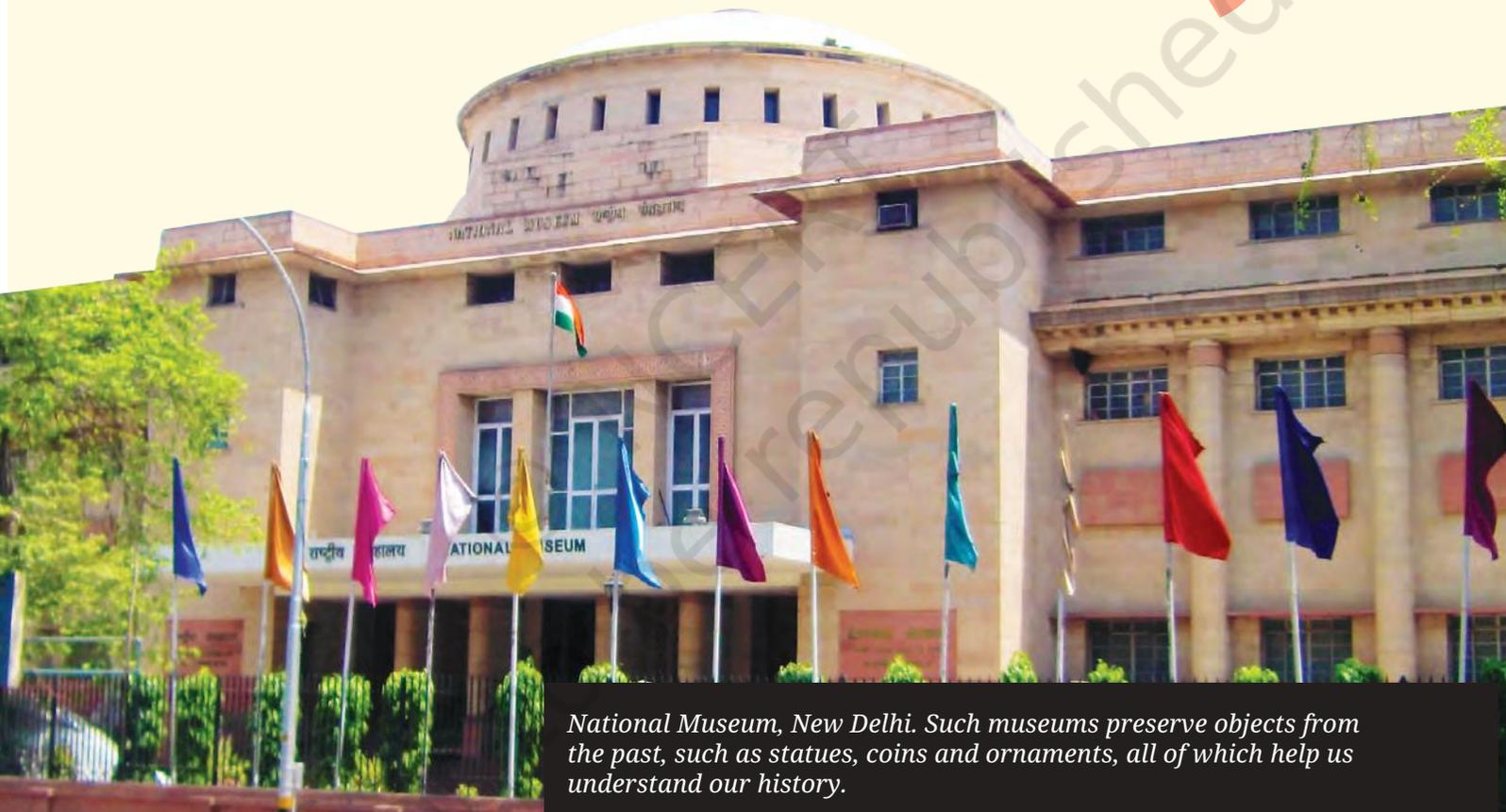


Timeline and Sources of History

History is “an unending dialogue between the present and the past ... between the society of today and the society of yesterday. ... We can fully understand the present only in the light of the past.”

— E.H. Carr



National Museum, New Delhi. Such museums preserve objects from the past, such as statues, coins and ornaments, all of which help us understand our history.

The Big Questions ?

1. *How do we measure historical time?*
2. *How can various sources help us understand history?*
3. *How did early humans live?*



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How Do We Learn About the Past?



THINK ABOUT IT

- What is the earliest memory you can recollect? Do you remember how old you were at that time? Those memories together are a part of your past, maybe going five or six years back.
- How do you think understanding the past will help us understand the present world?

History: The study of the human past.

You will discover in Science that the Earth has a very, very long **history**, of which we humans occupy only a tiny part — the most recent one.

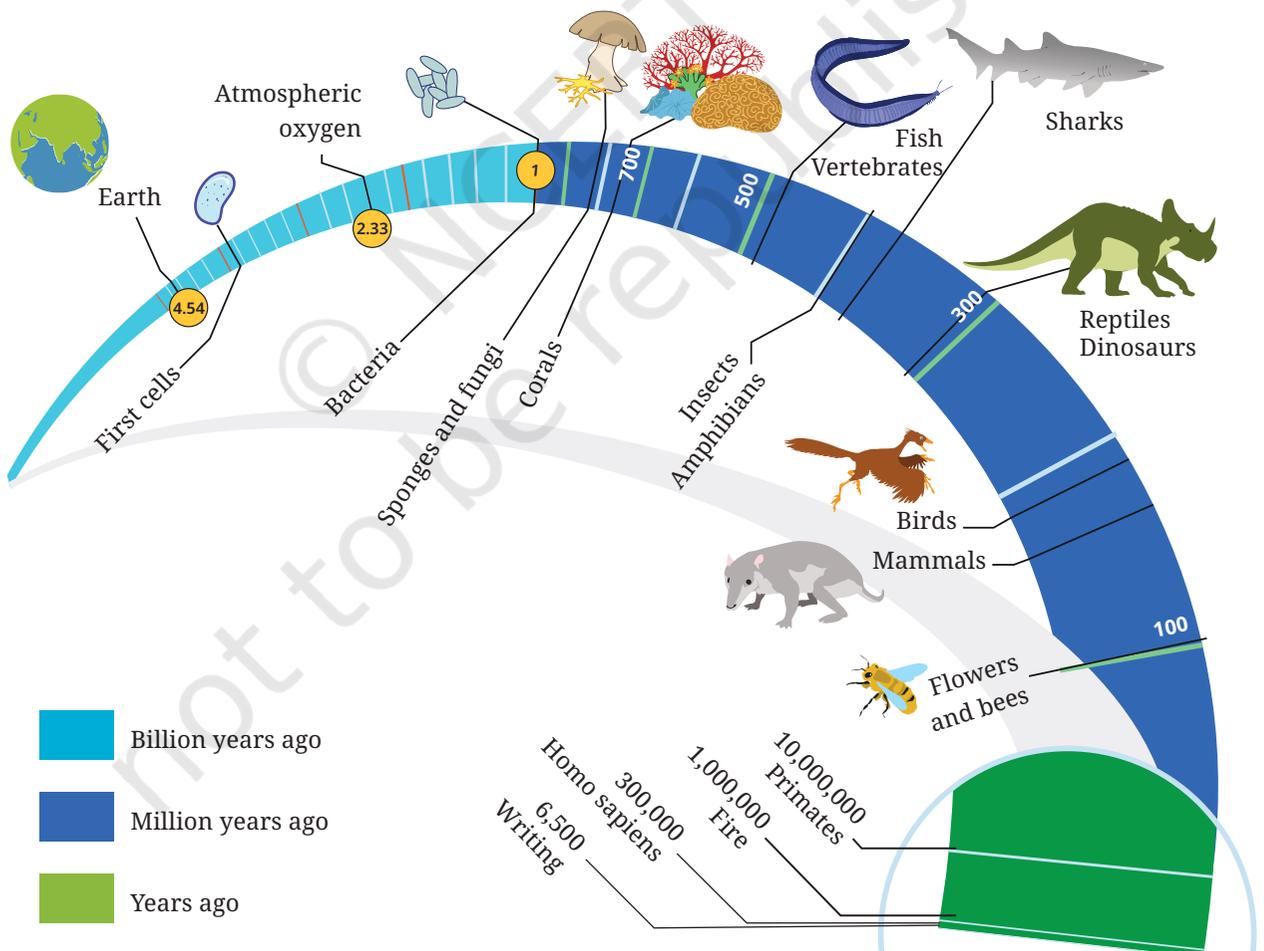


Fig. 4.1. Timeline of a few important stages in the evolution of life on Earth.

Many people study the history of the Earth. Some of them are trained to uncover the secrets left beneath the Earth's surface and help us learn about its past — and also our past.



Fig. 4.2.1: Geologists



Fig. 4.2.2: Palaeontologists



Fig. 4.2.3: Anthropologists



Fig. 4.2.4: Archaeologists

Observe these four pictures and the activities involved. From top left:

- **Geologists** (Fig. 4.2.1) study the physical features of the Earth, like the soil, stones, hills, mountains, rivers, seas, oceans and other such parts of the Earth.
- **Palaeontologists** (Fig. 4.2.2) study the remains of plants, animals and humans from millions of years ago in the form of **fossils**.
- **Anthropologists** (Fig. 4.2.3) study human societies and cultures from the oldest times to the present.
- **Archaeologists** (Fig. 4.2.4) study the past by digging up remains that people, plants and animals left behind, such as tools, pots, beads, figurines, toys, bones and teeth of animals and humans, burnt grains, parts of houses or bricks, among others.

How Is Time Measured in History?

Each society and culture has had its own ways of measuring time. Major events, such as the birth of an important person or the start of a ruler's reign, have often marked the beginning of a new **era**. At present, the **Gregorian**

Fossils: Impressions of footprints, or parts of plants or animals that are found preserved within layers of soil or rocks.

Era: A distinct period of time.

Gregorian calendar: The calendar now used the world over; it has 12 months adding up to 365 days, and a leap year every four years. However, century years — for example, 1800, 1900, 2000 — are leap years only if they are multiples of 400; so in the three centenary years above, only 2000 is a leap year.

Auspicious: favourable or bringing luck; for instance, 'an auspicious beginning'.

calendar is commonly used worldwide; side by side, Hindu, Muslim, Jewish, Chinese and other calendars are also used for calculating the dates of festivals and other **auspicious** events.

In the West, the conventional year for Jesus Christ's birth has generally been taken to be the starting point for this calendar. Years are counted forward from this point and used to be marked with 'AD' (an abbreviation for a Latin phrase that refers to the years after Jesus' birth). However, this is now called the **Common Era** or CE across the world. For example, 1947, the year India gained independence, can be written as 1947 AD (sometimes AD 1947) or 1947 CE. Similarly, the years before the conventional date for the birth of Jesus are counted backward and used to be marked with BC (or Before Christ). They are now called **Before Common Era** or BCE. For example, 560 BCE is an approximate year of birth of Gautama Buddha (whom we

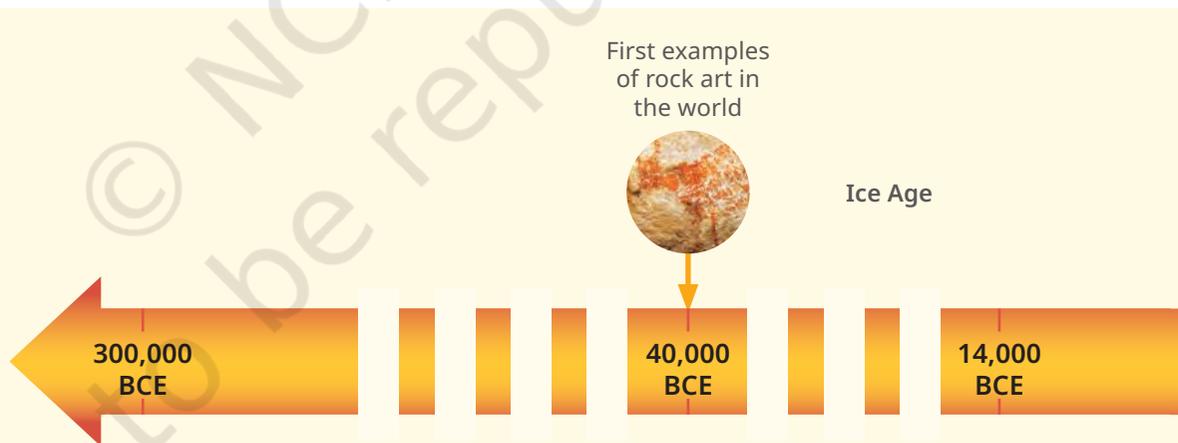
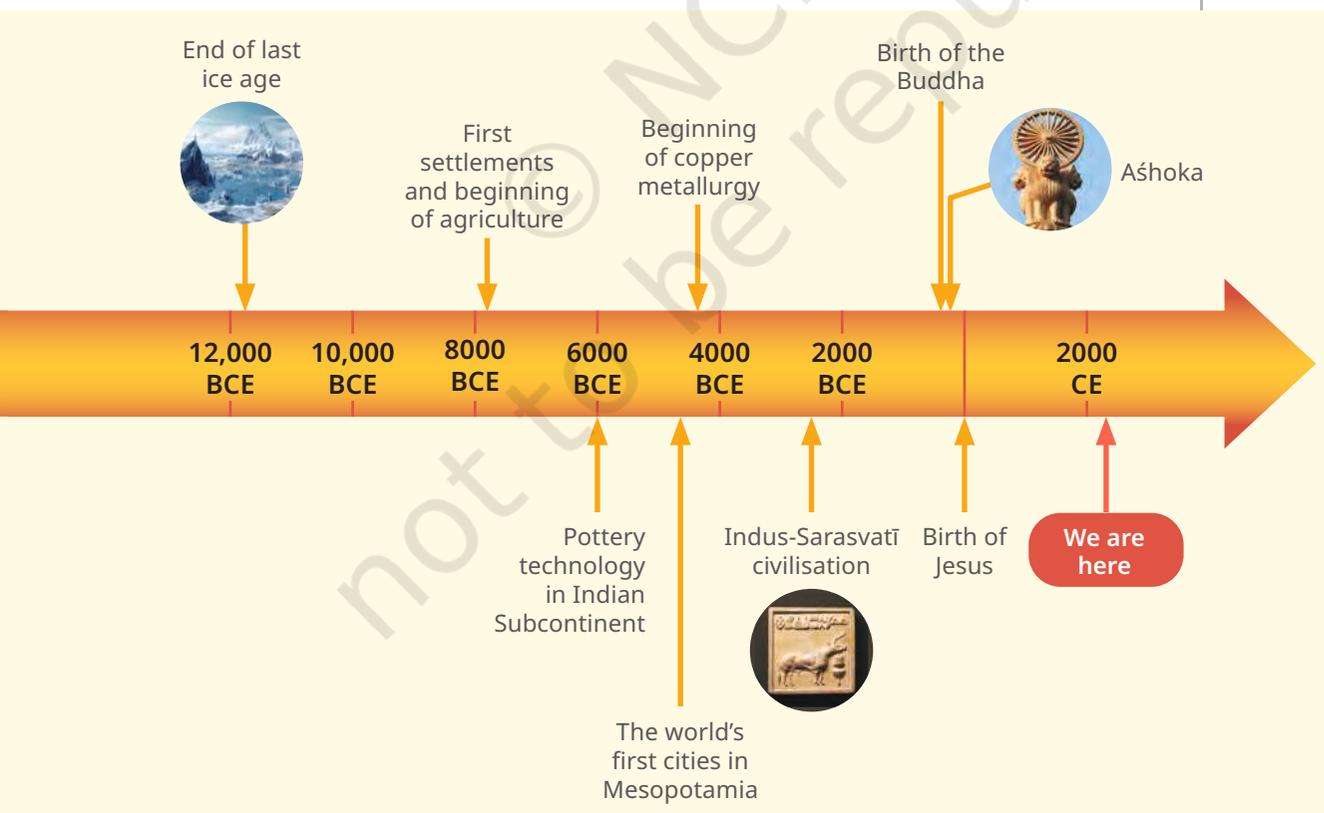


Fig. 4.3. Timeline of some main events since 300,000 BCE

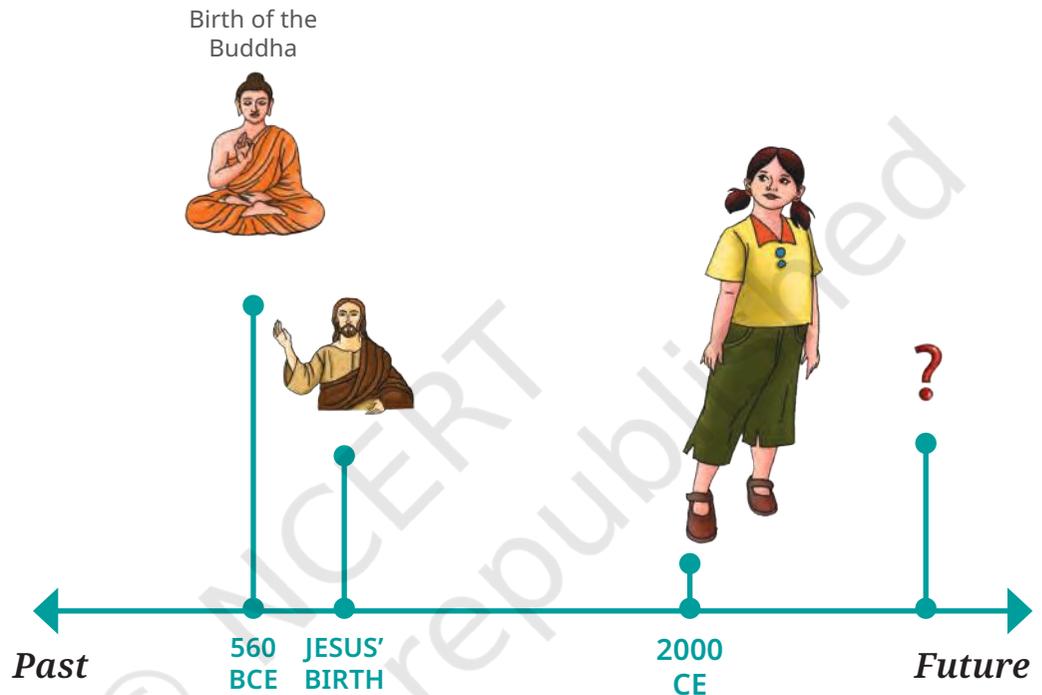
will meet in Chapter 7). Can you calculate how many years ago that was?

LET'S EXPLORE

- Such calculations are simple, but there is a catch. In the Gregorian calendar, there is no 'year zero'. The year 1 CE follows immediately the year 1 BCE. Draw a simple timeline marking every year from 2 BCE to 2 CE; you will see that because of the absence of a year zero, only 3 years have passed between those two dates.
- So to calculate the number of years between a BCE date and a CE date, you should add them but subtract 1 — in the above case, $2 + 2 - 1 = 3$.
- Practice a few examples with your classmates. For example, to return to the question about the Buddha, suppose we are now in the year 2024 CE, then the Buddha was born $560 + 2024 - 1 = 2,583$ years ago.



A **timeline** (see Fig. 4.3 on pages 62 and 63) is a convenient tool to mark such events, as it shows a sequence of dates and events covering any particular period. It runs from the beginning of humanity to the present, with a few important landmarks. Note that the dotted portion marks a skipped period; otherwise, this timeline would have to be almost 3 metres long!



A timeline also helps in understanding the order in which historical events take place. For example, even without looking at dates, you can now see that the birth of Buddha occurs before that of Jesus.



DON'T MISS OUT

Along with a year and a decade (a period of ten years), we often use other terms to understand longer durations of time. Two of these are quite commonly used when learning about history.

1. **Century:** It is any period of 100 years. In history, specific centuries are counted every 100 years starting from the year 1 CE. For instance, we are currently in the 21st century CE, which runs from 2001 to 2100.

The centuries BCE are calculated beginning from the year 1 BCE and keep going back in time. For example, the 3rd century BCE would include the years 300 BCE to 201 BCE.

- 2. Millennium:** It is any period of 1,000 years. In history, specific centuries are counted every 1,000 years from the year 1 CE. For instance, we are currently in the 3rd millennium CE, which began in 2001 CE and will go up to 3000 CE.

As with centuries, millenniums BCE are also calculated beginning from 1 BCE and go backwards. So the 1st millennium BCE would include the years 1 BCE to 1000 BCE.

In the timeline given on pages 62 and 63 (Fig. 4.3), can you mark the beginning of the 8th millennium BCE? (*Note: In English, the plural of 'millennium' is 'millenniums' or 'millennia'; both are correct.*)

LET'S EXPLORE

Create a timeline stretching from 1900 CE to the current year and place the dates of birth of your grandparents, parents, siblings and yourself. Also, mark the years that the 20th century CE begins with and ends with.



DON'T MISS OUT



Do you know how calendars have been traditionally made in India? Many Indian calendars rely on the positions of the sun and the moon to define the months of the year. A *pañchānga* is a book of tables which lists the days of each month along with related astronomical data; for instance, it precisely predicts events like solar and lunar eclipses, times for sunrise and sunset, etc. *Pañchāngas*, still widely used in India, often also give weather predictions for the year, dates and timings of festivals, and more.

Source of history: A place, person, text or an object from which we gather information about some past event or period.



What Are the Sources of History?

LET'S EXPLORE

Can you collect information about at least three generations of your family on your mother's and father's sides? Create a family tree with your parents, grandparents and great-grandparents. Find out their names, what they did for a living and where they were born. Also, write the sources from where you got this information.

Relation	Name	Occupation	Place of birth	Source of information
Grandparents (paternal)				
Grandparents (maternal)				
Great-grandparents (paternal)				
Great-grandparents (maternal)				

How did you find details about your family's past? Did you rely on things like photographs, diaries, ID cards or memories from your parents and relatives?



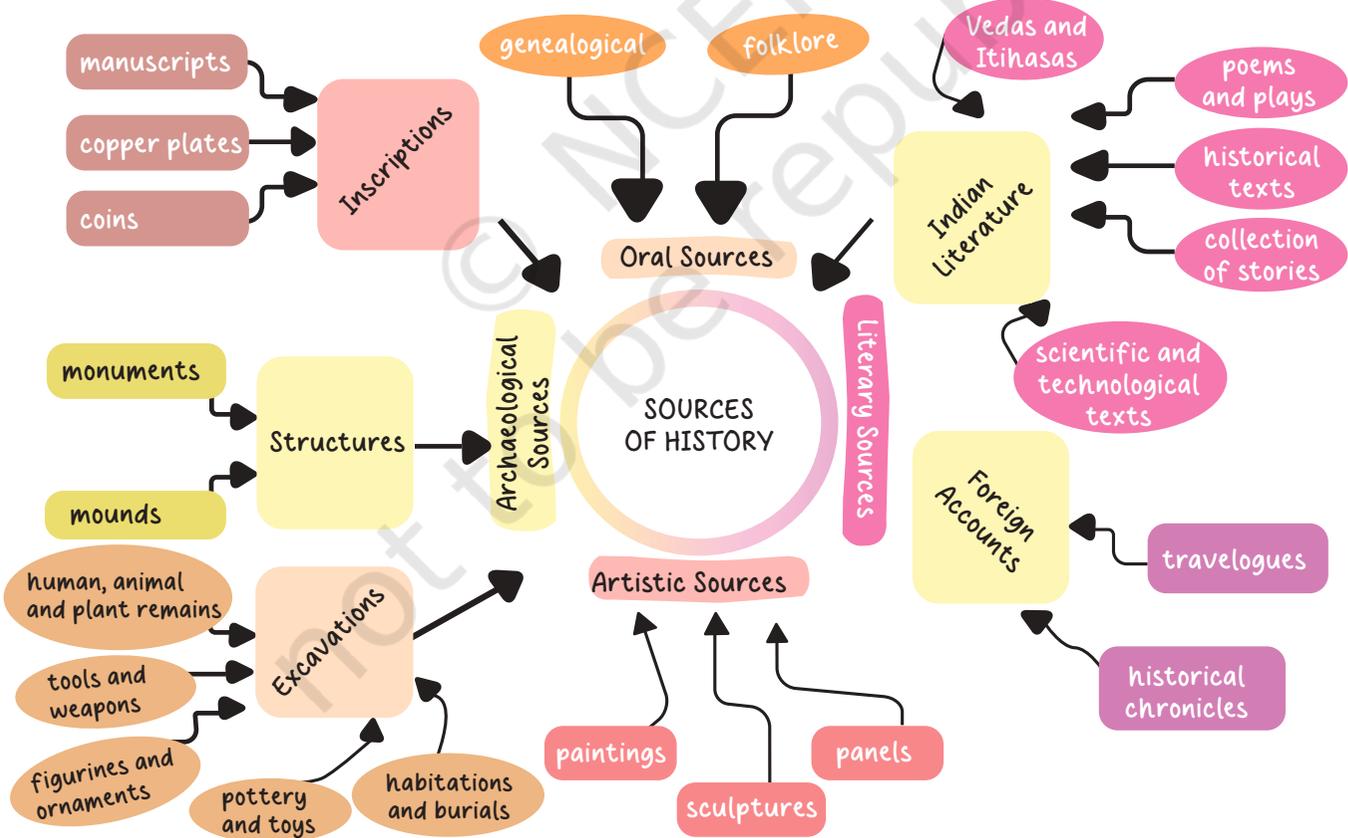
THINK ABOUT IT

Have you ever seen old coins, books, clothes, jewellery or utensils in and around your house? What type of information can we gain from such objects? Or from old houses or buildings?



Every object or structure tells a story and is like a piece in a jigsaw puzzle. The objects that you see around your house convey something of the history of your family. Similarly, we can put together historical events through a variety of sources. But keep in mind that in the case of history, quite a few pieces of the puzzle may remain missing!

Observe the figure at the bottom of the page. It brings together the main sources of history. You do not need to



Historian: A person who studies and writes about the past.

Genetics: The branch of biology that studies how, in plants, animals or humans, certain features and characteristics get passed down from one generation to the next.

remember them all now; we will use some of them as we go along. When **historians** study, say, a king or queen of 1,500 years ago, an ancient monument, a war or some items of trade, they take great care to gather information from as many sources as they can find and consult. Sometimes, the sources confirm each other (the jigsaw pieces match); at other times, sources may give contradictory information (the jigsaw pieces don't match), in which case they need to decide which source they can trust more. That is how they try to re-create the history of the period they are studying.

Who contributes to all these sources of history? Historians themselves, but also archaeologists, epigraphists (who study ancient inscriptions), anthropologists (who study human societies and their cultures), experts in literature and languages, and some more. In addition, in the last 50 years or so, scientific studies have been contributing more and more to the reconstruction of the past. For example, studies of ancient climates, chemical studies of excavated materials and studies of the **genetics** of ancient people have provided fresh insights, which supplement the more usual sources. And when historians study recent history (which usually means the last two or three centuries), another source is newspapers; for the last few decades, electronic media (television, the internet, etc.) can also be consulted.

LET'S EXPLORE

There are a few images of different sources of history on the next page. Who and what do you think the objects show? Write down in the boxes next to the images any information that you get from these objects.



Handwriting practice area with three sets of red dashed lines on a light beige background.



Handwriting practice area with three sets of red dashed lines on a light beige background.



Handwriting practice area with three sets of red dashed lines on a light beige background.

The Beginnings of Human History

Modern humans (*Homo sapiens*) have walked the planet for about 300,000 (three lakh) years. This appears to be a very long time, yet it is only a tiny fraction of the Earth's history. Let us have a quick look at our early history.



LET'S EXPLORE

In the above picture, look at some activities of early humans in a rock shelter. Which ones can you recognise? Give a brief description for each.

Early humans faced many challenges from nature and lived in bands or groups to help each other. They were constantly seeking shelter and food, and were mainly hunters and gatherers; this means that they relied on hunting and collecting edible plants and fruits for their survival. Our early ancestors also had certain beliefs about the natural elements and possibly also some notion of **afterlife**.

Afterlife:
A life
that begins
after death.

These groups lived in temporary camps, rock shelters or caves, and communicated with each other using languages that are now lost. They used fire and started making objects that made their lives easier, like improved stone axes and blades, arrowheads and other tools. Aspects of their life are visible in rock paintings found in hundreds of caves all over the world. Some of those paintings depict simple figures or a few symbols; others are more detailed and represent scenes with animals or humans. In time, these early humans learned to make simple ornaments such as stone or shell beads, pendants made of animal teeth, and sometimes exchanged them with other groups.

The First Crops

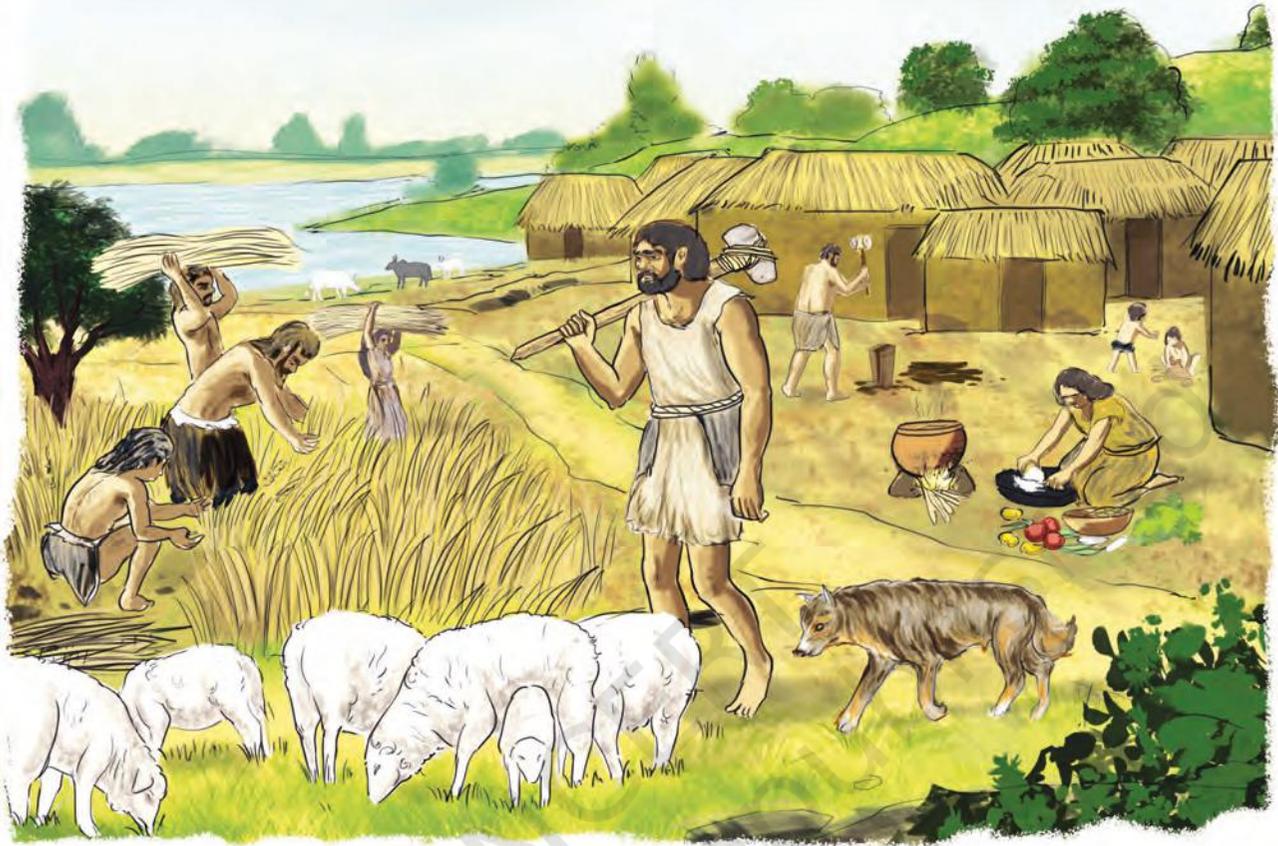
Over long ages, the Earth's climate has gone through many changes. At certain times, it was very cold and much of the Earth was covered with ice — this is called an 'Ice Age', as you will learn in greater detail in Science. Later, when the climate warmed up, this ice partly melted, and the resulting waters swelled the existing rivers and eventually drained into the oceans. The last Ice Age lasted from over 100,000 (one lakh) years ago to around 12,000 years ago.

Afterwards, living conditions improved for humans; in many parts of the world, they started settling down and cultivating cereals and grains. They also domesticated animals such as cattle, goats, etc. With more food available, these communities grew in size and number, and often settled down near rivers. This was not only because of the availability of water, but also because the soil would be more fertile there. It made the process of growing crops easier.

LET'S EXPLORE

Observe the scene on the next page. It depicts an agricultural community from a few millenniums ago. List the main activities you can identify.





THINK ABOUT IT

- ◆ Both in the earlier picture of a rock shelter and in this one, men and women are given certain roles. While they may appear to be ‘natural’, they are not necessarily accurate and do not cover all situations. For instance, in a rock shelter, women may have helped prepare colours for painting the rock or may have done some of the painting. In both scenes, men may have done some of the cooking or may have helped take care of children.
- ◆ Keeping in mind that we have only limited information, think about such roles and situations, and discuss in class.

As communities grew, so did their social complexity. Leaders or ‘chieftains’ were responsible for the well-being of the people, and everyone collectively worked towards the community’s **welfare**. For example, there was no sense of individual ownership; the lands were collectively sowed and harvested.

As time went by, **hamlets** grew into sizeable villages that exchanged goods — mostly food, clothing and tools. Slowly, networks of communication and exchange were established among those villages, and some of them grew into small towns. New technologies appeared — for example pottery, for making pots and other clay objects; and the use of metal (copper first, iron later), which helped make durable tools, objects of daily use and ornaments.

We will see in Chapter 6 how this stage prepared for the emergence of what is called ‘civilisation’. For now, it is important to remember that this early progress of humanity had to face many challenges. At some critical times, humanity could have almost disappeared, as some earlier species did. We will never know those early humans to whose courage and persistence we owe our existence today.

Before we move on ...

- We have explored some ways to learn more about our pasts. The concept of a timeline helps us understand the sequence of historical events at different times.
- There are different ways of measuring time: years, decades, centuries, millenniums.
- Sources of history are many; they help us reconstruct and interpret historical events.
- We have also had a brief look into the lives of early humans and how human societies grew more complex in time.

Welfare:
Health, prosperity and well-being.

Hamlet:
A small settlement or small village.



Questions, activities and projects

1. As a project, write the history of your family (or village if you live in one), using sources of history at your disposal. Ask your teacher to guide you.
2. Can we compare historians to detectives? Give reasons for your answers.
3. A few exercises with dates:
 - Place these dates chronologically on the timeline: 323 CE, 323 BCE, 100 CE, 100 BCE, 1900 BCE, 1090 CE, 2024 CE.
 - If King Chandragupta was born in 320 CE, which century did he belong to? And how many years was that after the Buddha's birth?
 - Rani of Jhansi was born in 1828. Which century did she belong to? How many years was that before India's Independence?
 - Turn '12,000 years ago' into a date.
4. Plan a visit to a nearby museum: the visit should be prepared with some prior research on the kind of exhibits the museum holds. Keep notes during the visit. Write a brief report afterwards, highlighting what was unexpected / interesting / fun about the visit and the exhibits.
5. Invite to your school an archaeologist or a historian and ask them to speak on the history of your region and why it's important to know it.