

GEOGRAPHY

Maps

Globes and Maps

We widely use maps to study the different places on the Earth. Though, a globe gives us a three dimensional representation of the Earth, it has a few disadvantages. Following are the differences between a globe and a map:

Map	Globe
It is a two dimensional representation of the Earth.	A globe gives us a three dimensional representation of the Earth.
A map is easy to carry and use.	Often globes are difficult to carry as they are bulky.
In a map, we can study about villages, districts and cities.	A globe is useful only if we have to study continents and oceans.
A map presents a distorted view of the location, shapes and sizes as it is flat.	As a globe is round, it presents a less distorted images of continents, distance between them etc.

A map is a drawing of the Earth's surface or its part on a flat surface according to a scale. The collection of various maps in a book is called an **Atlas**. The maps in an atlas are of different sizes and scales.

Different Types of Maps

There are broadly three different types of maps:

Physical Maps: These maps display the physical features of the Earth like plains, plateaus, mountains, rivers etc. These maps are also called relief maps.

Political Maps: These maps show the villages, towns, cities and countries of the world with their boundaries.

Thematic Maps: These maps only provide us with specific information such as the demographic map of Asia, distribution of minerals in a region, distribution of rainfall etc.



A physical map showing the relief features of India



A political map showing the boundaries of cities, states, countries and continents



A map showing the natural vegetation of India is an example of a thematic map.

Components of Maps

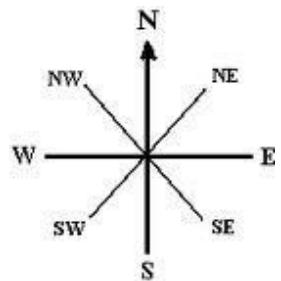
Distance, direction and symbols are the three components of a map.

Distance

- Since the various parts of the Earth are represented on a sheet of paper in a map, we draw these (maps) on a reduced scale.
- The actual large distance is represented by small distance in a map.
- A **scale** is the ratio between the actual distance on the ground and the distance shown on a map. For example, the distance between your home and your friend's home is 20 km. If we have to show this distance on a map, then we will take 1 cm = 10 km. It means that 1 cm on a map will represent a distance of 10 km.
- If you know the scale, you will be able to calculate the distance between any two places on a map.
- A smaller scale is used for displaying larger areas like continents or countries on a map. For example 2 cm may be used to show 200 km of the ground. Such maps are called **small scale maps**.
- When a small area like a village or a district is shown on a map, then a larger scale is used. For example, 2 cm on the map will now show 200 metres only. Such maps are called **large scale maps**. Such maps give us more information than the small scale maps.

Direction

- Maps usually have an arrow marked with the letter 'N' at the upper right hand corner. This arrow depicts the North direction. The other directions which are shown are East, South and West. These four directions are called the cardinal points.
- North-East (NE), South-East (SE), North-West (NW) and South-West (SW) are known as the four intermediate directions.
- With the help of these intermediate directions, we can easily locate places.
- We can also find the direction of a place with the help of a compass. The magnetic needle of a compass always points towards the North-South direction.

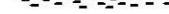


The intermediate directions we can easily locate the places.

Symbols

- Symbols are an important component of a map.
- In any map we cannot draw the actual shape of different features such as roads, railways, bridges etc. This is the reason why these features are shown using various symbols.
- Symbols help us to find a place or collect information about a place even if we do not know the language of a region.
- Symbols are the universal language of a map which can be understood by all.
- There is an international agreement regarding the symbols which are to be used for depicting various features in a map. These are called conventional symbols.
- Certain relief features such as mountains, water bodies, plains and plateaus are represented by brown, blue, green and yellow colours respectively.

Example of symbols

Point features	Linear features	Area features			
Tower	○	Highway	=====	Moraine	
Lighthouse	○○	Railway	-----	Coral reef	
Bridge	~~~~	Powerline	-----	Lake	
Building	■■	Trail	-----	Swamp	
Campsite	▲	Boundary	—-	Tidal flat	
Survey marker	△	River	~~~~	Mangroves	

Some symbols used on a map.

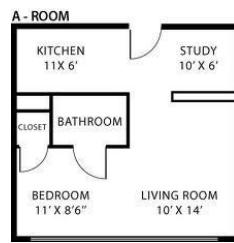
A Sketch and Plan

A rough drawing, drawn without a scale, is known as a **sketch** map. A sketch is drawn mainly on the basis of observation and memory.

A **plan** is a drawing of a small area on a larger scale. It helps us to find various things like the length and breadth of a room, which is not shown in a map.



Asketch



Aplan