo-Greeks ruled for about one hundred years. They were followed



An Indo-Greek coin

by a Central Asian people known as the Shakas, who set up kingdoms in the north-west, north and western India. Some of these kingdoms lasted for about 500 years, till the Shakas were defeated by the Gupta kings (Chapter 11). The Shakas in turn were followed by the Kushanas (about 2000 years ago). You will learn more about the Kushanas in Chapter 10.

In the north, and in parts of central India, a general of the Mauryas, named Pushyamitra Shunga, set up a kingdom. The Shungas were followed by another dynasty, known as the Kanvas, and by rulers from other families till the establishment of the Gupta empire about 1700 years ago.



A Kushana coin

The Shakas who ruled over parts of western India fought several battles with the Satavahanas, who ruled over western and parts of central India. The Satavahana kingdom, which was established about 2100 years ago, lasted for about 400 years. Around 1700 years ago, a new ruling family, known as the Vakatakas, became powerful in central and western India.



A Shaka coin

In south India, the Cholas, Cheras and Pandyas ruled between 2200 and 1800 years ago. And, about 1500 years ago, there were two large kingdoms, those of the Pallavas and the Chalukyas. There were several other kingdoms and kings as well. We know about them from their coins and inscriptions, as well as from books.

There were other changes that were taking place, in which ordinary men and women played a major role. These included the spread of agriculture and the growth of new towns, craft production and trade. Traders explored land routes within the subcontinent and outside, and sea routes to West Asia, East Africa and South East Asia (see Map 6) were also opened up. And many new buildings were built — including the earliest temples and *stupas*, books were written, and scientific discoveries were made. These developments took place *simultaneously*, i.e. at the same time. Keep this in mind as you read the rest of the book.



A Satavahana coin

CHAPTER 9

VITAL VILLAGES, THRIVING TOWNS

Prabhakar at the blacksmith's shop

Prabhakar sat watching the smiths at the local shop. There was a small bench on which iron tools like axes and sickles were laid out, ready for sale. A bright fire was burning, and two men were heating and beating metal rods into shape. It was very hot and noisy, and yet it was fascinating to watch what was happening.



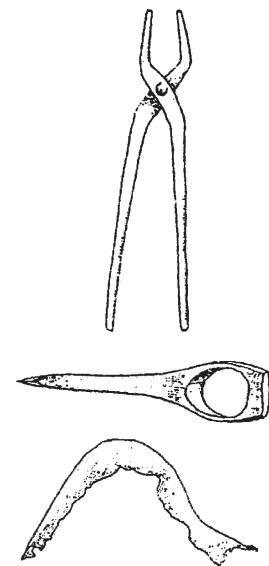
Iron tools and agriculture

We often take the use of iron for granted today. Things made of iron (and steel) are a part of our daily lives. The use of iron began in the subcontinent around 3000 years ago. Some of the largest collections of iron tools and weapons were found in the megalithic burials, about which you read in Chapter 5.

Around 2500 years ago, there is evidence for the growing use of iron tools. These included axes for clearing forests, and the iron ploughshare. As we had seen (Chapter 6) the ploughshare was useful for increasing agricultural production.

Other steps to increase production: irrigation

The kings and kingdoms you have been reading about could not have existed without the support of flourishing villages. While new tools and the system of transplantation (Chapter 6) increased production, irrigation was also used. Irrigation works that were built during this time included canals, wells, tanks, and artificial lakes.



Iron tools.

Here is a set of captions. Choose the right one for each of the pictures.

Sickle, tongs, axe.

Prepare a list of at least five objects made of iron or steel that you use almost everyday.

If you look at the chart, you will find that some of the stages in the construction of irrigation works are mentioned.

Fill in the rest by using the following phrases:

- Labour is provided by the people.
- Farmers also benefit because crop production is more certain.
- Farmers have to increase production to pay taxes.
- Kings provide money and plan irrigation works.

1. Kings need money for armies, palaces, forts.

2. They demand taxes from farmers.

3.

4. This is possible with irrigation.

5.

6.

7. Production increases.

8. So does revenue.

9.

Who lived in the villages?

There were at least three different kinds of people living in most villages in the southern and northern parts of the subcontinent. In the Tamil region, large landowners were known as *vellalar*, ordinary ploughmen were known as *uzhavar*, and landless labourers, including slaves, were known as *kadaiyiar* and *adimai*.

In the northern part of the country, the village headman was known as the *grama bhojaka*. Usually, men from the same family held the position for generations. In other words, the post was hereditary. The *grama bhojaka* was often the largest landowner. Generally, he had slaves and hired workers to cultivate the land. Besides, as he was powerful, the king often used him to collect taxes from the village. He also functioned as a judge, and sometimes as a policeman.

Apart from the *gramabhojaka*, there were other independent farmers, known as *grihapatis*, most of whom were smaller landowners. And then there were men and women such as the *dasa karmakara*, who did not own land, and had to earn a living working on the fields owned by others.

In most villages there were also some crafts persons such as the blacksmith, potter, carpenter and weaver.

The earliest Tamil compositions

Some of the earliest works in Tamil, known as *Sangam* literature, were composed around 2300 years ago. These texts were called *Sangam* because they were supposed to have been composed and compiled in assemblies (known as *sangams*) of poets that were held in the city of Madurai (see Map 7, page 113). The Tamil terms mentioned above are found in *Sangam* literature.

Finding out about cities: stories, travellers, sculpture and archaeology

You may have heard of the Jatakas. These were stories that were probably composed by ordinary people, and then written down and preserved by Buddhist monks. Here is part of a Jataka story, which tells us how a poor man gradually became rich.

The clever poor man

Once upon a time, there was a clever poor young man who lived in a city. His only resource was a dead rat. He started off by selling it for a coin to a hotel, for their cat.

Then one day, there was a storm. The king's garden was littered with branches and leaves, and the gardener was at a loss as to how to clear the mess. The young man offered to clean the garden if he could keep the wood and leaves. The gardener agreed at once.

The young man rounded up all the children who were playing, with an offer of sweets for every stick and leaf that they could collect. In no time, every scrap had been neatly piled near the entrance. Just then, the king's potter was on the look out for fuel with which to bake his pots. So he took the whole lot and paid the young man for it.

Our young man now thought of another plan. He carried a jar full of water to the city gate, and offered water to 500 grass cutters. They were pleased and said: "You have done us a good turn. Tell us, what can we do for you?"

He replied, "I'll let you know when I need your help."

He then made friends with a trader. One day, the trader told him: "Tomorrow, a horse dealer is coming to town with 500 horses." Hearing this, our young man went back to the grass cutters. He said: "Please give me a bundle of grass each, and don't sell your grass till mine is sold." They agreed, and gave him 500 bundles of grass.

When the horse dealer could not buy grass anywhere else, he purchased the young man's grass for a thousand coins. ...

List the occupations of the persons mentioned in the story.

For each one, try and decide whether they would have lived (a) only in the city (b) only in villages (c) in both cities and villages.

Why do you think the horse dealer was coming to the city?

Do you think women could have taken up the occupations mentioned in the story? Give reasons for your answer.

Facing Page : Ring well
found in Delhi.

*In what ways do you think
this system of drainage was
different from that of the
Harappans?*

We can use other kinds of evidence to find out about life in some of these early cities. Sculptors carved scenes depicting peoples' lives in towns and villages, as well as in the forest. Many of these sculptures were used to decorate railings, pillars and gateways of buildings that were visited by people.



Below : A sculpture from Sanchi.

This is a sculpture from Sanchi, a site with *stupas*, in Madhya Pradesh, showing the scene in a city. You will learn more about Sanchi in Chapter 12. Notice the way walls are shown. Are they made of brick, wood or stone? Now look at the railings. Are they made of wood? Describe the roofs of the buildings.

Many of the cities that developed from about 2500 years ago were capitals of the *mahajanapadas* that you learnt about in Chapter 6. As we had seen, some of these cities were surrounded by massive fortification walls.

In many cities, archaeologists have found rows of pots, or ceramic rings arranged one on top of the other. These are known as ring wells. These seem to have been used as toilets in some cases, and as drains and garbage dumps. These ring wells are usually found in individual houses.

We have hardly any remains of palaces, markets, or of homes of ordinary people. Perhaps some are yet to be discovered by archaeologists. Others, made of wood, mud brick and thatch, may not have survived.

Another way of finding out about early cities is from the accounts of sailors and travellers who visited them. One of the most detailed accounts that has been found was by an unknown Greek sailor. He described all the ports he visited. Find



Bharuch on Map 7 (page 113) and then read his description of the city.

The story of Barygaza (the Greek name for Bharuch)

The gulf is very narrow at Barygaza, and very hard to navigate for those coming from the sea.

Ships had to be steered in by skilful and experienced local fishermen who were employed by the king.

The imports into Barygaza were wine, copper, tin, lead, coral, topaz, cloth, gold and silver coins.

Exports from the town included plants from the Himalayas, ivory, agate, carnelian, cotton, silk and perfumes.

Special gifts were brought by merchants for the king. These included vessels of silver, singing boys, beautiful women, fine wines and fine cloth.

Make a list of all the things imported and exported from Barygaza. Underline at least two things that were not in use during Harappan times. Why do you think merchants brought gifts for the king?

Coins

You may have noticed how wealth is measured in terms of coins in the story on page 90. Archaeologists have found several thousands of coins belonging to this period. The earliest coins which were in use for about 500 years were punch marked coins, such as the one shown below. They have been given this name because the designs were punched on to the metal — silver or copper.



Other means of exchange

Read this short poem from the Sangam collection:

As they carry the white paddy of their land
To exchange it for the salt of another,
Crossing the long roads in carts,
Through sands white as moonlight,
Taking whole families,
Who hate to be left behind,
The departure of the salt merchants
Leaves the city empty.

Salt was produced plentifully along the sea coast.
What are the merchants planning to exchange it
with?

How are they travelling?

Cities with many functions

Very often, a single town was important for a variety of reasons. Let us look at the example of Mathura (Map 7, page 113).

Mathura has been an important settlement for more than 2500 years. It was important because it was located at the cross roads of two major routes of travel and trade — from the northwest to the east and from north to south. There were fortifications around the city, and several shrines. Farmers and herders from adjoining areas provided food for people in the city. Mathura was also a centre where some extremely fine sculpture was produced.

Around 2000 years ago Mathura became the second capital of the Kushanas, about whom you will be reading in Chapter 10. Mathura was also a religious centre — there were Buddhist monasteries, Jaina shrines, and it was an important centre for the worship of Krishna.

Several inscriptions on surfaces such as stone slabs and statues have been found in Mathura.

Generally, these are short inscriptions, recording gifts made by men (and sometimes women) to monasteries and shrines. These were made by kings and queens, officers, merchants, and crafts persons who lived in the city. For instance, inscriptions from Mathura mention goldsmiths, blacksmiths, weavers, basket makers, garland makers, perfumers.

Make a list of the occupations of people who lived in Mathura. List one occupation that was not practised in Harappan cities.

Crafts and crafts persons

We also have archaeological evidence for crafts. These include extremely fine pottery, known as the Northern Black Polished Ware. It gets its name from the fact that it is generally found in the northern part of the subcontinent. It is usually black in colour, and has a fine sheen.

Remember that the archaeological evidence for many crafts may not have survived. We know from texts that the manufacture of cloth was important. There were famous centres such as Varanasi in the north, and Madurai in the south. Both men and women worked in these centres.

Many crafts persons and merchants now formed associations known as *shrenis*. These *shrenis* of crafts persons provided training, procured raw material, and distributed the finished product. Then *shrenis* of merchants organised the trade. *Shrenis* also served as banks, where rich men and women deposited money. This was invested, and part of the interest was returned or used to support religious institutions such as monasteries.

Rules for spinning and weaving

These rules are from the *Arthashastra*, mentioned in Chapter 8. They describe how spinning and weaving could be done in workshops under the supervision of a special official.

“Widows, young women who are differently abled, nuns, mothers of courtesans, retired women servants of the king, women who have retired from service in temples, may be used for processing wool, bark, cotton, hemp and flax.

They should be paid according to the quality and quantity of work.

Women who are not permitted to leave their homes can send maid-servants to bring the raw material from the superintendent, and take the finished work back to him.

Women who can visit the workshop should go at dawn to give their work and receive their wages. There should be enough light to examine the work. In case the superintendent looks at the woman or talks about anything other than the work, he should be punished.

If a woman does not complete her work, she will have to pay a fine, and her thumbs can be cut off.”

Make a list of all the women who could be employed by the superintendent.

Do you think women would have faced any problems while working?

A closer look — Arikamedu

Find Arikamedu (in Pondicherry) on Map 7 (page 113), and read the box on Rome on page 96. Between 2200 and 1900 years ago, Arikamedu was a coastal settlement where ships unloaded goods from distant lands. A massive brick structure, which may have been a warehouse, was found at the site. Other finds include pottery from the Mediterranean region, such as amphorae (tall double-handled jars that contained liquids such as wine or oil) and stamped red-glazed pottery, known as Arretine Ware, which was named after a city in Italy. This was made by pressing wet clay into a stamped mould. There was yet another kind of pottery which was made locally, though Roman designs were used. Roman lamps, glassware and gems have also been found at the site.



Tamil-Brahmi inscriptions. Several pieces of pottery have inscriptions in Brahmi, which was used to write Tamil.

Small tanks have been found that were probably dyeing vats, used to dye cloth. There is plenty of evidence for the making of beads from semi-precious stones and glass.

List the evidence that indicates that there was contact with Rome.

Elsewhere

Find Rome on Map 6 (page 84). This is one of the oldest cities in Europe, and developed around the same time as the cities in the Ganga valley. Rome was the capital of one of the largest empires —



An aqueduct

one that spread across Europe, North Africa, and West Asia. Augustus, one of the most important emperors, who ruled about 2000 years ago, said that he found Rome a city of brick, and made it into a city of marble. He, and later rulers, built temples and palaces.

They also built huge amphitheatres — open arenas surrounded by tiers of seats — where citizens could watch all kinds of shows, and public baths (with separate timings for men and women), where people met and relaxed.

Huge aqueducts — channels to supply water — were built to bring water to the city — for the baths, fountains and toilets.

Why do you think the amphitheatres and aqueducts have survived?

Imagine

You live in Barygaza and are visiting the port. Describe what you would see there.

Let's recall



1. Fill in the blanks:
 - (a) _____ was a word used for large landowners in Tamil.
 - (b) The *gramabhojaka* often got his land cultivated by the _____
 - (c) Ploughmen were known as _____ in Tamil.
 - (d) Most *grihapatis* were _____ landowners.
2. Describe the functions of the *gramabhojaka*. Why do you think he was powerful?
3. List the crafts persons who would have been present in both villages and cities.
4. Choose the correct answer:
 - (a) Ring wells were used for:
 1. bathing
 2. washing clothes
 3. irrigation
 4. drainage
 - (b) Punch marked coins were made of:
 1. silver
 2. gold
 3. tin
 4. ivory

KEYWORDS

iron
irrigation
village
port
ring well
city
shreni
Sangam

SOME IMPORTANT DATES

- ▶ Beginning of the use of iron in the subcontinent (about 3000 years ago)
- ▶ Increase in the use of iron, cities, punch marked coins (about 2500 years ago)
- ▶ Beginning of the composition of Sangam literature (about 2300 years ago)
- ▶ Settlement in Arikamedu (between 2200 and 1900 years ago)

(c) Mathura was an important:

1. village
2. port
3. religious centre
4. forested area

(d) *Shrenis* were associations of:

1. rulers
2. crafts persons
3. farmers
4. herders

Let's discuss



5. Which of the iron tools shown on page 87 would have been important for agriculture? What would the other tools have been used for?
6. Compare the drainage system in your locality with that of the cities mentioned in the lesson. What similarities and differences do you notice?

Let's do



7. If you have seen crafts persons at work, describe in a short paragraph what they do. (Hint: how do they get the raw materials, what kind of equipment do they use, how do they work, what happens to the finished product).
8. List the functions performed by men and women who live in your city or village. In what ways are these similar to those performed by people who lived in Mathura? In what ways are they different?

CHAPTER 10

TRADERS, KINGS AND PILGRIMS

Jagini at the market

Jagini looked forward to the fair in the village. She loved to see and touch the pots and pans of shiny steel, bright plastic buckets, cloth printed with brilliant floral designs, and clockwork toys, all of which came from the city. The men who spread out their wares came in buses and trucks and went back at the end of the day. Why were they always on the move? She wondered. Her mother explained that they were traders — people who bought things where they were made, and sold them elsewhere.



How to find out about trade and traders

You read about the Northern Black Polished Ware in Chapter 9. This fine pottery, especially bowls and plates, were found from several archaeological sites throughout the subcontinent. How do you think it reached these places? Traders may have carried them from the places where they were made, to sell them at other places.

South India was famous for gold, spices, especially pepper, and precious stones. Pepper was particularly valued in the Roman Empire, so much so that it was known as black gold. So, traders carried many of these goods to Rome in ships, across the sea, and by land in caravans. There must have been quite a lot of trade as many Roman gold coins have been found in south India.

Can you think of how and why these reached India?

A poem about trade

We can find evidence of trade in the Sangam poems.

Here is one which describes the goods brought into Puhar, an important port on the east coast:

“(Here are brought)

Swift, prancing horses by sea in ships,

Bales of black pepper in carts,

Gems and gold born in the Himalayas,

Sandalwood born in the western hills,

The pearls of the southern seas

And corals from the eastern oceans

The yield of the Ganga and the crops from the Kaveri,

Foodstuffs from Sri Lanka, pottery from Myanmar,

And other rare and rich imports.”

Make a list of all the things that are mentioned.
What would they be used for?

Traders explored several sea routes. Some of these followed the coasts. There were others across the Arabian Sea and the Bay of Bengal, where sailors took advantage of the monsoon winds to cross the seas more quickly. So, if they wanted to reach the western coast of the subcontinent from East Africa or Arabia, they chose to sail with the south-west monsoon. And sturdy ships had to be built for these long journeys.

New kingdoms along the coasts

The southern half of the subcontinent is marked by a long coastline, and with hills, plateaus, and river valleys. Amongst the river valleys, that of the Kaveri is the most fertile. Chiefs and kings who controlled the river valleys and the coasts became rich and powerful. Sangam poems mention the *muwendar*. This is a Tamil word meaning three chiefs, used for the heads of three

ruling families, the Cholas, Cheras, and Pandyas (see Map 7, page 113), who became powerful in south India around 2300 years ago.

Each of the three chiefs had two centres of power: one inland, and one on the coast. Of these six cities, two were very important: Puhar or Kaveripattinam, the port of the Cholas, and Madurai, the capital of the Pandyas.

The chiefs did not collect regular taxes. Instead, they demanded and received gifts from the people. They also went on military expeditions, and collected tribute from neighbouring areas. They kept some of the wealth and distributed the rest amongst their supporters, including members of their family, soldiers, and poets. Many poets whose compositions are found in the Sangam collection composed poems in praise of chiefs who often rewarded them with precious stones, gold, horses, elephants, chariots, and fine cloth.

Around 200 years later a dynasty known as the Satavahanas became powerful in western India (see Map 7, page 113). The most important ruler of the Satavahanas was Gautamiputra Shri Satakarni. We know about him from an inscription composed by his mother, Gautami Balashri. He and other Satavahana rulers were known as lords of the *dakshinapatha*, literally the route leading to the south, which was also used as a name for the entire southern region. He sent his army to the eastern, western and southern coasts.

Why do you think he wanted to control the coasts?

The story of the Silk Route

The rich, glossy colours of silk, as well as its smooth texture, make it a highly valued fabric in most societies. Making silk is a complicated process. Raw silk has to be extracted from the

cocoons of silk worms, spun into thread and then woven into cloth. Techniques of making silk were first invented in China around 7000 years ago. While the methods remained a closely guarded secret for thousands of years, some people from China who went to distant lands on foot, horseback, and on camels, carried silk with them. The paths they followed came to be known as the Silk Route.

Sometimes, Chinese rulers sent gifts of silk to rulers in Iran and west Asia, and from there, the knowledge of silk spread further west. About 2000 years ago, wearing silk became the fashion amongst rulers and rich people in Rome. It was very expensive, as it had to be brought all the way from China, along dangerous roads, through mountains and deserts. People living along the route often demanded payments for allowing traders to pass through.

Look at Map 6 (pages 84-85) which shows the Silk Route and its branches. Some kings tried to control large portions of the route. This was because they could benefit from taxes, tributes and gifts that were brought by traders travelling along the route. In return, they often protected the traders who passed through their kingdoms from attacks by robbers.

The best-known of the rulers who controlled the Silk Route were the Kushanas, who ruled over central Asia and north-west India around 2000 years ago. Their two major centres of power were Peshawar and Mathura. Taxila was also included in their kingdom. During their rule, a branch of the Silk Route extended from Central Asia down to the seaports at the mouth of the river Indus, from where silk was shipped westwards to the Roman Empire. The Kushanas were amongst the earliest rulers of the subcontinent to issue gold

coins. These were used by traders along the Silk Route.

Why do you think it would have been difficult to use carts along the Silk Route?

Silk was also sent from China by sea. Trace the routes on Map 6 (pages 84-85). What do you think would have been the advantages and problems in transporting silk by sea?

The spread of Buddhism

The most famous Kushana ruler was Kanishka, who ruled around 1900 years ago. He organised a Buddhist council, where scholars met and discussed important matters. Ashvaghosha, a poet who composed a biography of the Buddha, the *Buddhacharita*, lived in his court. Ashvaghosha and other Buddhist scholars now began writing in Sanskrit.

A new form of Buddhism, known as Mahayana Buddhism, now developed. This had two distinct features. Earlier, the Buddha's presence was shown in sculpture by using certain signs. For instance, his attainment of enlightenment was shown by sculptures of the *peepal* tree.

Now, statues of the Buddha were made. Many of these were made in Mathura, while others were made in Taxila.

The second change was a belief in *Bodhisattvas*. These were supposed to be persons who had attained enlightenment. Once they attained enlightenment, they could live in complete

A sculpture from the *stupa* at Sanchi.

Look at the tree and the empty seat below it.

Sculptors carved this to indicate that the Buddha had attained enlightenment while meditating under the tree.



isolation and meditate in peace. However, instead of doing that, they remained in the world to teach and help other people. The worship of Bodhisattvas became very popular, and spread throughout Central Asia, China, and later to Korea and Japan.

Buddhism also spread to western and southern India, where dozens of caves were hollowed out of hills for monks to live in.

Some of these caves were made on the orders of kings and queens, others by merchants and farmers. These were often located near passes through the Western Ghats. Roads connecting prosperous ports on the coast with cities in the Deccan ran through these passes. Traders probably

Below left : An image of the Buddha from Mathura.

Right : An image of the Buddha from Taxila.

Look at these and note the similarities and differences that you may find.



halted in these cave monasteries during their travels.

Buddhism also spread south eastwards, to Sri Lanka, Myanmar, Thailand, and other parts of Southeast Asia including Indonesia. The older form of Buddhism, known as Theravada Buddhism was more popular in these areas.

Read page 100 once more.
Can you think of how Buddhism spread to these lands?



A cave at Karle,
Maharashtra

The quest of the pilgrims

As traders journeyed to distant lands in caravans and ships, *pilgrims* often travelled with them.

Pilgrims

are men and women who undertake journeys to holy places in order to offer worship.

The best-known of these are the Chinese Buddhist pilgrims, Fa Xian, who came to the subcontinent about 1600 years ago, Xuan Zang (who came around 1400 years ago) and I-Qing, who came about 50 years after Xuan Zang. They came to visit places associated with the life of the Buddha (Chapter 7) as well as famous monasteries.

Each of these pilgrims left an account of his journey. They wrote of the dangers they encountered on their travels, which often took years, of the countries and the monasteries that they visited, and the books they carried back with them.

How Fa Xian returned to China

Fa Xian began his journey back home from Bengal. He boarded a ship belonging to some merchants. They had barely travelled for two days when they were caught in a storm. The merchants began throwing their merchandise overboard so as to lighten the load and save the ship from sinking. Fa Xian threw away his meagre personal belongings, but clung to his books and the statues of the Buddha that he had collected. Finally, the storm subsided after 13 days. This is how he describes the sea:

“The sea itself is boundless in extent — it is impossible to know east or west, except by observing the sun, moon, or stars in their motions. If it is dark, rainy weather, the only plan is to steer by the wind.”

It took him more than 90 days to reach Java, where he halted for five months, before boarding another merchant ship that took him to China.

Try and trace the route Fa Xian took on Map 6 (page 85).

Why do you think he did not want to throw away his books and statues?

Xuan Zang, who took the land route back to China (through the north-west, and Central Asia) carried back with him statues of the Buddha made of gold, silver and sandalwood, and over 600 manuscripts loaded on the backs of 20 horses. Over 50 manuscripts were lost when the boat on which he was crossing the Indus capsized. He spent the rest of his life translating the remaining manuscripts from Sanskrit into Chinese.

Nalanda – A unique centre of Buddhist learning

Xuan Zang, and other pilgrims spent time studying in Nalanda, (Bihar) the most famous Buddhist monastery of the period. This is how he describes it:

“The teachers are men of the highest ability and talent. They follow the teachings of the Buddha in all sincerity. The rules of the monastery are strict, and everyone has to follow them. Discussions are held throughout the day, and the old and the young mutually help one another. Learned men from different cities come here to settle their doubts. The gatekeeper asks new entrants difficult questions. They are allowed to enter only after they have been able to answer these. Seven or eight out of every ten are not able to answer.”

List the reasons why Xuan Zang wanted to study in Nalanda.

The beginning of Bhakti

This was also the time when the worship of certain deities, which became a central feature of later Hinduism, gained in importance. These deities included Shiva, Vishnu, and goddesses such as Durga.

These deities were worshipped through *Bhakti*, an idea that became very popular at this time. *Bhakti* is generally understood as a person's devotion to his or her chosen deity. Anybody, whether rich or poor, belonging to the so-called 'high' or 'low' castes, man or woman, could follow the path of *Bhakti*.

The idea of *Bhakti* is present in the Bhagavad Gita, a sacred book of the Hindus, which is included in the Mahabharata (see Chapter 12). In this Krishna the god, asks Arjuna, his devotee and friend, to abandon all *dharma*s and take refuge in him, as only he can set Arjuna free from every evil. This form of worship gradually spread to different parts of the country.

Those who followed the system of *Bhakti* emphasised devotion and individual worship of a god or goddess, rather than the performance of elaborate sacrifices.

According to this system of belief, if a devotee worships the chosen deity with a pure heart, the deity will appear in the form in which he or she may desire. So, the deity could be thought of as a human being, lion, tree or any other form. Once this idea gained acceptance, artists made beautiful images of these deities.

Vishnu as Varaha — an image from Eran, Madhya Pradesh.

This magnificent statue is of a special form of Vishnu, the *Varaha* or boar. According to the Puranas (see Chapter 12) Vishnu took the shape of a boar in order to rescue the earth, which had sunk into water. Here the earth is shown as a woman.



Bhakti

Comes from the Sanskrit term *bhaja* meaning 'to divide or share.' This suggests an intimate, two-way relationship between the deity and the devotee. Bhakti is directed towards Bhagavat, which is often translated as god, but also means one who possesses and shares *bhaga*, literally good fortune or bliss. The devotee, known as the *bhakta* or the *bhagavata*, shares his or her chosen deity's *bhaga*.

A poem by a bhakta

Most Bhakti literature tells us that riches, learning and high status do not automatically ensure a close relationship with the deity. This is part of a poem composed in Tamil by Appar, a devotee of Shiva, who lived about 1400 years ago. Appar was a *vellala* (Chapter 9).

"The leper with rotting limbs,
The man who is regarded as low by the *brahmin*, even the scavenger
...
Even these men, if they are servants (i.e. devotees)
Of him who shelters the Ganga in his long hair (i.e. Shiva)
I worship them,
They are gods to me."

What does the poet regard as more valuable, social status or devotion?

Because the deities were special, these images of the deity were often placed within special homes, places that we describe as temples. You will learn more about these temples in Chapter 12.

Bhakti inspired some of the best expressions in art — sculpture, poetry and architecture.

Hindu

The word 'Hindu', like the term 'India' is derived from the river Indus. It was used by Arabs and Iranians to refer to people who lived to the east of the river, and to their cultural practices, including religious beliefs.

Elsewhere

About 2000 years ago, Christianity emerged in West Asia. Jesus Christ was born in Bethlehem, which was then part of the Roman empire. Christ's teachings were that He was the Saviour of the world. He also taught people to treat others with love and trust others, just as they themselves wanted to be treated.

Here are a few verses from the Bible, the holy book that contains the teachings of Christ:

"Blessed are those who hunger and thirst for righteousness,
For they shall be filled.

Blessed are the merciful, for they shall obtain mercy.

Blessed are the pure in heart for they shall see God.

Blessed are the peacemakers for they shall be called sons of God."

Christ's teachings appealed to ordinary people, and spread through West Asia, Africa and Europe. The first Christian preachers came from West Asia to the west coast of the subcontinent within a hundred years of Christ's death.

Look at Map 6 (pages 84-85) and trace out the route that they may have used.

The Christians of Kerala, known as Syrian Christians because they probably came from West Asia, are amongst the oldest Christian communities in the world.

Imagine

You have a manuscript which a Chinese pilgrim would like to carry back with him. Describe your conversation.

Let's recall



1. Match the following:

Muvendar

Mahayana Buddhism

Lords of the *dakshinapatha*

Buddhacharita

Ashvaghosha

Satavahana rulers

Bodhisattvas

Chinese pilgrim

Xuan Zang

Cholas, Cheras and
Pandyas

KEYWORDS

trader

muvendar

route

silk

Kushanas

Mahayana

Buddhism

Theravada

Buddhism

Bodhisattva

pilgrim

Bhakti

SOME IMPORTANT DATES

- ▶ Discovery of silk making (about 7000 years ago)
- ▶ The Cholas, Cheras and Pandyas (about 2300 years ago)
- ▶ Growing demand for silk in the Roman Empire (about 2000 years ago)
- ▶ Kanishka, the Kushana ruler (about 1900 years ago)
- ▶ Fa Xian comes to India (about 1600 years ago)
- ▶ Xuan Zang comes to India, Appar composes devotional poems in praise of Shiva (about 1400 years ago)

2. Why did kings want to control the Silk Route?
3. What kinds of evidence do historians use to find out about trade and trade routes?
4. What were the main features of Bhakti?

Let's discuss



5. Discuss the reasons why the Chinese pilgrims came to India.
6. Why do you think ordinary people were attracted to Bhakti?

Let's do



7. List five things that you buy from the market. Which of these are made in the city/village in which you live, and which are brought by traders from other areas?
8. There are several major pilgrimages performed by people in India today. Find out about any one of them, and write a short description. (Hint: who can go on the pilgrimage — men, women or children? How long does it take? How do people travel? What do they take with them? What do they do when they reach the holy place? Do they bring anything back with them?)

CHAPTER 11

NEW EMPIRES AND KINGDOMS

Arvind plays a king

Arvind had been chosen to act as a king in the school play. He had expected to march solemnly in splendid robes, to twirl his moustaches and wield the silver-paper wrapped sword with gusto. Imagine his surprise when he was told he would also have to sit and play a *veena*, and recite poetry! A musician-king? Who was that? he wondered.



Prashastis and what they tell us

Arvind was supposed to be acting as Samudragupta, a famous ruler of a dynasty known as the Guptas. We know about Samudragupta from a long inscription, actually a poem in Sanskrit, composed by his court poet, Harishena nearly 1700 years ago. This was inscribed on the Ashokan pillar at Allahabad.

This inscription is of a special kind known as a *prashasti*, a Sanskrit word, meaning 'in praise of'. While *prashastis* were composed for some of the rulers you read about in Chapter 10, such as Gautamiputra Shri Satakarni, they became far more important from the time of the Guptas.

Samudragupta's prashasti

Let us see what Samudragupta's *prashasti* tells us. The poet praised the king in glowing terms — as a warrior, as a king who won victories in battle, who was learned and the best of poets. He is also described as equal to the gods. The *prashasti* was composed in very long sentences. Here is part of one such sentence:

Samudragupta the warrior

Whose body was most charming, being covered with the plenteous beauty of the marks of hundreds of scars caused by battle-axes, arrows, spikes, spears, barbed darts, swords, iron clubs, javelins, barbed arrows, long arrows and many other weapons.

What does this description tell you about the king? And also about how kings fought wars?



The king who played the veena.

Some other qualities of Samudragupta are shown on coins such as this one, where he is shown playing the veena.



If you look at Map 7 (page 113), you will notice an area shaded in green. You will also find a series of red dots along the east coast. And you will find areas marked in purple and blue as well.

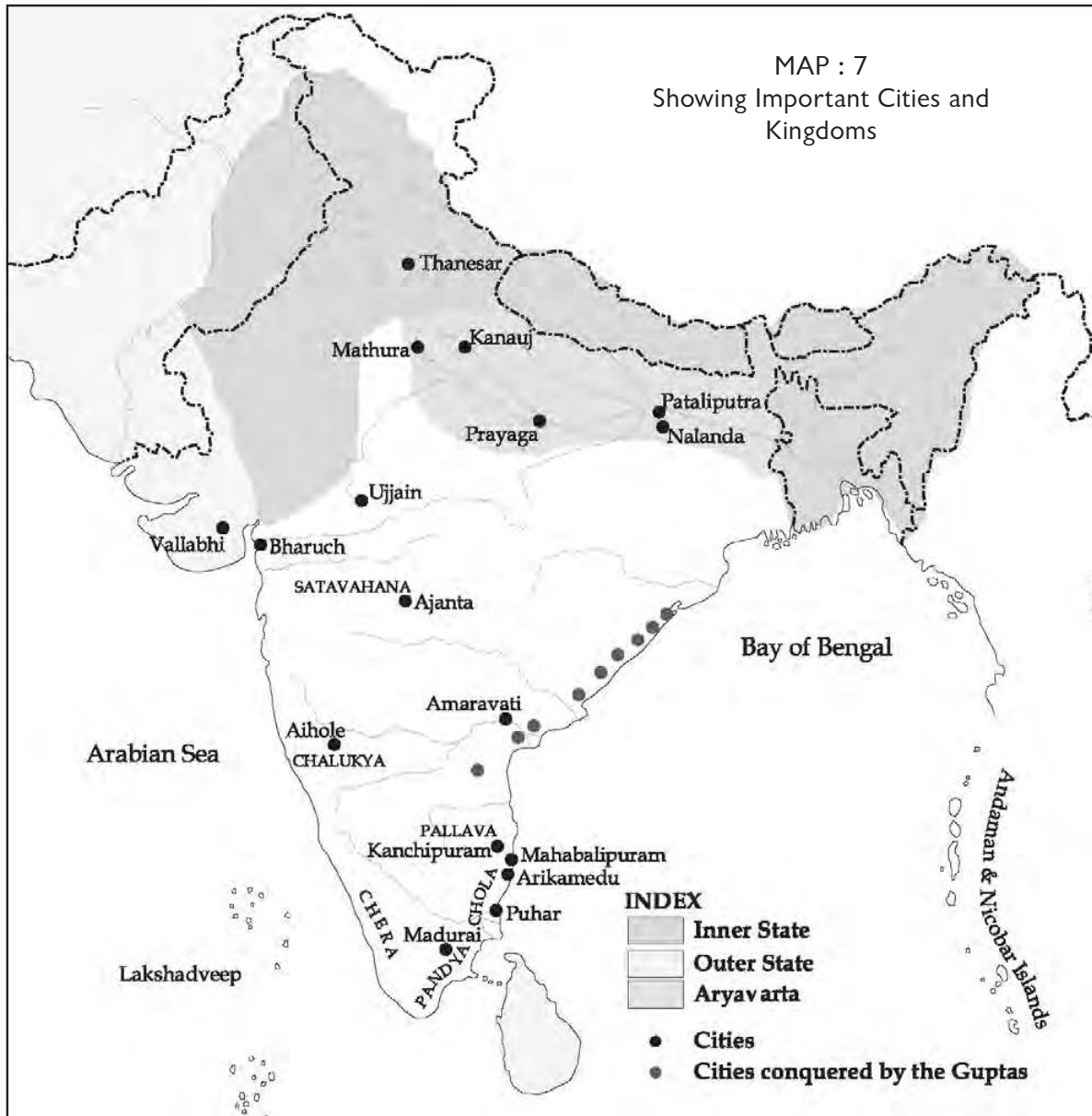
This map is based on the information provided in the *prashasti*. Harishena describes four different kinds of rulers, and tells us about Samudragupta's policies towards them.

1. The rulers of *Aryavarta*, the area shaded in green on the map. Here there were nine rulers who were uprooted, and their kingdoms were made a part of Samudragupta's empire.
2. The rulers of *Dakshinapatha*. Here there were twelve rulers, some of whose capitals are marked with red dots on the map. They surrendered to Samudragupta after being defeated and he then allowed them to rule again.
3. The inner circle of neighbouring states, including Assam, coastal Bengal, Nepal, and a number of *gana sanghas* (remember Chapter 6) in the north-west, marked in purple on the map. They brought tribute, followed his orders, and attended his court.
4. The rulers of the outlying areas, marked in blue on the map, perhaps the descendants of the Kushanas and Shakas, and the ruler of Sri Lanka, who submitted to him and offered daughters in marriage.

Find Prayaga (the old name for Allahabad), Ujjain and Pataliputra (Patna) on the map. These were important centres of the Gupta rulers.

What was the difference between the way in which Samudragupta treated the rulers of Aryavarta and Dakshinapatha?

Can you suggest any reasons for this difference?



Genealogies

Most *prashastis* also mention the ancestors of the ruler. This one mentions Samudragupta's great grandfather, grandfather, father and mother. His mother, Kumara devi, belonged to the Lichchhavi *gana*, while his father, Chandragupta, was the first ruler of the Gupta dynasty to adopt the grand title of *maharaj-adhiraja*, a title that Samudragupta also used. His great grandfather and grandfather are mentioned simply as *maharajas*. It seems as if the family gradually rose to importance.

Arrange these titles in order of importance: *raja*, *maharaj-adhiraja*, *maha-raja*.

Samudragupta in turn figures in the genealogies (lists of ancestors) of later rulers of the dynasty, such as his son, Chandragupta II. We know about him from inscriptions and coins. He led an expedition to western India, where he overcame the last of the Shakas. According to later belief, his court was full of learned people, including Kalidasa the poet, and Aryabhata the astronomer, about whom you will read more in Chapter 12.

Harshavardhana and the Harshacharita

While we can learn about the Gupta rulers from their inscriptions and coins, we can find out about some kings from biographies. Harshavardhana, who ruled nearly 1400 years ago, was one such ruler. His court poet, Banabhatta, wrote his biography, the *Harshacharita*, in Sanskrit. This gives us the genealogy of Harsha, and ends with his becoming king. Xuan Zang, about whom you read in Chapter 10, also spent a lot of time at Harsha's court and left a detailed account of what he saw.

Harsha was not the eldest son of his father, but became king of Thanesar after both his father and elder brother died. His brother-in-law was

the ruler of Kanauj (see Map 7) and he was killed by the ruler of Bengal. Harsha took over the kingdom of Kanauj, and then led an army against the ruler of Bengal.

Although he was successful in the east, and conquered both Magadha and Bengal, he was not as successful elsewhere. He tried to cross the Narmada to march into the Deccan, but was stopped by a ruler belonging to the Chalukya dynasty, Pulakeshin II.

Look at Map 8 (page 136) and list the present-day states which Harshavardhana passed through when he went (a) to Bengal and (b) up to the Narmada.

The Pallavas, Chalukyas and Pulakeshin's *prashasti*

The Pallavas and Chalukyas were the most important ruling dynasties in south India during this period. The kingdom of the Pallavas spread from the region around their capital, Kanchipuram, to the Kaveri delta, while that of the Chalukyas was centred around the Raichur Doab, between the rivers Krishna and Tungabhadra.

Aihole, the capital of the Chalukyas, was an important trading centre (see Map 7). It developed as a religious centre, with a number of temples. The Pallavas and Chalukyas frequently raided one another's lands, especially attacking the capital cities, which were prosperous towns.

The best-known Chalukya ruler was Pulakeshin II. We know about him from a *prashasti*, composed by his court poet Ravikirti. This tells us about his ancestors, who are traced back through four generations from father to son. Pulakeshin evidently got the kingdom from his uncle.

According to Ravikirti, he led expeditions along both the west and the east coasts. Besides, he

checked the advance of Harsha. There is an interesting play of words in the poem. Harsha means happiness. The poet says that after this defeat, Harsha was no longer Harsha! Pulakeshin also attacked the Pallava king, who took shelter behind the walls of Kanchipuram.

But the Chalukya victory was short-lived. Ultimately, both the Pallavas and the Chalukyas gave way to new rulers belonging to the Rashtrakuta and Chola dynasties, about which you will study in Class VII.

Who were the other rulers who tried to control the coasts and why? (Hint: see Chapter 10).

How were these kingdoms administered?

As in the case of earlier kings, land revenue remained important for these rulers, and the village remained the basic unit of administration.

There were some new developments as well. Kings adopted a number of steps to win the support of men who were powerful, either economically, or socially, or because of their political and military strength. For instance:

- Some important administrative posts were now hereditary. This means that sons succeeded fathers to these posts. For example, the poet Harishena was a *maha-danda-nayaka*, or chief judicial officer, like his father.
- Sometimes, one person held many offices. For instance, besides being a *maha-danda-nayaka*, Harishena was a *kumar-amatya*, meaning an important minister, and a *sandhi-vigrahika*, meaning a minister of war and peace.
- Besides, important men probably had a say in local administration. These included the *nagara-shreshthi* or chief banker or merchant of the city, the *sarthavaha* or leader of the merchant caravans, the *prathama-kulika* or the chief craftsman, and the head of the *kayasthas* or scribes.

These policies were reasonably effective, but sooner or later, some of these powerful men grew strong enough to set up independent kingdoms.

What do you think may have been the advantages and disadvantages of having hereditary officers?

A new kind of army

Like earlier rulers, some of these kings maintained a well-organised army, with elephants, chariots, cavalry and foot soldiers. Besides, there were military leaders who provided the king with troops whenever he needed them. They were not paid regular salaries. Instead, some of them received grants of land. They collected revenue from the land and used this to maintain soldiers and horses, and provide equipment for warfare. These men were known as *samantas*. Whenever the ruler was weak, *samantas* tried to become independent.

Assemblies in the southern kingdoms

The inscriptions of the Pallavas mention a number of local assemblies. These included the *sabha*, which was an assembly of *brahmin* land owners. This assembly functioned through sub-committees, which looked after irrigation, agricultural operations, making roads, local temples, etc.

The *ur* was a village assembly found in areas where the land owners were not *brahmins*. And the *nagaram* was an organisation of merchants. It is likely that these assemblies were controlled by rich and powerful landowners and merchants. Many of these local assemblies continued to function for centuries.

Ordinary people in the kingdoms

We can catch an occasional glimpse of the lives of ordinary people from plays, and other accounts. Let us look at some of these.

Kalidasa is known for his plays depicting life in the king's court. An interesting feature about these plays is that the king and most *brahmins* are shown as speaking Sanskrit, while women and men other than the king and *brahmins* use Prakrit. His most famous play, *Abhijnana Shakuntalam*, is the story of the love between a king named Dushyanta and a young woman named Shakuntala. We find an interesting description of the plight of a poor fisherman in this play.

A fisherman finds a ring

A fisherman found a precious ring, which the king had given to Shakuntala, but which had been accidentally swallowed by a fish. When he went to the palace with it, the gatemen accused him of theft, and the chief police officer was rather rude. However, the king was happy when he saw the ring and sent a reward for the fisherman. Then, the police officer and the gatemen decided to take a share of the reward, and went along with the fisherman to have a drink.

Do you think that if a poor man finds something and reports this to the police he would be treated like this today?

Name a famous man who taught in Prakrit and a king who issued inscriptions in Prakrit (hint: see Chapters 7 and 8)

The Chinese pilgrim Fa Xian noticed the plight of those who were treated as untouchables by the high and mighty. They were expected to live on the outskirts of the city. He writes: "If such a man enters a town or a market place, he strikes a piece of wood, in order to keep himself separate; people, hearing this sound, know what it means and avoid touching him or brushing against him."

And Banabhatta provides us with a vivid picture of the king's army on the move:

The king's army

The king travelled with an enormous amount of equipment. Apart from weapons, there were things of daily use such as pots, pans, furniture, golden footstools, food, including animals such as goat, deer, rabbits, vegetables, spices, carried on carts or loaded on to pack animals such as camels and elephants. This huge army was accompanied by musicians beating drums, and others playing horns and trumpets.

Villagers had to provide hospitality along the way. They came with gifts of curds, *gur* and flowers, and provided fodder for the animals. They also tried to meet the king, and place their complaints and petitions before him.

The army left a trail of destruction behind. Elephants often trampled down the huts of villagers, and the oxen yoked to the caravans of merchants ran away, scared by the tumult.

As Banabhatta says: "The whole world was swallowed up in dust."

Make a list of all the things that were carried with the army.

What did the villagers bring for the king?

Elsewhere

Find Arabia on Map 6 (pages 84-85). Although it is a desert, it was at the hub of communications for centuries. In fact, Arab merchants and sailors played an important role in the sea trade between India and Europe (see page 100). Others who lived in Arabia were the Bedouins, pastoral tribes depending mainly on like hardy animals camels, that could survive in the desert.

Around 1400 years ago, Prophet Muhammad introduced a new religion, Islam, in Arabia. Like Christianity, Islam was a religion that laid stress on the equality and unity of all before Allah, the one supreme god. Here is a verse from the Quran, the sacred book of Islam:

“For Muslim men and women, for believing men and women, for devout men and women, for true men and women, for men and women who are patient and constant, for men and women who humble themselves, for men and women who give in charity, for men and women who fast, for men and women who guard their chastity, and for men and women who engage much in Allah’s remembrance, for them has Allah prepared forgiveness and great reward.”

Within a hundred years Islam spread to north Africa, Spain, Iran and India. Arab sailors, who were already familiar with the coastal settlements of the subcontinent, now brought the new religion with them. Arabs soldiers conquered Sind (in present-day Pakistan) about 1300 years ago.

Trace the routes that would have been taken by these sailors and soldiers on Map 6.

Imagine

Harshavardhana’s army will visit your village next week. Your parents are preparing for the visit. Describe what they say and do.

Let’s recall



1. State whether true or false:
 - (a) Harishena composed a *prashasti* in praise of Gautamiputra Shri Satakarni.
 - (b) The rulers of Aryavarta brought tribute for Samudragupta.
 - (c) There were twelve rulers in Dakshinapatha.

- (d) Taxila and Madurai were important centres under the control of the Gupta rulers.
 - (e) Aihole was the capital of the Pallavas.
 - (f) Local assemblies functioned for several centuries in south India.
2. Mention three authors who wrote about Harshavardhana.
 3. What changes do you find in the army at this time?
 4. What were the new administrative arrangements during this period?

KEYWORDS

prashasti
Aryavarta
Dakshinapatha
genealogy
hereditary officer
samanta
assembly
nagaram

Let's discuss



5. What do you think Arvind would have to do if he was acting as Samudragupta?
6. Do you think ordinary people would have read and understood the *prashastis*? Give reasons for your answer.

Let's do



7. If you had to make a genealogy for yourself, who are the people you would include in it? How many generations would you like to show? Make a chart and fill it.
8. How do you think wars affect the lives of ordinary people today?

SOME IMPORTANT DATES

- ▶ Beginning of the Gupta dynasty (about 1700 years ago)
- ▶ The rule of Harshavardhana (about 1400 years ago)

CHAPTER 12

BUILDINGS, PAINTINGS AND BOOKS



Marutasami and the iron pillar

Marutasami was so excited. His brother had propelled his wheelchair all along the dusty, stony path, past the towering Qutb Minar, and up the metal ramp. It had been tough, but now he was here, in front of the famous iron pillar. It was an unforgettable experience.

The iron pillar

The iron pillar at Mehrauli, Delhi, is a remarkable example of the skill of Indian crafts persons. It is made of iron, 7.2. m high, and weighs over 3 tonnes. It was made about 1500 years ago. We know the date because there is an inscription on the pillar mentioning a ruler named Chandra, who probably belonged to the Gupta dynasty (Chapter 11). What is amazing is the fact that the pillar has not rusted in all these years.

Buildings in brick and stone

The skills of our crafts persons are also apparent in the buildings that have survived, such as *stupas*. The word *stupa* means a mound. While there are several kinds of *stupas*, round and tall, big and small, these have certain common features. Generally, there is a small box placed at the centre or heart of the *stupa*. This may contain bodily remains (such as teeth, bone or ashes) of the Buddha or his followers, or things they used, as well as precious stones, and coins.

This box, known as a relic casket, was covered with earth. Later, a layer of mud brick or baked brick was added on top. And then, the dome like structure was sometimes covered with carved stone slabs.

The iron pillar



Often, a path, known as the *pradakshina patha*, was laid around the *stupa*. This was surrounded with railings. Entrance to the path was through gateways. Devotees walked around the *stupa*, in a clockwise direction, as a mark of devotion. Both railings and gateways were often decorated with sculpture.

Find Amaravati on Map 7 (page 113). This was a place where a magnificent *stupa* once existed. Many of the stone carvings for decorating the *stupa* were made about 2000 years ago.

Other buildings were hollowed out of rock to make artificial caves. Some of these were very elaborately decorated with sculptures and painted walls.

Some of the earliest Hindu temples were also built at this time. Deities such as Vishnu, Shiva, and Durga were worshipped in these shrines. The most important part of the temple was the room known as the *garbhagriha*, where the image of the chief deity was placed. It was here that priests performed religious rituals, and devotees offered worship to the deity.

Often, as at Bhitargaon, a tower, known as the *shikhara*, was built on top of the



Top : The Great Stupa at Sanchi, Madhya Pradesh. Stupas like this one were built over several centuries. While the brick mound probably dates to the time of Ashoka (Chapter 8), the railings and gateways were added during the time of later rulers.

Left : Sculpture from Amaravati. Look at the picture and describe what you see.





Top : An early temple at Bhitargaon, Uttar Pradesh.

This was built about 1500 years ago, and was made of baked brick and stone.

Top Right : Monolithic temples at Mahabalipuram.

Each of these was carved out of a huge, single piece of stone (that is why they are known as monoliths). While brick structures are built up by adding layers of bricks from the bottom upwards, in this case the stone cutters had to work from top downwards.

List the problems that stone cutters may have faced.

Right : The Durga temple at Aihole, built about 1400 years ago.

garbhagriha, to mark this out as a sacred place. Building *shikharas* required careful planning. Most temples also had a space known as the *mandapa*. It was a hall where people could assemble.

Find Mahabalipuram and Aihole on Map 7 (page 113). Some of the finest stone temples were built in these towns. Some of these are shown here.



How were stupas and temples built?

There were several stages in building a *stupa* or a temple. Usually, kings or queens decided to build these as it was an expensive affair. First, good quality stone had to be found, quarried, and transported to the place that was often carefully chosen for the new building. Here, these rough blocks of stone had to be shaped and carved into pillars, and panels for walls, floors and ceilings. And then these had to be placed in precisely the right position.



Left : A Jain monastery from Orissa.

This two storey building was carved out of the rock surface. Notice the entrance to the rooms. Jain monks lived and meditated in these rooms.

In what ways is the cave shown here different from the illustration on p.15?

Below : A sculpture from the National Museum, New Delhi.

Can you see how some of the caves may have been hollowed out?

Kings and queens probably spent money from their treasury to pay the crafts persons who worked to build these splendid structures.

Besides, when devotees came to visit the temple or the *stupa*, they often brought gifts, which were used to decorate the buildings. For example, an association of ivory workers paid for one of the beautiful gateways at Sanchi.

Among the others who paid for decorations were merchants, farmers, garland makers, perfumers, smiths, and hundreds of men and





women who are known only by their names which were inscribed on pillars, railings and walls. So when you get a chance to visit any of these buildings, remember how several hundreds of people probably worked to construct and decorate them.

Make a diagram like the one on page 88 (Chapter 9) to show the stages in the building of a temple or *stupa*.

Painting

Find Ajanta on Map 7 (page 113). This is a place where several caves were hollowed out of the hills over centuries. Most of these were monasteries for Buddhist monks, and some of them were decorated with paintings. Here are some examples.

As the caves are dark inside, most of these paintings were done in the light of torches. The colours, which are vivid even after 1500 years, were made of plants and minerals. The artists who created these splendid works of art remain unknown.

Paintings from Ajanta.
Describe what you see in
each of these paintings.



The world of books

Some of the best-known *epics* were written during this period. Epics are grand, long compositions, about heroic men and women, and include stories about gods.

A famous Tamil epic, the *Silappadikaram*, was composed by a poet named Ilango, around 1800 years ago. It is the story of a merchant named Kovalan, who lived in Puhar and fell in love with a courtesan named Madhavi, neglecting his wife Kannagi. Later, he and Kannagi left Puhar and went to Madurai, where he was wrongly accused of theft by the court jeweller of the Pandya king. The king sentenced Kovalan to death. Kannagi, who still loved him, was full of grief and anger at this injustice, and destroyed the entire city of Madurai.

A description from the *Silappadikaram*

Here is how the poet describes Kannagi's grief:

“O witness of my grief, you cannot console me. Is it right that your body, fairer than pure gold, lies unwashed here in the dust? Is it just that in the red glow of the twilight, your handsome chest, framed with a flower wreath, lies thrown down on the bare earth, while I remain alone, helpless and abandoned to despair? Is there no god? Is there no god in this country? Can there be a god in a land where the sword of the king is used for the murder of innocent strangers? Is there no god, no god?”

Another Tamil epic, the *Manimekalai* was composed by Sattanar around 1400 years ago. This describes the story of the daughter of Kovalan and Madhavi. These beautiful compositions were lost to scholars for many centuries, till their manuscripts were rediscovered, about a hundred years ago.

Other writers, such as Kalidasa, (about whom you read in Chapter 11) wrote in Sanskrit.

A verse from the Meghaduta

Here is a verse from Kalidasa's best-known poem, the Meghaduta, in which a monsoon cloud is imagined to be a messenger between lovers who are separated from one another.

See how the poet describes the breeze that will carry the cloud northwards:

"A cool breeze, delightful as it is touched
With the fragrance of the earth
Swollen by your showers,
Inhaled deeply by elephants,
And causing the wild figs to ripen,
Will blow gently as you go."

Do you think Kalidasa can be described as a lover of nature?

Recording and preserving old stories

A number of Hindu religious stories that were in circulation earlier were written down around the same time. These include the Puranas. *Purana* literally mean old. The Puranas contain stories about gods and goddesses, such as Vishnu, Shiva, Durga or Parvati. They also contain details on how they were to be worshipped. Besides, there are accounts about the creation of the world, and about kings.

The Puranas were written in simple Sanskrit verse, and were meant to be heard by everybody, including women and *shudras*, who were not allowed to study the Vedas. They were probably recited in temples by priests, and people came to listen to them.

Two Sanskrit epics, the Mahabharata and Ramayana had been popular for a very long time. Some of you may be familiar with these stories. The Mahabharata is about a war fought between the Kauravas and Pandavas, who were cousins.

This was a war to gain control of the throne of the Kurus, and their capital, Hastinapur. The story itself was an old one, but was written down in the form in which we know it today, about 1500 years ago. Both the Puranas and the Mahabharata are supposed to have been compiled by Vyasa. The Bhagavad Gita, about which you learnt in Chapter 10, was also included in the Mahabharata.

The Ramayana is about Rama, a prince of Kosala, who was sent into exile. His wife Sita was abducted by the king of Lanka, named Ravana, and Rama had to fight a battle to get her back. He won and returned to Ayodhya, the capital of Kosala, after his victory. Like the Mahabharata, this was an old story that was now written down. Valmiki is recognised as the author of the Sanskrit Ramayana.

There are several versions (many of which are performed) of the Mahabharata and the Ramayana, popular amongst people in different parts of the subcontinent. Find out about a version in your state.

Stories told by ordinary people

Ordinary people also told stories, composed poems and songs, sang, danced, and performed plays. Some of these are preserved in collections of stories such as the Jatakas and the Panchatantra, which were written down around this time. Stories from the Jatakas were often shown on the railings of *stupas* and in paintings in places such as Ajanta.

Here is one such story:

The story of the monkey king

Once upon a time there was a great monkey king, who lived on the banks of the Ganga in the Himalayas, with 80,000 followers. They fed on the fruit of a special mango tree, which were very sweet. Such exquisite mangoes did not grow on the plains. One day, a ripe mango fell into the river and floated all the way to Varanasi. There the king of the city who was bathing in the river found it, and was amazed when he tasted it. He asked the foresters of his kingdom whether they could find the tree for him, and they led him all the way to the Himalayas. There, the king and his courtiers had their fill of mangoes. At night, the king discovered that the monkeys were also feasting on the fruit, and decided to kill them.



However, the king of the monkeys worked out a plan to save his followers. He broke off branches of the mango tree, and tied them to form a 'bridge' across the river, and held on to one end till all his followers crossed over. Exhausted with the effort, he fell down and lay dying.

The human king saw what had happened, and tried unsuccessfully to revive the monkey. When he died, the king mourned his death and paid him full respect.

This story is shown on a piece of sculpture found from a *stupa* at Bharhut in central India. Can you identify which parts of the story are shown in the sculpture?

Why do you think these were chosen?

Writing books on science

This was also the time when Aryabhata, a mathematician and astronomer, wrote a book in Sanskrit known as the Aryabhatiyam. He stated that day and night were caused by the rotation of the earth on its axis, even though it seems as if the sun is rising and setting everyday. He developed a scientific explanation for eclipses as well. He also found a way of calculating the circumference of a circle, which is nearly as accurate as the formula we use today.

KEYWORDS

stupa
temple
painting
epic
story
Purana
science
mathematics

Zero

While numerals had been used earlier, mathematicians in India now invented a special symbol for zero. This system of counting was adapted by the Arabs and then spread to Europe. It continues to be in use throughout the world.

The Romans used a system of counting without using zero. Try and find out more about it.

Elsewhere

Paper has become a part of our daily lives. The books we read are printed on paper, and we use paper for writing. Paper was invented in China about 1900 years ago, by a man named Cai Lun. He beat plant fibres, cloth, rope and the bark of trees, soaked these in water, and then pressed, drained and dried the pulp to create paper. Even today, hand made paper is made through a similar process.

The technique of making paper was a closely guarded secret for centuries. It reached Korea about 1400 years ago, and spread to Japan soon after. It was known in Baghdad about 1800 years ago. From Baghdad it spread to Europe, Africa, and other parts of Asia including the subcontinent.

What were manuscripts in early India made out of ? (Hint: See Chapter 1)

SOME IMPORTANT DATES

- ▶ beginning of stupa building (2300 years ago)
- ▶ Amaravati (2000 years ago)
- ▶ Kalidasa (1600 years ago)
- ▶ Iron pillar, Temple at Bhitargaon, Paintings at Ajanta, Aryabhata (1500 years ago)
- ▶ Durga temple (1400 years ago)

Imagine

You are sitting in a *mandapa* of a temple. Describe the scene around you.

Let's recall



1. Match the following

Stupa

Place where the image of the deity is installed

Shikhara

Mound

Mandapa

Circular path around the stupa

Garbhagriha

Place in temples where people could assemble

Pradakshina patha

Tower

2. Fill in the blanks:

- (a) _____ was a great astronomer.
- (b) Stories about gods and goddesses are found in the _____
- (c) _____ is recognised as the author of the Sanskrit Ramayana.
- (d) _____ and _____ are two Tamil epics.

Let's discuss



3. Make a list of the chapters in which you find mention of metal working. What are the metals objects mentioned or shown in those chapters?
4. Read the story on page 130. In what ways is the monkey king similar to or different from the kings you read about in Chapters 6 and 11?

5. Find out more and tell a story from one of the epics.

Let's do



6. List some steps that can be taken to make buildings and monuments accessible to differently abled people.
7. Try and list as many uses of paper as you can.
8. If you could visit any one of the places described in this chapter, which would you choose and why?