

Environmental Science

Part - 2

Class III



**Government of Kerala
Department of General Education**

Prepared by

State Council of Educational Research and Training (SCERT), Kerala

2024

The National Anthem

Jana-gana-mana adhinayaka, jaya he
Bharatha-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga
Tava subha name jage,
Tava subha asisa mage,
Gahe tava jaya gatha.
Jana-gana-mangala-dayaka jaya he
Bharatha-bhagya-vidhata.
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he!

PLEDGE

India is my country. All Indians are my brothers and sisters.
I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.
I shall give respect to my parents, teachers and all elders and treat everyone with courtesy.
I pledge my devotion to my country and my people. In their well-being and prosperity alone lies my happiness.

Environmental Science

Class III

Prepared by

State Council of Educational Research and Training (SCERT)

Poojappura, Thiruvananthapuram 695012, Kerala

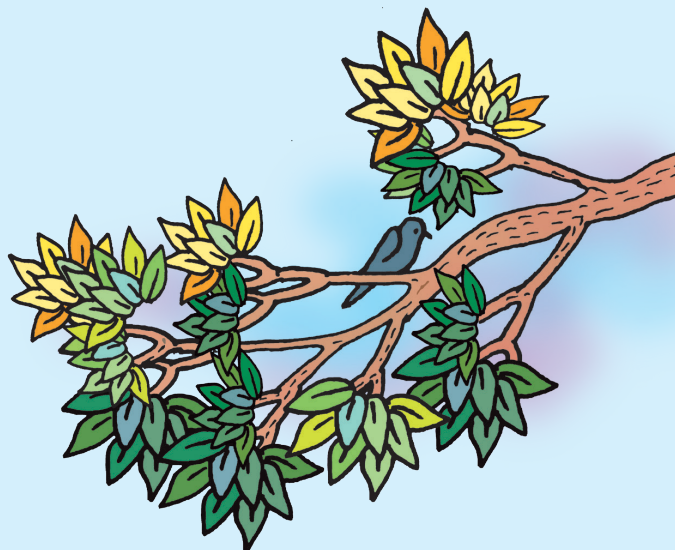
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Friends,

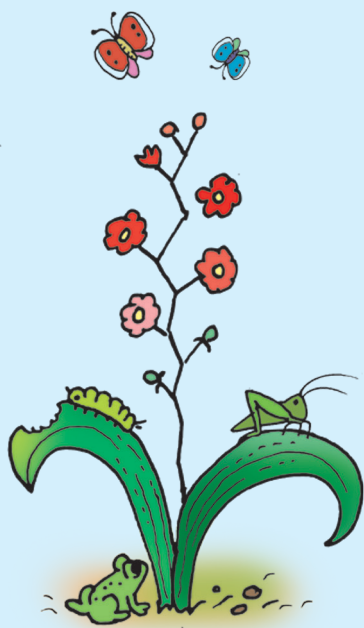
This textbook contains fundamental information and a variety of activities for observing deeply and studying the environment in which we live. When you observe in this way, you can understand the features of creatures and things, and the connections among them. The book also provides the opportunity to understand the basic factors that influence human life as a social animal. This book includes many activities that you can do along with your friends. The Environmental Science textbook offers occasions for constructing knowledge through joyful activities including observation, queries, discussions, debates, simple experiments and projects. We hope that the information given in the textbook will prompt you to seek out further knowledge. Learn and enjoy.

Wishes,

Dr. Jayaprakash R.K.

Director

SCERT, Kerala



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Contents

- 5. Food and Health..... 79-96
- 6. Living Safely97-115
- 7. The World We Live In..... 116-135
- 8. Home and Nest..... 136-150

Certain icons are used in this textbook for convenience



For further reading
(Evaluation not required)



ICT possibilities for
making concepts clear



Let us assess



Extended activities



THE CONSTITUTION OF INDIA PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

-
1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
 2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

Food and Health



Have you ever had a vegetable salad?

Do you know how to prepare any dishes?

What all dishes have you prepared?

Dishes

Which are the dishes that you usually eat?

How about your friends?

Which are the food items used to make these dishes? Complete the table.

Dish	Food items
Boiled rice	Rice
Chapathi	Wheat,
Sambar	Potato, Lady's finger, tomato, dal,
Egg curry	Egg, onion,

Are all the food items that you have written on the table of the same type?

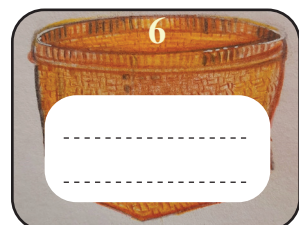
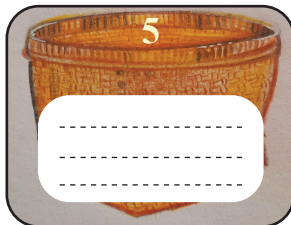
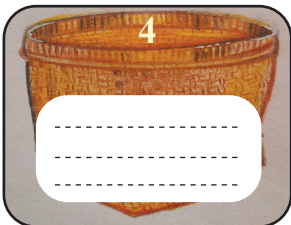
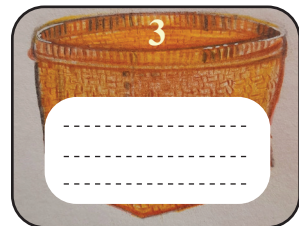
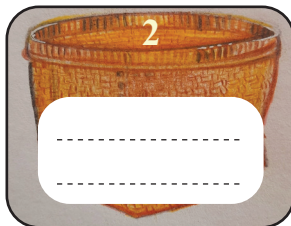
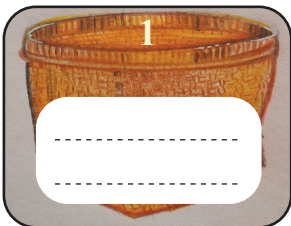
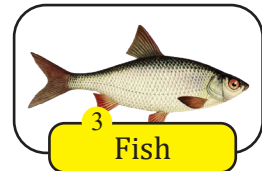
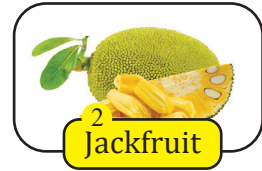
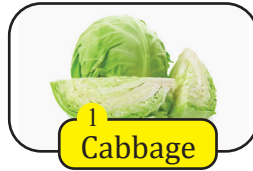
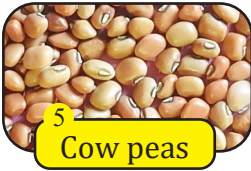
Which among them are of the same type?

Let's classify

Look at the name and picture of the food items.

Write their names in the food basket on the basis of the number given.

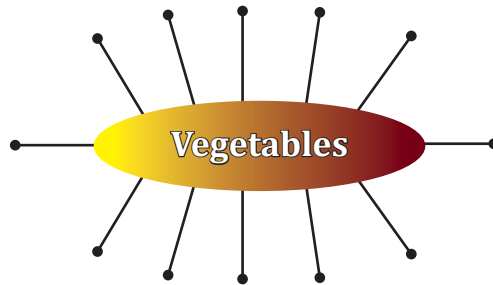




What are the food items in the first basket?

Which category do they belong to?

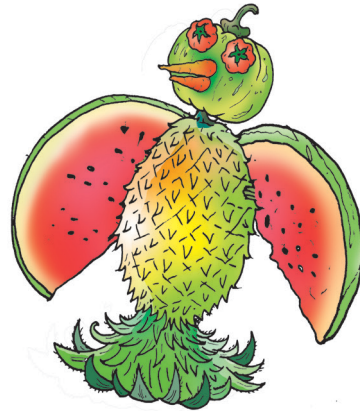
Find out more and complete the word sun.



In which category can the food items in the second basket be included?

Find and write down the names of more fruits.

Have you noticed how a pineapple has been turned into a bird? Which are the fruits and vegetables in the figure of this bird?



Draw and colour pictures like this using fruits.

Didn't you see the food items in the third basket?

What other food items do you know which we get from animal sources?

In which category do the food items in the fourth basket belong to?

Tubers

I grow underground and belong to the tuber family.



What are the types of tubers grown in your area?

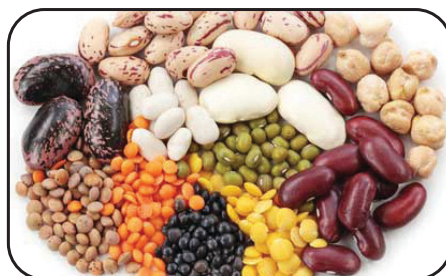
Yam,

Which category of food items are there in the fifth basket?

Pulses

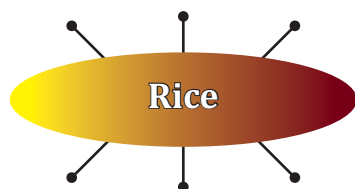
What are the pulses that we use as food? Write them down.

Beans,

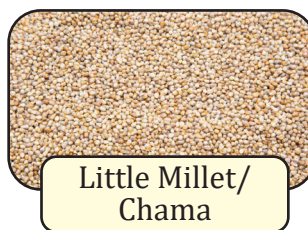


Cereals

What are the food items in the sixth basket? What dishes do you know that are made using these items ? Complete the word sun.



Millet



These are included in the category of millets.

Find out the details of other millets.

Do you know about the dishes prepared with millets?

List them out.

Ragi Puttu, Chama Upma,

Are millets grown in your area?
Find out.



Idamalakkudi in Idukki district is the only tribal panchayat in Keralam. “Korankati” is a dish prepared by the residents by making pudding from Finger Millet.



Expand the list below by finding more food items in each category like fruits, vegetables, and grains.

-----	-----	-----	-----	Fruits	-----
Rice	Yam	Beans	Lady's finger Spinach	Guava	Egg

Health and food

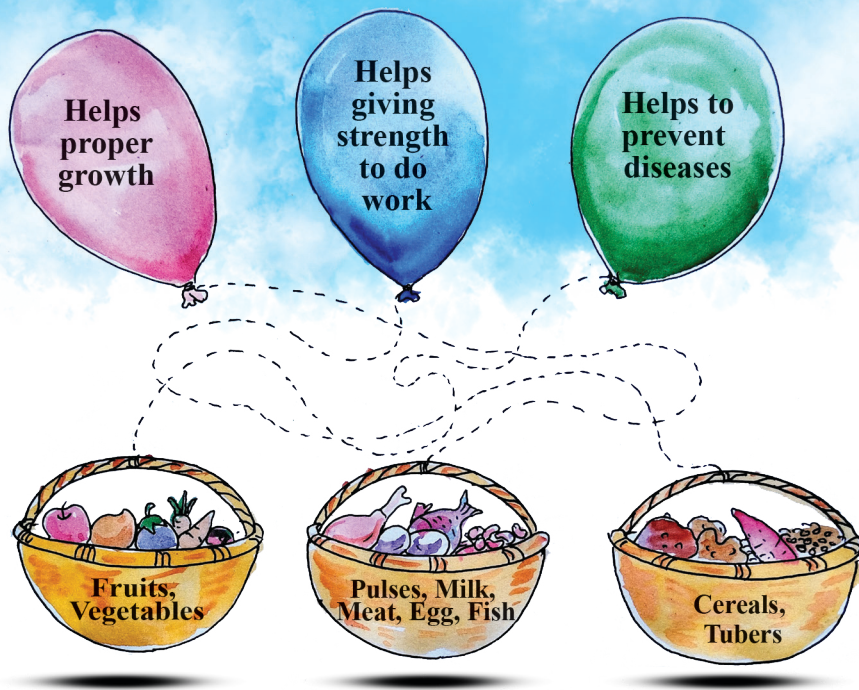
Why should we include foods from different categories in our diet?
Discuss with your friends.

- Helps proper growth
- Helps to prevent diseases
-

Let's draw

Draw the path from food items through the balloon yarn. You can reach the balloon listed with the health benefits of those foods.





Let's write the information we have gathered.

Food items	Benefits we get from them
Cereals	
Tubers	
Vegetables	
Fruits	
Pulses	
Milk	
Meat	
Egg	
Fish	

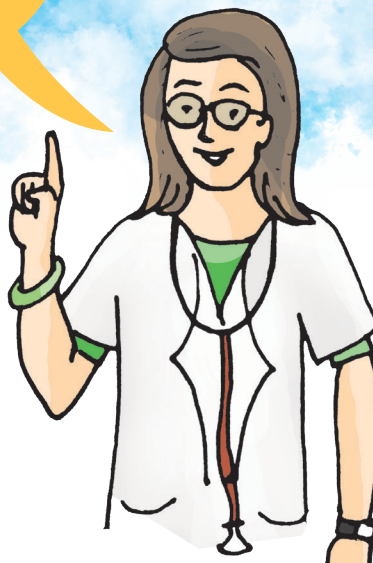
"Eating a variety of food items is necessary for the health and growth of our bodies."

Don't you also eat foods prepared in oil?

What are they?

Listen to what the doctor says...

Fat from edible oils gives us energy to work. But excessive use of these oils will increase body fat. This may lead to various diseases. Therefore, eating fried food products should be reduced as much as possible.



Drinking water

How many glasses of water do you drink a day?



Children of your age should drink 6 to 8 glasses of water a day. This may change depending on the physical activities we do. Fruits and vegetables should also be included in the diet.

Quality food and proper food habits are necessary for a healthy life.

List the food items you had on each day of a past week in the table below. Analyse the chart and find out the changes needed in your diet.

My Health Card

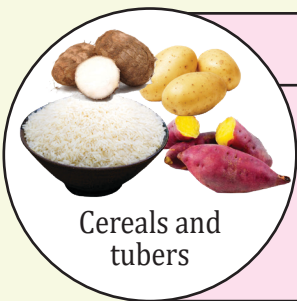
Name :

Class :

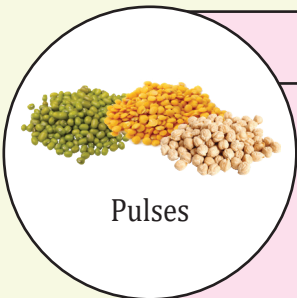
Weight :

Division :

Height :



1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day



1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day



1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day

	1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day
 Quantity of water consumed							

	1 st Day	2 nd Day	3 rd Day	4 th Day	5 th Day	6 th Day	7 th Day
 Vegetables and fruits							

Washed hands and face thoroughly before and after having food.

Yes		Yes	
No		No	

Played various games with active physical involvement.

Yes	
No	

Did activities like planting and watering vegetables.

Let's prepare a salad

Shall we prepare a delicious salad with a variety of fruits, vegetables and leaves? What are the things to keep in mind when preparing uncooked dishes?

Discuss in the class.



What are the food items seen in the picture?



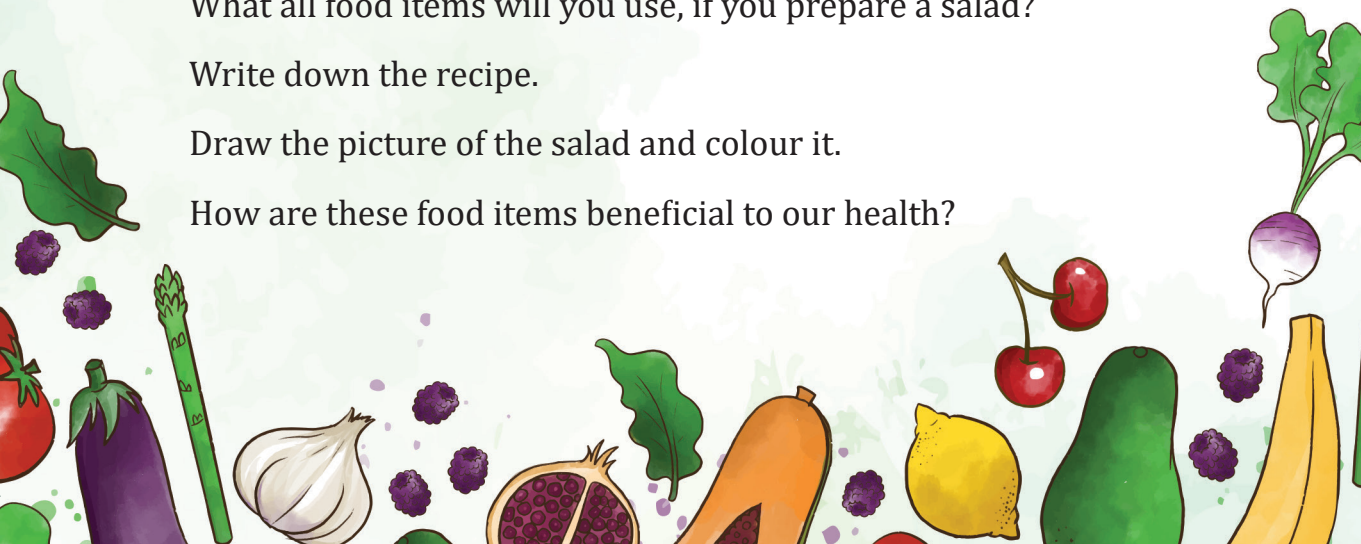
Look at the picture of a salad and identify the food items in it.

What all food items will you use, if you prepare a salad?

Write down the recipe.

Draw the picture of the salad and colour it.

How are these food items beneficial to our health?



Classify the cooked and uncooked food items.

Cooked	Uncooked	Both cooked and uncooked
Rice	Java apple (champakka)	Carrot

What type of food do we consume the most?

Cooked? or uncooked?

Which category of the food items are mostly consumed raw?

What about the cooked food items?

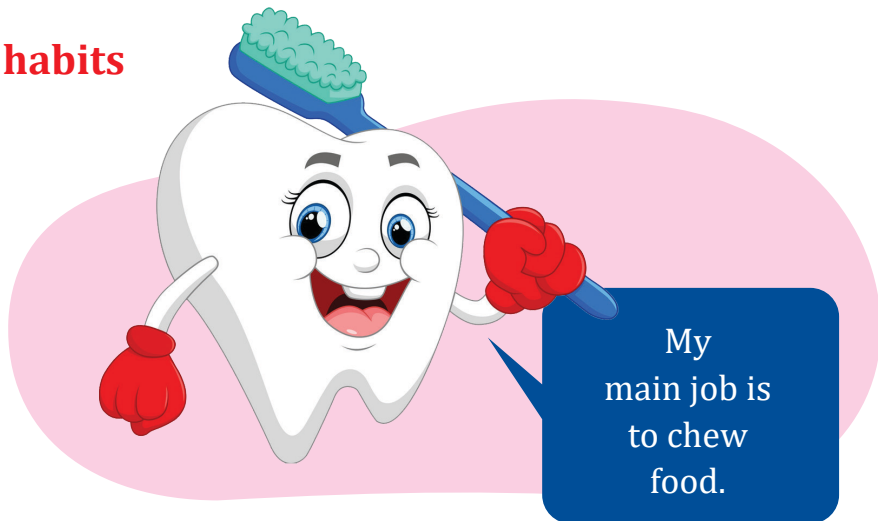
Why do we cook food?

- To increase taste
-
-

We have learned what all types of food items are necessary for a healthy life. Do you need to make any changes in your diet?

Write your opinion.

Food habits



Do we eat food well chewed?

Do you know the importance of chewing food?

- Digestion becomes easy
- Different tastes can be recognized

Write down whether the following habits are good or bad...

- | | |
|---|----------------------|
| • Eating food without washing hands | <input type="text"/> |
| • Eating meat after cooking well | <input type="text"/> |
| • Using fruits and vegetables after washing | <input type="text"/> |
| • Not eating fruits bitten by creatures | <input type="text"/> |
| • Showing reluctance to drink water | <input type="text"/> |
| • Not having proper breakfast in the morning rush | <input type="text"/> |

Kitchen garden

What are the fruits and vegetables grown in your surroundings?

What are the benefits of fruits and vegetables grown in your surroundings?



- Can be used fresh

-
-
-

Papaya

We are used both as fruits and vegetables. When ripe, we become food for many creatures. We are known by different names in each region. What do you call us in your region?



Are there papaya trees in your schoolyard or at home?

If not, plant it.

Are there any other fruits like this which are found in your area?
List them.

School vegetable garden



What all items are grown in the school vegetable garden?

Does your garden have the variety of food items necessary for healthy living?

Let's prepare the table.

Items	Those which are available in the garden	Those to be included
Pulses		
Tubers		
Vegetables		
Leafy vegetables		

Expand the vegetable garden with your friends based on the prepared list.

Let's observe and find out

Does the vegetable garden benefit only us?

Look at the picture.

What other creatures come into the garden? Do they come to the farm only to eat pests?

Are there creatures who come to eat the crop?

Illustrate their conversation.
Exhibit the illustration in the class.

I also eat the pests in the farms.



Have you noticed chillies and papaya sprouting up in the surroundings without planting them? How can it be possible?

Creatures play a role in pest control and seed dispersal.



Let us assess

1. Draw a human figure by including suitable food items as body parts. Write down the benefits of food items included in the figure.
2. Look at the burger prepared by Mitra. What food items does it contain?



Do you think the burger is healthy? Why?

3. Match the following

Tuber

Pulses

Egg

Millets

Edible oil

Protein

Fat

Taro

Barley

Little millet

4. Haven't you seen the food items in the picture? Colour the food items that we consume cooked in red and the uncooked ones in green. You may colour the food items we consume either cooked or uncooked in yellow. You can give the respective colour in the small boxes given below the picture.

☐☐☐☐☐☐☐☐☐☐

Extended activities

1. Mithra and her brother are harvesting vegetables from their garden.



Shall we prepare a vegetable garden? Which of the following items will you plant? Put a ✓ mark against them.

Spinach ☐ Lady's finger ☐ Tomato ☐ Brinjal ☐

Pea ☐ Cucumber ☐ Chilly ☐ Bitter gourd ☐

Pumpkin ☐ Snake gourd ☐ Ivy gourd ☐ Ridge gourd ☐

Plant at least five items. You can plant them in your vegetable garden, in sacks filled with soil or in grow bags.

2. Prepare a delicious and healthy dish using locally available food items. Exhibit them in the school food festival.



Living Safely



The teacher entered Kuttan's class with a new game. She and the students sang a song and danced together in tune.

*When one finger shakes,
When it shakes itself,
Let's dance, sing and play.
When one finger two fingers shake,
When they shake themselves,
Let's dance, sing and play.*

Shall we also sing and play this game adding more lines to the song?

What are the games that you play in groups?

-
-
-



Do you know the games shown above?

What are the benefits that we get from games with active physical movement?

- Improve physical fitness
-
-

What are the other things that help us maintain our health?

- Healthy food habits
- Sufficient sleep
-

What are the healthy food habits?

How do sleep habits affect our health?

When should we go to bed? How long should we sleep? If we don't practise good sleep habits, what health problems will we face?

Prepare a short note by gathering information from health care professionals about these issues.

Healthy food habits, active group games and sufficient sleep are important for the health of our body and mind.

Climate and clothes

The teacher distributed some books to the students from the school library. Look at the picture on the cover of the book that Kuttan got.



What is special about the clothes worn by the child in the picture?

What is the reason for wearing such clothes?

Are all fabrics same?

How many kinds of fabrics do you know?

- Cotton
- Polyester
-
-

What features should the clothes that we wear during summer have?

- They should absorb moisture quickly.
- There should be interweave gap to ensure flow of air.
-

Which type of clothes have these features, the most?

Cotton clothes or polyester clothes?

How can we find out?

Let's experiment



Take a piece of cotton and a polyester fabric of equal size. Take equal quantity of water in two glasses and dip each cloth piece completely in the water. Take them out after one minute. Observe the quantity of water left in each glass.

What did you find out?
Discuss the reason.

Which cloth will be suitable for the rainy season?

- Clothes that dry quickly
-
-



The sheep and the polar bear that live in colder climates have a thick coat of fur that helps them survive the cold. For penguins, their feathers protect them from the cold. The layer of fat under the skin of the creatures found in such areas also protects them from the cold.

Road and surroundings

Kuttan and friends walked to get on the school bus after the class.



What should be taken care of when we walk along the side of the road?

- Walk along the right side.
- Don't walk cluttered.
- Walk only along the footpath, if it is there.
-

Walking along the right side is safe. There are more chances for accidents when you walk along the left side. Why is this so? Discuss.

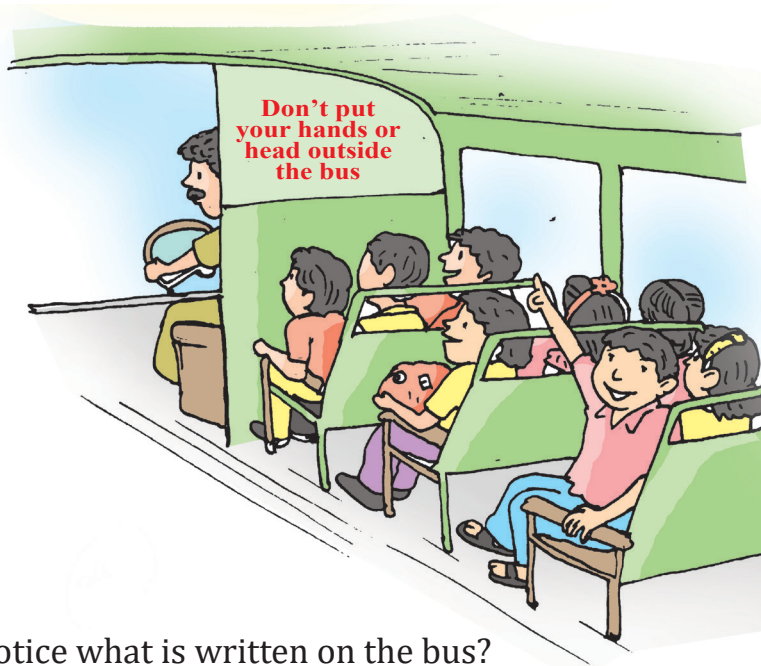
We can see vehicles coming from the opposite side when we walk along the right side of the road. The vehicles coming from behind us are on the left side of the road and hence the chances for accidents are less.

Why are 'Zebra lines' marked on the road?



Zebra lines are for pedestrians to cross the road.

The children looked at both sides of the road and made sure that vehicles were not coming. They crossed the road through the Zebra line and boarded the bus keeping a queue.



Did you notice what is written on the bus?

What are the things we should take care of when traveling in vehicles? Discuss.

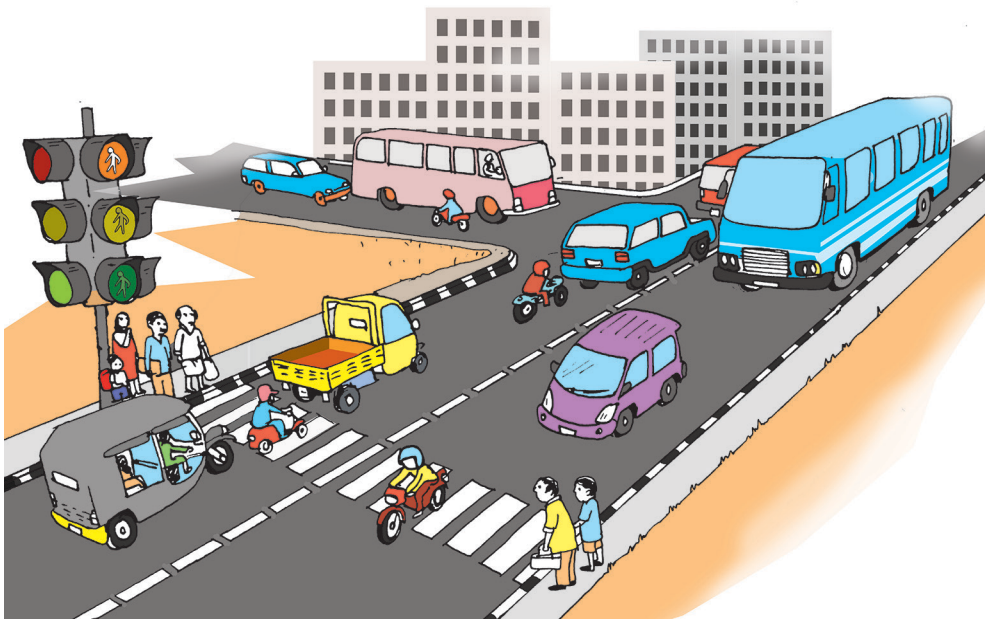
- Don't leap into a moving vehicle to get on.
- Get down only after the vehicle stops moving.
-
-



What are the causes of road accidents?

- Overspeed.
- Careless driving.
- Disregarding 'warning sign boards'.
- Not paying attention to traffic signal lights.
-
-

When they reached the junction, the children's attention was on the traffic signal lights.



What does each colour and sign on the signal light indicate?





Some of the signs that the children saw along the side of the road are given below.

Find out what these signs indicate and write them.







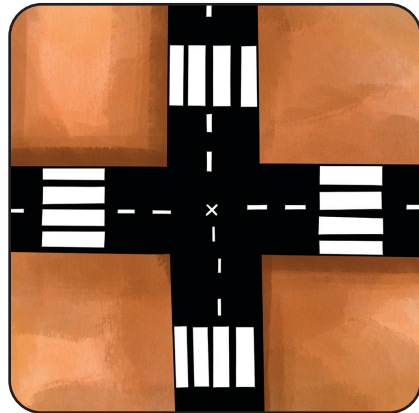


Find more traffic signs and draw in
My Environmental Science Diary.

Let's drive a vehicle

Shall we play a traffic game?

Draw roads on the school ground as shown in the picture. Draw zebra lines in two or three places also. One child can be the traffic police person. Three children can be ready with the sign boards of red, yellow and green signs. Some of you may act as vehicles. The rest of the players can be pedestrians.



Now let us start the game. Vehicles should run through the road. Vehicles should move only by strictly following the traffic rules. Could everyone follow the rules? Did any accidents happen on the road? Write an experience note after the game.

First aid

Kuttan reached home.



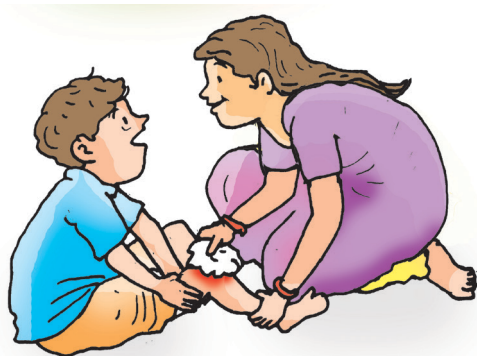
He was playing in the courtyard.



Stumbling on a rock, Kuttan fell down, wounded his knee and bled.



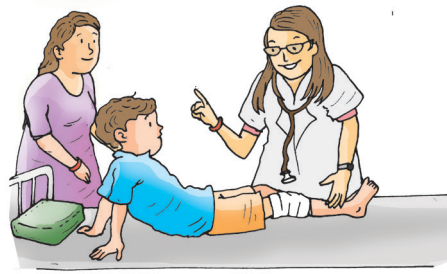
Mother came hastily. She washed the wound in running water.



The leg was kept lifted. The wound was wrapped with a clean cloth to stop it from bleeding.



Kuttan was brought to the hospital because the wound was deep.



The wound was cleaned, medicine was applied and bandaged.

You have observed the pictures, haven't you?

What did the mother do when Kuttan had an injury?

- Washed the wound
-
-
-

Mother did all these before reaching the hospital, didn't she?.

What were the benefits of the first aid when he was wounded?

- Was able to limit pathogens from reaching the wound.
- Was able to stop the bleeding.
-

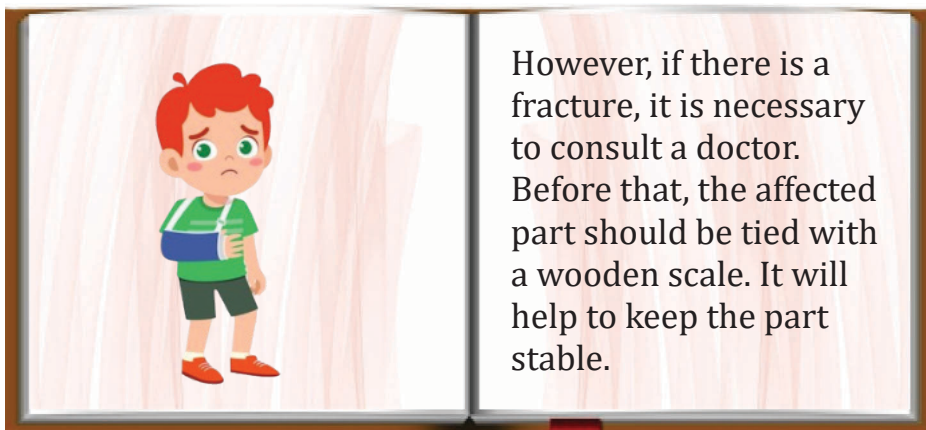
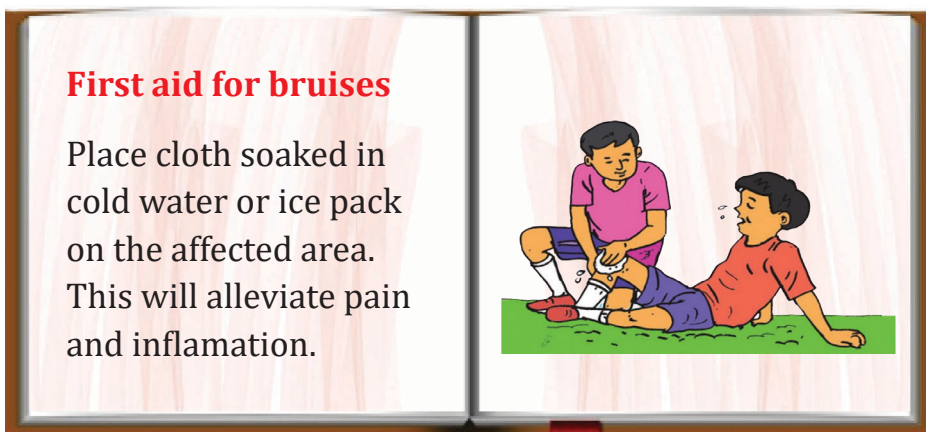
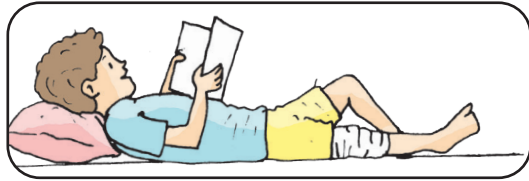
First aid is the immediate care given to a person in an emergency situation, before receiving expert medical care.

Mother reached home with Kuttan.

Kuttan : Mother, where did you learn all these from?

Mother : I will give you a book. You can read it.

Kuttan read the book that mother gave him. Look at these pages of the book.



Kuttan : This book says that a First Aid Box should compulsorily be kept in vehicles and schools.

See what all things are there in the first aid box given below. Write down the use of each of these items.

First aid box

- Scissors
- Cotton
- Cloth
- Bandage
- Soap
- Pin
- Wooden scale
- Tweezers
-
-



What are the other situations in daily life in which first aid should be given?

- Fainting
- Burns
- Chocking
-

Invite healthcare professionals to your school to know more about first aid.

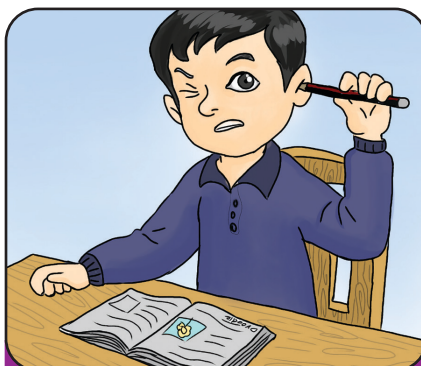
Write down the information in *My Environmental Science Diary*.

If the care that is given during the time of emergency situations is not proper, it will cause more harm than good.

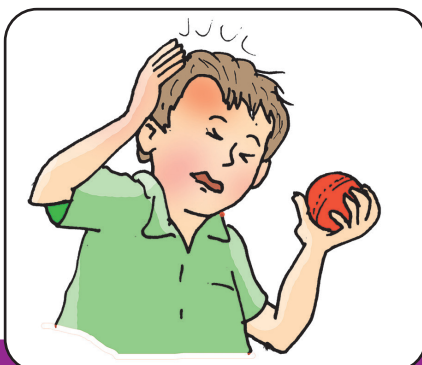
Please don't do



Don't rub your eyes
if dust falls in to them.



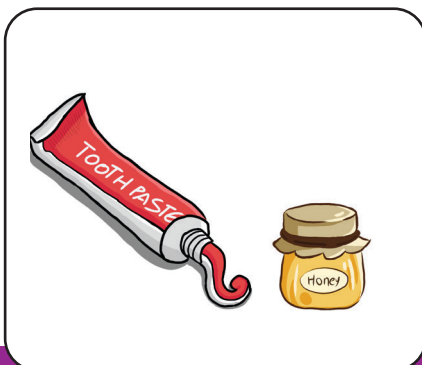
Don't insert objects
into the ear.



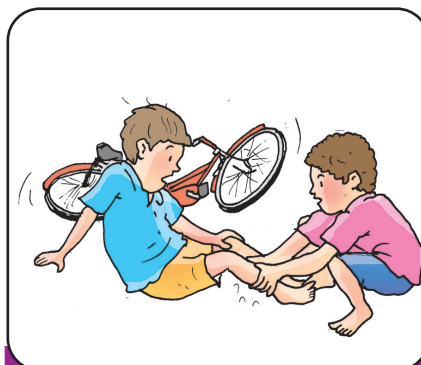
If you hit your head and get a
swelling, don't rub it forcefully.



Victims of accidents may have
fractures in their bones. Do not
lift them up suddenly.



Don't use toothpaste,
honey, etc. on burns

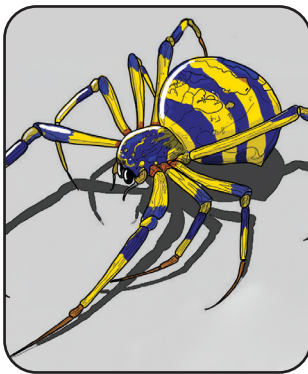


Don't rub or apply
heat on bruises.



If stung by insects such as bees, carefully remove the sting. Applying too much force on the part where it stung can cause the poison to go further in to the body. Get to the hospital immediately as this can cause serious health issues.

Friends of Nature



Which creatures can you see in the pictures?

What is the speciality of these creatures?

Do they always cause harm to us?

People get bitten or stung by them on rare occasions. If bitten or stung, seek medical aid immediately. The most important thing is to take precautions from getting bitten or stung.

Do these creatures do any good to the environment in anyway?

These creatures play a major role in controlling unbalanced increase of many other organisms.

Is it right to harm them unnecessarily? Discuss.

Let's ask the doctor



Listen to the instructions given
by the doctor from the Primary Health Centre
on children's safety.



Don't accept gifts or sweets from strangers.



Don't allow anyone to touch you in a way that you don't like.



You should strongly say "No" or "Don't" in situations where it is necessary.

You should make your objection clear if someone touches your body parts in a way that is uncomfortable to you. You should also talk frankly about this to your parents or teachers.

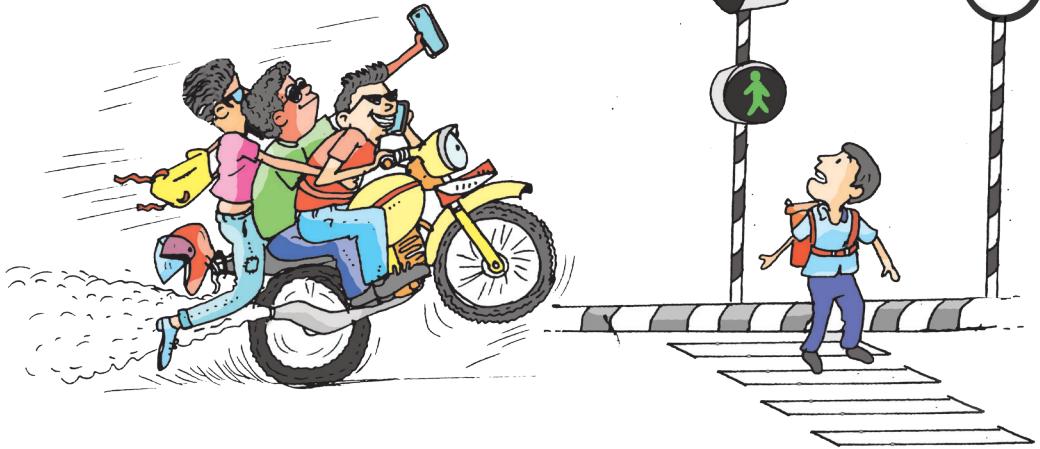


Shouldn't these instructions be followed? Discuss.



Let's assess

1. Observe the picture.



Which traffic rules are being violated here?

What problems will this cause?

2. Match the following



Turn right



Pedestrians restricted



Speed limit



Petrol station nearby

3. Fill in the blanks

Objects in the First Aid Box	Uses
.....	Used to wrap around wounds or bruises
.....	Used to cut cloth or bandage
Pin	Used to bind bandage together
.....	Used to clean and wipe wounds
Tweezers	



Extended Activities

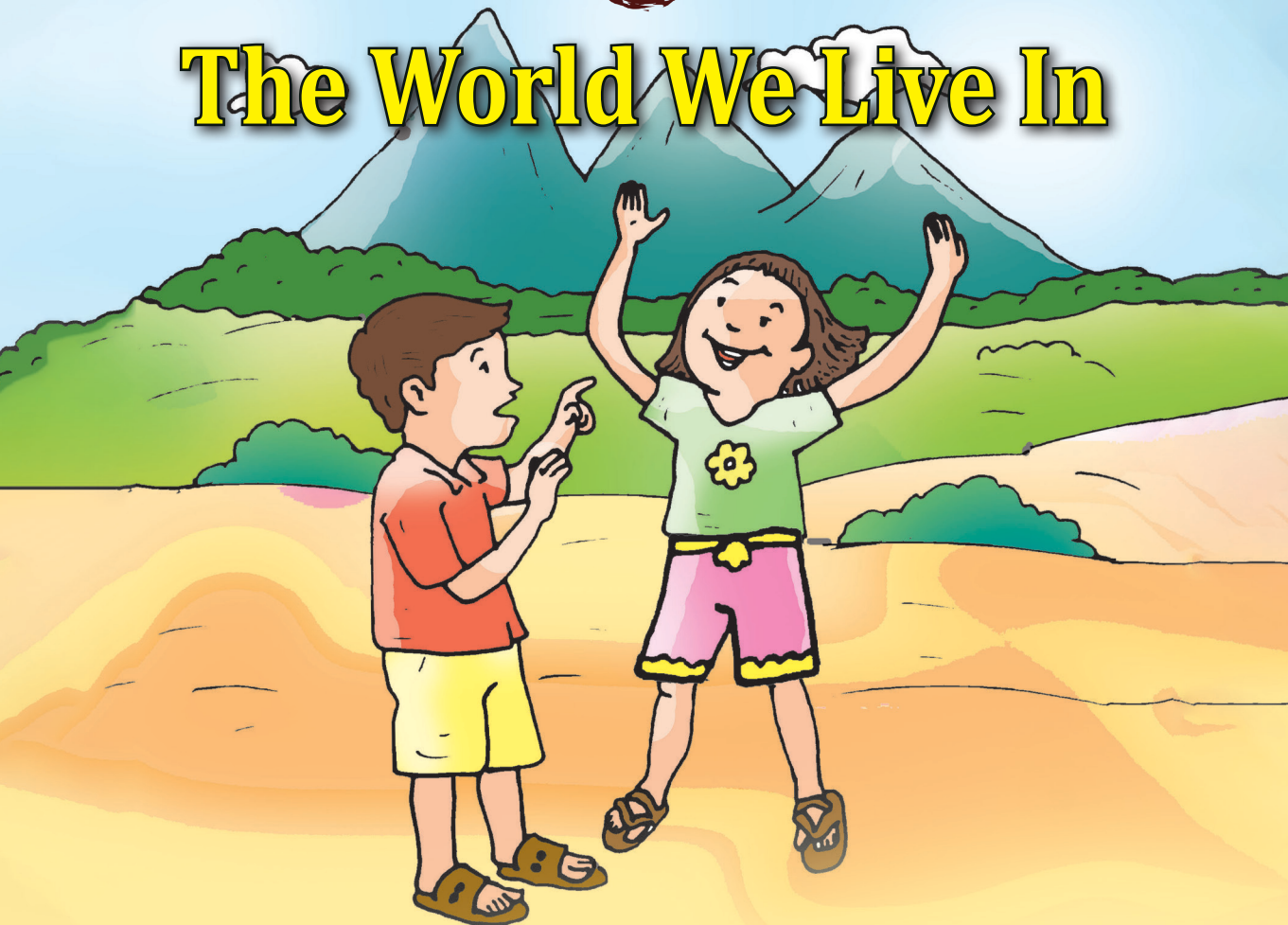
1. Collect the different types of fabrics we use for making clothes and exhibit them in the class.



2. Prepare and present a skit including various accidents that occur in daily life and the first aid to be given.



The World We Live In



When the teacher entered the class, Samatha and Sayan were in a debate.

Sayan : The earth is flat indeed, I'm sure...

Samatha : No, it isn't so... If it is flat,
shouldn't Earth have a boundary?

Sayan : Isn't the sea the Earth's boundary?

The teacher engaged with their doubts.

Then what if we go further forward out to the sea?

If we continue our journey like that, where will it end?

Where should we travel up to, if we want to see the whole Earth?

The shape of the Earth

Look at a picture of the Earth taken from space.



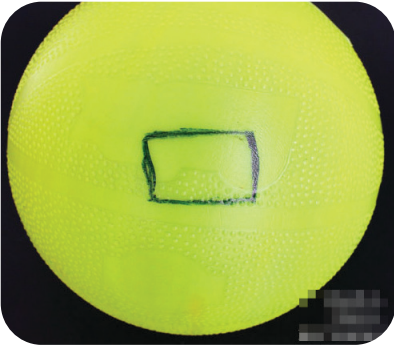
In this picture, in which shape do you see the Earth?

We see the Earth as flat; don't we?

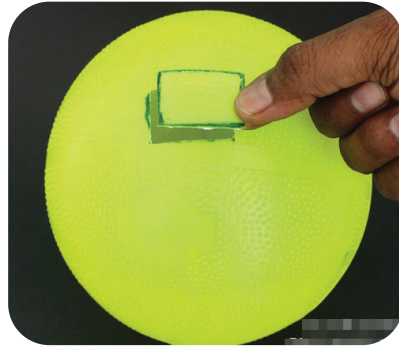


Can we recognise the shape of the Earth by seeing only a small part of it?

Let's find out



Take a plastic ball and mark a square on it.



Cut out that part.

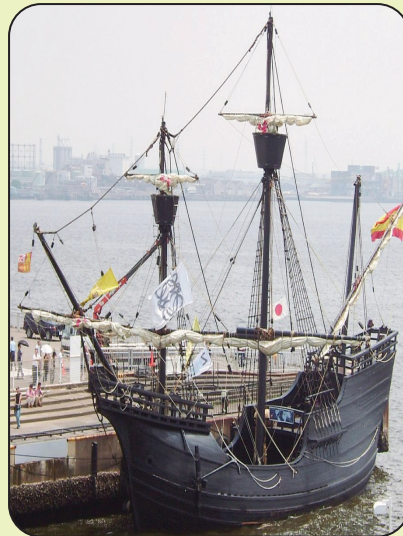
Is the cut out part round or flat?

If the ball is the Earth, and the square is our locality, can you say the reason why we don't experience the spherical shape of the Earth?

Round shaped objects are called spheres.

Some sailors had long ago, realised that the Earth was round. Ferdinand Magellan was the first among them. Magellan and his colleagues set off on a voyage on a sailboat. They travelled throughout in the same direction. The voyage was very slow. After some years, the sailboat ended up at the same place where it started the voyage.

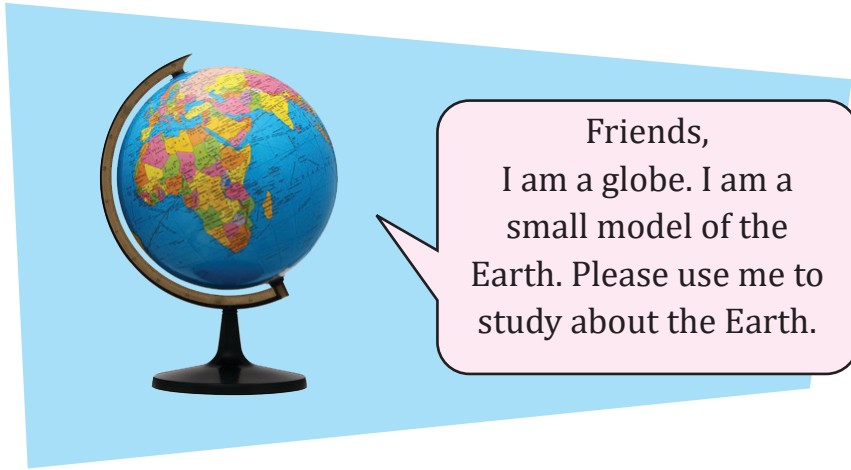
How could this have happened?



Model of Magellan's ship

Model of the Earth

If we make a small model of the Earth, what will it be like?



Now, shall we observe the globe?



Which colour do you see the most on the globe?

What does this represent?

What about the parts in other colours?

Is the land area or the sea area larger in size?

The part illustrated on the globe in blue colour is the sea.
The land parts are illustrated in other colours.
The sea area is more than twice the size of the land area.

Let's look at the sky

Have you looked up at the sky?

What are the sights in the sky?

Where all do you see the sky?

Do you see the sky only above your head?

Go to the middle of the playground and observe the sky.

On which sides of you do you see the sky?

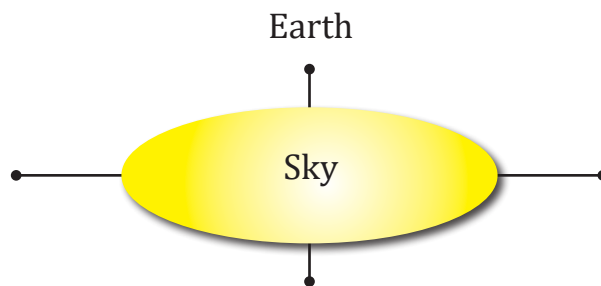
Look at the illustration of the Earth and the sky.



In which parts of the Earth do you see the sky?

There are other spheres in the sky other than the Earth, aren't there?

Which are they? Complete the word sun.



Where are the stars during the day?



Teacher,
why can't we
see the stars
during the day?

Let us
find out
through an
experiment.

Illuminate a small white LED in an open area. Observe the light. Do the same activity in a closed dark room. Observe the difference in the intensity of light. What change did you observe? Isn't it hard to see the LED shining in the open area? What could be the reason for this?

The Sun
is also a star.
It is the star
closest to the
Earth.

We cannot see the stars during the day
because of the light of the Sun.

The Sun

It is the light from the Sun that reaches the Earth.
Haven't you seen the Sun at sunrise and sunset?
In which shape do you see the Sun?

The Sun is a very large sphere compared to the Earth.
Since it is so far away the Sun appears
small to us when we look at it from the Earth.

A girl with short dark hair, wearing a yellow shirt and blue pants, stands in a night landscape. She is looking up at a large, bright yellow full moon in a dark blue sky filled with stars. To her left is a large, leafy tree. In the background, there is a small hut with a brown roof and several palm trees. The ground is covered with green grass and some small plants.

Let's observe the Moon

The Moon, which is the celestial sphere closest to the Earth, cannot shine by itself. The Moon reflects the Sun's light falling on it. This is the reason for the Moon's glow and the moonlight at night.



So it is the Sun
itself that gives the
light at night!

How big is the Sun?

Imagine that the Sun is a ball of the size of your classroom. Then the Earth will be as small as a bead. The moon will be as small as a mustard seed.

But, if we look at the setting Sun and the full Moon, they will appear to be the same size. Why is this so?

Place a football on top of the table and observe the size. Later, place the same football as far away in the school courtyard as possible and observe the size from a long distance. Doesn't the same football appear large at first and small later?

What could be the reason for this?

The Sun is very far away from the Earth. But how about the Moon? It is located nearer to the Earth compared to the Sun.

Day and Night

Read the conversation between Samatha and her father in America.



Why is it daytime in America when it is night for us?

Let's experiment.



Close the door and the windows of your classroom. Now it is dark inside the room, isn't it? We can use an emergency lamp for the experiment. Imagine this lamp as the Sun. Now illuminate the emergency lamp in such a way that the light falls on the side of the globe with America. Does the light fall on the side with India on it? What did you find out?

Now keep the globe on the table and turn it slowly in anti clockwise direction and bring the side with India towards the light. What happens now?

- Now does the light fall on the same side that it fell at first?

Turn the globe again in the same way.

- Write down how day and night occur on the Earth.

India - our country

“Teacher, why are there so many colours on the land area of the globe?”

Sayan asked.

“Each colour represents a country.”, the teacher said.



Where is our country in this?

The teacher showed the children the location of India.

You may also find the location of India on the globe.

If we copy and draw the border line of India on a paper, it will look like this.



Such pictures are called **maps**.

National Flag

You have seen our National Flag, haven't you?



The Indian National Flag has saffron colour on top, white in the middle, and green at the bottom. It has the Ashoka Chakra with 24 spokes of blue colour in the middle.

Make a National Flag having the correct measurements in a group with the help of your teacher.

Let us learn some other symbols of our country.



National Flower



सत्यमेव जयते
Government Of India



National Animal



National Bird

National Emblem



National Tree

Our State

India is divided into different states.

These states differ in their language, clothing and ways of living.

Which is our state?

Find out the location of Keralam in the map of India given here.



Our Keralam is very small when compared to the whole size of India.

Keralam was formed as the land of people who mainly speak Malayalam.

When is Kerala Formation day (*Kerala Piravi*)?

KERALAM



What are the activities conducted in your school in connection with *Kerala Piravi*? Keralam is divided into various districts for administrative convenience. Look at the map of Keralam and identify the districts.

How many districts are there in Keralam?

Which is your district?

Write the districts of our state in the table in the correct order.

1	Thiruvananthapuram	2	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	

Copy and draw the map of Keralam and colour your district.

Observe the map and find the answers to the questions given below.

- Which districts have sea shores?

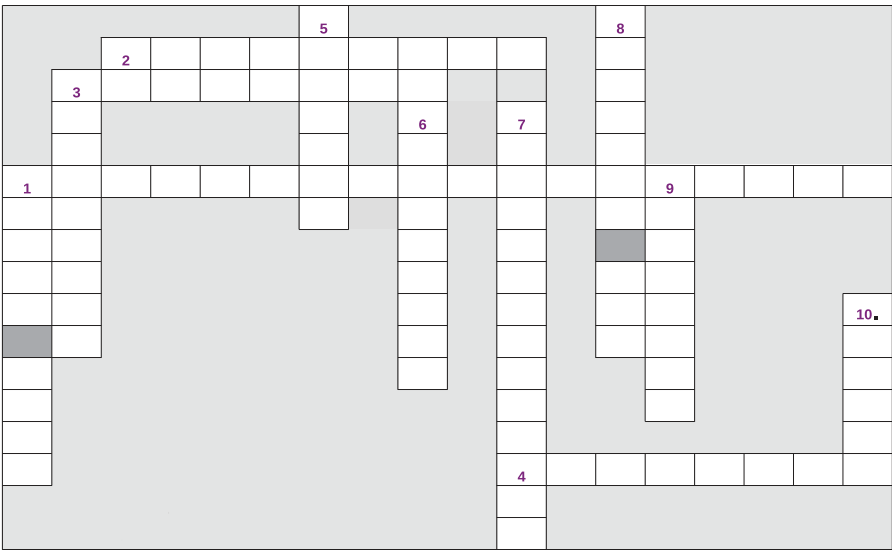
.....

- Which are the districts that adjoin your district?

.....

Draw an enlarged map of Keralam. Paste it on a thick paper and cut along the border lines of the districts. Jumble the pieces. Join the pieces together to recreate the map as before.

Complete the word puzzle



Across to the right

1. Situated at one end of Keralam.
2. Neighbouring state of Keralam.
3. District surrounded by other districts.
4. Malappuram and Palakkad are the neighbouring districts.

Downwards

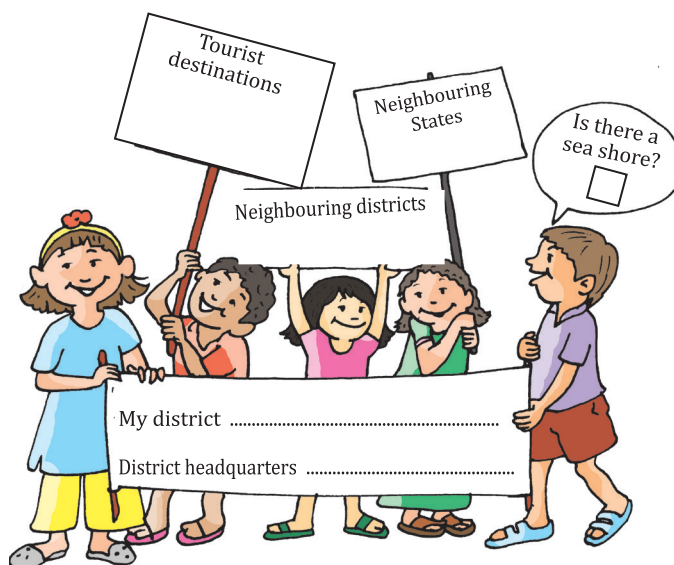
1. Neighbouring state of Keralam.
3. Has a sea shore, Wayanad and Malappuram are the neighbouring districts.
5. The district shares borders with Tamil Nadu and Karnataka.
6. The smallest district.
7. It shares borders with Kollam and Alappuzha districts.
8. The sea adjacent to Keralam.
9. It lies adjacent to Malappuram and Thrissur districts.
10. Sea lies on one side and Karnataka on the other side. It has three neighbouring districts.

Upwards

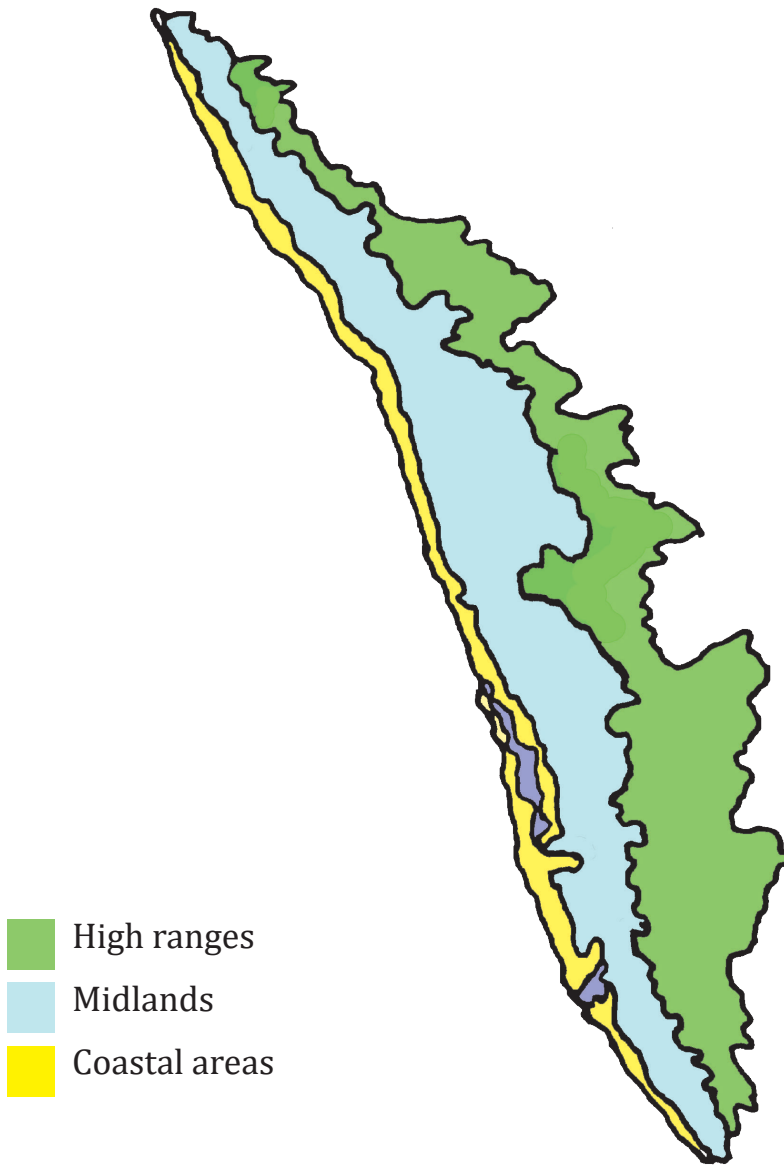
7. This is a neighbouring state of Kerala
10. Malappuram and Palakkad are the nearby districts
11. The sea adjacent to Keralam.

Create more such questions and play a game with your friends.

Prepare a table about your district including the information given below.



Topography of Keralam



Are all the regions in Keralam the same?

There are mainly three natural regions in Keralam.

The areas adjacent to the sea can be called the coastal areas and those adjacent to the mountains can be called the high ranges.

The areas in between them are called midlands.



What is the cultivation shown in the picture? In which region such a cultivation is found?

Are the same kinds of crops cultivated everywhere?

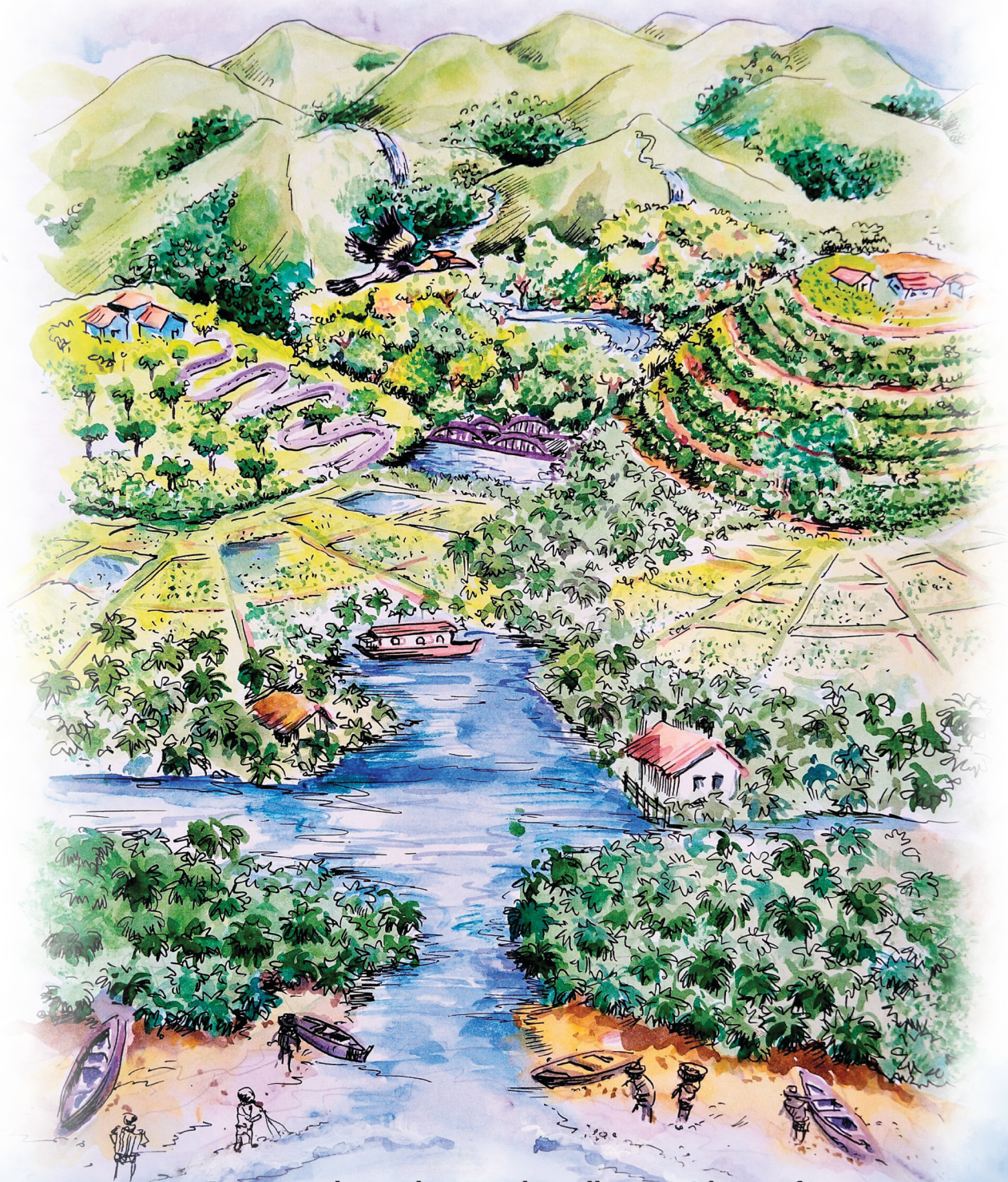
What is your opinion?



What is the occupation shown in the picture?

The occupations in a particular area are connected to the characteristics of that area. Some of the occupations are found every where. Some of them occur only in the coastal areas. Some other occupations occur only in highranges and midlands. There are occupations connected to the geographical characteristics of each locality.

Are there any such occupations in your area? Find out.



Long sea shores, large and small rivers, plenty of
backwaters, vast agriculture fields, varieties of forests,
mountain ranges and meadows...
How beautiful is our land!



Let's assess

1. Circle the correct choice

- Our National Animal : Elephant Tiger Lion
- The colour which is used to denote the sea on the globe:
Blue Green Yellow
- The region which is close to the sea:
Highland Midland Coastal area

2. True or False

1. The Sun is the star closest to the Earth ☐
2. The sky exists only above our head ☐
3. The Sun and the Moon are of the same size ☐
4. The sea is more than twice the land area on Earth ☐
5. The Sun revolves around the Earth ☐
6. When it is night in India it is also night in America ☐

3. Examine the districts of Keralam on the map and complete the columns.

With Coastal Area	Sharing the border with Tamil Nadu	Sharing the border with Karnataka	Without sea coast and not sharing the borders with other states

4. Colour the boxes given against various occupations according to the indication given below.

● Only in coastal areas ● Only in high ranges and midlands ● Found in all the regions

●Cattle farming		●Coffee cultivation	
●Fishing from the sea		●Trade	
●Vegetable cultivation		●Rubber cultivation	
●Cardamom cultivation		●Tailoring	



Extended activities

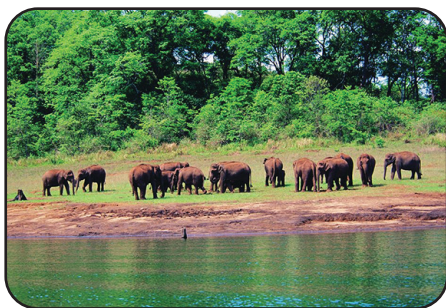
1. Prepare an album entitled “Ente Keralam” using the pictures of the places of importance and their special features.



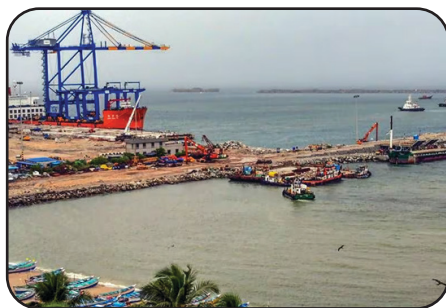
Athirappilly waterfall,
Thrissur



Bekal fort, Kasaragod



Thekkady wildlife sanctuary,
Idukki



Vizhinjam Port,
Thiruvananthapuram

2. You have learnt about our National Flag, haven't you?

Draw the National Flags of various countries and prepare an album.



A colorful illustration of a weaver bird in flight, facing a large tree. A woven nest hangs from a branch of the tree. The background shows a green field, a blue sky with other birds, and a body of water in the distance.

8

Home and Nest

The weaver bird mates (*Attakkuruvi*) had a wish
They wanted to build a nest before the rainy season.
The birds claimed a tree branch.

The male weaver bird started building the nest...
A beautiful nest was made within days using fibres
pecked from paddy and coconut leaves.
Then the female laid eggs and they waited for the little
ones to come out.

The eggs hatched and the baby birds came out.
Days passed.

The baby birds were ready to fly.

The weaver birds and their young ones flew far away.

Have you seen the nest of a weaver bird?
Which all bird's nests have you seen?
Are the nests of all birds the same?
How are they different?
Look at the pictures.



Where does the lapwing bird
(*Thithiripakshi*) lay eggs?



There are many types of birds that build nests in trees, shrubs, hollows in tree trunks and soil.

Why do birds build nests?

-
-

Do all the birds build nests?

Observe the birds in your locality. Where do they build nests?

Find out the birds that build nests in trees and the birds that do not.



Some birds do not build nests, but lay their eggs in the nests of other birds. The cuckoo laying its eggs in the crow's nest is an example for the dependence on other birds. Collect more information.

Do only birds build nests?

Look at the picture.

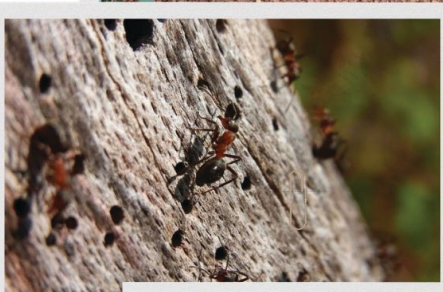
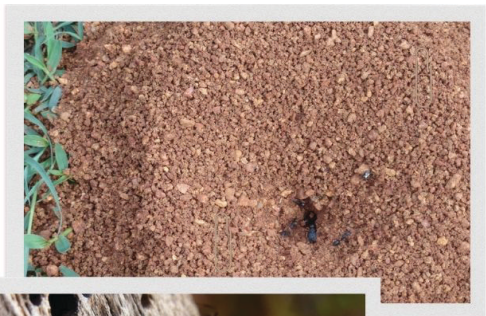
It is a kind of anthill.

Ants build different types of nests.

They build nests not only in the soil, but also by joining leaves together and by drilling wood.



Observe the pictures of different types of ant nests.



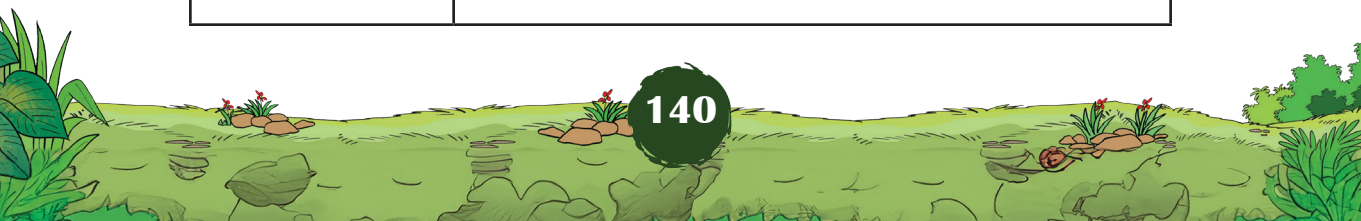
What other creatures around you build nests?

Do they use the same materials to build nests?

Find out and write.



Creature	Materials used for building nest
• Termite • Wasp • • • •	Soil Pulp, saliva, soil



Match the following

Crow



Ant



Honey bee



Potter wasp



Our houses

Why do we build houses?

- for a safe living
- for keeping us away from rain and sun light
-
-

What types of houses do we make? Look at the pictures of various types of houses.

What are the materials used for the construction of each house?
Observe the pictures and complete the table below.



Picture	Wall	Roof
1		
2		
3		
4		
5		
6		

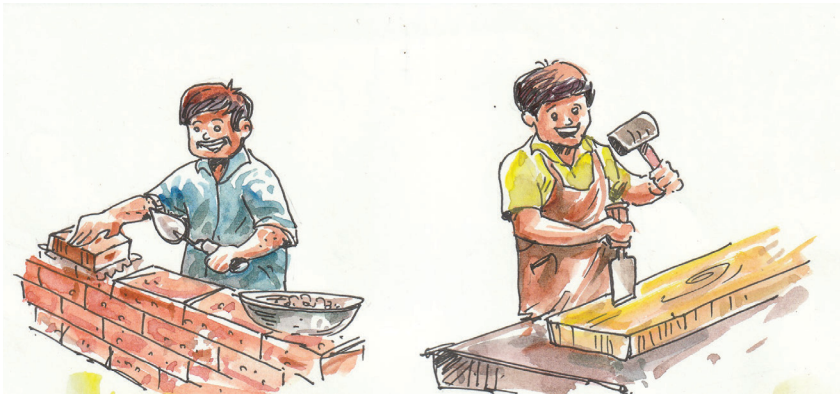
Analyse the table and note down your findings.

Why are different materials used to build a house?

Different materials are used for building houses according to the climate and availability.

Many many jobs!

The different jobs associated with construction of houses are indicated in the pictures. What are they? Write them down.



Visit a house under construction and meet the people doing different jobs. Ask them about the different works going on there and understand the process.

Houses of many kinds

Flats are huge buildings with many floors in which a lot of people can live.

Pictures of different types of houses are given below. Identify glass house, house built on pillars, igloo, and 3D printed house among them.



What are the special features of each house?

1. _____
2. _____
3. _____
4. _____

Houses should be constructed keeping in mind the climate of each region, the peculiarity of the location, availability of resources, security and the number of family members. The growth in technology has brought about big changes in the construction of houses.

Let's build a house

Let's build the model of a house.

Cardboard, chart paper, glue, scissors, paper and watercolour can be used for this. Now make a house according to your imagination.

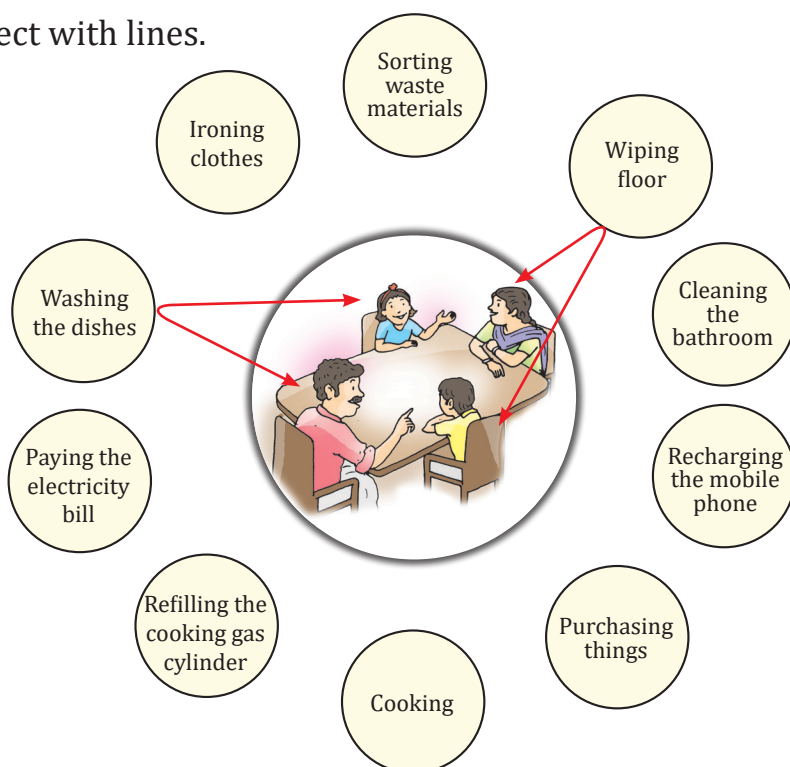
Is the house that you made similar to the house made by your friends?

Together we can

What are the different household chores?

What chores can each person do?

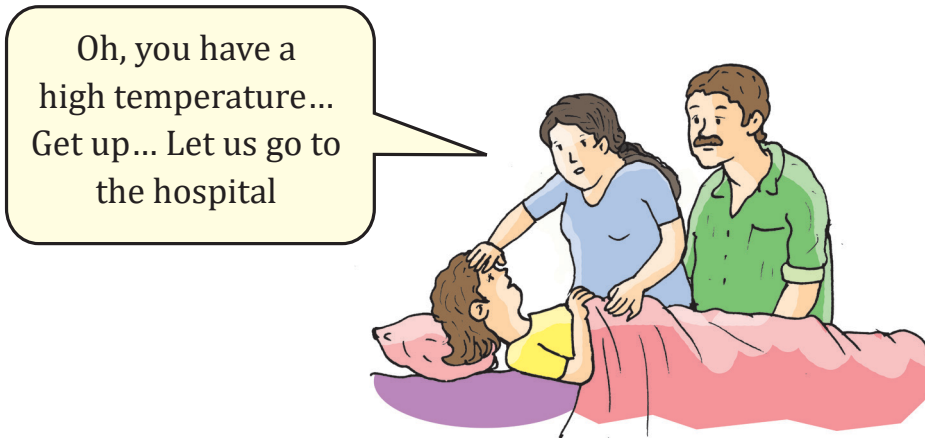
Connect with lines.



Discuss your findings in the class.

Shouldn't the household chores be done with the cooperation of all the family members?

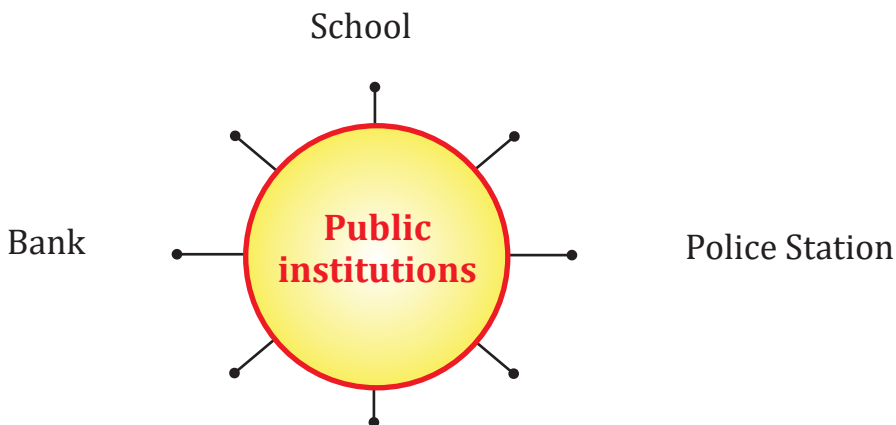
Public institutions



Hospitals are institutions that provide care to those who are sick.

Institutions which are either fully or partly owned by the government, providing various services to people are Public Institutions.

What are the other institutions that provide us different services?



What services do we get from each of these institutions?

Discuss and write in *My Environmental Science Diary*.

Visit a public institution nearby your school.

Discuss with your friends and prepare questionnaires before visiting the institutions to understand the services provided.

Prepare a report of the information that you gathered and present it to the class.

The homeless and those who lost their homes

**New houses will be handed over to
228 families who lost their
houses in the flood.**



**The government's
new project gives
hope to the homeless**

Various government projects and community organisations work towards realising the dream of 'House for All'



Let's assess

1. Various works related to the construction of a house are given below. Find out and write the materials needed at each stage.

Work	Materials needed
Foundation work	
Wood work	
Building a wall	
Plastering	

2. Observe the dwelling of different creatures. Write down the features. List them according to the particulars given below.

Those that build nest only for laying their eggs and hatching the little ones	Those who stay in the dwelling built by themselves	Those who depend on the dwelling of others

3. Read the situations given below.

- Meera and her friends learn joyfully with their teacher.
- The father buys rice, wheat and kerosene.
- The mother takes the grandfather for an eyetest.
- The grandmother receives pension.
- The garbage collectors take the plastic waste from the house.

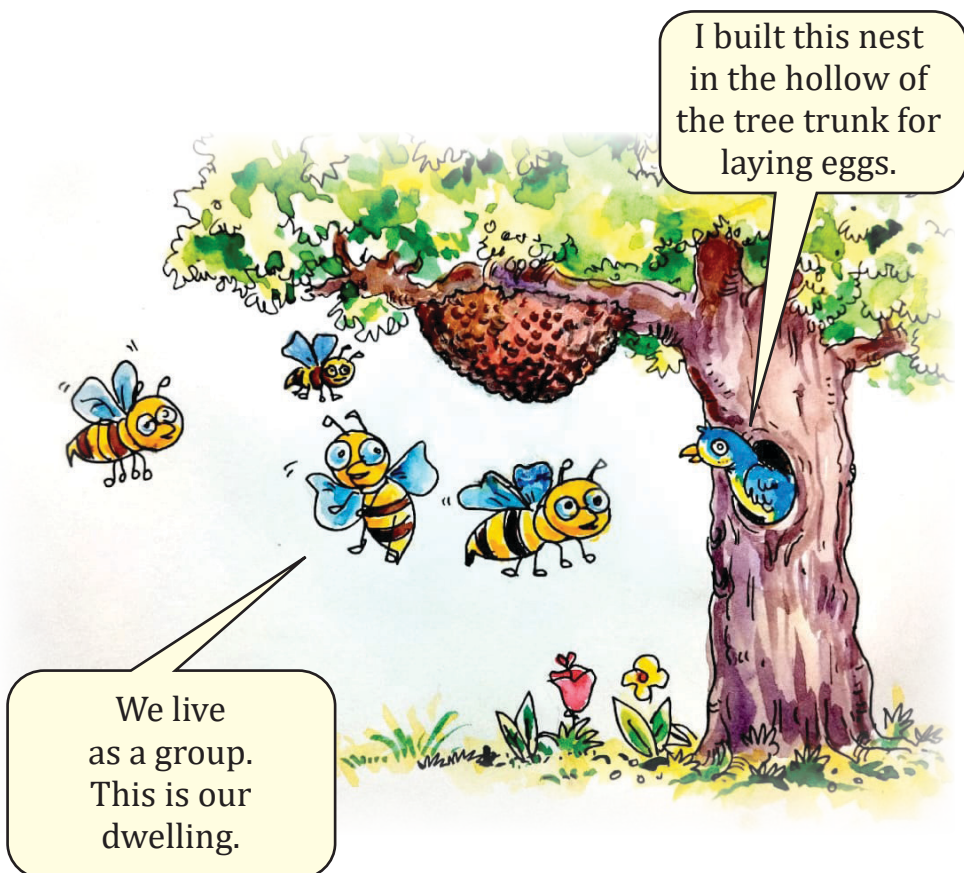
Which of the public institutions have been useful to Meera and family? Write them down.

Public Institutions	Services
• • • • •	



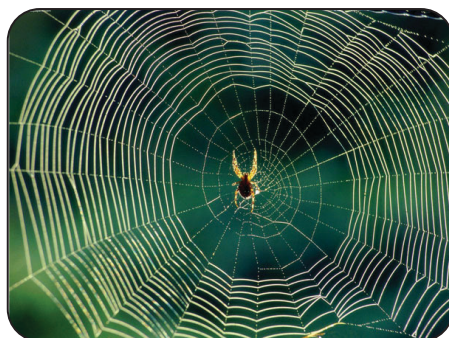
Extended activities

- The dwelling of the birds and the honey bees are shown in the picture. Are they identical? Identify and classify the animals and birds living as a group or as single. Note them down below.



Those which live as a group	Those which live single

2. Haven't you seen spider webs? Look at the differences in the given pictures of webs. Observe your surroundings as well. Note down the specialities of different types of spider webs.



CONSTITUTION OF INDIA

Part IV A

FUNDAMENTAL DUTIES OF CITIZENS

ARTICLE 51 A

Fundamental Duties- It shall be the duty of every citizen of India:

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievements;
- (k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between age of six and fourteen years.

CHILDREN'S RIGHTS

Dear Children,

Wouldn't you like to know about your rights? Awareness about your rights will inspire and motivate you to ensure your protection and participation, thereby making social justice a reality. You may know that a commission for child rights is functioning in our state called the **Kerala State Commission for Protection of Child Rights**.

Let's see what your rights are:

- Right to freedom of speech and expression.
- Right to life and liberty.
- Right to maximum survival and development.
- Right to be respected and accepted regardless of caste, creed and colour.
- Right to protection and care against physical, mental and sexual abuse.
- Right to participation.
- Protection from child labour and hazardous work.
- Protection against child marriage.
- Right to know one's culture and live accordingly.
- Protection against neglect.
- Right to free and compulsory education.
- Right to learn, rest and leisure.
- Right to parental and societal care, and protection.

Major Responsibilities

- Protect school and public facilities.
- Observe punctuality in learning and activities of the school.
- Accept and respect school authorities, teachers, parents and fellow students.
- Readiness to accept and respect others regardless of caste, creed or colour.



Contact Address:

Kerala State Commission for Protection of Child Rights

'Sree Ganesh', T. C. 14/2036, Vanross Junction

Kerala University P. O., Thiruvananthapuram - 34, Phone : 0471 - 2326603

Email: childrights.cpcr@kerala.gov.in, rte.cpcr@kerala.gov.in

Website : www.kescpcr.kerala.gov.in

Child Helpline - 1098, Crime Stopper - 1090, Nirbhaya - 1800 425 1400

Kerala Police Helpline - 0471 - 3243000/44000/45000

Online R. T. E Monitoring : www.nireekshana.org.in