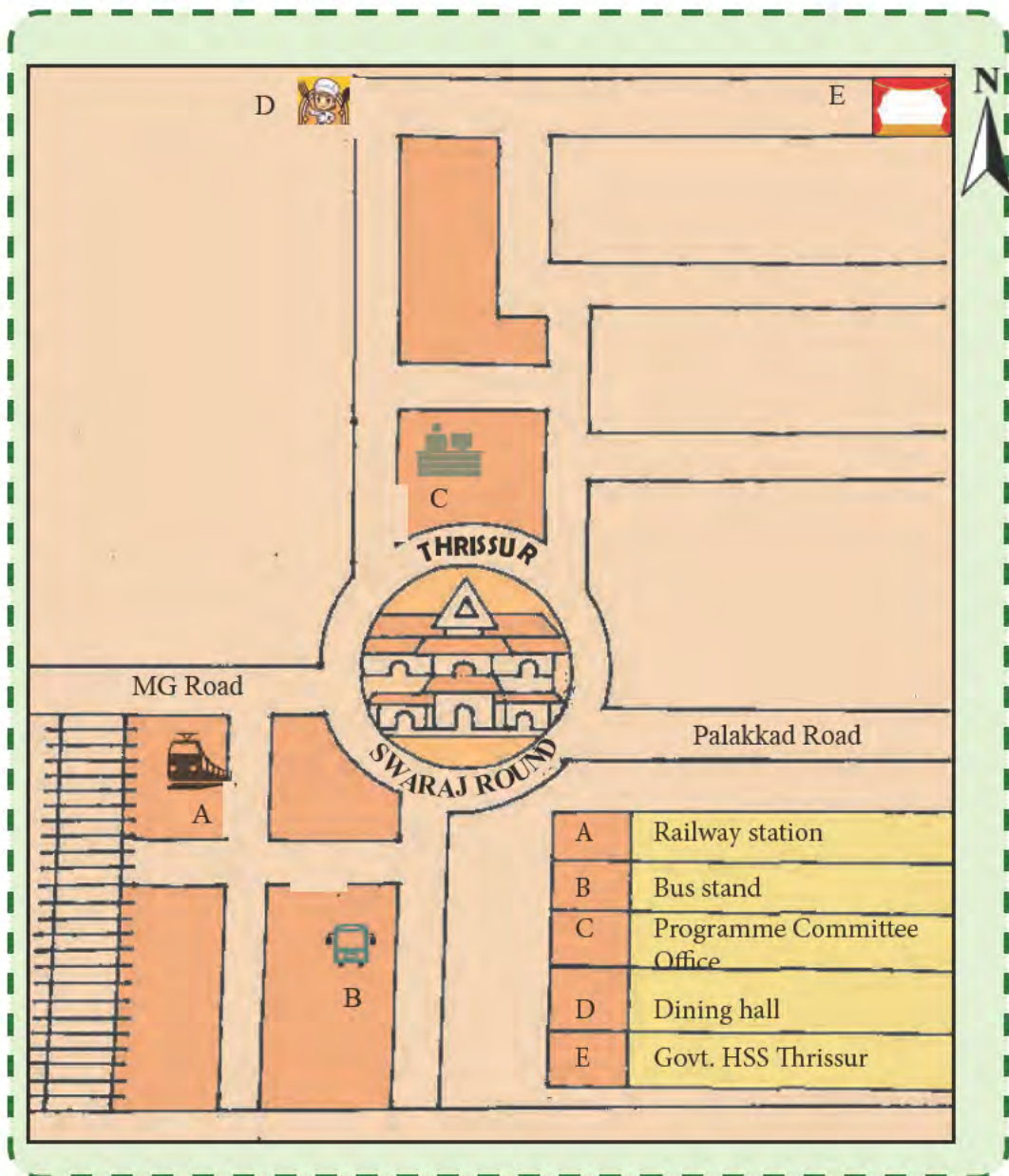


5

Let's Draw and Read

Aji has come to participate in the Kerala School Arts Festival being held in Thrissur district. His family is also with him. Given below is the layout of the venue with them.



Having travelled from the railway station, Aji and his family have now come near the Programme Committee Office which is close to the Swaraj Round. Aji's programme is scheduled to be held at Govt HSS Thrissur.



- In which direction should Aji go to reach the venue quickly, from the Programme Committee Office?
- Can you find where the dining hall is, by checking the layout?
- In which direction should one travel from Govt HSS Thrissur to reach the dining hall?

What we familiarised above is the layout of the venue of the Arts Festival.



Haven't you seen the layout maps showing the location of buildings, displayed in front of some institutions? Are such layouts made only to understand the direction?

Have you realised that a sketch and plan are prepared while constructing a new house or building? While preparing the plan of buildings, it also includes exact measurements. But when sketches are prepared, measurements may not be exact.



How about making a sketch of your classroom?



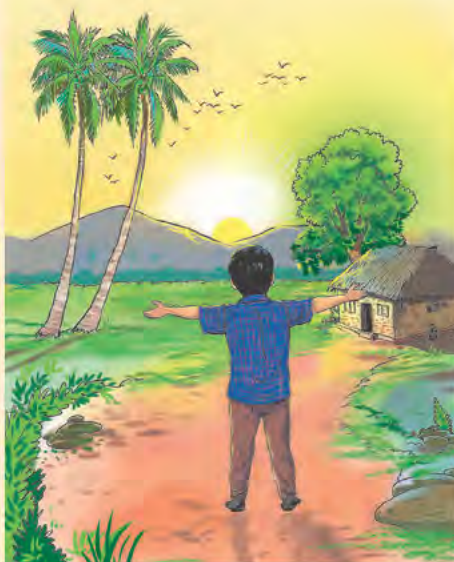
- In which direction is the door of the classroom?
- Where are the windows located?
- Where is the Blackboard/Whiteboard fixed?

Check the sketch that each of you prepared. Are they all of the same? Did you feel any difficulty to find direction?

How to find directions in a place?

We consider the direction from where the sun rises to be the east.

Picture A



Aji is standing near his house facing the rising sun.



- In which direction is Aji facing?
.....
- To which direction has Aji stretched out his right hand? What about his left hand?
.....
- Which direction is indicated by Aji's shadow?
.....

Picture B



- In which direction is Aji facing in Picture B?
.....
- To which direction is Aji's right hand stretched out? What about his left hand?
.....
- Which direction does Aji's shadow indicate?
.....
- Which is the direction opposite to the direction that Aji faces?
.....



Haven't you learned how to find the direction based on the position of the sun? A compass is commonly used to find the direction. Now a days we also use mobile apps to find direction.

Compass



A compass is the instrument used to find the direction. This instrument is based on the principle that a freely moving magnetic needle will remain in the north-south direction. A specially marked tip of the needle indicates north. This instrument has been used by sailors since ancient times to find direction on sea voyages.



Shall we prepare the sketch of our classroom based on direction?



What are the things that we should pay attention to while drawing the sketch on a paper or in a book based on the direction?

Look at the map, hanging on the wall? How do you find the direction on this map?



Directions on the Map

A map will usually have a sign indicating the direction. A sign indicating the north direction can be seen at the top of the wall maps. The bottom of the map points to the south; the right side of the map points to the west and the left side to the east.



Find out the north direction of your classroom. Now, put any symbol indicating direction as shown below on the top right side of the paper in which you prepare the sketch of your classroom.

Symbols commonly used to indicate direction on maps:



Haven't you identified the direction in which the door of your classroom is located? In which directions are the windows located? In which direction has the table been placed? Now let's draw the sketch of the classroom.



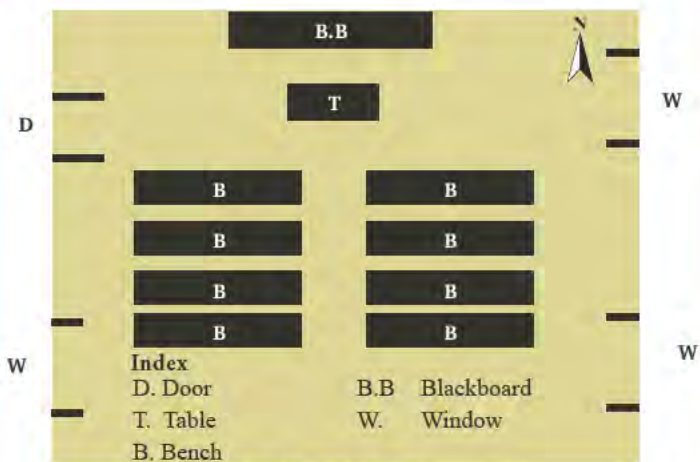
Haven't you completed the sketch. Prepare an index for things such as windows, door, table etc. as given below and include it in the outline.



- D. Door
- T. Table
- W. Window
- B.B Blackboard
- WB. Whiteboard
- B. Bench

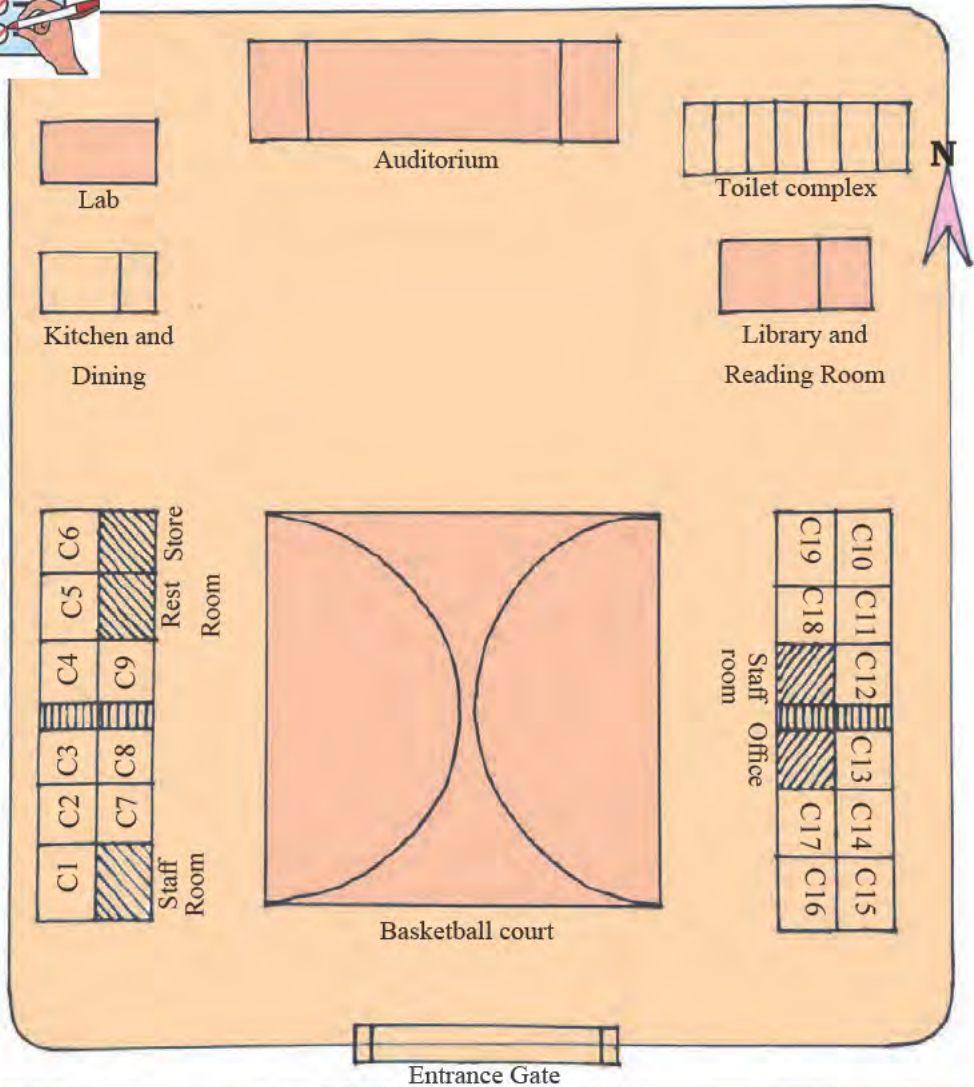
The sketch prepared by Aji for his class room is given below. Observe.

Now check the sketches drawn by everyone. All the sketches are the same, aren't they?



The sketch of Aji's classroom

The sketch of Aji's school is given below. Observe the sketch and complete the table.



To which direction of the basketball court is the office building located?	•
To which direction of the basketball court is the entrance of the school located?	•
To which direction of the toilet complex are the library and reading room located?	•
To which direction of the building with the store room is the kitchen located?	•
To which direction should one move from the auditorium to exit through the entrance gate?	•

Haven't you marked position of the bench, desk, and blackboard/white board in your classroom on the sketch. How do you tell where you sit in the classroom?

- Second on the first bench
- First on the last bench
-
-

If so, you may tell the position of each of you in your classroom.

How can we locate a place on earth?



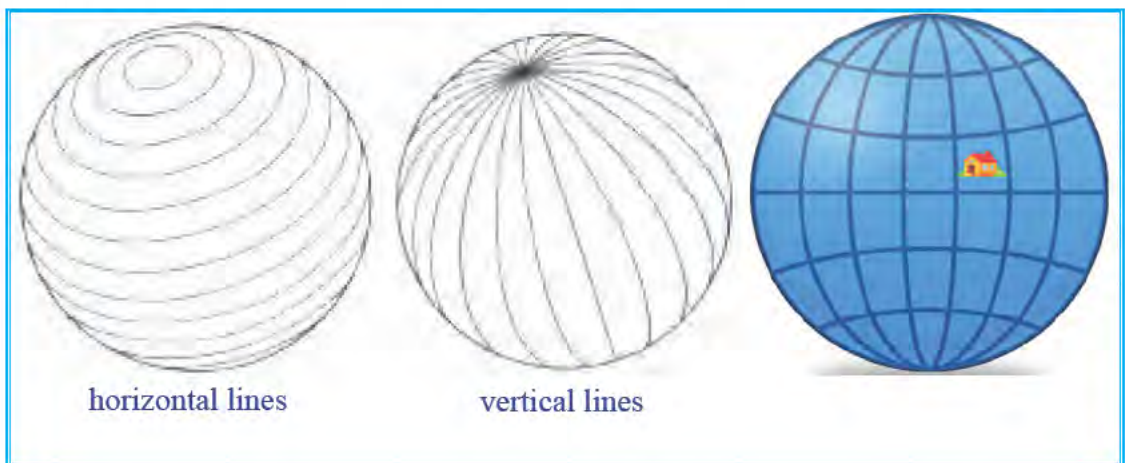
Observe the picture of the ball given below.

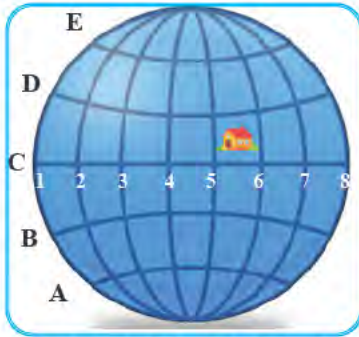
Did you see the picture of a house affixed on the ball? How do we determine the exact position of the house?

Top, bottom, centre, on one side. Which of these is correct?

It is difficult to determine the exact position of an object on a spherical surface. How can we find the exact position of the house affixed on the ball?

Shall we draw lines vertically and horizontally on the ball as shown in the picture?

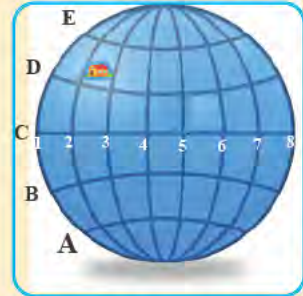




Now, if we give alphabet and number to each line, won't you be able to find out the exact position of the house by spotting the lines between which it is located?



Now write down the position of this house on the ball.



Observe the globe.



Look at the line marked in red on the given globe. This is the equator. This line divides the globe into two hemispheres. In the given figure, what is marked A is the Northern Hemisphere and B is the Southern Hemisphere. Observe the equator and other circular lines drawn above and below, parallel to it. These are the lines of latitudes. Don't you see the semicircular lines drawn perpendicular to the lines of latitudes or latitudinal lines? These are longitudinal lines or lines of longitudes. The location of a place on the earth is determined based on these imaginary lines.

Observe the globe and identify the characteristics of latitude lines and longitudinal lines.

Globe and Map

A globe is a spherical model of the earth. When the features of the earth's surface are drawn on a flat surface, we can develop a map.

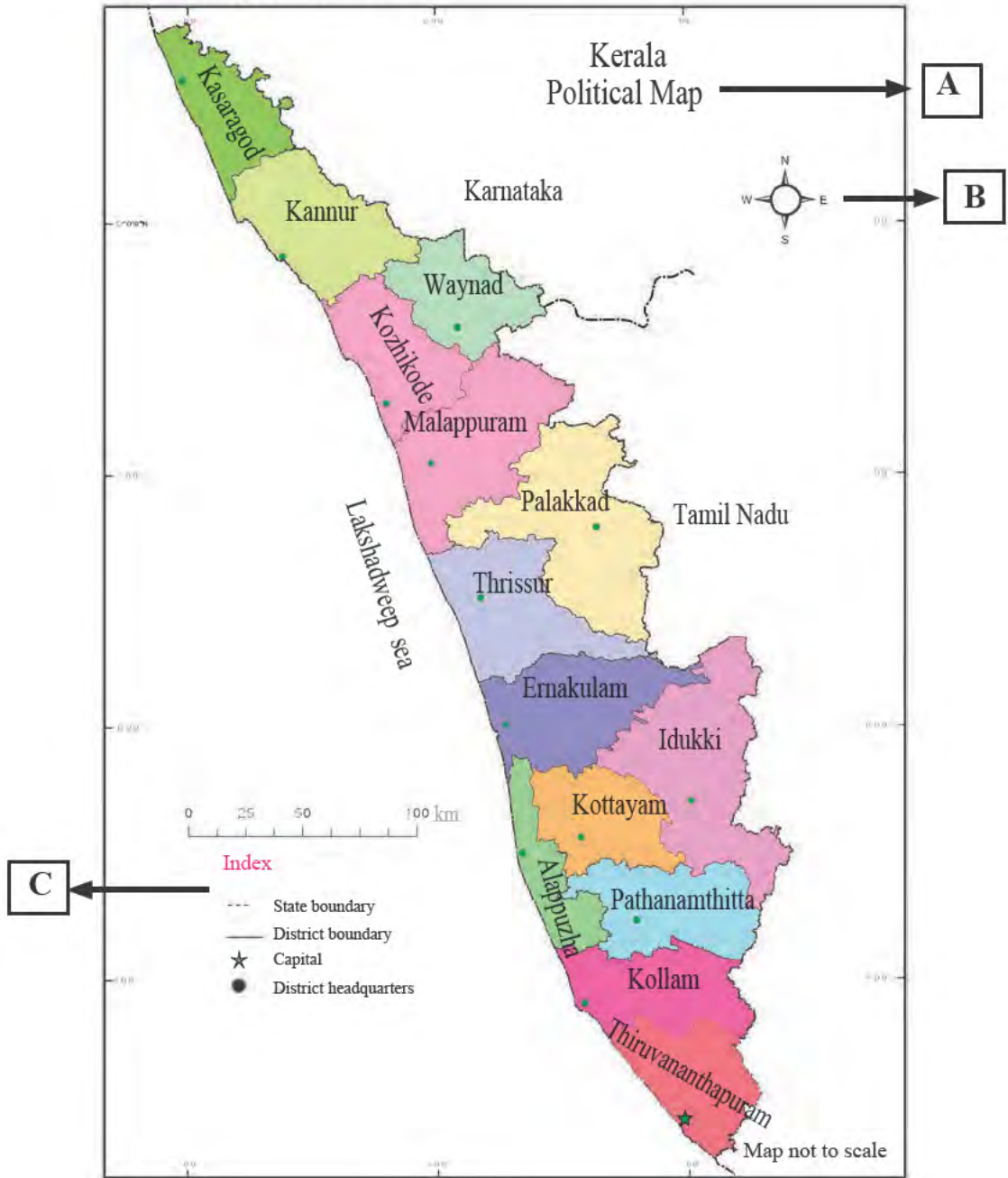


Globe



World Map

Observe the map of Kerala.



Note that the given map is labelled with letters A, B, C. They are the title, direction and index of the map respectively. These are the essential components of a map. The Map reading is done by using these components.

The title is generally given at the top of the map. The title refers to the content of the map. Locate the title on the given map.

A Title Kerala - Political Map



Check out the titles given to the different maps in the Social Science lab of your school.

When the sketch of the classroom and school were made, didn't we give the symbols indicating the directions? Find the symbol to identify directions in the given map.

B Direction



List the coastal districts to the north of Thrissur and the ones to the south of Thrissur.
Which state lies to the east of Kerala?

The index given in a map helps to identify the features of the map. Find the index in the given map.

C

Index

----- State boundary
 _____ District boundary

☆ Capital
 ● District headquarters

Observe the index given on the map of Kerala in your Social Science lab.

Index

----- State boundary

_____ District boundary


 River

 National Highways

 Railroad

☆ Capital


● District headquarters

 Port


 Airport

 State highways

Note that in the given map of Kerala (page 74) different colours are given to differentiate between various districts. Similarly, different colours are used to represent the features of the earth's surface on maps.




Which colour is used to represent water bodies in the globe and the maps?



Examine the map of Kerala and find and draw the symbols indicating features of the earth's surface in the given table.


Index	Symbol
Road	
Railroad	
River	
Port	

Cartography



Cartography is the branch of science that deals with the preparation of maps. The person who prepares maps is known as Cartographer.

Survey of India is the central government agency responsible for producing, verifying and publishing maps in our country. Its headquarters is at Dehradun, Uttarakhand.



Observe the map of Kerala in the Social Science lab of your school and complete the worksheet.

The southern most district of Kerala	
The northern most district of Kerala	
The district which shares its border with two states	
The direction in which the Bharatapuzha flows	from east to
Direction of railway line from Kasaragod to Thiruvananthapuram	from north to
The neighbouring states of Kerala	



Let's find the districts

With the help of the teacher, take a printout of the political map of Kerala in A3 size (colour) card. (The names of the districts may be omitted.) Carefully cut out each district. Keep the cut-outs in a box. Now divide the class into groups. One person from each group may come and take one cutout from the box. Identify the district from the shape of the cutout and say the name loudly.



Now, shall we prepare an ID card for the districts that each group got? What can be included in the ID card of a district?

- Name of the district
- Location
- Neighbouring State/Districts
- Airport/Port, Railway, Seashore
- Other features



Prepare district ID cards and display them in the classroom.

ID card of the district

You are now familiar with the basic concepts of map reading. Now let's observe the map of India and find out information.



Kerala is a state in India. Do you know how many states and union territories are there in India?

Prepare a list of the states, their capitals and union territories of India.



Complete the table given below by observing the map of India showing borders, states, union territories, neighbouring countries, etc.

Hint	Facts
The sea to the east of India	Bay of Bengal
The sea to the west of India	Arabian Sea
The capital of India
The northernmost Union Territory of India
In which part of India is Arunachal Pradesh situated?
The neighbouring country to the south of India
The southernmost union territory of India
Neighbouring countries of India	Pakistan



Strips with names of Indian states are deposited in a box. Students can form group of three. One from each group can draw a strip from the box. Prepare a note with the help of Atlas and Map about the state mentioned in the strip. What information can be included in the note?

- Name of the state
- Capital
- Neighbouring countries
- Neighbouring states
- Major cities
-
-
-

Check out the note prepared by Aji.

Uttar Pradesh

My location is in the northern part of India. There is a country on my border. That is Nepal. Also, I share my borders with eight states of India. I am often referred to as the 'Sugar Bowl of India' as I produce a large quantity of sugarcane. Kathak is a dance form that belongs to my place. You might have heard the names of my major cities such as Kanpur, Lucknow, Varanasi, Agra, Allahabad etc. Sarnath, known through the Ashoka pillar, spreads my fame around the world.



Read the note about the voyage of the Portuguese traveller Vasco da Gama to India.



Vasco da Gama set out in search of India, leading a fleet of four sailing ships with 170 sailors from the port of Lisbon, Portugal. He travelled south-east with the help of the winds and reached the southernmost tip of Africa. He then travelled northwards along the east coast of Africa and reached the port of Malindi. With the help of the monsoon winds, they reached Kappad near Calicut on the west coast of India on 20 May 1498. This adventurous journey made by Vasco da Gama and his companions, covering thousands of kilometers, has made a mark in history.

Observe the sea route of Vasco da Gama during his voyage to India.



Through which oceans did Vasco da Gama make his voyage and reach India from Europe? Find these oceans by observing the world map.

-
-

Which are the other oceans?

-
-
-

- Are all these oceans lying close to each other.
- Observe the globe and find out the largest ocean.

In the given world map, don't you see vast land areas along with oceans? Such vast stretches of landmasses are called continents.



Observe the map and globe to identify the continents.



- Which continent is our country, India a part of?
- Most of the continents are surrounded by oceans. Which continents are surrounded by oceans?



Observe the given world map. The colours of the respective continents are given. Now, give the corresponding colours of the continents to their images in the map. After giving the colour add the name of the continents also.



Map not to scale

Complete the worksheet with the help of an Atlas and a World Map.



Worksheet	
Features	Continent
Continents found to the west of the Atlantic Ocean ,
Continent to the east of the Indian Ocean
The largest continent
The continent found between the Atlantic Ocean and the Indian Ocean

Identify and name the continents















Have you familiarised with the continents? Now, you may divide into seven groups and give each group the names of the continents. Each group should use an atlas and a globe to prepare an ID card of its respective continents.

Maps have great significance in human life. Different types of maps are used in fields such as geographical studies, defence, tourism, administration and transport. When natural disasters like floods, land slides and other catastrophic events occur, maps and route maps are widely used to reach quickly in such areas and engage in relief operations. There are many occasions in everyday life where we need to depend on map reading. Map reading has become an essential factor to build up human life in the modern world.



Extended Activities

1. Prepare a sketch of your school with the help of your teacher. Organise an exhibition of the sketches you prepared.
2. Observe the map of Kerala and list out the major tourist destinations. By using the possibilities of internet, find out the fastest route and distance from your current location to the tourist spots you want to visit.
3. Draw the sketch of India on a chart. Mark states, capitals and union territories. Give different colours to states and union territories. Display the prepared charts in the class.
4. Organise 'Kerala-Map Reading Quiz Competition' with the help of digital technology as part of Kerala Day celebrations on 1st November. What topics can be included in the quiz?

Kerala - Map Reading Quiz Competition

Topics

- Tourist destinations
- Rivers
- Ports
- Lakes
- Airports
- Places of historical importance
- Celebrations
-