Social Science

Standard VIII

Part 1

Government of Kerala
Department of Education

State Council of Educational Research and Training (SCERT, Kerala)
2015

JT 283-1/Soc. Sci. 8(E)

THE NATIONAL ANTHEM

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga.
Tava shubha name jage,
Tava shubha asisa mage,
Gahe tava jaya gatha,
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he!

PLEDGE

India is my country. All Indians are my brothers and sisters. I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give my parents, teachers and all elders respect, and treat everyone with courtesy.

To my country and my people, I pledge my devotion. In their well-being and prosperity alone lies my happiness.

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Dear Students

This Social Science text of yours infuses History, Geography, Economics, Political Science, and Sociology. It reminds you that history is an ever flowing river... Geography tells the story of the unique bond between man and nature... Economics shares perceptions on how economic ideas and thoughts mould our society... Political Science explores the functioning of the government... Sociology depicts man and his interactions with society... Thus, this text will lead you to engage in social construction activities and guide you to grow into ideal citizens.

With warm regards,

Dr. S Raveendran Nair
Director
SCERT

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Certain icons are used in this textbook for convenience


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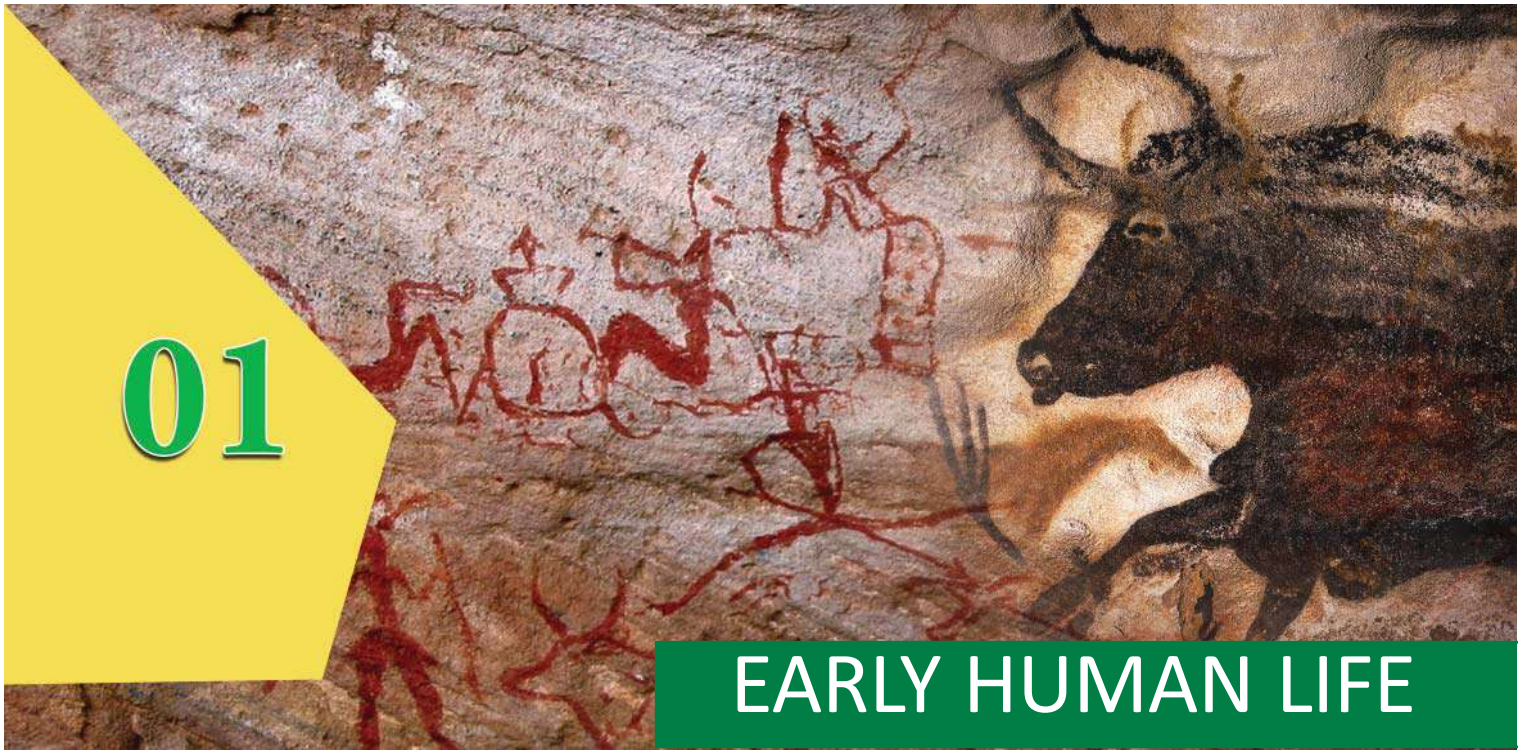
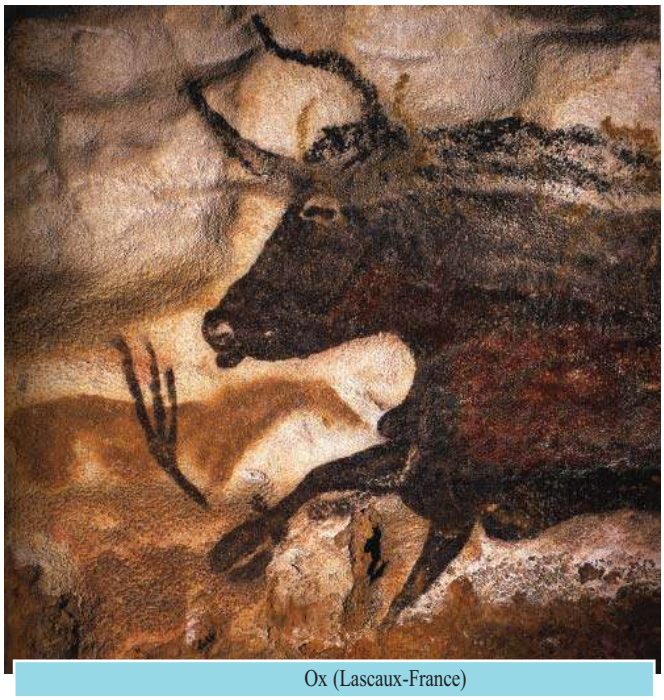


01 EARLY HUMAN LIFE

Two boys from Lascaux in north west France set out with their dog for hunting rabbits. The dog disappeared while they were searching for rabbits in bushes and burrows. Trying to track down the dog, the panic-stricken boys chanced upon a big cave, which had gone unnoticed for centuries. The scenes in the cave astonished them. The walls of the cave were covered with multicoloured paintings of horse, bison, ox, deer, etc.

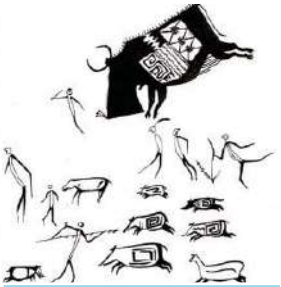
They were the pictures drawn by the Palaeolithic man. Several such cave paintings can be seen in different parts of the world. These pictures provide valuable information on the early human life.



Ox (Lascaux-France)

Palaeolithic Age

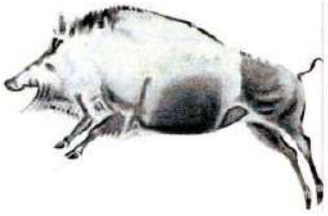
Group dance (Bhimbetka-India)



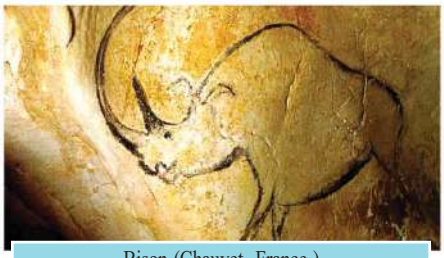
Hunting (Bhimbetka-India)

Observe the pictures. These are the cave paintings drawn by the Palaeolithic man around ten thousand years back. Why were they drawn inside the caves? What are the features of these cave paintings? Discuss.

- Most of them are pictures of animals.
-
-



Boar (Altamira-Spain)



Bison (Chauvet -France)

What information about the life of the early man can be obtained from these pictures?

- Hunted animals
- Collectively engaged in recreational activities
-

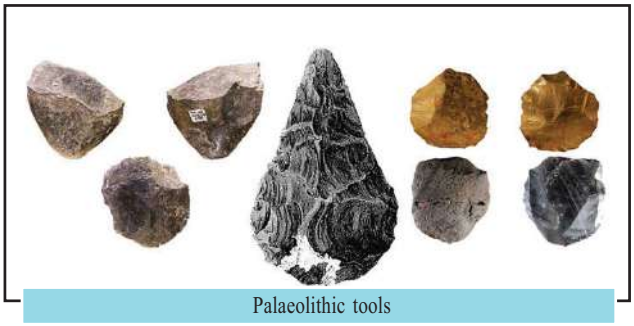
Different colours were used in the cave paintings. The colours were made from mixtures of plant extracts and powdered laterite. In addition to the figures of bison and boar that you see in the given pictures, the figures of horse, deer, lion, leopard, bear, hyena, etc. can also be seen in different caves. Animal fat was used as fuel for lighting in the caves where sunlight was insufficient. The pictures of hunting are the evidence for their planning of the hunting ground and the prey. Pictures were drawn on the ceilings of the caves as well. This stands in evidence for the dexterity of early humans.

'Cave paintings are a source of information about the early human life'. Substantiate.

Residue of cooked food, ashes, bones and skulls of animals, leftovers of fruits, vegetables, and freshwater fishes, etc. were also discovered from the caves. What else can we comprehend from them about the early human life?

- They cooked food
-
-

The Palaeolithic humans hunted collectively. The stronger among them led the group. There was no gender difference in hunting. They ate the flesh of hunted animals and carcasses. For hunting, they mainly used weapons made of stones. They also used bones of animals, ivory, pieces of wood, etc. as weapons. Hide and bark were used as clothes. The bones of animals were used as needles for sewing.



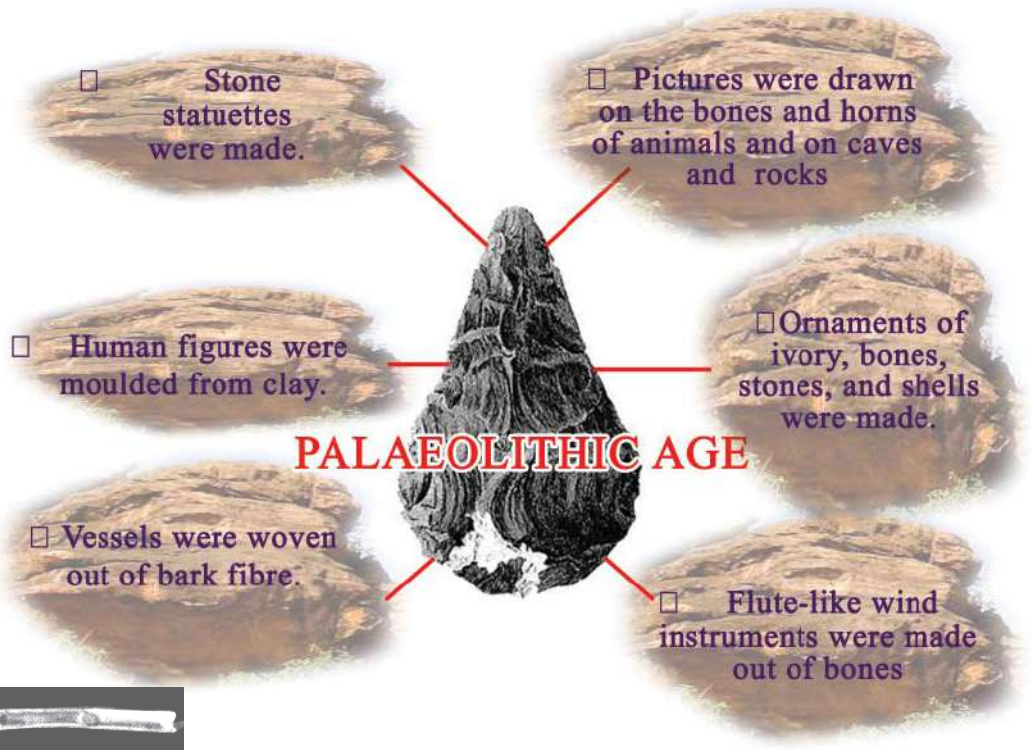
Palaeolithic tools

What information about the Palaeolithic human life is obtained from the caves? Conduct a discussion based on the following hints.

- *Tools*
- *Social life*
- *Food*
- *Planning*
- *Shelter*
- *Artistic skills*
- *Means of livelihood*
- *Use of fire*

Can the Palaeolithic Age be termed as 'the age of hunters'? Why?

There are several pieces of evidence for the technological advancement of early humans. The making of tools and their improvement helped them to attain such progress. A few of them are given below.

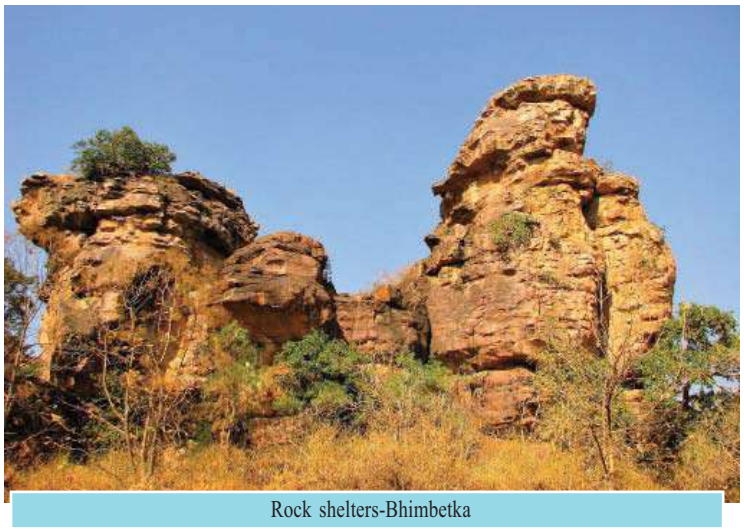


Musical instrument made of bone

The fields in which the Palaeolithic man attained progress are listed below. Find out examples for each from the unit.

Fields	Examples
Sculpture	
Painting	
Handicraft	

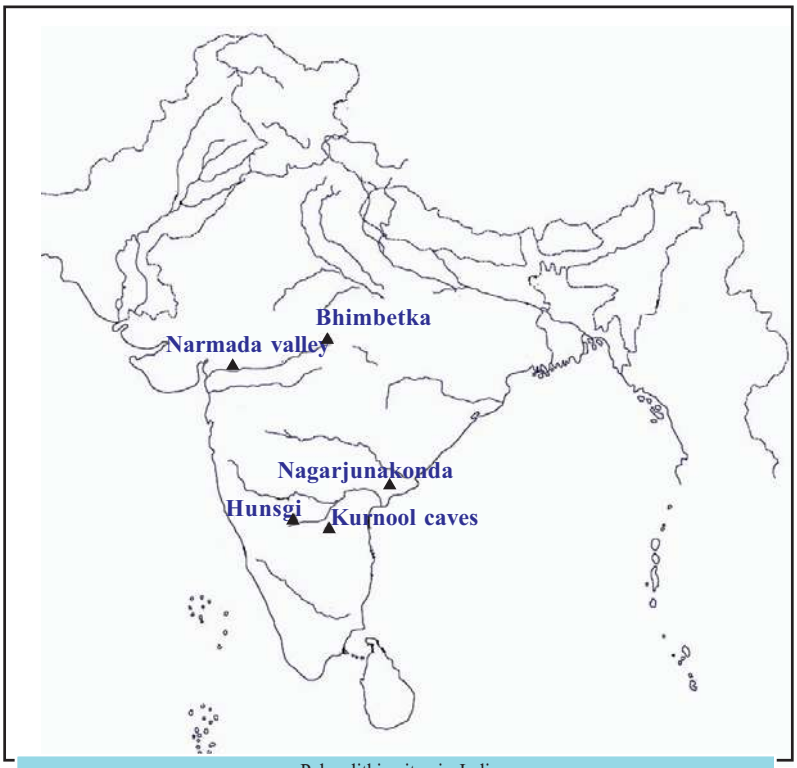
Bhimbetka in Madhya Pradesh is a remarkable Palaeolithic site. Rock shelter was the salient feature of this site. Besides Bhimbetka, there are several such sites in India that provide evidence for the Palaeolithic human life.



Rock shelters-Bhimbetka

Marked in the map are a few sites in India from where the evidence for Palaeolithic human inhabitation were found. With the help of the Internet and other sources of information, identify the present states where these sites are situated and complete the table.

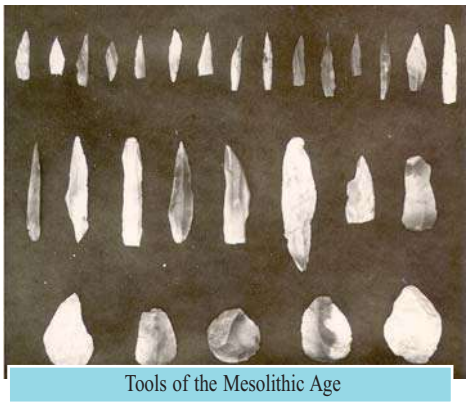
Palaeolithic site	State
• Bhimbetka	• Madhya Pradesh



Palaeolithic sites in India

Mesolithic Age

Observe the tools in the picture.



Tools of the Mesolithic Age

How are they different from the tools of the Palaeolithic Age?

They are small stone tools with sharp points. These types of tools were used in the period subsequent to the Palaeolithic Age. This age is known as the Mesolithic Age .

Why is the Mesolithic Age called Microlithic Age?

What could have been the uses of these tools?

- To hunt animals by fastening to a pole
-
-

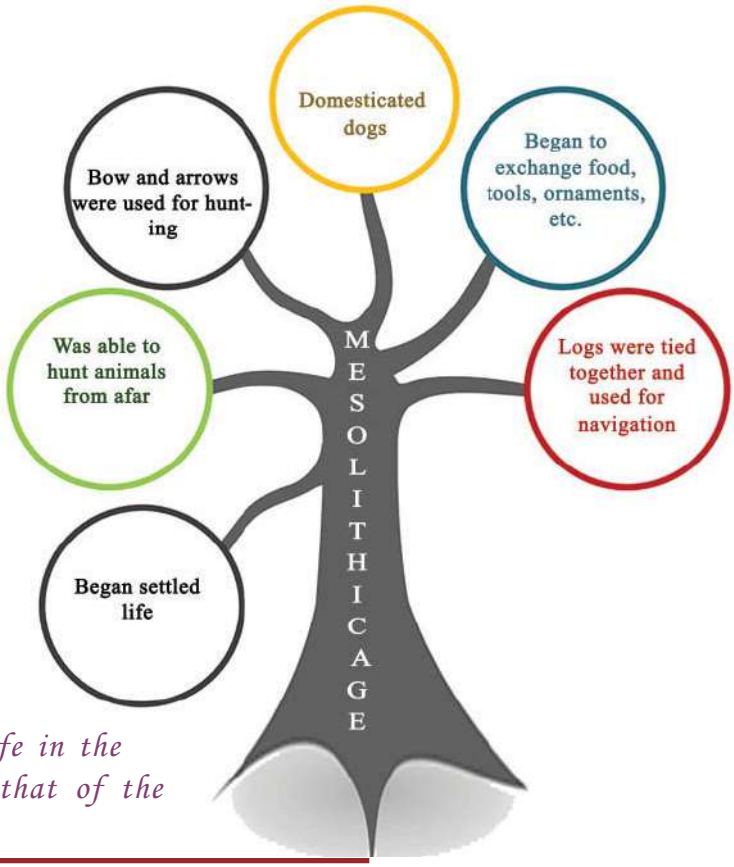
Hunting became extensive in the Mesolithic Age. As a result many animals became extinct. Mammoth is an example for such a species. Man discovered new sources of food in this period. They ate edible grass, dolphin, otter, whale, fishes, and so on.

Mammoths return

Mammoths, who belong to the elephant family, lived around ten thousand years back. Now scientists are trying to resurrect the mammoth through cloning. This scientific venture is attempted on the well preserved carcass of a mammoth discovered deep under ice from Siberia in 2013. It has been confirmed that the liquid got from the carcass is blood. The scientists look forward to resurrecting the mammoth with thick fur covered body and long tusks. Tori Herridge, a palaeontologist leads this experiment.

From the given figure, identify the progress in human life during the Mesolithic Age.

Evidence for human life in the Mesolithic Age have been discovered from various countries in Europe and west Asia. In India, such evidence have been found from Bagor (in Rajastan) and Adamgarh (in Madhya Pradesh).



Compare the human life in the Mesolithic Age with that of the Palaeolithic Age.

Neolithic Age

We have discussed the changes in human life during the Mesolithc Age. In the period subsequent to the Mesolithic Age, man began to use polished stone tools. This period is called the Neolithic Age. The beginning of cultivation was the major progress in this period that dates around eight thousand years back. The change from food gathering to food production is a landmark in the history of human life. Environmental changes, scarcity of food, population growth, etc. are pointed out as the major reasons that led to cultivation. Man began to cultivate and settle down in the river valleys.

Haven't you understood the changes in human life brought about by cultivation in the Neolithic Age? Gordon Childe, the historian, termed these changes as 'Neolithic Revolution'.

Gordon Childe

V Gordon Childe, the archaeologist and historian, was born in Australia. His researches have provided a great many information about the pre-historic period. 'Man Makes Himself', and 'What Happened in History' are his famous works.

In the Neolithic Age, human beings began to rear animals for food. They began a settled life for the purpose of cultivation and domestication of animals. Wheat, barley, jute, different kinds of tubers, paddy, plantain, etc. were the major crops of that age.

Prepare a flow chart that depicts the progress of human beings from food gatherers to food producers.

Cave paintings - Edakkal Cave

Have you heard of the Edakkal caves? Where is it located?

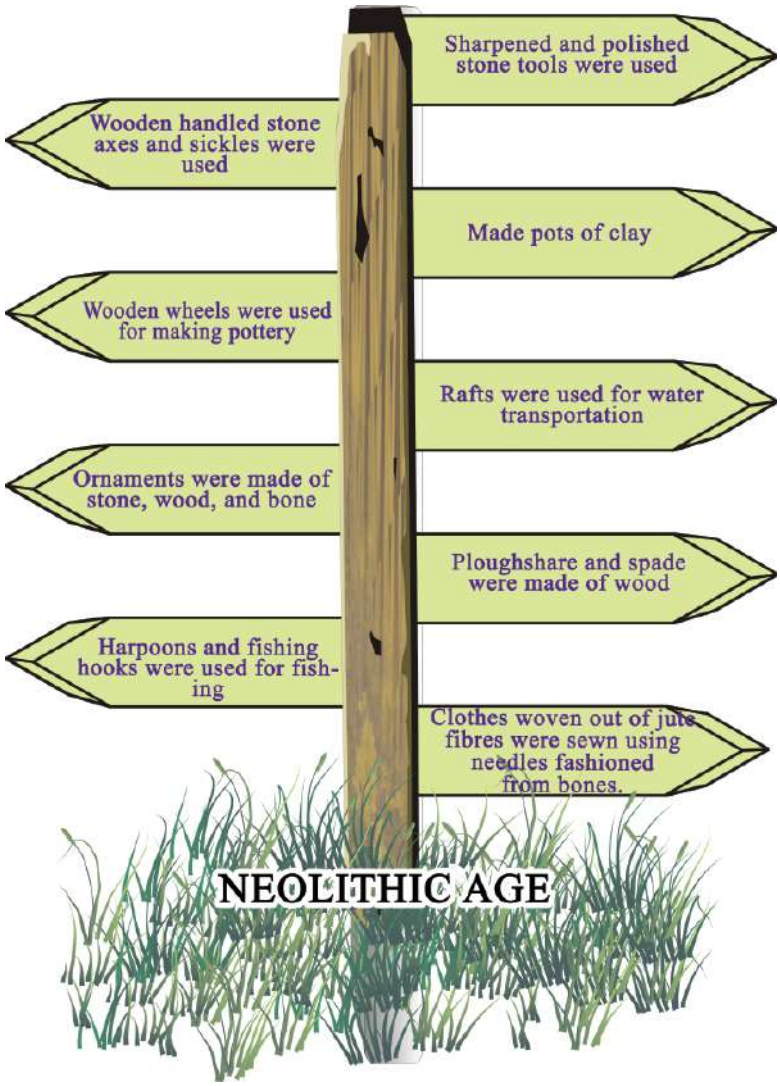
Edakkal is a major Neolithic site in Kerala. Observe the given pictures. What all can you identify?

- A wheeled cart
-
-

In those days, wheels were used to carry goods from one place to another. The development of cultivation and permanent settlement led to a collective life.

Why is the beginning of cultivation regarded as a landmark in the history of human progress?

From the picture given below, identify the technological progress attained in the Neolithic Age and find out the fields in which the people were proficient. Conduct a discussion.



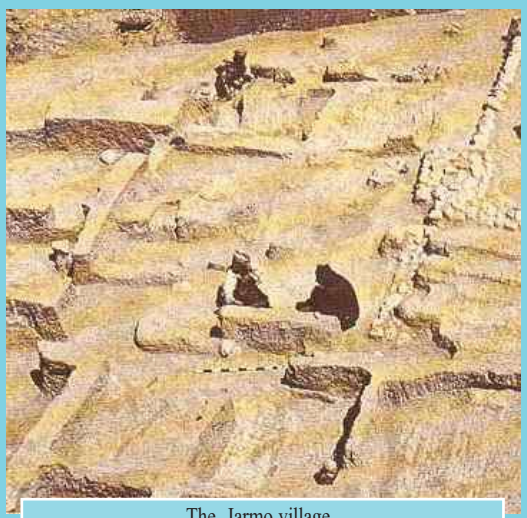
Lake Village - Switzerland (an illustration)

The lake villages in Switzerland are another example for the technological progress attained by the Neolithic man. These dwellings in the lake were constructed using logs, animal skin, and mud. Walls and houses built of stone in the Neolithic Age were discovered from Jericho in Palestine.

The transformation that began in the Mesolithic age developed further in the Neolithic Age. Identify them from this unit and prepare a note on it.

Jarmo

Jarmo in northern Iraq is an important site that provides evidence for life in the Neolithic Age. The ruins of several mud huts have been discovered here. These huts had stone foundations, sun-dried brick walls, and sun-dried mud roofs. The people of Jarmo engaged in agriculture. They stored food grains and exchanged the same.

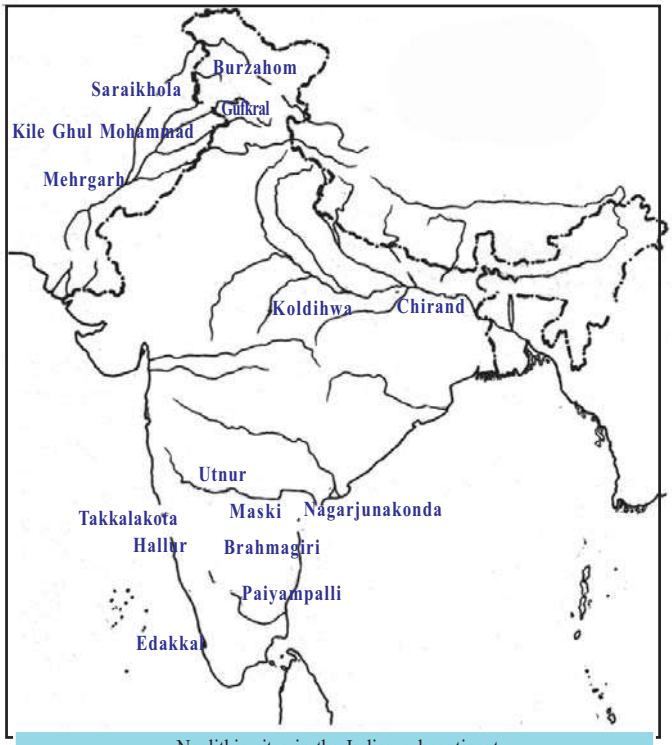


The Jarmo village

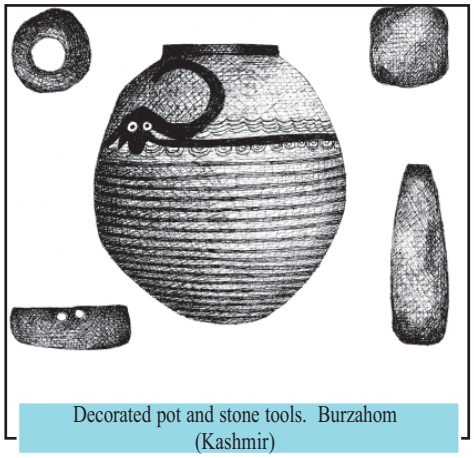
During the Neolithic Age human life spread far and wide. Population growth and the consequent necessity for cultivable and habitable land were the major causes for this. Water transportation facilitated the migration to different parts of the world.

Find out the major Neolithic sites from the given map and note them down.

- *Edakkal*
-
-
-
-



Neolithic sites in the Indian subcontinent



Decorated pot and stone tools. Burzahom (Kashmir)

Find out the changes that occurred during the Neolithic Age from the Palaeolithic Age and complete the table below.

	Palaeolithic Age	Neolithic Age
Tools	Rough stones	Polished stones
Occupation		
Food gathering		
Settled life		
Animal husbandry		
Pottery		
Technology		

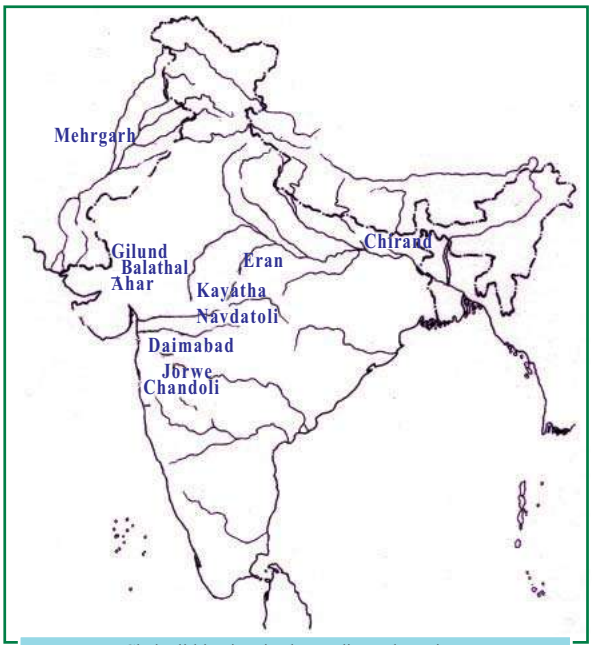
Chalcolithic Age

The Chalcolithic Age was a transition period from the Stone Age to the Metal Age. In addition to the stone tools, the people of this period made copper tools as well. Let us see the major sites of the Chalcolithic Age.

Catalhoyuk in Turkey is a major site from where evidence for human life in the Neolithic and the Chalcolithic Ages have been discovered. Ancient forms of urban settlement existed in this site. The major remnants discovered here are the ruins of dwellings. The huts were built using mud-bricks. The residues of wheat and barley have been discovered here. Pictures were drawn on the walls of huts. Excavations are still in progress in this extensive and ancient site.

Excavation in Catalhoyuk

What evidence of the Chalcolithic Age have been discovered from Catalhoyuk? Discuss.

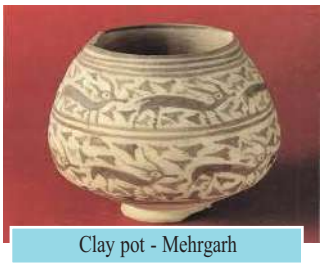


Chalcolithic sites in the Indian subcontinent

There are several places in the Indian subcontinent from where the features of the Chalcolithic Age have been excavated. Read the given map and list them.

- *Mehrgarh*
-
-
-

Mehrgarh in Baluchistan is a major Chalcolithic site in the Indian subcontinent. Wheat and barley were cultivated there. Houses with ovens were built of mud-bricks. The evidence for the use of the potter's wheel has also been discovered from here.



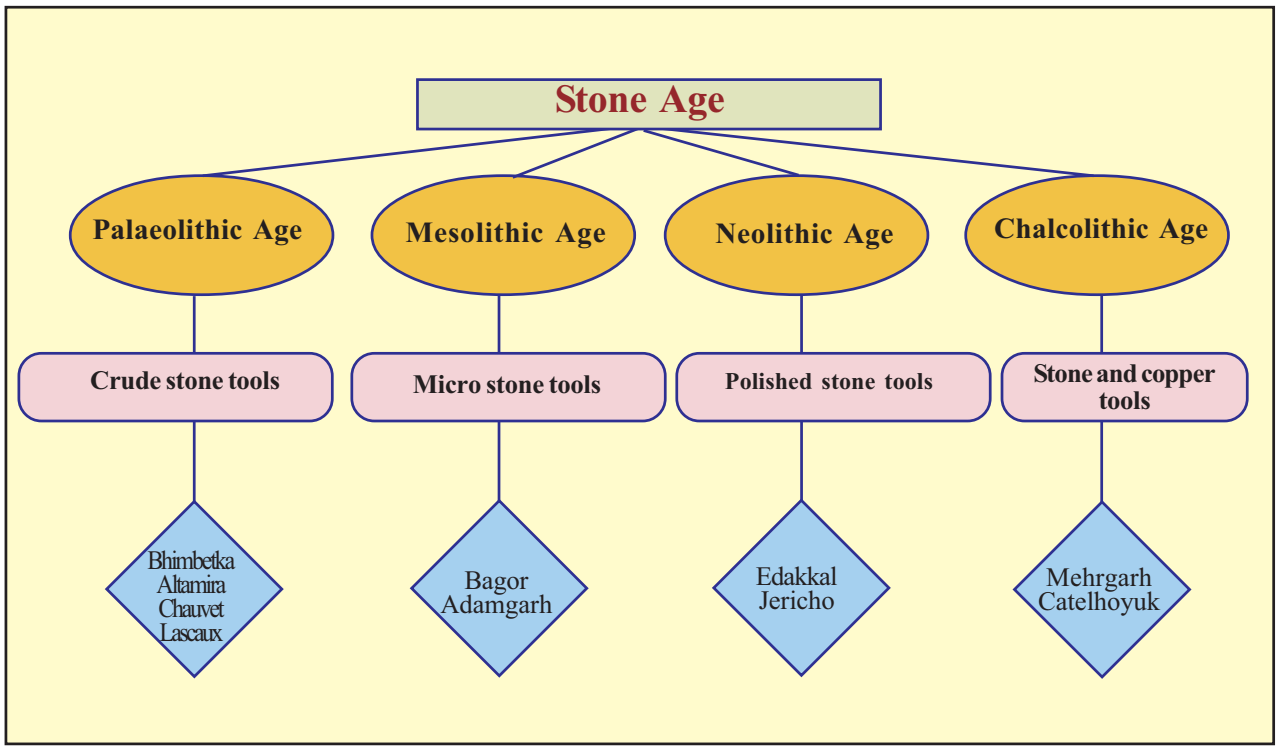
Clay pot - Mehrgarh

Which are the fields the Chalcolithic human life attained progress in?

Early man used tools made of stones. As needs increased, they improved the tools. The improved tools helped the progress in social life. This led to the invention of metal tools.

Summary

- The age in which man used stone tools and weapons is known as the Stone Age.
- Stone Age can be divided into Palaeolithic Age, Mesolithic Age, and Neolithic Age based on the improvement in the stone tools.
- Human life varied in different ages.
- The information on the Stone Age is obtained from the remnants of the objects used by the humans of that age .
- By the end of the Stone Age metal tools began to be used. This period is called the Chalcolithic Age



Significant learning outcomes

The learner:

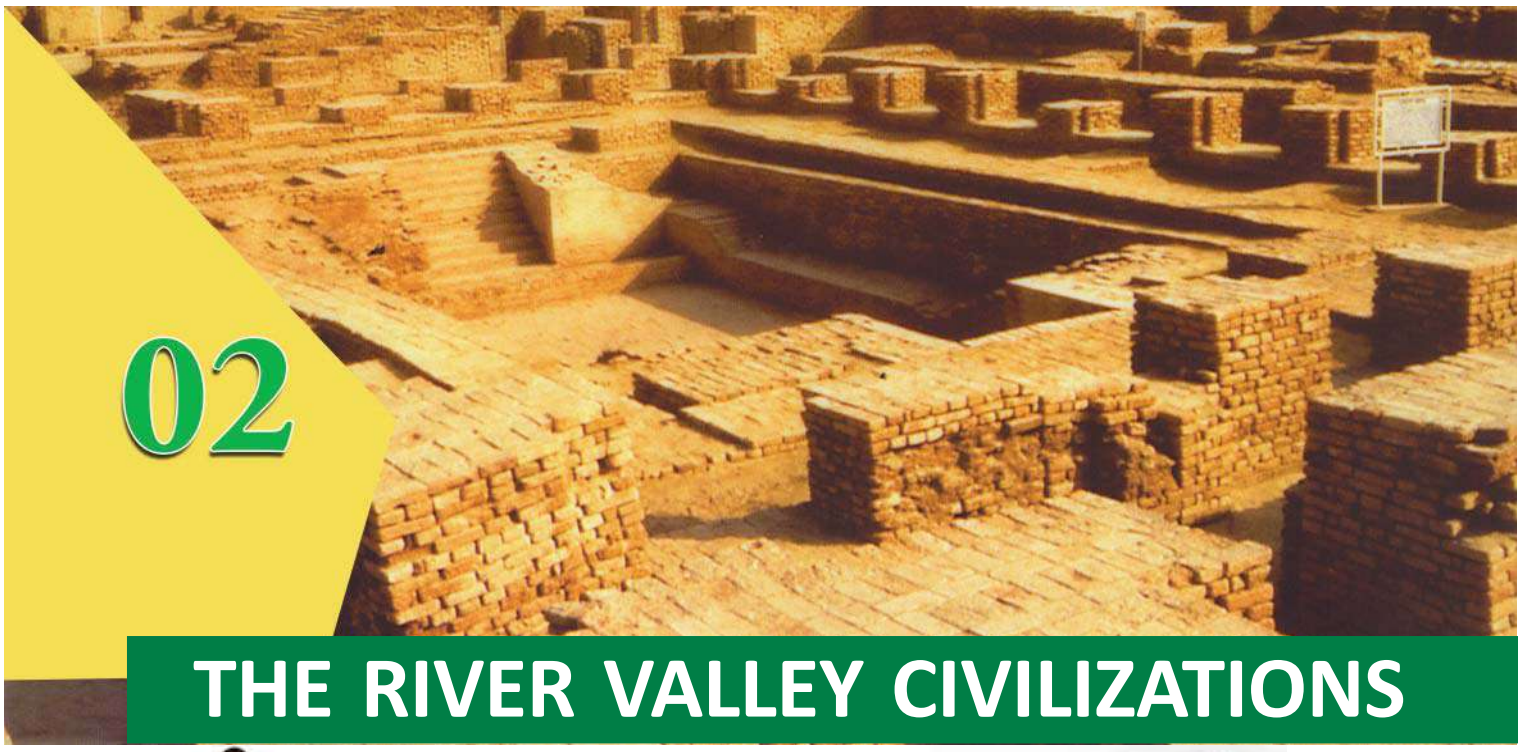
- analyses the cave paintings of the Palaeolithic Age.
- explains the significance of the cave paintings as a source of history.
- analyses the features of human life in different stages of the Stone Age.
- compares the different stages of the Stone Age.
- lists the Stone Age sites.
- evaluate the transition from the Stone Age to the Metal Age.

- Can the caves be regarded as centres of human inhabitation? Why?
- The Mesolithic period is termed as the age of transition from the Palaeolithic to the Neolithic age. Why?
- How does the Neolithic Age differ from the Palaeolithic Age?
- 'The Stone Age was an important period in the human history.' Substantiate.
- Match the sites in column A to the ages in column B

A	B
Altamira	Neolithic Age
Catelhoyuk	Palaeolithic Age
Edakkal	Mesolithic Age
Bagor	Chalcolithic Age

- Collect the objects from your locality that can be sources of information on the past and prepare a note on their features and the information gathered. Keep these objects in the school museum. Prepare an album with the pictures of such antiques.

	Completely	Partially	Need Improvement
Can differentiate between different Stone Ages based on the tools and varied features of human life			
Can find out the features of cave paintings			
Can analyse the features of different Stone Ages			
Can compare the different Stone Ages			
Can list the Stone Age sites			
Can recognise the changes from the Stone Age to the Metal Age			
Can evaluate the human progress that came about in different ages			
Have understood that human history is a continuous process and that different ages have had a significant role in it.			



02

THE RIVER VALLEY CIVILIZATIONS

It was the year 1856.

The British decided to lay a railway line from Multan to Lahore. The Brunten Brothers were assigned the charge of its construction. The line was to be laid through the Indus valley. Though the brothers, who were engineers, toiled hard with the labourers, they could not fix the railway track in the loose soil. The construction came to a standstill. Then the engineers noticed some burnt bricks nearby. They were hard and suitable for laying the track. Without wasting any time, they paved those bricks and laid the line.

Neither the labourers nor the engineers realised that those burnt bricks were the remains of a great civilization that existed centuries back. Later, when Sir John Marshall was the director of the Archaeological Survey of India, an excavation was undertaken in 1921. It revealed that the bricks were the ruins of a great civilization.

Archaeological Survey of India

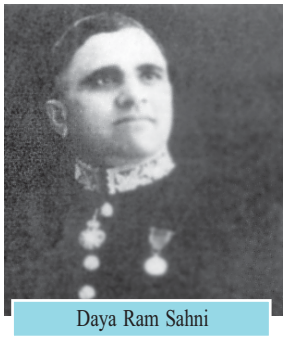
The Archaeological Survey of India leads the researches on archaeology in India. This institution was established during the reign of the British.

The excavations revealed that a civilization had existed in the valleys of the river Indus and its tributaries. Hence, this civilization came to be known as the Indus valley civilization.

The first excavation was conducted in Harappa in the present Pakistan. It was led by Daya Ram Sahni. Since the first evidence for the Indus valley civilization was obtained from Harappa, this civilization is also known as the Harappan civilization. It was R D Banerji, who led the excavations in Mohenjodaro in the present Pakistan. Further researches on this civilization are going on.

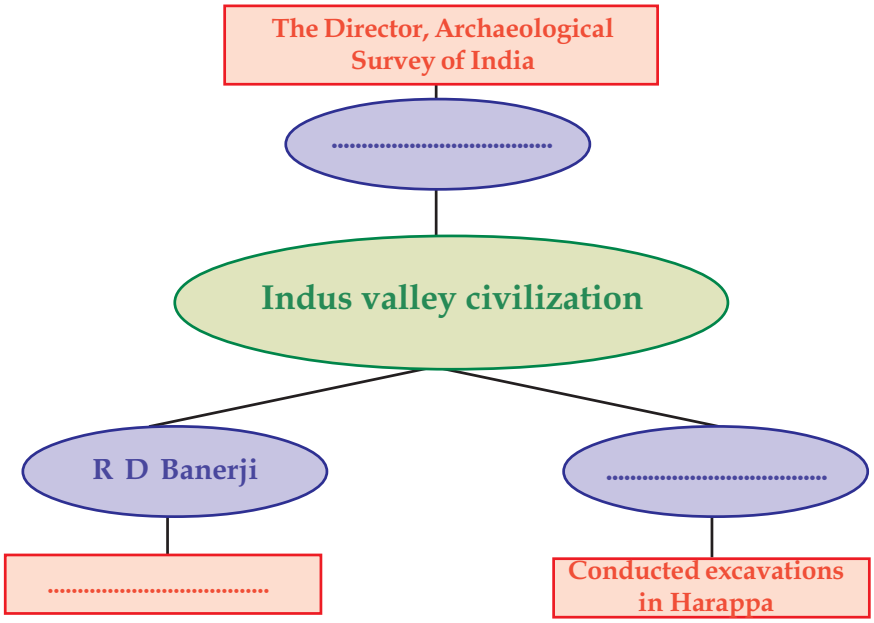
Complete the chart that indicates the excavations of the Indus valley civilization.

Sir John Marshall



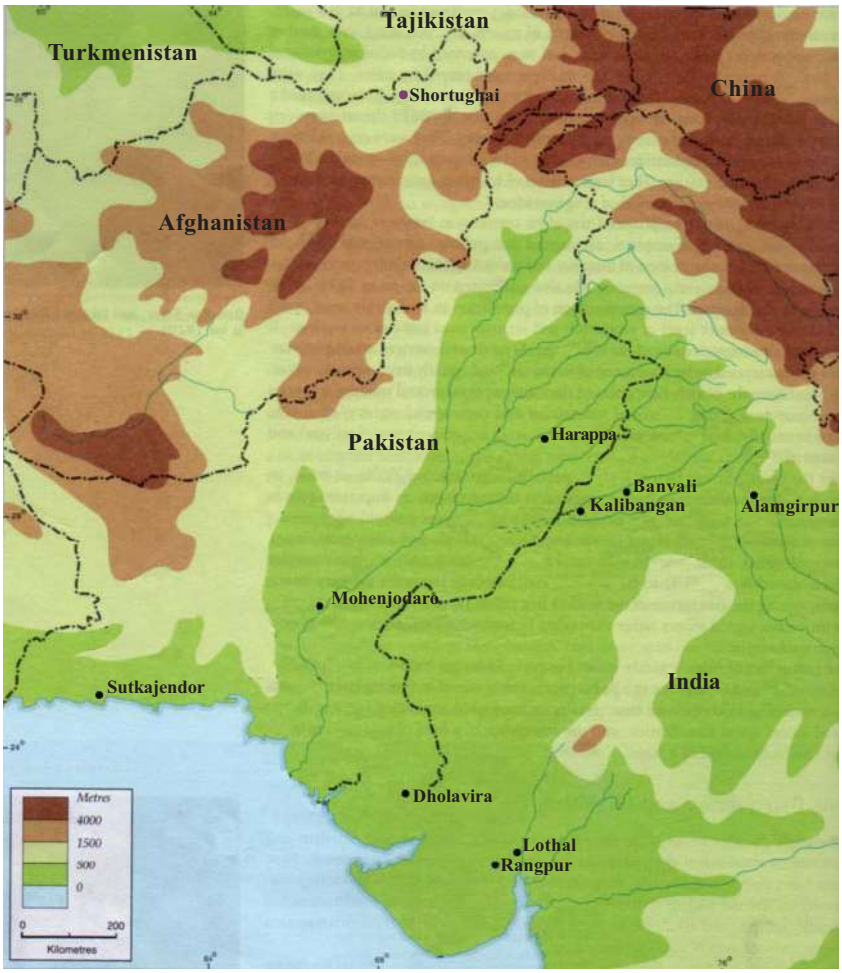
Daya Ram Sahni

R D Banerji



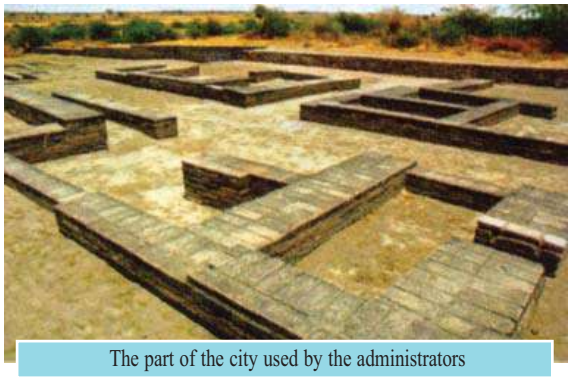
The Harappan civilization stretched across the region ranging from the western part of Pakistan to Alamgirpur in Uttar Pradesh, and from Kashmir in the north to the Narmada valley in the south. The period of this civilization is generally placed between BCE 2700 and BCE 1700.

Observe the map and list the major sites of the Indus valley civilization in the table given. Identify the present countries in which they are situated.



Sites of Indus valley civilization	Country	Sites of Indus valley civilization	Country
• Harappa	•	• Kalibangan	•
• Mohenjodaro	•	• Lothal	•
• Sutkajendor	•	• Dholavira	•
• Alamgirpur	•	• Rangpur	•
• Banvali	•	• Shortughai	•

Features of cities



The part of the city used by the administrators

We have seen that it was the hardness of the bricks they came across that amazed the laborers. The key feature of the Harappan cities was the use of hard burnt bricks. All buildings were built of burnt bricks. The cities Harappa, Mohenjodaro, and Lothal all had two parts.

Parts of the Harappan Cities

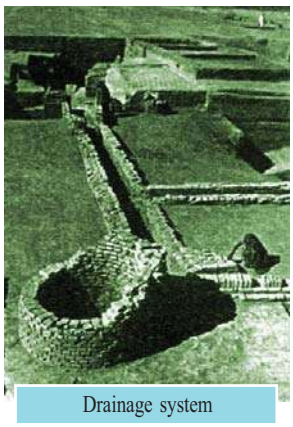
The part of the city to the west was higher. It was used by the administrators. The ruins of a big building, probably an assembly hall, were discovered here.

The part of the city to the east was lower and was inhabited by the common people. The ruins of many buildings that might have been houses were unearthed here.

Street

Houses were built along both sides of planned streets. They were of varying structures. Some houses had only one room, whereas others had more rooms, a courtyard and a well. Every house had a toilet.

The drainage system was another feature of these cities. The waste water from the houses was let out into the drains. These drains were connected to the main drain of the street. The drains were built of burnt bricks and covered with stone slabs. Effective drainage systems existed even in small towns and villages.



Drainage system

In Mohenjodaro a great tank, called the Great Bath, was discovered. It is an evidence for the architectural skill of the people of that period. It was built entirely with burnt bricks.

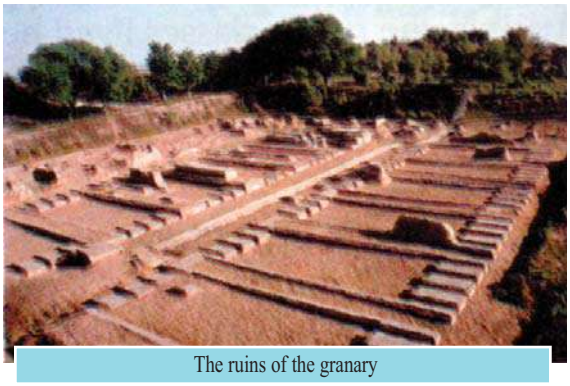
The Great Bath

What hints about the social and administrative system can be obtained from the ruins of the Harappan cities?

Discuss and prepare a note on the importance of personal and social hygiene maintained by the people of the Indus valley civilization.

Granary and agriculture

Granaries are significant among the ruins discovered from Harappa. They were big buildings with the facility to dry and store grains. The remains of wheat, barley, millet, sesame, pulses, etc. have been found here. Evidence of rice cultivation have been uncovered from Rangpur and Lothal in Gujarat. Cotton was also cultivated. The urban folk depended on the villages for food and work. The villages were the major market for the urban products.



The ruins of the granary

Examine the role played by the villages in the existence of the Harappan civilisation.

Clay plough

The agricultural fields in the villages were fertile. It is the alluvial soil deposited by the river Indus that made them fertile. In Kalibangan in Rajasthan farming was done by ploughing the land. The figures of ploughs made of clay were discovered from here. Canals were constructed for irrigation.

Clay figures of animals

In addition to agriculture, animal husbandry also existed. Plenty of animal bones have been unearthed from here. The figures of rhinoceros and elephants made of clay have also been found. They reared ox, goat, pig, and sheep.

The surplus agricultural products were stored in the granary. The grains collected in the form of revenue were also kept there. The grains thus stored were made available to the public. Such granaries are the evidence for the existence of an efficient administrative system.

The Harappan granaries speak many things about the administrative system of that period. What are they?

Trade

Weights and measures

The agricultural progress led to surplus production and storage of grains. Accurate weights and measures were used for exchanging the stored products. Weighing and measuring tools have been unearthed from here.

Haven't you discussed the Mesopotamian civilization in a previous class?


Seals

The inscriptions discovered from Mesopotamia mention their trade relation with Meluha. Historians opine that Meluha is probably Harappa. The Mesopotamian seals found from Harappa also provide evidence for this trade link. Lothal was one of the centres of maritime trade. The clay models of sailing ships obtained also prove their maritime trade link.


Lothal

The seals widely found from the Indus valley sites were probably used for the purpose of trade. However, no evidence for the use of coins has been found yet. They collected copper from the mines of Khetri in the present Rajastan and tin from the present Afghanistan and central Asia. Copper was mixed with tin to produce bronze. They made tools and weapons using bronze. Since bronze was widely used in the Harappan civilization, it came to be known as Bronze Age civilization.

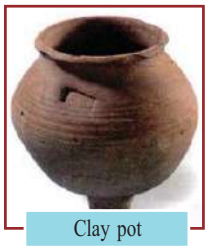

What are the evidences that signify the trade relations of the Harappan people?

Handicrafts and occupational groups

The seals, clay figures, utensils, ornaments, etc. dug out from Harappa bear witness to their craftsmanship. The ruins of kilns where pottery was produced have been widely dug out. Ornamental works were done on clay pots. Animal figures were moulded from clay. Figures of men, women, and carts have also been uncovered from here. Copper, bronze, and gold were used


Ornaments

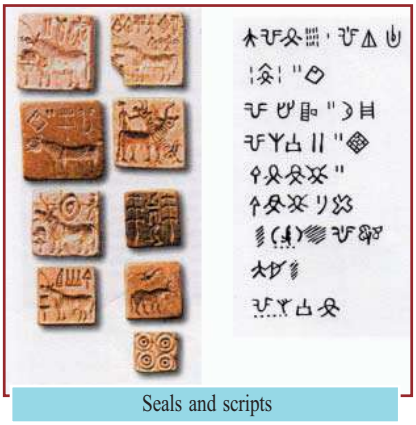

Clay cart


Clay pot


Bronze statuette of dancing girl

to make ornaments. Evidence of centres where beads were made have been unearthed in Lothal. Bangles were made from clay, bronze, and tortoise shells. Though skilled at making handicrafts, the Harappans did not give importance to forging weapons. The artistic skill of the Harappans is reflected in the seals they made. The seals were made from clay and stones. The statuette of the dancing girl found from Mohenjodaro is also an example for their artistic skill. The diverse handicrafts hint at the existence of occupational groups.


Sign board in Dholavira

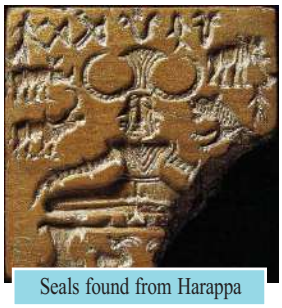

Seals and scripts

Given above are the pictures of a few seals found from the Indus valley sites. Can you see the scripts in them? We can discern that the Harappans had their own script. The attempts to decipher them have not yet been successful.

Belief systems

The seals found from Harappa provide information about the then belief systems. Clay figures of women have widely been discovered. They prove the existence of worshipping the mother goddess. Such worship existed in connection with fertility of the soil.

Historians opine that the figures of men found from here are the early form of Siva (Proto Siva). They also worshipped animals and trees. The Great Bath unearthed in Mohenjodaro might have been used for religious ceremonies.



Seals found from Harappa

The fall of the Harappan civilization

The Harappan civilization began to decline by BCE 1700. Several views prevail on the causes of its decline. A few of them are given below.

- Flood
- External invasions
- Deforestation
- Decline of agricultural sector
- Epidemics

Prepare a seminar paper on the salient features of the Indus valley civilization.

Egyptian, Mesopotamian, and Chinese civilizations

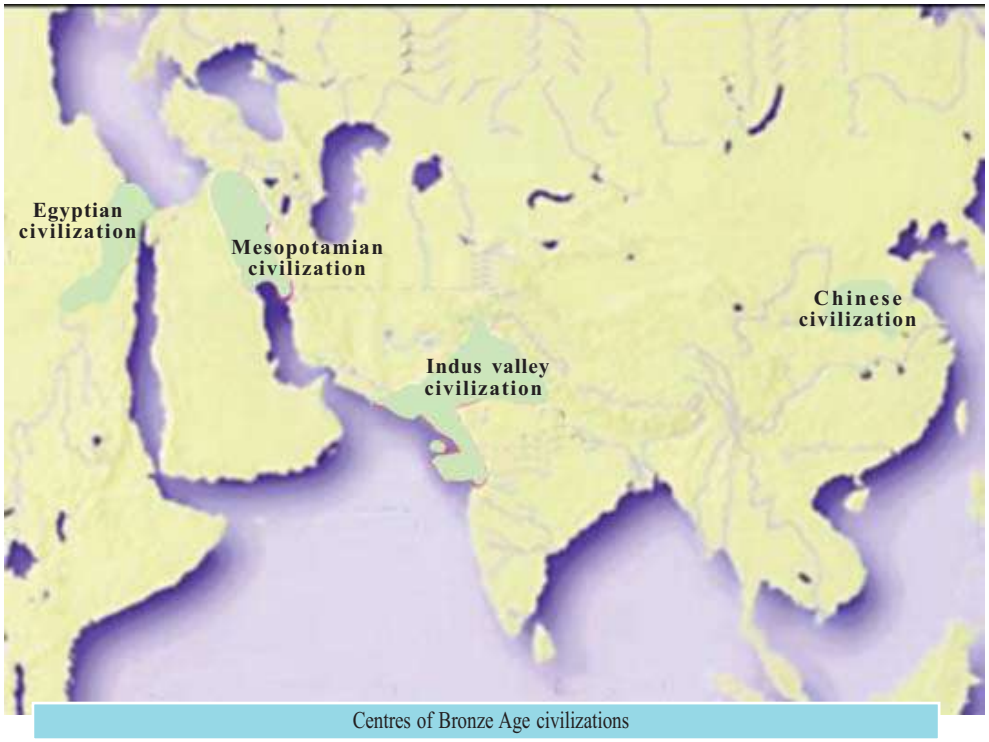
We have discussed the Indus valley civilization. There were a few other civilizations in different parts of the world in the same period.

They were Mesopotamian, Egyptian, and Chinese civilizations. Wide use of bronze tools was the common feature of all these civilizations. Hence, these civilizations are commonly known as Bronze Age civilizations.

Why river valleys?

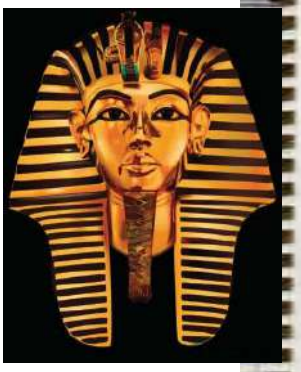
Early man had not mastered the technology for acquiring farm lands by clearing the forest. So he began farming in grass lands that could easily be made arable. The river valleys of the Nile, the Euphrates, and the Indus were vast areas of grass lands. Fertile soil, plenty of water, gazing fields, etc. were the favourable factors for the concentration of human settlement in the river valleys. These river valleys were the cradles of civilization.

Observe the map below and identify the regions where these civilizations flourished.



Centres of Bronze Age civilizations

Egyptian Civilization



I reached Egypt in November 1922. It was a journey in search of the mummy of Tutan Khaman, the emperor who lived in the 14th century. It was a new stage of the journey in search of mummies and pyramids. A prolonged search across the northern valley of Egypt... But to no avail. Expectations gave way to disappointment. At last, I decided to start excavations near a huge pyramid. Curiosity gave way to wonder. Steps leading to a large door underground. One after the other... When the third door was opened, I stood dazed. The emperor whom I have been pursuing, lay adorned in eternal sleep.

Haven't you read the diary of Howard Carter, the archaeologist? Have you heard of Tutan Khaman, mentioned in the diary? He was a king of ancient Egypt. Back then, the kings of Egypt were known as 'Pharaoh'. The practice of preserving the body of the dead prevailed in Egypt. A corpse preserved thus is called a 'mummy'. Pyramids were tombs where the mummies were preserved. They remain as evidence for the excessive use of labour and wealth.

Pyramids in Egypt

What were the other features of the Egyptian civilization that existed in the Bronze Age?

This civilization flourished in the valley of the river Nile. Agriculture was the backbone of this civilization. The Egyptians also engaged in weaving and production of glassware.

They formed an art of writing. It is known as 'Hieroglyphics', which means 'sacred writing'. They used the leaves of the plant called papyrus for writing.

Hieroglyphics

The hieroglyphic sript was first deciphered by Champollian, a French scholar. He had accompanied the French ruler Napoleon when the latter conquered Egypt in 1798. The script was engraved on a stone (Rosetta) near the mouth of the river Nile. The script could only be deciphered after much patient labour.

The Egyptians also attained amazing advancement in the field of science. They formulated a solar calendar. As per this calendar a year had 365 days. A year was divided into 12 months, of 30 days each. The remaining five days were set aside for celebrations. Their advancement in the field of Mathematics is also significant. They could calculate the area of triangles and rectangles. To determine time they made sundial, a clock that tells time by the shadow cast by the sun and water clock that works on water current.

The Egyptians were also skilful in sculpture. It is evident from the sphinx, a statue with lion's body and human head.

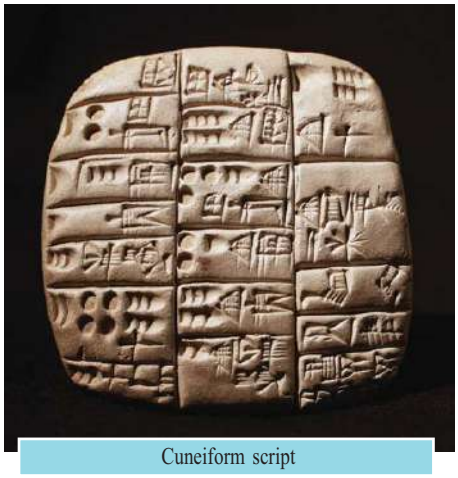
Sphinx

Mesopotamian civilization

The Mesopotamian civilization flourished in the region where the modern Iraq is situated. Mesopotamia is the land between the rivers Euphrates and Tigris. These rivers originate from the Armenian mountains and merge with the Persian sea. The word Mesopotamia means the land between the rivers. Four different civilizations emerged and declined in Mesopotamia. They were

the Sumerian, the Babylonian, the Assyrian, and the Chaldean. The fertile soil of Mesopotamia helped agricultural progress. It led to trade and the consequent growth of cities. Ur, Uruk, and Lagash were the major cities in ancient Mesopotamia. Cities were also trading centres. We have discussed the trade link between the people of Mesopotamia and the Indus valley. As trade developed, it became essential to record the accounts of the exchanged goods. It eventually led to the development of the art of writing. The Mesopotamian system of writing is called Cuneiform. The script was wedge-shaped. They were written on the smooth surface of wet clay tablets. A sharp stylus was used for writing. The tablets were then baked in the sun. A huge collection of these tablets has been found here. Most of them were related to trade.

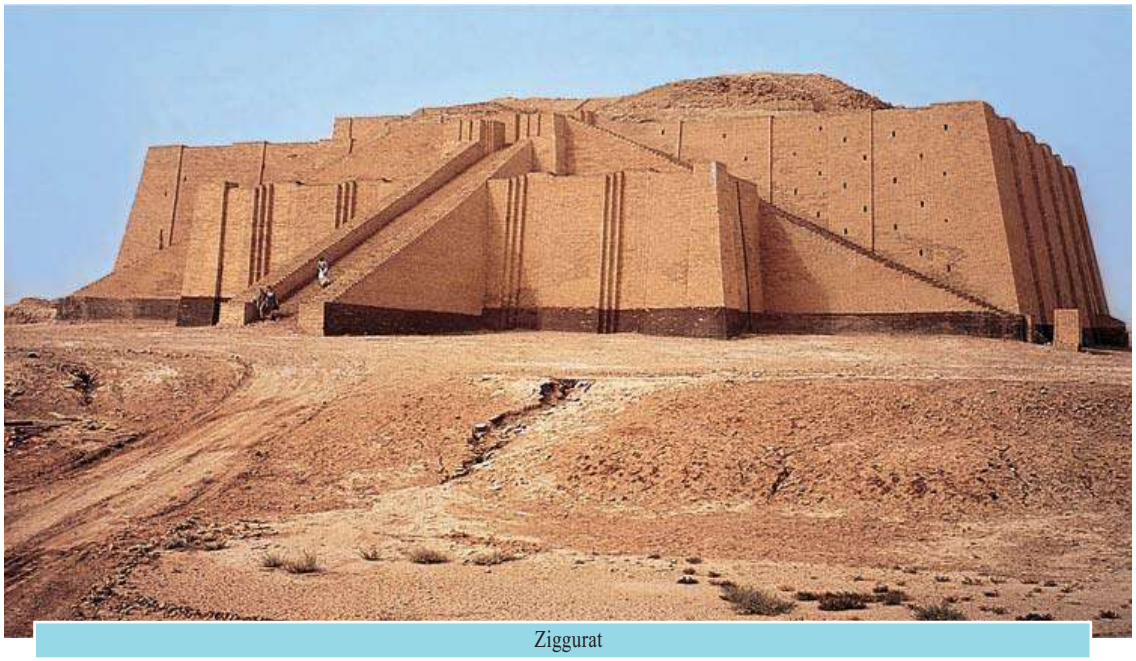
They achieved remarkable progress in the field of mathematics and astronomy. They formulated a calendar based on the movements of the moon. They divided a year into 12 months, a month into four weeks, and a day into 24 hours. They knew division, multiplication, and square root.



Cuneiform script

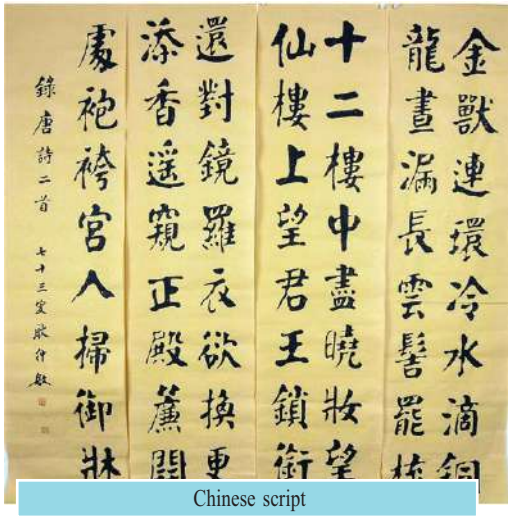
Prepare a note on the achievements of the Mesopotamians in the field of science.

The construction of temples namely 'ziggurat' is the evidence of the amazing architectural skills of the ancient Mesopotamians. They were constructed in cities. They were built on artificial hillocks using bricks.



Ziggurat

Chinese civilization



Chinese script

The Chinese civilization flourished in the valley of the river Hwang-Ho. Agriculture was the base of this civilization. They were also skilful in weaving, making pottery, and silk production.

The art of writing existed in ancient China as well. The script was pictographic, not alphabetic. Later it developed into an ideographic script. Like ancient Mesopotamians and Egyptians, ancient

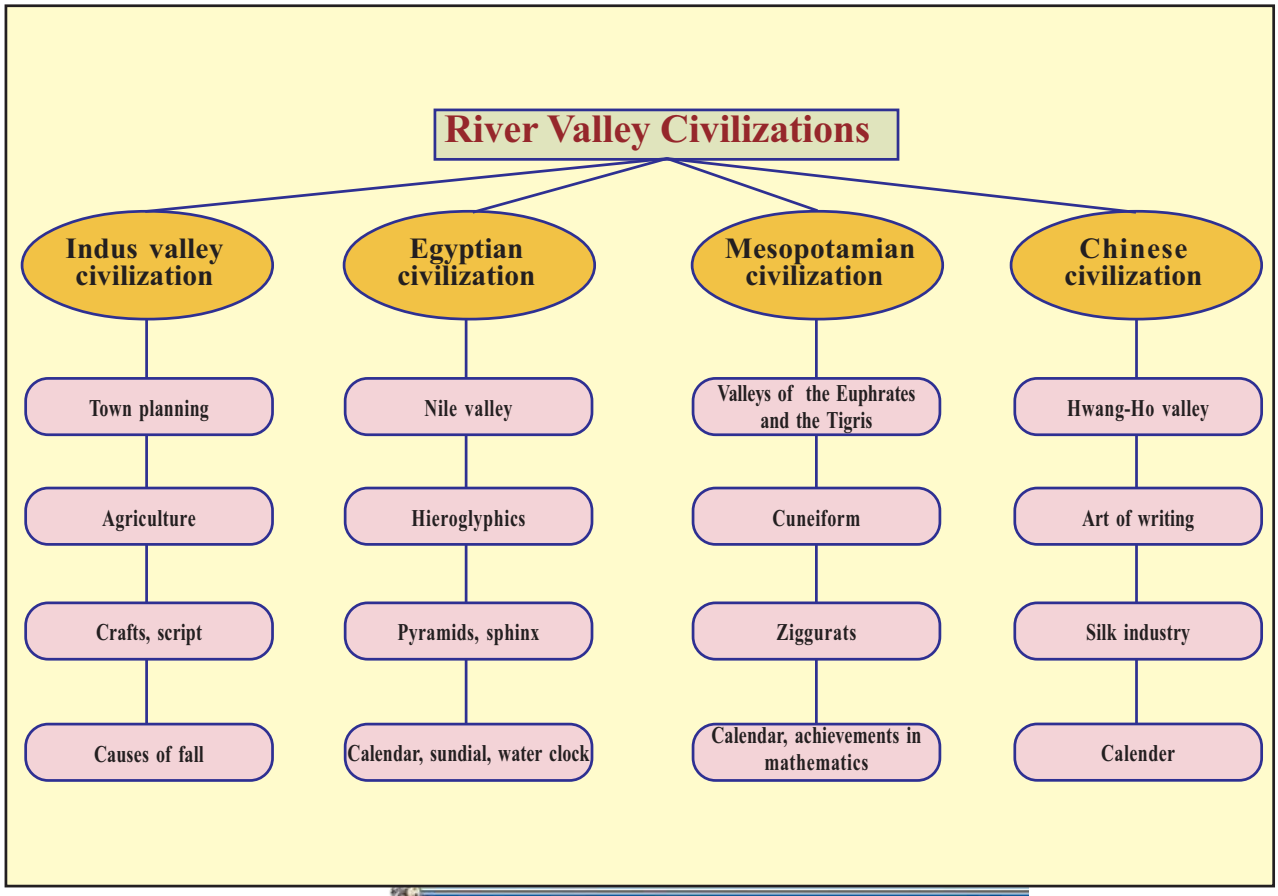
Chinese too formulated a calendar in which a year consisted of 365 ½ days.

In this unit, we have discussed a few civilizations that flourished in river valleys. The use of bronze, agricultural progress, development of trade and craftsmanship, the art of writing, progress in the field of science, etc. were the remarkable common features of these civilizations.

Prepare a note on the achievements of the Mesopotamian, Egyptian, and Chinese civilizations in arts, science, and the art of writing.

Summary

- The Harappan civilization flourished in the valleys of the river Indus and its tributaries in the period between BCE 2700 and 1700.
- The use of burnt bricks, bronze tools, drainage, streets, granaries, and the Great Bath were the major features of the Harappan civilization.
- The Harappan people cultivated various crops.
- Agricultural progress led to the development of trade.
- They excelled in craftsmanship.
- The Egyptian, Mesopotamian, and Chinese civilizations were contemporary to the Indus valley civilization.
- These civilizations achieved remarkable progress in the fields of science, mathematics, and architecture.



Significant learning outcomes

The learner :

- identifies the places where the Bronze Age civilizations existed
- analyses the major features of the Indus valley civilization
- explains the progress attained by Harappan people in agriculture and craftsmanship
- identifies the factors that led to the fall of the Indus valley civilization
- analyses the major features and achievements of the Egyptian, Mesopotamian, and Chinese civilizations

- Prepare a note on the early excavations in the Indus valley regions.
- Explain the features of life in the Indus valley cities.
- What were the features of the Great Bath in Mohenjodaro?
- What are the major handicrafts that prevailed in the Indus valley civilization?
- The Indus valley civilization is an example of a Bronze Age civilization. Substantiate.
- The artistic skill of the Harappan people is evident in the seals they made. Explain with examples.
- Prepare a note on the art of writing in Mesopotamia.
- Analyse the progress achieved by the Bronze Age civilizations in the fields of science and mathematics.

- Match column A with B

A	B
John Marshall	Mesopotamia
Daya Ram Sahni	Mohenjodaro
R D Banerji	Harappa
Hieroglyphics	Director of the Archaeological Survey of India
Cuneiform script	Egypt

- Find out the present agricultural crops in the regions where the Harappan civilization existed.
- List the common features of the Bronze Age civilizations.
- Collect the pictures relating to the Bronze Age civilizations and prepare an album.

	Completely	Partially	Need improvement
Can analyse the major features of the Indus valley civilization.			
Can evaluate the trade relations that existed between different regions and civilizations.			
Can identify the occupational groups that existed in Harappa.			
Can identify that the art of writing and the seals were the features of the Bronze Age civilizations.			
Can explain the features of the various Bronze Age civilizations that existed in different parts of the world.			
Am convinced that the Bronze Age Civilizations had great influence on various fields of human life.			
Am convinced that India has a great heritage of thousands of years.			

03

IN SEARCH OF EARTH'S SECRETS

Westonaria is a small town situated to the south-west of Johannesburg in South Africa. The Penang gold mine is near to it. I have been in this town for the past three days, patiently awaiting the permission to visit the mine. At last, when I was about to fly back giving up the idea of preparing a feature on the mine, I received a phone call from the manager of the mines. He said, "Get a taxi and reach the mine immediately." I rushed to the wonder world at once. Imagine ten Empire State Buildings, each hundred and three stories-high kept one over the other. That is the depth of the Penang gold mine. The security officer gave me the oxybox, a life saving instrument to protect me from the poisonous gases from the Earth's interior, a helmet with torch, and a protective coat to prevent the heat. He explained how to wear them.

The downward journey was in an elevator car, a vehicle that can hold about a hundred people. As we descended, the temperature increased and ears clogged due to pressure variation. The only source of light was the one on the ceiling of the elevator. With a thousand curious thoughts, I descended into the wonder world of mines.

What you read is from the diary of a journalist on his experience in a mine. You have seen the changes that occur while journeying from the surface to the interior of the Earth. The Earth's interior

Although manmade vehicles could reach as far as the Mars which is about 225 million kilometres away, man has not yet been able to go beyond 12 kilometres deep inside the Earth on which he lives.

is full of wonders. But there are many limitations in collecting information about the mysteries of the Earth's interior directly. What are they?

The temperature and pressure inside the Earth increases with depth. The variations in pressure is due to the weight exerted by the overlying layers.

The temperature at the centre of the Earth is about 5000^{O} C. Remember that even iron melts at 1538^{O} C.

Let us see the different sources from which we get information on the Earth's interior.

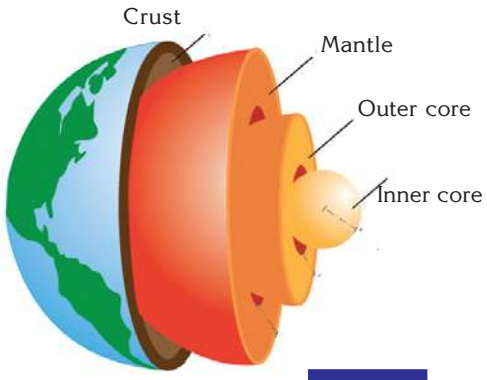


Fig 3.1

- From the materials reaching the Earth's surface through volcanic eruptions.
- Data collected from mines.
- Analysis of the propagation of waves generated during earthquakes.
-

Based on the analysis of the waves generated during earthquakes, the Earth has been divided into different layers.

Observe the given figure (Fig 3.1) and identify these layers.

-
-
-
-

Let us see the features of each of the layers from the following figure (Fig 3.2).

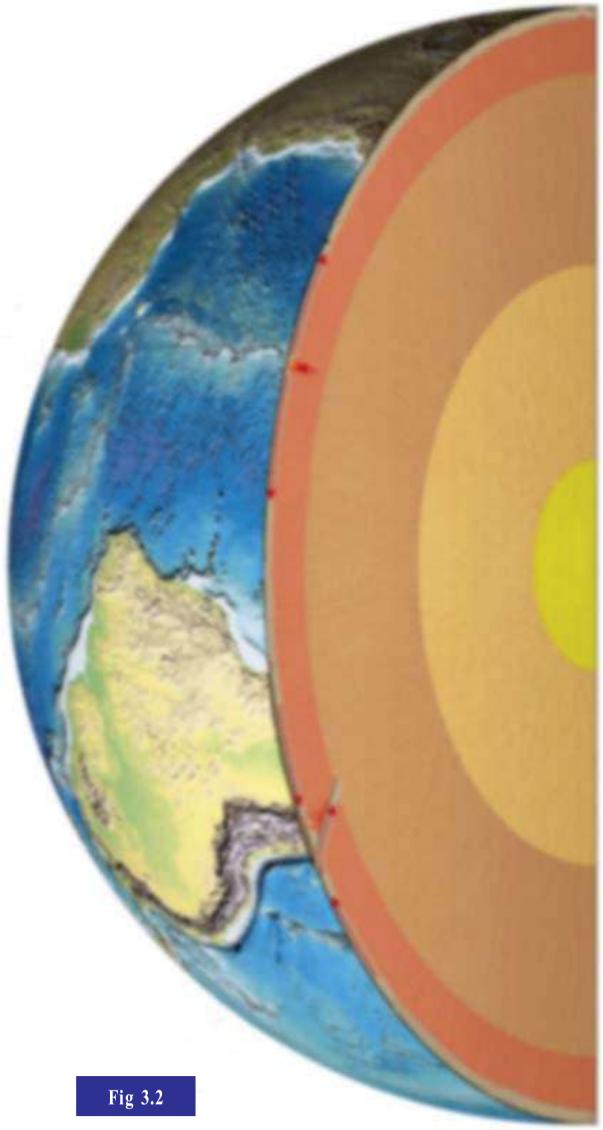


Fig 3.2

Crust

- The comparatively thin outer shell of the Earth.
- Approximately 40 km thick.
- Two parts- continental crust, oceanic crust.

Continental crust and oceanic crust

As silica and alumina are the chief contents, the continental crust is also known as SIAL.

As silica and magnesium are the chief contents, the oceanic crust is also known as SIMA.

Mantle

- Located beneath the crust.
- Extends upto 2900 km from the crust.
- Two parts- upper mantle, lower mantle.

Upper mantle and Lower mantle

Upper mantle

The upper mantle, made up of silicon compounds, is in a solid state.

Lower mantle

The lower mantle, located beneath the upper mantle, is in a semi-liquid state.

Core

- Central part of the Earth.
- From 2900 km to 6371 km
- Two parts- outer core, inner core.

Outer core and inner core

The materials in the outer core are in a molten state.

Due to the high pressure prevailing at the centre, the inner core is in a solid state. As it is mainly made up of the minerals nickel (Ni) and iron (Fe), it is also known as NIFE.

Fossils

The remains of ancient plants and animals found in sedimentary rocks are called fossils. We make use of these fossils to understand the Earth's prehistory and to estimate the age of rocks.

Coal, petroleum, natural gas, etc. have been evolved from the remains of ancient organisms. Hence these are also called fossil fuels. Collect more information on fossils.

Lithosphere and asthenosphere

The crust and the upper part of the mantle together are known as lithosphere.

The part beneath the lithosphere, where the materials exist in a partially molten state is known as asthenosphere. This is the source of the molten rock material (lava) that comes out during volcanic eruptions.

Observe an animation on the Earth's interior and prepare a note on it.

Rocks

The lithosphere acquires its name from the material with which it is made ('lithos' means rock). If you look around you can see rocks of different colours and hardness. This diversity is due to its constituents. The constituents of rocks are called minerals. More than two thousand minerals such as silica, mica, hematite, bauxite, etc have been identified on earth.

Based on the mode of formation, rocks can be classified into three-igneous, sedimentary, and metamorphic.

Rocks

Igneous rocks	Sedimentary rocks	Metamorphic rocks
Igneous rocks are formed by the molten rock material rising through the fissures in the crust and solidifying either on the surface of the Earth or within the crust itself. Eg:- granite, basalt.	Rocks undergo weathering in course of time. The debris so formed will be deposited in the low regions as layers. These materials gradually get lithified and transformed into sedimentary rocks. Eg:- sandstone, limestone.	When rocks undergo physical and chemical changes due to high temperature and pressure metamorphic rocks are formed. Eg:- marble, slate.
As all other rock types are formed from the igneous rocks, they are called primary rocks.	As the sedimentary rocks are formed in layers, they are also known as stratified rocks.	Metamorphic rocks are prominent in Kerala.

The rocks may not remain in their original form forever. They are subjected to several changes over time. Observe the diagram (Fig.3.3) and fill in the blanks.

Rocks from one form to other - Rock cycle

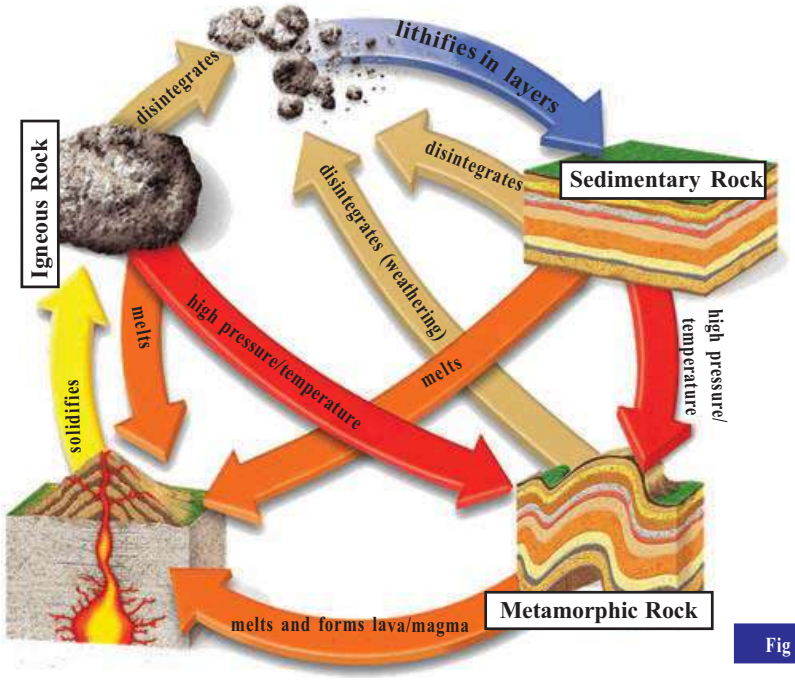


Fig 3.3

Igneous Rock

Process

Melts

.....

Sedimentary Rock

Metamorphic Rock

.....

.....

Igneous Rock

Sedimentary Rock

.....

.....

Metamorphic Rock

Collect pictures of igneous, sedimentary and metamorphic rocks from the Internet and prepare a digital album on different types of rocks.

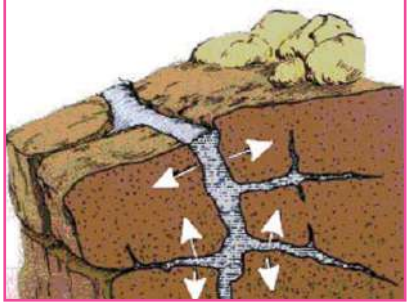
Weathering

You have learned about the different types of rocks. They undergo various changes with time. Such disintegration or decomposition of rocks is known as weathering. As a result, the physical and chemical composition of rocks change. Familiarize the different types of weathering from the flow chart below.

Weathering

Physical/Mechanical Weathering

The expansion and contraction of minerals due to the variations in temperature results in weathering. Disintegration also occurs due to the freezing of water in the fissures of rocks.



Chemical Weathering

Oxygen, carbon dioxide, water, etc. react with the minerals and result in the chemical decomposition of rocks.

Biological Weathering

The plant roots penetrating into the fissures in rocks, burrowing of animals, and the decomposition of plant and animal remains lead to weathering. Apart from these, human activities such as mining and quarrying also lead to weathering.

Weathering and humans

Look at the following pictures (Fig.3.4). What are the human activities that lead to the weathering of rocks?

Fig 3.4

- Quarrying
-
-
-

Visit various places in your locality and identify the human activities that result in weathering.

Weathering helps humans in many ways.

- Minerals in rocks get extracted
- Helps in mining
- Causes soil formation

Pedology is the branch of science that deals with soil. The scientists associated with this branch are called pedologists.

Soil evolves

Soil is a natural resource that you are very familiar with. How is soil formed? The soil we see today is formed by prolonged processes like weathering of rocks and decomposition of organic matter. It is estimated that more than a thousand years is required for the formation of an inch-thick layer of soil.

Identify the factors influencing soil formation from the following diagram (Fig.3.5).

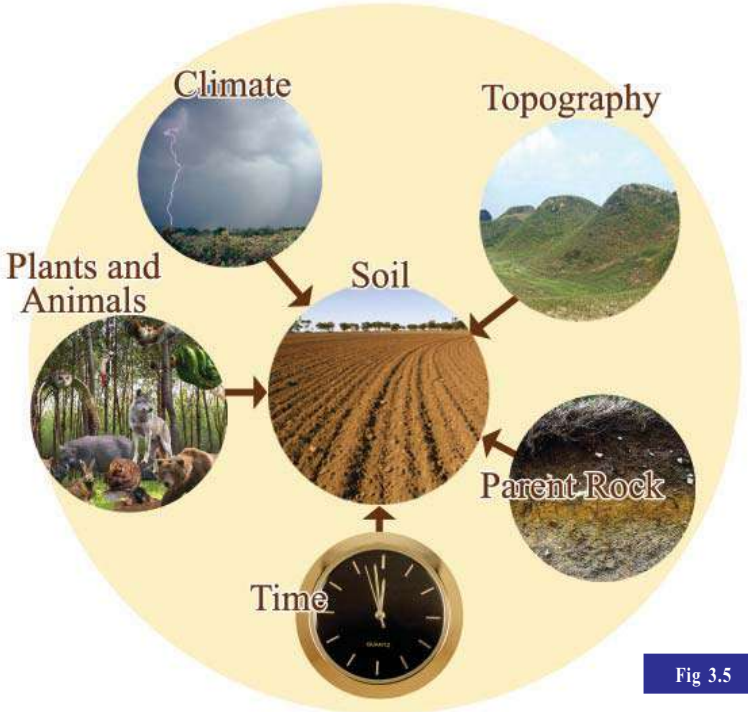


Fig 3.5

Complete the following table (Table 3.1) with the help of the data given in the above diagram.

Table 3.1

Climate	Topography	Plants and Animals	Parent Rock	Time
• Soil formation will be slow in cold environments. •	• Soil will be thin along steep slopes. •	• The acid formed as a result of the decaying of plants and animals cause weathering of rocks •	• The minerals in the soil and the structure of the soil depend on the rock from which it is formed. •	• The thickness and structure of soil depends on the time taken for its formation. •

Different types of soils are formed due to variations in factors such as topography and climate. You have learned about the different types of soil in India and in Kerala from the previous classes. Complete the following table (Table 3.2) based on that.

Table 3.2

Soil types	
India	Kerala
•	•

Soil for sustenance

Without soil there won't be any plants or animals. The case of man is not different. Soil is one of the important factors that makes life on the earth possible. You know that the green plants absorb nutrients from the soil and prepare food with the help of sunlight. Humans and other animals consume these plants. When plants and animals die, they return to the soil. Observe the function of a food chain and the importance of soil in it with the help of your teacher. Have a look around. What are the uses of soil? Do you see many agricultural activities? Is that the only use of soil? List out the uses of soil.

Fig 3.6

Fig 3.7

Fig 3.8

- For construction purposes
-
-
-

Perishing soil

Fig 3.9

Fig 3.10

Fig 3.11

Fig 3.12

Soil gets depleted due to various human activities such as deforestation, destruction of hills and unscientific agricultural activities. You know that the roots of trees hold the soil like a net. Man is killing the soil by felling these trees and tilling the land for cultivating intensively without considering the environment. Observe your surroundings and prepare a note on 'soil and humans', incorporating the following:

- Non-degradable materials like plastic cause soil pollution.
- Overuse of chemical fertilizers that alter the structure of soil.
- Unscientific construction and quarrying.
- Use of agricultural land for non-agricultural purposes.
- Draining wastewater into soil on a large scale.
- Overgrazing.

Discuss in the class the alternatives that help in environmental conservation.

Let us conserve soil

Once the top soil is lost what is left behind is barren land or rocky surface. It will take thousands of years for the top soil to regenerate. Top soil is essential for the continued sprouting of life. For this conservation is the only solution. By what all means can we conserve the soil? Discuss and find out.

Fig 3.13

Terrace farming

- Check deforestation
- Crop rotation
- Terrace farming along hill slopes
- Construction of check dams
-

Fig 3.14

Check dams

Go on a field visit and prepare a project report on soil and human intervention. Points for data collection are,

1. Major landuse
2. Is there any degradation of soil? How?
3. Have any measures been adopted for the conservation of soil?
4. Changes that took place in the agricultural sector over time.

The land will be sterile if the soil is lost. Let us get involved in activities to protect the Earth from such a pathetic situation.

A day to celebrate soil

The United Nations Organization observes the 15th of December as the World Soil Day for creating awareness among the people about the importance of soil.

World Soil Day
December 15

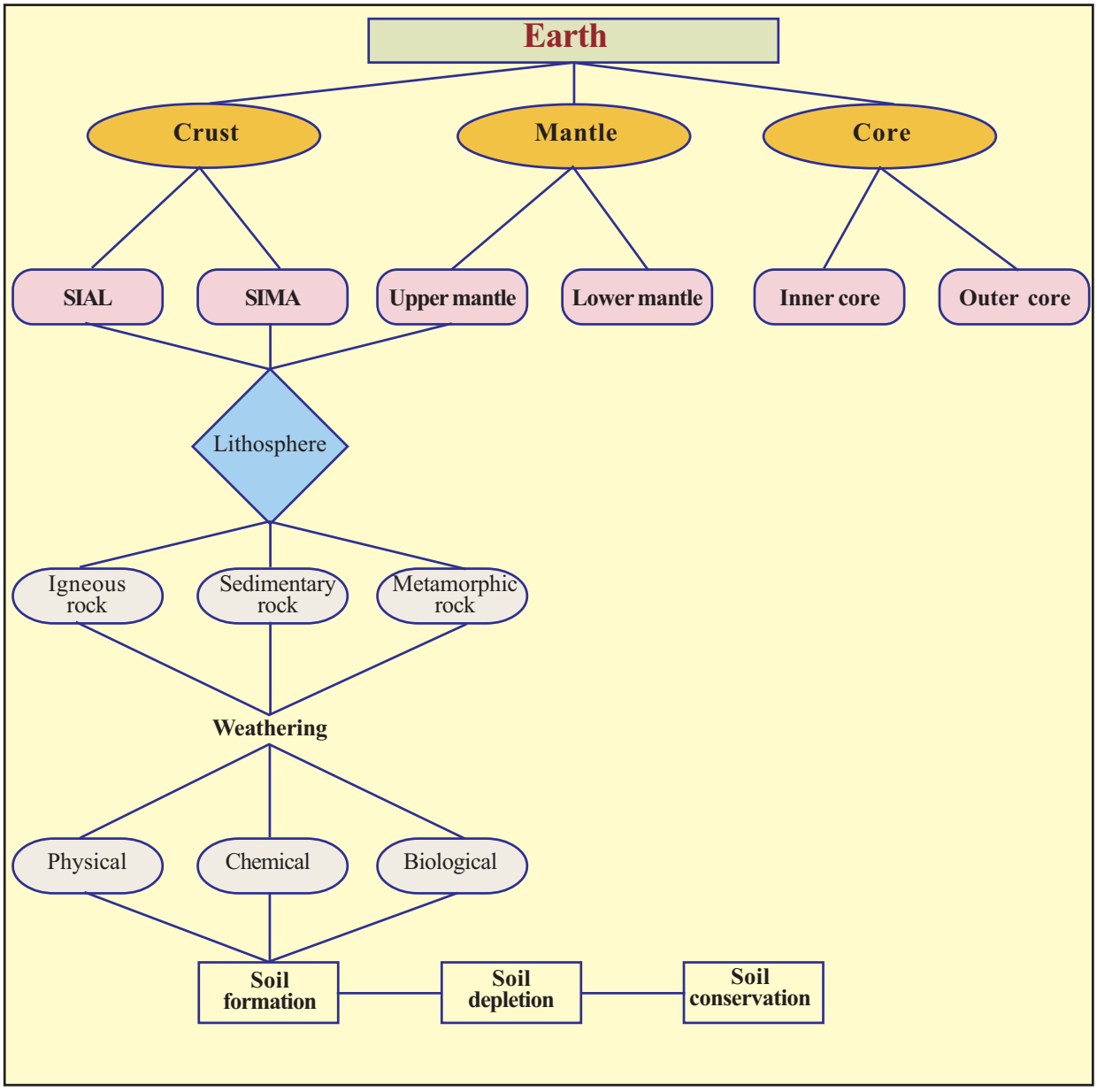
2015 International Year of Soils

Discuss a plan for the observance of the World Soil Day in your school?

Summary

- Earth's interior has a layered structure.
- Each of the Earth's layer has unique features.
- On the basis of the mode of formation, rocks can be classified into igneous, sedimentary, and metamorphic.

- The process of physical disintegration and chemical decomposition of rocks on the crust is called weathering.
- Weathering of rocks is the root cause of soil formation.
- The soil which is inevitable for the existence of life is being depleted in many ways.
- Conservation of soil is essential for the sustenance of life.



The learner :

- identifies and illustrates the layered structure of the Earth.
- lists out the features of the different layers of the Earth.
- classifies rocks based on their mode of formation.
- analyses the rock cycle.
- analyses the different types of weathering and establishes the importance of the process.
- understands the importance of soil and explains the various factors influencing soil formation.
- analyses the importance of soil conservation and takes part in soil conservation activities.

- Crust is the most important layer on the earth for man. Substantiate the statement with examples.
- Read the indicators and identify the rock type. Give an example for each.

  (i) Formed by the lithification of rock debris deposited in the lower regions.

  (ii) Formed by the solidification of molten rock materials.

- The carbon dioxide dissolved in rain water causes weathering of rocks on the Earth's surface. Identify the type of weathering.
- The rock debris formed by weathering is transformed into soil by a lengthy process. Explain the process.
- 'Humans slowly kill the soil'. Analyze the statement and record your inferences.

- Make a model of the Earth's interior.

  Let us try to understand the Earth's internal structure with the help of two balls-one big and the other, small. Cut the big ball and fill one half with sand. Place the small ball in its centre in such a way that only half of it is visible. Label the outer ball as the crust, the sandy part as the mantle and the inner ball as the core. Give suitable colours to the layers and exhibit it in your Social Science lab.
- Invite an agricultural officer to your class. Ask him about the importance of soil, its depletion, conservation measures, etc.

	Completely	Partially	Need improvement
Can present that the Earth's interior is divided into three layers.			
Can explain the features of the crust.			
Can explain the features of the core.			
Can explain the features of the mantle.			
Can analyse the weathering process.			
Can present the process of soil formation.			
Can explain soil depletion and the necessity of soil conservation.			
Realised the necessity of soil conservation			

04

OUR GOVERNMENT

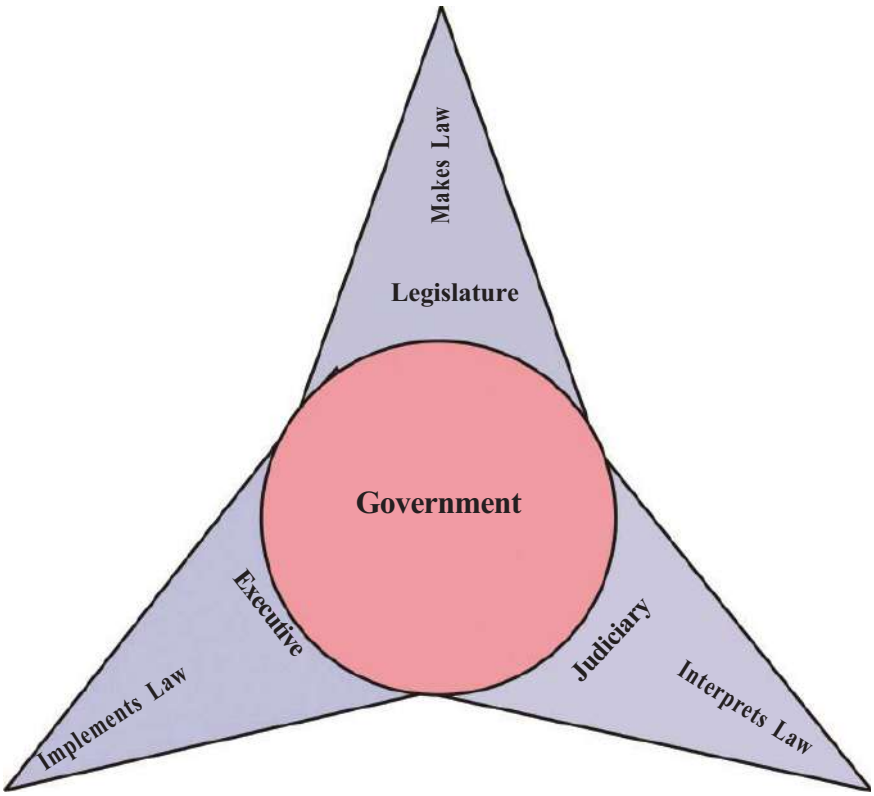
Fig 1

Fig 2

Fig 3

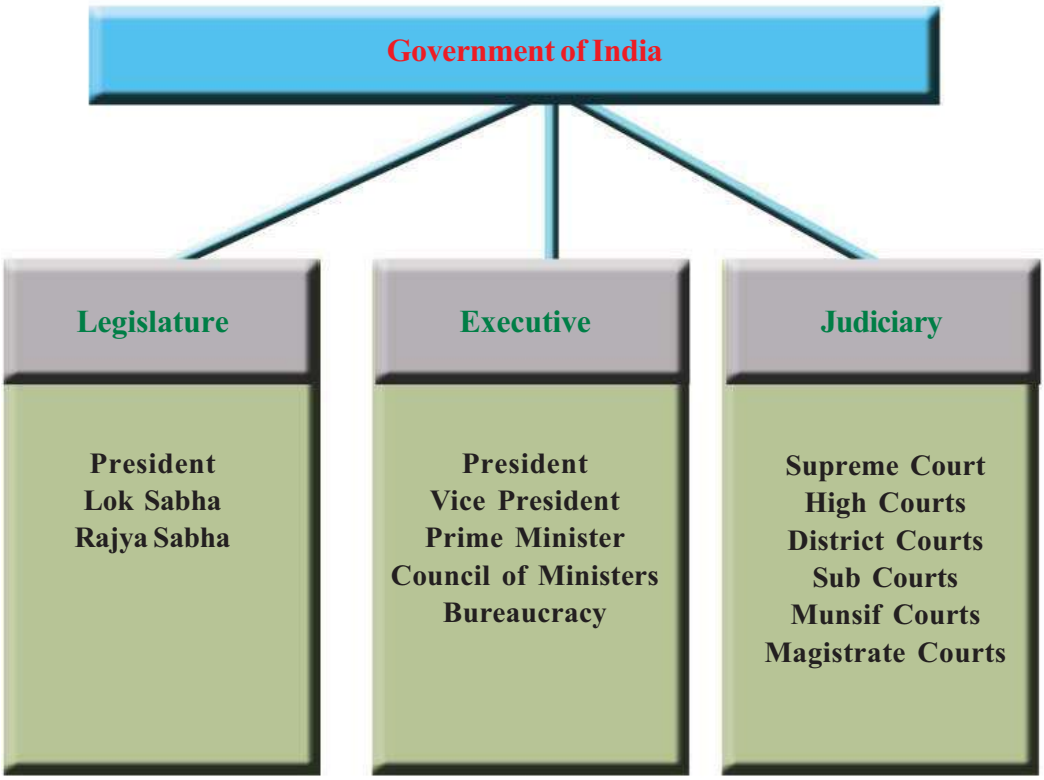
Can you identity the above pictures? The first one is the Parliament building which represents the Legislature. It is here that the Parliament sessions are held. The second represents the Executive and is the official residence of the President of India.

The third is the Supreme Court complex, which represents the Indian Judiciary. These three institutions are related to three organs of the government namely Legislature, Executive, and Judiciary.



Write a short note on the organs of the government based on the given picture

Haven't you understood what the organs of the government are? Analyze the three organs of the government of India, based on the chart given.



Collect news and pictures relating to the government of India and identify the organ to which they are related.

Legislature in India

The Legislature in India is known as the Parliament. It consists of the President and the two houses namely Rajya Sabha and Lok Sabha. The Rajya Sabha is known as the upper house and the Lok Sabha is known as the lower house. Since it has two houses it is known as Bicameral Legislature.

Find out more countries having bicameral legislature.

Rajya Sabha

Rajya Sabha Hall

- 238 elected members
- 12 nominated members
- Known as Council of States
- Permanent house
- Vice President presides over the sessions

Lok Sabha

Lok Sabha Hall

- 543 directly elected members
- 2 nominated members
- Known as House of Representatives
- Elected for a term of five years
- Presided over by the Speaker

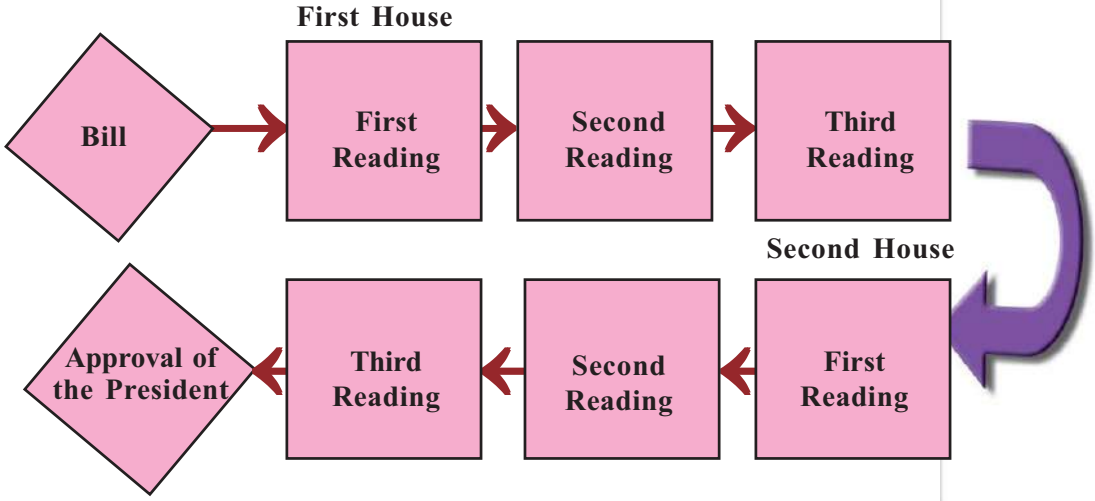
With the help of the chart given above compare the features of the Rajya Sabha and Lok Sabha.

The President of India is not a Member of Parliament. But he is considered as an integral part of the Parliament. This is mainly because of the fact that the President of India performs legislative functions like summoning the sessions of the Parliament, addressing the joint sittings, and approving the bills passed by the Parliament.

Functions of Parliament

Legislation is the primary function of the Parliament. To make a law, the approval of both the houses of the Parliament is required. The Lok Sabha and Rajya Sabha assembles separately for legislation.

A law in draft form is known as a bill. An ordinary bill can be introduced in either house of the Parliament. The house which considers the bill first is called the first house and the house which considers it next is called the second house. In both the houses the bill passes through different stages.



Let us examine the various stages of passing a bill.

- First Reading

  The bill is introduced

- Second Reading

  Each and every article included in the bill is either passed, changed or rejected after discussion.

- Third Reading

  The bill as a whole is passed or rejected.

Sessions of Parliament

As per the Constitution there should not be an interval of more than six months between two sessions of the Parliament. Normally the Parliament of India assembles three times a year. They are known as monsoon session, winter session and summer session. If needed the Rajya Sabha assembles four times a year

Question Hour

Daily sessions of the Parliament begin with question hour. Every day the Parliament meets at 11 in the morning and the intial hour is question hour. The members can ask questions relating to any administrative subject. The ministers in charge will give answers to them. The timetable of the state legislatures are different from that of the Parliament.

Zero Hour

At 12 noon, the question hour ends. The small interval after the question hour, before commencing deliberations on the items on agenda is known as zero hour. It is known as zero hour because it is 12 o' clock. The house considers adjournment motion, calling attention motion, etc. during this time. The zero hour lasts for 5-15minutes

After passing the bill in the first house, it is sent to the second house along with the certificate of the presiding officer. The bill passes once again through the above mentioned three stages in the second house.

After the bill is passed by both the houses, it is sent to the President for approval. On getting the approval of the President, the bill becomes a law.

Conduct a discussion in the class on the various stages of passing a bill.

If there is a difference of opinion between the two houses, a joint sitting of both houses of the Parliament is summoned and a decision is taken. It is the President who summons the joint sitting of the Parliament, which is presided over by the Speaker of the Lok Sabha.

Money Bill

The procedure of passing a money bill is different from that of an ordinary bill. What is a money bill? Any bill relating to the collection of revenue or expenditure from the consolidated fund can be termed as money bill. The Constitution states that a money bill can be introduced only in the Lok Sabha. After the bill is passed by the Lok Sabha, it is sent to the Rajya Sabha with the certificate of the speaker that the bill is a money bill. The Rajya Sabha must return the money bill, along with its

recommendations, to the Lok Sabha within a period of fourteen days. The Lok Sabha can accept or reject the recommendations of the Rajya Sabha.

Is legislation the only function of the Parliament? Along with law making, the Parliament performs a number of other functions.

Other Functions of Parliament

Control over Executive	Electoral Function	Constitutional Amendment
• Asking questions • Deliberating various bills and resolutions • Passing or rejecting the no confidence motion	• Participating in the election of the President and Vice President	• Timely amendment of the constitutional provisions

State Legislature

In India there are state legislatures in all the states. They make laws on subjects that come under the state government. In majority of the states, the state legislature has only one house. Such legislatures are called Unicameral Legislatures. A few states, on other hand, have Bicameral Legislature. Find them out.

Kerala Legislative Assembly

States having Bicameral Legislatures

Bihar, Uttar Pradesh, Maharashtra, Karnataka, Jammu and Kashmir, Andra Pradesh, and Telangana have Bicameral Legislatures. The lower house is known as the Legislative Assembly and the upper house is the Legislative Council.

Find out the difference between Unicameral and Bicameral Legislatures.

Excecutive

Central government made Aadhar Card compulsory for LPG subsidy.

Central approval for expatriates vote

Implementation of Food Security Bill gets delayed

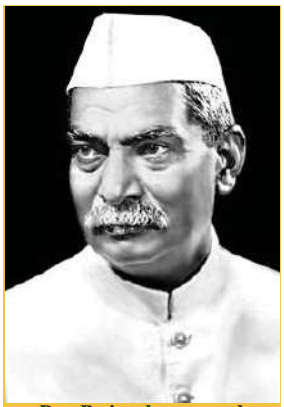
'Aadarsh Gram' project to set off this year

Haven't you read the above given news headings? All of them are related to the day to day administration of the country. Who takes such decisions and implements them? The organ of the government which implements law and administers the country is called the Executive.

Executive in India

In India there are two levels of Executive. They are Central Executive and State Executive. The Central Executive consists of the President, central ministers, and bureaucracy.

The President and ministers are elected and they are the political Executive. Bureaucrats, on the other hand, are appointed on the basis of certain qualifications and they continue in office till retirement. They are known as the permanent executive.



Dr. Rajendraprasad
First President

President

The picture of India's first President is given here. Who is the current President of India? The President is the head of the Indian Republic. He is elected by an electoral college for a term of five years.

The electoral collage consists of :

- Elected members of Lok sabha
- Elected members of Rajya sabha
- Elected members of state legislative assemblies

Qualifications of President

- *Must be a citizen of India*
- *Should have completed 35 years of age*
- *Should have all other qualifications required for a member of Lokh Sabha.*

All the executive powers of the central government are vested with the President of India. But he performs all these functions with the support and advice given by the council of ministers.

Functions of the President

- Appoint Prime Minister and other ministers.
- Appoint Chief Justice and judges of the Supreme Court.
- Nominate 12 members of Rajya Sabha and 2 members of Lok Sabha.
- Act as the Supreme Commander of armed forces.
- Give assent to bills passed by the parliament.
- Declare emergency in the country if needed.
- Take decision on mercy petitions

Make a note on the election and functions of the President of India.

Vice President

Besides the President, India has a Vice President as well. The Vice President is also elected by an electoral college. The members of Lok Sabha and Rajya Sabha are members of this electoral college. He is elected for a term of five years.

Dr. S Radhakrishnan
First Vice President

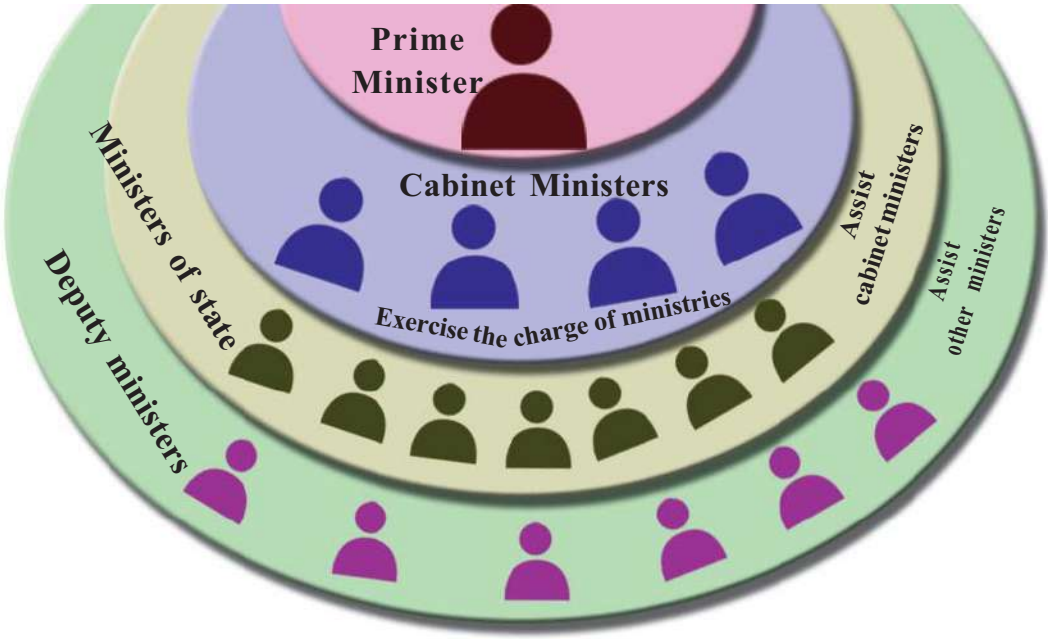
Functions of Vice President

- Performs the functions of the President in his absence
- Presides over the sessions of Rajya Sabha

Find out the difference between the electoral colleges that elect the President and Vice President.

Union Council of Ministers

The Union Council of Ministers work under the leadership of the Prime Minister. All the functions vested with the President are really exercised by the Council of Ministers, which consists of cabinet ministers, ministers of state, and deputy ministers.

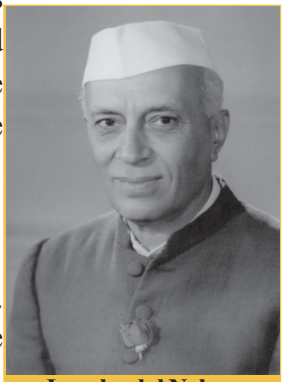


Find out the names and portfolios of the central cabinet ministers.

Functions of Prime Minister

The leader of the majority party or coalition in the Lok Sabha is appointed as the Prime Minister. He has extensive powers and functions. He can influence all the important decisions of the central government. Some important functions of the Prime Minister are given below.

- Acts as the leader of the Lok Sabha
- Presides over the meetings of the Cabinet
- Co-ordinates the functions of the Council of Ministers.
- Informs the President of the decisions taken by the Cabinet.



Jawaharlal Nehru
First Prime Minister

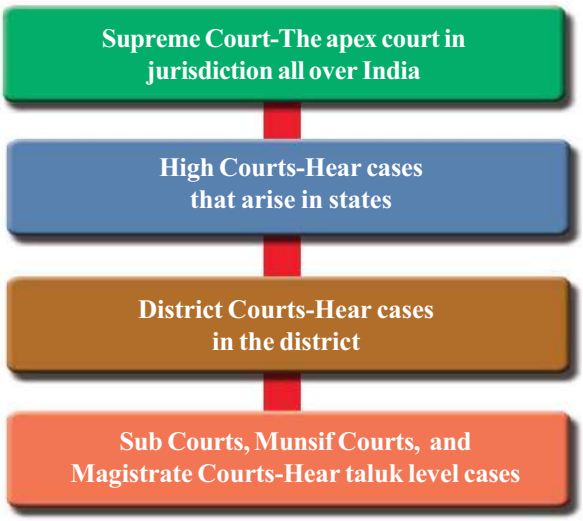
Analyze the position and functions of the Prime Minister and the President and make a note.

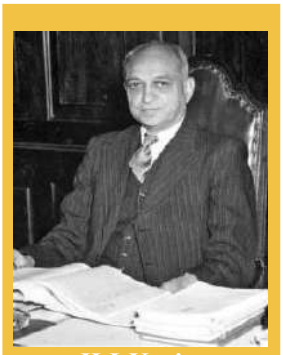
State Executive

The head of the state level executive is the Governor. The Chief Minister and his Cabinet act as the real Executive in the states.

Judiciary

There may arise disputes between individuals, individuals and government, between central and state governments, and among states on various issues. It is the Judiciary which resolves these disputes. By punishing the guilty and protecting the innocents, the courts implement justice. It is the Judiciary which interprets the laws passed by the Legislature. Find out the structure of the Judiciary in India from the given diagram.





H.J. Kania
First Chief Justice

Judiciary in India

Supreme Court

The Supreme Court is the apex court in India. It consists of a Chief Justice and judges appointed by the President. At present the Supreme Court has a Chief Justice and 30 judges.

Cases Considered by Supreme Court

- Cases relating to violation of Fundamental Rights
- Cases that arise between state government and central governments.
- Disputes between state government.
- Cases that require interpretation of constitutional provisions.
- Appeal cases from High Courts.

Collect news on Supreme Court verdicts and classify them based on the cases stated above.

High Court

Kerala High Court

High Court is the highest court in a state. The High Court consists of the Chief Justice and such other judges appointed by the President. It supervises the working of district courts and other subordinate courts.

Jurisdiction of High Court

- Give verdicts on cases relating to violation of Fundamental Rights.
- Hears civil and criminal appeal cases from lower courts.
- Interprets laws passed by the state Legislature.

Find out the states having no High Courts

Subordinate Courts

Subordinate courts consist of District Courts, Sub Courts, Munsief Courts, and Magistrate Courts. They give verdicts on civil and criminal cases.

You have now learnt about the three organs of the government. Government becomes effective only when these three organs work together with mutual respect and in accordance with the Constitutional Provisions.

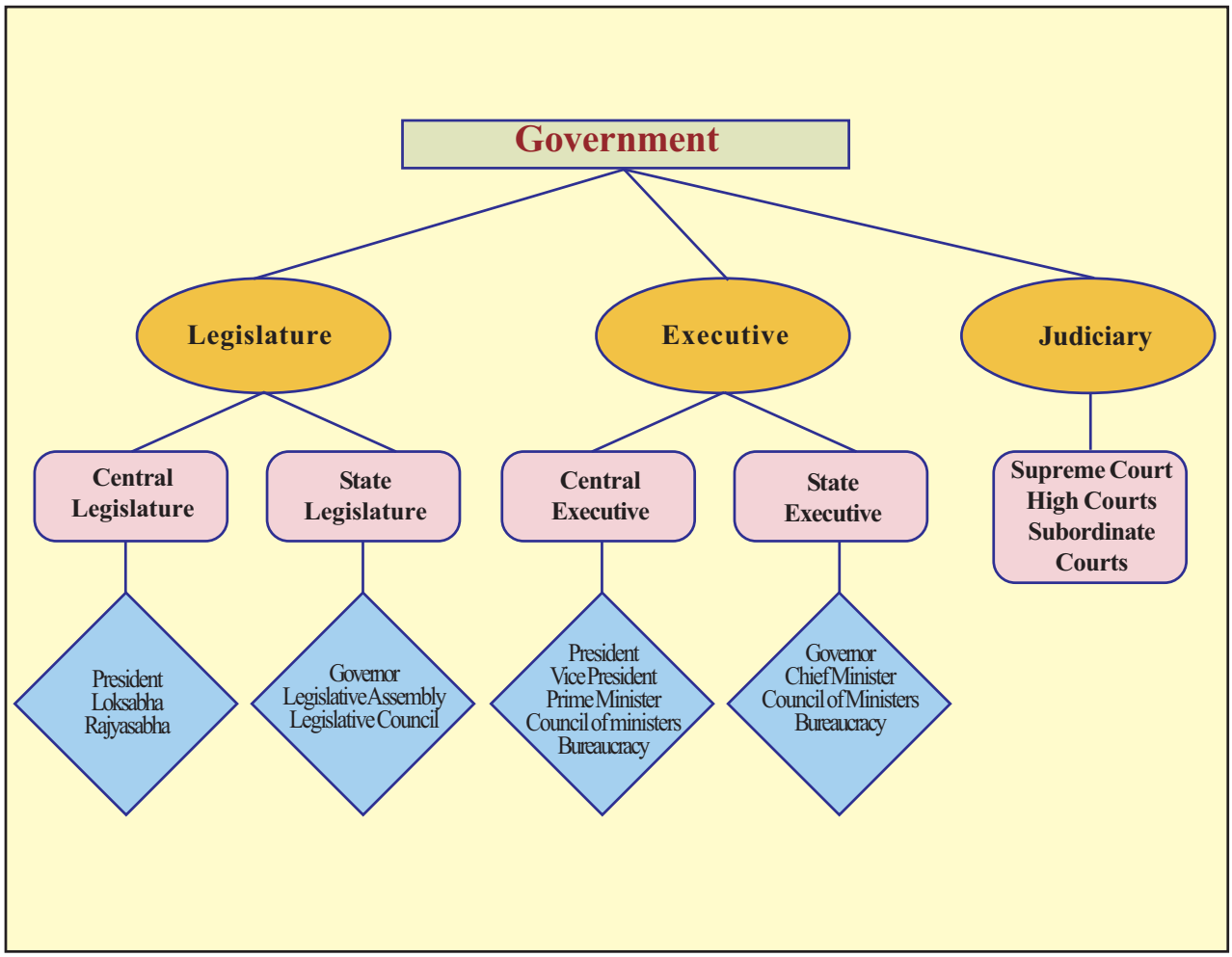
Prepare a seminar report on the organs of government in India.

Lok Adalath

Government has taken certain steps to ensure justice affrodable to the poor and ordinary man. The most important among them is Lok Adalath. Lok Adalath means people's court. It is a judicial system which is voluntary in nature. Clients, desirous of disposing their cases can approach the Lok Adalth, which will persuade them to dispose the cases through negotiations and mutual agreements. The aim of the Lok Adalath is to settle the cases without any delay.

Summary

- The government has three organs. They are the Legislature, Executive, and Judiciary.
- The Legislature makes laws, Executive implements laws, and Judiciary interprets laws.
- The central Legislature in India is known as the Parliament
- The Parliament consists of the President, Lok Sabha and Rajya Sabha.
- Legislation is the prominent function of the Parliament
- Along with legislation, the Parliament performs a number of other functions.
- The central Executive consists of the President, Vice President, Prime Minister, and Council of Ministers
- The Governor, Chief Minister, and Council of Ministers are part of the state level Executive.
- The Judiciary in India consists of the Supreme Court, High Courts, and subordinate courts.



Significant learning outcomes

The learner :

- explains that the government consists of Legislature, Executive, and Judiciary.
- compares the features of the Lok Sabha and Rajya Sabha

- describes the legislative procedure in India.
- identifies the structure of the central and state level executives.
- evaluates the functions of the President, Vice President, and Prime Minister.
- describes the functions of the Supreme Court, High Courts, and Subordinate Courts.

- The government consists of three organs. Which are they?
- Find out the correct statement from those given below.
  - (a) Indian parliament consists of Lok Sabha and Rajya Sabha
  - (b) Indian Parliament consists of Lok Sabha, Rajya Sabha, Prime Minister, and Vice President.
  - (c) Indian Parliament consists of the President, Rajya Sabha, and Lok Sabha.
- Compare the structure of the Lok Sabha and Rajya Sabha and make a note on it.
- A bill passes through different stages before it becomes a law. Explain the legislative procedures in India.
- Given below are some statements related to the election of the President. Write down the most appropriate one.
  - (a) The President of India is directly elected by the people.
  - (b) The President of India is elected by members of Lok sabha and Rajya Sabha
  - (c) The President of India is elected by the electroal college consisting of the elected members of Lok sabha, Rajya Sabha, and state legislative assemblies.

- In which house is money bill first introduced
  (a) In Rajya Sabha
  (b) In Lok Sabha
  (c) Joint sitting
- The Prime Minister has a prominent position in the council of ministers. Based on the statement, clarify the position and functions of the Prime Minister.
- The Supreme Court is the apex court in India. Explain the jurisdiction of the Supreme Court of India.

- Collect the pictures of the Presidents, Vice Presidents and Prime Ministers of India and make an album.
- Conduct a model Parliament in school to explain the legislative procedure.
- Conduct a quiz competition in the class by preparing questions relating to the organs of the government.
- Collect newspaper cuttings relating to the legislative decisions of the Executives, and verdicts of the Supreme Court, and High Courts. Prepare a collage using this.

	Completely	Parially	Need Improvement
Can explain the organs of the government			
Can list the functions of each organ of the government			
Can clarify the structure of the Indian Parliament			
Can define Bicameral Legislature with examples			
Can define Unicameral Legislature with examples			
Can explain the legislative procedure in India			
Can analyse the state legislature			
Can explain the structure of the central and state level Executive in India			
Can list the functions of the President			
Can explain the position and functions of the Vice President			
Can explain the position and functions of the Prime Minister			
Can describe the structure of the Indian Judiciary			
Can explain the position of the Supreme Court and list its functions			
Can explain the jurisdiction of the High Court			
Can classify the subordinate courts			

05 ANCIENT TAMILAKAM

കലം ചെയ്കോവെ
കലം ചെയ്കോവെ
അച്ചുതൈച്ചാ കാട്ടാരം പൊരുന്തിയ
ചിറ്റുവെൺപല്ലിപോലത്തന്നൊടു
ചുരം പലവന്തവമെക്കുമരുളി
വിയൻമലരകൻ പൊഴിലിമത്താഴി
അകലിതാ കവനൈമോ
നനന്തലൈ മുരൂർകലഞ്ഞെയ്കോവെ
(പുറനാനൂറ്)

O potter

Like a tiny white lizard hugging the spoke of a turning cart wheel is carried to places afar, I have been a part of all his joys and sorrows. He has passed away now.

Make sure the urn for his burial is wide enough for me too.

Given above is an ancient Tamil song. The widow asks the potter to make an urn for the burial of her dead husband. The poem depicts the significance of big urns in the burial practices that prevailed during that period.

Rock chamber

Kudakkallu

The practice of burying the remains of the deceased by placing them it in a big urn prevailed in ancient Tamilakam. Such urns were known as urn burials (*nannangadi*). In some areas big stones were placed above such urn burials. Locally available stones were used for this. Stone circle, dolmen, cist, rock chamber, *thoppikkallu* (tomb stone), *kudakkallu* (umbrella stone), sarcophagus, menhir, etc. were remarkable among them. They are known as the megalithic monuments and the period when they were constructed is known as the megalithic period. The megalithic monuments, ancient Tamil songs, coins, travelogues, and a few Tamil inscriptions are the major sources of information on the history of ancient Tamilakam.

Sarcophagus

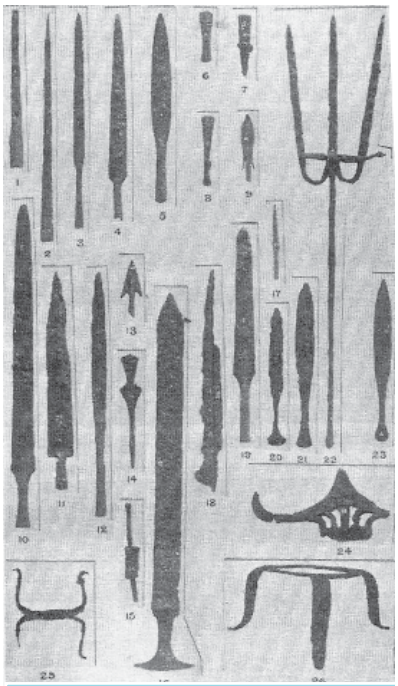
Dolmens

Menhir

Observe the pictures and discuss the features of the different megalithic monuments.

Different types of iron tools have been discovered from these megalithic monuments. They include sword, spear, knife, hook, lamp, nail and so on. Hence, this period is known as Iron Age in the South Indian history. Besides iron tools, clay pots, beads, etc. were also found from these monuments. Roman coins were also discovered from a few monuments. Black and red wares were used in that period.

Many megalithic monuments have been found from different parts of South India. Kodumanal, Alagarai, Thirukambaliyoor, Pazhani, Adichanellur, Cheramanangad, Marayoor, and Umichipoyil are the major places among them.



The iron tools discovered from megalithic monuments

Black and red wares

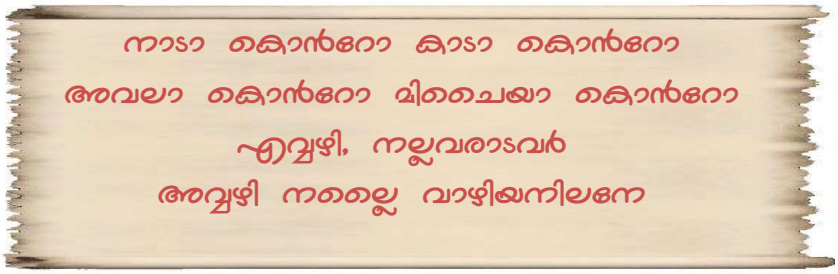
Cists discovered from Kodumanal

Excavation site of Adichanellur

What information on the life in ancient Tamilakam can be gathered from the remains of the megalithic monuments?

Sangam literature

The megalithic monuments and the ancient Tamil songs belong to the same period. The region ranging from Tirupati in Andhra Pradesh to Kanyakumari. This included Kerala as well was called Tamilakam in ancient period. The ancient Tamil songs provide more information about the human life in the ancient Tamilakam. The collection of these ancient Tamil songs is known as Sangam literature. Sangam literature is the most ancient among the available Tamil literature. It is believed that these were compiled in the period between BCE 300 and CE300.



O earth!
Whether you are plain or jungle
Hill or valley
You are good only if the virtuous folks reside there
You have no virtue of your own

The lines given above was written by Auvvaiyar, a famous poet during Sangam period. Like Auvvaiyar, there were several women poets during that period. Kapilar, Paranar, Mathurainakkeeran, Palaigauthamanar, etc. were the major poets of the period. The works of these poets have been compiled in different texts. They are classified in accordance with the period of composition and theme. This can be understood from the given table.

Sangam works

Category	Major works
Pathupattu	Thirumurukattupadai Mathuraikanchi
Ettuthokai	Akananuru Purananuru Patittupathu
Pathinenkeezhkanakku	Thirukkural Muthumozhikanchi
Grammar text	Tholkappiyam
Mahakavya	Chilappathikaram Manimekhalai

Thirukkural

കർക കചടറ കർപവൈ കൺപിൻ
നിർക അതൻവഴു തരുക

Learn carefully and thoroughly. Practise what has been learned. Imbibe it and live accordingly.

The ancient Tamil songs are classified into *Akampattukal* and *Purampattukal.* The theme of *Akampattukal* is mainly personal and family affairs. The *Purampattukal* treat external affairs like war and trade. The Sangam literature illustrates the physiography, plentiful resources, food habits, dressing patterns, ornaments, recreational activities, customs, major occupations, and beliefs of the period.

Discuss the importance of the Sangam works as a source of history

Social life

In the previous class you have learnt about the Tinais mentioned in the ancient Tamil songs. The Tinais had an important role in moulding the social life of ancient Tamilakam.

KARIPPADAPPAI

Foreign travellers including Plini have stated that pepper is a wild plant. However, in ancient Tamil songs there are references about the cultivation of kari (pepper) and padappai (pepper groves) in Kurinchi

Punam Cultivation (shifting cultivation)

There is mention about shifting cultivation in Purananuru by clearing and burning jungles of Kollimala. This method still prevails among some tribal communities in Attappadi.

Hunting and collecting of forest resources were the means of livelihood of the people in the hilly Kurinchi. Some songs indicate that they engaged in shifting cultivation as well. Pepper and other spices were cultivated here.

Rearing of cattle was the major occupation of the people of Mullai, the grassland. In order to increase the 'cattle wealth', the practice of seizing cattle prevailed. This practice was known as *vetchi*. Those who chiefly engaged the stealing cattle were the people from Palai, the dry lands.

Rice and sugarcane were cultivated in the wetland Marutam. There are evidences for the use of iron ploughshare affixed to plough in that period. Fishing and salt production were the major occupation of the people in the coastal region Neytal. Salt was made by evaporating the sea water held in the salt pans.

Salt pan

Explain the role of physiography in moulding the social life of the Tinais.

Exchange system

തേൻ നെയ്യൊടു കിഴങ്കു മാറിയോർ
മീൻനെല്ലൊടു തറവുമറുകവും
(പൊരുനാരാറ്റുപ്പടൈ)

People procure fish and rice by exchanging honey, ghee and tubers.

Sangam literature mentions the practice of exchange of goods known as *noduthal*. *Allalavanam* (evening market) and *nalangadi* (morning market) were the markets of ancient Tamilakam. The commodities for daily use in different Tinais were obtained from these markets.

Nectarous jackfruits

Jackfruits are among the major agricultural produce mentioned in the ancient Tamil songs. They were found in abundance in Kurinchi. The ancient Tamil songs abound in references to the sweet jackfruits along the village paths.

ഉപ്പുങ്ങളിൽ വിളഞ്ഞ ഉപ്പുപരലുകൾ
ഉച്ചത്തിൽ വില പറഞ്ഞു കൊണ്ടുപോകും കച്ചവടക്കാർ
വണ്ടിക്കാളകളെ നുകമഴിച്ചു മേയാൻവിട്ട്
കല്ലടുപ്പുകൂട്ടി പാകം ചെയ്യുമാഹാരം

The hawkers shouting out the price of salt crystals produced in the salt pans, set the bullocks free and cook food in the make-shift stone ovens.

Given above is an adaptation from Akananuru . What information can we gather from it? In those days salt was an important commodity of exchange. This exchange was done by the merchant group called *Umanar*.

Umanar also exchanged spices, the major export commodity in ancient Tamilakam. They collected dried fish and salt from the coastal area and exchanged it for spices like pepper and forest products of other Tinais. These exchanges were largely done during summer. Why was summer suitable for this exchange?

Excavation at Pattanam

The excavations in Pattanam near Paravur in Ernakulam district provide many an evidence about the trade relations Kerala had with Rome and west Asian countries. Remains of Roman amphorae (containers) and glasses have been widely found here.

- Summer is the harvest season.
- Salt and dried fish were made in summer.

The spices collected by the *Umanar* were sold at trade centres in coastal towns, from where they were exported to foreign countries. We have already mentioned about the coins discovered from the megalithic monuments. To which country do they belong? The major commodities that the Romans took from ancient Tamilakam were the spices; especially pepper.

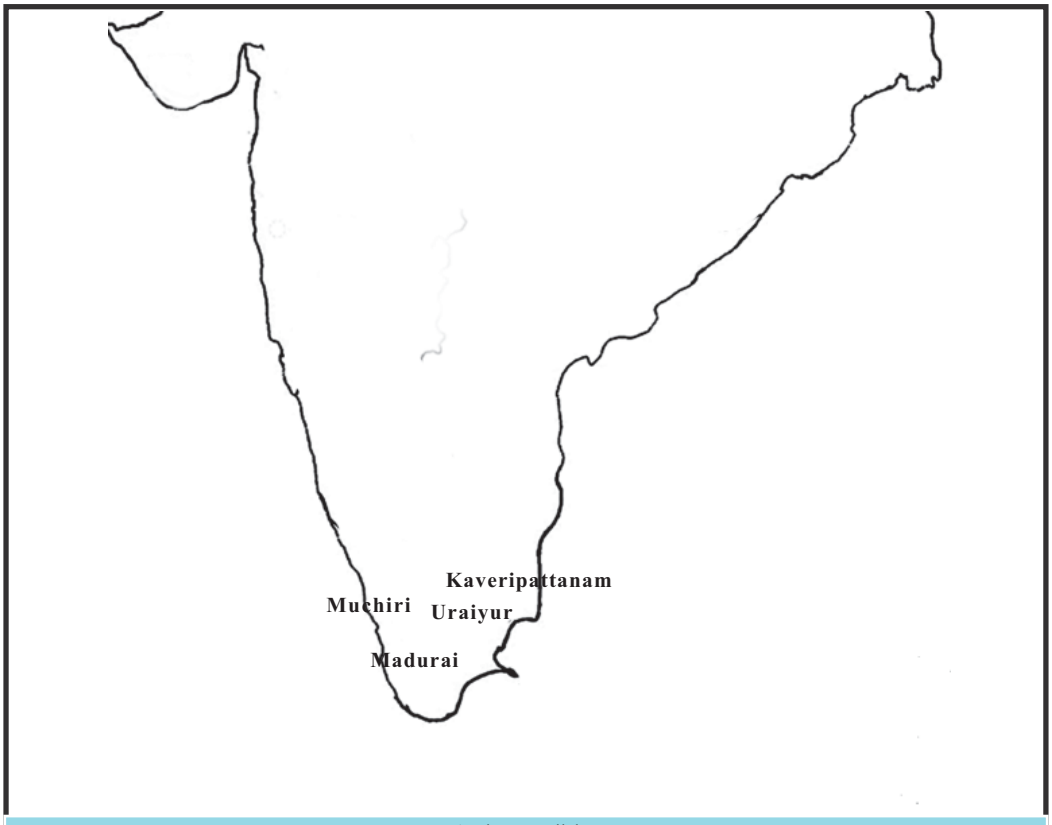
Roman gold coins

What was the role of the *Umanar* in the trade of ancient Tamilakam?

Moovendans

You have seen that there was inland and maritime trade in ancient Tamilakam. Some power centres were essential to frame the rules for such trading and its control. Trade was controlled by three power centres namely the Cheras, the Pandyas, and the Cholas. They were together called Moovendans. The capitals of the Cheras, the Pandyas, and the Cholas were Muchiri, Madurai, and Uraiyur respectively. Muchiri, Thondi, Vakai, Mantai, Kaveripattanam, etc. were the major port cities of the period.

Locate the trade centres of ancient Tamilakam and the capitals of the Moovendans from the given map and list them.



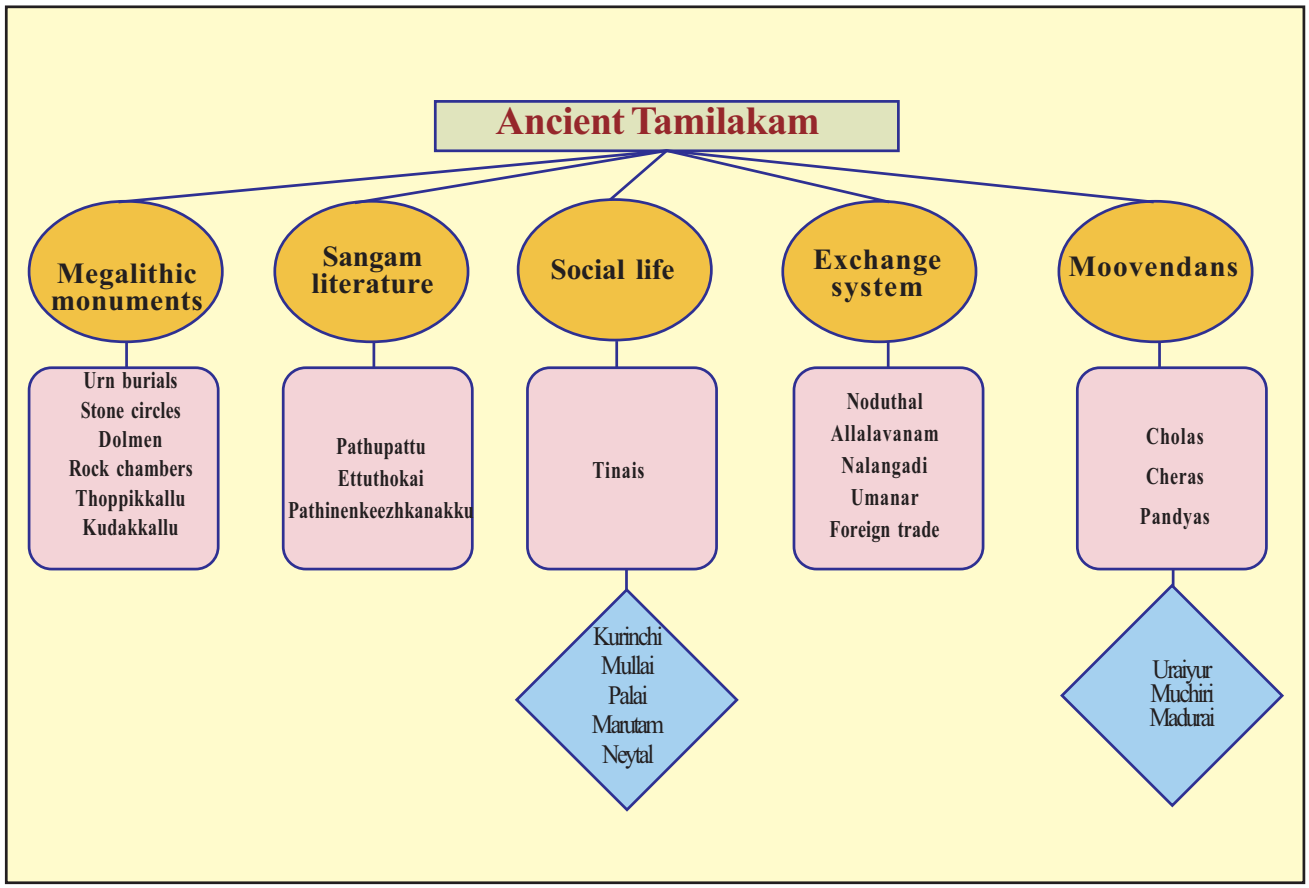
Ancient Tamilakam

Prepare a seminar paper on the socio-economic life of ancient Tamilakam based on the information gathered from the ancient Tamil songs and the megalithic monuments.

Summary

- The major source of information on ancient Tamilakam is the ancient Tamil songs and the megalithic monuments.

- The period when the megalithic monuments were constructed is known as the Megalithic period
- The Sangam literature is a compilation of the ancient Tamil songs
- The Tinais had an important role in moulding the social life of ancient Tamilakam
- Local and foreign trade existed in ancient Tamilakam.
- The Cheras, the Cholas, and the Pandyas were together known as the Moovendans



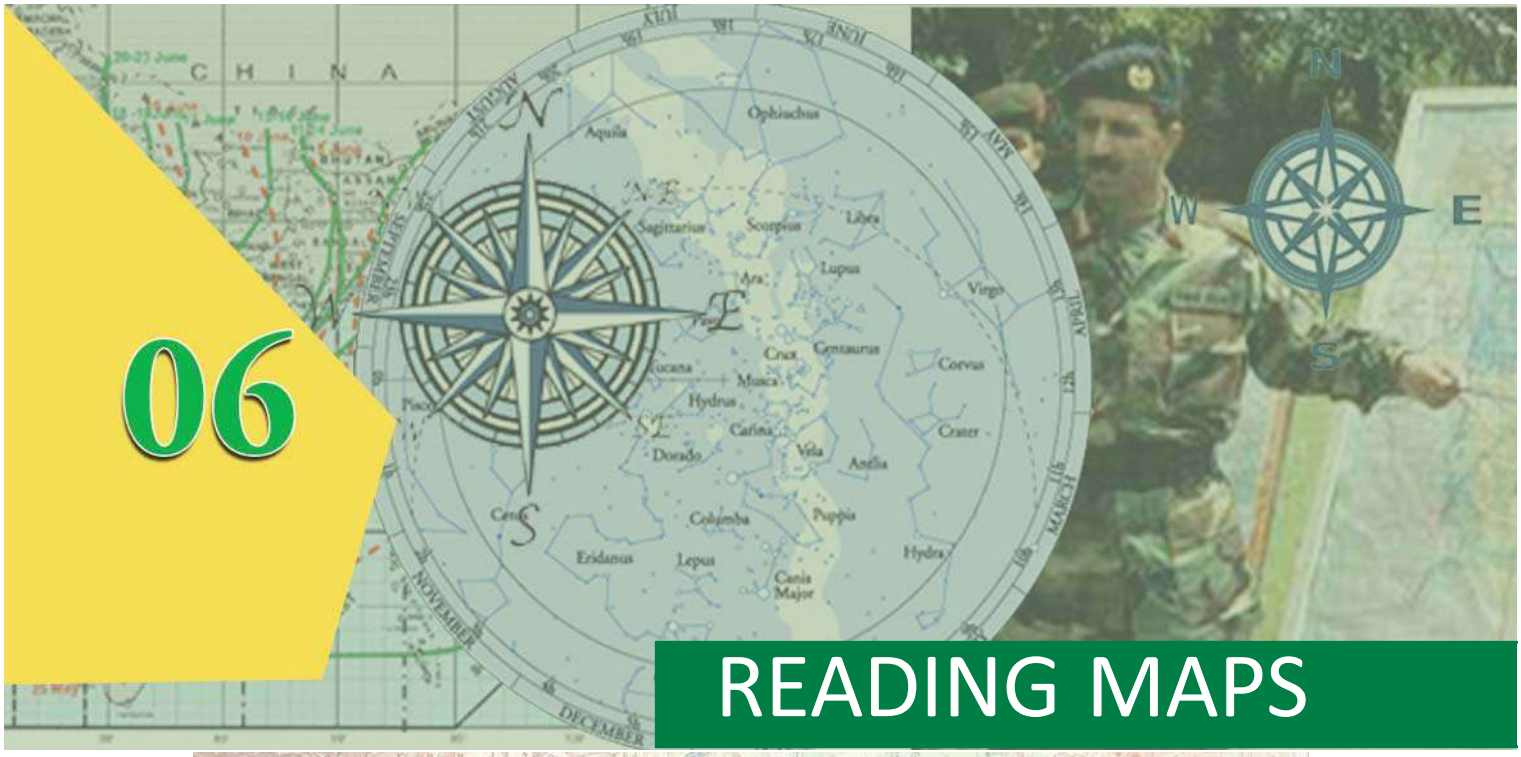
The learner :

- identifies the features of the ancient Tamilakam.
- elucidates the importance of the Sangam literature.
- explains the megalithic monuments.
- analyses the interrelationship between each Tinai and its life.
- evaluates the exchange system that existed in ancient Tamilakam.
- explains that the major rulers of ancient Tamilakam were the Cheras, the Cholas and the Pandyas.

- What are the features of the megalithic monuments of ancient Tamilakam ? Analyse.
- Explain the social life depicted in the ancient Tamil songs
- Why is the Iron Age in South India called the Megalithic period?
- Analyse the social life that existed in the Tinais.
- What were the features of the trade relations in ancient Tamilakam? Elucidate.

- Collect the pictures of the megalithic monuments and prepare an album.
- Visit the megalithic monuments and prepare a note.

	Completely	Partially	Need improvement
Can identify the major features of human life in ancient Tamilakam			
Can explain the features of the megalithic period			
Can explain the importance of the megalithic monuments as a source of history			
Can analyse the information about ancient Tamilakam depicted in the ancient Tamil songs			
Can analyse the social life in Tinais			
Can evaluate the exchange system that existed in ancient Tamilakam.			



06

READING MAPS

You have read about a mistaken bombing and its cause. Now you might have understood the importance of maps and the accuracy of the information therein.

Are the maps used for military purposes the same as the ones we use for study purposes? Different types of maps are used for different purposes.

A few of them are given below.

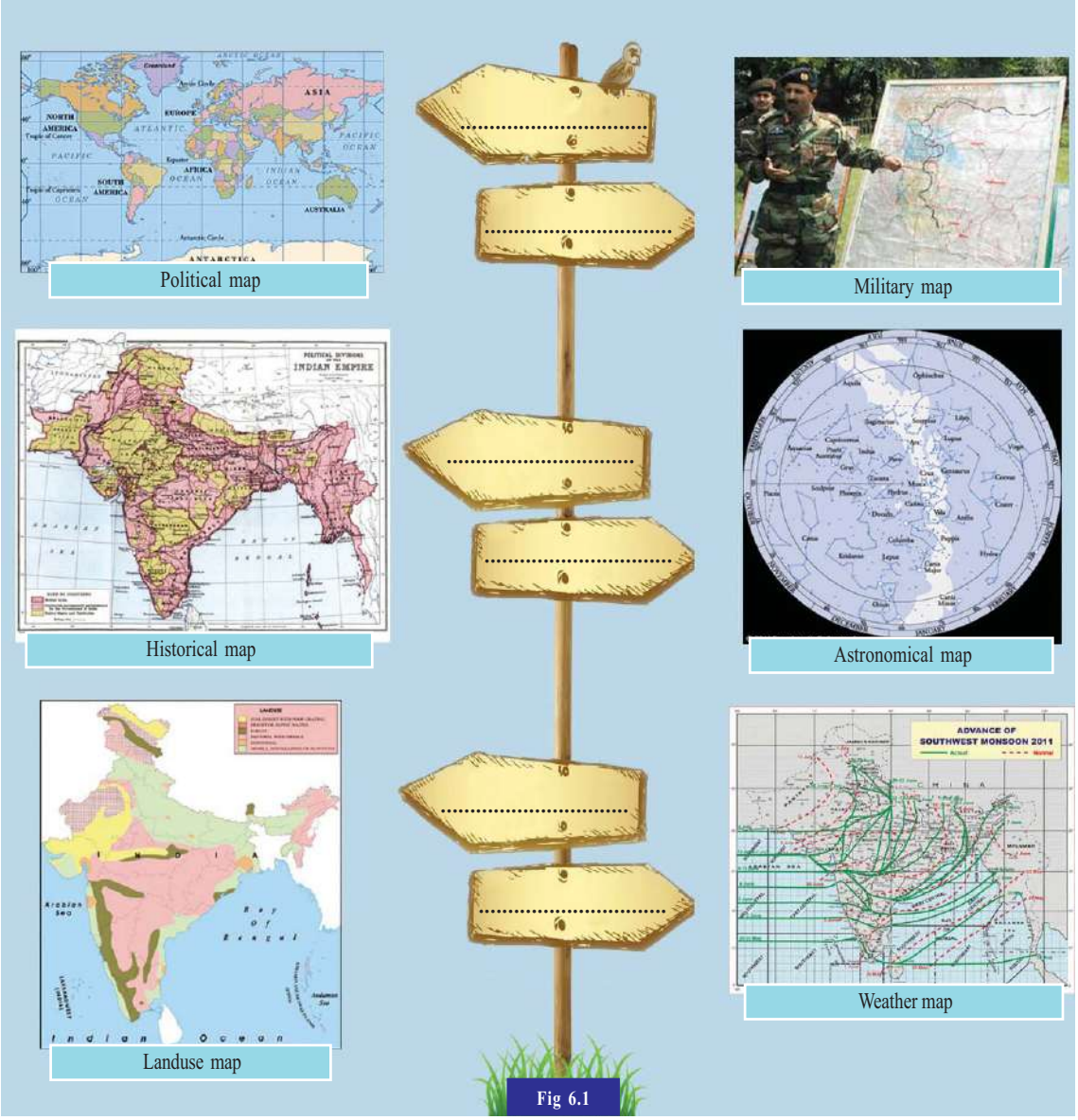


Fig 6.1

Write down the use of each on the sign boards against them (Fig 6.1). Make use of the indicators given below.

Indicators:

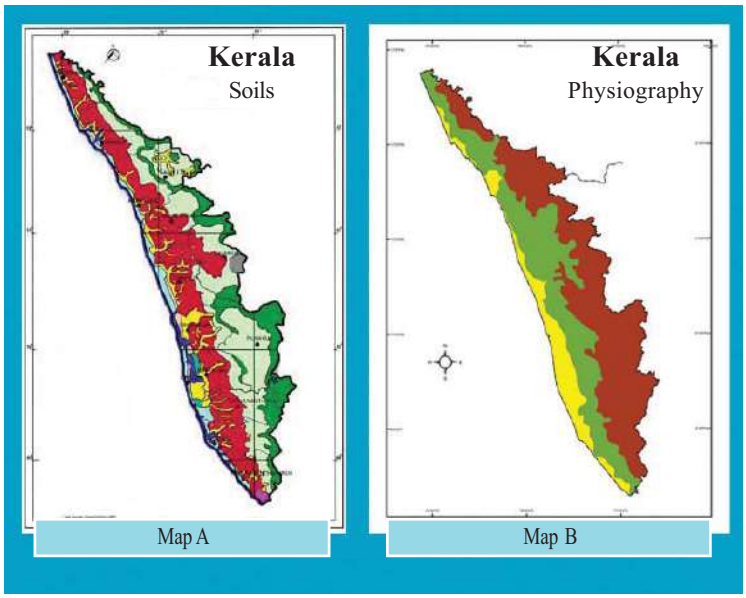
- For understanding the landuse.
- For the study of celestial bodies.

- For meteorological studies.
- For military purposes.
- For understanding the political boundaries.
- For the study of history.

Prepare a list of maps familiar to you.

- World political map.
-

Compare the given maps of Kerala. Are the information included in both the maps the same?



Map A depicts the soils of Kerala and Map B the physiography. What might happen if both soil types and physiography are incorporated in the same map?

Including different information in the same map will create confusion in reading it. That is why different information are plotted in different maps. Maps depicting specific themes are known as thematic maps.

Let us classify maps

Recorded details of natural as well as man-made features on earth are subjected to different types of observation and analysis. Maps are the most relevant tool for recording information for the same.

Classification of maps based on function

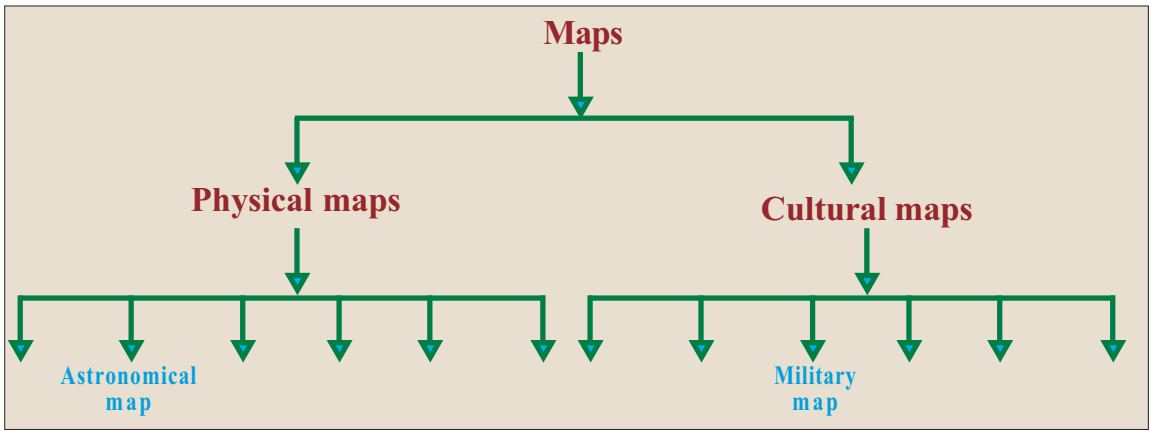
Based on function, maps can be classified into two.They are

- Physical maps
- Cultural maps

Maps representing natural features such as physiography, climate, etc. are called physical maps. Maps representing man-made features such as agriculture, industry, and political boundaries are called cultural maps.

Complete the flow chart by classifying the below mentioned maps based on function.

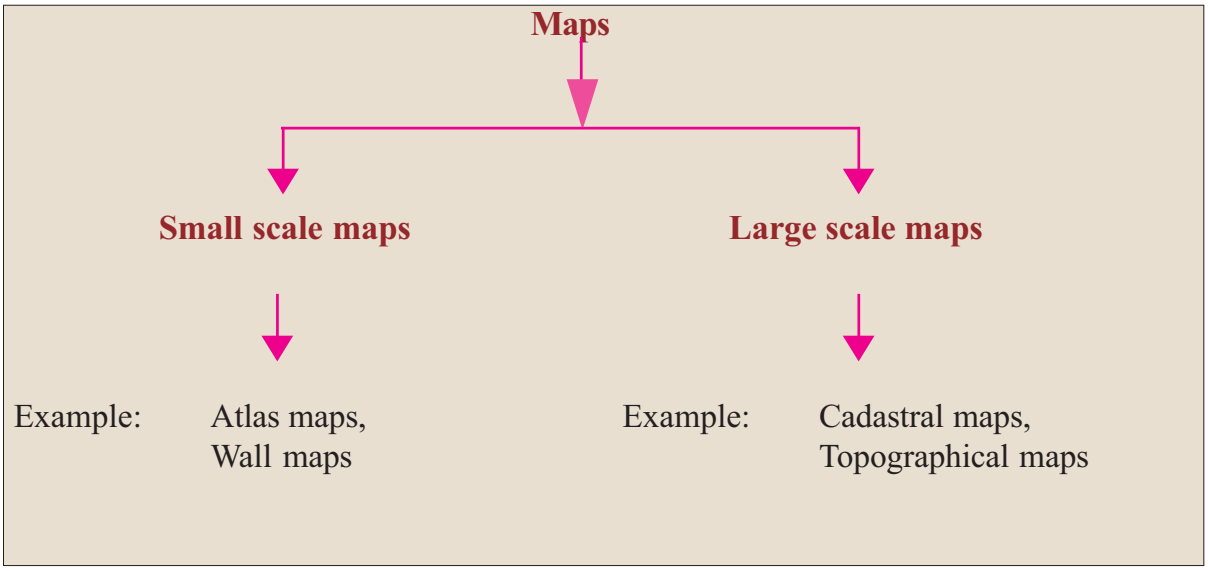
- Political map
- Soil map
- Climatic map
- Astronomical map
- Weather map
- Physiography map
- Agricultural map
- Industrial map
- Natural vegetation map
- Military map
- Landuse map
- Historical map



Prepare a table showing the uses of the physical and cultural maps you have added in the flow chart.

Classification of maps based on scale

See how maps are classified based on the scales they correspond to.



If larger areas such as the world, continents, countries, and states are to be depicted in a small sheet of paper, only a little information can be incorporated into it. Maps showing only the important information of larger areas are called small scale maps. If the area to be depicted is a comparatively small region like a ward or village, more information can be incorporated in it. Maps representing detailed information of a small area are called large scale maps.

Cadastral maps

The word cadastral is derived from the French word 'cadastre' which means 'register of territorial property'. Cadastral maps are prepared to record the boundaries and ownership details of land properties such as fields, buildings, etc. These maps are used to assess the land tax and to indicate the ownership. Village map is an example.

Observe an Atlas and identify whether the maps in it are small scale or large scale.

Conduct a discussion in the class on different types of maps. The following points can be included in the discussion.

- *Uses of maps*
- *Need for different types of maps*
- *Small scale and large scale maps.*

Topographical maps

Topographical maps are prepared based on comprehensive land surveys. These maps show both natural and man-made features in detail. Detailed information on relief, topography, rivers, forests, agricultural lands, towns, means of transport and communication, settlements, etc. are included in topographical maps.

Map reading

Map reading requires a good knowledge of its scale, direction, and the signs and symbols used in them.

Map scale

You have learnt in the previous class that maps are prepared on specific scales and that there are three different methods to show the scale - statement of scale, representative fraction, and linear scale.

Observe the given map (fig. 6.2)

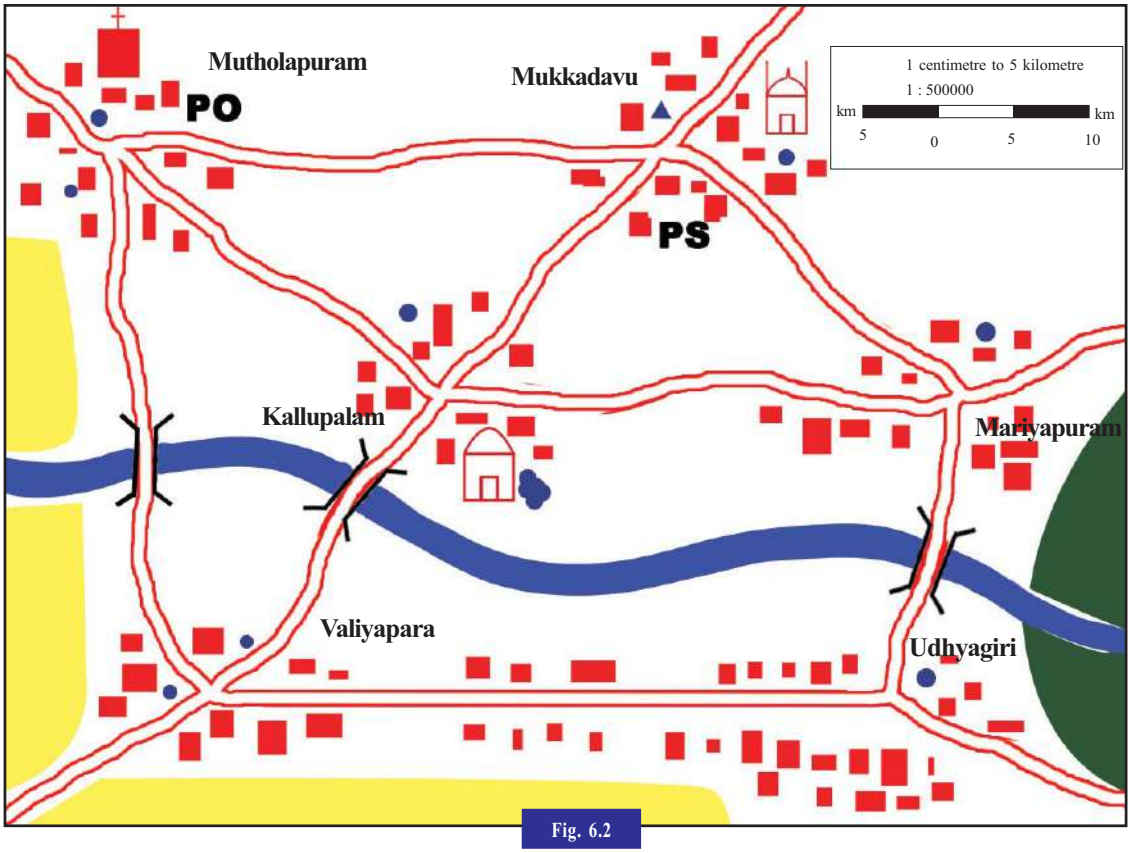


Fig. 6.2

Note the scales shown in this map. What might be the purpose of these three methods of scale?

Statement of scale

Which among the scales given in the map is easy for us to understand? Isn't it the one shown as 1 cm to 5 km? This method of representing the scale is the statement of scale. From this we can easily understand that one centimetre on the map represents 5 km on earth. The merit of this method is that even a layman can easily understand this.

Then why should we use the other two methods to represent scale? Let us examine.

Inch, mile, furlong, etc. are the units followed by the British. This system of units is known as the British system. This system was followed in India till independence. The educated generation of that period also learnt this system. After the British left India, the metric system of units came into practice. As per this, centimetre, metre, kilometre, etc. became our units.

Representative fraction

You might have heard the elder members of your family refering to distances between places many-a-times. They commonly use units such as miles, furlongs, etc. Which are the units familiar to you?

The units used for measuring distance are different in different countries. In India we follow centimetre, metre, kilometre, etc. whereas units like inch, mile, and furlong are followed in the European countries. Can the people of other countries intepret the maps prepared on Indian units with ease? Representative fraction is used to avoid this problem. Representative fraction is the ratio between the map distance and corresponding ground distance expressed in fractional form. For example, the statement of scale 1 cm to 5 kilometres, can be represented as 1:500000 in representative fraction. This proportionate distance can be read in accordance with the units followed in each country. While the Indians read this as 1 centimetre to 500000 centimetres, the Europeans can read this as 1 inch to 500000 inches. Now you might have understood the use of representative fraction.

Linear scale

Suppose Mutholapuram town shown in the map (Fig 6.2) is undergoing some urban development programmes. The map shown below (Fig 6.3) is the enlarged version of the previous map projecting the area including Mutholapuram. Does the scale remain unchanged? Check whether the scales represented by the first two methods (statement of scale and representative

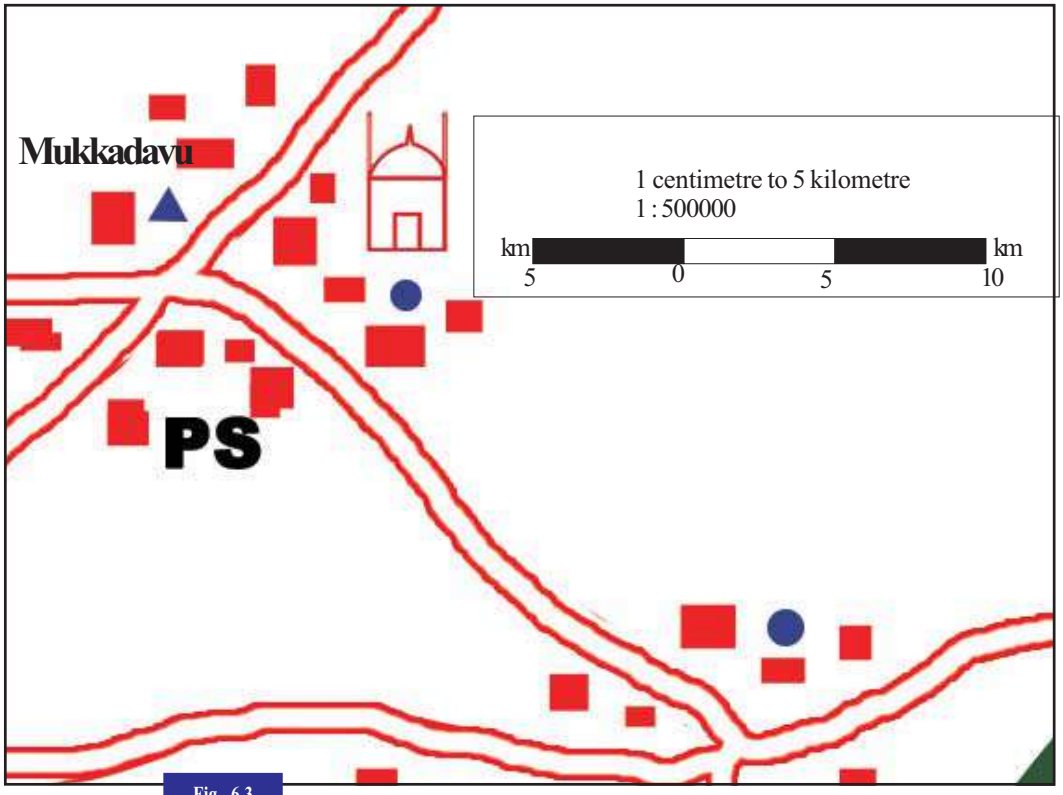


Fig 6.3

fraction) changed in accordance with the change in the map. Now look at the scale shown in the linear method. You can see that the linear scale has changed in proportion with the change in the map. When a map is subjected to enlargment or reduction, the linear scale will also change accordingly. This is the merit of this method.

Let us measure distance

Observe the map (Fig 6.2). This is the area where Gopu's village is located. You may notice that scale is represented in the map in all the three methods.

Try to answer the following questions based on this map.

- Which is the shortest route for Gopu, who resides at Kallupalam, to reach his uncle's home in Udayagiri?
- How long should he travel from Udayagiri to Mutholapuram market via Valiyapara?
- How much distance should he cover from Mutholapuram back to his home at Kallupalam via Mukkadavu?

Is it difficult to find the actual distances from maps? Let us see how this can be done.

How to measure distances on maps?

To measure straight distance, a ruler can be used. If it is a curved distance such as a river or a curved path, first measure the distance using a thread and then measure the length of the thread. Now you have the map distance. What should be done to find the actual distances? For this, the map distance should be multiplied with the proportionate ground distance shown in the map scale.

For example,

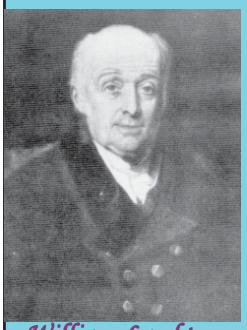
Scale of the map is 1cm to 5km

Suppose the distance from A to B in the map is 4 cm.

Then the actual distance from

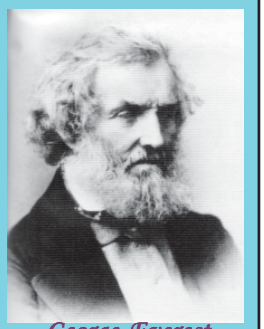
A to B = 4 x 5km =20km

The pioneers who surveyed India



William Lambton

Earlier map making speaks of the herculean efforts and sacrifice of many. The survey for the preperation of a map started by William Lambton from the southern tip of India in 1800 AD could only be completed after 50 years by his successor George Everest. This survey accurately covering 1600 miles with heavy instruments like Theodolite, weighing more than 500 Kg, helped in assessing the height of Mt. Everest. The survey team toiled for many years under harsh conditions.Many of them died of malaria and in natural calamities like floods. This map making task is still considered as the greatest attempt of this kind in the world.



George Everest

You might have understood how to find the actual distances by measuring the map distances. Now can you find the distance travelled by Gopu?

Make use of the political map of India from the Social Science laboratoy and find out the actual road distances from the capital of Kerala to Mumbai, Delhi, Chennai, and Kolkata.

The Survey of India

The Survey of India is the agency responsible for making, scrutinising, and publishing maps in our country.

Like the scales, the directions in the map are also important in map reading. Let us see how the directions are determined.

Directions in maps

You have learnt that direction is one of the essential factors in maps. See the map below.

The following symbols are used for easy identification of directions in maps

Fig 6.4

A few cities in India are marked on the map (Fig 6.4). Try to identify the location of these cities based on direction.

Write your findings in the table (Table 6.1) given below.

Table 6.1

Direction	City
North	•
South	•
East	•
West	•
Northeast	•
Southeast	•
Northwest	•
Southwest	•

If you face any difficulty in finding the direction, you can use the indicator of direction as shown in the following map (Fig 6.5) to complete the task.

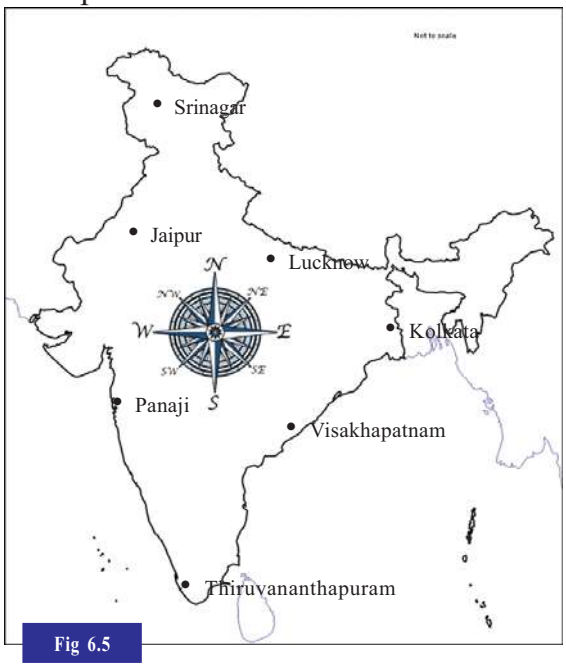


Fig 6.5

Signs and symbols used in maps

Read the following descriptions about an area:

- Length and breadth of the area are 1500 m and 1000 m respectively.

- A river flows from between the north and northwest towards the south-southeast.
- A road runs across the river from west to east and there is a railway line just north of the road running parallel to it.
- The northeastern part consists of paddy fields which extend to about 500 m towards the west and 400 m towards the south from the northeast corner. Between the paddy field and the river, there is a temple near the former about 200 m to the south and a pond immediately south of it.
- The southwestern part is a forest extending 450 m to the east and 400 m to the north from the southwest corner. There is a fort located close to the forest at a distance of 150 m from the south to the north.
- Between the south and southeast there are settlements close to the river and a post office and a police station close to the road.

The given sketches were prepared by three students based on the above description (Fig 6.6).

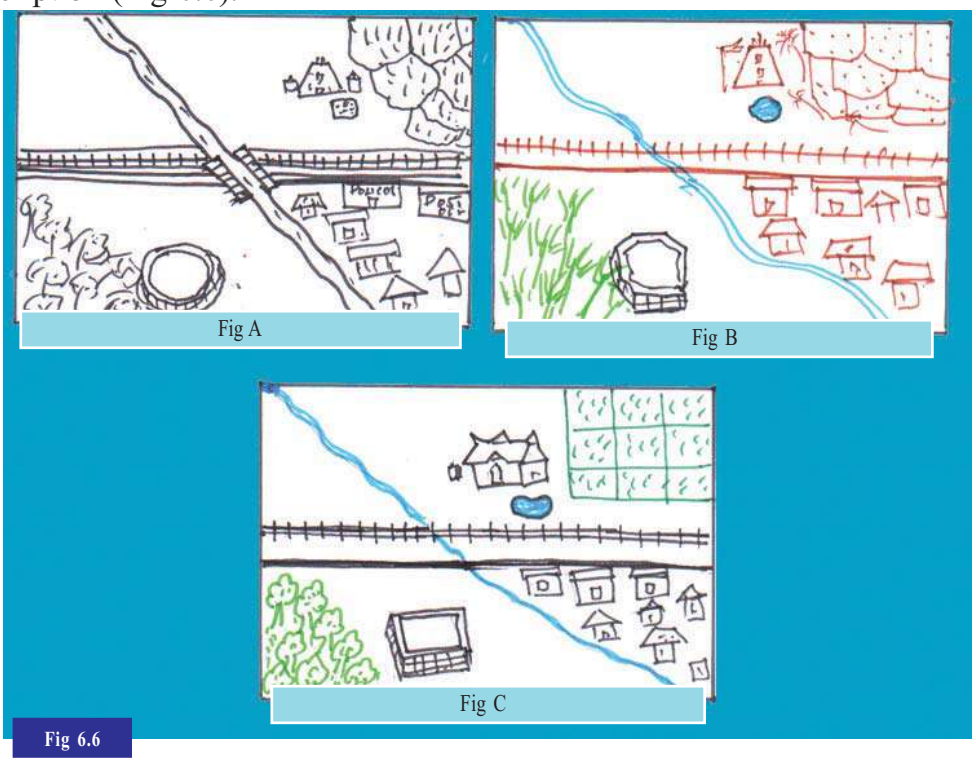


Fig 6.6

There is no uniformity in the signs and symbols used by the three students in preparing the sketch. Map reading will be confusing if different countries use different signs and symbols for map making. That is why internationally accepted signs and symbols are used for making maps.

- Get familiarised with a few conventional signs and symbols used in maps from the table (Table 6.2) below.

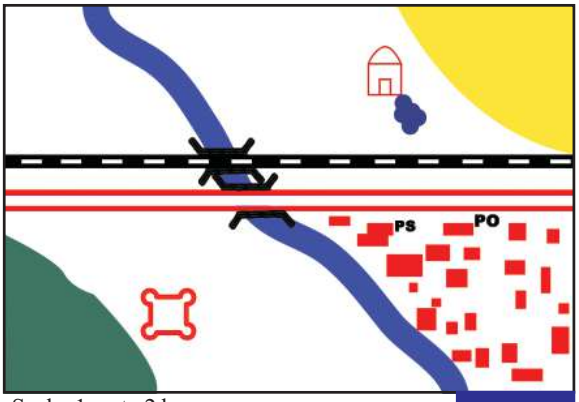
Table - 6.2

Signs and symbols	Features
Green	Natural vegetation
Yellow	Farmland
Red	Settlements, roads
Black	Railway line, latitudes and longitudes, telephone lines
Blue	Water bodies
Brown	Rock outcrops, sand dunes, hills
	Metalled road
	Railway line
	Stream
	River
	Church
	Temple
	Mosque
	Settlement
PO	Post Office
	Well
PS	Police Station
	Fort
	Bridge
	Pond
	Tube well
	Graveyard

- Prepare a sketch based on the earlier descriptions. Make use of the conventional signs and symbols.

Look at the map (Fig 6.7). It has been prepared based on the earlier description using conventional signs and symbols. Compare it with the ones prepared by the students (Fig A, B, and C). What all differences do you notice?

Using scale, directions and conventional signs and symbols, try to prepare a map of your school compound. Use a metre tape to measure the length and breadth of the compound and the position of different physical and cultural features in it. Directions can be determined using a magnetic compass. Display the map in your classroom.

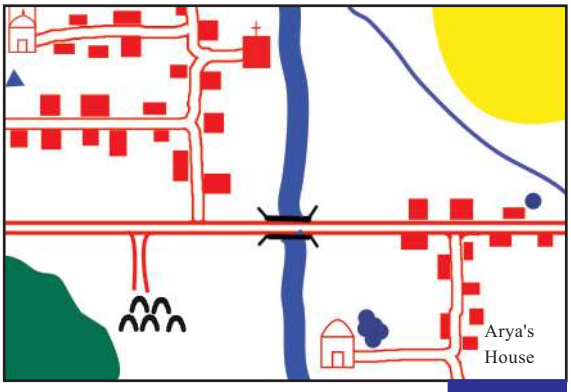


Scale: 1cm to 2 km

Fig 6.7

Observe the map (Fig 6.8) and answer the questiions. Consolidate your answers as a map interpretation report.

- What is the scale of this map?
- In which directions are the places of worship situated? (Mosque, temple, church)
- How far is the temple from Arya's home?
- How far is the graveyard from the church?
- To which direction from the temple is the pond?
- How long is the canal from the northern end to the bridge?



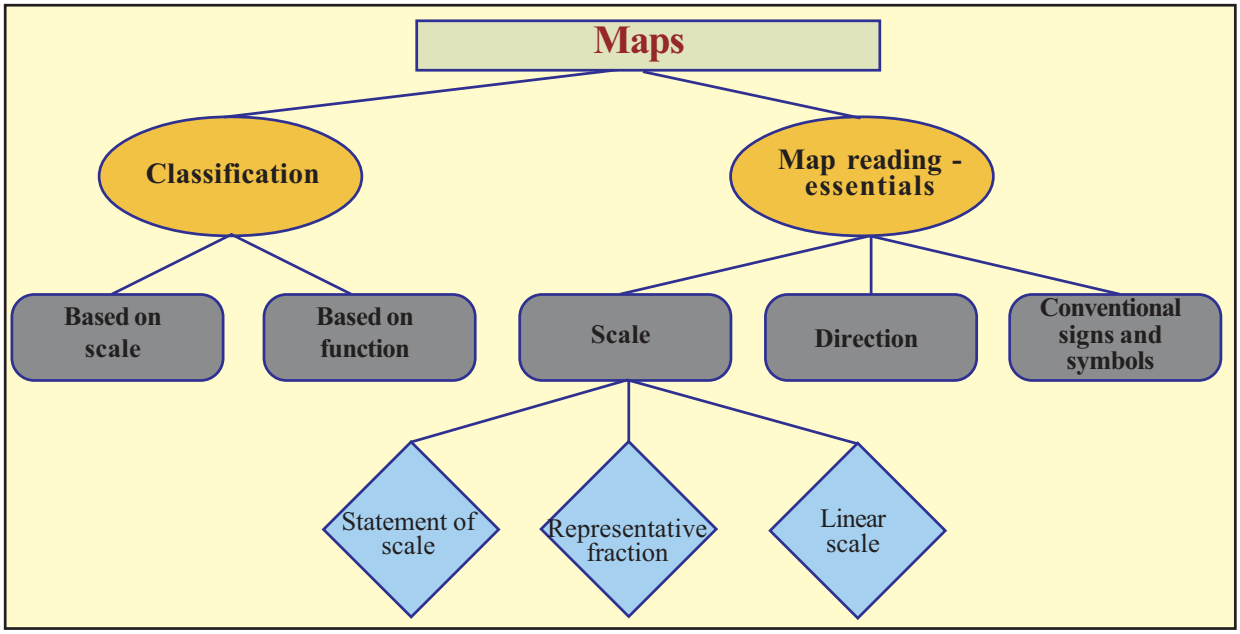
Scale: 1cm to 2 km

Fig 6.8

- In which direction are the forest and agricultural field located?
- What is the length of the stream flowing west of the agricultual field?

Now you can read and understand various maps.

- Different types of maps are used for different purposes.
- Based on function, maps can be classified into physical maps and cultural maps.
- Based on scale, maps can be classified as small scale maps and large scale maps.
- Scales are represented in maps in three different methods: statement of scale, representative fraction and linear scale.
- Actual distances between places can be calculated based on scale.
- Actual directions can be determined based on the indicators.
- Conventional signs and symbols are used in maps to represent different features.
- Maps can be read effectively using scale, direction, and conventional signs and symbols.



Significant learning outcomes

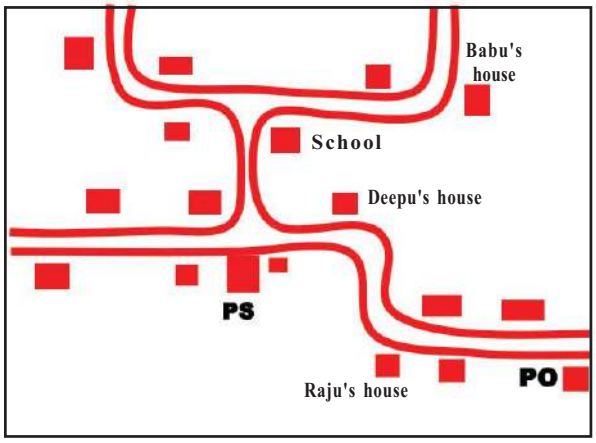
The learner :

- classifies and explains maps based on function.
- calculates the actual ground distance using map scale.
- determines the directions using indicators.
- pepares maps using conventional signs and symbols.
- prepares reports by interpreting maps based on scale, directions, and conventional signs and symbols.

Extended activities

- Collect different types of maps from the Internet, classify them based on their use and scale, and prepare a flow chart. Display it in the classroom.

Answer the questions based on the given map.



Scale: 1cm to 2 km

- Towards which direction from Raju's house is the post office?
- Which direction should be taken to reach Babu's house from Deepu's?
- How far is the post office from the police station?
- In which direction from the school is the police station?

Complete the table by classifying the maps appropriately.

- Weather map
- Topographical map
- Cadastral map
- Soil map
- Historical map
- Agricultural map
- Wall map
- Atlas map

Physical maps	Cultural maps	Large scale maps	Small scale maps

- The distance between two places shown on a map is 2.5 cm. If the scale of the map is 1 cm to 50 km, how much is the actual distance between these two places?
- Identify the geographical features represented by the given conventional symbols and fill in the table.

Symbols	Features
	
	
	
	

	Completely	Partially	Need improvement
Can classify the maps based on function.			
Can calculate the actual ground distance using the map scale.			
Can distinguish between large scale and small scale maps.			
Can determine the directions in maps using indicators.			
Can prepare maps using conventional signs and symbols.			
Can effectively read maps by making use of scale, direction, and conventional signs and symbols.			
Have realised that map reading is essential for understanding geographical information and to interact with nature accordingly.			

07 ECONOMIC THOUGHT

Have you ever noticed the nature of human wants? As soon as one gets satisfied, another crops up. We have seen in the earlier classes that production is a process of creating goods and services for satisfying these wants.

Look at the pictures. What activities are the people engaged in?

- Agriculture
- .....
- Regulating traffic
- .....

Agriculture and factory work come under production of goods,

whereas the traffic police and the doctor provide services.

We have discussed the factors of production like land, labour, capital, and entrepreneurship and their rewards in the lower classes.The reward for the factors of production are distributed according to their respective share. Thus distribution is significant in an economy. Fair distribution speeds up economic development.

Man satisfies his wants through the consumption of goods and services. The reward received by participating in the production process is spent on consumption. Therefore, there is a correlation between production, distribution and consumption of goods and services.

Economics is the branch of science that studies economic activities relating to production, distribution, and consumption. Economic decisions are taken by analysing the basic problems in an economy. Let us see what these problems are.

The fundamental problems faced by an economy

A meeting was held in Varun's school to decide how to utilize the one acre land available in the campus. Many suggestions emerged but the idea of utilizing the land for farming received the maximum support. Though rice and plantain cultivation were discussed, finally it was decided to grow vegetables.

Varun and his friends were overjoyed by the idea of growing vegetables as it gave them an opportunity to give pesticide free and cheap vegetables to the villagers.

Varun was entrusted with the responsibility of making a detailed plan about the area of land that should be brought under cultivation, the types of vegetables to be cultivated, the method of cultivation and care to be given, the beneficiaries, etc.

- Don't such discussions take place at your home or school?

In the above example we have discussed the basic problems in and economy. There are three essential questions associated with every economic activity.

- What to produce and how much to produce?
- How to produce?
- For whom to produce?

Answers to these questions decide the relevance of economic activities.

What to produce and how much to produce?

Since resources are limited, it is very important to use the available ones and to decide what to produce for the welfare of the society. Though various suggestions came up during the above discussion, everyone was convinced that growing vegetables must be given top priority. The identification of the crop for cultivation and expected quantity of output is equally significant. Similarly, when we have to decide about industrial products, the type of industry, the number of units required, etc. need consideration while planning.

Food, shelter, clothing, hospitals, schools etc. should be made available according to the wants of the society. There should exist of balance between the wants of the society and the quantity of a product.

How to produce?

Following the decision regarding what to produce and how much to produce the question of how to produce arises. This denotes the method of production. How to produce is decided on the basis of the availability of resources and technology.

For example, the services of labourers or machines can be utilized for agricultural activities like preparing land for cultivation, sowing, weeding, manuering, harvesting, and threshing. The selection of a particular method is decided on the basis of available resources in an area.

The method of production varies with the availability of resources.

Examine whether the activities undertaken in the service or industrial sectors in your locality make use of locally available resources.

For whom to produce?

Production is undertaken to satisfy the wants of the society.

Human wants are unlimited. As soon as one gets satisfied, another crops up. However, we may not have the necessary resource to satisfy all our wants. Therefore, it is important to prioritize our wants.

We must plan production activities in such a way that it benefits the maximum number of individuals in the society.

It is also important how the income generated is distributed.

The total income generated is distributed as interest on capital, profit of the entrepreneur, wages of the labour, and rent of the land.

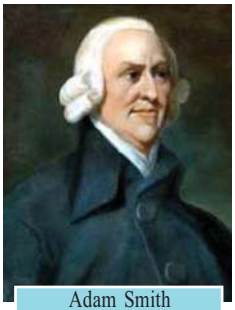
Discuss and prepare a note on how the basic economic problems are related to the economic activities like production, distribution and consumption.

Economics is not merely a study of wealth, it is also a study of man and society. The contributions of economic thinkers belonging to different periods have benefited the growth of Economics.

The ideas propounded by prominent western thinkers like Adam Smith (1723-1790), the father of Economics, have contributed to the growth of the subject. Let us see the ideas of a few.

Economic thinking

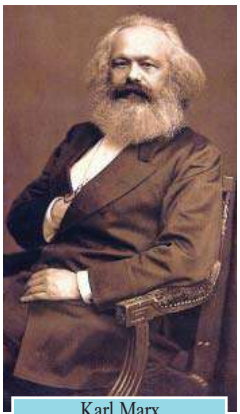
Adam Smith in his "An Enquiry into the Nature and Causes of the Wealth of Nations" has laid a strong foundation for Economics. He described Economics as the study of wealth. He wanted limited government intervention in the economic activities and argued for more freedom to individuals. This is known as the theory of 'Laissez Faire'.



Adam Smith
(1723-1790)

Discuss and record your views on the issue of government intervention in the economic activities of individuals.

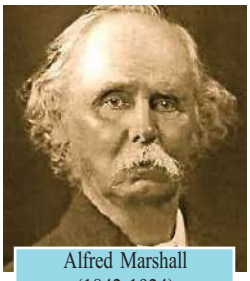
The Industrial revolution led to the establishment of new industries and labour union. There occurred marked changes in technology and production process. The ideas put forward by Karl Marx are rooted in these changes.



Karl Marx
(1818-1883)

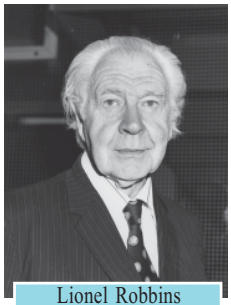
Marx gave importance to the role of labourers in the production process. He maintained that the basis of production is the manpower of labourers and that the price of a product is the reward for it. However, the laboures get only a portion while the lion's share goes to the capitalist as profit. Marx calls this surplus value. He dreamed about a society where there is no difference between the "haves" and the "have-nots". The ideas of Marx are contained in his magnum opus 'Das Capital'.

Alfred Marshall presented several new principles in the field of Economics. He believed that wealth should ultimately result in the welfare of the society. Economic activities must be welfare oriented. These principles are contained in his work 'Principles of Economics'.


Alfred Marshall
(1842-1924)

The world population reached 160 crore at the beginning of the 20th century and kept increasing.

- Are we able to produce resources for such a multitude of population?
- How can we judiciously utilize the limited resources?


Lionel Robbins
(1898-1984)

These questions prompted the British economist Lionel Robbins to concentrate on the ever increasing wants and limited resouces. He suggested that we should prioritize our wants for the judicious utilization of limited resources.

Paul A Samuelson, the American economist, presented his ideas in the beginning of the 20th century. He maintained that a nation's financial stability depends on efficient economic planning and proper utilization of resources.

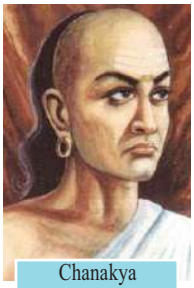

Paul A Samuelson
(1915-2009)

We have seen the prominent thinkers of the west. Now try to complete the table.

Thinkers	Basic ideas
Adam Smith	Study of wealth of nations
	Importance of labourers
Alfred Marshall	
	Unlimited wants and limited resources
Paul A Samuelson	

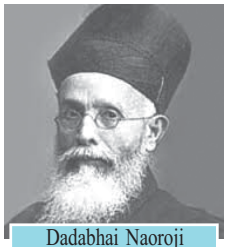
Examine the changes in economic thinking during various periods.

Indian thinkers have also contributed much to Economics.


Chanakya
(BCE 370 - 283)

India's economic thoughts date back to the Maurya dynasty. Chanakya, the chief advisor of Chandragupta Maurya, wrote the famous 'Arthasasthra'. It is a major work of the Indian economic thoughts. Lack of effective economic activities can bring a nation to ruin. He emphasized the importance of following the right policies for a nation's progress. This would help the nation to prevent loss of revenue. Chanakya played a key role in making Magadha a powerful nation.

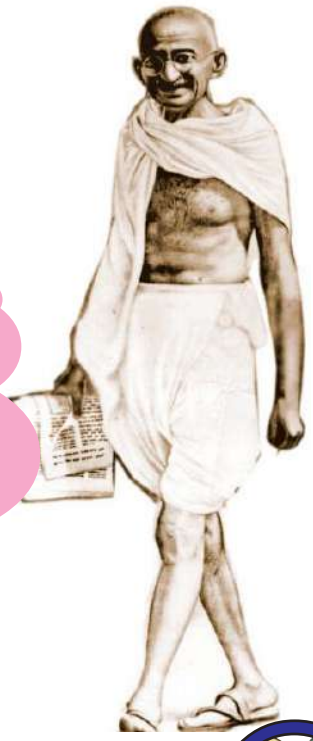
Dadabhai Naoroji, was a well known economist in British India. He pointed out that the Britishers were draining our resources and that this led to economic crisis and poverty. This is known as the Drain Theory. The main reasons for the drain of resources were the following.


Dadabhai Naoroji
(1825-1917)

- The British officers in India were paid high salaries.
- Goods made from Indian raw materials and resources bought at extremely low price were sold at a high price in the Indian market.
- Indian wealth was robbed for expanding the British Empire.
- Indian labourers were treated as slaves and farm and industrial products were exported to England.

The studies of Ramesh Chandra Dutt on British exploitation of India also strengthened the Indian economic thought. His studies revealed how the western civilization and British exploitation ruined India.

Gandhian Economics



Our objective is to distribute capital among the 7.5 lakh villages in our continent which is 1900 mile long and 1500 mile broad and not to concentrate it among a few individuals.

Mahatma Gandhi

Have you noted Gandhiji's words?

What is your response to this?

You may record it in your notebook.

It was Mahatma Gandhi, the Father of our nation, who contributed original ideas in Economics since Dadabhai Naoroji. His ideas can be found in his first book 'Hind Swaraj', published in 1909. Gandhiji's ideas gave importance to moral values and rural economy. His idea of 'trusteeship' led to fresh thoughts in the area. Through trusteeship, Gandhiji aimed at an economy which is founded on truth and non-violence.

Trusteeship

The main ideas of Gandhiji's 'trusteeship' are as follows:

- *The capitalist has to denounce sole ownership and declare that he holds wealth as a trustee of the public.*
- *A trustee has no other heir but the public.*
- *The nature of production is decided by the society and not by the individual's choice or greed.*
- *Just as we decide about minimum wages needed for a modest living, there must be a limit to maximum wage as well*

We can compile his main ideas as follows:

- Priority to rural-agricultural system.
- Emphasis on small and cottage industries.
- Formation of an economy built on equality.
- A self sufficient and self-reliant local economy.

Many Indian economists were impressed by the economic ideas of Gandhiji. Economists like J C Kumarappa, Sriman Narayan, and Dharampal wanted independent India's development to give priority to agriculture and small scale industry.

How significant are the economic ideas put forward by Gandhiji in the modern world?

Amartya Sen is an Indian economist, who received the Nobel Prize for Economics in 1998. His major works covered vast areas like welfare economics, economic inequality, and development.

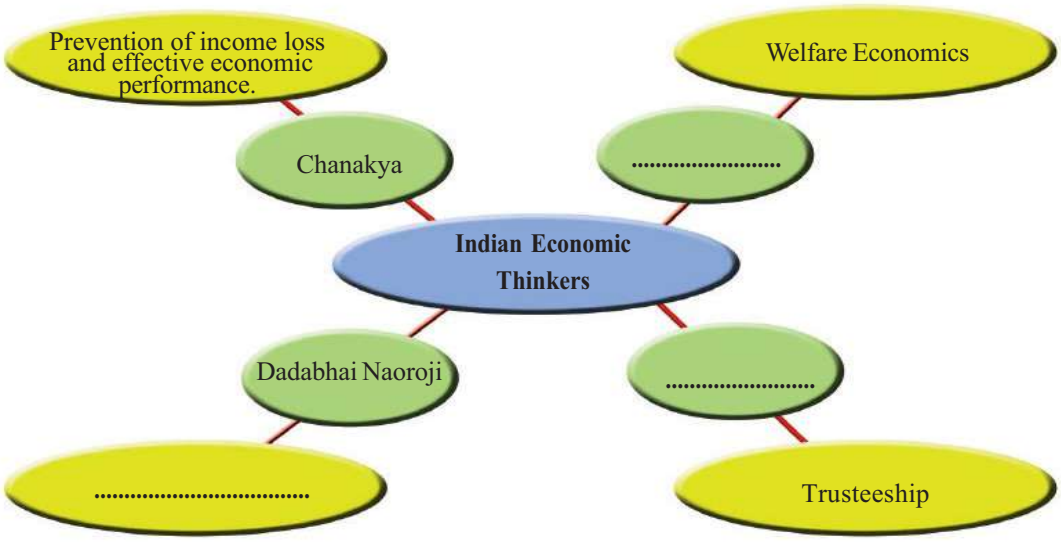
Amartys Sen
(1933-)

He pointed out the flaws in determining the poverty line and concentrated his studies on povery, inequality, and famine.

We have discussed the contributions made by some leading Indian economists during the various stages of development of Economics. Such thoughts influence the economic policy formulation of the country.

You have come across certain famous personalities who have made significant impact on Indian economic thinking. Use the Internet to collect information on the individuals who have made significant contributions to the field of Economics and prepare a magazine.

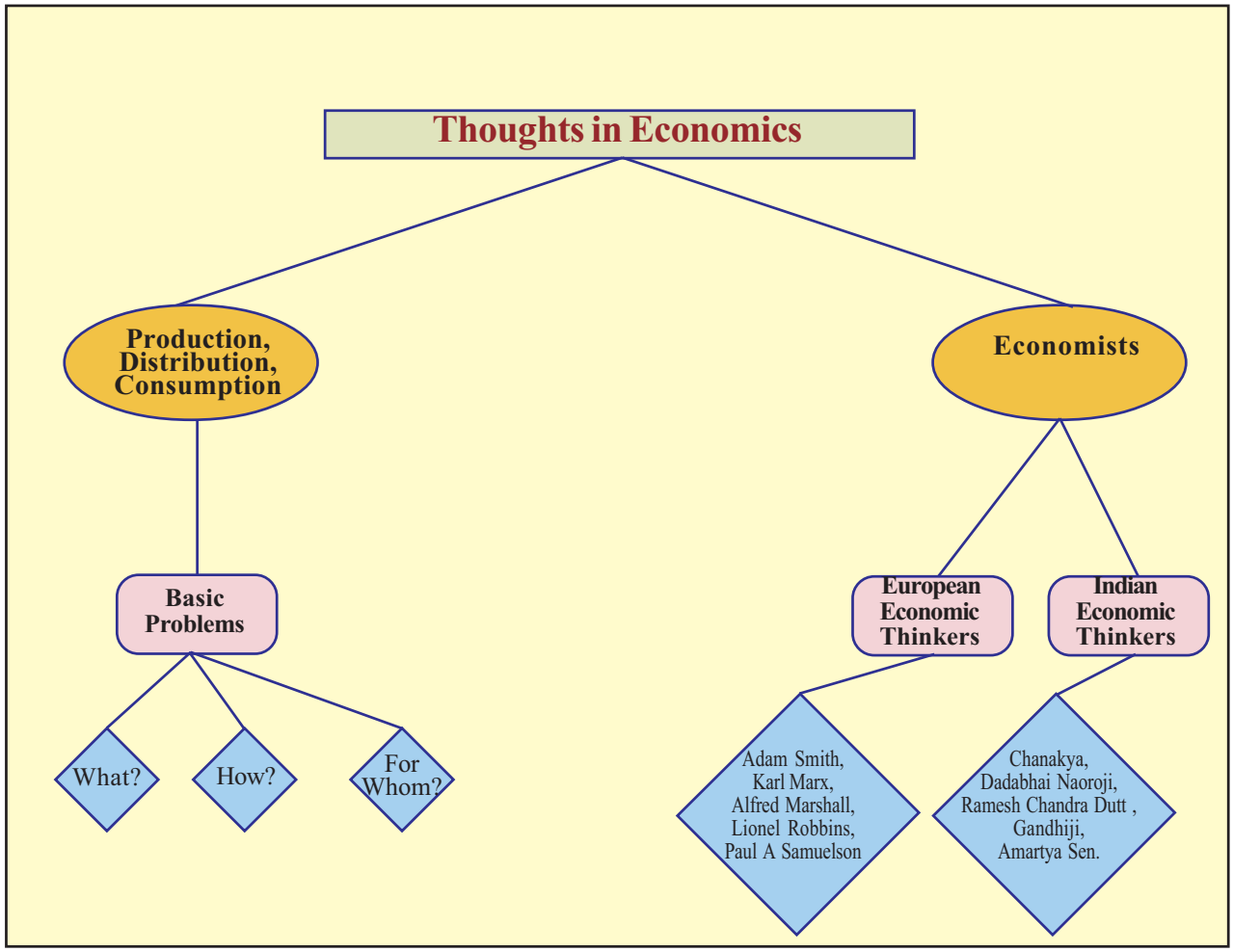
Complete the following chart



Economics is a constantly growing area of study. Its study enables us to find solutions to socio-economic problems and to understand the emerging world economic conditions.

- The basic economic problems are what, how, and for whom to produce.
- The study of Economics is very significant as it studies not only the production, distribution, and consumption of wealth, but also the human resources.

- Economics is defined differently during different periods.
- India's contribution to Economics is significant.



Significant learning outcomes

The learner :

- explains the basic economic problems
- explains the scope and significance of the study of Economics.

- analyses the approach and thoughts of European economists.
- analyses the difference in the definitions of Economics during different periods.
- realizes the significance of Gandhian economic thought in the present world.

- List any five activities related to production.
- Which are the four major factors of production?
- Evaluate the significance of the principle of Laissez Faire in the modern world.
- The various definitions of Economics reflect the socio-economic conditions prevalent at that time. Evaluate the statement.
- 'India of my dreams is a self sufficient village economy'. Evaluate the significance of Gandhian thought in the present day India based on this statement.
- Which are the basic economic problems?
- Explain the importance of the study of Economics.

- Prepare an album on European and Indian economic thinkers.

	Completely	Partially	Need Improvement
Can explain the basic economic problems			
Can distinguish between the various European thinkers and their ideas.			
Can clarify the changes in the definitions of Economics over the years.			
Can identify and present the contributions of India to Economics.			
Can analyse the significance of Gandhian Economics in the current context.			
Can analyse the scope and significance of Economics.			