

Mapping Skills



Learning objectives

- To introduce maps
- To read maps using its components
- To learn the methods of surveying and other techniques of acquiring map data like aerial photography and satellite remote sensing
- To gain knowledge of the latest techniques of mapping, namely GIS and GNSS



Introduction

With maps on hand, one can see the world in one sweep. A map is worth a thousand words. Mapping skills are the basics to understand a map and to interpret the area depicted. Maps are introduced with its components such as scale, signs and symbols. Surveying is the process of recording the measurement of a land area. Its outcomes are the data sources of maps. This lesson deals with the latest techniques of mapping - remote sensing, GPS, GIS, global navigation system and web maps of the 21st century.

7.1 Map as a Tool

A map is the basic tool of a geographer. It illustrates the earth's surface clearly and effectively through a combination of drawings, words and symbols. Thus, maps form an integral part of teaching geography. A map is a location guide.



A cartographer is one who measures, analyzes and interprets geographical information to create maps and charts for political, cultural and educational purposes.

7.1.1 Maps and Cartography

Maps are drawings of an area as seen from above. A map is defined as the miniature image of the 3 dimensional earth's surface on a paper/cloth or any flat surface. Maps can show a whole or part of the world. Maps are drawn to a scale and direction. Maps have legends to explain the meaning of symbols and colours used on it. The art of map - making is called **Cartography**.

7.1.2 Components of a map

A map should include the following components namely, the title, scale, direction, grid system, projection, legend, conventional signs and symbols.



(A) Title

It indicates the purpose or theme of the map. Example: India – Physical, World – Political, Tamil Nadu – Transport.

(B) Scale

Scale makes it possible to reduce the size of the whole earth to show it on a piece of paper. A scale is a ratio between the actual