



Do You Know?

The word 'map' is derived from the Latin word *mappo* which means a 'napkin' or a cover cloth.

several geographic, natural and cultural elements, such as mountains, hills, rivers, distribution of forests, rainfall, sources of irrigation, location of historical places, etc. A map can be folded, rolled or bound in a book and carried easily.

Map-making is an art and requires a special skill and training. The science of map-making is known as

Cartography, and the experts of map-making are called **Cartographers**.

History of Map-making

The earliest map was made in 2300 BC in Mesopotamia (Iraq). It was made on a clay tablet. But the maps of that period were not very clear. They only showed the boundary of the land.

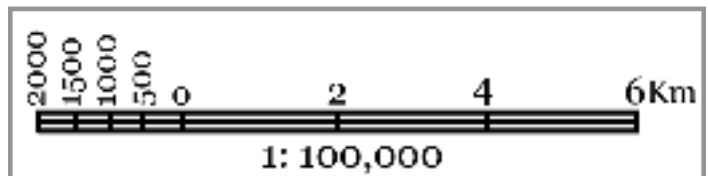
Different techniques of map-making were adopted in different parts of the world. Eskimos made maps by sewing animal skins of different colours. The Egyptians engraved the boundaries and features on metal plates.

The ancient maps were based on memory and information. They were not drawn to a scale. Thus, they can be called mere **sketches**.

Ptolemy, an Egyptian, was the first cartographer, who made the map of the world according to scale and direction. He was the first person to represent the earth as a sphere. He was known as the 'Father of map-making'.

Components of Maps

Let us now study the language or the components of the map which help us to read or interpret a map. The main components are— scale, direction, symbols and colour scheme.



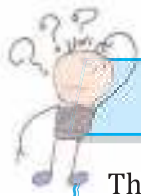
Scale

Scale: You know that a map shows a large area on a small sheet of paper. Each map is drawn according to a scale. The **map scale** is the ratio of distance between two points on a map with the corresponding distance between the same points on the ground. For example, the distance of 5 km on ground is represented as 1 cm on the on the map, the scale written on the map shall be 1 cm = 5 km.



Do You Know?

Mostly scale is represented in a form of a Linear Scale or RF (Representative Fraction). For example, 1:500 means 1 cm on the map is representing 500 cm of the ground.



Do You Know?

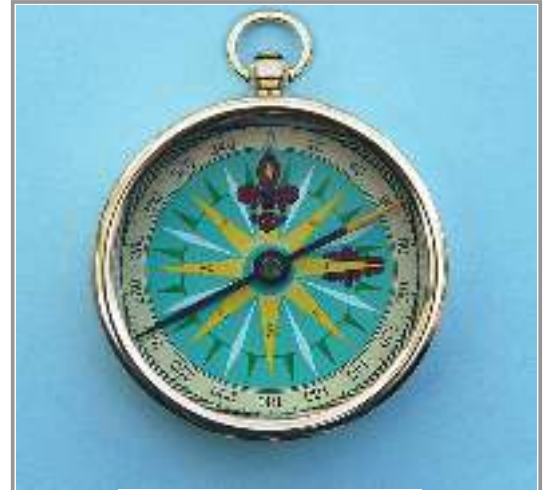
The Chinese invented the compass.

Direction: It is the second component of the map. **Direction** indicates the location and position of the places in relation to each other. North, South, East and West are the **Cardinal Points** of the compass. Other intermediate directions are North-west, South-west, South-east and North-east.

If we are in a field or travelling across an ocean, we use a compass to find the directions. A **compass** has a magnetic needle which rotates freely on a pivot. By placing the compass on a plain surface, the needle comes to rest. It then points towards the north and south direction. The darker or coloured side of the needle at rest, always points towards the North. Keep the compass away from metallic objects. It can cause a false reading if kept too close to them.

Symbols: Forests, rivers, hills, railway lines, and roads are shown by some common symbols on a map. With the help of common symbols, we can read a map made in any country without knowing the languages of that country. These symbols are known as **conventional symbols**. The symbols make the map reading easy and quick.

Colour Scheme: Like common symbols, a common **colour scheme** has also been adopted for showing different relief



Compass

Boundaries		Bridge	
International State		Railway Line	
Roads		Broad Gauge	
Metalled		Metre Gauge	
Non metalled		Temple	
River		Mosque	
Tank		Church	
Dam		Village	
Spring			
Conifer Tree			
Deciduous Tree			

Conventional Symbols

features on a map. **Blue** colour is used for showing water bodies, like oceans, seas, etc. Low lands and plains are represented by **green** colour. Higher parts, like plateaus and hills are shown by **yellow** and **orange** colours, while **brown** colour is used for showing mountains. Snow-capped areas are shown by using **white** colour. This scheme of colours for showing relief features on maps is the same throughout the world.

Types of Maps

Maps are broadly classified on the basis of scale or the type of information they contain. On the basis of **scale**, these are categorised as **large scale maps** and **small scale maps**.

- **Large scale maps**

They represent small area on large scale. Such maps are topographic maps which show greater details of cities, villages, mountains, etc. They represent these details with the help of contours and symbols. For example, the scale may be 1 cm = 1 km. It means one centimetre on a map is representing corresponding one kilometre of the ground.

- **Small scale maps**

Small scale maps are those maps which show larger areas with less details. Wall maps or atlas maps showing world, continents, countries and states with limited information are small scale maps. For example, the scale may be 1 cm = 100 km, i.e. one centimetre on the map is representing corresponding 100 kilometres on the ground.

Some maps represent a particular theme or a feature. Some of them are described below.

- **Political maps**

They represent the political boundaries of a village, city, state, country and continent. For example, the map of India showing its states, is a political map.

- **Physical maps**

They represent physical or relief features of a place. They generally show features like mountains, plateaus, plains, rivers, lakes, etc.

- **Thematic maps**

A thematic map emphasises a particular theme or special topic, such as the average distribution of rainfall, distribution of crops, minerals, population, lines of transport, etc., in an area. They are used to enhance one's understanding of the map's theme and purpose.

PLAN

A **plan** is a layout of a building, a factory, a playground, etc. It is drawn on a comparatively large scale and shows directions. The details of rooms, *varandahs*, open spaces, etc., are shown along with their dimensions.

The only difference between a map and a plan is that a map shows important and selected

features for definite purpose but a plan is a layout of very small area.

With the development of computer technology, the technique of map-making has undergone changes. A computer helps to draw very accurate, sharp and neat maps. If you compare an old map with a computer generated improved map, you can easily know the difference between them. The new maps possess high degree of accuracy.

ATLAS

An **atlas** is a collection of maps of the world, the continents and selected countries. It may also include information and diagrams dealing with various topics like the solar systems, geographical features of the earth, population data, etc.



Physical map



Political map

* Amravati is a proposed capital of Andhra Pradesh.



Keywords

- **three-dimensional**: an object that has height, width and depth.
- **two-dimensional**: an object with length and width.



Something To Know

A. Tick (✓) the correct option.

1. Which one of the following is a representation of the earth drawn on a flat surface?

(a) map

(b) globe

(c) plan

(d) sketch

2. Which one of the following symbols represents a bridge?

(a) 

(b) 

(c) 

(d) 

3. A compass is mainly used to—

(a) show the directions.

(b) calculate the distance.

(c) identify the details of a place.

(d) examine the height of a place.

4. Large scale maps are used for—

(a) small areas.

(b) large areas.

(c) areas of moderate extent.

(d) for showing specific themes.

5. Which type of map represents relief features like mountains, plateaus, plains and deserts?

(a) a political map

(b) a thematic map

(c) a topographical map

(d) a physical map

B. Fill in the blanks.

1. A _____ represents the three-dimensional view of the earth.

2. The technique or skill of making maps is called _____.

3. _____ is a drawing of a small area drawn from one's observation and memory without directions.

4. A _____ is a device consisting of a magnetic needle, which always points towards north.

5. _____ area are shown by using white colour on maps.

C. Read the statements given below and write an appropriate term for each.

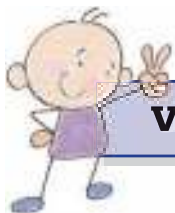
1. The most perfect approximation of the earth. _____
2. The device that helps the mariners to sail in the desired direction. _____
3. The experts of map-making. _____
4. Maps showing distribution of rainfall, population, etc. _____
5. A collection of maps of the world, continents and selected countries in a bound form. _____

D. Answer the following questions in brief.

1. What are the limitations of a globe?
2. Mention the advantages of a map.
3. What is a thematic map?
4. Name the cardinal points along with intermediate directions.
5. How do conventional symbols help in reading maps?

E. Answer the following questions.

1. Why is a globe considered a perfect representation of the earth? Give any three reasons.
2. What is a scale? Why is it an important component of a map?
3. Distinguish between a physical map and political map.
4. If you are lost in a jungle, how can a topographic map help you to come out of the jungle?
5. Describe the history of map-making.



Value Based Question

Christopher Columbus was an Italian born navigator who sailed for Spain. He thought earth is round and on the other side of Europe, India is located. He was seeking a western sea route from Europe to Asia. On the morning of October 12, 1492 he stepped ashore on an island in America with the impression that he reached India. Although, Christopher was mistaken in his goal but he helped the world to know about America. He had shown magnificent seamanship and powerful leadership. He had shown courage and dedication in his long voyage over the unknown sea of darkness.

'Christopher Columbus is known as a great voyager.' How does his life inspire you?



Map Skill

1. On a political map of India, label all the states with their capitals.
2. On an outline map of India, show the given geographical features by using appropriate colours.
 - (a) Arabian Sea
 - (b) Northern Plains
 - (c) Deccan Plateau
 - (d) The Himalayas



Something To Do

1. Get up early in the morning. Go to a nearby open space and locate the directions during sunrise.
2. Prepare a sketch of the route from your house to your school showing some landmarks on the way. Show every turning at 90° and mention the direction also.



Studying the Past

History is the study of change over time and progress from the past to the present world. It can be defined as a systematic description of the past events. It is based on facts and not on imagination. It helps us to learn about the great people, culture, art and architecture of the earlier times. History motivates us to make the present world a better place to live in.

Historians divide history into two parts:

A. Prehistory refers to that period when the art of writing was unknown. Our information about prehistory depends upon the remains of tools, bones, pottery and weapons that have been excavated. We learn about the age of artifacts through carbon dating.

B. History refers to the period after the invention of writing. The written records, dates, names of places and people may be on *bhojpatras*, palm leaves or pillars are source of information. History is generally categorised into three periods, namely, **Ancient**, **Medieval** and **Modern**.



Archaeologists working at an excavation site



Do You Know?

- AD does not mean 'After Death'. It is an abbreviation for '*Anno Domini*', which is a Latin phrase meaning 'in the year of our lord', referring to the year of Christ's birth.
- In most usages, BCE stands for 'Before the Common Era', and CE stands for 'Common Era'. BCE is used in place of BC, and CE is used in place of AD. The word 'common' in both instances refers to the Gregorian calendar. For example, 2015 can be written as CE 2015.

Let us see how a historian studies the Source Material (available evidences) and then draws conclusions. The source material can be divided into two categories—**Archaeological Source Materials** and **Literary Sources**.

Archaeological Source Materials

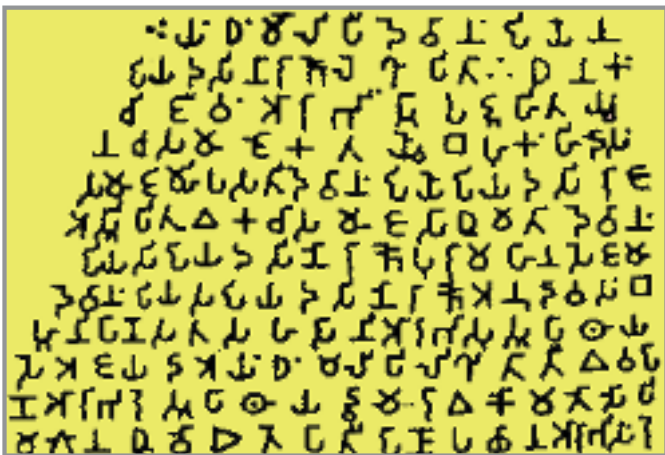
Some materials of the past are buried deep under the earth. They are either discovered by chance, or archaeologists dig certain places and



Mohen-jodaro

find ancient inscriptions, coins, pots or buildings. The study of these remains tell the archaeologists about the religious, social and cultural conditions of that time. For example, buildings excavated from Mohen-jodaro provide useful information about the Indus Valley Civilisation. The archaeological source materials are mainly – inscriptions, coins, monuments, sculptures, paintings, articles of daily use and skeletons.

Inscriptions are the writings which are engraved on rocks, pillars, clay tablets, the walls of the temples and caves. They tell us about the kings, their empires, achievements as well as the society and the language of that period. The inscriptions of Ashoka’s period tell us about his achievements in field of administration and the steps that he took like building hospitals, wells, etc., for the welfare of the public. The inscriptions were put up in places where the common people could read them easily. The study of inscriptions is called **Epigraphy**.



Ashoka’s inscription, Girnar (Gujarat)



Ashoka’s inscription

In earlier times, **coins** were made of different materials like lead, copper, bronze, iron, silver, gold and even leather. They give us useful information about the art, religion, rulers, the use of different metals and the level of development of technology.

The given picture of one such coin is of King Samudragupta. The study of coins is called **Numismatics**.



Coin of Samudragupta

Do You Know?

Coins of Indian rulers have been found in many countries. This indicates that India had trade relations with foreign countries.



Sanchi stupa

Monuments are the remains of temples, stupas, palaces and forts. These ancient buildings help the historians to collect information about the social and economic life, the religious beliefs, dress, art forms and architecture of that time.

Skeletons are also a very useful source of information. The students of Skeletal studies try to know every minute detail about the skeletons and list their findings. For example, the skeleton of a woman generally has broader hip or pelvic

area for child bearing. Jewellery found on the skeletons also helps in determining whether the skeleton belongs to a woman or a man.

Literary Sources

All written records of the past are known as **literary sources** or **manuscripts**. They are very important for the historians. Before the invention of paper, people wrote on dried palm leaves, *bhojpatras*, copper plates, etc. Some of the literary sources are as follows:

Religious Literature consists of the *Vedas* of the Hindus in Sanskrit, *Pitakas* of Buddhists in Pali and *Angas* of Jains in Prakrit. They tell us about the religious beliefs, society, customs and traditions of that time. The *Puranas* and the Epics, like *Ramayana* and *Mahabharata*, also provide useful information of that period.

Non-Religious Literature consists of prose, plays, poetry, grammar as well as the writings of Kautilya (*Arthshastra*), Kalidas (*Abhigyan Shakuntalam*), etc.

The **Secular Literature** throws light on the life of the people of that period. The account of events, by foreign pilgrims and travellers like Fa-hien (Chinese) and ambassadors like Megasthenes (Greek) who visited India in earlier times, are also important sources of information about ancient Indian history and culture.

Historical Literature consists of autobiographies of the ancient rulers and biographical sketches like *Harashacharita*.

The various sources of history provide knowledge about marvels of the past and inspire us to march forward to achieve greater heights.



Temple of Java and combodia



Do You Know?

The temples found in Java and Cambodia tell us about spread of Indian culture to distant countries in ancient times.



Keywords

- **archaeology:** the study of prehistory and history through excavation of sites.
- **artifact:** an object made by a human being.
- **autobiography:** an account of a person's life written by that person.
- **biography:** an account of someone's life written by someone else.



Something To Know

A. Tick (✓) the correct option.

1. Kautilya wrote the book—

(a) *Meghdoot*



(b) *Arthshastra*



(c) *Ramayana*



(d) *Harashcharita*



2. The period when art of writing was unknown is called—

(a) Prehistory



(b) Ancient history



(c) Medieval history



(d) Modern history



3. The study of coins is known as —

(a) Architecture



(b) Numismatics



(c) Calligraphy



(d) Epigraphy



4. Who is the author of *Abhigyan Shakuntalam*?

(a) Kautilya



(b) Tulsidas



(c) *Mahatma Buddha*



(d) Kalidas



5. The Chinese traveller who visited India was —

(a) Alexander



(b) Columbus



(c) Megasthenes



(d) Fa-hien



B. Fill in the blanks.

1. _____ are the remains of palaces and forts.

2. Jain literature was written in _____ language.

3. The study of inscriptions is called _____.

4. Historians divide history into two parts, namely, _____ and _____.

5. _____ literature consists of prose, plays, poetry, etc.

C. Answer the following questions in brief.

1. How does the study of the monuments help the historians?
2. The study of history help us to make the present world a better place to live in. How?
3. How do skeletal studies help us to identify gender differences?
4. What are the literary sources of Indian history?
5. Explain historical literature with an example.

D. Answer the following questions.

1. Distinguish between archaeological and literary sources.
2. How do the archaeological source materials help us to learn about our past?
3. What is more important in history – events, persons, places or dates? Give reasons to justify your answer.
4. How do secular literary sources throw light on the life of the people in any period of history?
5. How does the study of coins help the historians?



Value Based Question

Once, a foreign traveller came to meet Kautilya. It was dusk and darkness had just started to set in. When he entered his room, he saw that Kautilya was busy writing under the light of an oil lamp. With a smiling gesture Kautilya politely asked him to sit for a while. He then quickly finished the work.

After completing the work, he extinguished the oil lamp and lit another lamp. The traveller was curious to know why Kautilya did so. He asked Kautilya “Is this a custom in your country, when a guest arrives at your house?” Kautilya replied, “No my dear, actually when you entered, I was working on an official task. The oil filled in that lamp was bought from the money of National treasury. Now, when I am talking to you, this is a personal and friendly conversation. So, I cannot use that lamp now.”

1. Why did Kautilya decide to light another lamp?
2. What message does the story convey to the present day public servants or elected representatives of the people?



Map Skill

On the outline political map of India, locate and label the following places.

- (a) One of the cities of Harappan civilisation.
- (b) One place of Ashokan inscription found.
- (c) Place where Red Fort is situated.
- (d) One of the archaeological sites.



Something To Do

1. Take any five different coins of free India. Study them carefully. List the information that you can get from them like the metal used, dates, languages, pictures, denomination or any other information.
2. Solve the crossword.

M			U			R		P	
		M						L	
M		S				K			
		A				S			C
	H						Y		
		C							E

ACROSS (→)

- Handwritten record
- Information about past
- Religious books of Jains
- Language of Vedas

DOWN (↓)

- Ancient building
- Study of coins
- Home of ancient man
- Language of Buddhist literature

3. Do you ever wonder how the age of ancient tools, bones and other materials is determined? Read the following information and discuss with your teacher in the class.

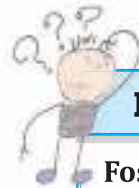
Carbon dating is a method of estimating the age of materials. This method, developed by Willard F. Libby can date samples that are as old as 50,000 years. It has proven to be useful in archaeology, geology, geophysics and other branches of Science.

Carbon dating is based on the fact that plants and animals contain carbon in a ratio that matches the percentages found in the atmosphere for as long as they are alive. This is true because most life on Earth is carbon-based; plants absorb it through photosynthesis and animals absorb it by eating plants or animals that eat plants. Once an organism dies, the carbon intake stops and the percentage of carbon-14 decreases. To calculate the date of an object, researchers compare the percentage of carbon-14 it contains to the normal percentage found in the atmosphere. **The lower the ratio, the older the object.**

We do not know the exact place of the origin of mankind. However, evidences indicate that human species may have developed in Africa as this area has favourable climatic conditions for the evolution of human life. It is believed that later on the human species may have wandered to Asia, Europe and America.

Our information about the life of the early man is based on the remains of objects, fossils and tools that have been excavated from different parts of the world by the archaeologists. Most of the tools are made up of stone. The period when the stone tools were used is known as the **Stone Age**. It is divided into three main phases:

- **Palaeolithic Age or Old Stone Age**
- **Mesolithic Age or Middle Stone Age**
- **Neolithic Age or New Stone Age**



Do You Know?

Fossils are the remains or impressions of dead plants, animals and human beings embedded in rocks.



Archaeological Sites of Stone Age