

Environmental Studies

A textbook for Class IV



The Jammu and Kashmir State Board of School
Education, Srinagar/Jammu

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Environmental Studies

A Textbook for Class IX

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FOREWORD

The Jammu and Kashmir State Board of School Education initiated the process of review and revision of school curriculum to make it in tune with societal demand. School curriculum is basically a social curriculum, which is transacted in a classroom so that it is understood in a right perspective. Like a living organism society and social curriculum is dynamic and needs modification continuously to keep it as updated as is the demand of the growing society.

The subject of Environmental Studies is being taught extensively and has been incorporated at primary stage, where the study intends to be familiar and inculcates zest in the children about the concept of good environment. As a matter of fact, the essence of the subject has tremendous inclination following outcome of the contemporary atmosphere. The course is meant to develop the child's skill to protect the environment, develop such values, which help in promoting the quality of life individually and concurrently that of the community as a whole.

The textbook for class IV has been developed and made available in your hands by virtue of vigorous efforts of subject experts, through series of workshops. More importantly, the textbook has been developed and based on National Curriculum Framework (NCF) 2005, wherein, contextualization has been done.

The present textbook has been visualized under 17 chapters based on child's day-to-day and surrounding situations. Besides, the budding scholars have been given the concept of environmental knowledge to sensitize them towards their neighborhood, nature, society and about the planet earth. Chapters dealing with plants and animals are focused to develop among themselves the interest and assist them to recognize the importance of the plants and animals in their life. Environment saving has become part of the world agenda. What has been put in this textbook is subject matter of debate and deliberation. I sincerely request the stakeholders to come up with suggestions if any for the improvement of this textbook which will be incorporated in the next edition to make the book better one. I place on record my gratitude for all those who have helped us in the development of this textbook. I also record my appreciation for Academic and Curriculum Development and Research Wing, particularly **Dr. Sheikh Bashir Ahmad**, Secretary BOSE, **Mr. S.M. Mahajan**, Deputy Director (Academics), J.D. and **Dr. Yasir Hamid Sirwal**, Academic Officer. I am also thankful to NCERT, New Delhi which extended helping hand in sparing the copyrights for the use of their textual material.

Prof. (Dr.) Desh Bandu Gupta
Chairman
The Jammu and Kashmir State BOSE

ACKNOWLEDGEMENT

At the outset it is indeed laudable to mention the assistance and valuable inputs/contribution offered by the subject experts for framing the present Environmental studies book for class IV. The contents have been developed in a lucid and exhibitivve manner to enable the students to comprehend all the topics unambiguously.

It is apt to record that while dedicating this textbook of class 4th to the pupil of State, I acknowledge with gratitude the contribution made by the experts of the subject and for extending their whole hearted support.

They are:

1. Mr. M.d. Zargar, Dy. Director (Academics) - K.D, J KBOSE
2. Dr. Jyoti Malhotra, Lecturer, GHS, Jhandrah, Jammu
3. Mr. Sandeep Mansotra, Tr. GHS, Kathua.
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7. Mrs. Rajinder Kaur, Master, GHS, Ghou Manhasan, Jammu.
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9. Mr. Shobir Ahmed, Tr. GHSS (G), Kishtwar.
10. Mr. Arif Jan, Academic Officer, BOSE.
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14. Mr. Naseer Ahmed, Central Academics, JK State BOSE.
15. Mr. Zameer Ahmed, Central Academics, JK State Board.
16. Mr. Jameel Ahmed, Cental Academics, JK State Board.
17. Mr. Shakeel Ahmed, Central Academics, JK State Board.

I am highly thankful to the Academics Division (CDR Wing) for their contribution in preparing this book of Environmental Studies. I also place on record my profound appreciation for the contribution made by S.M. Mahajan, Dy. Director, (Academics)- JD and Dr. Yasir Hamid Sirtwal, Academic Officer for preparing and processing this Environmental Studies textbook and making available local specific materials for the children of the State and the contribution of Mr. Narinder Jamwal for Designing & Type setting.

Every effort has been made to keep this book error free. As there is always scope for improvement, any comment and suggestion will be gratefully acknowledged.

(Dr. Sheikh Bashir Ahmad)
Secretary
The J&K State BOSE

Chapter - 1

Going to School

Let us meet some children and see how they reach school.



It rains so much where we live. Sometimes after the rain, there is knee high water everywhere. But that does not stop us from going to school. We hold our books in one hand and bamboo with the other. We quickly cross the bamboo and rope bridge to reach school.

Try these



- Collect some bricks. Lay them on the ground in a line as shown in the picture. Try walking on them. Was it easy?
- Make a small bridge by tying 4 or 5 bamboo poles together. Ask your teacher to help you. Now walk on the bridge. How did you feel? Did you fall down? If you walk like this a few times, you will start finding it easier.
- Do you think it would be easier to walk on this bridge barefooted or with shoes or with slippers? Why?



The Trolley

Everyday we have to cross the river to reach school. The river is wide and deep. There is a strong iron rope across the river. On both the sides it is tied tightly with strong trees or rocks. There is a trolley (an open box made of wood) attached with the rope.

Four or five of us sit in the trolley. A pulley helps the trolley to move across the rope. We reach the other side of the river very quickly.

Let us do

Observe pictures 1 and 2. In the pictures, children are pulling the buckets from the well. Can you tell the difference in both the pictures? Which would be easier—using the pulley or not using it?



Q Look around you, name the things where you use pulleys?

Ans:

➤ With the help of pulley, try and lift various things, as shown in the picture.

Ans:



Cement Bridge

We often need to go across rivers, nallas, streams, so we use bridges. These are made of cement, bricks and iron rods. The bridge may also have steps.



Q1. How is this bridge different from a bamboo bridge?

Ans:

Q2. How many people do you think can cross the bridge at one time?

Ans:

You have seen how children use different kind of bridges, to cross rivers and other uneven areas to reach school.

Q3. If you had a chance, which bridge would you like to use? Why?

Ans:

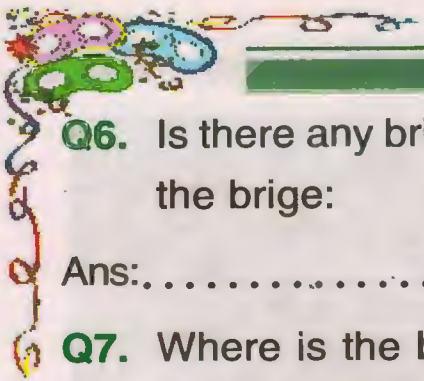
Q4. Do you have to cross any bridge on the way to your school? If yes, what type of bridge it is?

Ans:

Q5. Find out from your grandparents, what kind of bridges were there when they were young?

Ans:





Q6. Is there any bridge near your house? Find out more about the bridge:

Ans:.....

Q7. Where is the bridge – over water, over a road, between two mountains or somewhere else?

Ans:.....

Q8. Who uses the bridge? Is it used by people on foot, by vehicles or by animals?

Ans:.....

Q9. Does the bridge seem to be old or new?

Ans:.....

Q10. Find out what type of materials are used in making this bridge. List some of them.

Ans:.....

Q11. Draw a picture of bridge on your notebook. Do not forget to draw the train, vehicles, animals and people who cross the bridge.

Q12. Imagine what difficulties there would be, if the bridge was not there?

Ans:.....

Let us find out some other ways by which children go to school.



SHIKARA

In some parts of J&K, we use a *Shikara* (small wooden boat) to reach school.



Q1 Have you seen any other kind of boats?

Ans:

Q2 Can you think of other ways by which we can travel on water?

Ans:



In some parts of Jammu & Kashmir there are roads all around. It gets very hot in the day. We use Bus, Auto, Horse Cart to reach school.

➤ **Q1.** Have you ever sat in a Horse-cart or horse carriage (tonga)? Where?

Ans: _____

Q2. Did you climb on it yourself, or did someone help you?

Ans: _____

Q3 How did you feel riding in the Auto?

Ans:





Village in the plains

Bullock-Cart

We ride in our bullock-cart, going slowly through the green fields. If it is too sunny or raining, we use our umbrellas.

Q1 Do you have bullock-carts where you live?

Ans:.....

Q2 Does it have a roof?

Ans:.....

Q3 What kind of wheels do they have?

Ans:.....

Q4 Make a drawing of the cart in your notebook.

Bicycle Ride

We ride our bicycles on the long road to school. At first, girls here did not go to school, because it was too far. But now groups of 7-8 girls easily ride even through the difficult roads.



Q1. Can you ride a bicycle? If yes, who taught you to ride?

Ans:.....

Q2 How many children use bicycles for going to school?

Ans:.....



Children Cross the Jungle

We have to go through a thick forest to reach school. At some places, it is so thick that even sunlight does not pass through. It is also very silent there: You can only hear the sounds of different birds and other creatures.



Q1 Have you ever been in a thick jungle or any such place?

Ans:

- Write your experiences in your notebook.
- Can you recognize some birds by their sounds? Can you imitate the sounds of some birds? Do it.

MOVING ON THE SNOW

See, how we reach school! We go to school through miles of snow. We hold hands and walk carefully. If the snow is soft, our feet sink into it. When the snow is frozen, we may slip and fall.



Northern Hills

Q1 Have you ever seen so much snow? Where? In films or somewhere else?

Ans:



Q2 Do you think that such places have snow all the time? Why?

Ans:

Rocky Paths

We live in the mountains. The paths are rocky and uneven. The children who live in the plains will find it difficult to walk on these. But we can easily move up and down.



No matter whether there is a dense forest, farms, mountains or snow on the way, we manage to reach school.

Q1 Do you face difficulties on the way to your school?

Ans:

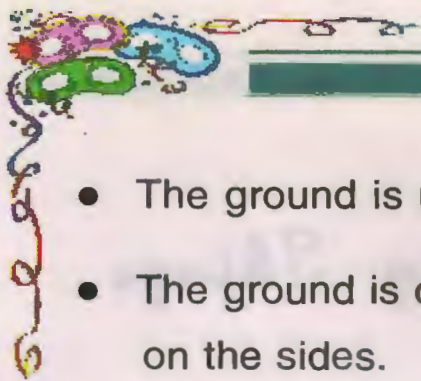
Q2 Which is the best month, you like to go to school? Why?

Ans:

See Me Walk!

Go to a ground or an open space with your friends. Act the way you will walk in these situations.





- The ground is made of soft and smooth rose petals.
- The ground is covered with thorns and there is tall grass on the sides.
- The ground is covered with snow.

Was there a difference in the way you walked each time?



Chapter - 2

Living and Non-living Things



Let us look carefully at the picture above.

What do we see in the picture? There is a table. There is a pot with a plant on the table. A child is standing near the table.

Let us now keep a pot with a plant on the table as shown in the picture.

Teacher calls Yuan.

“Yuan, come and stand near the table.”

“Now, walk three steps ahead,” says the teacher.

Yuan walks on his own.

Can the table walk on its own?

Can the plant walk on its own?

No, they cannot.

“We have seen that only Yuan

can walk from one place to another on his own,” says the teacher.



Look at the things around you. Write the names of any four things that can move on their own from one place to another and four things that cannot.

Things that can move
on their own

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

Things that cannot move
on their own

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

What we have learnt.

- Human beings, animals, birds, fish, insects etc. can move from one place to another by themselves.
- Some other things, like a rope, a car, a stone, a pencil, a shoe, etc. cannot move on their own from one place to another.



Normally plants cannot move from one place to another on their own.

But some plants do show some typical movements.

Some flowers open in the sunlight and close at the time of sunset. For example the Sunflower can be seen always turning with the direction of the Sun.



This is one type of movement.

The blooming of buds into flowers is another type of movement.



Leaves of some plants, such as *Touch-me-not*, shrink when we touch them. This is another example of movement in plants.

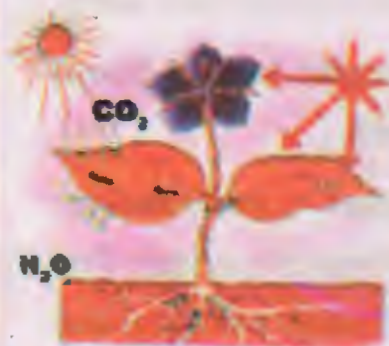
“Once again, let us turn our attention to Yuan, the table and the plant,” says the teacher.

What things does Yuan need to stay alive ?

He needs air, water and food to live.

What things does a plant need to stay alive?

A plant also needs air, water and food.



However, plants make their own food in the sunlight. They need carbon dioxide, water and mineral salts to make their food.

They get carbon dioxide from the atmosphere.

Water and mineral salts are taken from the soil through the roots.



Some of the water is taken from the atmosphere through the pores in the leaves.

Does the table need food and air to live?

No, it does not need any food or air.



Name three things that need air, water and food to live and any three things that do not.

Things that need Air, Water and Food to live

Things that do not need Air, Water to live

1. _____
2. _____
3. _____

1. _____
2. _____
3. _____

What we have learnt

- Human beings, animals, birds, insects, fish and plants need air, water and food to live.
- A table, a pencil, a stone, a shirt, etc, do not need food, water and air.

Look at the pictures given below:



The pictures show different stages of growth of plant, human beings and animals.

This shows that with the passage of time-

- Plants grow;
- Human beings grow;
- Animals grow.

Does a table grow with the passage of time?

List the things that grow and those that do not grow with the passage of time

Things that grow

1. _____
2. _____
3. _____

Things that do not grow

1. _____
2. _____
3. _____

What we have learnt

- Human beings, plants and animals grow with the passage of time.
- A table, a rope, a shirt do not grow with the passage of time.

Look at these pictures:



In these pictures a man and woman, a fish, a cow, and a hen can be seen with their young ones. You can also see a tree with its sapling.

All these things give birth to young ones like themselves.

Can a table give birth to a table?

What we have learnt.

- Human beings, plants and animals give birth to young ones like themselves.
- A table, a rope, a pencil, a shirt, etc. cannot give birth to young ones, like themselves.

All things which breathe, need food and water, move from one place to another on their own and give birth to young ones, are called **Living Things**.

Things which do not breathe, do not need food, and water, do not move from one place to another on their own and do not give birth to young ones, are called **Non-Living Things**.

Exercises

Oral Work

1. Name any three non-living things in your classroom?.
2. Name any two living things in your school surroundings?.



3. Which thing need air, water and food to live?
4. What is the difference between plants and other living things?

Written Work

1. Put (T) for True and (F) for False Statements.

- (i) Plants are living things. ()
- (ii) Animals and birds need food. ()
- (iii) A stone can walk on its own. ()
- (iv) All plants breathe. ()

2. Name any five living and five non-living things?

3. Write three differences between living and non-living things?

4. How is the movement of a car or a scooter different from that of a human being?

5. Give reasons:

(i) A car is not a living-thing because

(ii) All plants are living things because



(iii) A toy cannot give birth to a toy because

6. Write the following under the correct column:

Crow, Kite, Car, Plant, Television, Tortoise, Sand, Bus, Chair, Fish.

I Living Things	II Non-Living Things
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

7. Write the correct answer in the given box.

(i) Which of these is a non-living thing?

- (a) a plant (b) a hen
(c) a clock (d) a fish

(ii) Which of these is a living thing?

- (a) a rose plant (b) a piece of wood.
(c) a car (d) a radio

8. Write five sentences which describe you a living thing?



Things to do

- Write names of five living and five non-living things that you see on your way from home to school?
- Make a list of non-living things that you use from morning till night.

<p>Non-Living Things</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Living Things</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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Chapter - 3

Ear to Ear

Who has got my ears?



Are these animals looking funny? The artist has drawn wrong ears on the heads of the animals. Give correct ears to the animals. Give correct ears to the animals in the space given below.

Animal	Ear	Animal	Ear
Elephant	_____	Dog	_____
Rabbit	_____	Buffalo	_____
Mouse	_____	Deer	_____
Giraffe	_____		



Different animals have different kinds of ears. Among the animals given below, which one have ears that you can see? In which animal can you not see the ears? Write in the table below.

- | | | | | |
|-------|---------|---------|----------|--------|
| Deer | Frog | Fish | Ant | Crow |
| Tiger | Sparrow | Buffalo | Snake | Lizard |
| Pig | Duck | Giraffe | Elephant | Cat |

**Animals whose ears we
can see**

**Animals whose ears we
can not see**

Do you think that the animals whose ears we can not see, really do not have ears?

Let us observe this picture



Name the animals in the pictures?.

Can you see their ears?

They all have ears, even though we can not see them.

- Find out some other animals which have ears that we can not see. Write their names?.



Read and Write

- An animal with ears like fans
- An animal with ears like leaves
- An animal with ears on the top of its head
- An animal with ears on both sides of its head

You know very well that ears help us to hear. In some animals you see the ears, in some you can not. We can not see a bird's ears. A bird has tiny holes on both sides of its head. Generally, the holes are covered with feathers. They help the bird to hear.



If you look carefully, you will see tiny holes on the lizard's head. These are its ears.

A crocodile also has like this, but we can not see them easily.

Whose Skin

Now you know how to recognize animals by their ears. Let us see if we can recognize animals by their skin.

Match the animals shown here with the pictures of their skin. Make the correct pattern of the skin on the picture of each animal.





The different patterns on the animals are due to the hair on their skin.

Have you ever seen an animal without hair or whose hair have been removed? Imagine how the animals would look if it did not have any hair on its skin. There would be no patterns! You might have seen some of animals given below.

- | | | | |
|--------------|-----------------|----------------|---------------|
| Fox | Elephant | Sparrow | Pigeon |
| Frog | Crow | Peacock | Pig |
| Mouse | Cat | Buffalo | Duck |
| Hen | Camel | Lizard | Cow |



Put the names of the animals in the table below.

Ears can be seen	Has hair on skin	Ears can not be seen	Has feathers on skin
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

In which list did you put the cow and the buffalo? From a distance, can you see the hair on their skin? Try to go near one of them. Could you see the hair?

If you were to meet an elephant, would you dare to touch it? Do you know that an elephant also has hair on its skin.

You have put names of many animals in the table above. Let us find out something more about them.



Can you tell which of the animals mentioned in the list lay eggs? Find out and write the names of these animals in the green box.



Which of the animals in the list give birth to babies? Write their names in the red box.



Now, look again at the table on the previous page. Draw a line under the names of animals whose names are in the green box.

So, what did you note? Those animals whose ears you can see have hair on their body. These animals give birth to the young ones. Those animals that do not have ears on the outside, do not have hair on their body. These animals lay their eggs.



- Have you seen animals around your house or school that have small babies? Write their names in your notebook.
- Have you ever kept a pet? Does anyone of you keep a pet?
- Find out more about the pet.

• Which animal is it?

• Does it have a name? what is it?

• Who gave it this name?

• What does it like to eat?

• How many times a day is it given food?



- When does it sleep? For how long does it sleep?

- Is there any special way to look after this animal?
How?

- Does it get angry? When? How do you know it is
angry?

- Does it have hair or feathers on its skin?

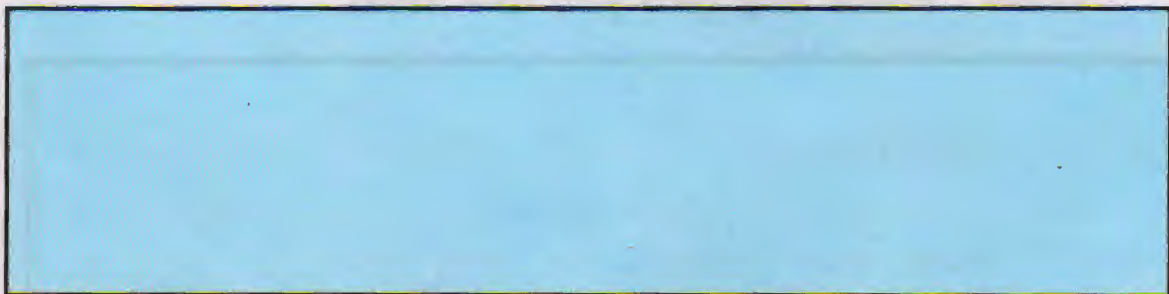
- Can you see its ears?

- Is it a baby or a young animal or a full grown animal?

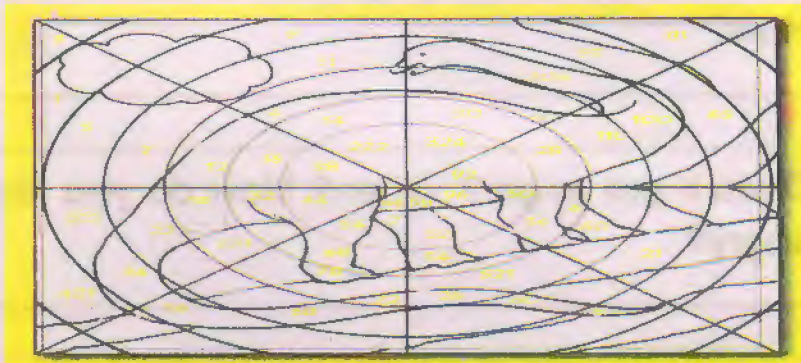
- Will this pet animal lay eggs or give birth to babies?

- Does it have young ones?

Draw picture of this animal and colour it. Give it a name of your own choice.



Look at this picture. What do you see? Find out the name of the animal.



Many many years ago there were dinosaurs on earth, but they are not any more. Now we see them in films, photos and books. Find out more about dinosaurs and share with your friends.

Have you seen any animal that looks like a little dinosaur? Do you know its name?

Find out from your elders.

- Look at the animal. Write its name. Do you know that this is our National Animal?
- Where does it live?



The number of this animal is going down in India. Discuss why is this happening?

Draw / Paste any bird you like most.



Chapter - 4

From the Window

17 May
Morning



It is morning now. Last night I went to sleep early. It was too dark to see anything outside. When the train stopped early this morning, I woke up. It was the Vijaypur (Samba). That was written on the board at the platform. *Appa* said that we were going through the State of Jammu & Kashmir.

We got off at the station and had some hot tea and filled our water bottles. The train started again. I find it difficult to describe the scene outside. It is green everywhere—fields with red soil, green crop and hills covered with trees.



Sometimes, I can see small ponds, and far away, behind the hills, more water, I can't make out if it is a river. The air is cooler, and not so dry as in Delhi.

The train passed a 'level crossing'. People are waiting on both the sides of the crossing for the train to pass. There are



buses full of people, cars, trucks, autorickshaws, cycles,



motor cycles, scooters and even tongas with people and goods in them. Some people do not switch off the engine of their vehicle even while waiting. There is a lot of smoke and noise. I see some people going under the bars of the level crossing. How dangerous this is!

At times our train crosses another train, Ajay and I tried to count the carriages in one such train, but both the trains were going so fast. We always got confused.

Q1 What was the difference in the scene that Ritu saw from the train on the first day and on the second day?

Ans: _____

Q2 Ritu saw many kinds of vehicles at the level crossing. Which of them run on diesel or petrol?

Ans: _____



Q3 Why was there so much smoke and noise from the vehicles at the level crossing?

Ans: _____

Q4 Have you ever seen a scene like the one Ritu saw in Jammu & Kashmir? Describe it.

Ans: _____

Discuss

Sometimes people cross the tracks even when the crossing is closed. What do you feel about this?

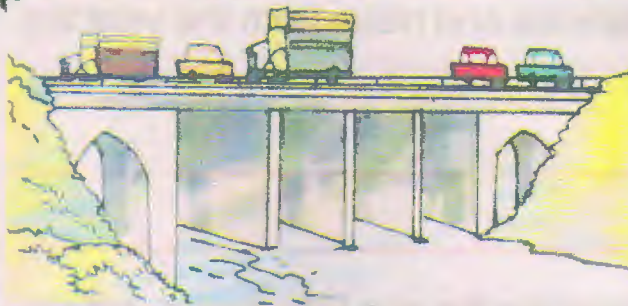
17 May
Morning



Later, I was sitting near the window with my eyes closed. Suddenly the sound of the moving train changed—khud, khud, khud....I opened my eyes. Guess what I saw? Our train was crossing a very big river, on a very long bridge! As it was crossing the bridge it sounded very different.

The wheels rattled as there was no ground, only the tracks, and the water down below. When I first looked down. I felt giddy. It was really quite scary! The river down below was full of water and had some boats. I could also see some





fishermen on the banks. I waved at them, but I did not know if they could see me. Alongside our bridge, there was another bridge for buses and cars. This was built differently from ours. I think going over our bridge was more adventurous!

Q1. Have you seen any bridge? Where ?

Ans: _____

Q2. Have you ever crossed a bridge ? Where ?

Ans: _____

Q3. What was the bridge built over?

Ans: _____

Q4. What did you see below the bridge?

Ans: _____

Q5. Find out why bridge are made?.

Ans: _____



17 May



The last few hours have been so exciting. After breakfast, I climbed on to the upper berth to read my comics. It was bright and sunny outside. Suddenly, everything became dark. It also felt a little cold

inside. I was afraid. Then the lights in the train were switched on. But outside, it was very dark. Somebody said, "We have entered a tunnel. This goes right through the mountain." The tunnel seemed to go on and on. And then, just as suddenly, we were in daylight again. Outside it was sunny, bright and green. The train had crossed the tunnel.

Appa explained that we were on the other side of the mountain. Since then, we have passed through four smaller tunnels. Now I am enjoying going through the tunnels.



Q1. Have you ever been through a tunnel? How did you feel?

Ans: _____

- Imagine and draw in your notebook what Ritu saw under the bridge when her train crossed it?

Ans: _____



- Imagine, if on the way there had been no tunnels and bridges, how would Ritu's train have crossed the mountains and rivers?

Now it is time for some lunch. We had Rajma & Rice. We also bought some bananas. They were very small and very tasty. The scene outside has changed again. Now we can see many Mango trees, and green fields every-

17 May



where. *Amma* says that these are paddy fields. The houses and villages look very different. People's clothes are also different from what we see in Delhi. Most people are wearing black or maroon Firans and Salwar Kameez. Many people who were with us from Delhi have got off. People have also got on to the train from different stations.

Sunil's family is getting off at a station, which comes before Udampur Station. We have exchanged addresses and plan to meet in Delhi.

Q1. Which languages do you speak at home?

Ans.: _____



Q2. On the way from Delhi to Jammu & Kashmir, Ritu's train went through several Cities of our country. Find out and list which cities, towns are crossed.

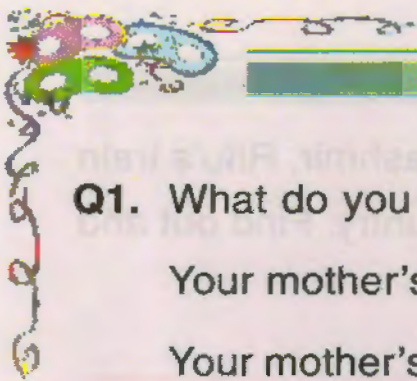
➤ Find out in which cities these languages are spoken?

Language	Where it is spoken (State/City)
Dogri	<hr/>
Kashmiri	<hr/>
Urdu	<hr/>
Punjabi	<hr/>
Ladakhi	<hr/>

Now it is noon time. We have also started packing up. The train will reach Udhampur in about ten minutes. That is where we have to get off.

Tonight we will go to Anju's house. Tomorrow, we will take the bus that will take us to Ajay's village. We all are quite tired. After all, we have been on the train for 16 hours. What a long journey it has been! We had a lot of fun. I will put my diary away now.





Q1. What do you call them?

Your mother's sister _____

Your mother's mother _____

Your father's sister _____

Your father's mother _____



Blank writing area with horizontal lines for the student's answer.



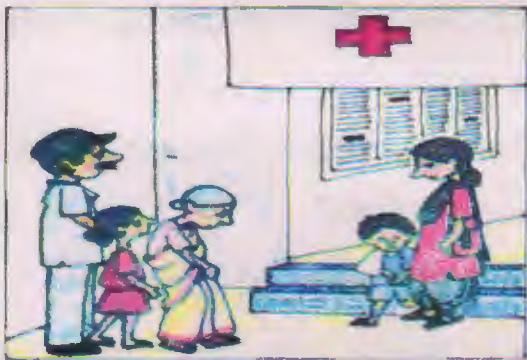
Chapter - 5

Changing Families

Here are some pictures of families. These are the families of Nimmi and Yasir. Let us look at these pictures, talk about what we see and discuss.

A New Arrival!

There is great excitement in Nimmi's family. She has a new baby sister.



Look at the pictures and write



- Who were the members of Nimmi's family before the arrival of her baby sister?



- How many members are there in Nimmi's family now?
-

Let us talk

- How do you think the lives of Nimmi's family members have changed after the arrival of the new baby? For example-

- ◆ How will Nimmi spend her day now?
- ◆ What new work will her mother do now?
- ◆ There will be a change in the daily work of Nimmi's father, grandmother and uncle with the arrival of the new baby. Can you tell how?

- Has a small brother or sister been born in your home or in any house in your neighbourhood?

- ◆ How does it feel to have a new baby at home?
- ◆ How have things changed at home with the new baby?

- Find out all about the youngest child in your home or in the home of a relative. Then write-

- ◆ When was the baby born?
-

- ◆ Is the baby a boy or a girl?
-

- ◆ How are you related to him or her?
-



◆ Where was the baby born?

◆ Who does the baby look like?

◆ What is the colour of his or her hair?

◆ What is the colour of his or her eyes?

◆ Does the baby have any teeth?

◆ What is the baby's skin colour?

◆ How many hours a day does the baby sleep?

◆ What different sounds does the baby make?

◆ Who does the baby stay with most of the time?

◆ Stick a photograph of the baby or draw a picture in your notebook.



New Place

Yasir's father received a letter from his office. The letter said that he was being promoted and would have to move to another city.



When Yasir's father showed the letter to his family, how do you think the different members would have felt?



- ❖ What will change in Yasir's family after his father's transfer? Who from Yasir's family will live with his father at the new place? Which school will Yasir go to now? Will he have new friends?



Has anybody in your family moved to a new place because of work?

What do you feel about this change ?

❖ Is there anyone in your class or school who has come to your school from another place? If so, talk to him or her.

- ◆ Where has she or he come from?
- ◆ What was his or her old school like?
- ◆ What does he or she find different here?
- ◆ Does he or she like the change?

It's a Wedding!

There is great joy in Murfa's home today. Her elder cousin brother is getting married.



Let us talk

Do you think that there will be any change in Murfa's family after this wedding? What will change?

- ❖ Do you think there will be change in the home from where the new bride has come? What kind of changes?

Talk to your mother and aunts in the family. Ask them about where they lived before they got married.

Who were the members in their families then?

Has anybody in your family been married recently? Who?

- ❖ Talk to your classmates and write all about what happens during weddings in their families.

- ❖ What kind of special food is cooked?

- ❖ What special clothes do the bride and bridegrooms wear?

- ❖ What kinds of songs and dances are performed at weddings?

What did you see at the wedding that you attended? Draw or paste some pictures in your notebook. Then look at the pictures drawn by your classmates.

We saw changes taking place in the families of Nimmi, Yasir and Murfa because of different reasons.



Write down the reasons for these changes.

❖ In Nimmi's family:

❖ In Yasir's family:

❖ In Murfa's family:

❖ There can be many reasons for changes in families. Can you think of some more reasons?

❖ Talk to three old people-one from your family, one from your friend's family and one from a family in your neighbourhood. Ask them these questions and fill in the table.



Question	Your Family	Friend's Family	Neighbour's Family
❖ Since how many years has your family been staying here?			
❖ Where did your family live before coming here?			
❖ How many members are there in your family today?			
❖ How many members were there in your family 10 years ago?			
❖ What were the reasons for the changes in your family in the last 10 years?			
❖ How do you feel about all these changes?			



My Family - Yesterday, Today, Tomorrow....

All families change in some way or the other because of different reasons. Has your family changed too?

- ❖ Ask your grandmother or grandfather how many members were there in their family when they were of your age? Then draw a family tree in your notebook of their family when they were young.
- ❖ Can you see yourself, your brother or your sister, your mother or your father, anywhere in this family tree?
- ❖ Now draw a family tree of your present family in your notebook.

Can you see yourself anywhere in this family tree? Who are the members of your family today? Where are your grandparents ?

Let us Talk

Can you tell in what ways the family tree of your grandmother or grandfather in their childhood is different from your family tree today?



Going back to school!

- Upto which class do you want to study?

- Upto which class have your parents studied ?

- Till which class did your grandmother get a chance to study?

- At what age did your grandmother get married ?

- Have you heard of a law that talks about the ages before
- which girls and boys must not get married?

There are many girls who get married before they are 18 years old. Many of them have to even leave school. There are many true stories of girls like Susheela of Ranga Reddy district who are going back to school. She also got the help of the *Panchayat*. The *Panchayat* said that young children should play, study and not be married off. A group of people of Andhra Pradesh holds special camps to help married girls to go back to school.

Find out and write

- Are there any such children in your neighbourhood who had to drop out of school? Do they want to go back to school?

- What are they doing these days?

- Has anybody in your family got married recently? Who?

- What was the age of the bride and the groom?

FOR THE TEACHER:

Teacher can discuss about children who cannot finish school and also the law on child marriage, which has strictly fixed the minimum age for marriage for girls at 18 and boys at 21 years.



Chapter - 6

Safe Drinking Water



Land and water part of the earth



River water



Sea water

Water is the most common substance on the earth. Seven-tenths of the world's surface is covered by water. Water is also the most important substance on the earth. Without water, life would be impossible.

Life started in water and the bodies of all living things are mostly water. Water fills the seas and lakes. It flows in rivers. On high mountains and polar regions it exists as snow or ice. In air, it is found in the form of vapour.

As water vapour rises, it reaches in cold air high in the sky. It turns back into tiny drops of water which join to make clouds. The drops fall to the ground as rain.

Water helps plants to grow. It is used for drinking, washing, cooking and bathing.

For our daily use, we get water from lakes, tanks, wells or rivers. Water obtained from these sources may not be pure.



Mountain water



Questions:

- Q1. What is the important substance on earth?
- Q2. From where we get water?
- Q3. Give the uses of water.

How Does Water Become Impure?

We get water mainly from rains. Rainwater is the purest form of natural water. But as it passes through the air many atmospheric gases and waste gases from factories mix with it. These things make water impure.



Rainwater falling a little after the first shower is generally clean.

As soon as the rainwater reaches the ground, many more impurities dissolve in it. It takes mud and sand particles with it. We can see muddy water flowing through streams and rivers during the rainy season. When this water collects in lakes and ponds, the mud and sand slowly settle down at the bottom. Now the water looks clear. The soluble impurities, however, remain in the water.

Water Becomes Impure Owing to Many Reasons

- People wash their cattle in ponds and rivers. The dirt and mud sticking to the bodies of cattle mix with the water.



People wash their utensils and clothes in water

- People wash their utensils and clothes in water. The left-overs of food from the utensils and dirt from clothes mix with water. When this water flows to the rivers and ponds it makes them dirty.
- Sick persons take bath and wash their clothes in the reservoirs of water. As a result of this, germs mix with water.
- Some people urinate and defecate near the sources of water. Due to this germs enter the water.
- Sometimes, drainage water containing germs and poisonous chemicals from factories enter the water reservoirs and contaminate it.
- Sometimes, water is collected in small pits. Water does not flow out from these pits. This is known as **stagnant water**. In due course, stagnant water becomes very dirty. Insects, mainly mosquitoes breed in stagnant water and spread many diseases.
- Mention few ways by which water becomes impure?

Sea water is the most **impure** form of water. It receives all the impurities present in river water. Dissolved salts, especially common salt, give sea water a salty taste. The sea water cannot be used for home and agriculture.

Some rainwater seeps through the soil. It passes through various layers of sand, stones, clay and finally meets with the hard rock. The rock does not allow water to pass through it.

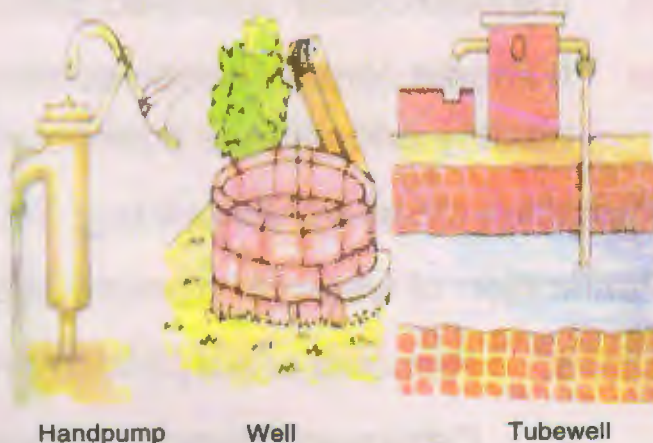
The reservoir of water that collects over the hard rock is called **underground water**.



Underground Water May be Used for Drinking and Agriculture

The underground water is usually pure because impurities are filtered out when it passes through the various layers of the earth. It may contain dissolved salts. We get this water through hand-pumps and by digging wells.

The purity of hand-pump water and well water depends upon their depth. Shallow hand pumps and shallow wells are often polluted with sewage water.



Handpump

Well

Tubewell

Sometimes, waste matter from the ground falls into the well water and makes it dirty. Water of deep hand-pumps and deep wells may contain impurities that are present in the surrounding soil.

Drinking Water

We cannot get pure water from natural sources. But all the impurities mixed with water are not harmful. In fact, some salts dissolved in water are useful to us. Yet impure water contains many dangerous impurities. Such water spreads diseases. It is, therefore, essential to purify water before use.

Characteristics of Drinking Water

- ☞ It should be colourless.
- ☞ It should be odourless (without any smell).
- ☞ It should be free from suspended impurities.
- ☞ It should not contain germs and bacteria.
- ☞ It should contain dissolved gases like oxygen and hydrogen.
- ☞ It should contain dissolved mineral salts that make water healthy and give us a pleasant taste.

Purification of Drinking Water

Purification of water for drinking purpose involves:

1. Removal of suspended or insoluble impurities.
2. Destroying harmful germs and bacteria.

1. Removal of Suspended or Insoluble Impurities



Water filter

Insoluble impurities of water can be removed by filtration. Addition of little alum to impure water helps in setting down floating particles of mud and other impurities. This is called **sedimentation**. This water is then filtered to remove insoluble impurities from it.

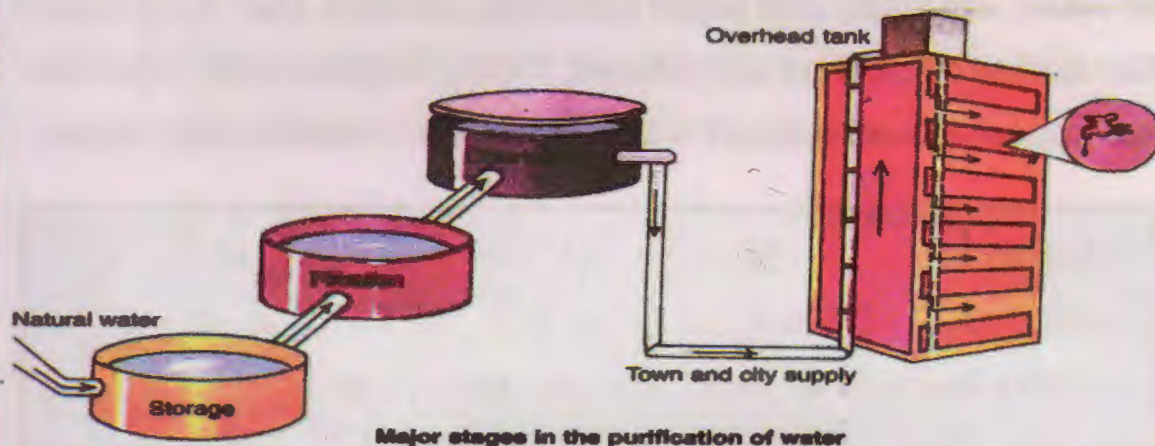


At home, water is filtered by a ceramic water filter. Some kinds of water purifiers are also available which can be fitted with the tap. Water passes through the filter and purifier, and is collected in a vessel.

On a large scale, water of the river or lakes is filtered by passing it through layers of sand, pebbles (gravel) and charcoal.

2. *Destroying Harmful Germs and Bacteria*

Filtered water does not contain insoluble impurities. It looks clean. Yet it may contain harmful germs and bacteria. To destroy harmful germs and bacteria, the following methods are used:



Major stages in the purification of water

1. **Chlorination:** A gas called chlorine is passed through the filtered water, harmful germs and bacteria are killed. This process is known as chlorination. Well water is purified by adding bleaching powder or potassium permanganate. These substances also kill germs.



2. Aeration: The tank containing filtered water is treated with air under pressure. The organic matter reacts with the oxygen present in the air is made harmless. This process is known as aeration. Aeration also kills harmful germs. Thus, purified water reaches the homes through the municipal water supply system. We get this water through tap.

The tap water can be made still safer to drink by boiling. Boiling kills the germs. During the monsoon, water is generally contaminated with harmful germs. So boiled water is safe for drinking. Hence, during the monsoon, drinking water must be boiled.

If water is boiled for 20-25 minutes, all harmful germs in the water are killed and water becomes potable. But such water after boiling should be well-stored. If dirty fingers or dirty utensils are dipped in such boiled water, it will be contaminated again.

Water is precious. We must not waste it. If we do not save water, soon there will not be enough water for all of us. For avoiding wastage of water, we will take the following steps:

- ☞ While taking water for drinking, we should take only just enough water.
- ☞ We should make economical use of water while taking bath or washing clothes.
- ☞ Water tap should be closed immediately after use



Points to Remember:

- Aeration** : Adding air (a gas) to a liquid under pressure.
- Alum** : A white mineral salt.
- Atmosphere** : The gases envelop surrounding the earth.
- Ceramic** : Made of clay.
- Chlorination** : Treating water with chlorine to kill harmful germs in it.
- Contamination** : Making impure by adding dangerous or disease-carrying substances.
- Filtration** : Process of filtering liquid, etc.
- Impurities** : Substances present in another substance that make it of poor quality.
- Odourless** : Without a smell.
- Purification** : The process of making pure by removing dirty and harmful substances.
- Reservoir** : Natural or artificial lake used as a source to store water.
- Sedimentation** : Process of depositing undissolved matter to the bottom of a liquid.
- Sewage water** : Water mixed with waste matter from human bodies, factories, towns, etc.
- Shallow** : Not deep.
- Stagnant water** : Water which is not flowing and therefore dirty and of unpleasant smell.
- Underground water.** Water that collects over the hard rock layer.



Discuss

- ☞ Water is the most important substance on the earth.
- ☞ Water becomes impure in many ways.
- ☞ Water in tanks and lakes is made impure by washing clothes, bathing, cleaning utensils and washing cattle in it.
- ☞ Many substances dissolve in water and make it impure.
- ☞ Many substances are carried by water and they make it impure.
- ☞ Water which has become impure because of disease-causing germs, poisonous chemicals or decaying matter is called contaminated water.
- ☞ Mosquitoes and many harmful germs breed in stagnant water.
- ☞ Sea water is the most impure form of water.
- ☞ The reservoir of water that collects over the hard rock is called underground water.
- ☞ Underground water may be used for drinking and agriculture.
- ☞ It is essential to purify water before use.
- ☞ Water is purified by filtration, boiling or by passing chlorine through it, or by adding bleaching powder or potassium permanganate to it.



Think and Answer

I. Fill in the blanks. Choose the right word from the box:

purified boiled stagnant precious pure

1. Mosquitoes breed in _____ water.
2. Contaminated water should be _____ before drinking.
3. Water which is free from germs and impurities is called _____ water.
4. Water is very _____ we should not waste it.
5. During the monsoon water should be _____ to kill the germs.

II. State whether the following statements are **True** or **False**:

1. It is good for health to drink water from a river or a pond directly. _____.
2. To make the water free from germs, it should be filtered by using clean piece of cloth _____.
3. Use of unsafe water can cause diseases. _____.
4. The filtered water which will look clear may contain germs _____.
5. Bleaching powder kills the germs in the water. _____.

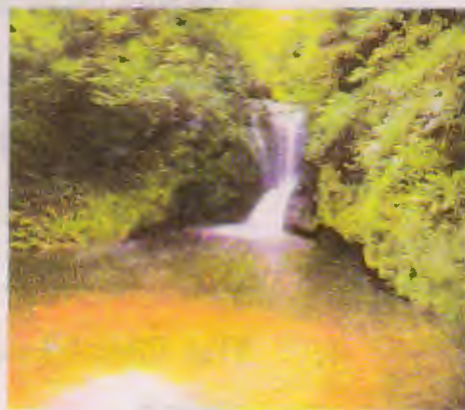


III. Answer the following :

1. How is water useful to us?
2. What are the sources of water? Name any three.
3. How does water in ponds become impure?
4. How does pure water become impure?
5. How is stagnant water harmful to us?
6. Name two substances which are mixed with water in order to kill germs?.
7. Why should we not drink contaminated water?
8. What precautions will you take to see that drinking water kept at public places is not contaminated?
9. How is water contaminated?

IV. Answer, why?

1. Sometimes, even filtered water is not safe for drinking.
2. We should not dip our hands in a pond.
3. During the monsoon, we should drink boiled water.
5. Potassium permanganate is added to the well water.
6. Sea water is not considered as a source of water.



V. In each of the following there are four choices. Select the most suitable answer:

1. The safer source of drinking water is:
(a) river (b) tube-well (c) Pond (d) Lake
2. The germs present in water can be killed by:
(a) filtration (b) boiling
(c) sedimentation (d) contamination
3. Bleaching powder is used in the water to:
(a) separate dissolved materials
(b) kill disease-causing germs
(c) make its taste better
(d) remove impurities
4. The drinking water in the vessel should be changed after:
(a) 1 day (b) 2 days
(c) 5 days (d) 7 days



Chapter - 7

How Days and Nights are Formed



One morning our teacher said, "Today we will play a game in the room."

All of us were surprised and curious. But everybody was happy on hearing about playing a game.

The teacher said again, "We need dark room for playing this game.

Let us close the windows and doors.

We require a ball and a torch for playing this game. I have brought these things with me.

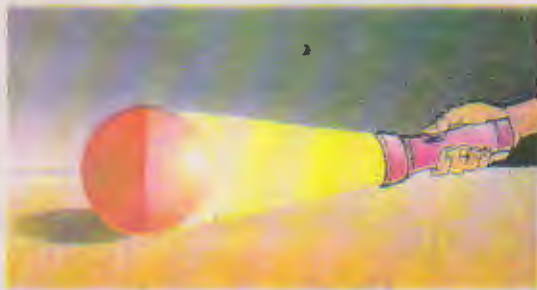


I have kept the ball on one side and the torch on the other side of the table.

Now, all of you will come in groups of five, near the table, turn by turn and look carefully at the light falling on the ball.



After going back to your seats, each one would write answers to the following two questions in the notebook:



- (i) *On which part of the ball is the torch light falling?*
- (ii) *Why is there darkness on the other side of the ball?"*

Most of the children wrote the following answers:

- (i) *The light is falling on the side of the ball facing the torch.*
- (ii) *The other side of the ball is not getting any light.*

Now the teacher said, "We will write the word 'Light' on the side of the ball which is getting the light from the torch and 'Darkness' on the other side of the ball.



Now, I shall move the ball slowly.

Is the light still falling on the same side of the ball?"

The children said, "No"

"Because of the movement of the ball the side facing the torch is moving towards the back.

Now, let us replace the ball with a globe and let the torch light fall on it.



Which part of the globe is getting light?"

The children said "The side facing the torch."

The teacher asked again, "Why is there darkness at the back of the globe?"

The children looked at the globe and replied, "Because that part is not getting light."

"Now, I shall move the globe slowly. What do we see," asked the teacher.

The side of the globe facing the torch gets light and there is darkness on the other side."

Do you know?

The globe is a model of the earth.

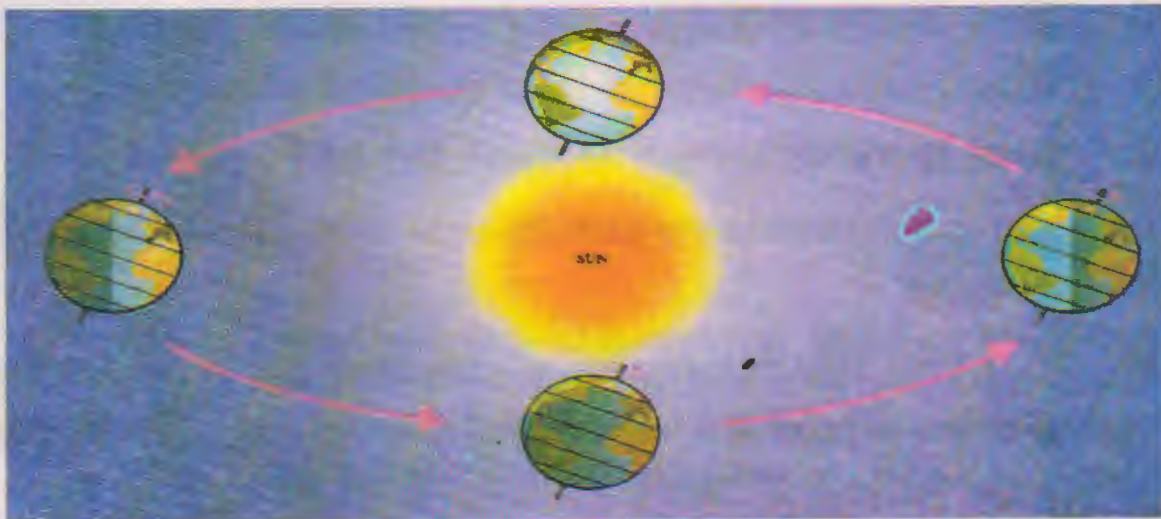


“Do you know the earth also rotates on its axis from west to east?”

The movement of the earth on its own axis is called **Rotation**.

Day and night are formed due to this rotation of the earth. The part of earth which gets sunlight has day; the part which does not get light has night.

The earth completes one rotation on the axis in 24 hours. We call it a day.



The earth also revolves around the sun.

The time taken by the earth to complete one revolution around the sun is called one year.”

Exercises

Oral Work

1. What will you call the part of the earth which gets sunlight?



2. In which direction does the sun rise?
3. In which direction does the sun set?
4. Which movement of the earth makes day and night?
5. How long does it take the earth to complete one rotation on its axis?

Written Work

1. What is the movement of the earth on its own axis called?
2. What is rotation?
3. What is one year ?
4. What is the effect of rotation of the earth on our lives?
5. What is the difference between day and year?
6. How many minutes the earth takes to complete one rotation?

Things to do

- ◆ Play the game of formation of day and night in your home with the help of a ball or a globe and a torch. Show this game to your brothers, sisters and friends.
- ◆ Make a list of the activities you do in the day and at night.
- ◆ Find out what they do at night.
 - (i) watchman
 - (ii) owl
 - (iii) dog
 - (iv) bat



For the Teacher:

Note: Teacher should make the students to learn the Meaning and spelling of difficult words used in the lesson before going through the lesson

Chapter - 8

A Busy Month

Balmandir
Bhavnagar, 13 April, 1936

Dear Children,

It is 3 O'clock in the afternoon. There are no clouds in the sky. The sun is burning hot.

The Sparrows, Doves and Sunbirds have started working in pairs to make their nests. Some of the birds have already made their nests. In some of the nests, the eggs have been hatched. The parent birds are busy feeding the chicks with different kinds of insects and other things.



Dove



Indian Robin



Crow

In our courtyard also, there is a baby Dove. There is another egg in the nest but it has not hatched yet.

On the way to Gopalbhai's house, there are many stones along the roadside. In the space between these stones, an Indian Robin has laid its eggs. Karan showed it to me. I looked through the binoculars. I saw that the nest was made of grass.



On top there were soft twigs, roots, wool, hair and cottonwool. This is how the Robin makes its nest. What a soft and cozy home for its chicks! The Robin is not like the crow. A crow's nest is made of all kinds of things – even pieces of wire and wood.

I saw a baby bird in the Robin's nest. It was sitting with its beak wide open. The mouth was red from inside. In a little while the Robin flew to the nest and put something in the chick's open beak—may be a few small insects. By then it was evening. The Robin settled down with its chick.

You know that the Koel sings sweetly. Do you know that this bird does not make its own nest? It lays its eggs in a crow's nest. The crow hatches them along with its own eggs.

There is a small tree nearby. It has a nest hanging from its branch. Birds are wonderfully different. The crow builds its nest high up on the tree. The Dove makes its nest among the thorns of a cactus plant or a mehendi hedge. The Sparrow can be found in and around our own house. It makes its nest anywhere—on top of a cupboard, behind a mirror, on a roof. Pigeons also make their nest like this.

Dove



Barbet





Tailor Bird

Nest

Often they make nests in old or deserted buildings. The Barbet or Coppersmith bird can be heard in the summer with its 'tuk, tuk, tuk' call. It makes its nest in a hole, in a tree trunk. And the Tailor bird uses its sharp beak to stitch together two leaves on a bush.



Sun Bird

It lays its eggs in the fold of the leaf that it has made. This is its nest.



Weaver Bird

The Sun Bird makes a nest that hangs from the branch of a small tree or a bush. The same evening, we saw a Sun Bird's nest. Can you guess what its nest is made of? The nest has hair, grass, thin twigs, dry leaves, cottonwood, bits of trees bark, pieces of cloth rags and even Spider's cobwebs.

When I looked through the binoculars, I could see a chick in the nest. It was sitting near the small opening in the nest. It was waiting for its mother to bring some food. What else can it do-just eat and sleep!

Do you know about the Weaver Bird? The male Weaver Bird make beautifully woven nests. The female looks at all the nests and chooses the one that she likes the best and decides in which it will lay her eggs.

All the birds are so busy these days. Making a nest and laying the eggs is only the first step. It is a difficult task to raise the young ones in the nest which had been made with so much effort.

Birds have many enemies – humans and other animals, Crows and Squirrels, Cats and Rats – all of them wait for a chance to steal their eggs. Many times they even break the nest.

To keep oneself safe from danger, to find food, make a nest, hatch the eggs and raise the chicks safely – all these are tasks for every bird.

And see-how the birds still sing with joy and spread their wings and fly freely.

So that is all for now, Salaam
Blessings from your
Salim Ali

Exercise

- ✂ How many years ago did Salim Ali write this letter?

- ✂ Find out how old your grandfather and grandmother were at that time.

- ✂ This letter talks about many different birds. How many of these birds have you seen?



How many other birds have you seen? Name them?

Have you ever seen a bird's nest? Where did you see it?

Which is your favourite bird? Can you show your friends in the class how it flies, and what sound it makes?

Guess what this bird is-

A crown on the head and coins on the tail.

So many shades of blue from top to tail.

Clue: It is our national bird.

Do you know of any other bird that makes its nest in a tree trunk like the Barbet does?

If there is a nest inside or around your house, look carefully at it. Remember, do not go too near the nest, and do not touch it. If you do, then the bird will not come to the nest again.

Observe the nest for some days and note down the following things:



Where is the nest made ?

What is the nest made of?



Is the nest ready or are the birds still making it?

Can you recognize which bird has made the nest?

What things does the bird bring to the nest?

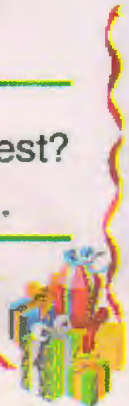
Is there any bird sitting in the nest?

Do you think there are any eggs in the nest?

Can you hear any sound like 'chee chee' from the nest?

If there are chicks in the nest, what do the parent birds bring for them to eat?

How many times in one hour do the birds come to the nest?



- ✂ After how many days did the chicks leave the nest?

- ✂ Make a picture of the nest in you notebook.

You have seen how birds use many different things to make their nests. Use some of these things and make a nest. Make a small paper bird to put in your nest.

Birds use the nest only to lay their eggs. After the eggs have hatched and the chicks have grown, they leave the nest. Imagine, how it would be if we also had to leave our homes as soon as we learnt how to walk and talk!

After they leave their nest, different kind of birds live at different places – some on trees, some near or on water, and some on land.

Other animals also have different places to live on land, under the ground, in water, on trees.

Let us have some fun

- ✂ Make three groups in the class. Each child must draw a picture of an animal and colour it. They should then cut each picture out.
- ✂ Children in one group will take the cut-outs of the pictures of animals that live on land. They should then draw soil, grass and some trees on a chart paper. Stick the pictures of the land animals at the correct places on the chart.



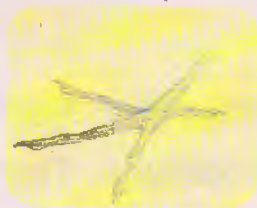
- ✂ The second group will take the cut-outs of the pictures of animals that live in water. They should then colour a chart paper blue to show water. Then also draw water plants, stones etc. They should then stick the pictures of the animals that live in water on the chart.
- ✂ The third group will take the cut-outs of the pictures of animals that live on trees. One child in the group will draw a big tree on a chart paper and colour it. Then all the children in the group must stick their cut-outs of the pictures on the chart paper of their group.
- ✂ Put up all the three charts in your class.

More to know about the birds

Bird Feet – Different Kinds for Different Needs



To swim in water



To hold the tree branches



To catch the prey
(when it hunts)



To climb the tree



To walk on the land



Beaks – According to the Food



To tear and eat meat



To make holes in wood and tree trunks



To suck nectar from flowers



To find insects and worms from mud and shallow water



To break and crush seeds



To cut and eat many kind of food

Do Birds have teeth?

Animal Teeth

You have seen that animals have different types of teeth.



Cows have short front teeth for snipping grass. The teeth on the sides are large and flat for chewing the grass.



Cats have sharp teeth for tearing and cutting meat.



Snakes have sharp curved teeth, but they do not chew their prey. Snakes always swallow their food whole.

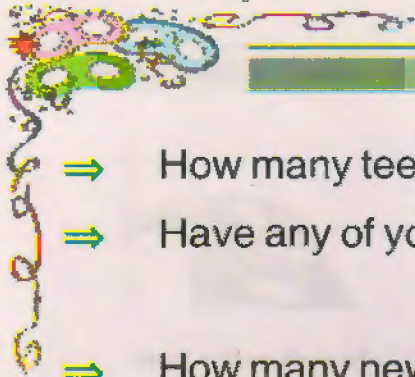
Squirrel's front teeth keep growing throughout their life, they have to keep gnawing on things to keep their teeth from becoming too long.



Find out about your own teeth and write

⇒ Your age _____



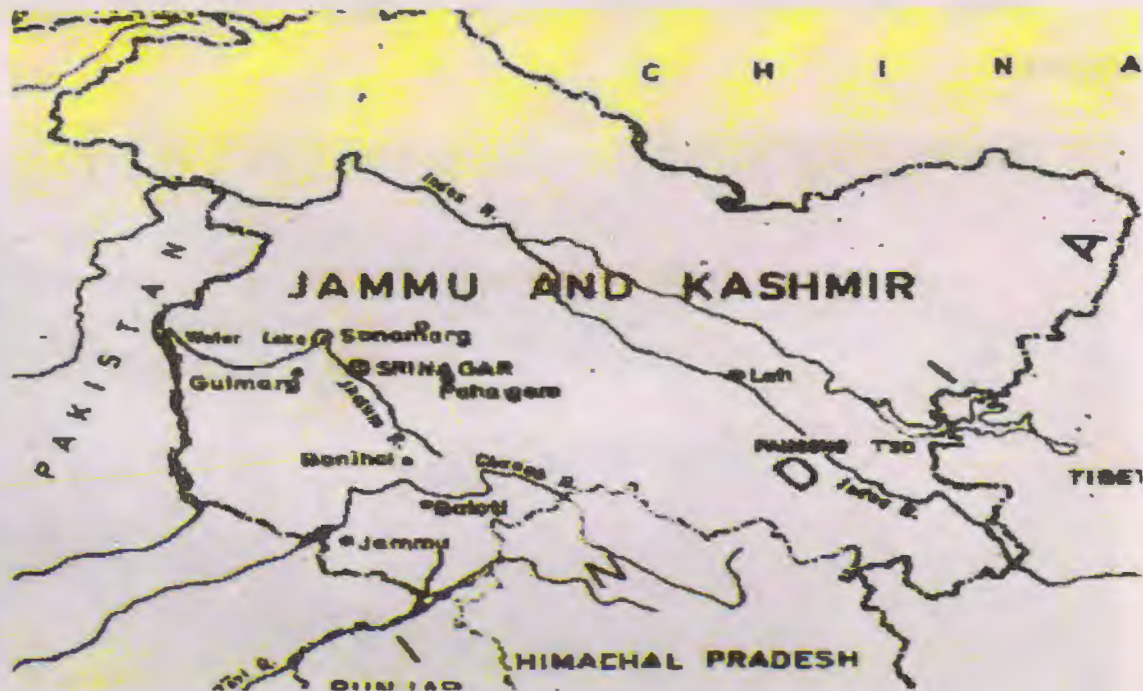


- ⇒ How many teeth do you have? _____
- ⇒ Have any of your teeth fallen or broken? _____
- ⇒ How many new teeth do you have? _____
- ⇒ How many of your milk teeth have fallen, but no new teeth have come in their place? _____



Chapter - 9

A Visit to Jammu & Kashmir



A visit to Jammu & Kashmir State! How pleasing is it to hear these words! Jammu and Kashmir is a beautiful state. We start our journey from the Jammu region of this state by small buses.

The people of Jammu are called Dogras. They speak the Dogri language. These people are known for their bravery. Jammu is the most important city in this region. It is situated on the banks of Tawi river. This city is the winter capital of Jammu and Kashmir. There are beautiful temples in the City. Mansar lake is situated in this region. The cave of Shri Mata Viashno Devi is



situated in Trikuta hills. It is an important holy place for Hindus. The famous tourist spots viz Kud, Batote, Sanasar, Patnitop, Bhaderwah and Kishtwar are also here in this region.

Diwali, Eid, Holi and Gurpurav are the main festivals of Jammu region.



On both sides of the road you find so many different kinds of trees. All along you can see thick forests and narrow mountain roads. These roads have been built by cutting the mountains. On one side are tall mountains and on the other side is the deep river. Can you hear the noise of the Chenab river? It flows through an awesome valley. How fast the river flows jumping all the way! Perhaps the river wants to say, "How I have made my way through these mountains!" This is what the river says. Of course, if we make up our mind, we also can easily cross the mountains.



During heavy rains these roads often get blocked at some places. Many times rocks and trees fall across the roads and block them. On these high mountains sometimes we get snowfall instead of rain. So heaps of snow blocks the roads here. On such occasions, it becomes necessary to clear and repair the roads quickly. Imagine what you will do, if you are to do this kind of work in such a severe cold climate!

Can you see those mountain slopes on the other side? How happily those buffaloes, goats and sheep are grazing! Look at those Gujjar shepherds merrily doing their job. They do not seem to care for the world outside. They simply move from one place to another along with their animals. How difficult their life is! Even then how happy these people are.



Now we are going to enter into a mountain tunnel. Our bus will also pass through this long tunnel along with other buses and trucks. Of course, it will be very dark when you pass through this tunnel. But you will discover a new world on the other side of the tunnel.

This tunnel has been built by cutting through a long mountain. The tunnel has been named after Jawahar Lal Nehru. It is called Jawahar Tunnel. When this tunnel was not built, we had to cross this mountain through the Banihal Pass. Often this pass used to get blocked with snow. You see, how useful this tunnel is. Both labour and time are saved now. Now throughout the year transport moves through this tunnel without any difficulty.

Look, there is a new world in front of you. Vast plains and green fields! How beautiful these surrounding mountains are! This is Kashmir Valley. The majestically flowing river in this valley is known as Jhelum. There are also a number of lakes in this valley. All these things make the valley even more beautiful.



We shall now go to a small village in this valley. The houses here have slanting wooden roofs. When snow falls, it slips down easily and quickly from these roofs. Snowfall continues here for two to three months in a year.

The people of Kashmir valley cultivate their land. The main crops here are paddy and maize. Rice is the main food of the people here. People of Kashmir valley rear sheep. They earn a lot from sheep wool. Many people weave woolen and silk cloth.

The people of Kashmir valley are tall and fair. The women are beautiful and also hardworking. Both men and women of this valley wear similar clothes. Both wear Shalwar and Pyjamas. Over this they put a long shirt with loose sleeves. But there is beautiful embroidery work done on women's clothes.

The people here have to do a lot of work during the severe winter days. When it snows outside these people sit at home and do all kinds of work. They have to keep their body and hands warm to do the work. Therefore Kashmiri people use Kangri. It is a small earthen pot. They put burning coal inside this pot and keep it in a cane basket. Sometimes they keep the kangri inside their clothes very carefully. This is how they keep themselves warm.



Kashmiri people are famous for their handicrafts. They do fine carvings on wood. They also make things with paper pulp. They do a lot of work on silver vessels. The blankets, carpets and shawls of Kashmir are famous all over the world. People of this area are also interested to music and dance. Their rouf dance is very popular.

The Kashmir valley is thickly populated. Most of them are Muslims. There are Hindus and Sikhs too. People here speak Kashmiri and Urdu. All these people live like brothers. Eid, Shivratri, Gurupurab and Christmas are their main festivals. They celebrate these festivals in a very grand manner.

Kashmir has its own beauty. During summer, the climate here is very cool and pleasant. In winter there is heavy snowfall. People play different kinds of games in winter. People grow almonds, apples, pears, grapes, peaches and saffron also.



People from far off places come here to see the beauty of Kashmir valley. They are called tourists. They come here to spend their holidays and see important places. They enjoy their holidays visiting various places here. Many of these tourists in Kashmir like to stay in house boats on the lakes.

Let us now take you around Srinagar. This city is the summer capital of Jammu and Kashmir. Srinagar is situated on the banks of the river Jhelum. You can see hundreds of beautiful boats moving on the river. These boats are very beautiful. They are called Shikaras. There are some big boats also. These boats are called house boats.



Dal lake is situated near Srinagar. There are floating gardens on this lake. Close to it are the famous Nishat and Shalimar gardens. You will find many artificial springs in these gardens. In the evening there are many colourful lights. You will really enjoy watching them.



The Hazratbal mosque here is the most important holy place for Muslims. Shri Amarnath Ji temple is situated on the high mountains. It is an important centre for Hindu pilgrims. The famous Gulmarg and Pahalgam are also here.

We shall leave the Kashmir valley and move on to a distant, high plateau. Earlier, people used to come here on ponies. Now jeeps and buses go easily to this place. This plateau is called Ladakh. People here speak Ladakhi. EiD and Budhpurnima are their main festivals. The major fraction population of Ladakh is Buddhists. Their priests are known as Lamas. Here you will find many viharas or monasteries.

In Ladakh very little cultivation is done. People of this region rear goats, sheep and yak. They take milk and meat from these animals. People here wear heavy, warm woolen clothes because the winter in this place is very severe. Villages are at long distances. So life is very difficult, yet people are cheerful, laughing, singing and dancing all the time.



Leh is an important city of this region. There has been built one of the highest aerodromes in the world. The river Indus flows through this plateau. This river makes its way through deep valley in the high mountains.

EXERCISES

Written Work

1. Name the Capital of Jammu and Kashmir?
2. Name the fruits available in Kashmir?
3. What are the major crops of Jammu and Kashmir?
4. Which river flows through the Kashmir Valley?
5. Fill in the blanks.
 - (i) Jammu is situated on the banks of river _____.
 - (ii) The Summer capital of Jammu and Kashmir is _____.
 - (iii) The main food of Kashmir is _____.
 - (iv) Leh is an important city of _____ region.
 - (v) _____ river flows through Ladakh.
 - (vi) Priests of Buddhists are known as _____.

Things to do

- Collect some pictures of scenic beauty of Kashmir.
- Make a model of Shikara or a house boat.
- Make a clay model of a mountain, a plateau and a valley. Show in them roads, tunnels and rivers.
- Get some samples of handicrafts from Kashmir. Make a list of them, draw some pictures of them.



Chapter - 10

Abdul in the Garden

Abdul in the Garden

It was a holiday. Abdul was helping his Abbu in the garden. Abbu was clearing the dried leaves and grass from the vegetable beds. Abdul started to pull out the grass from one of the beds. He found that it was not easy to pull out even the small grass. His hands became red by the effort. In trying to pull out grass, Abdul knocked down a stick that was supporting the pea plant (climber). The delicate stem of the pea plant broke. Abbu said, "Why are you pulling the grass? The roots of the grass are strong. You will have to dig them out." Abdul carefully dug out the plant. He then saw that the roots of the grass plant were longer and much more spread out than the part of the plant above the ground.

- ✎ The stick which was stuck in the ground fell very easily. It was difficult to pull out a small grass. Why?
- ✎ Do all plants have roots?
- ✎ Look at some plants and trees around you. Imagine how deep and spread out the roots of these are.



After three days, Abdul saw that one broken part of the pea plant had dried. Guess which part would have dried up? Why?

Abbu remembered that he had to send some radish (mooli) home. He started to pull the radish out of the soil. Abdul wondered whether these were also roots. Only a few radish were pulled when there was suddenly a strong wind and rain. Both of them picked up the radish and ran. They had just reached home when a branch of the Neem tree in the courtyard was broken and fell. Infact, Abbu was lucky to have missed by only a few inches. Despite the strong wind the tree remained firm on the ground. They both sat down to have tea with Ammi. Abbu said to Abdul, "The plants were getting dry. Now that it has rained, we will not have to water the plants. We can now sit and play ludo."

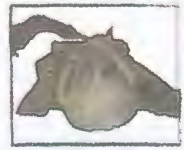
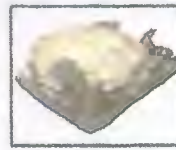
- ⊙ Why do you think the Neem tree did not fall despite the strong wind?
- ⊙ On putting water in the soil, the dropping leaves become fresh again. How?
- ⊙ What do you feel, do all plants need water?
- ⊙ Which of the plants around you need regular watering?

-
- ⊙ What will happen, if nobody gives water to these plants?
 - ⊙ Abdul realized that he never watered the huge Neem tree. "Where did it get its water from?" he thought. Which of the

plants around you do not need watering? Where do they get water from? Make two guesses.

- © Abdul wondered whether radish was a root. Why did he think so?

- © Look at the picture below and find out which of these vegetables are roots.



Abdul has more Questions

Nowadays Abdul keeps thinking about all kinds of plants that he sees.

Abdul saw a plant growing out of a wall in school. He wondered-



- ◆ How deep must the roots of this plant be going?
- ◆ How do the roots get water?
- ◆ How big will this plant grow?

- ◆ What will happen to the wall?
 - ◆ Can you give the name of the plant in the picture?
- Have you ever seen a plant growing from a crack in a wall?
Where was it? Do you have any questions when you saw it?
What were some of your questions? Ask elders and find the answers. Find out the name of the plant you saw.

Abdul saw a huge tree that had fallen on the roadside. He remembered the Neem tree in his courtyard. He could see some of its broken roots. Abdul thought-



- ☞ Would someone have uprooted such a big tree or would it have fallen on its own?
- ☞ How old would this tree be?
- ☞ Abdul on seeing a tree surrounded by cemented ground, thought that how will it get rain water?



Let us talk

- ☞ Which are the oldest trees in your area? Find out from your elders how old the trees are?

Have you ever seen any big tree that had fallen down? What did you think when you saw the tree?

Unusual Roots

Have you swung from a banyan tree? What did you hold to swing? What looks like the hanging branches are actually the roots of the tree. These grow down from the branches until they reach the ground. These roots are like pillars that provide strong support to the tree. The banyan tree also has roots under the ground, just as other trees have.

There is a saying against cutting trees

There was a tree growing close to a lamp post. The tree was so full of leaves that the light of the bulb was blocked. People felt that the branches of the trees needed to be trimmed. Before they do this, they need to take written permission from the government office.



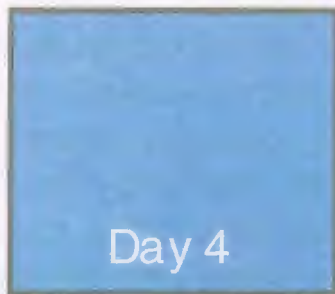
Have you seen any tree which has roots growing from its branches?

Let us do this Activity

Get together with 3-4 of your friends- from the list of things given, decide who will bring which thing.

A transparent glass tumbler or bottle with a wide mouth, rubber band or thread, some seeds of moong, wheat, bajra, mustard, channa (chick peas) or rajma (red beans) and a wad of cotton wool.

Each group will work with only one kind of seed. Soak a few seeds (5-6) overnight in a bowl full of water. Take the wad of cotton wool and wet it. Put it on the mouth of the tumbler. Tie it tight to the mouth with rubber band or thread. Remove soaked seeds from water and place them on the cotton wool. You will have to take care that the cotton wool does not dry. Observe the changes that take place for the next 10 to 12 days. Did you observe the seedlings come out of the seeds? Draw the picture of the seedling as it looks on the fourth and the eighth day.



Write it in your notebook

Exercise

- ☺ What difference did you observe in the seeds after soaking? Compare with dry seeds and write.

- ☺ What do you think would happen if the cotton wool had been left dry?
- ☺ In which direction did the roots and the stem grow?
- ☺ How big did the plant grow in the cotton wool?
- ☺ Did small plants come out from all seeds?
- ☺ What is the colour of the roots?
- ☺ Did you see any hair on the roots?
- ☺ Try and pull out one little plant from the cotton wool. Were you able to pull it out? Why?
- ☺ Did you see how the roots grip the cotton wool? Do you think that the roots hold the soil in the same way? Also look at the plants grown by your friends.

Do you know ?

Desert Oak is a tree that is found in Australia. It grows almost as tall as your classroom wall. It has very few leaves. Guess how deep its roots go down? Imagine the length of about 30 such trees laid down in a line end to end, one after other. That is how long the roots of this tree can be. These roots go deep into the ground till they reach water. This water is stored in the tree trunk. Local people knew about this. When there was no water in the desert, the local people use to put a thin pipe into the trunk of the tree, to drink this water.

What Grows?

Arif and Yuaan did the above activity. They saw the seedlings grow. When asked-what are the things that grow? They had very different ideas about things that grow.

Arif made a list of the following-Leaves, munna, bud, puppy, nails, fish.

Yuaan's list had-Moon, tree, I, hair, watermelon, mosquito, crow.

- ☺ What do you think? Which of these things listed by Arif and Yuaan grow?
- ☺ Why don't you make your own list of things that grow?

Your list can include the names of things that are in Arif's and Yuaan's list.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Think about yourself-in what ways have you changed over a period of time? Have you grown in any way? For example-

- ☺ Has your height increased? How much taller have you grown in the last one year?

- ① Imagine that you had never cut your nails! Draw a picture of your fingers in the notebook to show how they could have looked.
- ② What other part of your body keeps growing? Some people cut it regularly.



Chapter - 11

Eating Together

Class Party:

The school reopened today after the vacations. The children share news about how they spend their holidays.

“When did you put mehendi on your palms?” Meena asked Aarti. “At my uncle’s wedding,” Aarti said. “You must have had a lot of fun at the wedding,”. David said. “Oh, yes! I enjoyed the wedding feasts the most,” Aarti said. “At the wedding, we had fun with all my cousins and other relatives eating and doing everything together.” Aarti said, “Why don’t we do something like this in school? Let us also have some fun together.” Rehana asked.

“I have an idea,” David said. “Why don’t we have a class party? Then we can also eat and have fun together.” “We have parties in our colony whenever there is a festival. We collect money from everyone for the party. We cook some dishes and buy other things from the market,” Rehana said.

Reena said, “We don’t need a festival to have a party. Saturday is half-day. Why don’t we plan to have our party then?”



Everyone in the class decided what each would bring for the party. On Saturday the children really enjoyed their party. There was so much variety in food. They played so many games. Everybody was so relaxed. There was singing and dancing too. They decided that they would again arrange such a party.

Write in your notebook

- Do you like to eat with others?
- On what occasions do you eat together with your friends?
- Have you ever had a party in your class? When? What all did you do to arrange a party?
- What did you and your classmates bring to the party?
- Write the name of things, you ate in the party?
- Who were the people you invited for your party?
- Were there some people who work in your school, whom you could not invite? Who were these people?
- Did you wear any special dress for the party?
- What are the other things that you can do to make the party greater fun for everyone? Discuss.



Celebrating Bihu



Suman woke up early and ran to meet her friends Rajat, Fatima and Mazani. Today was a special day in Assam. The new rice crop had been harvested. The village was celebrating the festival of Bihu. The four friends sang and chatted happily as they made the *Bhela Ghar*.

Let us read how they celebrated *Bihu*.

Suman Hurry up! We must finish making the *Bhela Ghar* of grass and bamboo before the feast tonight.

Rajat Yes, today is *Uruka*. The whole village will eat together.

Fatima Have they started preparing the feast?

Suman Yes, everyone has contributed money to buy the *bora* rice, fire wood, bamboo but *Mezi*. *Hariya* and *Bhadiya* have not given money, but they are helping with all the work.

Fatima What about the meat, fish and vegetables?

Suman Some people have gone to market to buy all these things. The *bora* rice has been



soaked. The whole village is busy making *pitha*. Some people are cooking and some are roasting the sweet potatoes. Some will help to serve the food at night. In the evening, everyone will be served tea and *pitha*.

Rajat

I am waiting to eat the *cheva* rice that we will get all the feast. I really love it.

Fatima

How will the *cheva* rice be prepared?

Suman

They will light a fire and boil the water in the big *tao* (a big vessel). On this vessel, they will put the *Kadhahi* containing soaked rice and cover it with banana leaves. After some time, the *cheva* rice will be cooked and ready to eat.

Let us talk

- ⊙ Where is the festival of *bihu* celebrated?
- ⊙ Which are the festivals you celebrate together with other families?
- ⊙ Does everyone cook and eat together on such festivals?
- ⊙ What are some of the special dishes that are cooked? How are they cooked?





- Are some special vessels used for cooking these items? What are they?
- Which is the biggest vessel that is used? Can you draw a picture of it? Can you guess how many people can eat the food that is cooked in it at one time?










The *Bhela Ghar* was ready. The four friends ran off to change their clothes. Soon all the people in the village got together at one place. The women were dressed in yellow. They wore beautiful *mekhalachador*. Suman and her friends ran to the *Bhela Ghar*. The drums started to play and everyone started to sing and dance. The *Bhela*

Ghar was set alight as people danced around it. Everyone danced till they were tired. Then they all sat down on the ground in rows and got ready to eat. The food was served on banana leaves. Everyone enjoyed the feast.

Mazani: Suman! We should go and sleep now. We have to get up early tomorrow to light the *Mezi*.



Find out and do

-  Can you guess how many people must have eaten together in the village feast?
-  Have you ever seen the *bihu* dance? Did you like it?
-  Find out from the students in your class, the festivals that they celebrate and the special food that they eat on these days. Who cooks the special food for festivals?
-  Do you wear clothes of some special colours on some festivals? Make a picture of these clothes in your notebook.
-  Are there some special songs that are sung at different festivals in your place? Learn some of these songs and sing them in the class.
-  Learn some special festival dances. Perform these with your friends in your assembly.
-  When you meet friends of your own age do you do anything special-like play a game, chat or watch a movie? What else do you do?

Mid-day Meal

It is almost one o'clock in the afternoon. The smell of food cooking is coming from a verandah and our stomachs are rumbling. We are so hungry, we are not able to pay attention to the lesson in class.



Ding, Ding, Ding At last, now the bell rung! All the children ran out and went to wash their hands. *Master Imran* sent all the children to the hand pump at the corner of the courtyard.

“Geeta, see that everyone washes one's hands properly,” he called.

After washing out hands, we all stood in a queue to take our food. Some had their own boxes, and others had plates. Then we all sat down in a circle with our food. Before we started to eat, we sang together-

We play together,
We eat together,
For the good of everyone,
We will always be together.

Today there is (rice with vegetable and gravy) in our meal. Yesterday, we had *rice* with *Nuetry*. Outside *Didi Mumtaz's* room, a list of food items has been displayed. It tells what we will get every day of the week. Would it not be wonderful if on some days we got an extra treat-may be something sweet!

There is another interesting thing about lunch time at school. Everyday we change our places in the circle and sit next to a different child. I really like this because I can meet new children and make new friends.



The food was not always very nice. Sometimes, rice was of poor quality, sometimes, it was not properly cooked. Some parents did not like their children to eat such food.

Didi Mumtaz explain to them that it was everyone's duty to make sure that the children got fresh, hot and properly cooked food. Also make sure that every child gets afternoon meal regularly. The parents also decided to help.

Now things are better. We eat fresh, hot and properly cooked food together. The younger children sometimes cannot finish all the food, but my friends and I are sometimes still a little hungry even after we eat.

Now a days many of the schools give food in school during the day. It was not always like this. When my *didi* was in the primary school, children did not get afternoon meal in school. Some children come to school in the morning without eating anything. Imagine! Having to study on an empty stomach!

Find out and write in your notebook

- Write about the food given in your school. If you do not get food in school, ask a friend or someone else who gets food in school.
- ☺ What time is the meal served?
- ☺ What do you get in the meal at school?
- ☺ Do you like the mid-day meal that you get?
- ☺ Is the food that you get enough for you?



- ☺ Do you bring your own plate, or do you get it in school?
- ☺ Who serves the food?
- ☺ Do your teachers eat with you?
- ☺ Is the week's menu put up on the school board?
- ☺ What will you get on Wednesday and Friday?
- ☺ If you got a chance to change the menu for the meal in your school, what would you like to change? What would you like to eat? Make your own menu.

Day	Food items
Monday	
Wednesday	
Friday	

- ☺ If you do not get food in the school, find out why.

Mid-day Meal
Every Child's right

Many children in our country are not able to get even one full meal everyday. Many of them do not even go to school. Those who go to school without eating properly, cannot study properly.

Some years ago, the highest court of our country gave an important decision. All children in primary school should be provided with hot, cooked food. This is the right of every child.



Chapter - 12

Food and Fun

Anything that people eat can be called food. But it makes more sense to talk of it as being only those products people enjoy eating. We get our food from plants and animals.

Why Do We Need Food?

Our body is continuously working. We need energy to do work. Food gives us energy. Good food means good health. Right kind of food improves the health of a person. The main uses of food are:

- ⊙ It gives us energy to work.
- ⊙ It makes us strong.
- ⊙ It builds our body.
- ⊙ It makes us grow.
- ⊙ It repairs the body parts.
- ⊙ It helps to fight against the diseases and we enjoy good health.



A boy eating the food

Exercise

1. What is food?



2. What does food give us?
3. Give main uses of food?

Types of Food

All food falls into three types. They are:

1. Body-building foods – Proteins.
2. Energy-giving foods – Carbohydrates and Fats
3. Protective foods – Minerals and Vitamins.

1. Body-Building Foods

Proteins are body-building foods. These foods make us grow tall and strong. Babies and young children need more protein than adults. Milk, milk products, pulses (dals), beans, peas, nuts, soyabean,



meat, fish and

Foods rich in proteins

eggs are rich sources of proteins.

2. Energy-giving Foods

Carbohydrates and fats give us the energy.

Sugar and starch are rich in carbohydrates. These foods give



us strength and energy to work, run, play, study, etc. Sugar is present in all fruits, honey, beet root and sugarcane. Starch is present in rice, wheat, potato, sweet potato, tapioca and yam.

Fats give us more energy than carbohydrates. If fats are not used up in the body, it increase the body weight which is not good for health.

All oily foods have fat in them. Oil seeds like ground-nuts, cashewnuts, coconuts, vegetable ghee, butter, milk; cheese, eggs have fat in them.

3. **Protective Foods**

Foods rich in minerals and vitamins are called protective foods. We need these foods to grow healthy bones, teeth, hair, skin and for our general well-being. These foods help the body to fight against sickness.



MILK IS COMPLETE FOOD

Milk is considered superior to other foods. It is the best and complete food. It contains proteins, minerals, fats and vitamins. So it is also called a perfect food. It is a food meant for young and old, for the sick and healthy. Babies live mostly on milk for sometime.

Exercise:

1. Name three types of food?
2. What are energy giving foods?
3. What are body-building foods?

Fresh vegetables and fruits give us minerals and vitamins. Vegetables are richer in minerals like iron and calcium than fruits. It is important to eat green leafy vegetables like spinach, cabbage, drumstick leaves etc.

Papayas are rich in vitamin A, necessary for good eyesight. Oranges are rich in vitamin C which helps to build your resistance.

Water

Our body needs a lot of water. Water is necessary for digestion of food and circulation of blood. It throws out the waste material from our body and keeps us fit.



A girl drinking water

Raw Food

We eat fruits and some vegetables without cooking.

We eat ripe fruits such as mangoes, apples, bananas, etc. without cooking. We also eat salad of raw vegetables



Cabbage



Radish



Beet root



Cucumber



Carrot



Tomato

These foods are eaten raw



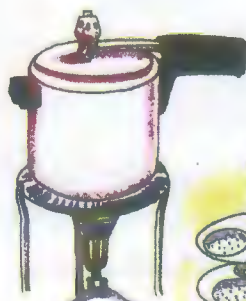
such as carrot, radish, tomato, cucumber, beet root, cabbage, etc.

Exercise

- Q1. Why is milk called a perfect food?
 Q2. Why milk is superior to all other foods?
 Q3. Why our body needs a lot of water?
 Q4. Name three vegetables which are eaten raw.

Raw vegetables contain many vitamins. The raw foods should always be fresh and clean. Always wash the fruits and vegetables in clean water before cutting or eating. Cut the fruits and vegetables and eat immediately. Re-

member to cover all cut fruits. If kept uncovered, they may be attacked by flies and germs. Rotten food substances must be thrown away.



Boiling



Steaming



Roasting



Frying



Baking

Cooked Food

Cooked food is soft and easy to digest. It is tasty too. Here are some common methods of cooking.

1. **Boiling:** Rice, dal, fish-curry, vegetables, etc. are prepared by boiling them in water.
2. **Steaming:** Some food items like idly, dhokla, etc. are cooked in steam.
3. **Roasting:** Some food items, such



as chapatti (roti), nan, peanuts, etc. are cooked by roasting on a hot pan or on burning coal.

4. **Frying:** Some food items, such as puri, samosa, batata vada, pakora, wafers, etc., are fried in oil or ghee.
5. **Baking:** Bread, cakes, biscuits, etc. are baked in an oven.

Cooking helps to kill the disease germs that are present in the raw food and avoids many diseases.

Exercise:

1. What are the different methods of cooking food?
2. What rules should we follow while cooking food?

Follows these Rules:

- * Do not overcook or cook at high temperature.
- * Do not cook with too much of water. Vitamins are lost by these types of cooking.

Think and Answer

I. Name the following:

1. Three major groups of food.

(i) _____ (ii) _____ (iii) _____

2. Three body-building foods.

(i) _____ (ii) _____ (iii) _____



3. Three energy-giving foods.

(i) _____ (ii) _____ (iii) _____

4. Three protective foods.

(i) _____ (ii) _____ (iii) _____

II. Fill in the blanks. Choose the right word from the box.

Proteins	tasty	protective	digestive
carbohydrates	complete	wheat	rice
vitamin A	minerals	vitamins	

1. _____ gives us energy.

2. _____ and _____
come under energy-giving food.

3. Body-building foods are known as _____.

4. Minerals and vitamins are _____ foods.

5. Milk is a _____ food.

6. Papayas are rich in _____
necessary for good eye sight.

7. Vegetables and fruits contain
_____ and _____
which protect us from diseases.



8. Cooking makes the food easily

_____ and _____.

III. Match the following:

- | | |
|--------------------------|---------------------|
| 1. Butter | (a) Protective food |
| 2. Rice | (b) Eaten Raw |
| 3. Milk | (c) Fat |
| 4. Soyabean | (d) Carbohydrate |
| 5. Green leafy vegetable | (e) Protein |
| 6. Salad | (f) Complete food |

IV. Given below are the names of some food items. Group them into energy-giving food, body-building food and protective food.

Orange, potato, moong dal, rice, milk, fish, sugar, amla, palak (spinach)

V. Draw three food items which can be eaten raw?.

VI. Put a tick (✓) mark on the statement which is most appropriate in the following:

- Energy for our work and play is obtained mainly from:

(a) Pulses	(b) Cereals
(c) Vegetables	(d) Fruits
- Pulses are the good sources of:

(a) Carbohydrates	(b) Proteins
(c) Fats	(d) Vitamins



Chapter - 13

The World in my Home

Tug of War

Once again, everybody in Amir's family is quarrelling over watching the TV just like they do every day! Amir's brother wants to watch a cricket match while little Seema is eager to watch her favourite programme of songs. Mummy and Aunty are good friends but their favourite TV programmes are different. Mummy likes to watch the news while Aunty enjoys a TV serial.



Amir wants to watch cartoons and daddy enjoys the football match. He says that he can watch TV only in the evening. Finally, everyone had to watch the football match.

Let us Talk

- ★ In your home too, do people quarrel over fans, TV, newspapers, chairs or anything else?



- ✱ In your home, who settles such quarrels?
- ✱ Talk about any interesting incident at home when there was a quarrel over such things.
- ✱ Have you ever seen people quarrelling over something elsewhere? Why?

Why the Difference?



It is 7 O'clock in the evening, Parveen is hurrying home from her friend's house. Her brothers Shabir and Manzoor are busy playing round the corner with their friends. They are in no hurry to go home. Even if they are late, nobody will scold them.

Parveen thinks that this is not fair. Why should there be one rule for her and another for her brothers? But what can she do?

Let us Talk

- ✱ Does this kind of thing happen in your house or in any of your friend's house? What do you think about this?
- ✱ Do you think that there should be different rules for girls and boys, women and men?
- ✱ Think-what would happen if girls had to follow rules made for boys and boys had to follow rules made for girls.



Piloo Aunty



One day, Piloo Aunty took Rama and Mona and their friends to the beach. What a good time they had! They played in sand and water, and then went for a ride on the Giant wheel. After that they ate bhelpuri and bought balloons. Then everybody enjoyed some icy cold kulfi. When the kulfi-seller asked for money, he made a mistake. He charged for five kulfis instead of seven. The children thought, "Hurrah! We have saved money." But Piloo Aunty paid the money for seven kulfis to the kulfi-seller.

The children will always remember what Piloo Aunty did that day.

- ☺ Is there anyone in your family who is like Piloo Aunty? Who?
- ☺ What would the children have thought if Piloo Aunty had paid less money to the Kulfi-seller? What do you think about this?



What should I do?



Akshay loves his grandmother very much. She loves him dearly too. She talks to him about many interesting things. Anil is Akshay's friend. His grandmother likes Anil too, but one thing that she tells Akshay again and again is that he should never eat or drink anything at Anil's house-not even a glass of water! "They are very different from our family." She says.

One day there was a volleyball match in the big ground near Anil's house. It was a hot day and everybody was tired and thirsty after the match. Anil invited everybody to his home. Anil's mother gave water to all of them, and they drank it. When Anil handed Akshay a glass of water, he suddenly remembered his grandmother's warning. Akshay starred at Anil, not knowing what to do.

Talk about it

- 8 What do you think Akshay will do?
- 8 Why was Akshay confused?
- 8 Why do you think Akshay's grandmother warned him not to drink even water in Anil's house?



- 8 Do you know about anybody who thinks like Akshay's grandmother?
- 8 Do you agree with Akshay's grandmother?
- 8 What do you think Akshay should do?

Who will Decide?

Kamran comes from a very large family. His elder uncle looks after the family, their fields, money matters, etc. He decides about all the small and big things for the family.



Kamran has always worked in the fields. But now, he wants to do something different. He would like to borrow some money from a bank and buy a *chakki* machine to grind grain. There is no such machine in their village. Kamran is confident that this new work will help him to earn more money for his family. Father has agreed to let him try the new work. But his elder uncle is not agreeing with this.

Talk about it

- ★ If you were in Kamran's place what would you do?
- ★ Has it ever happened with you that you wanted to do something but the elders in the family did not allow you?



- ★ Who takes important decisions in your family? What do you feel about this?
- ★ How would you like if only one person made all the decisions for your family?



I Don't Like it!

Ateeba and Afia were going home after playing hopscotch. "Come on, come to my house." Pleaded Ateeba, pulling Afia by the hand.

"Is your Uncle at home? If he is, I will not come," Afia answered.



"But why do you say that? Uncle likes you. He was saying-bring your friend Afia at home and I will give both of you lots of chocolate."

Afia pulled her hand away from Ateeba saying. "I am scared of your Uncle. I do not like to when he even touches my hand."

Saying this, Afia went home.

Talk about it

- ☞ Have you ever disliked anybody's touch? Whose touch did you dislike?
- ☞ If you were in Afia's place, what would you do?



What else can be done when such things happen? Discuss.

Everybody's touch is not the same. Afia did not like it when Ateeba's uncle held her hand, but she liked to hold Ateeba's hand. Why do you think there was this difference?



Chapter - 14

Home and Abroad

Today, there was a lot of activity at Rabia's house. Yasir and his family were coming home after five years. Yasir had got a job in a country called Abu Dhabi five years ago. Since then he had lived there. Rabia and her *Appa* went to the airport to receive them.

After the plane landed, the passengers had to wait for some time to collect their luggage. At last Yasir, *Sahrish* and their two children could be seen coming out. "How big *Yuaan* and *Yawar* have grown." *Appa* said.

Soon many suitcases and bags were fitted into the taxi and everyone was on the way to Rabia's house.

"*Yuaan*, you must be very tired after your long journey, *Appa* told me that Abu Dhabi is another country, far from India," said Rabia.

"We are not tired. Even though it is far, our flight took only two hours," said *Yuaan*, "the plane flies very fast."

Rabia was surprised. She remembered that when she had gone on a school trip to Chennai, they had spent almost 12 hours in the train. And on the map, Kochi and Chennai seemed quite near. Rabia, *Yuaan* and *Yawar*



chatted all the way home from the airport. Rabia remembered how much fun she had on her school trips. She wanted Yuanan to tell them all about his trip from Abu Dhabi.

Dust All Around!



“Did you see many interesting things from the plane?” asked Rabia.

“Most of the time we saw only clouds because the plane was flying so high, even higher than the clouds.” said Yuanan. “But before it went so high, we could see that we were flying over sandy areas. It was sand but the colour of the sand kept changing—white, brown, yellow, red, black. We saw mountains made only of sand.” “They are called sand dunes,” added Yawar. “I have seen sand only at the seashore,” said Rabia.

“Then you should come to visit us,” said Yasir .



“The countries around Abu Dhabi are located in the desert area. Even if one drives a little away from city, one can see miles and miles of sand, no trees, no greenery—just sand.”



"I used to dream of the thick greenery and water around our home in Kashmir," said Sahrish. "I am so happy to see all this after such a long time."

"The children have almost forgotten how it feels when it rains. You know it almost never rains in desert areas," said Yasir.



By this time the taxi had reached Rabia's house. Yuaan and Yawar were surprised to see so many fruit trees-apples, grapes, almonds, pear, nuts.... "So many kind of trees!" Yawar said, "We used to see only one kind of tree there-the date palms because it is the only one that can grow in the desert. The date is the most common fruit."

Nice Gifts and Photographs!

After they had met everyone, Sahrish unpacked their bags. They had brought gifts for everyone. They gave dates to everyone to eat. The dates were very sweet and tasty. Yawar showed Rabia some notes and coins. Yuaan explained that the money they used in Abu Dhabi was different and was called Italis. It had some writings in their local language-Arabic. They also showed many photographs of the place where they lived.





Yasir gave Rabia a globe. He said, "Rabia, why don't you locate Abu Dhabi on this? Locate Kashmir also." The children enjoyed playing with the globe

and looking for different places on the globe. Rabia found Jammu and Kashmir also.

In the evening everyone sat in the verandah, enjoying the breeze and looking at the photographs. They saw that in Abu Dhabi the buildings were tall with many storeys and big glass windows. Maalu said, "You must be getting cool breeze through the big windows." Yasir said, "We cannot open the windows because of the heat. It is air-conditioned inside where everyone stays. As the weather is very hot, people wear loose cotton clothes and keep themselves fully covered-even the head is covered. This protects them from the strong sun."



Rabia enjoyed looking at the pictures and finding out about the other country from her cousins. She constantly kept comparing her city with the things that they described about Abu Dhabi.



She decided that she would make a project report about Abu Dhabi for her class.

Discuss and write

☺ You can also make a small report comparing Abu Dhabi with the place where you live. You can use some of these points mentioned below while writing the report. You can also draw pictures or put photographs.

- ✂ The climate and weather ✂ What people wear?
- ✂ The trees and plants ✂ The kind of buildings.
- ✂ The traffic on the roads (kinds of vehicles)
- ✂ The common food items. ✂ The language

☺ Why do you think many trees cannot grow in desert areas?

☺ Do you have any relatives who live in another country?



- ☺ How long have they lived there? Did they go there for studies or for work? Was there any other reason?
-

- ☺ Look at these currency notes

Write the value of each note in the box near its picture.



☺ To which country does this currency belong? How did you know?

☺ Whose picture can you see on the notes?

☺ Can you find any number on the notes (other than the value)?

☺ Do you think that two notes can have the same number?

☺ Take a ten rupee note and observe it carefully, how many languages can you see on the note?

☺ Write the name of the bank on the note.

Match the coins



☺ How many of these coins do you recognize?

☺ What is written on each coin other than the value?

☺ Look at these notes. Do they all belong to India/ Put a circle around notes that are not Indian. Find out which country do they belong to.



Chapter - 15

Defence Officer Wahida



Have you ever seen her photograph anywhere? She is Lieutenant Commander, Wahida Prism, Doctor in the Indian Navy. She is one of the few women who has worked on a naval ship. She is the first woman to lead a parade. This is considered to be a very big honour in the armed forces.

We specially spoke to Wahida for this book. Let us read what we spoke.

Question: Wahida, tell us something about your childhood and school?

Wahida: I come from a very small village called Thannamandi. This is in Rajouri District of Jammu and Kashmir. I did my schooling from government school. Most of the girls from the village studied in my school. However, few of them ever thought of what they would do after finishing school. I always wanted to become someone special and move forward in life. I was very interested in higher studies and wanted to complete the tenth class. In my area, it was new thing at that time. My mother and father had to face many

problems because of this. We even had to move out of our village. We then went to live with my grandmother in Rajouri. I did my twelfth class from there.

Question: So you always thought differently right from the beginning?

Wahida: Even when I was very young I wanted to do something different. I was very fond of riding a motor-cycle. We are three sisters. My father wanted one of us to become a doctor and one a teacher. He wanted the third daughter to become a lawyer or join the police force. I have become a doctor in the Indian Navy and my sister is in Jammu Police Force.

Question: How did you become a doctor?

Wahida: I worked very hard. My friends and family members helped me a lot. I got admission in Jammu Medical College. I studied for five years and did my M.B.B.S.

Question: How did you get into the Defence Forces? Didn't your family stop you?

Wahida: Oh, no! They felt that a job in the Forces would be the best thing for me. When I was very small, I would see army officers in our village. I wanted to be like them.



This was really a very big dream for me! While in school, I attended camps, climbed mountains and was a 'Girl Guide'.

After I became a doctor, I appeared for an interview to join the Armed Forces. I got selected there and received a training for six months.

Question: Why did you join the Indian Navy? You went to live on the naval ship?

Wahida: Well, I am very fond of travelling. I like to see different places. I wanted to go to far-off places. I was born in the hills and now I am working in sea. I really enjoy it. Very few lady-officers have worked on a ship. I am one of them. Earlier, women were not allowed to go on naval ships. When an opportunity was given, I myself went forward and gave my name. I even want to go in a submarine. I want to do everything which people think women cannot do. At present women are not allowed to go in submarines, but whenever it is allowed. I will certainly go.

Question: So what happened to your degree of MBBS?

Wahida: I am a doctor, but in Indian Navy, a naval doctor does not just give medicine to patients. She is in fact, a medical officer. The ship goes to sea for three-four months at a time. There, it is my responsibility to make sure that everybody on the ship stays fit and healthy. I carry out medical checkups of all the officers and sailors. I also have to make sure that cleanliness is maintained on the ship.



I have to ensure that no garbage collects and there are no rats on the ships. Rats and garbage can spread diseases. I must keep everybody, ready for any medical emergency on the ship. In case there is an accident on the ship (like a fire), everybody must be ready to deal with it.



Question: Is there a hospital on the ship?

Wahida: 'First-aid' is given on every naval ship. Each ship has one doctor and two or three assistants. Necessary medicines and some equipments are also available. All these things are kept in a small room.

Question: You are the first woman to lead a parade. You must have worked very hard for this?

Wahida: My seniors gave this opportunity to me after seeing my performance for three years. I felt happy that they had chosen me and showed faith in me. So I participated very sincerely.

Question: Tell us something about that parade?

Wahida: In a parade, four platoons march behind the leader. Thirty-six commands have to be given during the entire parade. These must be given in a very loud voice so that it is heard till the rear end. The voice should also reach the spectators sitting on the other side of the ground.



Question: Didn't you feel nervous leading four platoons?

Wahida: I was not nervous, but one has to shout thirty-six commands. If you forget even one, the entire parade can get spoiled. I practised every morning and evening for a month. But, I have been participating in the parades since school.



Question: What is the meaning of the word 'Prism' in your name?

Wahida: My father gave this name to me. A prism is a kind of glass which reflects seven colours. My father wanted me to be like a prism and that is why he started calling me by this name from my childhood itself.

☺ Do you know anyone who is in defence services? Is the person in the Navy, Army or Air Force?

☺ What work do they do in the force?

☺ Would you like to join the defence services?

☺ Which one would you like to join (Army, Navy or Air force)?

☺ In which other jobs do people wear uniforms as in defence services?



☺ Who is the first woman who lead the Parade?

☺ Have you ever seen a parade? Hold a parade in your own school and try giving thirty-six-commands-for example, "Parade, Eyes Right", "Don't move", "Close in", "Open file". Can you add some more commands in this list?

☺ What type of work Wahida performs on the ship as lady doctor?

☺ Do you know any woman who has done something unusual? Talk to her in the same way as we talked to Lt. Cdr. Wahida Prism. Think of the questions that you will ask. Find out why she has chosen that work. What were the difficulties she faced in her life?



Chapter - 16

Chuskit Goes to School

Chuskit's Dream

Today is a special day for Chuskit. It is so special that last night Chuskit could not even sleep. Do you know why? Chuskit is ten years old, but today she is going to school for the first time. She has been waiting for this day since long.

All the children of Skitpo Pul village take the big road and then walk along the lake, cross the river near the popular trees, and then after a small climb, they reach the school.

- ✂ How do you go to school?
- ✂ Find out where Ladakh is. What kind of a place is it?

At first Chuskit did not know that she was different from other children. But slowly she found that she could not do the things like other children. It was because of her legs. Since birth, Chuskit could not use her legs.



Chuskit's Chair



All day, Chuskit used to sit near the window and draw pictures. Her mother (Aama-le) said that Chuskit made the best drawings. This made Chuskit happy. But Chuskit was happier when one day her father (Aaba-le) got a chair which had wheels. She quickly learnt how to sit in the chair and how to move it-back and forth.

Chuskit was so happy now that she did not need her father to carry her everywhere. When she wanted to go out she would tell her mother to put her in the wheel chair. Now, she could come outside on her own.

Chuskit would see the other children every morning. They would be laughing and playing on their way to school. She wished that she could also go with them.

One day Abdul came to her house with a letter. When he saw Chuskit, he asked her why she did not go to school. Chuskit told him sadly, "I can not walk. *Aaba-le* cannot carry me all the way to school everyday. I cannot even come on my chair because the road to school is not levelled. Also, how can I cross the river?"



Abdul asked, "But would you want to go to school if you could?" Chuskit was excited. She said, "Of course, I want to go to school just like all of you. I want to study and play..."

Her *Meme-le* (grandfather) stopped her and said, "Chuskit do not dream. You know that this is not possible."

What are the things that you enjoy doing in School?

Do you like going to school?

How you feel if you could never go to school?

A Good Idea



Abdul went back from Chuskit's house, but he had started thinking of how to get Chuskit to school. He explained about Chuskit to the Headmaster and talked to the teachers till they agreed with his thoughts. Now everyone got together to work so that Chuskit's problem could be solved. They made a plan so that Chuskit could bring her wheel-chair by road to school.



For this, the uneven road had to be levelled. One group of children started to level the road. Another group worked to make the area near the river even. But there was still a problem. How would Chuskit cross the river? The older children took teacher's help to make a small bridge with flat pieces of wood across the river. Everyone happily worked hard. They wanted Chuskit to come to school.

Chuskit's Aama-le and Aaba-le gave hot tea and biscuits to everyone. Chuskit's Meme-le had tears in his eyes-not because he was sad, but because he was very happy!

By the evening, the work was done. All the children were happy. But the happiest of all was the Chuskit. Her dream was about to come true.

And today, it was that special day, Chuskit was all ready. She was eager to go to school!



Talk about it

- Who all helped Chuskit to reach school?
- If you were Abdul, what would you have done?
- At last, Chuskit could reach school. Do you think she may face some difficulties in school? What kind of difficulties? If you were Chuskit's friend, how would you help her?
- Do you have ramps in your school on which a wheelchair can move?
- Do you know any child near your house who cannot go to school because of some difficulty? Would you like to help such a child? How will you help such child?
- Look at the buildings around your house. Can a wheelchair go inside the building?

Let us do

- Draw/paste a picture of ramp and a wheelchair in your notebook.
- Make your own bridge? For this, use material that you can find around you – Ice cream sticks, plastic spoons, small sticks, rope, string etc. Your friends can help to make bridge.
- In a group of friends make a model showing fields, rivers, mountains, roads, and railway tracks, etc. You can use clay, sand, pebbles, twigs, leaves. Place your bridges at different positions on this model.



Help Chuskit to Reach School



Chapter - 17

From Home to Market



Day at night!

My name is Vaishali. My father is a vegetable-seller. My whole family- Amma, Bhaiya, Chhotu and I, help him in his work. Can you guess at what time we begin our work? At 3 o'clock in the morning. When most people are fast asleep, we start our work. Our day's work begins with Babuji, Amma, Bhaiya and I take out the previous day's vegetables from the storage bags and baskets. This is to prepare for bringing the fresh vegetables from the mandi. Sometimes Chhotu also helps us.

After doing this, we take some tea and then we hear the horn of the tempo. It is time for Babuji, Bhaiya, Chachu (uncle) and some others from our street to leave for the mandi.

- Does anyone in your house have to get up very early? What time does he or she get up? Why do they need to get up so early?



Preparing for the Day

While Babuji is away, Amma, Chhotu and I put the previous day's vegetables on gunny bags, and sprinkle some water on them. By 6.30 a.m. Babuji comes back from the mandi with baskets and small bags full of fresh vegetables. At that



time our house looks more like a small vegetable market! There are brinjals, potatoes, tomatoes, okra (Bhindi), pumpkin, gourds, chilies and many other vegetables all around. Everybody helps in arranging the vegetables. The vegetables which are not fully ripe and ready to sell are kept aside. We have to arrange the vegetables fast, so as to reach the bazaar as early as possible.



By 7 o'clock, Babuji arranges all the vegetables on the handcart and leaves for the bazaar. He says that if he is late, then his regular buyers may buy their vegetables from



someone else. As soon as Babuji leaves, I quickly get ready as I have to reach school by 7.30 a.m.

In the Bazaar



Chhotu attends school in the afternoon. He rests for a while and goes to the bazaar later with food for Babuji and Bhaiya. He stays with them at the vegetable cart, until it is time for him to go to school. Sometimes he goes back after school to help Babuji. Babuji tries to see that the previous day's vegetables are sold first.

Let us talk

- ⑤ Babuji sells the previous day's vegetables first. Why do you think he does this?
- ⑥ Have you seen dried or spoilt vegetables? Where?
- ⑦ How did you know that the vegetables were spoilt?

As the previous day's vegetables get sold, Bhaiya takes out fresh vegetables from the bags and puts them in the cart. He also keeps sprinkling water on the vegetables so that they do not dry up, especially in summers. Babuji and Bhaiya return home, after a long day, only around 10 o'clock at night. By then Chhotu and I are



asleep. Everyone else sleeps around 11 or 11:30 at night. And at 3 o'clock next morning-only four hours later-our family is up again. Another day has begun!

Look at the clocks given below. Write what you do, and what Vaishali does, at the time which the clocks are showing.



Morning



Morning



Night

Vaishali _____ Vaishali _____ Vaishali _____

You _____ You _____ You _____

From where do you get vegetables for your home? Who brings the vegetables?

Some fun with vegetables

The next time when you get okra (Bhindi) at home, look at them carefully. Are all of them the same size?

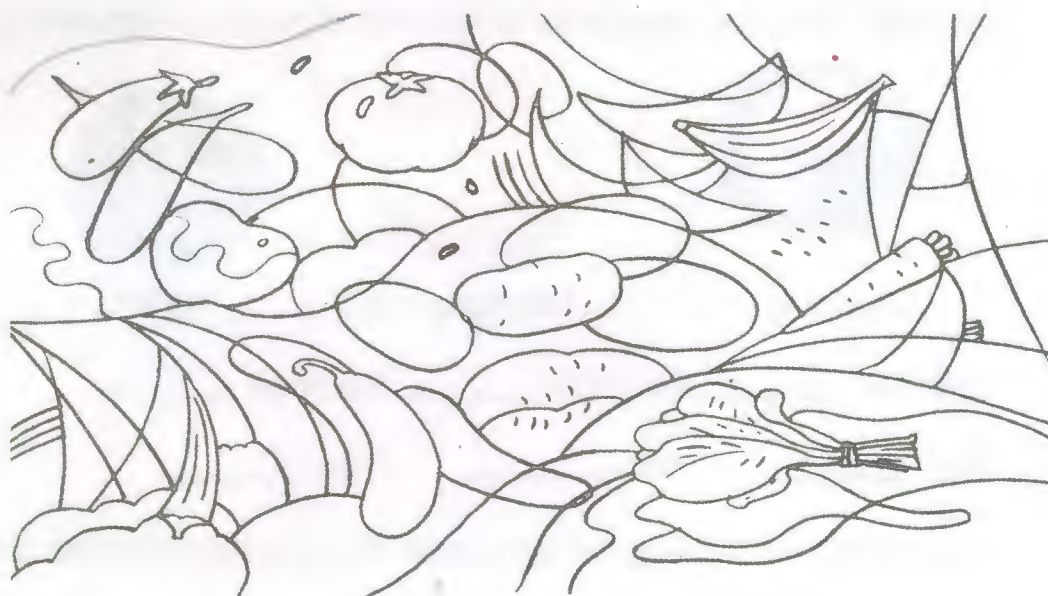
Find the longest and the shortest one. Measure them?

Do all the okra (Bhindi) have the same thickness and colour? Cut two okra (Bhindi) lengthwise. Do both of them have the



same number of seeds? Draw them in your notebook.

Seema's mother has brought some fruits and vegetables from the market. Can you find them in this picture? Colour them. Write their names in your notebook.



Find out

Given below is a list of vegetables and fruits. Which of these will spoil earlier, and which will stay for some days? Write the names in correct column. You can add more names in the list.

Spinach	Potato	Banana	Tomato	Pear
Chikoo	Pineapple	Gourd	Onion	-
Cabbage	Cucumber	Grapes	Ginger	-



Fruits and vegetables that spoil quickly

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Fruits and vegetables that can stay for some days

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Some of these fruits and vegetables are smooth to touch while some are rough. From the list above, put the names in the correct column.

Smooth

_____	_____
_____	_____
_____	_____
_____	_____

Rough

_____	_____
_____	_____
_____	_____
_____	_____

- ☺ Which vegetable do you find the heaviest to carry? Write its name and draw its picture in your notebook.
- ☺ Which is the lightest fruit or vegetable that you have eaten? Write its name and draw the picture in your notebook.
- ☺ Write names of three vegetables which do not have seeds.



Fill in the table given below. You can add three more names and fill in the table.

	COLOUR	LENGTH	WEIGHT	PRICE
Apple			(½kilo)	
Banana			(1 Dozen)	
Potato			(½ Kilo)	

☞ Talk with a vegetable-seller in your area. Ask the following questions and make a brief report in the notebook.

- ☺ What is his or her name?
- ☺ How many people are there in his or her house? How many children are there at her home?
- ☺ What are the names of the children? How old are they?
- ☺ Who help him in the work of selling vegetables?
- ☺ Who stays with the vegetable cart or sit in the shop?
- ☺ What vegetables do they sell?



- ☺ What time do they start work?
- ☺ For how many hours in a day do they work?
- ☺ Ask them about any three vegetables that they sell.

	Vegetable 1	Vegetable 2	Vegetable 3
Name of the vegetable			
The price of the vegetable			
Where does it come from?			
How much of the vegetable do they buy at one time?			
In which months does this vegetable usually come?			

