

12

Understanding the Map



Tourists visit different tourist destinations of Gujarat like- Somnath, Dwarka, Tarnetar, Ambaji, Dhordo, Saputara, etc. In spite of being unknown with the geographical area of tourist destinations, they can reach the destination very easily. What is the reason of it ? The reason is only that they have map, showing tourist destinations. They can receive information of the tourist (spots)/destinations by reading different maps.

In the present time, maps have proved very useful for many other objectives besides tours. Today, in the age of science and technology you can reach any place in the world with the help of GPS (Global Positioning System). Let us understand the map in this chapter.

Globe of the earth is very important to study the earth, but map is more important to study any one continent, country, state, district, Taluka, city or any village of the earth.

The word 'Map' is also called 'Naksha' in Hindi. Map word is derived from the Latin word "Mappa Mundi". The meaning of it is the piece of cloth that can be held in the hand. In the general sense drawing of earth surface or any one part of the earth on the plain flat paper is known as a map. Many details of any large area can be included in the map.

Atlas Map

An Atlas is a collection of maps showing various details of the earth or its larger part. It contains political, administrative, natural and cultural details. Complete details of any concerned region can be known by map. Map shows important details of various regions like physical details (mountain, plateau, plain, river, lake etc.) and cultural (transportation, industries, farming, irrigation etc.) too.

Types of Map

There are two types of maps : (1) Thematic map and (2) Scale Based Map

(1) Thematic Map : Such type of maps are prepared according to the requirement of necessary details. Thematic maps are categorized into two main sections based on the natural and cultural details depicted in them (A) Physical maps (B) Cultural maps.

(A) Physical Map : Map that shows physical details is called Physical Map. Physical map displays (showcases) natural land forms like mountains, plateau, plain, rivers, oceans etc. Maps showing the details of wild animals, vegetation, forests, minerals etc. are part of the Physical Maps.



(i) Topographic Map : Landscape like mountains, plateaus, plains, water ways etc. are shown in this type of map.

(ii) Climate Map : This map focuses on the details of climate, temperature, rainfall, winds etc.

(iii) Astronomical map : Information about celestial bodies like planets, satellites, galaxies, stars (constellation) etc. are shown in astronomical maps.

(B) Cultural maps : The map which outlines the man made details is called cultural maps. This map outlines various human activities. The map of state, farming, population, transportation are the examples of cultural map.

(i) Political map : The map which shows the details of continent, country, local administration and their frontier are called political map.

(ii) Industrial map : This map shows the details of industrial sector, phased history of industries, production etc.

(iii) Historical map : The map which shows history of regional and national administration is called historical map.

Apart from this there are two types of map on the basis of scale.

(2) Types of map on the basis of scale : Generally if the scale of a map is less than 1 cm : 50 km then that map is called **large scale map**. In this map 1 cm is equal to 50 kms that is real distance on the earth. Large scale map shows more details. District, city or village maps are the examples of large scale map. Small scale map shows large area of the earth's surface e.g. map of different continents are called map of small scale. World map, country map, maps of Atlas are the examples of small scale map. There are four types of small scale maps (1) Atlas (2) Cadastral (3) Toposheet [Site Map] (4) Wall map.

Make a list of maps available in your school and write down in the given below table. Note down the details shown in the maps :

Table

S.N.	Name of the map	Detail of map
1.		
2.		
3.		
4.		
5		

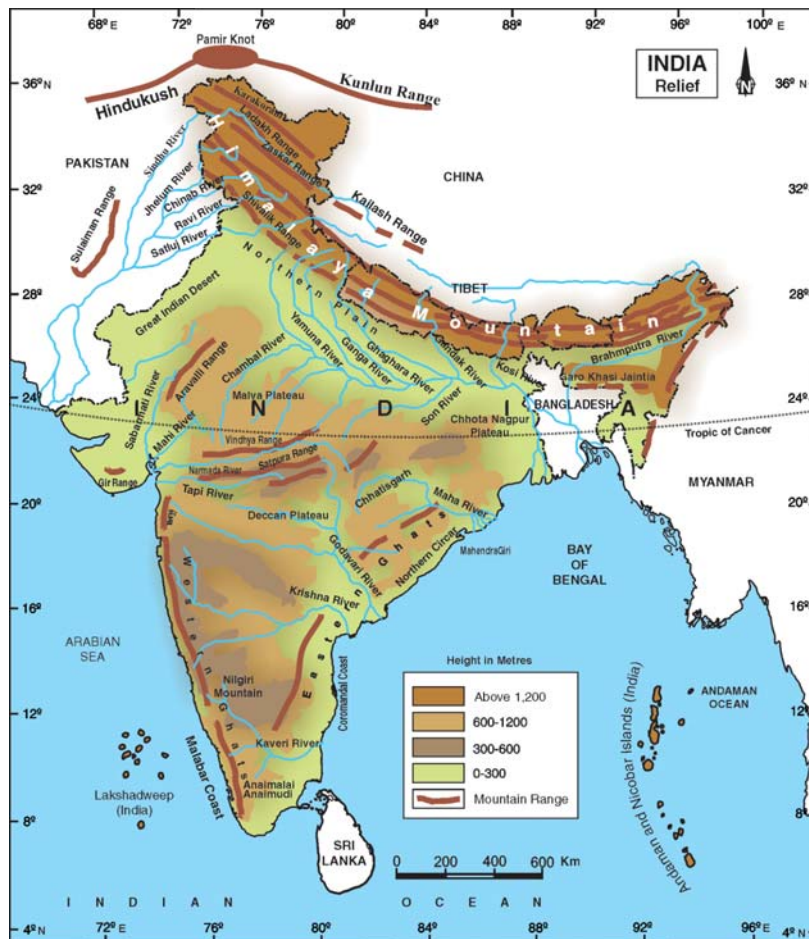




12.1 Gujarat



12.2 India



12.3 India



12.4 World

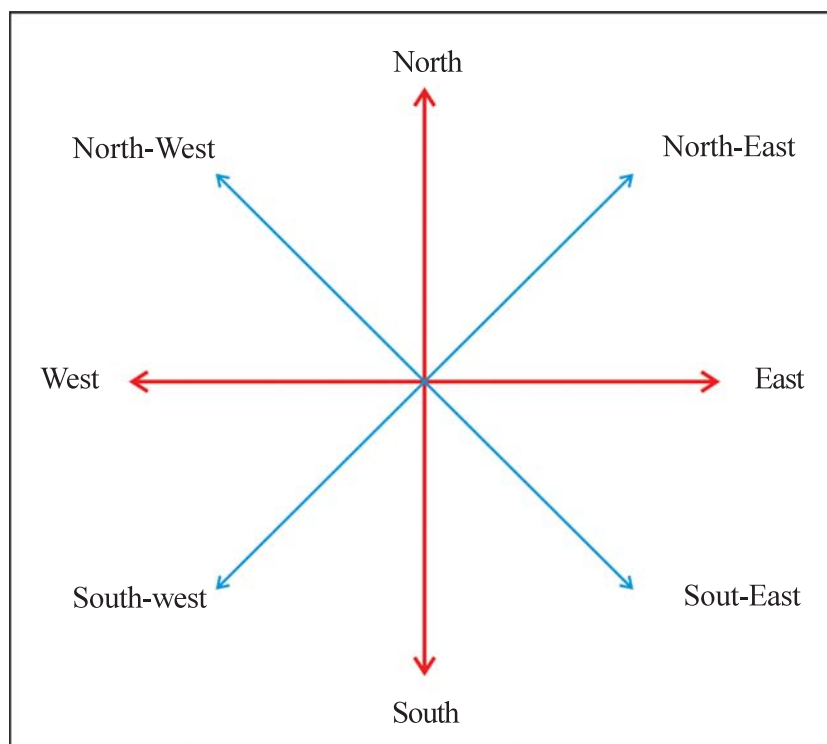
Things to know :

There are three main mapping institutions in India.

- NATMO (National Atlas and Thematic Mapping Organisation) This organisation is in Kolkata and produces maps showing distribution.
- NRSA (National Remote Sensing Agency). This organisation is in Hyderabad. They draw map with the pictures taken by satellite stationed in the space by ISRO.
- Survey of India : This organisation is in Dehradun. This organisation allows for creating map and gives permission for their uses. Maps of our textbook are certified by this organisation.

Components of map : There are three components of map. These three parts are direction, scale and Conventional Signs [symbols].

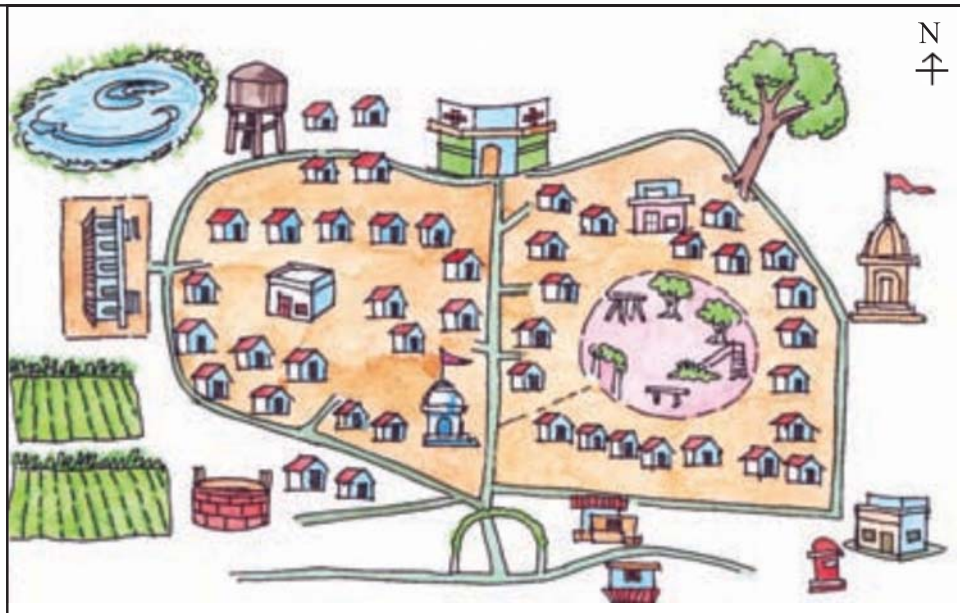
Direction : Generally when you observe the map, you see the sign of \uparrow with an 'N' below it. This arrow sign indicates the north-direction. If you have knowledge of north direction then you can easily decide about rest of the directions. If you stand facing the rising sun then that time north direction will be at your left hand side, south direction will be at your right hand side. While west direction will be at your backside and east in the front.



12.5 Cardinal Direction

Four main directions are shown in the above mentioned figure 12.5 while others are intermediate directions and angles. North-East : Ishaanya, South-East : Aagneya, South-West : Nairutya and North-West called Wayavya. Any of the place can be found-out in the map with the help of directions and intermediate directions.





Answer the following questions on the basis of above mentioned figure :

- (1) Direction of temple
- (2) Direction of well from post office
- (3) Direction of water tank from the pond
- (4) Direction of post-office from the farm

12.6 Drawing of Village

Things to know

Compass

Compass is a device developed on the basis of the properties of magnet. There is a magnetic needle on the axis that can move freely inside the compass box which is covered by a glass. N and S are marked on the needle. Compass is used in the ship, steamer, submarine, aircraft etc for determining the direction.



12.7 Compass

Think

- Why does a needle of compass always remain in the north-south direction ?

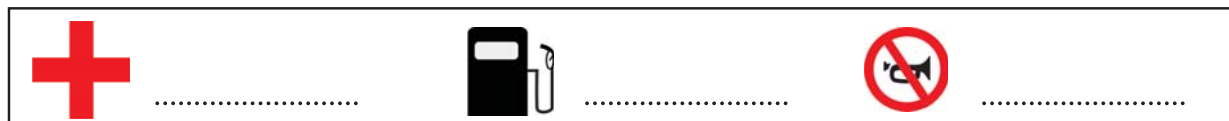
Scale

Ratio of the distance between any two places on the earth and the distance between those two locations on the map is called scale. Scale is 1 cm : 100 km means 1 cm shown in the map is actual 100 kms distance on the earth. Distance can be found using the thread and scale.



Conventional Signs

Student friends, you might have observed many special signs or symbols when you come to the school from home. Draw the seen signs given in the table and discuss about them in the class-room.



12.8 Identify the Signal







Various physical and cultural details are shown in the map with the help of some signs. Which are called conventional sign. Definite alphabate, shadow-light, colour, pictures and lines are used to show conventional signs in the map. Physical and cultural details can easily be shown in the map with the help of conventional sign. Conventional signs of map are in simple and universally accepted language. Since there is an international agreement regarding these symbol/sign, so conventional signs are used in the map. Observe the conventional signs in the table given below and then understand with the help of your teacher :

Matter	Conventional Sign	Matter	Conventional Sign
Mountain		North direction of map	
Hill		District boundary	
Peak		State-boundary	
Pass		International-boundary	
River		Scale	
Confluence of rivers		Capital of Country	
Dam on the rivers		Capital of the State	
Pakka road		District Headquarter	
Rail route		City	
Light House		Forest	
Post-Office	PO	Police-Station	PS
Circuit-House	CH	Post and Telegraph Office	PTO

12.9 Conventional Signs



Apart from signs, different physical and cultural details can be shown with the help of different colours and choropleths. Physical and cultural details given in the table are shown in the map with the help of colours :

Details	Colour	Colour
Land-forms	Brown	
Water-bodies	Blue	
Vegetation-region	Green	
Rail-route	Black	
Roadways	Red	
Agriculture	Yellow	

12.10 Colour level Indication

Location of India

India is a vast Landpart. India lies in the north-east hemisphere of the earth. India lies in the south of the continent of Asia. Himalayan mountain range is situated in the north of India. Bay of Bengal is situated in the eastern direction and Arabian sea is situated in the western direction. The area of main land of India lies between $8^{\circ} 4'$ to $37^{\circ} 6'$ North latitude and $68^{\circ} 7'$ to $97^{\circ} 25'$ East longitude. Tropic of cancer passes almost through the centre part of India.

At present, India is divided into 28 states, 7 union-territories and 1 national capital region for the sake of easy administration.

(Note : This information is up to the beginning of the year : 2019)





12.11 India Political

Exercises

1. Fill in the blanks :

- (1) Mappa Mundi is word of Language.
- (2) There are main components the map.
- (3) details are shown in the cultural map.

2. Match the following details in proper order :

A

(1) 

(2) PO

(3) 

(4) 

(5) 

B

(a) Post-Office

(b) International boundary

(c) River

(d) Scale

(e) North Direction

(f) Police Station

3. From the following statement put (✓) Mark against true/correct statement and (✗) against the false statement :

- (1) Oceans are shown in the cultural map.
- (2) Vegetation region is shown with green colour in the map.
- (3) India lies in the North West Hemisphere of the earth.
- (4) The map showing different continents is a large scale map.

4. Answer the following questions in one or two lines each :

- (1) Write the types of Thematic map.
- (2) What is meant by Conventional signs ?
- (3) How many Union Territories are there in India ?

5. Answer in short :

- (1) Differentiate between scale based maps and cultural maps.
- (2) Mention the components of maps on the basis of scale. Give two examples of small scale.
- (3) Write about the main-parts of the map, as well as about its scale.
- (4) Write in short about the location of India on the basis of map.



6. Observe the map to answer the following question :



12.12 India - Political Map

- (1) In which direction of India is Himachal Pradesh situated ?
- (2) In which direction of Gujarat is Madhya-pradesh situated ?
- (3) In which direction of India is Arunachal pradesh situated ?
- (4) Which state is situated in the north direction of Kerala ?
- (5) Which union-territory is situated to the south direction of Gujarat ?

● Visit the following websites to know more details :

www.surveyofindia.gov.in/
<http://www.natmo.gov.in>
<https://nrta.gov.in/>

