

GEOGRAPHY



CHAPTER 1

LET'S MAKE A MAP

Daulat's school re-opened in the month of July after summer holidays. Daulat was now in class 7. There were many new students in the class and they were happy to make new friends. The principal came to their class and told them that the strength of class 7 had increased that year, so there would be two sections - 7 A and 7 B, in separate classrooms. But there was only one room in the school for class 7. The principal said that one more room had to be built. The engineer had asked for a map of the school. The students had drawn a map of their classroom the previous year when they were in class 6. The principal now asked them to draw a map of the entire school. With the help of the map, the additional room could be planned and built as soon as possible. The children were very excited to know that they were to make a map of the entire school.

A few days later the class began to make the map of the school. "Last year, you had prepared a map of your classroom. Can anyone remember how the map was made?" the teacher asked.

"We had first identified the directions - the north, the east, etc." Daulat replied. "Then we made a list of immovable objects so that

they could be shown on the map. We even decided on symbols for each object," Jodha added.

Pura said, "We measured the whole classroom with a ruler and decided that one matchstick would correspond to the length of one ruler." Daulat said, "Yes, the northern wall of the room was six rulers long, so we showed it by joining six matchsticks in a line. Once the walls of the classroom had been shown we filled in the rest of the things with symbols. This is how we drew the map of our classroom."

The teacher said, "You are right. Now fill in the blanks, so that you remember all these."

- *Towards the upper margin of the map is the direction; towards the lower margin is the direction; towards the right side is thedirection; and towards the left side is thedirection.*
- *All the objects are shown on the map, as they are located on the*
- *Maps are made as if we were looking at the ground from the*

The teacher said, "Now we have to draw a map of our whole school, so that the engineer can decide where the new room can be built. Moreover, she will want a map with exact measurements. Last year, all of you learnt how to measure distances. A variety of things were measured in units of meters and centimeters. The present map, too, has to be measured in meters and centimeters, so that the engineer will be able to understand it."

Pura asked, "Why, Madam? Why will the engineer have trouble with our scale of one matchstick corresponding to one ruler? If we



tell her that the wall is eight rulers long and that we have shown it with eight matchsticks, why will she not be able to understand it?"

The teacher replied, "She might find it difficult to understand. How do we know what sort of ruler she has? Maybe her ruler is one meter long, or half a meter, or one foot long. It is also possible that the matchsticks she has are longer or shorter than ours. So how will your measurements be the same as her's?"

Children Draw a Map

All the children in Daulat's class began drawing a map of their school. Like them, you too, can draw a map of your school.

1. First, identify the directions. If necessary, use a magnetic compass to find the directions.
2. Go around the school and note the surroundings, classrooms, corridors, etc. and make a rough sketch of the school. Remember that the northern wall should align with the upper margin of the page.
3. Now make groups of four students each. Two students of each group will measure the length of the walls and the other two will note the corresponding distance on the sketch. In this manner every student will be able to check the work of the others and correct any mistake.

• *Look at the sketch of Daulat's school and the measurements recorded and answer these questions:*

- *How many meters wide is the corridor of Daulat's school?*
- *How many meters long is the southern wall of Daulat's school?*
- *How many meters long is the western wall of class 6?*

So here we have the sketch or the rough map of the school. Now we have to draw it to scale.

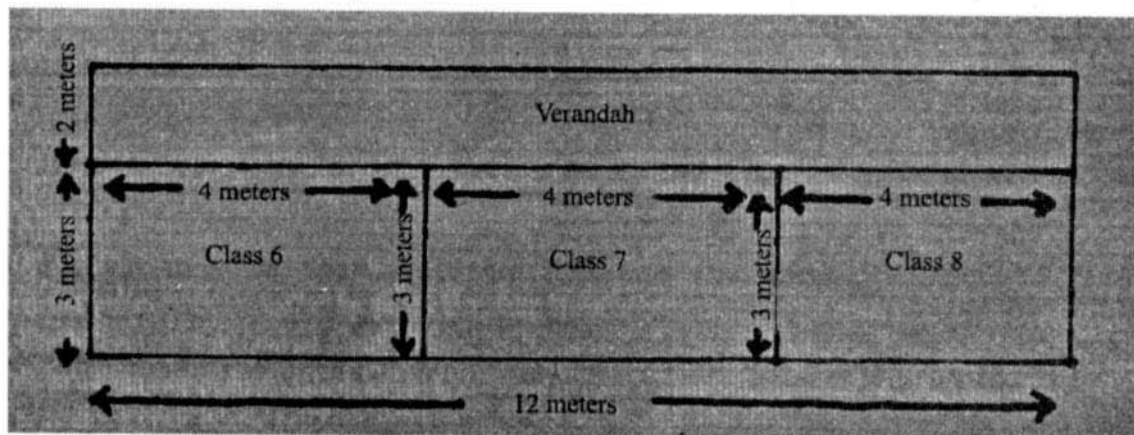
Scale

The teacher said, "How can we draw the map of such a big school on a small piece of paper? We don't have so much space. So, to show a big object on a small paper we have to use a scale.

"When we drew the map of the classroom in class 6 we had assumed that the actual distance of one ruler corresponded to the length of one matchstick on paper. If a wall measured six rulers we showed it in our map with the length of six matchsticks.

"In this way we used a scale to show a big object in a smaller scale on a map. We have now measured the length and breadth of our school in units of the meter. We have to depict

Fig. 1 Sketch -map of the school





this on paper in a smaller size. We will show one meter by one centimeter. The southern wall of our school is fifteen meters long, so we will show it with a

fifteen-centimeter long line. Therefore our scale is: *1 centimeter = 1 meter.*"

- *With the help of this scale draw lines for the following lengths: 2 meters, 5.5 meters, 9 meters.*

4. You can draw a map of your school according to this scale. First draw the outer walls and then the walls between the corridor and the classrooms.
5. Now that the outline of the school is ready, show the doors. The doors have to be shown with symbols in the correct position and in the correct direction.

6. Make an index of symbols beside the map so that readers can understand your symbols. Also write the scale of your map and make an arrow pointing to the north.

After the map was made the teacher said, "Now show what is all around your school with the help of different symbols. For instance, there is a well to the east of the school, so show it with an appropriate symbol. In this way fill the map with objects in all four directions."

Once the map of Daulat's school was ready, the principal sent it to the engineer.

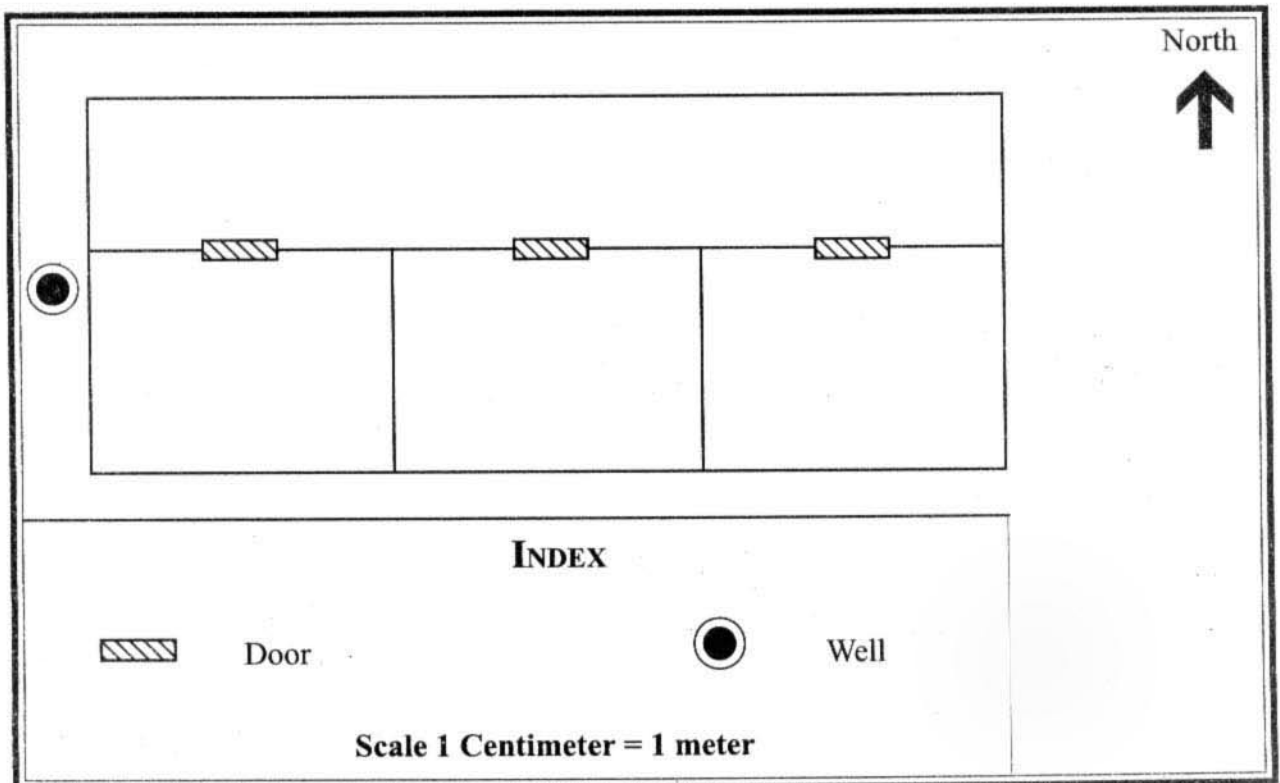
- *Look at the map of Daulat's school and answer:*

What is to the west of the school?

In which direction of the school can the second room for class 7 be built?

You too can fill in the objects on all sides of your school on your map, with symbols. In this way the map of your school will be ready.

MAP OF DAULAT'S SCHOOL



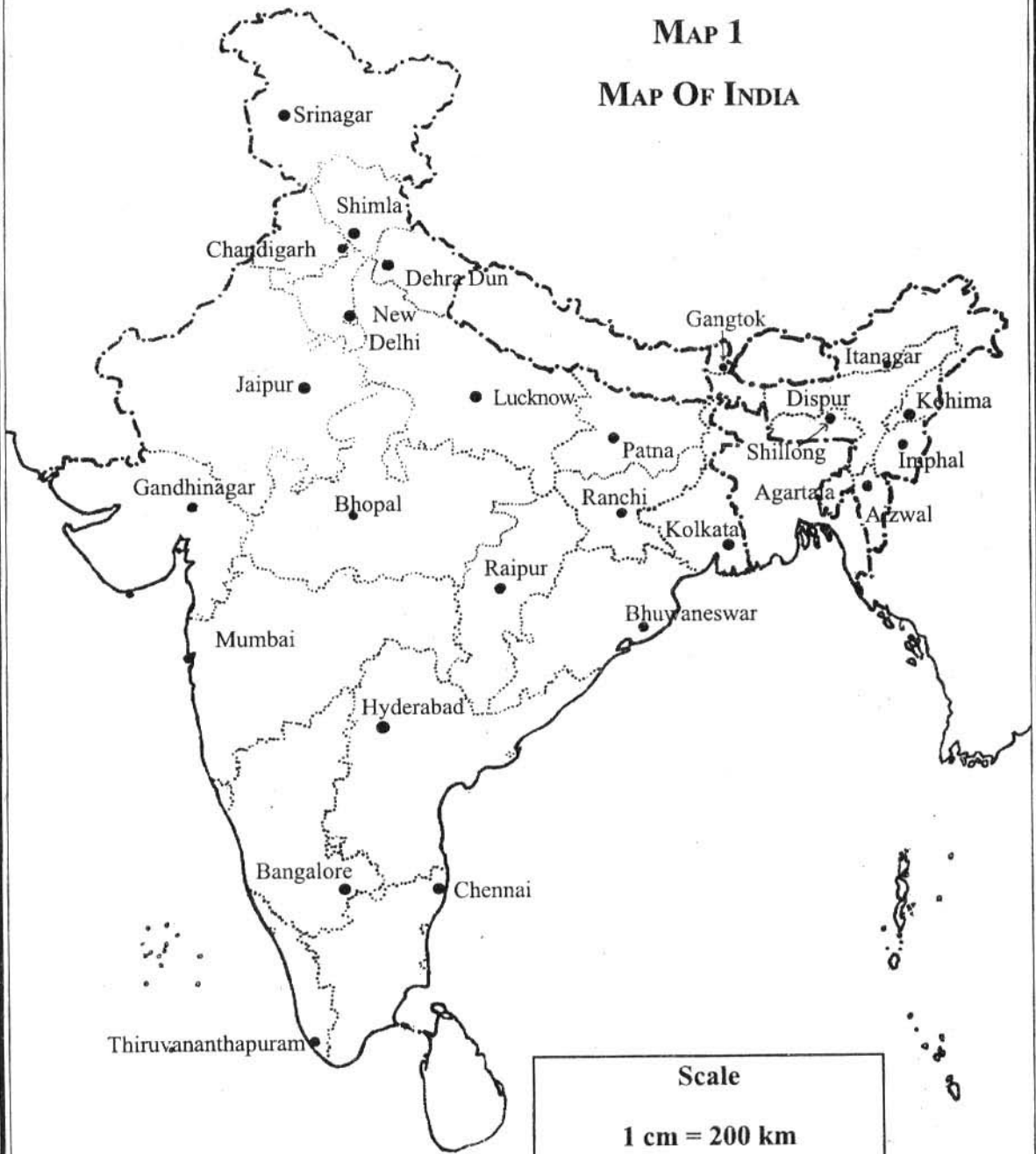
EXERCISES

1. What are the four main characteristics of a map?
2. What are the different methods of identifying directions?
3. Why is it necessary to prepare a sketch of the school before making a map? Did you find it useful?
4. Why is it necessary to draw the map to a scale?
5. A map was made according to the scale 1 centimeter = 1 meter. The length of the rooms and corridors in the map were as follows:
The length of the room was 4 centimeters, breadth of the room was 6.5 centimeters, and the length of the corridor was 8 centimeters. Can you give the actual lengths in meters?

Length on the map	Actual length
4 centimeters	
6.5 centimeters	
8 centimeters	

6. Look at the scale of the map on page 6. Using this scale, measure in centimeters the distances between the following places and convert them into kilometers:
 1. Jaipur to Lucknow centimeters.....kilometers.
 2. Kolkata to Srinagar centimeters.....kilometers.
 3. Bangalore to Shimla centimeters.....kilometers.
 4. Delhi to Kolkata centimeters.....kilometers.
 5. Chennai to Kohima centimeters.....kilometers

MAP 1
MAP OF INDIA



An interesting exercise: This map contains just the capitals of all the states. Look at the map on page 144 and write down the names of all the states and colour them.