

More Study Materials, detailed explanation on Essential Components of Maps

A map is a representation of a part or whole of the Earth's surface drawn according to a scale. A map is usually drawn on paper. Ancient maps were drawn on wood and cloth as well. A map gives an overall bird eye view of the area. Another representation of the Earth's surface is through a Globe. While a Globe is a true spherical representation of the Earth, you cannot view all parts of the earth unless you rotate the globe. In case of a Map, the Earth can be viewed entirely. Thus, maps were devised to learn about the Earth and study the various features present on the surface of the Earth.

Christopher Columbus who discovered the Americas is thought to have been guided by the map of the world made by the German Cartographer Henricus Martellus in 1491.

Essential Components of Maps

There are three Components of Maps – distance, direction and symbol.

Distance is shown on a map with the help of a scale. The scale is the ratio between the actual distance on the ground and the distance shown on the map. As a small distance on paper represents a very large distance on the ground, the scale has to be drawn in a precise manner. This reduction is done very carefully so that the distance between the places appears real. For example, the distance between your house and your grandparents' home is 10 km. If you show this 10 km. distance by 2 cm on a map, it means, 1 cm on the map will show 5 km. on the ground. The scale of your drawing

will be $1\text{ cm} = 5\text{ km}$. Thus, scale is very important in any map. If you know the scale, you will be able to calculate the distance between any two places on a map. A small scale is used to show large areas like continents in a map. A small scale will be for example 5 cm on the map which represents 500 km. 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 metres only on the ground. It is called a large-scale map. Large scale maps give more information than small scale maps.

The second component of Maps is Direction. Most maps contain an arrow marked with the letter 'N' at the upper right-hand corner. This arrow points at the northern direction. When you know the north, you can find out other directions, for example east, west and south. There are four major directions, North, South, East and West. They are called cardinal directions. Other four intermediate directions are north-east (NE), southeast (SE), south-west (SW) and north-west (NW). It is easier to locate any place accurately with the help of these directions. A compass is an instrument used to find the main directions. Its magnetic needle always points towards north-south direction.

The third important component of a map is Symbols. Symbols help us to represent the physical features on the ground that have been shown on the 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, colours, pictures and lines. These symbols provide a lot of information in a limited space. 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. Various colours are used for the same purpose. For example, generally blue is used for showing water bodies, brown for mountain, yellow for plateau and green is used for plains.

Very Short Answer Questions

1. A drawing based on memory is called?
2. The main directions are called?
3. What do physical maps contain?
4. Which type of map will you see to find rainfall and temperature of a place?

Short Answer Type Questions

1. What is a small scale map?
2. What would you use to show the interior of your room?
3. How are political maps useful?
4. Why do we study maps?

