

ગુજરાત શૈક્ષણિક સંશોધન અને તાલીમ પરિષદ, ગાંધીનગરના પત્ર-કમાંક
જારીઈએટાઈ/સી એન્ડ ઈ/2014/2222, તા. 3-2-2014-થી મંજુર

Teacher edition is prepared
separately for teachers and parents,
which they must be use.

Environment

Around Us

Standard 5

(Semester I - Semester II)



PLEDGE



India is my country.

All Indians are my brothers and sisters.

I love my country and I am proud of its rich and varied heritage.

I shall always strive to be worthy of it.

I shall respect my parents, teachers and all my elders and treat everyone with courtesy.

I pledge my devotion to my country and its people.

My happiness lies in their well-being and prosperity.

Price : ₹ 51.00

Student's Name :

School Name :

Standard : _____ Roll No. : _____



Gujarat State Board of School Textbooks

'Vidyayan', Sector 10-A, Gandhinagar-382010

© Gujarat State Board of School Textbooks, Gandhinagar

Copyright of this book is reserved by Gujarat State Board of School Textbooks.
No reproduction of this book in whole or in part, in any form is permitted without
written permission of the Director, Gujarat State Board of School Textbooks.

Writing - Editing (SRG)

| | |
|-----------------------|------------------------|
| Shri Bhavesh Pandya | Shri Ketan Vyas |
| Shri Jayesh Patel | Shri Pravin Patel |
| Shri Pranav Vyas | Shri Manan Buddhadev |
| Shri Changabhai Kag | Shri Ashok Makwana |
| Shri Jayesh Patel | Shri Haribhai Patel |
| Shri Kamlesh Patel | Shri Rakeshbhai Sharma |
| Smt. Aruna Parmar | Smt. Bhavnaben Modi |
| Smt. Minaxi Mehta | Smt. Pushpa Parmar |
| Shri Vivek Trivedi | Shri Prakash Parmar |
| Shri Kamlesh K. Patel | |

Translators

| | |
|------------------|----------------|
| Dr. I. M. Bhatt | Dr. B. K. Jain |
| Ku. Rinku Suthar | |

Reviewers

| | |
|---------------------|--------------------|
| Shri Samir Vakharia | Smt. Marggi Gujral |
| Smt. Chandra Das | Smt. Monika Sharma |
| Shri Naresh G Patel | Smt. T. Kalaiselvy |

Language Corrections

Shri Shivram M. Bhataiya

Graphics

Sarjan Graphics

Co-ordination

Shri Chirag H. Patel
(Subject Co-ordinator : Physics)

Preparation and Planning

Shri Haresh S. Limbachiya
(Dy. Director, Academic)

Layout and Planning

Shri Haresh S. Limbachiya
(Dy. Director, Production)

Preamble

In keeping with the guidelines laid down under NCF-2005 and RTE-2009, structural pedagogical changes have come about in primary education, curriculum design and textbooks across India. This change refers to our understanding of concerned subjects and teaching-learning procedure on the whole. The primary objective of this syllabus is to foster creativity, out-of-box thinking, logical and analytical skills among young children. The Textbook Board of Gujarat takes pleasure in introducing the textbook of **Standard V Around Us (Environment)** to students, teachers and parents painstakingly prepared by G.C.E.R.T., Gandhinagar.

IGNUS-erg Team Members have provided vital inputs and guided the State Resource Group members in the process of framing new syllabus and designing the textbooks. UNICEF and the core-group members of the concerned subjects have been quite helpful at various junctures.

Before prescribing this textbook in the schools across Gujarat, this book in Gujarati medium had been introduced in selected schools on an experimental basis. Based on the feedback received from the stakeholders, necessary changes have been incorporated by Gujarat Council of Education and Research Training.

Gujarat State School Textbook Board convened a meeting of invited subject-experts and experts from GCERT to prepare the final draft of this textbook in Gujarati before prescribing it in the primary schools across Gujarat. Subsequently, this final draft in Gujarati has been translated into English.

Every effort has been made to maintain quality of the book and to cater to the taste of young students. We hope that young children will like the four-coloured form of this textbook and make the optimum use of this book. Efforts have been made to rid the book of errors. Still we solicit suggestions from all the stakeholders.

Dr. Bharat Pandit

Director

Date: 3-3-2015

Dr. Nitin Pethani

Executive President

Gandhinagar

First Edition : 2015

Published by : Bharat Pandit, Director, on behalf of Gujarat State Board of School Textbooks,
'Vidyayan', Sector 10-A, Gandhinagar

Printed By :

FUNDAMENTAL DUTIES

It shall be the duty of every citizen of India* :

- (a) To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) To cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) To uphold and protect the sovereignty, unity and integrity of India;
- (d) To defend the country and render national service when called upon to do so;
- (e) To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) To value and preserve the rich heritage of our composite culture;
- (g) To protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures;
- (h) To develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) To safeguard public property and to abjure violence;
- (j) To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- (k) To provide opportunities for education by the parent or the guardian, to his child or a ward between the age of 6 and 14 years as the case may be.

*Constitution of India : Section 51-A

Index

Semester I

| Sr. No. | Unit | Page No. |
|---------|--------------------------------------|----------|
| 1 | Who will do this ? | 1 |
| 2 | All together | 11 |
| 3 | Developmental Journey of Seed | 21 |
| ● | How much have you learnt?–1 | 27 |
| 4 | My District | 29 |
| 5 | Wonderful World of Bholu | 37 |
| 6 | Helper to All | 46 |
| 7 | I Love Gujarat | 51 |
| ● | How much have you learnt?–2 | 57 |

Semester II

| | | |
|-----|-------------------------------------|-----|
| 8. | Science of Kitchen | 62 |
| 9. | Land | 71 |
| 10. | Day and Night and Seasons | 80 |
| ● | How much have you learnt?–3 | 86 |
| 11. | Nation's Pride | 88 |
| 12. | Let us make a Map | 93 |
| 13. | Circulation of Blood | 97 |
| ● | How much have you learnt?– 4 | 101 |
| 14. | Our Panchayat | 102 |
| 15. | Disaster and Rescue | 108 |
| 16. | Look, Learn and Experience | 118 |
| ● | How much have you learnt?– 5 | 124 |



Introduction

1.



Fill in the colours / Do the print work:





2.



Story:



3.



Think and Say:

- Which of your friends are taller than you ?
- Which friend's house is farthest from your house ?
- Which of your friends are shorter than you ?
- Which place do you like the most in your school ?

4.



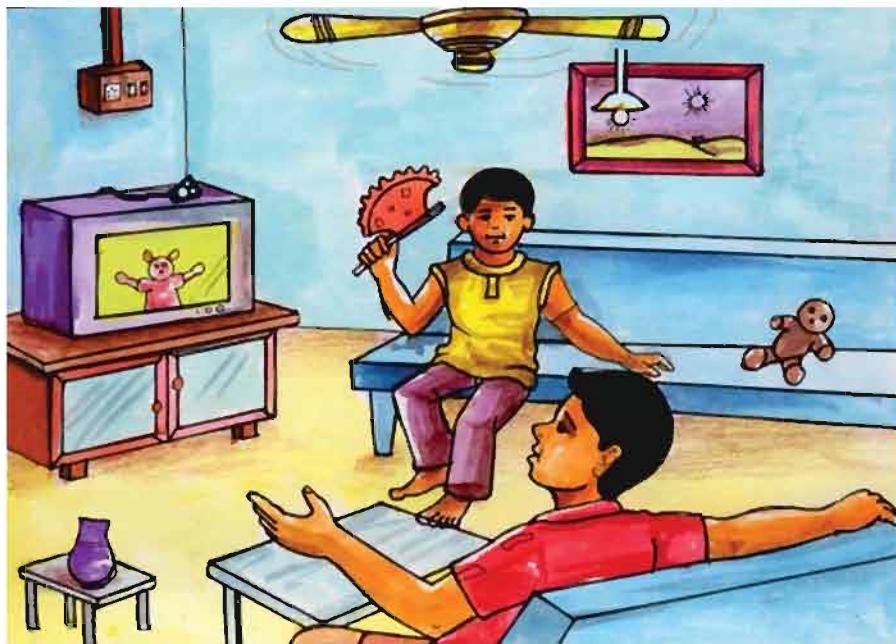
Outdoor Game:





5. Puzzle:

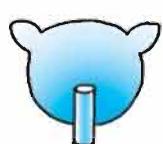
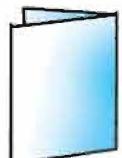
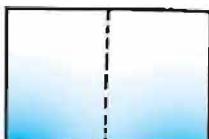
Circle 'O' the mistakes in the picture given below :



6. Perform / Enact / Role Play :

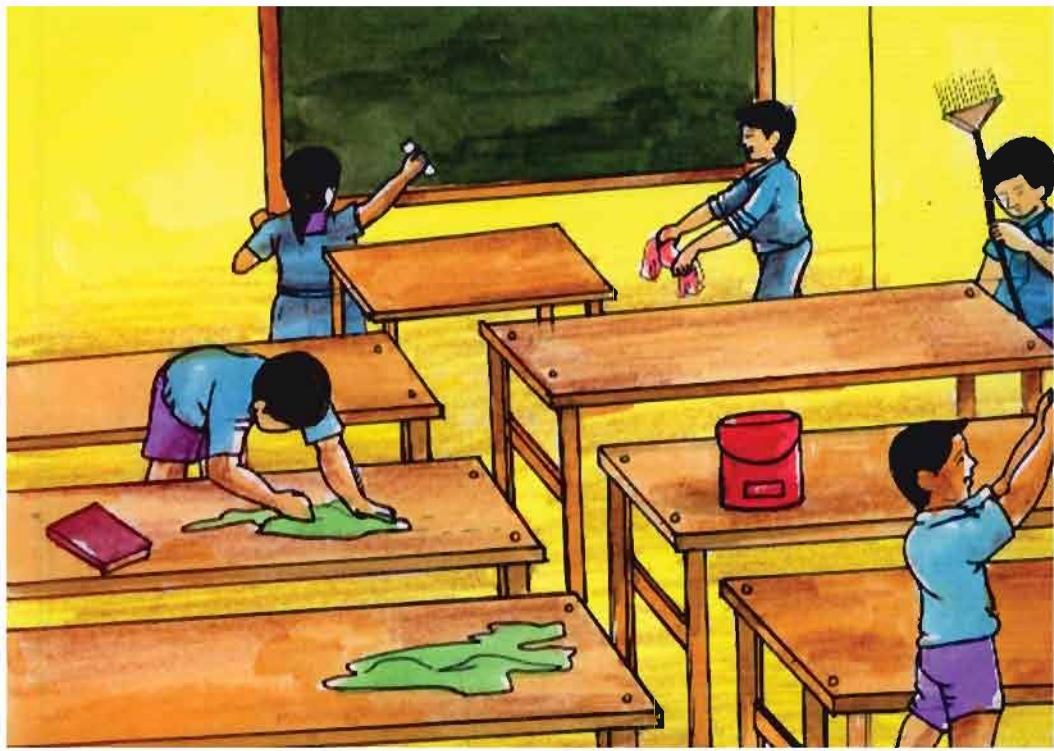


7. Activity:





Activity :



8.



Classroom Activity :

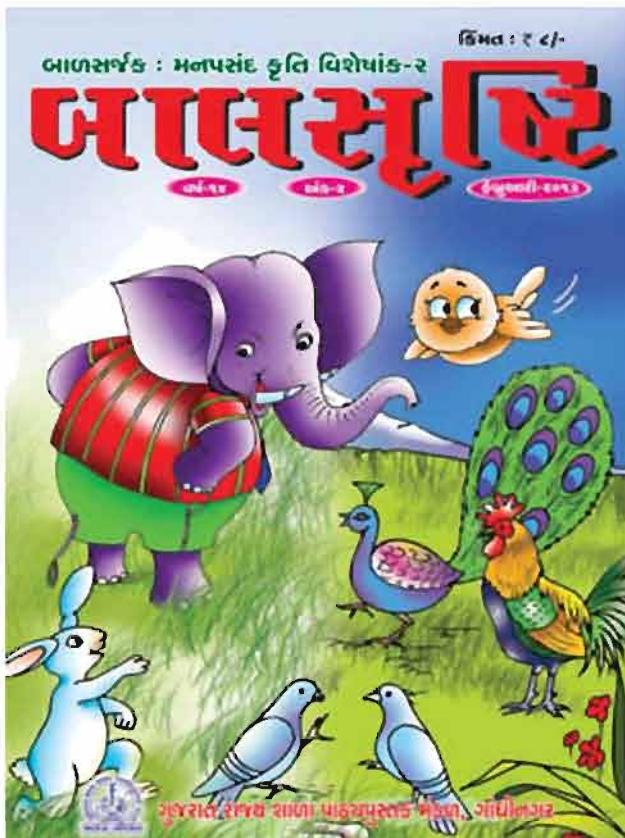




9.



Read :



10.



Write :

Write about your friend :

-
-
-
-
-
-
-
-



11.

**Observation :**

What have you observed while coming from home to school ?

| Sr. No. | Name | Is it useful ? | |
|------------|------|----------------|----|
| | | Yes | No |
| 1. | Dog | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |

12.

**Discussion :**

13.



Song : This symbol is for making the students sing.

14.

**Project :**

Who will do this?



Story :

Meena and Chintu are brother-sister. They study in school. Chintu does not like to go to school. Meena goes to school regularly while Chintu is irregular. Mummy wants to educate both the children namely Meena and Chintu. Grand-father tells both of them a new story every day. Grand-mother teaches them how to sing. Chintu and Meena are dear to all in the school. They are friendly with all the students in the school.. Mom and Dad are much worried about the Chintu's studies. They keep a close watch at their going to school regularly.



Think and Say :

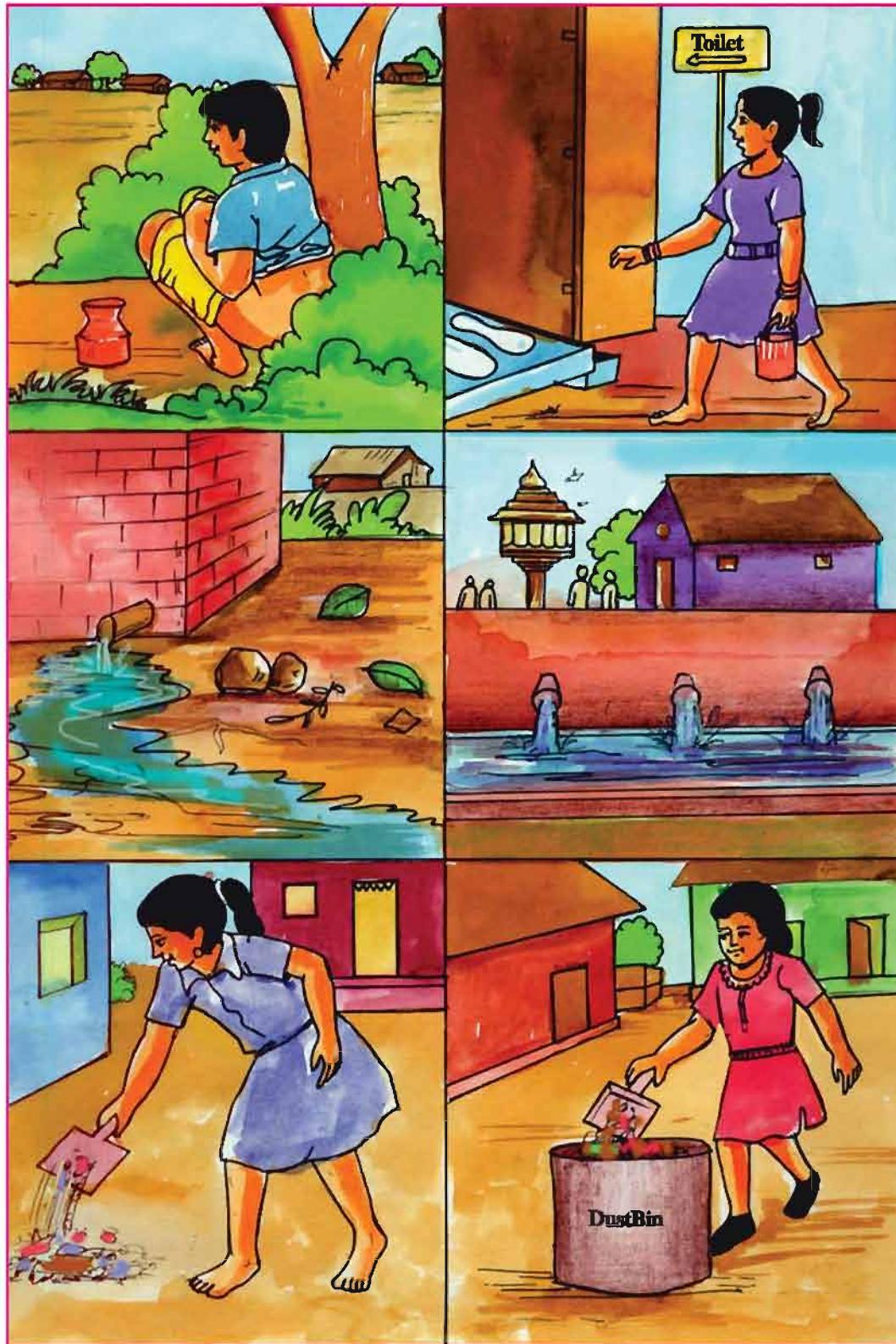
- What would Chintu dislike going to school?
- What would Chintu dislike in the school?

Primary Duties : We get many facilities where we reside or dwell. To preserve and maintain them is our moral duty. We use water and hence it is our duty to utilize it carefully. It is our duty to maintain the trees, streets and our environment. It is our prime duty to utilize our amenities wisely and rationally.





Observation :



2

Downloaded from https://www.studiestoday.com

Who will do this?





Think and Say :

- Do you throw garbage in dustbin?
- Do you use toilet?
- Do you wash your hands with soap before eating and after using the toilet?
- Do you release dirty water through drain, gutter or safety tank?
- How many of your answers are ‘Yes’?



It is true :

- If all your answers are ‘Yes,’ then take it for granted that you are maintaining the environment.



Write :

- Which other primary duties should be followed ?

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

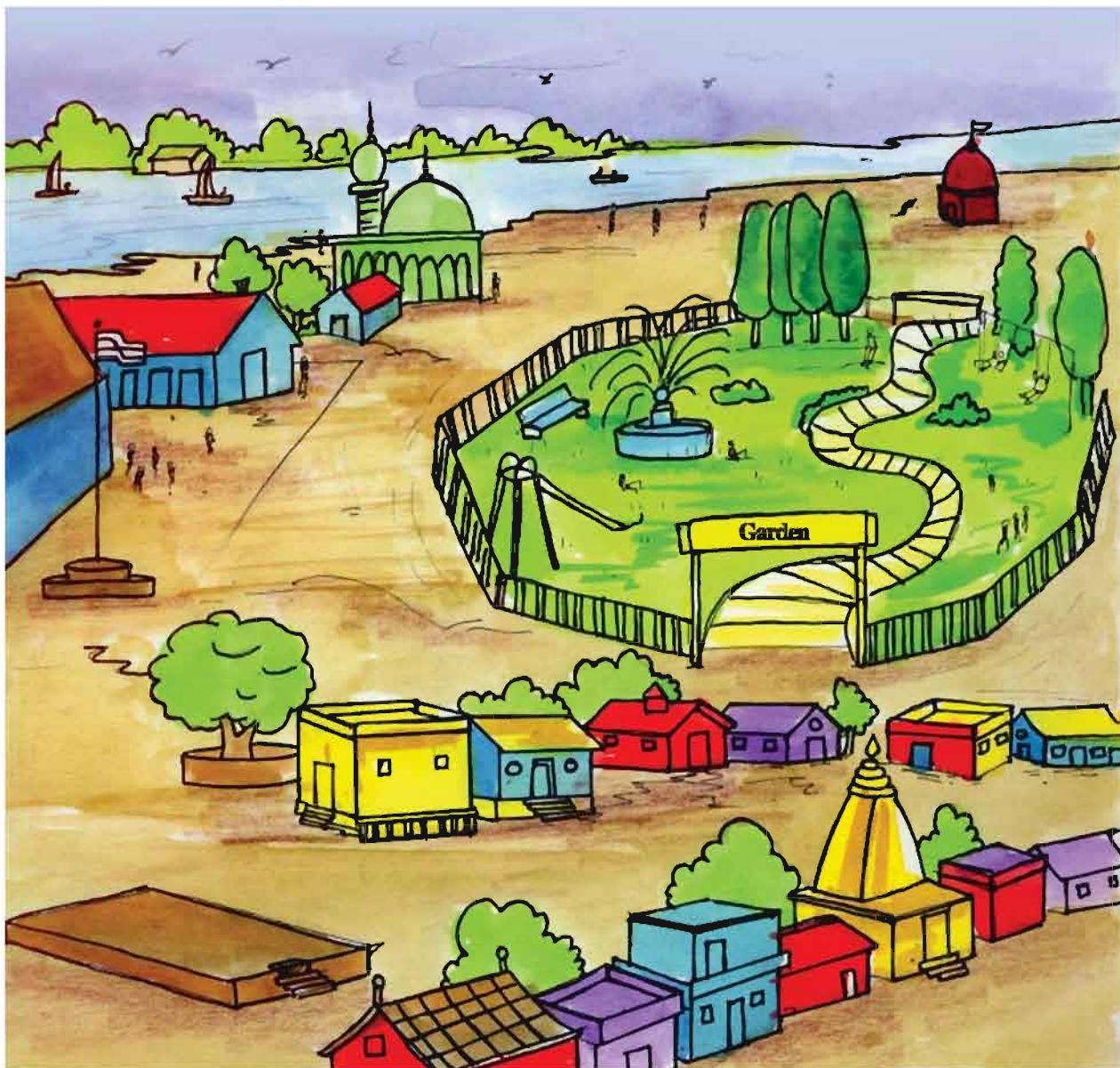




Read :

• Public Property

There are many things in our villages or streets. They are our facilities. These are such facilities which are not owned by any individual but are used by everyone. Such properties are called public properties. Given below are the pictures of such public properties which may also be found in your village.





Write :



Observation :

- Which are the public properties?

- _____
- _____
- _____
- _____

- Public properties in your surroundings :

- _____
- _____
- _____
- _____



It is true :

- **Hand washing Day :**

15th October is celebrated as Hand Washing Day. Dirty hands can cause many diseases.



Who will do this?



Write :



Observation :



First Picture :



Second Picture :



- What is good in both the pictures?
● _____
- What is wrong in both the pictures?
● _____
- Where do you dispose off the rubbish of your house?
● _____
- What is the arrangement for the disposal of street rubbish?
● _____
- Where do you release dirty water of your house?
● _____



6



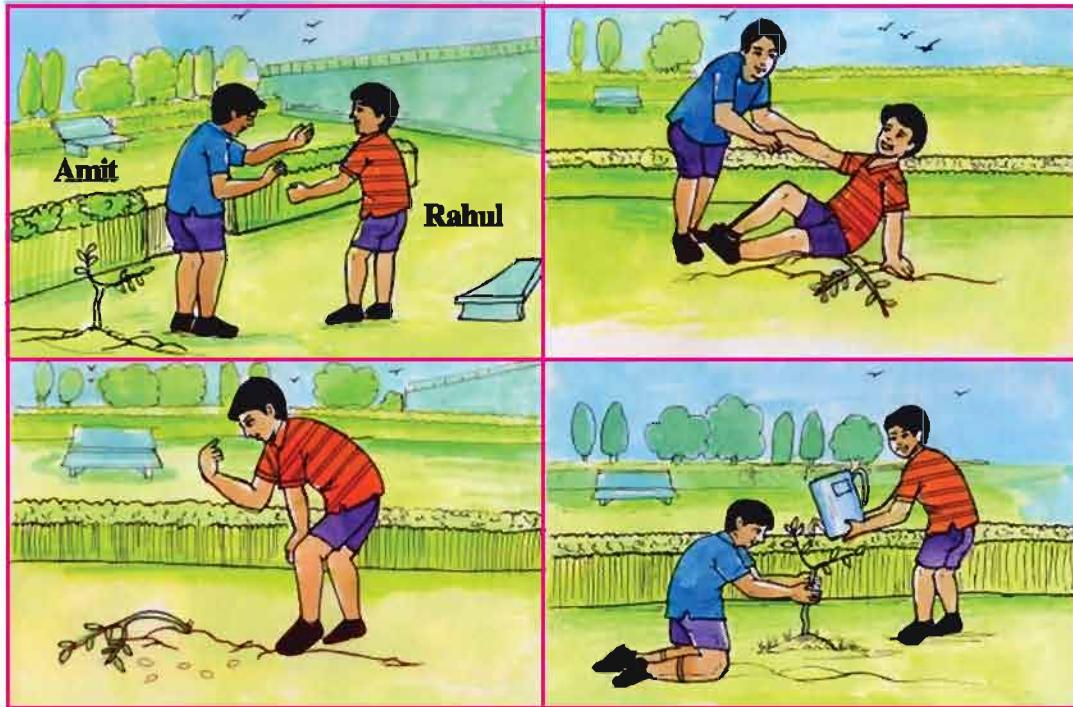


Write :



Observation :

Plants of Amit and Rahul



- What do you see in the first picture?
● _____
- What is Amit doing?
● _____
- What did Rahul do after the plant had been uprooted?
● _____
- What should Rahul actually do?
● _____
- What do you do to look after the garden?
● _____



Who will do this?



Write :



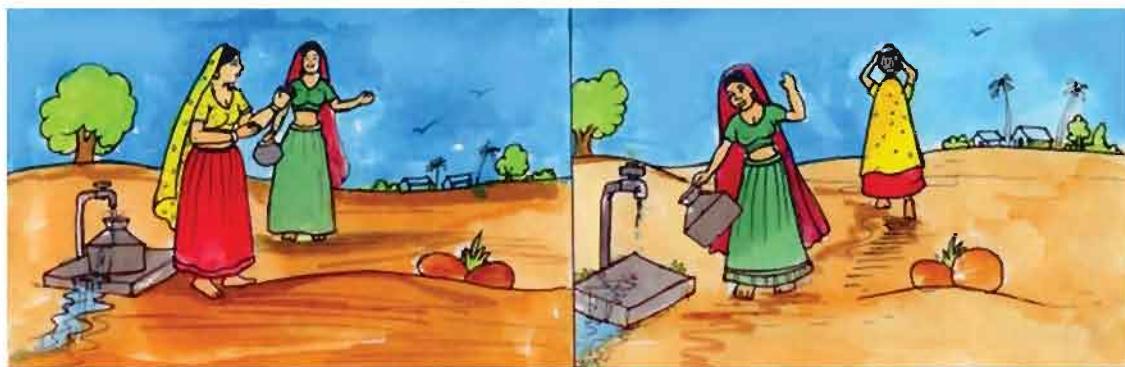
Observation :



First Picture :



Second Picture :

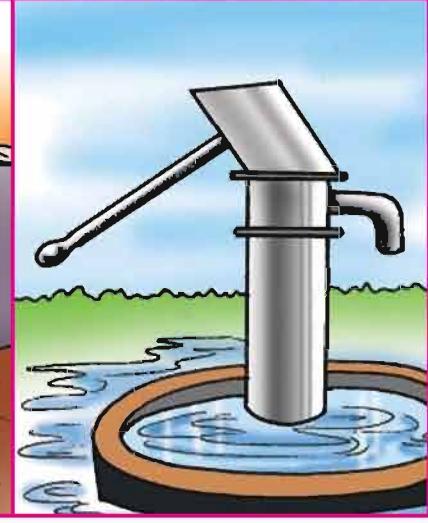
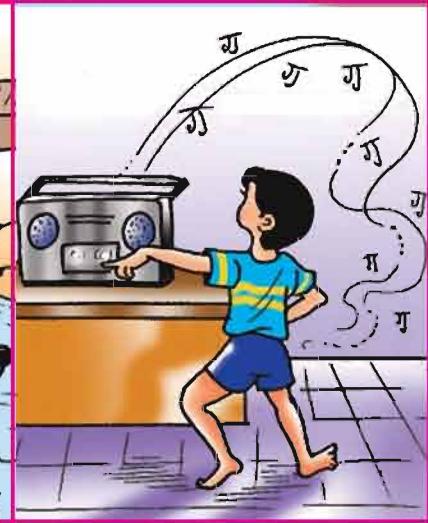
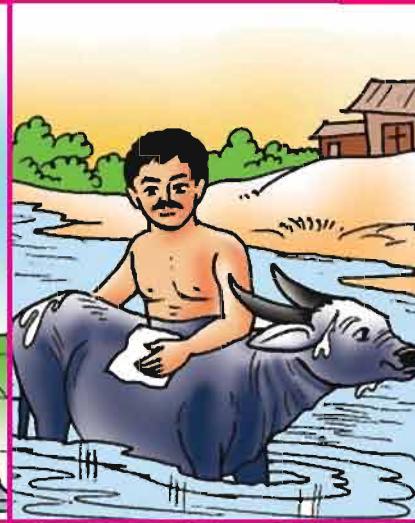
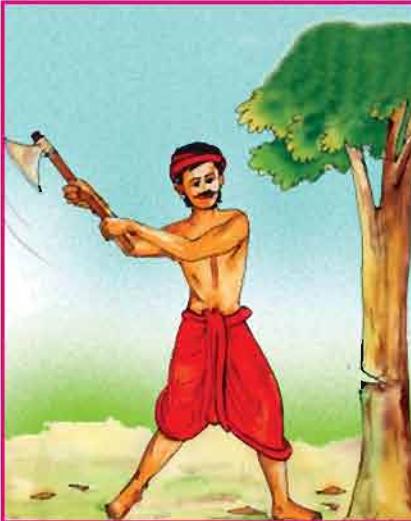


- What do you observe in the first picture?
● _____
- What do you observe in the second picture?
● _____
- Which things do you consider proper in both the pictures ? Why ?
● _____
- List down the activites where the water is saved and wasted in your surroundings ?
● _____





Observation :





Discussion :

- Which aspects in the pictures of page 9 are beneficial for environment?
- Which aspects in the pictures of page 9 are harmful for environment?



Write :

- What do you do out of these activities ? Why? Note down :

| What do you do? | What you do not do? | Why? |
|-----------------|---------------------|------|
| | | |
| | | |

- What other duties should be obeyed to preserve environment?

| | |
|--|--|
| | |
| | |



Classroom Activity :

- Play a game given on last page of the text book.

Things to Know

- The habit of disposing garbage in ditches out of the city amongst the western countries was first established in Athens in 500 B.C.
- In England, you require licence to buy television.



2

All together



Read :

We use air, water and food. Sometimes we see them being misused. Environment gives us land to grow food and build houses. Do we really do anything to maintain and preserve it?

Our country is a country with rich diversity. Our country shows diversity in religion, caste, language, sex and status. Although these diversities are there, even then we are provided with equal facilities. We should think about where these facilities are derived from.

Here we shall discuss about what facilities we are getting and how much we are alert regarding them.



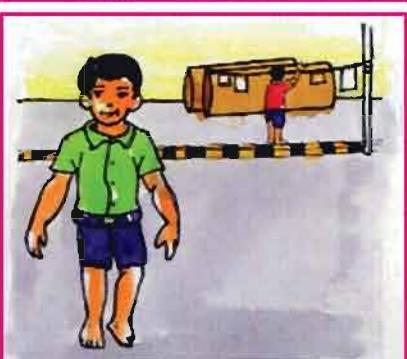
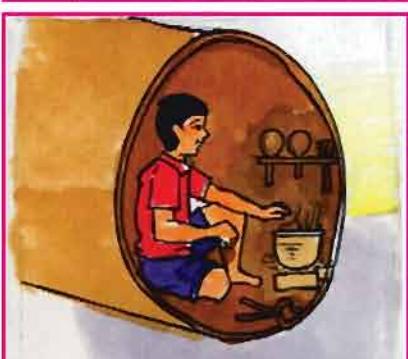
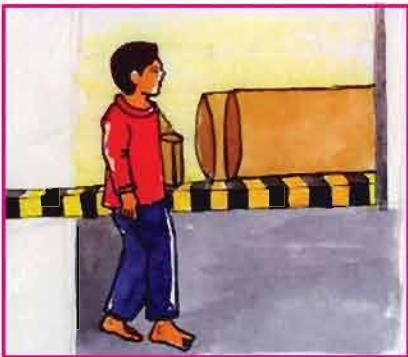
Story :

Once a boy named Aryan reached Ahmedabad. Nobody knows where he came from. Where will he stay and what will he do to get food? All our needs are fulfilled by our parents. But, who will help this boy? What will happen to him?





Discussion :



Think and Say:

- Where would Aryan's first house be?
- Which facility would Aryan have first?
- Why would another boy have joined Aryan?
- What may another boy have brought with him?
- Who will be benefitted due to both the boys being together?
- What other facilities would both the friends get now?





- What would they do now to get more facilities?
- Where would the boys buy vegetables from?
- Which things of nature would have been utilized by both the friends?
- What are the essential things required for a man to live?
- How would these boys keep clear the area around their house?



Write :

What Is made from what?



| | | |
|----------------------------|--|--|
| Made from wood. | | |
| Wood comes from tree. | | |
| I shall maintain the tree. | | |





Observation :





Story :



A young girl Rupal along with all the other children in village wants to go to school. She asks her father to send her to school but Rupal cannot go to school for study.



Think and Say :

- How do you go to school?
- Who among you does not go to school? Why?





Rupal used to feel that she should go to school but she could not because she was not like other children. She was different. She could not even play like other children from others. She was willing to go to school and was very fond of studying but, what can be done.



Think and Say :

- Why do you like going to school?
- What do you like in the school?
- What do you do if you cannot come to school?



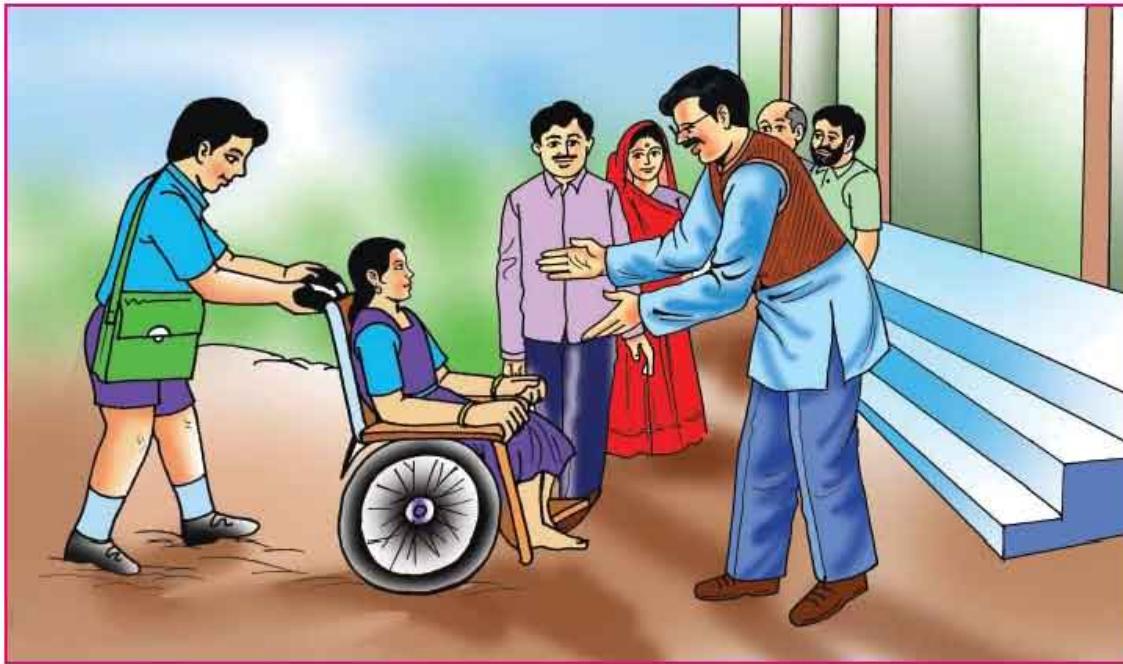
Rupal had been suffering from polio in both her legs since childhood. She could not walk thence. But once, some organization donated her a wheel chair. She came to school with the help of a neighbouring boy.





Think and Say :

- Do you help anybody? How?
- Does any one come to school with your help?
- Who can come to school with your help only?
- How do you help those children who have a fear to come to school?



Everybody welcomed her. Rupal is happy today. Her parents are happy too. Teachers and students are also happy.



Think and Say :

- By whose help could Rupal reach to school?
- What did Rupal see while coming to school?





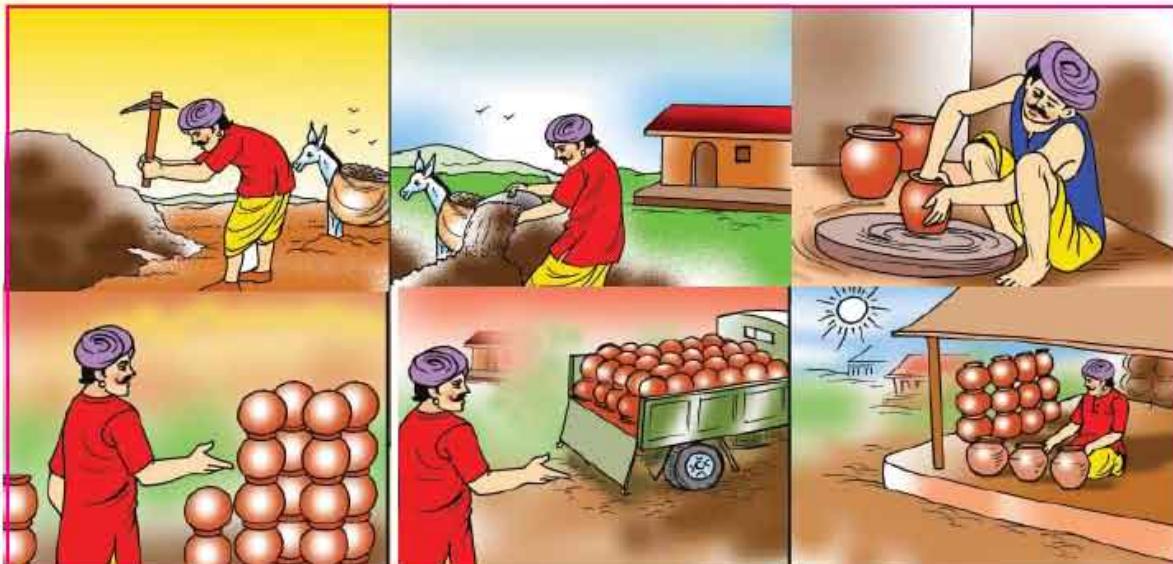
Rupal, studies along with all the children, tells stories, sings songs, answers the questions in the classroom... Everybody helps Rupal.

Think and Say:

- Who all might have helped Rupal?
- In which works of this school does Rupal need help?
- Whom do you come to school with?

Story :

- See the picture and tell the story:





Think and Say :

- From where does the potter bring grass for the donkey?
- Who may be bringing water for the potter to soak the soil?
- Who would help the potter to make pots?
- What may the potter require to fire the pots?
- Who would sell the things required for heating the pots, to the potter?
- Have you ever purchased a pot?
- What other purposes is the pot used for?



Think and Write :

Various kinds of professionals are connected with each other. Explain giving instance how the following things are united or connected with various professions?

● Pot :

| Profession | Potter | Driver | Businessmen |
|-------------------------|------------|-----------------|-------------|
| How they are connected? | Makes pots | Transports pots | Sells pots |

● Ice-cream :

| Profession | Animal Husbandry | Businessmen | Vendors |
|-------------------------|------------------|-------------|---------|
| How are they connected? | | | |

● Clothes :

| Profession | Tailor | Shopkeeper | Washerman |
|-------------------------|--------|------------|-----------|
| How are they connected? | | | |





Read :

Many people toil hard to provide facilities to us. All works are equally important. No work is considered low or high. Depending on each other, we all live an easy life.

Do we ever think about the toil made by a donkey, a potter or his helper while drinking cool water from the pot? We do not even think about the maker and the seller of an ice cream or milk provider while eating it.

We should ask ourselves whether we are harming the Nature, while making use of the sources available to us? We should protect and preserve our environment the giver of all necessities of our lives. It should be our moral duty to have a passion of homage for it. We should have a respectful attitude towards it.



- Many a times we harm Nature to avail various facilities.
- Our life is dependent upon many natural resources and people.

"Many Hands Make Light Work"



"United We Stand, divided We Fall"

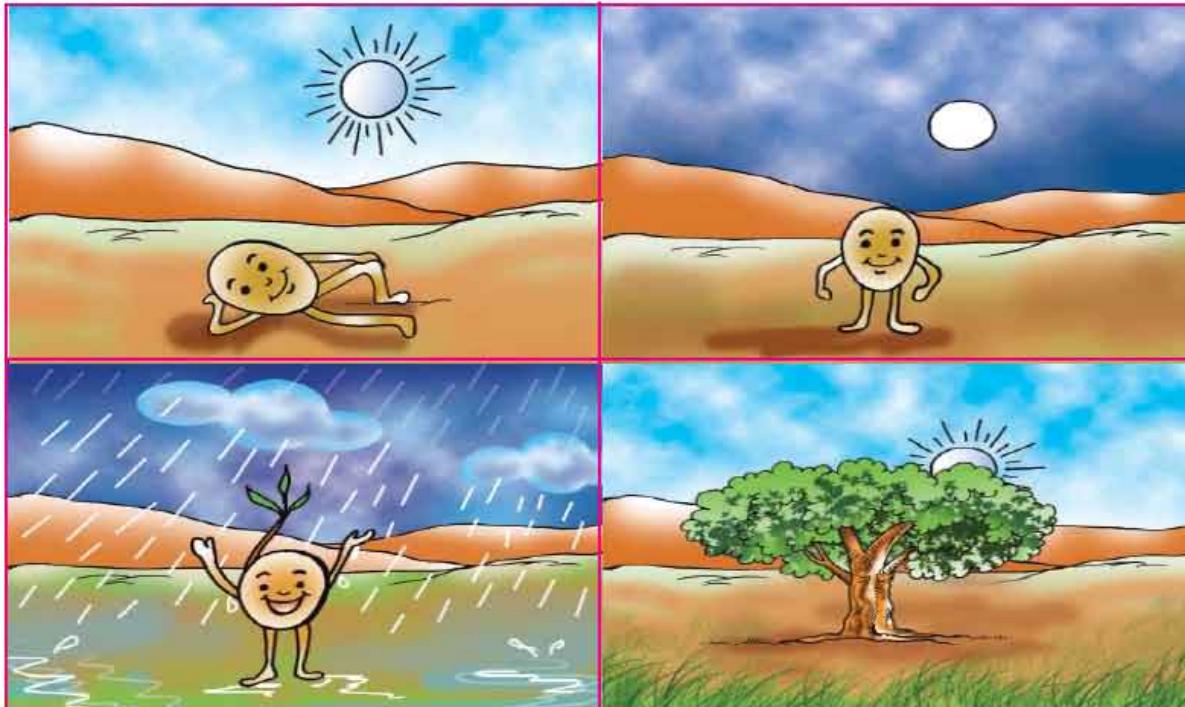


3

Developmental Journey of Seed



Observation :



- What do you see in the first picture?
● _____
- What is seen in the second picture?
● _____
- Which season is shown in the third picture?
● _____
- What do you see in the fourth picture?
● _____





Read :

- Collect seeds of different kinds.
- Collect seeds like bean, green gram, pigeon peas, gram, wheat, maize.
- Put all the kinds of seeds together in a bag and then divide children in three groups. Then, distribute a handful of seeds among each group.
- Perform the following experiments on seeds and then write conclusions.



Activity :

- Break each different kind of seeds with a stone.
- Put aside the seed which has been broken in two equal halves.
- Separate the seeds which have got into powder form while breaking.
- Finally rub all the seeds that have broken in equal halves or got into powder on a piece of paper.



Think and Write :

| Seeds with two equal halves. | Seeds which have been broken into pieces or turned into powder form. | Pieces or powder of Seeds leaving oily spots on paper during rubbing. |
|--|---|---|
| | | |
| | | |
| | | |
| | | |
| Seeds having broken into two equal halves but leaving no oily marks on a paper during rubbing are called pulses. | The seeds which turned into broken pieces or powder are called or known as cereals. | The seeds releasing oil while breaking into pieces or making paste or powder are known as oilseeds. |





Write :

- Make a list of seeds. Write the name of seeds which you have seen or you know, other than the seeds mentioned on Page No.-22.

SEEDS THAT YOU HAVE SEEN

| | |
|---|---|
| • | • |
| • | • |
| • | • |

SEEDS THAT YOU HAVE NOT SEEN

| | |
|---|---|
| • | • |
| • | • |
| • | • |



Write :

- Classify the seeds in the table given below :

| Cereals | Pulses | Oilseeds |
|---------|--------|----------|
| | | |
| | | |
| | | |





Write :



Seeds split in to two equal halves after breaking.

Seeds converted into many small pieces or powder form after breaking.

| | |
|--|--|
| | |
| | |
| | |
| | |

- Seeds which can be split into two equal halves are known as dicot seeds.
- Seed which can not be split into two equal halves are known as monocot seeds.



Write :

(Wheat, Pigeon peas, Mustard, Ribbed gourd, Bajra, Maize, Rice, ..., ...)

| Monocot seed | Dicot seed |
|--------------|------------|
| | |
| | |
| | |
| | |





Activity :

- Take two-three monocot and dicot seeds.
- Sow these seeds in a tea cup, plastic bag or open space around your house or school.
- See that they are exposed to sun light.
- Water the plants timely.
- Observe them daily.



Write :

- Write the names of the seeds which have sprouted first?

● _____

- Which seeds have grown by the fifth day?

● _____

- Which seeds has grown the tallest?

● _____

- Which seeds were the first to sprout bearing two leaves?

● _____





Draw the pictures and filling in color them :

- Draw the picture of germinating seeds.

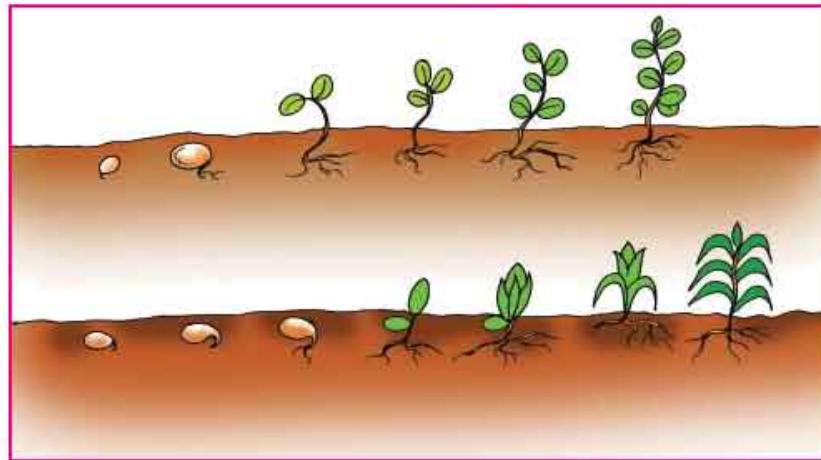
| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|



Observation :



Discuss :



Think and Say :

- What if a mango fruit develops on climber of gourd...
- If there were no seeds in the world...



Activity :

Keep the seeds of wheat and cotton together in a piece of paper. Sow them in a pot or a flower bed. Observe them for ten days.



How much have you learnt ?-1



Write :

- What will you do to maintain the garden of your school?

- _____
- _____
- _____
- _____



Activity :

- Fetch a bucket filled with water.
- Observe water.
- Then all the students wash their hands in the bucket.
- Observe the water again.

Discuss the following questions :

- How was the water in the bucket earlier?

- _____

- What change was seen in the water after washing hands?

- _____

- Why did the water get polluted?

- _____

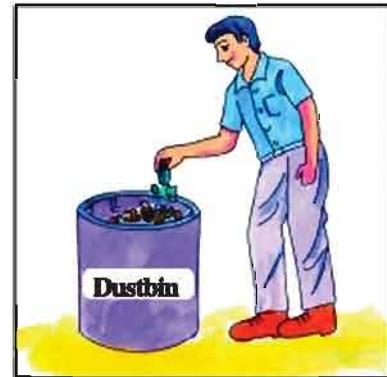


- Why should we wash our hands before taking meal?



Activity :

- Making dustbin using waste material.



'Use Me To Throw Waste'



Think and Say :

- Neel leaves the tap on after drinking water.
- Richa harms flowering plants.
- Rubbish is lying in the classroom.
- There are ditches containing squalor around the house.
- Smit does not go to school.



Perform Activity :

- Perform this activity in the groups of three each.
- Bring five seeds each, of monocot and dicot from home.
- Put seeds in transparent pouches and staple them and make a chart.
- Write the names of seeds on chart.



Think and Say :

- What observations have you made in chapters 1 to 3?
- What classifications have you made in chapters 1 to 3?



4

My District



Read :

You may usually go on tour. You must be visiting sightseeing places, famous pilgrimage places and historical monuments. You may also be visiting such places in your district. Where in your district are such places located?



Read :

Find the book namely “Our district”. Find the following information from it.

- Write about the historical and famous places of your district.

| Name | Where is it located? | Peculiarities |
|------|----------------------|---------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

- Write about famous pilgrimage places in your district :

| Name | The place where it is located. | Peculiarities |
|------|--------------------------------|---------------|
| | | |
| | | |
| | | |
| | | |
| | | |





Write :



(1) Name of historical places where maximum pilgrims visit?

- _____
- _____
- _____

(2) What is this historical place famous for?

- _____
- _____
- _____

(3) Which pilgrimage places of your district have you visited?

- _____
- _____
- _____

(4) In which pilgrimage places of your district is the fair held?

- _____
- _____
- _____

(5) Which of the worth seeing places do attract maximum number of tourists?

- _____
- _____
- _____





Activity :

- Which places have you discussed about?
- Which places have you visited out of the ones you had discussed?
- Which place do you wish to see?
- Collect a calendar, diary or a *Panchang*.



Write :

- Prepare a list of festivals celebrated during a year in the table below :

| | | |
|----------|--|--|
| New Year | | |
| Bhai Bij | | |
| | | |
| | | |
| | | |
| | | |
| | | |



**Write :**

- Classify the list of festivals :

| Datewise | Tithewise | Daywise, Yearwise or otherwise |
|----------|-----------|--------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**Discuss :**

- Which festivals are celebrated as the National festivals?
- Why are the National festivals celebrated?
- Which festivals are celebrated collectively by the people?
- Which festivals are associated with business?
- How does each festival differ from one another?

**Read :**

You all may have been to a fair. You have learnt about the fair in previous standard, but it was all about regional local fairs. Fairs might have been held in your district also. Most of our fairs are held or organized at our pilgrimages and during festivals. Note down the names of places where the festivals are held from the book named "My District".





| Place of fair | The day or the festival on which the fair is held or organized? | Whether the fair is held at any pilgrimage place? Answer in Yes /No. | In which English month is the fair organized? |
|---------------|---|---|---|
| | | | |
| | | | |
| | | | |



Discuss :

- Which type of diversity is seen in the fairs organized in your district?
- What kind of means of entertainment are found in the fair?



Write :

- Tick mark (✓) the appropriate occasion according to the list given :

| List | Fair | Wedding ceremony |
|--------------|------|------------------|
| Wedding card | | |
| Fatal Ride | | |
| Flower pin | | |
| Dholak | | |
| Sweet | | |





Read :

There are different communities in your district. They all earn their livelihood through different occupations. Most people usually run their business staying at one and the same place. Some people have to wander daily for their occupations and livelihood.



Write :

- There lives nomadic tribes in our district.
- Collect information regarding life of different kinds of people from elders of village.

| Name of the community | Occupation | Costume | | Food | Their tools and means |
|-----------------------|------------|---------|-----|------|-----------------------|
| | | Women | Men | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |





Fill in the colours :

- Which aspects of the life of an individual are affected by the profession?
- If affected then fill in colours in the box below :

| Residence | | Food | <th>Dressing</th> <td></td> <th>Tradition</th> <td></td> | Dressing | | Tradition | |
|-----------|--|-------|--|-----------------|--|-----------|--|
| Land | | Plant | | Animals - birds | | Air | |



Think and Say:

- What is the need of residence in our life?
- How does an occupation influence social life?
- What rituals are followed in a marriage ceremony in your society?



Write :

- What difficulties have to be faced by the nomadic tribe people?
- Draw a box on the proper option:

Water

Wind

Food

Costume

Cold

Heat

Rain

Education

Cyclone /
Typhoon

Noise

Darkness

Bathing



Fill in the colours :

- From which grain do people make chapatti/ bread at home?
- Fill in colour in the box from which Chapati/Bread can be made.

| | | | | | | | |
|--------|--|-------|--|--------|--|-------|--|
| Wheat | | Maize | | Bajara | | Rice | |
| Barley | | Ragi | | Jowar | | Bunti | |



Fill in the colours :

- Draw a picture of a fair :



5

Wonderful World of Bholu



Read :

Friends, come on, this is Bholu. Bholu has gone for a walk by a pond today. Let us too go along with him for a walk and get to know something new.

Bholu : Wow! What a beautiful fish is this! O....Mintu fish, Please come and play with me.

Fish : No , I cannot come out there. You come into the water to play with me.

Bholu : I cannot come into water.

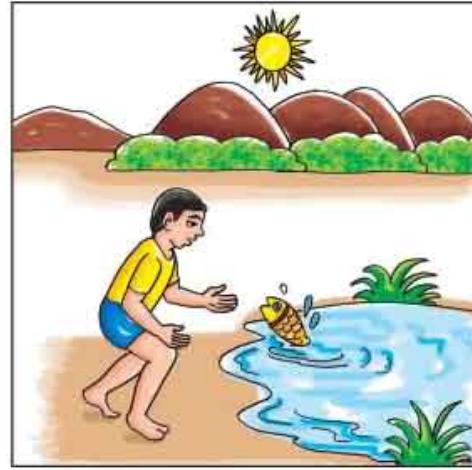
Fish : I cannot come out of water.

Bholu : Why?

Fish : I cannot breathe on land.

Bholu : Likewise I cannot respire in water.

Fish : Bholu, one has its own place of living.



Write :

| | | | |
|-----------------|--|--|--|
| Living in water | | | |
| Fish | | | |
| | | | |





Read :

Bholu : Oh! Chinchi Squirrel, are you fine over there? Would you please come down to play with me?

Squirrel : Yes, certainly.

Bholu : Can you get down from the tree and live on land?

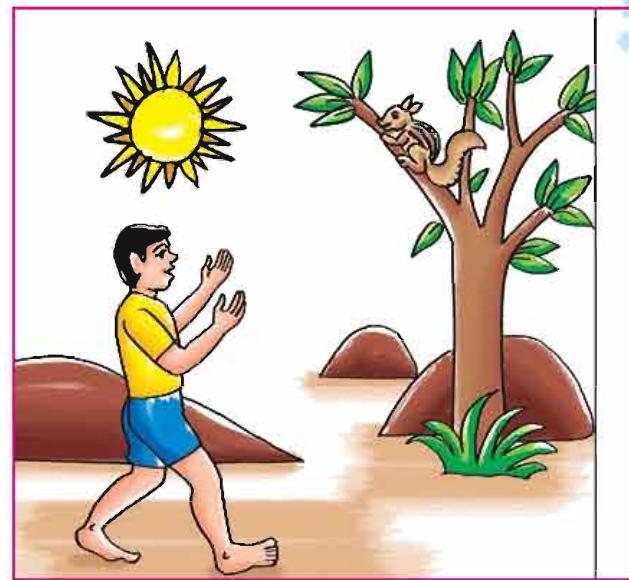
Squirrel : Sure, why not! I can live on land. I make nest on tree.

Bholu : Wow! You are very good. See, Mintu fish tells that it can live in water only.

Squirrel : It's true about fish. She can only live in water as the water is the home for it.

Bholu : So, can you not live in water?

Squirrel : No Bholu, I cannot live in water. We live on land so we cannot breathe in water hence we cannot live in water.



Write :

Which are the other animals like Chinchi squirrel?

| | | | |
|----------|--|--|--|
| Squirrel | | | |
| | | | |
| | | | |





Read :

Bholu walked ahead and met Dagmag tortoise.

Bholu : Aah....Dagmag, where are you going?

Tortoise : It's too hot here, Bholu, I shall go into the pond and take rest there. It would give me relief from the heat.

Bholu : You walk on land, then how can you live in water?

Tortoise : Why? Can I not live in water?

Bholu : Chinchi tells that those who live on land cannot live in water.

Tortoise : Chinchi is correct but there are some exceptional animals like me which can live both, on land and in water.

Bholu : Oh! It's really amazing!



Write :

There are many such animals like tortoise in our surroundings which can live in both places, in water as well as on land.

| | | | |
|----------|--|--|--|
| Tortoise | | | |
| | | | |
| | | | |





Read :

While Bholu was walking ahead brooding, he met Kitu pigeon on the way.

Pigeon : Hey ! Are you fine, Bholu? Where are you going?

Bholu : How may I say. I am confused.

Pigeon : What is the confusion?

Bholu : See, the fish says that she can live in water only. Likewise tells the Squirrel that she can live only on land not in water. But Dagmag tortoise claims that it can live both, in water and on land.

Pigeon : There is nothing to get confused with, Bholu. Some walk on the land, some fly in the sky and some may walk and swim as well.

Bholu : Where do you live? Do you walk or swim?

Pigeon : See dear, I am a flying bird and come on ground to pick grains. I usually live in the nest which I make in the hollows of well, houses or wall.



Write :

Note the birds that fly and which are living around us.

| | | |
|--------|--|--|
| Pigeon | | |
| | | |
| | | |





Read :

Elephant : Bholu, O Bholu where do you go ?

Bholu : Hathidada, its good that you have met. I am very much confused.

Elephant : What happened ?

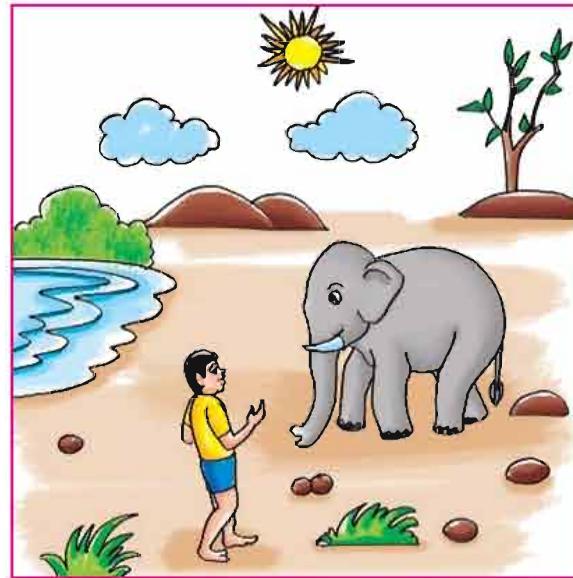
Bholu : Dada, the fish lives in water, the squirrel lives on land and the tortoise lives on land as well as in water. How wonderful is this?

Elephant : What is so strange in this ? Every one has habitat according to their adaptation.

Bholu : Is it so?

Elephant : Yes , the one which lives on land is a terrestrial, lives in water is an aquatic, flies in sky is an avian and lives on land and in water as well is identified as an amphibian.

Bholu : Oh, is it ?



Write :

Names of animals and birds that have been noted by you. Classify the animals-birds as per their habitats.

| Terrestrial | Aquatic | Avian | Amphibian |
|-------------|---------|-------|-----------|
| | | | |
| | | | |





Fill in the colours :

| Terrestrial | Aquatic | Avian | Amphibian |
|-------------|---------|-------|-----------|
| | | | |



| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|



| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|



| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|



| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|





Read :

Bholu : Elephant dada now I have understood very well.

Elephant : Dear son Bholu, in many ways diversities can be seen among animals and plants.

Bholu : Yes Dada, How much variation is seen in the appearance, habitat and in all ?

Elephant : Not only with respect to the appearance and habitat but with respect to the importance also there is diversity among us.



Discuss :

| Name of the things useful in our daily life | From whom are these things obtained | |
|---|-------------------------------------|--------|
| | Plant | Animal |
| Chapati/Bread | | |
| Fruit | | |
| Wooden table | | |
| Wool | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |





Discuss :



- **Importance of Plants**
- **Importance of Animals**

There were two friends. They have decided to grow neem tree in the school. They brought and planted it. One day they saw that a goat was going to eat it. Immediately, both the friends made a fence around it. This is called protection of a plant. For the growth of a plant fertilizer, watering, ploughing is done which is called breeding.

Elephant: Bholu, now have you understood the meaning of conservation and breeding ?

Bholu : Yes Elephant Dada , now I have understood properly.

Elephant: Now say : What will you do for our conservation and breeding ?

Bholu : Tell Dada, What should we do?

Elephant: Discuss with your friends and make a note yourself.

Bholu : Yes, Bye-bye Elephant Dada.



Write :

- What will you do?

- _____
- _____
- _____
- _____
- _____





Think and Say :

- Which plants have you sown in the school?
- What is to be done to sow the sapling?
- Which animals are kept in zoo?



Discuss :

- Sanctuaries, zoo and nursery.



Activity :

- Come on friends, make a puppet with the help of your teacher and perform puppet show.

- Make the impression of a leaf of a plant of your choice.

| | | |
|--|--|--|
| | | |
| | | |
| | | |



"Maintenance of Environment, is the best Education"



6

Helper to All

**Read :**

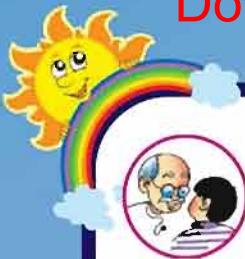
There is a girl. Her name is Anu. She wants to become a police officer. She has a younger brother. He wishes to become a soldier. What would you like to become? Here various pictures are given.

**Fill in the colours : What would you like to become?**

Children's Day was celebrated in Anu's school. All the students had discussed about what they wanted to become.

Fourteenth November is celebrated as Children's day





Story :



Anu discussed in her school. We should decide what we would like to become. Her friends also spoke. Some want to become doctor. Some want to become farmer and some police-officer.

Around us many people belong to various professions. Many professionals are helpful to us. Our many needs are completed with the help of such professionals. Professionals who help us are known as our helpers.



Write :

Professionals helping us :

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |





Read :



Yesterday was Saturday. Leena had gone to the market. Aruna was sick. She was admitted to the hospital. Leena reached the hospital. Doctor Ratan was examining her. Leena likes to serve all very much. Leena likes to become a doctor.

Today is Sunday. There was a meeting in village. Good pictures were shown in the meeting hall. Leena also likes to make such pictures. Leena also likes to become a painter.



Think and Say :

- Which profession is good for Leena? _____
- What do you like her to become? _____
- What else should Leena become? _____
- Like Leena what do you want to become? _____
- What do your friends want to become? _____
- How can you help them? _____





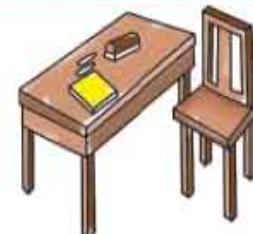
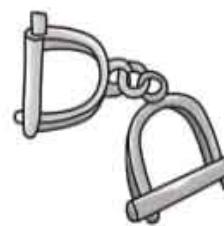
Fill in the colours : Fill the colour in of professional of your liking.



Write :



Doctor
Does the treatment



**Puzzle :****Observation :**

| Sr. No. | Name of Professionals | Tools | How is it useful? |
|---------|-----------------------|-------|-------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |



50



I Love Gujarat



Read :



It is a flamingo. Every year it migrates to Gujarat. Flamingo is a state bird of Gujarat. Flamingo is a bird which comes from foreign countries. Along with Flamingo other birds also come. Birds coming from foreign countries are known as migratory birds.

Ah!... It seems Gujarat has come.
This time I have to see entire Gujarat

Chinkara : Come, brother flamingo ! you are welcome in Gujarat. I will show you the desert of Kutch.

Flamingo : Here more quantity of salt is produced, isn't it ?

Yes, more than half of the total production of salt of our country is produced in small desert of Kutch. In addition to that the Kandla harbour located in the bay of Kutch is the second largest harbour of the country. International trade is promoted here.



Flamingo : Fine, today you have introduced me Kutch to me. I have to see entire Gujarat. I will leave now, Bye- bye.

**Grass growing in the Bunny region of Kutch
is the tallest grass in Asia.**





Think and Say :

Which other birds come to your village from other places?

Why do birds from foreign countries migrate to our state?



Now Flamingo has reached to Pirotan island of Jamnagar district located in bay of Kutch.

Flamingo : Yes, Dolphin we are the birds from cold region but during winter we come to Gujarat. Abdasa of Kutch means large town of Flamingo. This time we thought of visiting Gujarat, hence we came here.

Dolphin : Come with me And see here are the coral reefs. There are starfish, jellyfish, and dolphin fish like me. Even sea cucumber, tortoise and octopus are also here.



Think and Say :

- Which aquatic animals around you are seen throughout the year?
- Which animals are seen during monsoon?
- Where do frogs go after monsoon?
- What will you do to protect the animals living in water?

Dolphin is the national aquatic animal of our country.





Lion : Welcome Flamingo !

Flamingo : Do you live here?

Lion : Yes, we are found only in the Gir forest of Gujarat in entire Asia. Gir forest is the only sanctuary for Asiatic Lions in entire Asia.

Flamingo : What is a sanctuary?

Lion : A protected region where animals and birds can move freely without any fear, and can be protected and bred is known as sanctuary.

There are sanctuaries in Gujarat for animals like bear, wild ass, blackbug and Chinkara.



Think and Say :

- Is there any sanctuary in your district?
- Which animal or bird is this sanctuary known for?
- Have you ever visited any sanctuary?
- Which specific animal or bird is seen in your district?



Read :

Flamingo goes to Girnar . There are other hills also in Gujarat. Other than Pavagadh in Vindhya hill ranges in Panchmahal, Aarasur in the Arvalli ranges of Banaskantha, Saputara in the Satpuda ranges of Dang district and Shatrunjay in Bhavnagar. There are many small-large hills in Gujarat.



**Write :**

| Name of Hill | Name of District |
|--------------|------------------|
| | |
| | |
| | |
| | |
| | |

**Read :**

- There is a big centre of fishery in Veraval along the long coastal region of Gujarat.
- A flourishing is a huge business of wrecked ships thriving in Alang port in Bhavnagar district.
- Bamboo, Sadad, Haddharvo, Sisam and Timroo trees grow in the forest of Dang.
- Building wood of teak is produced in huge quantity.
- Entire Dang district mostly is the forest region.
- Beautiful botanical garden of Vagai and Gira fall are also there.



Saputara of Dang district is the only hill station of Gujarat.





Read :

Gujarat is the region of many rivers. Narmada is the biggest river. Sabarmati, Tapi and Mahisagar are also big rivers in Gujarat.

Sardar Sarovar Dam is built on the Narmada river. By this irrigation scheme water is supplied to many regions of Gujarat, water is supplied upto Kutch. This dam is also used to generate electricity.



Think and Say :

Dam and bridge, both are constructed on river. What is the difference between these two?

- Rivers of district

● _____

- Biggest river of district

● _____

- Dams located in district

● _____

The Flamingo flew from Narmada river and reached Gandhinagar -capital of Gujarat visiting Amul dairy of Anand, and Kadana dam of Mahisagar.

Gandhinagar is the city of Gujarat possessing highest number of trees. The Flamingo also visited Indroda Park and Mahatma Mandir. From there it went Ahmedabad, situated on the bank of Sabarmati river.

This is Gandhi Ashram. Jay ho Gandhibapu ! Wow ! Kankaria lake also looks very beautiful.





Read :

Nal Sarovar is a bird sanctuary situated between Ahmedabad and Surendranagar. On the onset of winter different types of foreign birds are seen here.

I enjoyed in Gujarat. Enjoyed a lot. I love Gujarat.



Activity :

- Fill yellow colour in the districts visited by flamingo.



"Gujarat is ours,
Neither Mine, nor Yours,
Neither His, nor Hers,
Gujarat belongs to Us,
Gujarat is Ours "



How much have you learnt?-2



Write :

- _____
- _____
- _____
- _____
- _____



Write :

What happens if.....?

- Water is exhausted,.....
● _____
- All trees get dried,.....
● _____
- There is no garbage at all.....
● _____
- Pesticides are sprayed in puddles,.....
● _____
- Your friend does not help, you.....
● _____



Activity :

Teacher will bring different seeds. Seeds will be placed before students and students will classify the same in monocot and dicot.





Write :

Historical places, Holy pilgrimage places and tourist places

_____, _____, _____, _____
_____, _____, _____, _____

What kind of businesses are developed in the places which are visited by maximum number of people.

_____, _____, _____, _____
_____, _____, _____, _____



Write :

Terrestrial animals

_____, _____, _____

Aquatic animals

_____, _____, _____

Arboreal animals

_____, _____, _____

Amphibians

_____, _____, _____



Think and Say :

- From whom do you take help?
- What happens if sweeper is not there?
- What kind of help do you offer in house work?
- Whom do you help at places other than home?
- How does police help us?





Write :

- How can garbage, be cleaned in your surroundings?

- _____
- _____



Write :

- Carpenter : _____
- Blacksmith : _____
- Doctor : _____
- Postman : _____



Write :

- Write about the places seen by you.

- _____
- _____
- _____



Write :

- Write about the domestic animals you like.

- _____
- _____
- _____





Write :

- Write about the birds you like.

- _____
- _____
- _____
- _____



Write :

- What would you like to become?

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____





Environment Around Us

Standard 5

(Semester II)



Science of Kitchen



Read :

We take cereals, pulses, fruits, milk and vegetables as food. We get energy from food. Different regions have different varieties of food. We prepare food either by boiling, roasting, frying or deep frying. Many food items can be eaten in raw form. There are varieties in our food.

Good and nutritious food is necessary for the growth of our body. For strong and healthy body, it is necessary to have knowledge of kitchen. It includes various spices used in the kitchen.



Observation :





- What is seen in the picture?
- Which spices are seen in the kitchen?
- What is being cooked in the pressure cooker?



Read :

Given below are the details of the food taken by Bhavana and Dipa :

| Sr. No. | Day | What did you eat? | | Deep fried food | Boiled food | Roasted food | Fried food |
|------------|-----------|-------------------|----------------|-----------------------|----------------|-----------------|---------------|
| | | Morning | Evening | | | | |
| 1 | Monday | Rotalo - Saak | Chapati - Saak | - | ✓ | ✓ | - |
| 2 | Tuesday | Daldhokali | Khichadi-Kadhi | - | ✓ | - | - |
| 3 | Wednesday | Puri-Saak | Dhokla | - | ✓ | - | - |



Write :

| Sr. No. | Day | What did you eat? | | Deep fried food | Boiled food | Roasted food | Fried food |
|------------|-----|-------------------|---------|-----------------------|----------------|-----------------|---------------|
| | | Morning | Evening | | | | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |



Read :

There is a boy. His name is Mahesh. Everyday, he asks for spicy food. After eating such spicy food, he started having problems in his stomach. One day Mahesh was in school. All students were playing. His stomach started paining. His pain increased gradually. He was taken to the hospital.





Think and Say :

- Why was Mahesh's stomach paining?
- What would the doctor have said to Mahesh?
- What will Mahesh do now?



Read :

There is girl named Varsha. She studies in standard five. She loves eating outside food. Everyday she eats uncovered and stale food from vendors. Varsha does this daily. Varsha does not like eating at home. Everyday Varsha goes to hotels, restaurants and vendors. She eats whatever she likes.



Think and Say :

- What different food items must she must be eating from the vendor?
- Why does Varsha eat stale and outside food?
- What would have happen to Varsha after eating outside food?



Read :

What would have happen to Varsha? We have learnt that why this has happened. Stale, fried and spicy food is harmful for our body. We may have to face minor-major diseases. Health is directly related to healthy food.

You eat varieties of food. There are various methods to prepare this food. Let us collect information regarding it.

Given here are names of various food items. Say how they are cooked. You can also take help of your mother.





Write :

| Sr. No. | Details of food | How is it cooked? | | | |
|---------|-----------------|-------------------|---------|----------|--------|
| | | Deep Frying | Boiling | Roasting | Frying |
| 1. | Khichdi | | ✓ | | |
| 2. | Rotalo / Rotali | | | | |
| 3. | Puri | | | | |
| | | | | | |
| | | | | | |

- Food and health are also related to the method of cooking.
- Raw, food roasted or boiled at low temperature is considered to be the best.
- Avoid using utensils made of plastic and aluminium for cooking or for eating food.
- Sunlight gives us constant and free of charge energy. Cookers are available for cooking food using this energy. Such cookers are called Solar Cookers. The quality, nutrients and taste of food are naturally maintained in the food cooked in solar cooker.
- Who uses such solar-cookers in your area?
- Get information regarding solar cooker and other such appliances.



**Write :**

Write a note on advantages of using solar cooker.

- _____
- _____
- _____
- _____

**Read :**

The tastes of different foods is not same. We enjoy food due to difference in the taste and aroma in the food. Which different tastes have you experienced?

- _____
- _____
- _____
- _____

- The food has six main tastes: Sweet, salty, sour, pungent, astringent and bitter. For good health all tastes should be taken in proper quantity .



From which food do we acquire the following tastes?

Write :

| Taste | From what do we get? | How is it present in the food? | | | | |
|------------|--|--------------------------------|--------|---------|-------|-----------|
| | | Raw | Boiled | Roasted | Fried | Any other |
| Sweet | Sugarcane, jaggery, sugar cubes, sugar | ✓ | - | - | - | ✓ |
| Salty | | | | | | |
| Sour | | | | | | |
| Pungent | | | | | | |
| Astringent | | | | | | |
| Bitter | | | | | | |





Read :

Many spices are used to prepare food in the kitchen. Salt, chilly, turmeric, cumin, fenugreek, mustard, jaggery, tamarind etc. are among these spices. Such components are very important for our health. There is some scientific approach related to each of these components of the kitchen. This information is very important to us.

Let's identify the spices based on its taste.

**"Six tastes don't include my name;
yet, no taste without me is my tall claim."**

Jaggery, sugar, sugar cubes, sugarcane and naturally ripen fruits are sweet things. We get energy from sweetness.

**"I am Mr. Salt, briny taste is my fame,
King of every kitchen, famous by this name."**

Salty taste is mainly provided by salt. Do you know it? The food is tasteless without it. During fever the cloth soaked in salty water is kept on the forehead to reduce fever.

**"A thought of me, sizzles your tongue and look how mouth waters,
Sweet and sour is my tasty yummy juice one loves and slurps."**

Sour juice is obtained from lemon, tomato, tamarind, kokum, amla, raw mango etc. Sour taste helps in digestion of food. You must have drunk buttermilk after having meals. Buttermilk is beneficial for digestion of food.

**"Green and Red are my colours, I am known as Chilly,
Keeping your tongue stinging-spicy-tangy is my ability."**

Spicy taste is obtained from chilly, mustard, black pepper, ginger, ajwain, garlic, chinnamou, clove, white pepper etc. Spicy spice kills harmful organisms. Secretes digestive juices. But too much of spicy food is harmful.

**"No one loves me as I taste plume and crest,
Help rid of cough and bad tasting mucus, I am the best."**

Turmeric, pulses, mango seed, betel nut etc have astringent taste. Astringent taste removes sticky substances from our body. Mango seed and betel nut are used as mouth freshener and remove the stickiness from our mouth.





**"People just spit me out, but when sick gulp and gobble,
Know my virtues for healthy life, bitter taste is noble."**

Bitter taste is obtained from fenugreek, bitter gourd etc. The neem is also bitter in taste. The bitter juice activates our hunger. It helps to keep our body disease free.



Write :

We have acquired introduction about some of the kitchen spices. Introduce any one component or spice of the kitchen to your friend. Identify the things brought by other friends.

On that basis fill in the following table :

| Components of kitchen | Color | Taste | Use | Does it smell? Yes / No |
|--------------------------|--------|------------|--|----------------------------|
| Turmeric | Yellow | Astringent | In kitchen, to apply on injury on the body | Yes |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |





It is True :

The ingredients used in the kitchen provide taste, flavor and aroma to our food. They are known as appetite and health stimulant.



Read :

Given is the list of ingredients used in the kitchen. the product you know. Get the information of the unknown ones and fill in the empty box.

| | | | | | |
|-----------|--------------|----------|------------|-------------------|-------|
| Jaggery | Sugar cubes | Sugar | Salt | | |
| | Coriander | Chilly | | Tamarind | Kokum |
| Ginger | | Turmeric | | Black peeper | Ajma |
| Chinnamou | Clove | Cardamom | Asafoetida | Dry ginger powder | Cumin |
| Mentha | Curry leaves | Garlic | | Mustard | Lemon |



Write :

- Which tastes are liked by you?

● _____ ● _____ ● _____

- Which dishes of your tastes do you eat?

● _____ ● _____ ● _____



It is True :

Excess of taste and aroma in the food is harmful for health. Due to this there is rapid increase in the patients of heart attack and diabetes. According to the season of our country proper use of taste and spice should be made.





Write :

Ask your elders and write about components of kitchen or spices used as primary cure for diseases.

| Disease | Which component of kitchen is used? |
|----------------|---|
| Sneezing, cold | Add turmeric and dry powder of ginger in hot milk and drink. Gargle with salty water. |
| | |
| | |
| | |
| | |



Think and Say :

Which spices from kitchen are used to cure diseases?

- _____
- _____
- _____

Based on this we can know about acid, base and salts. We will learn about them in detail in higher standards.



It is True :

Definitely there is effect of food on our health. But, food is also affected by the thoughts in the mind of one who is preparing or serving it. So prepare and eat food with calm mind and good thoughts.



Land



Read :

Maganbhai after taking his dinner sat for watching T.V. The Baby Zeel came running to him. She said, "Grandfather, tell me a story."

"Which story do you want to listen?" grandfather asked.

"The one which I enjoy the most." Zeel said.

O.K. said the grandfather and began the story.



Story :

There was a small village. A potter named Maganbhai stayed here. Everyday he brings soil from the lake and prepares pots, bowls etc. One day he prepared a small pot. He painted it colorful. The pot looked very beautiful now. He kept the pot in his shop for sale. The next day, Rameshbhai was passing near by his shop. He saw the pot and immediately purchased it. His daughter became extremely happy after seeing this small pot in Rameshbhai's hand. She said, "Papa I will fill water in this small pot."

O.K., said Rameshbhai.

Now, everyday Bindia fills water using this small pot. One day the pot slipped from her hands. It fell down and broken in to pieces. Heartbroken Bindia collected the pieces and kept them behind the house.

The grandfather asked, "Now tell me dear, what would have happen to those pieces"?

Some girls like me must have used them for playing games, replied Zeel.

You are correct, these pieces are mixed again with the soil.

Hearing this, confused Zeel asked, what other things get mixed in the soil.





Activity-1 :

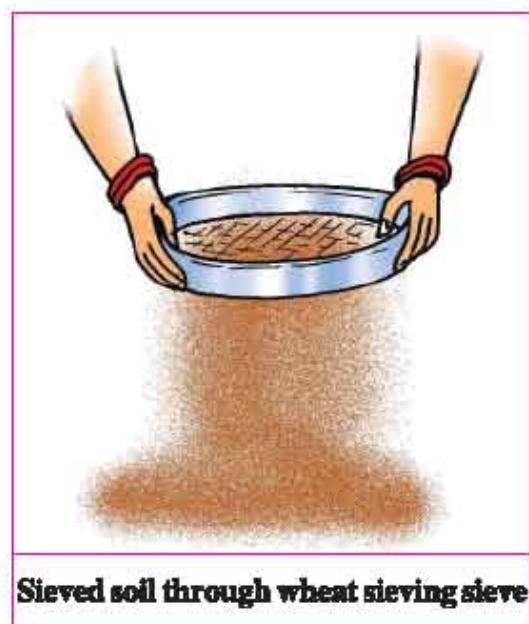
- **What do we need ?**

- Spade, sieve for sieving wheat, sieve for sieving wheat flour, thin cotton cloth, lumps of soil.

- **What to do?**

- Take one lump of soil. Turn it into small particle size. Sieve it through the wheat sieving sieve. What is left in the sieve? Observe it and note.

- Keep the component left in the sieve separately.



Sieved soil through wheat sieving sieve

| What is left in the sieve? | What is sieved out of sieve? |
|----------------------------|------------------------------|
| | |



Sieved part through wheat sieving sieve

Activity-2 :

- Collect the sieved part and sieve it with the sieve used for sieving flour.
- What is left in the sieve? Observe.
- Keep the component left in the sieve separately.



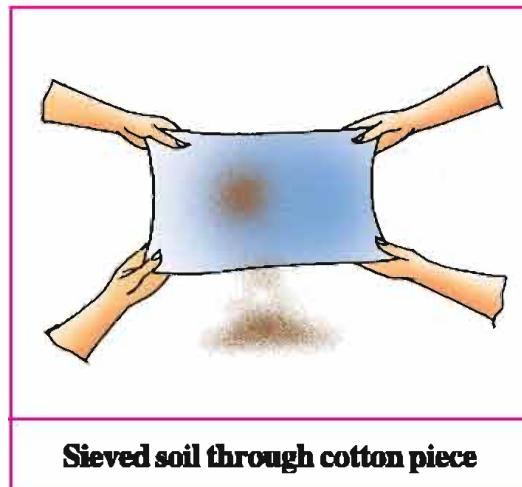


| What is left in the sieve? | What is sieved out of sieve? |
|----------------------------|------------------------------|
| | |



Activity-3 :

- Collect the second time filtered soil and sieve it through the cotton piece.
- What is left on in the cloth? Also observe the filtered component and note.
- Separate the component left in the cloth from those filtered from the cloth.



Sieved soil through cotton piece

| What is left in the cloth? | What is filtered out of the cloth? |
|----------------------------|------------------------------------|
| | |



Observation :

Observe the filtered and left over components for first, second and third time.



Think and Say :

- Which components are obtained after sieving the soil with different sieve size?
- Can there be any other components present in the soil?
- How do the amounts of different components affect the type of soil?





Activity-4 :

- **What do we need?**

- Transparent plastic bag, transparent glass, spade, lump of soil, thread

- **What will you do?**

- Bring three-four lumps of soil from the nearby farm, from one feet depth by digging with spade.
- Keep one-two lumps of soil in the transparent plastic bag and tie its mouth with thread. Now keep this plastic bag in sunlight for some time.
- After some time bring it to the class and observe.



Keep transparent plastic bag in sunlight within a lump of soil in it.

| What to observe? | What did you observe? |
|-----------------------------------|-----------------------|
| The inner wall of the plastic bag | |



Activity-5 :

- Take a transparent glass. Fill it with water.
- Now add a lump of soil to the glass. Observe what happens.

| Where to observe? | What did you observe? |
|--|-----------------------|
| In the transparent vessel, on and near the soil lump | |



In transparent glass lump of soil...



Remember and Write :

- Which different things are obtained after digging the soil?



- Which organisms are found in the soil?

- Which different components of soil can be seen separately?

- Leaves, feathers, parts of living organisms are seen. These are living components.
- Sand, stones, clay etc are non-living components.



Write :

- Components of soil

| Biotic components | Abiotic components |
|-------------------|--------------------|
| | |
| | |
| | |
| | |



It is True :

- Marble, coal, graphite, diamond, gypsum, calcium, petroleum (diesel, petrol, kerosene, gas) etc. are obtained from soil. Is any such thing obtained nearby you?
- Metals like gold, silver, mercury, copper, iron are also obtained from soil. From where are they obtained?





Observation :

- Circle the correct information:

| Varieties of soil | Samples of different types of soil in your area | | | | |
|--------------------------------------|---|-------------|-------------|---------------|-------------|
| | River/canal | Lake | Field | Sloping field | Garden |
| Colour of soil | Red | Red | Red | Red | Red |
| | Brown | Brown | Brown | Brown | Brown |
| | Black | Black | Black | Black | Black |
| Amount of pebbles | High | High | High | High | High |
| | Medium | Medium | Medium | Medium | Medium |
| | Low | Low | Low | Low | Low |
| Amount of sand | High | High | High | High | High |
| | Medium | Medium | Medium | Medium | Medium |
| | Low | Low | Low | Low | Low |
| Amount of clay | High | High | High | High | High |
| | Medium | Medium | Medium | Medium | Medium |
| | Low | Low | Low | Low | Low |
| Amount of loam | High | High | High | High | High |
| | Medium | Medium | Medium | Medium | Medium |
| | Low | Low | Low | Low | Low |
| Amount of organic matter | High | High | High | High | High |
| | Medium | Medium | Medium | Medium | Medium |
| | Low | Low | Low | Low | Low |
| Type of soil based on its components | Sandy soil | Sandy soil | Sandy soil | Sandy soil | Sandy soil |
| | Clayey soil | Clayey soil | Clayey soil | Clayey soil | Clayey soil |
| | Loamy soil | Loamy soil | Loamy soil | Loamy soil | Loamy soil |



Read :

Based on the colour of the soil

Based on the components of the soil

(1) Types of soil on the basis of colour : Generally the soil can be classified on the basis of its colour. Soil which is red in colour is known as red soil, if black in colour then black soil and if brown in colour, it is known as brown soil.

(2) Types of soil on the basis of its components :

- **Sandy soil :** The soil having large amount of sand particles is known as sandy soil. The particles of such type of soil get separated easily. The soil dries soon after the rain.
- **Clayey soil :** The soil having large amount of clay particles is known as clayey soil. During rain this soil becomes sticky and slippery. In dry season the soil becomes very hard and cracks are developed.
- **Alluvial soil :** The soil having large amount of organic matter is known as alluvial soil. Alluvial soil is fertile.



Read and Write :

- What are the different types of soil?

● _____

● _____

- On which type of soil water is not seen after it rains?

● _____

- Which type of soil becomes sticky and slippery after it rains?

● _____

- Which type of soil is more fertile?

● _____

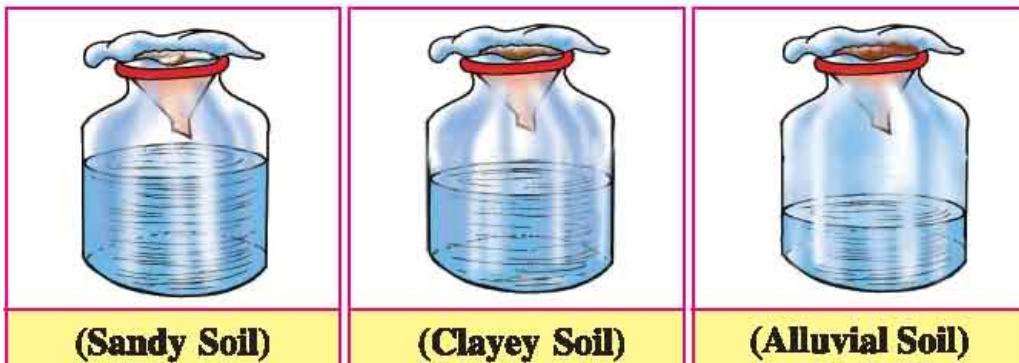


Activity :



- **What do we need?**

- Three transparent bottles, three plastic or glass funnels
- Three pieces of cotton cloth
- Water, sandy, clayey and loamy soil



- **What will you do?**

- Take samples of sandy, clayey and alluvial soil.
- Take three transparent bottles of equal size.
- Label one bottle with sand, other with clay and third with alluvium.
- Keep three funnels on the mouth of the bottle. Keep wet cotton clothes in them.
- According to the labels on the bottles put equal quantity of soil in the funnels.
- Add equal quantity of water to each funnel.



Observation:

- Tick (✓) against the right options :

| Types of soil Observation | Sandy soil | | | Clayey soil | | | Alluvial soil | | |
|------------------------------------|------------|--------|------|-------------|--------|------|---------------|--------|------|
| Rate of flow of water | Fast | Medium | Slow | Fast | Medium | Slow | Fast | Medium | Slow |
| Level of water in bottle | More | Medium | Less | More | Medium | Less | More | Medium | Less |
| Amount of water left in the funnel | More | Medium | Less | More | Medium | Less | More | Medium | Less |





Read :

The capacity of the soil to hold water for a longer period is known as water holding capacity of the soil. The capacity of the soil to drain out water is known as water draining capacity of the soil. Different soils have different water holding and water draining capacity.



Think and Say :

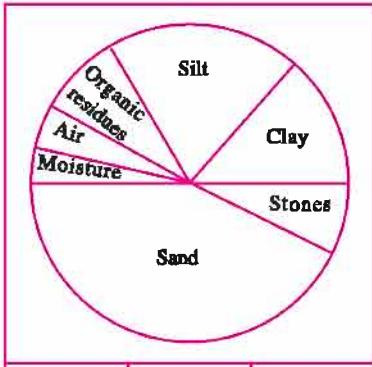
- Why does water drain fast in sandy soil?
- Why does water drain slow in clayey soil?
- Why is more water stored in alluvial soil?



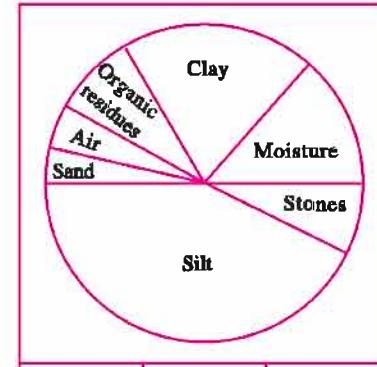
Fill in the colours :

- In the given circle, fill in different colours of your choice.
- Based on the amount of components shown here, mention type of soil.
- Tick (✓) the correct option from those given below the diagram.

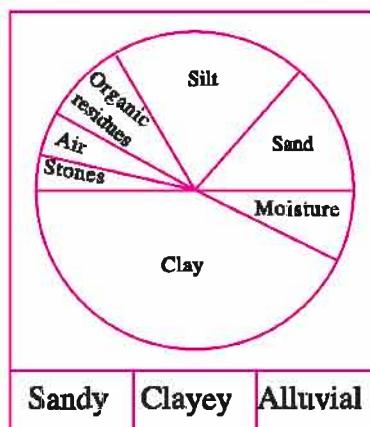
(1)



(2)



(3)



10



Day and Night and Seasons



Read :

Friends,

Everyday we see the sun rising and setting. But time of rising and setting of sun is not same everyday. We have prepared various notes in "My observation"-1 in June "My observation"-2 in September and "My observation"-3 in December.

On the basis of this details we have also prepared note on clothing, vegetables and food recipes. Based on this observation fill up the following details :



Write : Table : Write on the basis of 1 to 3



Observation :

- **Details 1 : Note the time of rising and setting of Sun**

| | | |
|---|----------------|--------|
| (1) My observation | Rising Time | Date : |
| | Setting Time | Date : |
| (2) My observation | Rising Time | Date : |
| | Setting Time | Date : |
| (3) My observation | Time of rising | Date : |
| | Setting Time | Date : |
| (4) When did the sun rise the earliest: | | Date : |





- Details 2 : Note the time of the sun set and rise :
- Note the time when the sunsets the latest :

| | | |
|---------------------------------|--------------|--------|
| (1) My observation | Rising time | Date : |
| | Setting time | Date : |
| (2) My observation | Rising time | Date : |
| | Setting time | Date : |
| (3) My observation | Rising time | Date : |
| | Setting time | Date : |
| (4) When did sun set the latest | | Date : |



Fill in the colours :

- Details 1 :

| My observation | Time of sunrise in the morning | | | | | | Day | Time of sunset in the evening | | | |
|----------------|--------------------------------|---|---|---|---|---|-----|-------------------------------|---|---|---|
| | 1 | 4 | 5 | 6 | 7 | 8 | | 5 | 6 | 7 | 8 |
| 2 | 4 | 5 | 6 | 7 | 8 | | | 5 | 6 | 7 | 8 |
| 3 | 4 | 5 | 6 | 7 | 8 | | | 5 | 6 | 7 | 8 |

- Details 2 :

| My observation | Time of sunset in the evening | | | | | | Night | Time of sunrise in the next day | | | |
|----------------|-------------------------------|---|---|---|---|---|-------|---------------------------------|---|---|---|
| | 1 | 4 | 5 | 6 | 7 | 8 | | 5 | 6 | 7 | 8 |
| 2 | 4 | 5 | 6 | 7 | 8 | | | 5 | 6 | 7 | 8 |
| 3 | 4 | 5 | 6 | 7 | 8 | | | 5 | 6 | 7 | 8 |



Think and Say :

- What differences can be seen between details 1 and 2



**Read :**

Friends,

**Write :**

Like sun we cannot see moon every night. Moon is sometimes small or big or invisible. Previously on the basis of "My observation" : 1, 2 and 3 , the time of Moon rise at night was noted. Keeping this in mind, prepare a note on below given details.

| Sr. | Time of moon rise and its difference | | | | | | |
|--------|--------------------------------------|------------|---------|------------|---------|------------|--|
| | Table-1 | Difference | Table-2 | Difference | Table-3 | Difference | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| Serial | | | | | | | |

**Count and find solution :****Write :**

- When the days are long, what type of clothes do we wear? Why?
• _____
- When the days are long, what type of clothes we don't wear?
• _____
- When the days are short, what kind of clothes do we wear?
• _____





- When the days are short, which clothes we should not wear?

● _____

- What type of clothes do you wear in September? Why?

● _____

- Which type of clothes can be worn in all seasons?

● _____



See, Write and Understand :

| Sr. No. | Detail | Observation-1 | Observation-2 | Observation-3 |
|---------|---|---------------|---------------|---------------|
| 1. | Names of vegetables noted in the tables | | | |
| 2. | Name of vegetables common in all three tables | | | |
| 3. | Name of vegetable different from each other in tables | | | |



Read :

In today's modern times, due to the usage of cold storage, scientific agriculture and improved seeds, most of the vegetables are available throughout the year - due to this it is not possible to differentiate vegetables on the basis of Winter, Summer and Monsoon.





Discussion :



Write :



Winter...



Summer...





Monsoon...

Today, due to the different types of effects of pollution, environment is harmed. Because of this, apart from Monsoon, rain falls in other seasons, too.



It is True :

- On 21st June, the day is longest and the night is shortest.
- 22nd December has the year's shortest day and longest night.
- 20th March and 23rd September have equal days and nights.



Discuss :

- Incidence of disease increase in a particular time phase.
- Make a list of games played in different seasons.
- Find the reasons for day and night being long or short.



How much have you learnt ?-3



As per the example, give three more names :

- Can be eaten raw : ‘Cucumber’

• _____ • _____ • _____

- Can be roasted and eaten : ‘Chapati’

• _____ • _____ • _____

- Can be boiled and eaten : ‘Khichdi’

• _____ • _____ • _____

- Can be sauted and eaten : ‘Parathas’

• _____ • _____ • _____

- Can be fried and eaten : ‘Puri’

• _____ • _____ • _____



From the kitchen, what is useful ?

- In case of cough, ...

• Put turmeric powder in milk, warm it and drink

- In case of diarrhoea

• _____

- In case of gas in the stomach...

• _____

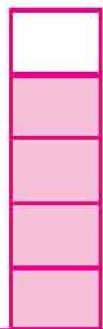




Fill in the colours :

Coloured part represents moisture holding capacity.

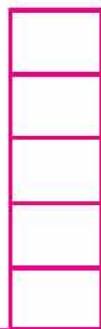
Example :



Alluvial soil



Clayey soil



Sandy soil



Think and Say :

- Which components are found in soil?
- How many types of soil are there? Name them.
- Which type of soil has maximum decantation power?



Fill in the colours :

Draw the materials of food to be eaten during particular season :

| Winter | Summer | Monsoon |
|--------|--------|---------|
| | | |
| | | |





Nation's Pride



Read :

Vatsa and Ayushi were watching T.V. Just then Ketul and Honey came back from the temple with grandma. Grandma asked Vatsa and Ayushi, "What are you watching in the T.V.? Do you know about him?"

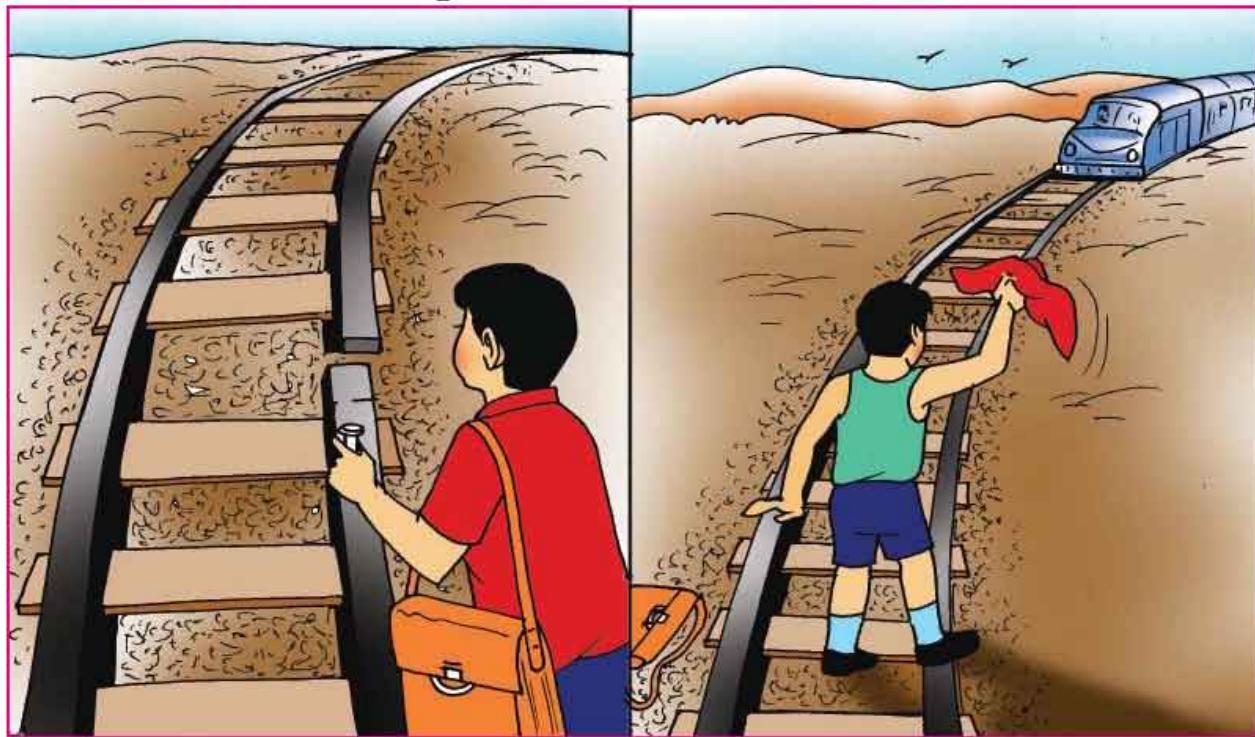
Vatsa : "Yes, this is about fearless Aazad."

Grandma : 'Fearless Aazad's name was Chandrashekhar. Since childhood, he was brave. He sacrificed for the freedom of the country. Ketul and Honey, you also watch this film. Afterwards, I shall tell you the story of one such fearless child.'



Story :

Grandma: "See this picture and listen."





Observation :

- What do you see in the first picture?
- What is the child doing in the second picture?
- Why has the train stood still in the second picture?
- Why is the guard congratulating this child?
- What would you do, if you were in place of that child?



Discussion :

- Place of the event : _____
- Note on the event :



**Discussion :****Write :**

- Place of event : _____
- Memorable characters of the event : _____
- Note on the event :

- Note about the event :

**Read :**

“Learn about the historical events that occurred around you. In those events, there must be talk about martyrs, too.

A martyr is one who dies for the pride of his village, city or country.”

**Story :**

Grandma: I shall tell you about the martyr ‘Punamchand Pandya’.



Martyr
Late Punamchand
Jayshankar Pandya
Born : 1905 - Died : 1948

It was the time when the Britishers were ruling in Meghraj village of Sabarkantha district, where every year, the festival of Holi was celebrated with great fervour. Here the Britishers had a bad law. The British officials would make a statue named ‘laji’, which would be of a man not wearing any clothes. The statue would be put up in the village centre. It was made compulsory for the villagers to move around this statue on the day of Holi.





Once the youth of the village got together. They were brought together by a young man called Punamchand Pandya.

The British officials got the statue made and went away. At night, Punamchand and his friends broke the statue. Next day, when everybody came there to follow the rule by the Britishers, there was no statue. When the officials inquired, Punamchand Pandya accepted his offence. The court ran the case. Punamchand was sentenced. The law of Britishers slavery was removed. Punamchand took part in the fight of non-cooperation against the foreign government. In order to free the country, Punamchand went to the jail several times.

To remember this patriot, his statue is there in Shri P.C.N. High School even today. To keep his name immortal, a road in this city is also named ‘freedom fighter Punamchand Pandya’ road.



Discussion :



Write :

● Martyr's name : _____

● If there is a statue on his name, then its details:

● Various events of the life of the Martyr....

● Event-1 :

● Event-2 :



- How did he become a Martyr?



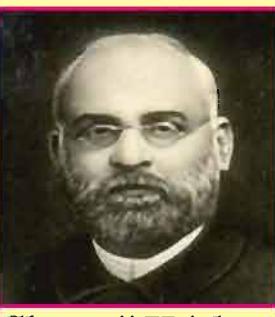
Think and Say :

- What would you do if this happens?
 - If your friend suddenly suffers from nausea
 - If an epidemic strikes your village
 - If there is a theft at your neighbours' home

Our Patriots :



Chandrashekhar
Azad



Shyamji Krishna
Verma



Ramprashad
Bismil



Bhagat Singh

- Various honours for bravery works of children upto 16 years of age :
 - National Bravery Award, since 1957
 - Sanjay Chopra Award, since 1978
 - Geeta Chopra Award, since 1978
 - Bharat Award, since 1987
 - Bapu Gayadhani Award, since 1988



12

Let us make a Map

Make a list of things in the classroom. Write the numbers of their quantity and give a symbol to each item.



Obsevation :



Write :

| Item | Number | Symbol |
|-------|--------|--------|
| Table | | |
| Chair | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |





Fill in the colours :

- Let the square below represent the classroom.
- Show the position of the things of classroom in the square.
- If there are two tables, then show the symbol of table at a specific place.
- Wherever there are benches, show them using the symbol.
- Give symbol to other things also, and show them as per their position.



Observation :

- See your friend's map.





Fill in the colours : Make a map of your school

- Whatever is in front of us, should be shown at the upper side and whatever is behind us, should be shown on the lower side of the map.
- Whatever is on the sides, is to be shown on the left and right sides.

My School

A large, empty rectangular box with a pink double-line border, intended for children to draw their school map.

Let us make a Map



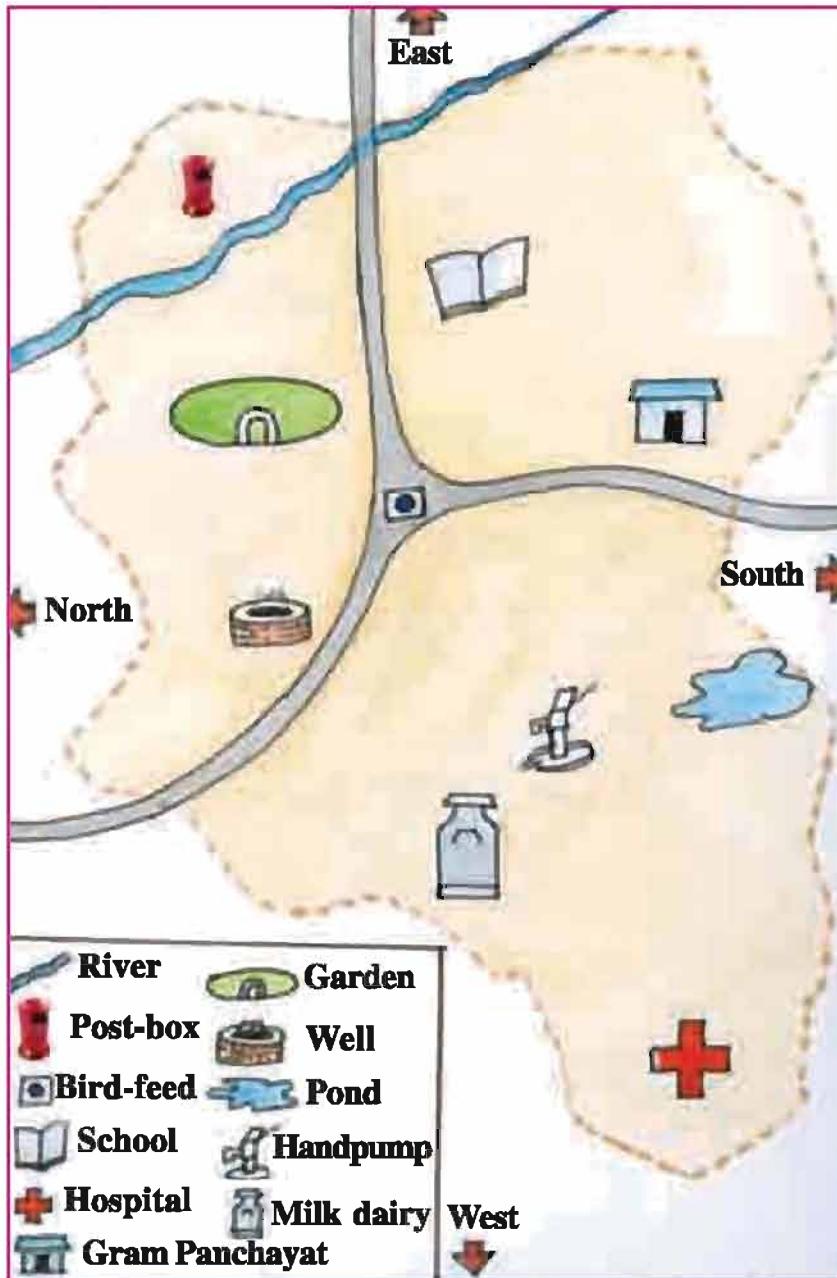
Observation :



Discussion :



Map of Ranpur village



Observation :

- Read the district map.



13

Circulation of Blood



Think and Say :

- Have you heard tik-tik of watch?
- Have you seen doctor keeping Stethoscope on chest and hearing?
- What can doctor hear?
- Have you heard heart beats?



Activity :

- Observe picture. Keep your ear on the chest of your friend as shown in picture.
- Hear the sound peacefully.
- Count beats as sound is heard.



**Discuss :****Write :**

- Discuss your experience :

**Project :**

- Write names of two friends.
- Count beats of heart in one minute.
- Write the count of heart beats.
- Ask friend to run. Now note down the beats.

| Sr.No. | Details | Name of friends | | |
|--------|--|-----------------|--|--|
| | | | | |
| 1. | Number of heart beats in normal condition | | | |
| 2. | Number of heart beats after the run | | | |

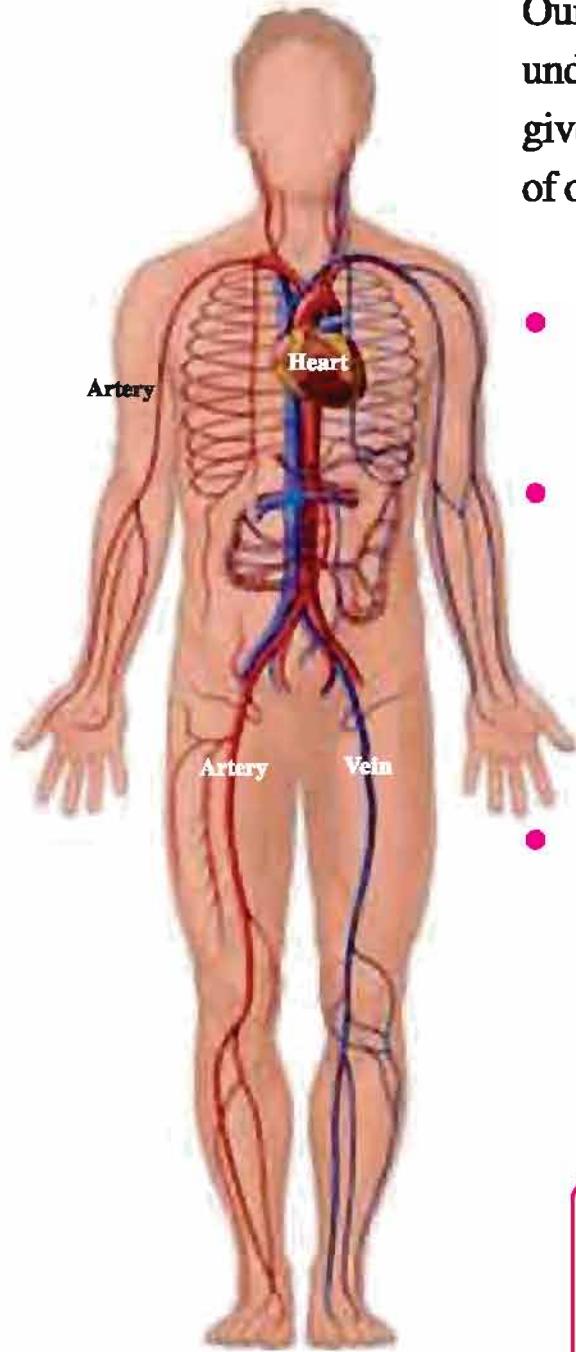




Observation :



Read :



Our blood circulates in body. We can understand the same looking at the picture given on the left side. Let's know the names of organs which circulate blood in the body.

- **Blood circulation** means circulation of blood in the body.
- **Heart** is an important organ associated with circulation of blood. Human heart is slightly larger than the fist. Heart is located between two lungs, protected inside the rib-cage.
- **Blood vessels** are connected to heart. They are mainly of two types :
 - Artery ● Vein

'World heart day' is celebrated on the last Sunday of September.





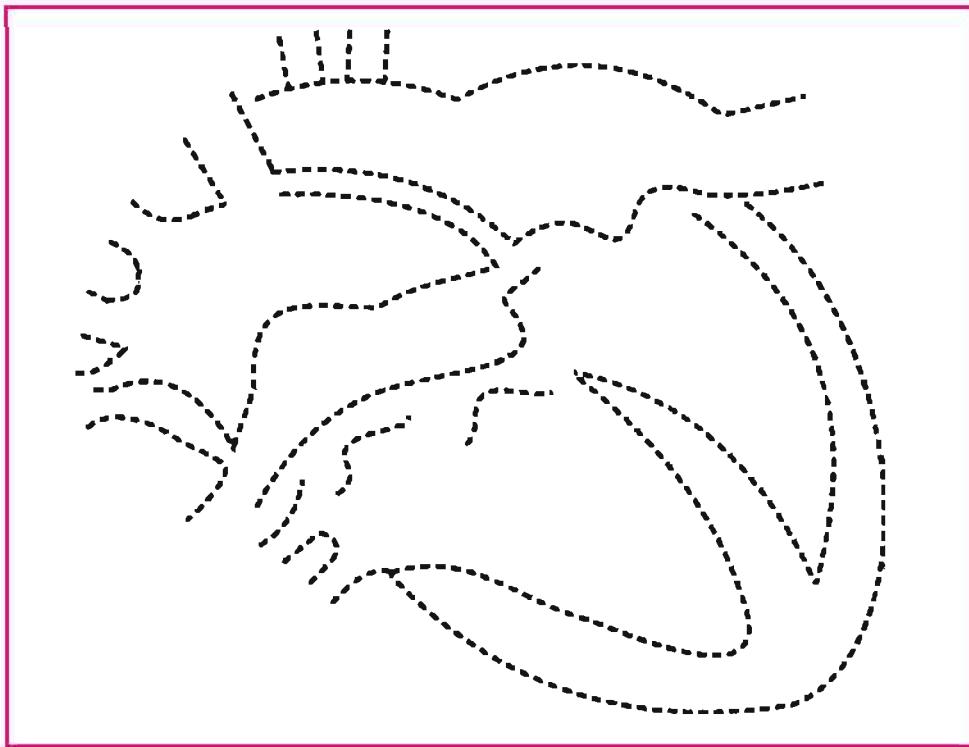
Write :
Mark ✓ in proper box :



| Name of organ / Blood Vessels | Digestive organ | Respiratory organ | Blood circulatory organ |
|----------------------------------|--------------------|----------------------|----------------------------|
| Heart | | | |
| Stomach | | | |
| Lungs | | | |
| Artery | | | |
| Mouth | | | |
| Vein | | | |
| Small intestine | | | |



Complete the dotted figure of heart given below and fill in the colour :



How much have you learnt?-4



Think and Write :

• What would you like to become? Why?

• What happens if soldier is not on the border?

• Note an incident of national love told by your teacher.



Write the correct number against the statement :

- I am located between two lungs in left part of chest.
- (1) Artery (2) Heart (3) Vein
- Blood circulation means :
- (1) Circulation of blood (2) Circulation of air
- (3) Circulation of food
- I am one type of blood vessel
- (1) Oesophagus (2) Trachea (3) Artery



Fill in the colours :

Mark which are associated with blood circulation :

| | |
|---------------------------------------|-----------------------------|
| <input type="radio"/> Artery | <input type="radio"/> Lungs |
| <input type="radio"/> Stomach | <input type="radio"/> Vein |
| <input type="radio"/> Small intestine | <input type="radio"/> Tooth |
| <input type="radio"/> Nose | <input type="radio"/> Heart |



14

Our Panchayat



Read :

We rule our country. Our country has become independent. Our government has formed. Panchayats have come into existence so work of people in local area can become easy. We know about our institutes working in villages and cities.



Observation :

- Study the map of district.



Write :

| | |
|---|--|
| • What does this map depict? | |
| • How many Talukas are located in your district? | |
| • In which Taluka your village is located? | |
| • Approximately how many villages are located in your Taluka? | |
| • Who will be managing all these Talukas ? | |





Observation :



Discuss :



Panchayat system exists in our country. This system is of three tiers in which institutes like Gram Panchayat, Taluka Panchayat and Zilla Panchayat are included. In which Gram Panchayat for villages and Municipality or Municipal Corporation works to manage cities. These institutes are very important for all of us. For proper administration better work is done with the help of representatives of people. Various parts are made on the basis of population.



Read :

Panchayats are working to solve our local problems speedily. Get following details and write.



Our Panchayat

- **Gram Panchayat : Manages village or group of villages.**



Ask and Write :



| Sr. No. | Ward No. | Elected Representative | Incorporated areas |
|---------|----------|------------------------|--------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |





- **Taluka Panchayat manages Taluka and Gram Panchayats of Taluka.**

Write :

| Sr. No. | Name of seat of Taluka Panchayat | Name of elected representative | Name of villages incorporated |
|---------|----------------------------------|--------------------------------|-------------------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |

- **Zilla Panchayat manages Talukas and their villages falling under district**

Write :

| Sr. No. | Name of seat of Zilla Panchayat | Name of elected representative | Name of villages incorporated |
|---------|---------------------------------|--------------------------------|-------------------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |





Ask and Write :

| Information | Taluka Panchayat | Zilla Panchayat |
|--------------------------|--------------------------------|-----------------|
| Total members | | |
| Elected Head | | President |
| Administrative Officer | | |
| What does he look after? | Taluka and its Gram Panchayats | |



Write :



Your friend may be in class Panchayat or in School Panchayat. Representatives are appointed in class or school to share various responsibilities. The same is followed in Gram Panchayat, Taluka Panchayat and Zilla Panchayat. If elected in own area, can represent the area. We have seen about such representatives.



Read :

Cleanliness secretary of class works for the cleanliness. Like this the representative of Panchayat represents the problems of his own area. Make attempts for development of his area. In this way useful work for the people is done. Local institutes are very important.





Write :

| Panchayat Name | Post | Name of the Officer | Contact No. |
|-----------------|-------------------------|---------------------|-------------|
| Gram Panchayat | Sarpanch | | |
| Municipality | Member | | |
| Taluka | President | | |
| Panchayat | Member | | |
| Zilla Panchayat | President | | |
| | Eduation committee Head | | |
| | Member | | |



Project :

| School Managing Committee (S.M.C.) | | |
|------------------------------------|--------------------|------|
| Sr. No. | Name of the member | Post |
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |
| 11. | | |
| 12. | | |



15

Disaster and Rescue

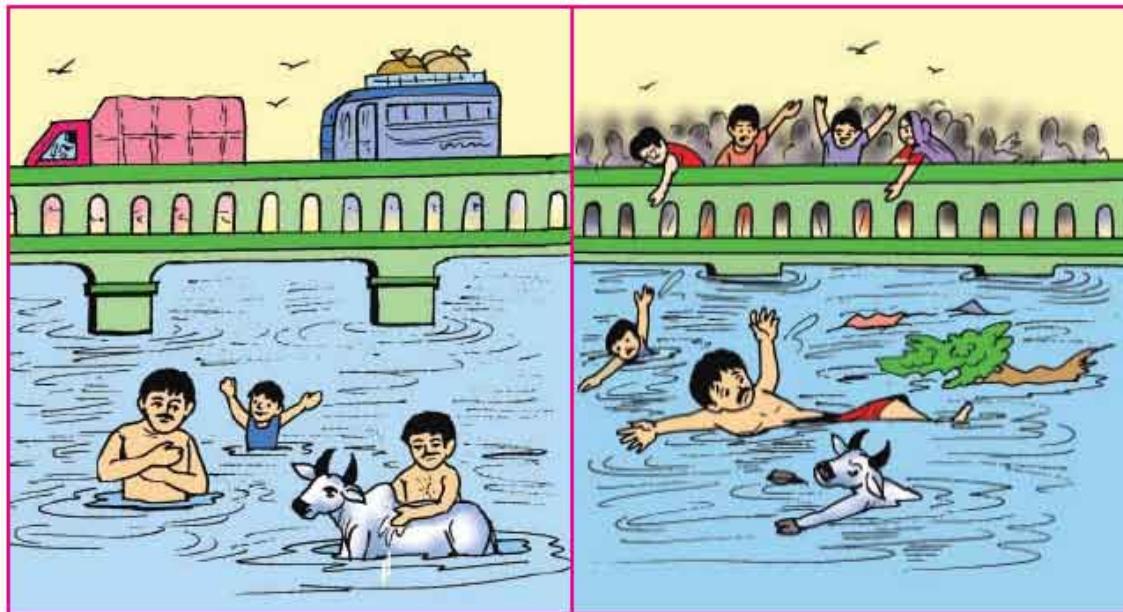


Read :

We see and hear about many events happening around us. Vehicular accidents happen or a child falls off while flying kites. Somewhere a fire may break out. Sometimes there are floods, earthquakes, cyclone or some other disasters. Such events cause damage to personal and public property. Sometimes loss of lives also occurs due to such disasters.



Observe and Say :



Think and Say :

- Can you see any disaster in these pictures?
- If there are floods in the village what type of problems can occur?
- What damage is caused due to floods?
- When is such a situation seen?





Read :

Through various questions we have come to know that occurrence of flood is a disaster. We have to face a lot of problems during such disasters.



Observation :



Write :

- A storm has occurred.

- _____
- _____
- _____
- _____



- The house is on fire.

- _____
- _____
- _____
- _____



- _____
- _____
- _____
- _____

- It must have happened due to eating outside food.





Observation :



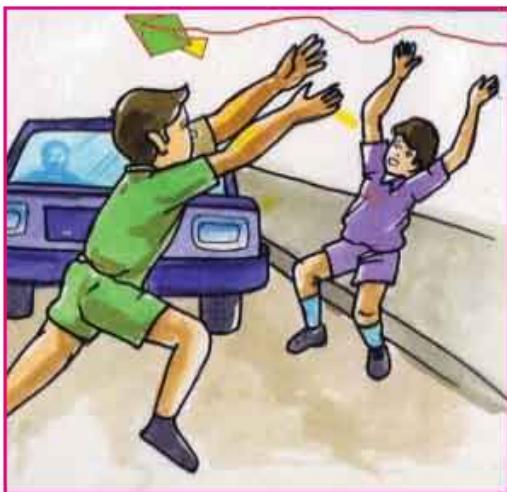
Think and Say :

- What do you see in this picture?
- How did this accident happen?
- How can such accidents be avoided?
- What sort of problems arise after the accident?
- Mention other such accidents.





Observation :



Write :

- Is running to catch a freely flying kite.

- Must have burnt hands and stomach.



- Hands may be wet.





Read :

We hear about various accidents. We must have seen such events. Television and newspapers often have such reports. Victims of such accidents sometimes lose lives. Sometimes there is a great damage. Such events are called disasters.



Story :

Once there was a man named Amrutbhai Patel. During monsoon, once Patel came back from his farm. Night fell. It was raining and it continued throughout the night. The village pond got filled up completely. Due to such an increase of water, the pond over flowed. The water from the pond entered the whole village. There was water and dirt everywhere. The water remained in the village for 2-4 days. Amrutbhai saved many lives.

Generally, natural problems are called disasters. Because of disaster property suffers great loss and there is loss of lives also. People have to face various problems.



Think and Write :

| | |
|------------------------------|--|
| Disaster we have heard about | |
| Disaster we have seen | |
| Disaster we have experienced | |



Story :

Jepur was a small village. There lived a girl called Tejal. She very much liked to cycle. It was Sunday. Tejal cycled towards the bazaar. While returning, she saw some children playing cricket. She lost her attention and had a minor accident with a truck coming from opposite side. This accident caused a furore in Jetpur. Tejal had injury in her head. She had to stay in the hospital for ten days.





- Generally accidents happen due to the mistake or blunder of a person. In such accidents, one or more people suffer losses.



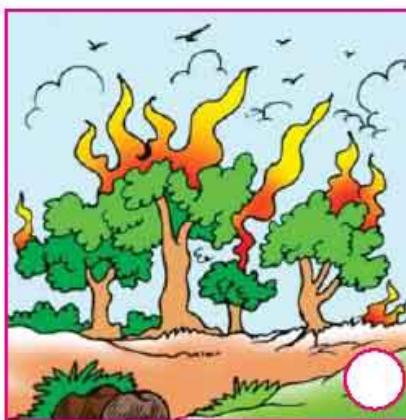
Think and Write :

| | |
|------------------------------|--|
| Disaster we have heard about | |
| Disaster we have seen | |
| Disaster we have experienced | |



Fill in the colours :

Colour : For accident and for disaster



**Project :****Discussion :****Talk about Surroundings :**

Name of the student :

Date :

Day :

Time :

| Detail | Detail | | | |
|--------------------------|----------|----------|-------------------------|------------------------------|
| | Disaster | Accident | What were the problems? | What can be safety measures? |
| Collision with a vehicle | | ✓ | | |
| Spread of an epidemic | | | | |
| Getting electric shock | | | | |
| Fire breakout | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |





Project :



Discussion :

Stick photos related to Disaster and Accidents.

Write details of photos pasted above.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____





Today, students of 5th standard of our school were shown a film. This film gave many important information regarding what to do at the time of troubles or disaster.

The main actors in this film were child artists Harsh and Niru, along with their Baa- Nathiba. The CD illustrated various conditions.

Flood : Harsh and Niru were giving information about the flood in the river. Because of the flood there was a lot of inconvenience in this region. Rescue operations were taken up by the government and other organizations. Workers of rescue operations were instructing again and again.

“Take a battery and essential things for daily life and reach to the higher areas.”

Cyclone : The wind was blowing. Dust was flying all around. The roofs of people’s houses were also flying away. Dirt, paper, plastic were also in the air. Repeatedly instructions were given through the microphone.

“Do not stand near a tree, electric pole, houses with tin roofs or such dangerous places. Everyone should stand together in an open ground in the vicinity.”

To slip : A monsoon day was shown. Children were returning home from school. They were running but just then, Ruchan slipped because it had rained. The children stopped. Ruchan was crying. He had hurt his elbow. Just then his brother Pancham came. He helped Ruchan to slowly get up and tied his hand to the neck in a sling so that it wouldn’t move. Then he arranged for him to reach the hospital.





Write :

| Sr. No. | Accident | What can be done for rescue? |
|---------|----------|------------------------------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |



Write :

Collect informations and note :

| Sr. No. | Name of the Disaster / Accident | Place | Year | Who were affected? |
|---------|---------------------------------|-------|------|--------------------|
| 1. | Flood | Surat | 2006 | People of Surat |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |



16



Look, Learn and Experience



Write :

- In your classroom and at home, you see many things. Some of them are listed here.

| Things | What is it made of ? |
|------------|----------------------|
| Chair | Wood, Plastic, Iron |
| Door | |
| Chapati | |
| Spectacles | |
| Bucket | |
| Spoon | |
| Shoes | |
| Book | |

The matter of which the above mentioned things are made is called a substance.



118





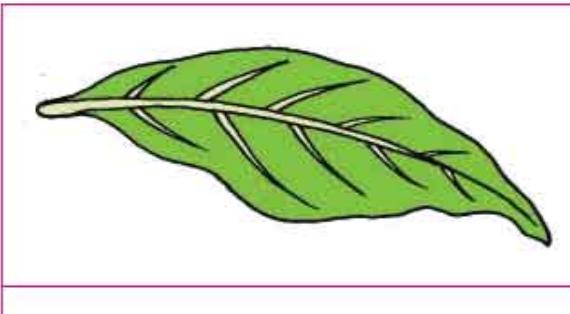
Encircle which has weight or mass :

| | | | | |
|--------------|----------------|-----------------|-------------|--------------|
| Water | Brick | Kerosene | Bag | Smoke |
| Ice | Man | Air | Milk | Cloth |
| Wheat | Stone | Paper | | Pen |
| Iron | Plastic | Wind | | Wood |



Activity :

- Collect things like leaf, nail, water, eraser, chalk.
- Use a pencil to draw an outline them.
- Draw the figures of various things.



It is True :

- Everything is made of matter.
- Everything has weight or mass.
- Everything occupies space.
- Air occupies space. Air has weight.





Activity :

- Take three transparent glasses and three transparent bowls.
- Fill water, stones and smoke in them and observe.



Put ✓ for the substance which takes shape of its container and ✗ for the one that does not change its shape:

| | Takes the shape of its container | | Doesn't change shape | |
|-----------|----------------------------------|---------------|----------------------|---------------|
| Substance | In glass cup | In glass bowl | In glass cup | In glass bowl |
| Water | | | | |
| Stone | | | | |
| Smoke | | | | |



Read and Write :

- In the tables, names of some solid, liquid and gaseous substances are written. You write few more names.

Like water, the substance which changes shape when put from one to other container, but there is no change in the space it occupies, such substances are called 'liquid substances'.

| | | | |
|-------|--|--------|--|
| Milk | | Petrol | |
| | | | |
| Water | | | |





Substances like stone, which do not change their shape or volume, are called 'solid substances'.

| | | | |
|--------|--|------|--------|
| Eraser | | | |
| | | Nail | |
| | | | Pencil |

Substances like smoke, when transferred from one container to the other, changes its shape and also the space it occupies, are called 'gaseous substances'.

| | | | |
|--|-------|--|-----|
| | Smoke | | |
| | | | |
| | | | Air |



Write :

(Salt , leather, milk, charcoal, air, diesel, butter-milk, steam, wood, factory smoke, oxygen, kerosene)

| Solids | Liquids | Gases |
|--------|---------|-------|
| | | |
| | | |
| | | |
| | | |



**Write :****Discussion :**

| Names of various things / substances | Made of what ? | What is the natural resource ? |
|---|-----------------------|---------------------------------------|
| Pants | Cloth / Cotton | Plant |
| Table | | |
| Belt | | |
| Ghee | Milk / Cow-Buffalo | Animals |
| Petrol | | |
| Brick | | |
| Water | Well-Pond-River | Rain |
| Paper | | |
| Charcoal | | |

**Read :**

We get everything from our environment. If we do not get all these things, then we would have to face many troubles. So we must protect our environment. We must use these natural resources judiciously.





Write :

| Thing / Substance | Natural Resource | Thing / Substance | Natural Resource |
|-------------------|------------------|-------------------|------------------|
| Milk | | Cloth | |
| Iron | | Oxygen | |
| Rice | | Petrol | |
| Water | | Steam | |



Read :

- Iron, Rice and Cloth, etc. are solid substances.
- Milk, Water, Petrol, etc. are liquid substances.
- Steam, Oxygen, Smoke, etc. are gaseous substances.



**"Preserve and protect every tree
For glorious future of our country."**



**"Earth and water need protection,
For prosperous growth of any nation."**



How much have you learnt?-5



Write :

- What is the name of your district? _____
- How many villages are there in your Taluka? _____
- What is the function of Gram-Panchayat ?

- Write the name of the Taluka member / corporator of your region.

- Write the name of the Head of your Taluka Panchayat / Municipality of your area.



Classify :

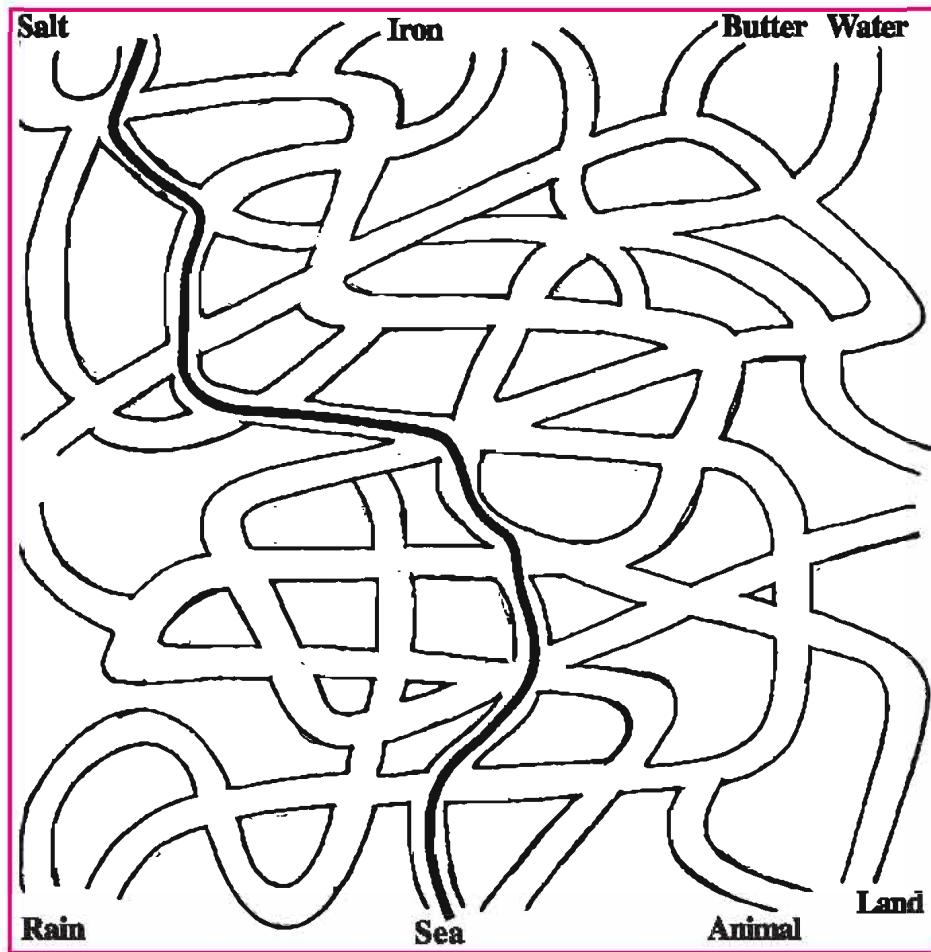
- Flood, Cyclone, Fire, Epidemic, Road accident, Fall while Running after kites, Sustain burns, Get electrocuted, Slip on banana peel, Fall off bicycle, Drought, Earthquake, Tsunami.

| Accident | Disaster |
|----------|----------|
| | |





Fill in the colours :



Join the things to their natural resource through the substance of their origin :

- Cement, _____, _____, Soil
- Sugar, Sugarcane, Farm, Land
- Sweets 'Penda', _____, _____, Animals
- Sweater, _____, _____, Animals
- Chair, _____, _____, Plant
- Bed, _____, _____, Plant





Around Us



Write :

| | |
|--|------------------------|
| Name of your village | |
| Where do you see crowds in the village? | (1) _____ (2) _____ |
| Where have you seen crowds? | |
| Whose is a small family in the village? | |



Read :

Today, Trusha and Dirgha have come to the village. Uncle Jagdish took both the children to see the village. Seeing a long queue of people, they asked “What is this?” Uncle replied, “They are standing to buy kerosene”. They all have big families, so they face difficulties. Trusha asked, “Uncle, if people in the city have big families, do they undergo similar difficulties”? Uncle said, “Yes. If the family is large, there are difficulties. Smaller family has lesser needs, so they have lesser difficulties.”



Discussion :

- What kind of difficulties are faced by larger families?
- What are the advantages of a smaller family?
- Where in the city, there are crowds?

While questioning make sure that inferiority complex does not arise in children.

