CHAPTER 3 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?

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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 baked that they have lasted for thousands of years. The bricks were laid in an interlocking pattern and that made the walls strong.

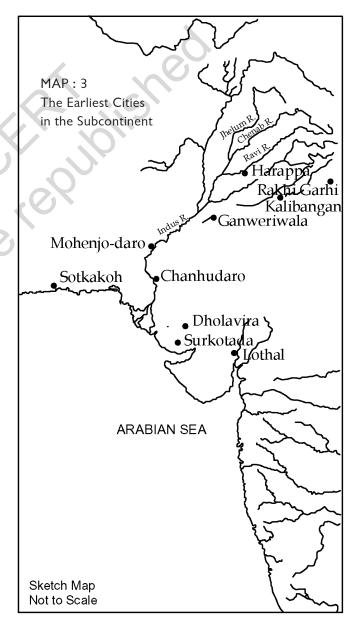
walls strong. In some cities, special buildings were constructed on the citadel. For example, in Mohenjodaro, a very tank. which special archaeologists call the Great Bath, was built in this area. This was lined with bricks, coated with plaster, and made water-tight with a layer of natural tar. There 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

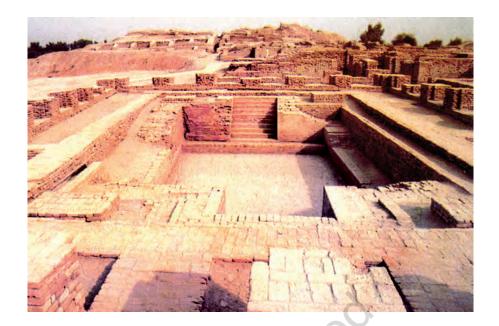
Other cities, such as Kalibangan and Lothal had fire altars, where sacrifices may have been performed. And some cities like Mohenjodaro, Harappa, and Lothal had elaborate store houses.

use. Perhaps important people took a dip in this tank

on special occasions.

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 paralleled sided long stone blades.





The Great Bath

Houses, drains and streets

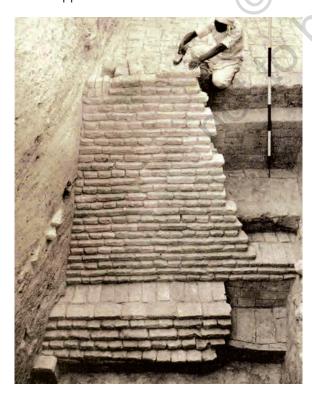
Generally, houses were either one or two storeys high, with rooms built around a courtyard. Most houses had a separate bathing area, and some had wells to supply water.

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 2.

How bricks were arranged to build walls in Harappan cities



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 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.

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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 27) 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 2?

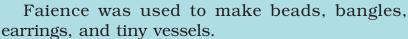
Was stone used to make weights?

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,

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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.





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 28) 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.

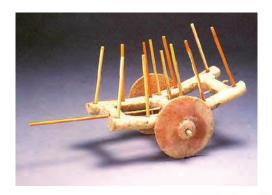
In search of raw materials

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

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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.

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

A closer look - Harappan towns in Gujarat

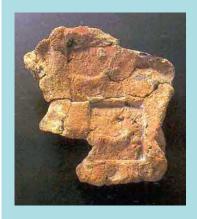
The city of Dholavira was located on Khadir Beyt (also spelled as Bet) in the Rann of Kutch, where there was fresh water and fertile soil. Unlike some of the other Harappan cities, which were divided into two parts, Dholavira was divided into three parts, and each part was surrounded with massive stone 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 Khambat. 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

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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 5 and 8.

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.

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IN THE EARLIEST CITIES

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 2? 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.

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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; Asian languages such as Persian 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.

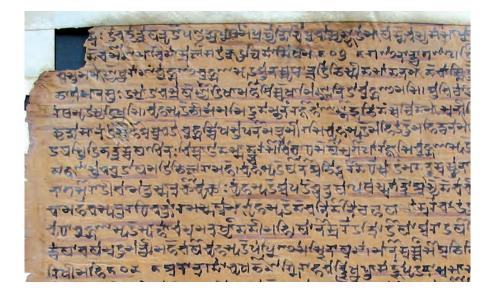
How historians study the Rigveda

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:

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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*.

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WHAT BOOKS AND BURIALS TELL US

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.

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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 5.

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.

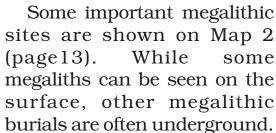
These stone boulders are known as megaliths (literally big stones). These were carefully arranged by people, and were used to mark burial sites. The practice of erecting megaliths began about 3000 years ago, and was prevalent throughout the Deccan, south India, in the north-east and Kashmir.

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WHAT BOOKS AND BURIALS TELL US



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.



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.

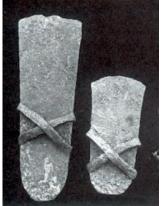
There were several things

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?

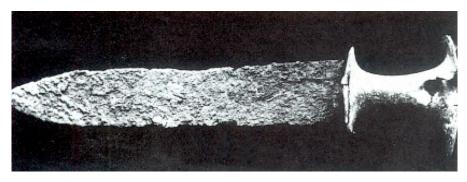




Iron equipment found from megalithic burials.

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 13). 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 (page13). 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

WHAT BOOKS AND BURIALS TELL US

the centre of the settlement. This house also had a granary. The body was placed in a crosslegged 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.

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

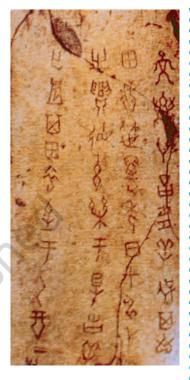
Elsewhere

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

Sukta Stone boulder

Chariots Sacrifice

Yajna Well-said

Dasa 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
		.00	
	10,		
	**0		

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WHAT BOOKS AND BURIALS TELL US