



Reading and Making Maps

Maps tell us several things about different places: where they are; whether they are on the sea or on a mountain or in a desert; how hot or cold or rainy they are; what kind of trees and plants grow there; what kind of people live there - the language they speak, the work they do, their settlements etc. You can know many details about a place from maps. Of course, not everything is shown on one map. You may have to consult different maps (physical maps, political maps, historical maps etc.) to get all the information. Shall we learn how to make and read a map?

District Political Map

You may have seen several maps in your classroom such as the map of India, the map of Telangana etc. Today, we will study the map of our own district.

- ◆ Bring two or three copies of the map of your district to the class.
- ◆ Locate your village/town, the nearby villages, towns, rivers, streams and other water-bodies, etc.
- ◆ Look for places such as roads, railway station etc.
- ◆ Can you work out the distance between different places shown on the map?

A Game

Form two teams; the first team should select a place on the map, write it down on a piece of paper secretly and give it to the teacher. The second team can ask questions about the place. Now, the first team can answer them saying only 'Yes' or 'No'. E.g.

Team two can ask questions like, Is this place in Mahabubnagar district? Is this place by the seacoast? Is this a district head quarter? Then the second team should locate the place decided by the first team through asking some questions. The teacher will examine the game and record the correct answers of these questions.

When the team finally finds out the place, the teams reverse the roles and play again. The team which finds out the name of the place with the minimum number of questions will be the winner.

Way to Mallika's house- Sketch Map

Laila and Mallika met at Red Cross service activity in Nizamabad. They became close friends there. Mallika lives in Venkatapuram village and Laila lives in Adilabad. Laila planned to visit Mallika's house in the coming holidays. She wrote a letter asking Mallika how to reach her house from the bus stand. Mallika was happy

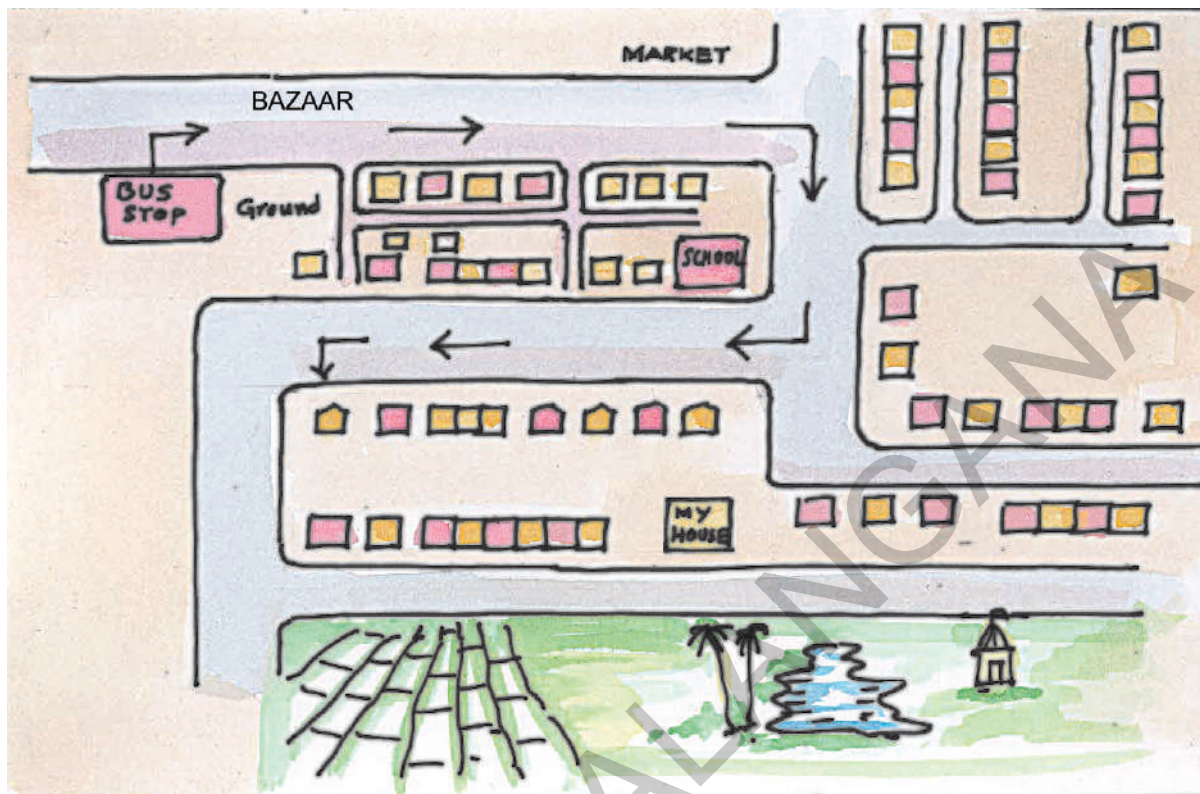


Fig. 1.1: Sketch showing way to Mallika's house

about her friend's proposed visit. She sent the details of the location of her house with a sketch map.

- ♦ Can you reach Mallika's house from the bus stop with the help of the sketch map?
- ♦ How many turns did Laila take to reach Mallika's house? Are there any landmarks at the turns?
- ♦ Are the buildings shown in the sketch drawn to their actual size?
- ♦ Can you tell the direction in which Laila walked (north or east)?
- ♦ Can you tell the distance from the bus stop to Mallika's house?

We cannot answer the last two questions with the help of the above map. This actually landed Laila in a problem. She had no idea of the distance from the bus stop to the house. When she reached

Mallika's house, she said, "Oh! Mallika, I am tired. You did not mention the distance in your sketch. If I knew it was so far away, I would have taken an auto."

"Sorry, Laila, I forgot to mention the distance," replied Mallika. "Anyhow, in future, if you take an auto, please mention that you have to go to South Venkatapuram - that is where this house is situated" said Mallika.

"How would I know the south or north of Venkatapuram?" Laila asked.

"It is simple. Now, you reached my house which is in the south of the village, the opposite side is north. Don't you know how to find directions in a place?" asked Mallika.

- ♦ Draw a sketch map of the route from your school to your house?

Directions

Look at the following picture carefully:

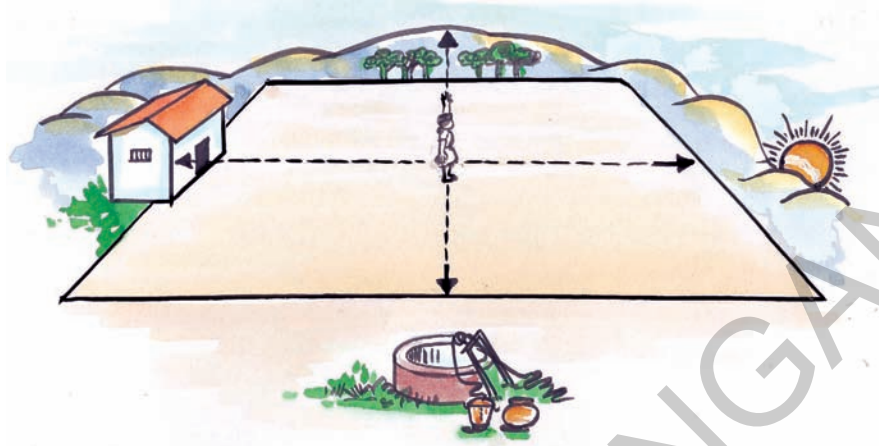


Fig. 1.2: Identification of directions

The girl in the middle is facing the rising Sun. Now fill the following table:

S.No	Direction	Object/Places
1	east	Sun, hills
2	south	
3	north	
4	west	

If you stand facing east, all the things to your right are towards south; all the things to your left are towards north; and all the things behind you are towards west.

Mallika proposed to play a game to understand directions better.

Look at the picture on the right. Now, everyone has to ask one question.

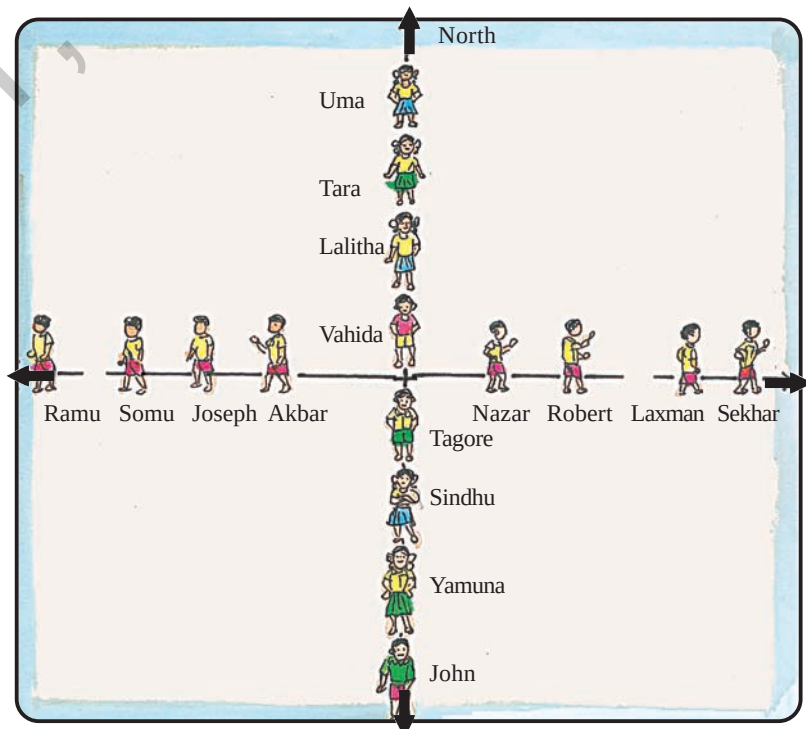


Fig. 1.3: Directions

- ♦ Lalitha is towards direction of John.
- ♦ Lalitha is towards direction of Uma.
- ♦ Nazar is in direction of Sekhar.
- ♦ Nazar is towards direction of Ram.
- ♦ Lakshman is towards direction of Somu.
- ♦ Lakshman is also towards direction of Sekhar.
- ♦ Tara is in the direction of John.

After doing this exercise, Laila said, “Wow! I now understand that direction is always relative to something! The same place may be in east or south or north or west, depending upon where we are looking at it from.”

- ♦ Identify directions in your class room and form a similar line and ask similar questions.

Directions on a map

Usually, maps are prepared in such a manner that north is at the top of the map and south is at the bottom. Therefore, east is on the right and west is on the left.

In some special cases, maps may be made with south on the top or on the left. However, in such cases, a special mention will be made on the map and an arrow will be given showing north.

Hang a political map of Telangana on the wall. Answer the following questions after looking at the map:

- ♦ In which direction is Mahabubnagar from Vikarabad?
- ♦ In which direction is Hyderabad from Yadadri?
- ♦ In which direction is Khammam from Suryapet?
- ♦ Is Komarambheem towards East of Adilabad?
- ♦ If you want to go from Manchiryal to Peddapalli, in which direction will you travel?

Think of more questions and ask each other.

‘Scale’ or distance on a map

On a pleasant evening, Mallika took Laila to see the village stream and they walked over the bridge. The bridge had 6 lamp posts at equal distance. The distance between two posts is about 100 metres. The length of the bridge is about 500 metres. Look at the following picture:



Fig. 1.4: Laila and Mallika walking on the bridge

When they came back, Laila wanted to draw a sketch of the bridge and the lamp posts on a paper so that she could take it with her. When she was drawing the lamp posts, she took care to draw them at equal distances. The distance between the first and the last lamp posts was about 5 centimetres. Her sketch was much smaller than the actual bridge.

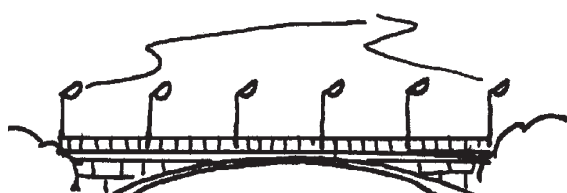


Fig. 1.5: Laila's sketch of the bridge

Measure the total distance in Laila's sketch map from lamp post one to lamp post six. The actual distance between the two lamp posts is mts

In the sketch, the distance between two lamp posts is only cm. and the total distance is only cm. You might have observed that Laila has drawn the lamp posts at equal distance.

We can also write down the relation between the distance on the bridge and its representation in the sketch in the following way:

5 cm on the sketch map = metres
on the bridge

1 cm on the sketch map =metres
on the bridge

This is called the 'Scale'.

We use Scale to show the actual distance on the ground by reducing it on a map.

Maps always mention the Scale they use and we can find out the actual distance between places using the Scale.

You might have observed the word 'Scale' in the maps. The Scale is the ratio of distance between two points (places) on the map to the actual distance on the ground. It can be expressed in different ways.

Statement Scale - Here, the scale is stated in words such as one cm to one km like a simple statement. As per the simple statement scale, we know that if we measure one cm as the distance between two places on the map, the real distance on the ground is one km.

In the given sketch, the distance between Mahabubnagar and Wanaparthy is given in the form of a line. The actual distance between these places is 50km.

Wanaparthy

Mahabubnagar

Measure the line joining the two places and find out the distance on the map.

Actual distance between Mahabubnagar and Wanaparthy : ____

Based on the distance between Mahabubnagar and Wanaparthy on the map can you find out the Scale of the map?

If it is one cm on the map, what will be the actual distance on land?

1 cm = km

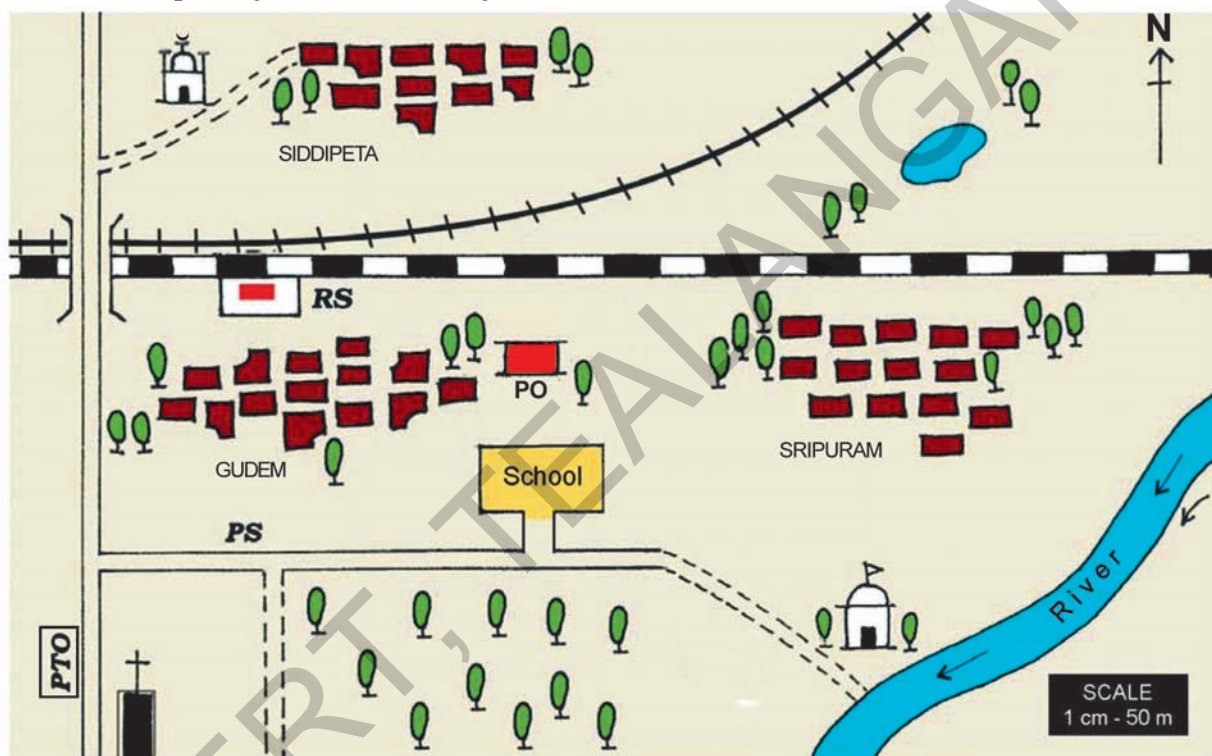
Now, try to look at your district map and find out its Scale. Then measure the distance from your village or town to a few other villages and towns on the map and find out the actual distance.

Now, take a thread and measure the coast line of India in a map and find out the actual coast line using the scales.

Symbols

You know that maps are too small for us to draw pictures of the things shown on them. For example, we cannot draw the real school or bus stand or Mallika's house, as it will take too much space on the map. Therefore, we always show things on a map with the help of symbols. You may have

noticed that in the district map, villages and towns are shown with dots and circles. Map makers prepare symbols appropriate to their needs. But some common symbols, which are called 'Conventional Symbols', are also used. The following is a complete map with symbols, scale and proper orientation:



Map 1: Study the map to find out how to use the symbols

Index

	Tree		Tank		Kutch Road		Pucca Road
	Masjid		Temple		Church		Meter Gauge Railway
PTO – Post & Telegraph Office			Settlement	Broad Gauge Railway			
PS – Police Station	RS- Railway Station	PO – post office					

Based on the map given on the previous page, answer the following questions:

- ♦ In which direction of the church is the river flowing?
- ♦ What kind of road is there to the south of Sripuram village?
- ♦ Which type of railway line is located near Sripuram?
- ♦ In which direction of railway station is the police station?
- ♦ Name the village that lies to the north of the railway track.
- ♦ Imagine that you are in the school shown on the map. Which direction will you face if you are coming out of your school?

Activity:

Face towards your east, stretch your hands and say the name of directions (e.g. north, south). Next time, change the direction of your face and continue the exercise.

Keywords

Sketch

Map

Scale

Direction

Improve your learning

1. Collect different kinds of maps and study them. If you have any doubts, clarify them with your teacher.
2. Find out the distance from your mandal headquarter to the district headquarter by converting the map distance into actual distance.
3. Why is the actual distance on the ground reduced on the map?
4. Explain the need of symbols in preparing maps.
5. Draw the symbols representing different waterbodies, places of worship and public offices on a drawing sheet and present it in the class.
6. Draw a sketch of your house and mark the other houses and places around it in the correct direction.
7. What are the important features of a map?
8. Read the paragraph titled 'Symbols' on page 6 and comment on it.
9. Observe the different maps present in the Atlas and fill the table with details.



S.No.	Name of the map	Symbols used	Important features

Project:

Prepare a map of your classroom using the following instructions:

- a) First, find the four directions in your classroom by facing the north.
- b) Make a list of all the walls, doors, windows, blackboards, almirahs etc. that you want to show on the map. Make symbols for them in your notebook.
- c) Draw a sketch map of the classroom with walls and location of the objects you want to show. Make sure to draw the northern wall on the top of the sketch.
- d) Now, split into small groups and measure the length of each wall with the help of a scale. Write down the distances on the sketch map.
- e) Draw a map of the classroom by selecting an appropriate Scale. It can be one centimetre for one meter. So if a wall is 7 metres long, you will have to make a 7 centimetres long line on paper.
- f) After making the outer walls, draw the symbols for windows and doors at the right places. Then draw the symbols for other objects like almirah, black board, table etc.
- g) Make an index of the symbols you have used in the map and also mention the Scale.
- h) Compare your map with your friends' maps and make corrections if there are any.