



A map is a representation or a drawing of the earth's surface or a part of it drawn on a flat surface according to a scale. Maps are useful to us for various purposes. One map shows a small area and a few facts. Another map may contain as many facts as a big book. When many maps are put together, we get an Atlas. Atlases are of various sizes, measurements drawn on different scales. Maps provide more information than a globe.

Difference between a globe and a map

A globe	A map
<ul style="list-style-type: none"> • A globe is a three-dimensional model of the earth • Globes show very few details. • Globe show the shapes and size of countries accurately. • One can view only a part of the world at a glance on a globe. • A globe shows the whole Earth; it cannot show only a part of the world. • It is inconvenient to carry a globe. 	<ul style="list-style-type: none"> • A map is a two-dimensional representation of the earth. • Maps can show large amounts of detail. • The shapes and sizes of countries get distorted in a map. • One can view the entire world at a glance in a world map. • Maps can be drawn to show the whole world, or a part of it. • It is easy to carry maps

Maps are of different types. Some of them are described below:

Physical Maps: Maps showing natural features of the earth such as mountains, plateaus, plains, rivers, oceans etc. are called physical or relief maps.

Political Maps: Maps showing cities, towns and villages and different countries and states of the world with their boundaries are called political maps.

Thematic Maps: Some maps focus on specific information; such as road maps, rainfall maps, maps showing distribution forests, industries etc. are known as thematic maps. Suitable titles are given on the basis of information provided in these maps.

Cadastral Maps: They are village maps which show trees, fields, streams, settlements, village schools, temples etc.

Components of maps: Title, Distance, direction and symbol, latitude and longitude.

Title: It states the purpose or theme of the map. For Example, India-Political, world- Physical, Chennai-Road Map.

Distance: Maps are drawings, which reduce the entire world or a part of it to fit on a sheet of paper. The scale of a map is defined as the ratio between the distance on the map and the corresponding distance on the ground. The scale of a map can be represented in different ways: -

Verbal or Statement Scale: A verbal scale describes the scale in words. For Example: 'One centimeter on the map is equal to one kilometer on the ground.'

Representative Fraction (RF): A representative fraction represents the scale of a map in terms of a fraction or a $\frac{\text{Distance on the map}}{\text{Actual distance on the land}}$ ratio.

For example, if 1 cm on the map represents 1 Km (equal to 1,00,000 cm) on the ground, we say the RF of the map is: $\frac{1}{1,00,000}$ or 1:1,00,000

Linear Scale: A linear scale is one where the scale of the map is represented by a straight with uniformly spaced divisions.





Large scale and small scale maps: When large areas like continents or countries are to be shown on paper, then we use a small scale. For example 5 cm. on the map shows 500 km, of the ground. It is called a small scale map.

When a small area like your village or town is to be shown on paper, then we use a large scale that is 5 cm. on the map shows 500 meters only on the ground. It is called a large scale map.

Large scale maps	Small scale maps
<ul style="list-style-type: none"> • Cover smaller land area on the map. • Provide a great deal of detail • e.g., a city map or a street map or a village map • Scale=1:100,000 	<ul style="list-style-type: none"> • Cover larger land area on the map. • Provide small amount of details • e.g., world map in an atlas • Scale=1:10,000,000

Direction: Most maps contain an arrow marked with the letter ‘N’ at the upper right hand corner. This arrow shows the north direction. It is called the north line. There are four major directions, north, south, east and west. They are called cardinal points. Other four intermediate directions are north-east (NE), south east (SE), south west (SW) and north-west (NW).

The direction of a place can be finding with the help of a compass. It is an instrument used to find out main directions. Its magnetic needle always points towards north-south direction.

Symbols: It is the third important component of a map. It is not possible to draw on a map the actual shape and size of different features such as buildings, roads, bridges, trees, railway lines or a well. So, they are shown by using certain letters, shades, colors, pictures and lines these symbols give a lot of information in a limited space. With the use of these symbols, maps can be drawn easily and are simple to read. Maps have a universal language that can be understood by all. There is an international agreement regarding the use of these symbols. These are called conventional symbols.

Sketch: A sketch is a drawing mainly based on memory and spot observation and not to scale. Sometimes a rough drawing is required of an area to tell where a particular place is located with respect to other places. Such a rough drawing is drawn without scale, and is called a sketch map.

Plan: A plan is a drawing of a small area on a large scale. A large-scale map gives lot of information, but there are certain things which we may sometimes want to know for example the length and breadth of a room, which can't be shown in a map. At that time, we can refer drawings drawn to scale called a plan.

