

Ch. 4 MAPS, Introduction

INTRODUCTION

- A globe can be used to study the Earth as a whole. It helps us to understand Earth's rotation, revolution & formation of seasons on the Earth.
- A globe cannot provide specific details about a country, city, district or village. So we need maps to locate places, find direction, routes, distances, etc from a paper, or picture.
- What are maps?
- Maps are a diagrammatic representation of earth's surface or a part of it.
- It can be ~~defined~~ defined as a 2D whole or part of Earth, drawn to ~~scale~~ scale on a flat surface.
- Atlas: - A collection of maps is called an Atlas.

Maps

Components of maps

A Map should include — title, scale, direction, latitude & longitudes, key or legend.

Title — It states the purpose or theme of the map.

Scale — It is the measure of the map. It is the ratio of the distance on the map & the corresponding distance on the ground.

Verbal scale — A verbal or statement scale gives a written description of the scale.
ex = 1 cm = 10 km

Representative fraction (RF) — A Representative Fraction represents the scale of a fraction or a ratio between the distance on map to distance on ground.

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

Large & small scale maps - Scale is the ratio of distance on the map to distance on ground. So larger the scale the smaller area it covers.

Direction - They are an essential part of a map.

Cardinal points - The cardinal points are North, South, East, West.

Inter cardinal points - The inter cardinal points are - North east, North west, South east, South west.

Compass - most common instrument to locate direction.

Latitude & longitude - Maps also show the latitude & longitudes within which the area being mapped located. This is called the coordinate system.

The key or legend - The key or legend of a map helps us interpret & understand the important

information contained in it.

Key - explains the conventional signs, symbols, patterns, colours used in map

Legend - legends are always shown at the bottom of a map with appropriate explanation.

Conventional signs & symbols :-

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Maps give us lots of information about Earth's surface. This information isn't in the form of pictures it's in the form of symbols.

The symbols are concrete representation of a real life object. As it isn't possible to show the actual size of roads, trees, ponds, bridges, lakes on the map, so they are shown by using certain symbols look very similar to the real life features they represent.

These symbols are also known as conventional symbols. Things like roads,

tracks, railway lines, ponds, temples, church, mosques, bridges, post offices etc all have symbols which are standardized.

• **Colours:** - Colours are used in a map makes the map look good & also provide definite information.

• Different colours are used to indicate specific features. For example - black indicates cultural features like buildings, roads, railway line etc. blue indicates water bodies, green indicates plains & forests, brown is mountains.

Sketch - A sketch is a rough free hand map. It's not made to scale & just give the broad guide lines to find or locate place. It represents the main feature of an area or a specific place. They're not accurate in dimension & detail.

- **APlan** - A plan is a map, of a very detailed drawing of a Building or a structure. It's a drawing of a very small area on large scale.
- Plans always drawn to scale. It covers length, breadth & height of the building & space. It also gives a lot of information of a specific area.
- Normally architects make plan for houses, building, offices, etc.
- **Cartography** - The art or science of making maps is cartography. In the past cartographers made maps using pen & paper.
- **Digital maps** these maps are stored in a digital format accessible on a computer rather than paper. Cartographers get additional information from satellites which take images of earth from space with remote sensing devices.
- **Remote sensing** ~~devices~~ is the art

of a acquiring information about
objects, area, or phenomena, witho
ut coming close into physical contact
with objects or area under study.