

OUR SURROUNDINGS

Part-3

Textbook of Environmental
Studies for Class-5



For Free Distribution in All Government Schools



Rajasthan State Council of Educational
Research and Training, Udaipur



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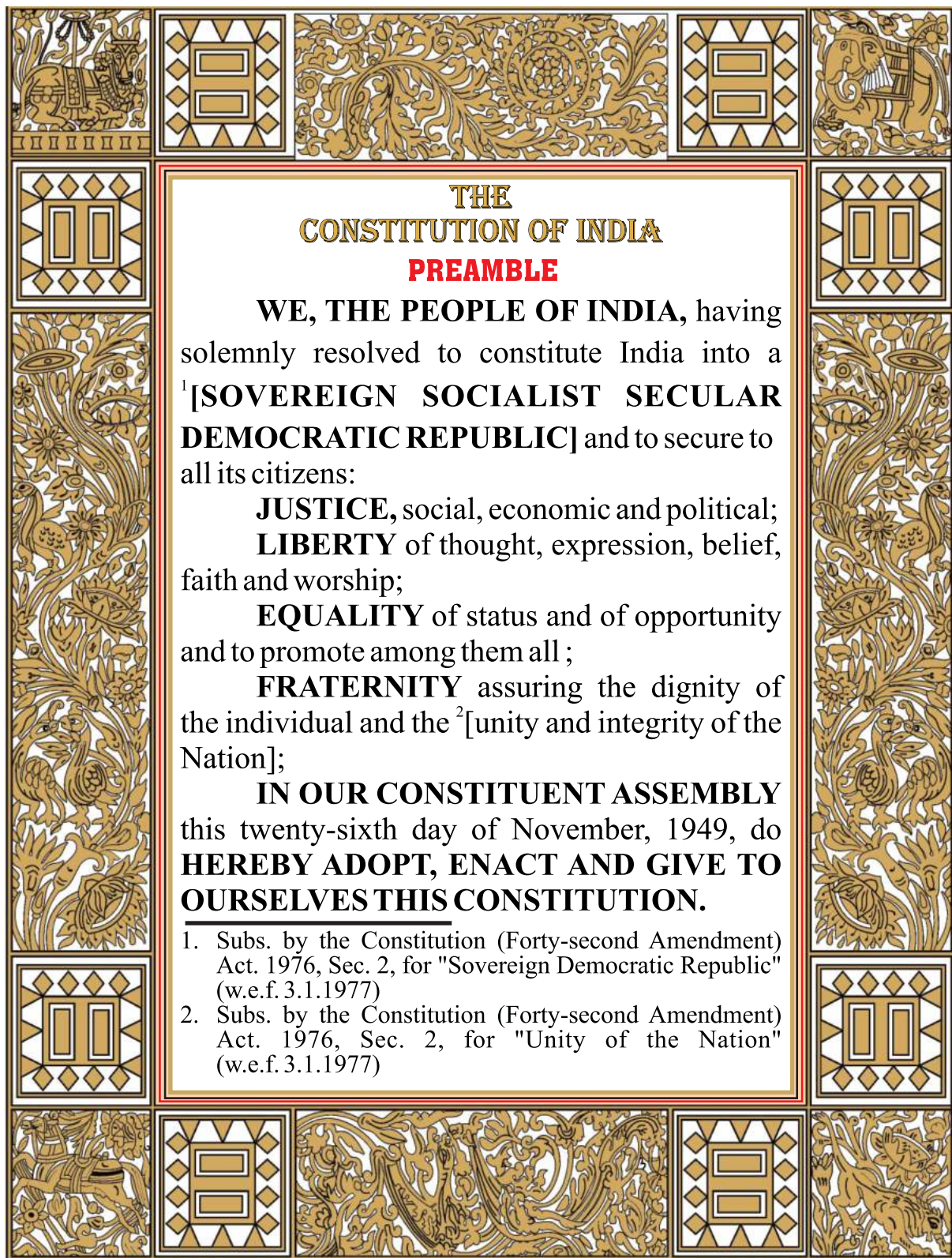
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**Special Note: The material compiled in this book is influenced by
several sources and we express our gratitude to all of them.**



FOREWORD

The preliminary stage of education for children (ages 6 to 11) is the most important. It is the time when they begin to explore, understand and learn about the world around them. The National Education Policy 2020 (NEP-2020) adopts this idea and emphasizes on making education interesting, enjoyable and experiential. This education policy recommends comprehensive reforms and the adoption of innovative approaches in the Indian Education System. The basic objective of this policy is to empower students with creativity, logical reasoning and practical skills to face the challenges of the 21st century. Under this, special emphasis has been laid on making education more inclusive, holistic and skill-based.

Keeping these objectives in mind, the Rajasthan State Council of Educational Research and Training, Udaipur, has developed textbooks for primary classes. To ensure the all-round and holistic development of children, these textbooks integrate Indian knowledge traditions, 21st-century skills, social-emotional skills, arts and physical education. These textbooks not only encourage logical thinking, clear conceptual understanding, and creativity, but also strengthens the tendencies of inclusion, cultural unity and harmony.

The textbooks include effective, interesting and creative activities appropriate to the class level, along with interesting stories, poems and content from other genres, so that children can learn in an easy and enjoyable manner. There are also Suggestions for teachers at various places so that they can help children learn more effectively.

In this important journey of textbook development, the contribution of selected teachers from the State, experts at the State and National Levels and Voluntary Organizations has been significant. Without their cooperation, suggestions and impartial perspective, it would not have been possible to carry out this work effectively. We express our heartfelt gratitude to all stakeholders for their unprecedented contribution. Special thanks to all the esteemed Members of the Curriculum Review Committee, whose invaluable suggestions have guided the enhancement of this textbook.

The newly developed textbook is expected to make the learning-teaching process in the classroom smooth, enjoyable and excellent, and this will only be possible with the active cooperation of teachers. The role of teachers is not only limited to impart knowledge; they are also guides who inspire students to learn actively, they should adopt child-centered teaching methodology, while using this textbook allowing students to learn according to their interests and abilities. Additionally, they should pay special attention to promoting 21st-century skills, encouraging social-emotional development and effectively incorporating the values of Indian knowledge traditions into classroom teaching.

This book is in your hands. Millions of children in the state are eagerly looking upto you for learning. With our combined efforts, we are confident that they will certainly achieve their learning goals. Your thoughts and suggestions for improving the quality of the book (To enhance children's learning capacity) are always welcome.

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and Training, Udaipur

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Lesson - 1

Plate of Basoda



Our Dishes and Celebration–

One evening during the summer, Pari came home from school. The unique aroma of whatever was being cooked in the kitchen today filled her nose. Her parents were



cooking some special dishes on the stove.

At the same time. Pari's classmate Arjun came to her house to play. As soon as he entered and smelled the delicious food, he said. "Pari it seems like a lot of dishes are being cooked today! Is it a special day" ?

Pari's mother smiled and said, "it is Sheetal Saptami tomorrow, so we eat cold food prepared before a day and it's called 'Basoda'.

Arjun asked, "What dishes are cooked in basoda?"

Father said, "Millet roti, jaggery, curd, buttermilk, gram flour



roti, sweet churma, curry, ker sangri and various types of vegetables and pickles.”

“But why is it eaten cold?”
Arjun asked in surprise.

Mother explained, in our state many types of dishes and delicious food are prepared for ‘basoda’. These mainly included panchkuta, puri, sogra, ghat, raab, dahibade, kari-pak, kanjibade, khaja, mathri, papad, khichia, salevada etc. are prepared a day in advance. Since cold and stale food is eaten on this day, so it is called ‘basoda’! During summers we should consume dahi rab and dishes made by milk.

Pari found all this very interesting. She asked her father, “is



What is this ‘thali’ called in your region?

In Banswara it is known as ‘**basoda**’.

In Dholpur

In Jaipur.....

In Sriganganagar.....

In Bikaner.....

In Ajmer.....





this festival celebrated all over India?”

Father said, yes, it is celebrated in every state with different names and traditions. In Gujarat, it is called ‘Sheetala Saptami’. It is also celebrated with great reverence in Haryana and North India. And you know, in different regions of Rajasthan, there is tradition to celebrate it one day later. On the day of ‘Sheetla Saptami, fairs are held at various places of Rajasthan, where men dance in groups singing a song on the beats of ‘chang’, its called ‘Gair’. In many areas ‘basoda’ is also made on ‘Sheetla Ashtami.’

“Mother, what effect does this have on health?” asked Pari.

Mother lovingly told, “Pari, summers begin at the time of ‘Sheetla Saptami’. Due to the increased in temperature and the bacteria, food gets spoiled quickly, so after this day, we should eat fresh food. We should consume dishes made from milk and curd such as *raab*, *oliya*, *thandai* etc. We should not take a bath with hot water.

Arjun asked after thinking, “Do all festivals have stories and traditions behind them?”

Project work : Find out what kind of crops are used to prepare dishes in the festivals or celebrations held in your community. What are their health benefits? After this, present your research in your class.

Name of Festival	Dishes Prepared for the Festival	Ingredients Required to Prepare the Dishes





Arjun looked at the ‘Basoda thali’ and said, “I like summers”. Now I will get to eat watermelon and muskmelons to my heart’s content. Pari is also thinking which season has her favourite food. Come, let’s find out which crops are grown in each season and what food is available to eat.

Activity-1

Write the names of crops grown in the following seasons-

Season	Potential Crops
Monsoon (Kharif)	
Winter (Rabi)	
Summer (Zaid)	

Write the names food items available in the following seasons-

Season	Food items made from Crops
Monsoon (Kharif)	
Winter (Rabi)	
Summer (Zaid)	

Mother said that the crops grown in the rainy season are called kharif crops. Kharif crops are sown in June-July and harvested in the autumn season. Example- millet, groundnut, moong etc.

The crops grown in the winter season are called Rabi crops. They are sown between October–December and harvested in





March- April. Example- wheat, gram, barley etc.

The crops grown in the summer season between Rabi and Kharif are called Zaid crops. They are sown between March and June. Example- cucumber, watermelon, muskmelons etc.

Answer it-

1. In which season is millet sown?
2. Why are zaid crops sown in summers?
3. Name the crop which is sown in two seasons?

Ask around and find out-

1. Which crops grow in large quantities of water?
2. Which crops grow in less water?
3. Which crop grows the most in your region and why?

Activity-2

Prepare chart of Rajasthan's food crops and display in the class-

Food Crops of Rajasthan	Name of Neighbouring District and its Food Crops

In school, Pari and Arjun told the teacher about 'basoda' thali.

Teacher said, "Every dish of basoda thali has a deep connection with health". Example-

1. **Millet** : It is rich in fiber, protein, iron, magnesium and



vitamins. It gives energy to the body.

2. **Curd and Buttermilk** : These contain calcium, vitamins, protein and minerals like phosphorus, which help the body and the digestion process.
3. **Jaggery** : It is a good source of iron. It contains natural sugar, which gives instant energy to the body.
4. **Green vegetables** : They are source of vitamins and minerals (like- iron magnesium)

Food is connected with many things in our society like socializing, celebrating, sharing happiness, sorrow etc.

Write down your emotions related to food below-

Food Items	Feelings Associated with it	Why does it Feel that Way?

Activity- 3

Go home and discuss with your family members, why a balanced diet is necessary. Draw a picture of a plate with a balanced diet.

Grandfather says that “As is the food you eat, so is your body and mind.”



This means that “The food you eat determines your body and mind!”

Let's discuss about healthy food

- What nutrients are present in our food?
- What good habits should we adopt to stay healthy?
- How does our food affect our body and mind?
- Which grains, pulses, vegetables, and spices are found in Rajasthani food? How are they beneficial for health?
- Do you know about junk food? What is it and what are its harms? (discuss to your teacher about this.)
- How is local grain beneficial for environment?
- Why are pure water and balanced diet necessary for health?



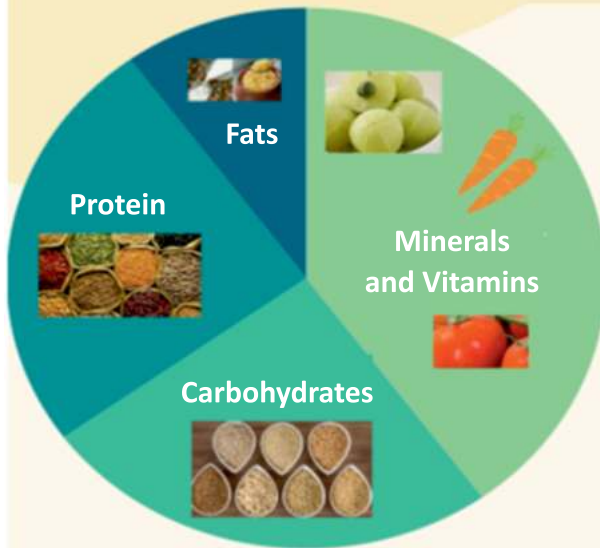
Pari asked her grandmother after going home.”How did people grind wheat and millet in old days?”

Nani took out an old hand mill (A hand operated ‘chakki’) and showed how grains were ground using a hand mill.

The next day after Sheetla Saptami festival, Pari and Arjun fed curd and jaggery to their younger brothers and sisters. While celebrating the festival, they explained its importance that festivals give opportunity to strengthen our culture and relationships.



A Balance Diet



Minerals and Vitamins

Carrot, Spinach, Tomato, Amla (Indian gooseberry), Orange, Lemon etc.

Carbohydrates

Wheat, Rice, Bajra (Pearl Millet), Maize etc.

Protein

Pulses (Moong, Chana, Matar, Soybean, Urad, Masoor etc.)

Fats

Milk, Ghee, Mustard Oil, Groundnut Oil etc.

Did you know ?

A Balanced Diet- Choosing healthy food and nutrients in the right proportion makes your diet balanced.

A balanced diet contains carbohydrates, proteins, fats, vitamins, mineral, salts and fiber in the right amounts.

Practice work

➤ Choose the correct option from the following-

- Which of these is a Kharif Crop?
(a) Gram (b) Mustard (c) Peanuts (d) Wheat
- Which musical instrument is used in 'Gair' dance?
(a) Tabla (b) Harmonium
(c) Flute (d) Chang



➤ **Fill in the blanks-**

1. food is consumed on 'Sheetla Saptami'.
2. is the Zaid crop of Rajasthan.
3. Curd and buttermilk are good for
4. Gair dance is perform in Rajasthan on the festival.
5. It is preferred to eat with millet bread.

➤ **Write True / False –**

1. 'Sheetla Saptami' is related to summer. ()
2. 'Sheetla Saptami' is celebrated only in Rajasthan. ()
3. Gair dance is performed only by women. ()
4. Buttermilk and curd are beneficial for digestion. ()

➤ **Match it-**

Column 'A'

Millet

Curd

Gair dance

Basoda

Column 'B'

stale food

Kharif crops

good for digestion

On the beat of 'chang'

➤ **Answer in three to four sentences-**

1. Write the name of some main dishes included in 'Basoda thali'.
2. In which category of crops do maize and millet fall? What type of climate is suitable for growing them?
3. What is a "Gair Dance?" When and why is it performed?



- 
4. Names of Rabi, Kharif and Zaid crops grown in Rajasthan?
 5. Make a list of Rabi, kharif and Zaid crops.
 6. What traditional dishes are prepared at your home?
 7. Why is stale food eaten on Sheetla Saptami?
 8. In which state is Sheetla Saptami festival celebrated apart from Rajasthan?
 9. What is the importance of festivals in our life?

➤ **Project based Activities-**

1. Collect information about the festivals celebrated in your area and the dishes cooked during these festivals.
2. Make a comparative chart of crops grown in Rajasthan and other states.
3. Discuss the health benefits of your favourite dish.
4. Why is a balanced diet necessary for our body?
5. Draw a picture of a plate having a balanced diet. Write the names of the dishes in the plate based on the nutrients.
6. **Research Work** : Ask your grandparents or parents how festivals were celebrated in their time?
7. Observe and draw any two machines used at home and write their working method.
8. Which are duties you should perform during a fair? Write about them.
9. Write a belief based story behind any one festival celebrated in your village/town.

**Wheat, millet, moong, moth-
consumed by the people of the region. A place where these
are the most commonly grown crops. That is Rajasthan.**



Lesson - 2

Animals-Birds Our Companions



Many animals and birds live in the ravines of Chambal. One of them is a lovely sparrow named Gaura. Gaura's home is in the wall of a hut.

Every morning she comes out to play with her friends-peacock, parrot and cuckoo.

One day Gaura thought she should tell the village children about herself? She shared this idea with her friends. All the birds got very excited and reached out to the children.

The peacock first said, "I am a peacock. My feathers are very beautiful and when I dance everyone find it very beautiful and feel happy."

The parrot said, "I am a parrot. I live in the tree's hollow, I can talk like a human being and I like eating green chillies and tomatoes."

The cuckoo said, "I am a cuckoo. My voice is very sweet and I sing very melodiously."

Gaura also said, "I am a sparrow. I am very small but I can fly very fast."

The children listened to everyone very attentively and enjoyed it a lot. Now they also wanted to know about the other birds of the village. They talked to the teacher about this. The teacher was very happy with children's curiosity and made a plan to observe the birds



of village.

Birds of Our Village-

The teacher decided to work on a project with children. They will all visit the village green area and ponds around the school and observe the birds and collect information about them.

The student named Ramesh was very excited to learn about birds. He told his friends that he had watch it on the T.V. that some birds are active at night and some during the day. Such as the owls remain awake at night and rest during the day.

Kiran also said, “I have heard an owl hooting on a tree near our house many times at night.”

Activity-1 :

Now all the children were given a task each. They will go to their house and collect the names of birds found in the village fields and gather information about them from their elders.

Name of bird	How does it look ? (feather colours, size, beak, claws)	Their role in the environment
Peacock		Controls Pests
Owl		It hunts and eats harmful small farm animals
Heron	White color, long neck and legs	
Sparrow		

Observation and classification of birds-

Let's classify animals and birds on the basis of their characteristics-

Exercise 1 : Write the name of birds on the basis of their habitat-

Living in water	Land/Tree Dwellers	Living in water and on land
Heron	Parrot	Frog

Exercise 2 : Write the names of animals based on their food habits-

Seed grain eaters	Hunters	Insect eaters	Eat dead animal
Sparrow	Eagle	Nightingale	Vulture

Exercise 3 : Write some examples based on the groups given in the table -

Solitary birds	Birds living in pairs	Birds living in groups
Owl	Peacock	Parrot
Vulture	Heron	Crow

A decorative horizontal line with a repeating wavy pattern, consisting of small, rounded, wave-like shapes.

To identify birds, it is necessary to study their body parts. For example-

-

Activity 2 :

Observe the birds around the school and village and record your observations in the table given below-

Name of bird	Where do we see it? (Tree, ground, water, flying)	Description (size, color, beak, claws, voice, behaviour)	Number (Single, Pairs, Flocks)
Crow	On the tree		Flocks
Parrot		Green feathers, red beak, imitations of human	
Heron	In water		Single



Exercise 4 : Draw a picture of your favourite bird and write its characteristics-

- Bird's Name :
.....
- What does he eat ?
.....
- Where is it found ?
.....
- Interesting facts related to it :
- Description of physical appearance :



Colourful Animals and Birds :

With colourful wings,
how wonderful birds are flying.
Squirrel also has an important
place among these birds.
Eating something in her hands
Wow! Squirrel what to say !
Wearing a stripped coat
With big bushy tail
Black and yellow in colour.





1. Classify the animals and birds shown in the picture based on the following information-
 - (a) Where do they live? - cave, burrow, nest, tree
 - (b) What do they eat?
 - (c) With wings/ legs/ without legs
2. Which animals are bigger and smaller than a mouse?
.....
3. What is each animal doing in the picture? Write.
.....

Exercise 8 : Group discussion – Think and answer-

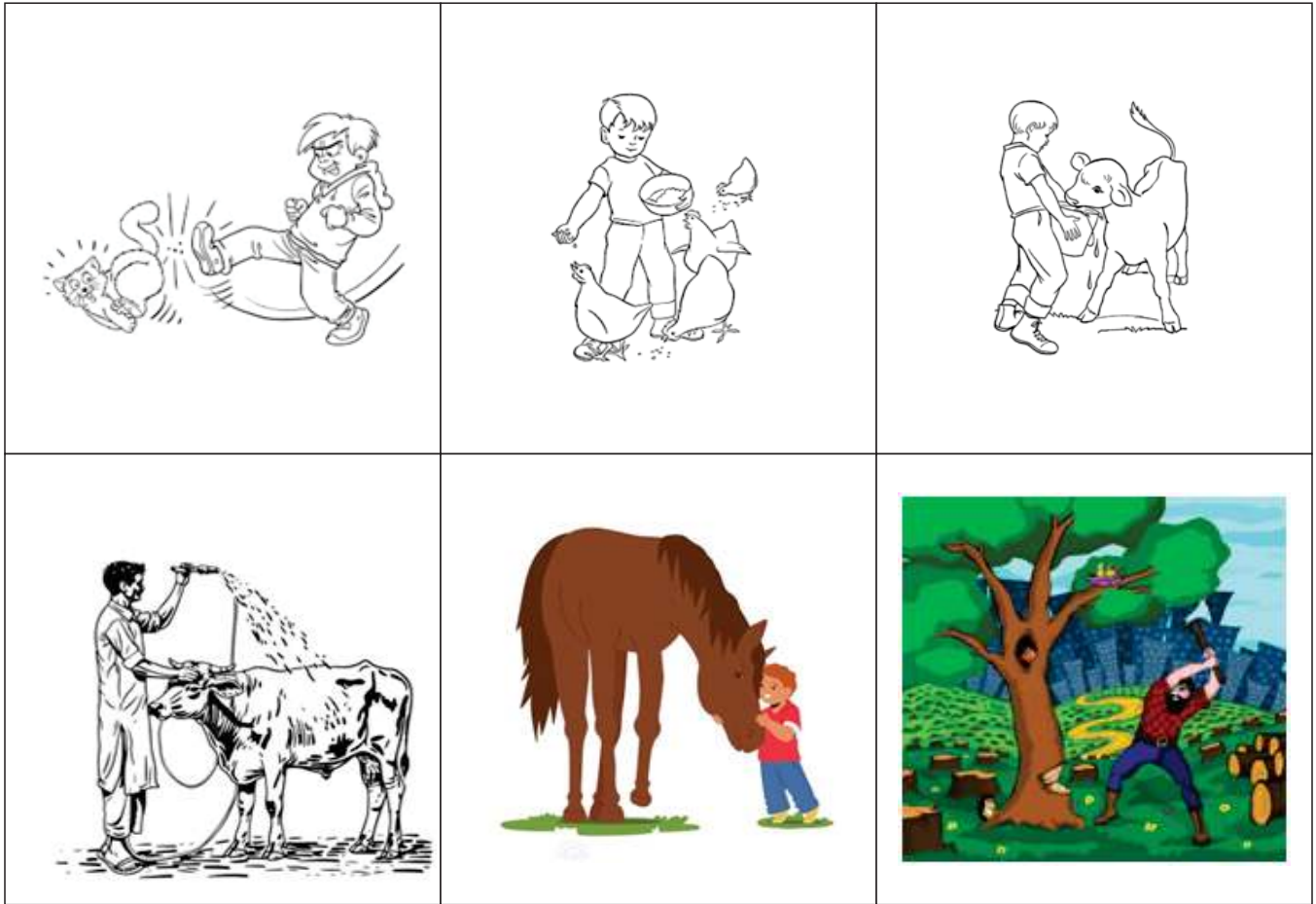
- A. If you had a beak instead of a mouth, what could you eat?
- B. If birds had teeth, what would they like to eat?
- C. Birds fly in the sky then why do they land on the ground?

Exercise 9 : Which one is different and why?

Circle the odd one out	Write the reason
Deer, Dog, Cat, Cow	
Orange, Apple, Mango, Gourd	
Saree, Pyjama, Kurta, Raincoat	
Cave, Tree, Burrow, Den	
Pitcher, Chair, Mobile, Rat	
Frog, Fish, Crab, Lizard	



Exercise 10 : In the picture given below, mark the compassionate act. Also write why do you think so?



Activity 3 : Let's make something-

- A. Make a bird's nest by finding materials such as mud, grass and leaves.
- B. Remember that it must be able to hold at least the weight of a small stone or an egg.
- C. Discuss -
 1. Why do birds make nests?
 2. How do they make a nest? What materials are needed?
 3. How do they collect nest building materials?

Practice work

➤ **Match the names of the animals given below with their tails-**

Dog



Cat



Mouse



Elephant



➤ **Complete the following sentences-**

1. The mouse lives in a
2. The elephant fills water in its.....and bathes.
3. Thewalks by crawling.
4. The monkey lives on

➤ **Write the answer in three or four sentences-**

1. If the water in the forest dries up, where will the animals living there go?
2. If all the trees are cut down, where will the birds live?

Lesson - 3

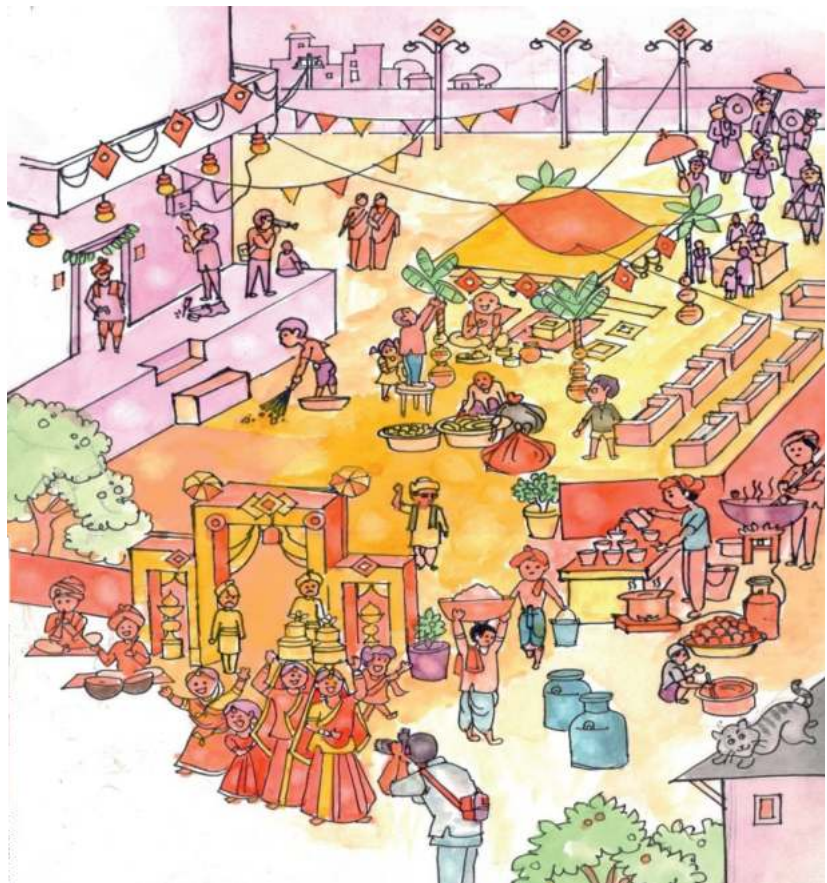
Our Skilled Helpers



Context : There is a wedding atmosphere in Haripur, Rajasthan. Many people are busy in wedding preparations. The confectioner, the tailor, the carpenter, the gold jewellery-maker, the band musician, the potter, the farmer, the cattle rearer, the barber, the florist, the cleaner and the electrician are busy in their work in wedding. Everyone's work is dependent on each other. Let's listen to the conversation among them.

Diagram 1

Confectioner- Your earthen 'kulhars' and 'diyas' are very beautiful this time. The guest will have a different pleasure drinking hot milk in 'kulhars' at the wedding. These kulhars are strong enough, aren't they? Hopefully, they won't break as soon as you pour milk in 'kulhars' and they are not so thin that your hand would burn as soon as you hold them."





Potter - No-No! That's not the case. Just like last time, I have made good and strong 'kulhars' this time as well. Have a look ! Thank you so much for using our 'kulhars'.

You prepare sweets but as you know that the ingredients for the sweets you are making bought from the grocery store and the ingredients are supplied to them by big vendors and farmers. And yes, you can't make anything without the grains obtained from the farmer and the milk and ghee obtained from the cattle rearer.

Farmer- You are absolutely right. We grow crops from which the confectioner gains pure grains, sugar and flour but we are also dependent on the flour miller and the carpenter who give us farming tools.

Carpenter- Yes! Of course! In addition to helping farmers, I also make furniture, Wedding canopy (mandap) and wedding decoration. Look I have prepared the mandap and decoration arch (toran gate) of this wedding. But have you all seen the groom's new clothes? If not, you must see them because our tailor has stitched the very beautiful clothes.

Tailor- Oh, thank you so much. Wedding clothes should be special, right? But the real joy in wedding is brought by the band musicians. Weddings are incomplete without them. We should also appreciate hard work of our band musicians.

Band musician- Thank you all but I also thank the brother who handles the electric work. If he were not there then how these lights and microphones work.

Electrician- Yes! Wedding is incomplete without lights fans and mics.



Just then the cleaner arrives there and says, “Please connect the wires on the ‘mandap’ and tape them properly because cleaning is to be done there.”

Everyone together- Yes, absolutely ! Without cleanliness the entire ‘mandap’ will look dirty. Thank you very much for keeping the ‘mandap’ house and surrounding clean. This keeps us all healthy.

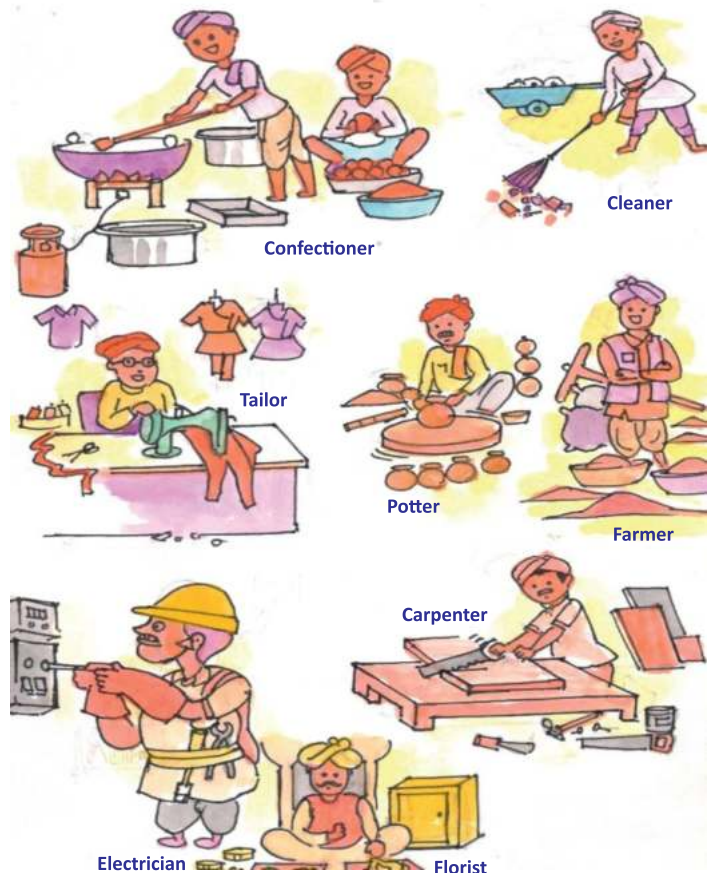
Mohan (Child) - Oh! Now I understood a wedding is not just an event of one family but hard work of all skilled helpers. This shows the interdependence of our society how we are incomplete without each other.

Project Work-

Why can't we do our work without each other? How does society function with mutual cooperation?

Instruction-

1. **Identify different workers/artisans in the village-** Look around or talk to elders to know about different artisans such as confectioner, tailor, farmer, potter, carpenter, florist, cleaner etc. What is the work of each worker? Understand this.



2. **Understand the Interdependence –** Think : If one person does



not do his work, what will be the effect on the work of others? For example, if the farmer does not grow grains, how will the confectioner make sweets? If the carpenter does not make 'mandap' then how will the decorations be done at the wedding?

3. **Make a chart / diagram–**

- Make a chart showing different professions.
- Identify the professions shown in the picture.

Dialogue 2

Context- Traditional Rajasthani dishes are being prepared for a wedding. Children are standing near the confectioner and talking to him and understanding the aspects of the items and ingredients used in the food. Let's listen to their discussion.

Khushi- Uncle, how are these sweets made so delicious?

Confectioner- To make sweets, we need pure milk, mawa, ghee, sugar and flour. All these food items come from farmers who grow Rabi, Kharif and Zaid crops.

Manjeet- Wow! Most of the food items that we are going to eat at the wedding today, will come from the farmers near our area.

Farmer (standing nearby)- Absolutely! Wheat and gram are Rabi crops while millet and maize are Kharif crops. Confectioner make such delicious sweets from the food grains grown in our field.

Kriti- Where do these fruits and vegetables come from?

Farmer- These also come from our farms. We sell some vegetables to traders and then you buy those vegetables from shops. Eating these green vegetables and fresh fruits keeps us healthy and provides useful nutrients for our body.

Confectioner- Look ! children, we have talked a lot. You must be





tired. Milk has also boiled and the jalebi has also been prepared. Come, let's drink milk and jalebi in the 'kulhar'.

Ashok- You are serving the milk in a 'kulhar' - is that good for our health and the environment?

Confectioner- Yes, 'kulhar' are made of clay and do not harm the environment. Using them instead of plastic cups is better for our health, promotes local products and creates new jobs.

Ashok- Oh! Now I understood that we are all related to each other and can't live without each other.

Manjeet- Yes! our teacher also told us that plants, trees and animals are very important in our lives and we must protect them because the useful things in daily life are obtained from them.

All the children happily go to the foodtent (pandal) to have food.

**Look at the specialty of each one,
constantly improve your abilities.**

**Together let us remove all
discrimination and disorders be hard working
and shine with new colours and beautiful wings spread wide.
May everyone's family be happy, may the community be happy.**

Discuss in Classroom-

1. Which sweets are made in your home? Share your favorite sweet recipe with the class.
2. Go to your area, understand the process of making 'kulhar'. Prepare a model and present it in the class.
3. Why is plastic harmful to the environment? Explain.
4. Bring samples of grains and pulses from your home and display them in the classroom with their names.



Practice work

➤ Fill in the blanks-

1. The most delicious sweets are made by in wedding.
2.crops give us wheat and gram.
3. Using a kulhar promotes.....digestion.
4. Band musician play at wedding.
5. Farmers grow..... and crops.
6. Confectioner use,, and to make sweets in the wedding.
7. The carpenter makes and in the wedding.
8. Kulhar is made of and beneficial for.....
9. Farmer gives us, and and then confectioner makes sweets.
10. Cleaner keeps the..... and clean which helps in maintaining beauty of the house.

➤ Write True/False-

1. Band musician stitches clothes for wedding. ()
2. Farmers grow grains from which confectioners are able to prepare sweets. ()
3. Kulhar is made of plastic and it is harmful for the environment. ()

4. The electrician manages the lighting and sound system at wedding. ()

5. Every person's work depends on the work of other person. ()

➤ **Match the following -**

Column A

Confectioner

Farmer

Carpenter

Cattle rearer

Column B

Make wedding canopy (Mandap) and decoration

Makes sweets in wedding

One who keeps animals

Provides cereals and pulses

➤ **Put the following tasks in the correct category-**

Sewing clothes, growing grains, cleaning, making sweets, making pottery, wedding canopy (mandap) making, arranging electricity.

Business	Work/ Name
One who does stitching	
One who does farming	
One who does cleaning	
One who makes sweets	
One who makes pottery	
One who arrange furniture	
One who arranges electricity	



➤ **Make a list-**

1. Name five traditional workers involved in weddings.
2. Write three benefits of 'kulhar'.
3. Write the names of four main dishes prepared in a traditional wedding ceremony.
4. Mention two measures to be taken for environmental protection.

➤ **Answer in three to four sentences -**

1. A wedding or any social event takes place with the cooperation of the whole community. Write four sentences on this topic.
2. Write the differences between 'kulhar' and a plastic glass based on an environmental usefulness.
3. Write the names of traditional dishes prepared in weddings and tell briefly about them.
4. Write about our duties in maintaining cleanliness.

➤ **Think before answer -**

1. What problem can arise if the cleaner does not come to wedding?
2. If the farmer does not grow grains, how will it affect wedding food?
3. If there is no one to do the electric work what difficulties will arise in wedding?
4. What will confectioner do if he does not get milk, sugar, pulses and grains to make sweets?



- 
5. If people do not help each other, how will the wedding event be affected?

➤ **Project work-**

1. **Group discussion-** Why can't people do their work without each other? Discuss the topic in the class.
2. Draw pictures of different professions and show the mutual cooperation among them.
3. **Survey-** Talk to different professionals in your area and collect information about their work.
4. **Exhibition-** Make a list of traditional wedding dishes made in your area and organize an exhibition in the class.
5. **Chart Making-** Make a chart to show what all professions involved in a wedding ceremony and how they depend on each other.
6. Many people help us in our daily life. Write about the times when you felt someone's kindness toward you.

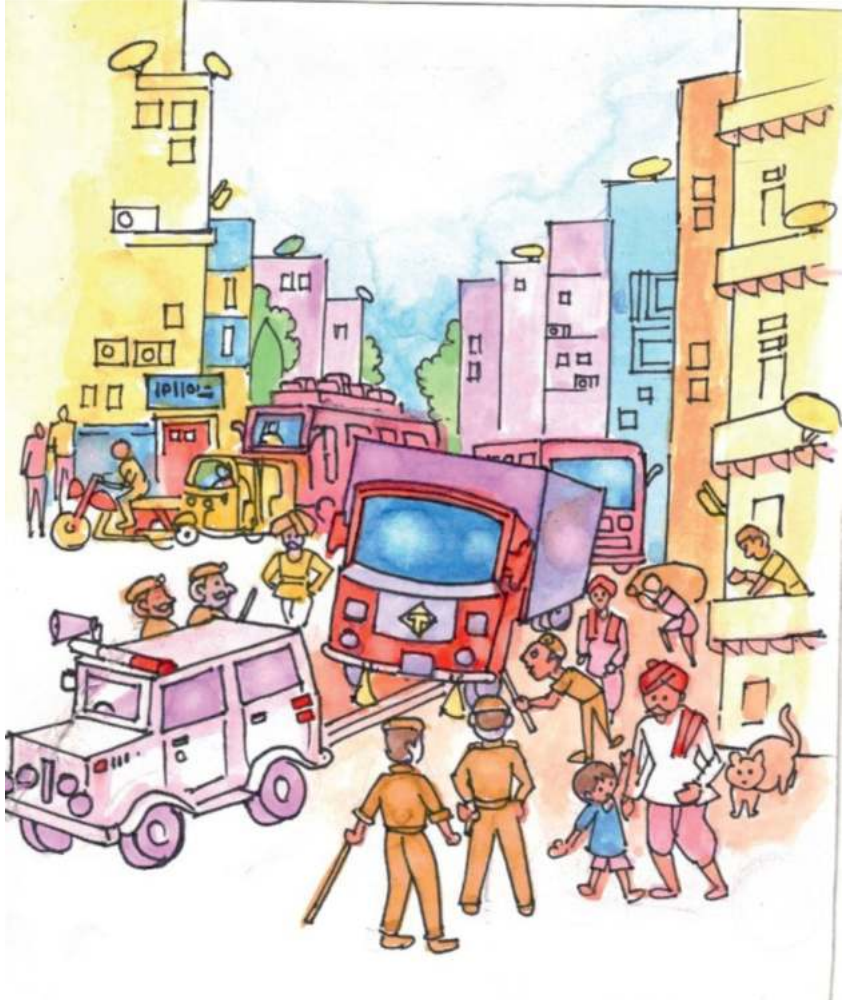


Lesson - 4

Means of Transport and Communication



One day Rohit and his younger sister Preeti were returning home from school. Suddenly they saw there was a huge traffic jam on the road. Vehicles were honking, cyclists were looking for a passage and pedestrians were also looking troubled. They started wondering why there was a traffic jam.



Then they saw that a broken truck was standing in the middle of the road, blocking the entire traffic. Some people were making phone calls, some were looking around anxiously. Rohit and Preeti thought, if there were traffic light and proper traffic management at this crossroad, then perhaps this jam would not have happened.

Means of Transport

Traffic is a part of transportation. Tell us about the means of transportation available around you-

Name of modes of transport around you	Type of transport two-wheeler, three, four wheeler	The type of fuel used
Bicycle	Two-Wheeler	None



Bhaiya, I like motorcycle very much and what do you like?



Preeti, I enjoy moving around in a boat, I also feel the cool breeze.

Do you also like any mode of transport like Rohit and Preeti? Draw a picture of your favourite mode of transport below and also write down why you like it.





Exercise 1 :

Write the name, function and uses of the means of transport in the table.

The means of transport	Function	In which situation it is used
Motor cycle	A ride for two people	To cover short distance

Main types of transportation are-

1. Land transport such as road and rail transport
2. Water transport such as ships
3. Air transport such as airplanes

Means of communication-

Rohit and his younger sister Preeti went to spend their summer holidays with their grandparents in the village. One day, there was a sudden power cut in the village and their mobiles were also not working due to network problem. Grandmother told them how people used to contact each other in olden times. Preeti asked in surprise, 'how did people send message?'

Fill the information in the following table by asking your parents, grandparents or elders :-





Means of Communication	Use in olden times	Use in present times
Postal service	To send letters	To send letters/documents
Telephone and Mobile		
Internet		
Radio and Television		

Now you can understand how means of communication have changed over a period of time and why they have an integral part in our lives.

Just as transport is necessary for our movement, similarly, communication is also important for conveying our messages. Earlier, people used pigeons and letters but today we can contact anyone in a moment through mobile, internet and telephone.

In olden days, postal service was the main medium of communication. Today, telephone and mobile make quick conversations possible. Internet is a modern and fast means of communication, whereas radio and television provide information and news.

Towards a solution- When Rohit and Preeti reached home, they narrated the whole incident to their parents. Their father explained that if people follow traffic rules and maintain discipline on the road, such traffic jams can be avoided. He also told them that proper use of mobile phones and internet can keep us safer and more informed.

Next day, Rohit and Preeti narrated this incident to their friends at school and made them take an oath to use the means of transport and communication properly.



Precautions-

To use the means of transport and communication properly, we must follow some precautions-

- ❑ **Road Safety-** Understand the proper meaning of traffic lights (Red, Green and Yellow) and follow the rules.
- ❑ **Use of safety equipments-** Always wear seat belt and helmet while driving.
- ❑ **Controlled Speed-** Driving at high speed can be dangerous, therefore, always maintain a controlled speed.
- ❑ **Proper use of Mobile-** Don't use mobile phone while driving as it may cause an accident.
- ❑ **Internet Safety-** Don't share your personal information with strangers online.

Proper use of means of transport and communication makes our life convenient and safe. If we follow all the rules and take precautions, we can be not only responsible for ourselves but also responsible citizens of society.

Let's us discussion-

- What would happen, if there were no means of transport and communication?
- According to you, how can awareness regarding traffic rules be increased at schools and at home?

“Transportation and Communication are the identity of life, without them our journey is incomplete.”

Incident-1 : Vivek and Monu are good friends. Both play in the



park after school. One day Monu brought his new bicycle. Vivek asked Monu for the bicycle but Monu refused. Vivek felt very bad. He thought “Monu is no longer my true friend. He has become selfish.”

Thinking this, Vivek gets angry and stops talking to Monu.

Let’s see what happened to Vivek?

Incident	Idea/Thoughts	Emotion	Behaviour
Monu’s refusal to give the bicycle	Monu is no longer my true friend. He has become selfish	Anger, Sadness	Stopped talking

If Vivek sees this incident from Monu’s perspective, what can change in his feelings and behaviour?

Incident	Idea/Thoughts	Emotion	Behaviour
Monu’s refusal to give the bicycle	Perhaps Monu is scared about his new bicycle that it might get damage		

Similarly, how thoughts can change in the situation given below and how it affects our behaviour :

Incident-2 : Preeti takes a bus to go to school daily. One day, when she boarded the bus, she did not find a place to sit. She started thinking, “I have to stand all the time. Nobody cares about me.” She got irritated and fought with her friends as soon as she reached the school. The whole day she was getting angry over





something or the other.

Incident	Idea/Thoughts	Emotion	Behaviour
Not getting a seat on the bus	I have to stand all the time nobody cares about me	Irritation, anger, sadness	Irritation, fight

Let's help Preeti so that she can change her thoughts and emotions-

Incident	Idea/Thoughts	Emotion	Behaviour
Not getting a seat on the bus			



Practice work

- **Match the following modes of transport with their correct description-**

Types of Transport

Road Transport

Rail Transport

Water Transport

Air Transport

Description

Suitable for transporting heavy goods.

Cheap and useful for long distance travel.

Bus, car, bicycle and scooter are its main means of transport.

Fastest mode of travel.

- **Match the following means of communication with their correct uses -**

Column A

Postal Service

Telephone and Mobile

Internet

Radio and Television

Column B

In olden times, it was the most important means of sending letters.

It is used to contact to someone immediately

It is used to get news and information.

It is the fastest means of communication in the modern world.

➤ **Choose the correct option-**

- (i) Which of the following is an example of water transport?
(a) Bus (b) Ship (c) Train (d) Car ()
- (ii) What is necessary for safe driving on the road?
(a) Follow the traffic rules
(b) Drive vehicles at high speed
(c) Driving without a helmet
(d) Driving vehicles while talking on a mobile phone ()

➤ **Fill in the blanks-**

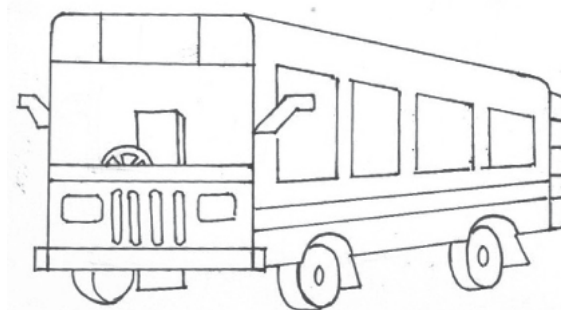
- (i) A boat is an example oftransport.
(ii)is the fastest means of communication.
(iii) We should wear.....while driving a two-wheeler.

➤ **Give short answer-**

- (i) What can we do to reduce traffic jams?
(ii) What measures should be taken for the safe use of Internet?

- Form two groups in the class, one group should present a short play on “Follow Traffic Rules” and the other group should make a poster on “Proper use of communication means”.

➤ **Colour the following picture-**



We Learn and Understand - I



(A) Oral Questions -

(To be asked by the teacher from the students and to be assessed using individual / group checklist as per requirement)

- Which dishes are prepared in Rajasthan on Sheetla Saptami? what is the relation of these dishes with health?
- When and where is “Gair” dance performed in Rajasthan?
- What traditional dishes are prepared in your family?
- Discuss with your grandparents or parents about the festivals celebrated in your area and tell them in your class.
- Is stale food is prepared in your house on Sheetala Saptami?
- Name the birds commonly seen in your area and describe their characteristics.
- Which are the main means of transport and communication that have been used in Rajasthan from ancient times till today?

(B) Written Assesment-

1. Choose the correct answer-

1. What kind of food is eaten on Sheetala Saptami?
(a) Hot Food (b) Stale Food
(c) Junk food (d) All of above





2. On which occasion is “Gair” dance mainly performed in Rajasthan?
(a) Diwali (b) Holi
(c) Rakshabandhan (d) Teej
3. What is the main dish in “Basoda thali”?
(a) Bajra Roti (b) Samosa
(c) Paneer Tikka (d) Pasta
4. Which bird is famous for its sweet voice?
(a) Peacock (b) Parrot
(c) Cuckoo (d) Vulture
5. Which bird is called the National Bird of India?
(a) Parrot (b) Peacock
(c) Pigeon (d) Vulture
6. What type of food does a heron eat?
(a) Grains (b) Non –Vegetarian
(c) Only Fruits (d) Flower nectar
7. Which of the following is not a means of transport?
(a) Camel cart (b) Bicycle
(c) Mobile Phone (d) Bus

2. Fill in the blanks –

1. On Sheela Saptami in Rajasthan, people eat food.
2. Millet is grown in Season.



- 
3. Traditional foods of Rajasthan, mainly include and
 4. In 'Gair' Dance, men dance by playing
 5. A Peacock's feathers are of colours.
 6. A confectioner (Halwai) needs to make sweets.
 7. The farmer provides, and
 8. is the main means of transport in rural areas of Rajasthan.
 9. is a modern means of communication through which we can also make video calls.
 10. In the old communication system, was used to send messages.

3. Write True / False –

1. Sheetla Saptami is celebrated only in Rajasthan. ()
2. 'Gair' dance is performed only by women. ()
3. In Olden times refrigerator was used to keep the food cool. ()
4. Bajra Roti and Jaggery are beneficial for the body. ()
5. Heron flies at night. ()
6. Many types of birds are found in Rajasthan. ()
7. A parrot can immitate human voice. ()
8. Metro trains are available at all places in Rajasthan. ()



- 
9. Postal service is still a major means of sending letters. ()
10. Following traffic rules reduces accidents. ()

4. Match the following -

Column 'A'

Millet (Bajra)

Curd

Peacock

Parrot

Confectioner (Halwai)

Farmer

Airplane

Camel Cart

Column 'B'

Kharif Crops

Good for digestion

imitation of human voice

Beautiful wings

Provides grains and milk

Making sweets

Desert area

Air travel

5. Write the answer in two or three lines (20-30 Words)-

1. Which dishes are included in 'Basoda Thali' ?
2. Why is there a tradition of eating stale food on Sheetla Saptami?
3. What are the main Rabi and Kharif crops grown in Rajasthan?
4. Which traditional dishes are prepared in your family during festivals?
5. Why is the number of vultures decreasing?
6. Which are the main birds found in Rajasthan?



- 
7. How does the work of a farmer affect other businesses in the village?
 8. What problems can arise if traffic rules are not followed?
 9. What is the importance of means of transport and communication in our lives?

(C) Do it yourself –

1. Collect information on any major festival celebrated in your village/town.
2. Which traditional dishes are prepared on this festival?
3. What are the major Rabi and Kharif crops grown in Rajasthan?
4. Compare the crops grown in Rajasthan and its neighbouring states.
5. Write the health benefits of your favourite dishes.
6. Make a chart on nutrients present in a balanced diet.
7. Ask your grandparents about the foods eaten in their times.
8. Write the names of birds found in your village or locality and describe them.
9. Ask any elderly person in your village about the birds found commonly in their childhood and the birds seen less now ?
10. Collect information from your grandparents or any elderly person about the means of transport and communication used in their time and share it in the class.



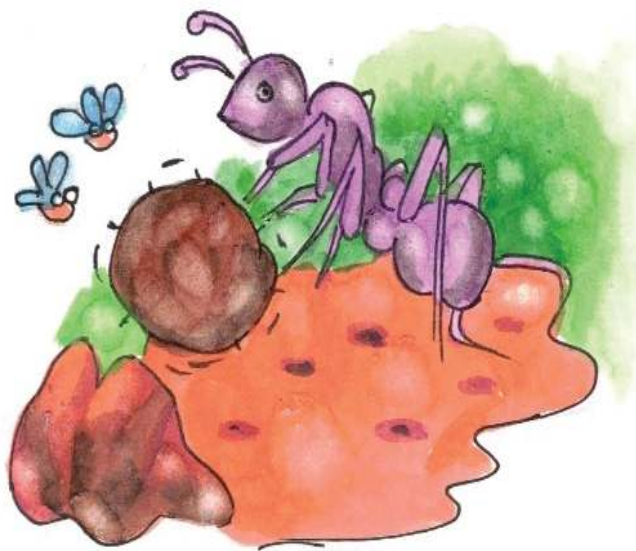
Lesson - 5

Architect of Nature



Funny Sunday

It was a Sunday and the morning was very Pleasant. Pranay was walking in the fields with his father Kailash. The chirping of many birds was heard from the bushes. Pranay was very excited because he always enjoyed exploring and learning new things.

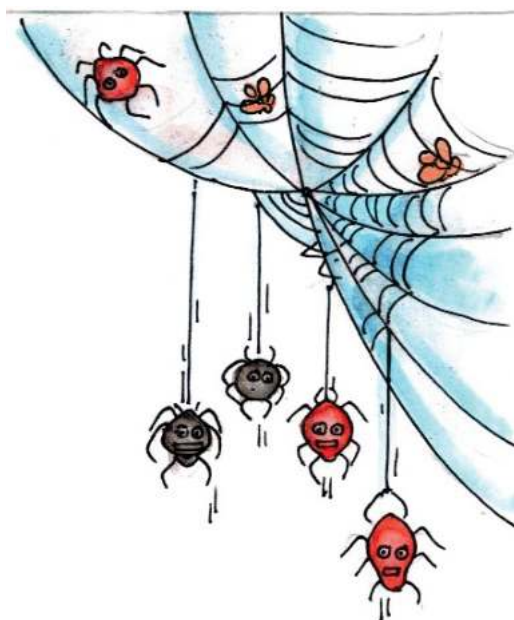


Pranay curiously asked his father– “Papa, where do birds and animals live? Do they also have homes?”

His father smiled and replied– Yes, animals and small creatures make their own homes.

Pranay thought and said, “Yes, but do they use bricks, wood and cement to build houses like we do?”

Father- No, they use





whatever material they find around to build their houses. Come lets walk around the fields and see which creatures build their houses and how.

Pranay and his father reach near an old Khejri tree. There a spider was sitting in its web. As soon as Pranay saw it, he said in surprise, “Papa, what is the shining thread?” And How could it have been made .

Father, “Son, this is a spider’s web. The spider weaves it by taking out silk thread from its mouth.

Pranay, “Is this web a home for a spider?”

Father, “Yes, it is not only a home for the spider, but also a way to catch its food. when an insect / moth gets trapped in it, then the spider catches it and eats it.”

Pranay asked curiously– So does a spider always stay in the same web?

Search Activity-

- Children you should also look for spider’s webs around you and find out what kinds of webs are made by different spider? Look at a spider’s web carefully and try to make its structure.

Think and Tell-

- If the spider’s web is so strong , then why does it break ?
- Do other animals also make such webs like homes? find out.

Father– “No, many spiders make new webs from time to time.”



“Some spiders make round webs some make tunnel-like webs and some make webs with strange shapes.”

After going a little further, they stopped near a bush. There was a cocoon hanging from a branch.

Pranay surprisingly- “Papa, what is this small silken shell? I had seen something like this on the lemon plant at home too.”

Father– Son, this is a cocoon! “this is made by the caterpillar (lavva stage) of the butterflies this is their temporary shell or corner. When they mature, they transform into a beautiful butterfly.”

Pranay with surprise– ‘Oh wow! It means something is changing inside it?’

Children! Like Pranay, would you also like to see and know about things made by different kinds of animals? Come, let us search for them together in our surroundings.





Some birds lay their eggs in a nest while some on the ground. A Wood Pecker makes nest by making holes in tree trunks.

A Baya weaver bird makes a beautiful hanging nest for itself by collecting grass, leaves and straws. A Sandpiper (Titahari) makes a nest by collecting small pebbles and stones on the ground.

Activities for exploration-

Have you also seen a bird's nests around your home or in the fields? Do all birds make a similar nests? Observe bird's nests around your school, houses or in the field and collect some information.

Write your observations in the table given below—

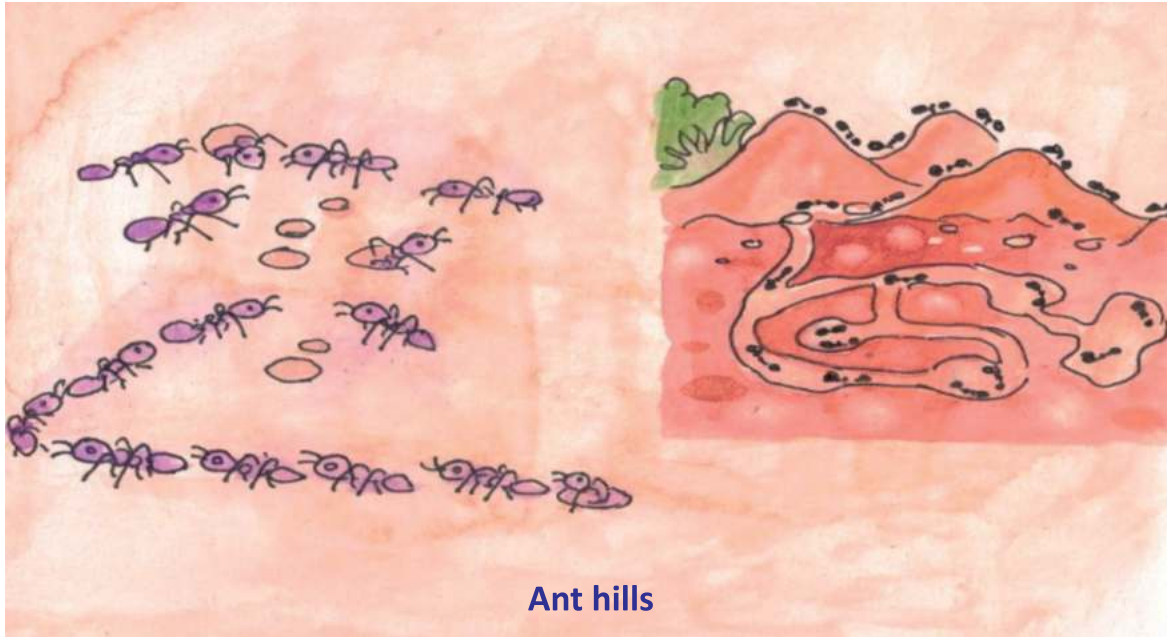
Name of Bird	How nest was built	What Material is used	Where was seen (On Tree, On Land, at Wall)

Think and Write—

- If birds do not get a place to build their nest then where will they live?
- Can you help the birds to build their nests?



Have you ever seen ant hills near your houses or school? Ants make holes in the soil and live in them where they store their food and eggs. Ant hills look simple from outside but they are divided into many branches inside.



Do you want to know other animals like ants, make burrows or dens to live in? If yes, then for that we have to carefully observe the places around school and home.

which animal's houses have you seen that are like burrows or dens in the soil? Write the names of those animals here-

- | | |
|---------|---------|
| 1. | 2. |
| 3. | 4. |

In this lesson, we learned that different kinds of creatures make houses of different shapes.

1. Spiders make webs.

- 
2. Cocoon transforms into butterfly.
 3. Ants live in Ant hills.
 4. Birds make nests.

So on this basis can we say that all these creatures are natural engineers?

Project Work-

- Are you ready to discover art works and homes made by these creatures around your home and school?
- You should observe inside your house, on the walls, around the plants, in bushes and on bare grounds and discuss about such shapes with elders and record the information in a table.

Name of the Creature (Animal)	Nest	House	Burrow	Den	Cocoon	Other

Discuss in groups and write down–

1. What is the role of different creatures in our lives?
2. What impact will the absence of animals have on the environment?





Project Work–

- Explore natural structures around your house or school.
- Present your observation in the form of written report, picture or modals.

Role of Creatures-

In this lesson, we learnt :– Insects, Reptiles are important for our environment. Let us understand this through a story.

There was a small forest and pond near the Nibhi village. In the forest Lepord, Elephant, Snake, Lizard, Tortoise and many other animals lived. A crocodile named “Makar” also lived in this forest. He was very powerful and was the leader of all reptiles. All the animals obeyed him out of fear.

One day Makar felt that the turtles are too slow and foolish, so he ordered them to leave the forest and stopped them from attending the meeting of reptiles.

The turtles left the forest. In a few days, without them, the forest began to smell of rotten fruits and dead fish.

In the next month, Makar drove away all the snakes by saying– that they looked wet and ugly. When the snakes were gone, the number of rats began to increase. One day Makar even ordered the insect eating lizards to leave the forest.

After some time, due to the absence of all these reptiles, the population of rats, frogs and insect increased a lot.

Due to their large number and the death of many animals, dirt and disease started to spread in the entire forest.



Seeing all this, Makar's understood everything.

Now Marker realized that creature in the forest has its own importance. He accepted his mistake and called all the animals back. He apologized to everyone and accepted that all animals /creatures are necessary for a happy and healthy environment.

Lets Discuss-

- Why did the crocodile not like turtles, snakes and lizards?
- What happened when the turtles, snakes and lizards left the forest?
- The healthy environment of the forest depends on all creatures. why and how ? Answer.

Practice work

➤ Choose the correct answer-

1. A sand piper makes its nest –
(a) on a tree (b) in water
(c) on the ground (d) in the wall
2. Which bird builds its nest on the ground with mud and pebbles?
(a) Sparrow (b) Sandpiper
(c) Nightingale (d) Baya weaver bird





3. What do cocoon turn into-
(a) Sandpiper (b) Butterfly
(c) Honey Bee (d) Sparrow
4. What does a spider use its web for?
(a) Catch its prey (b) to take rest
(c) to fly (d) food storage
5. Which bird makes its nest from straws and grass?
(a) Woodpecker (b) Sandpiper
(c) Baya wiver bird (d) Nightingale

➤ **Answer the following in three four sentences-**

1. How does a spider make a web?
2. How do birds make nest and how does it help them in their lives?
3. How does a woodpecker make its nest ?
4. Write about the natural habitats founds around your house or school.

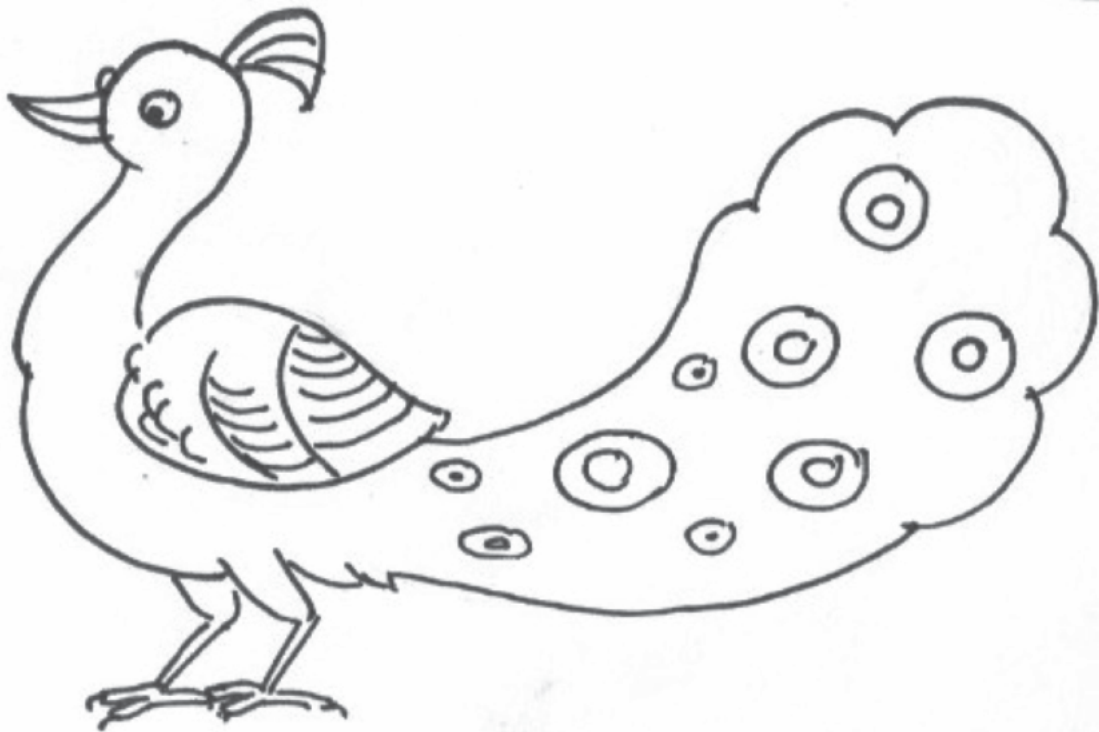
**Increase your love for animals and birds
feed them food and water daily.**





➤ **Do yourself –**

Colour the following picture.



Lesson - 6

Weather and Seasons



Travel experience

In the morning, all the children gathered in the school premises and their bus left from Mohangarh in Jaisalmer. As the bus moved ahead the children felt the hot sun and the strong hot wind. There were high sand dunes (dhoras) spread all around and there were high wind mills between them. The children looked out of the windows and said in surprise, "Such big fans! What are they for?" The teacher sitting nearby said "Children! These fans generate electricity while rotating." The dust and the sand flying in the air sometimes came inside through the windows, due to which they started rubbing their eyes. Due to the heat, everyone was feeling thirsty again and again and they were emptying their water bottles quickly. On the way, they also saw herds of camels which looked very beautiful while walking in the desert.

Travel by Train

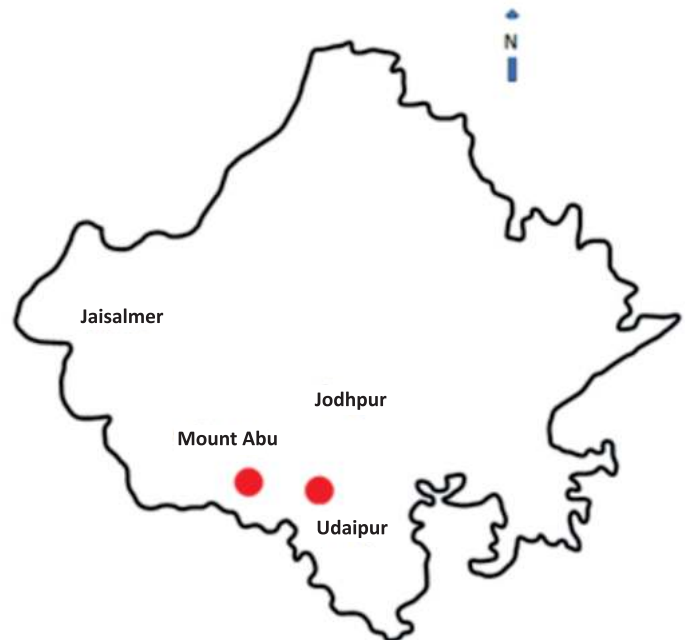
After a journey of almost one and half hour, the children reached Jaisalmer railway station and boarded the train. As the train departed from Jaisalmer, the children gradually started seeing a change in colour of the soil. Earlier only yellow and golden sand was visible now some green plants and small trees were also visible there. Looking out of the train windows, the children were experiencing how the geographical conditions were changing. As the



train moved forward and they reached near Abu Road, they felt that the weather had started getting slightly cold. As the sun set, a cool breeze started blowing due to which some children took out their shawls and sweaters. There was excitement and curiosity on everyone's face to know what kind of weather they would get in Mount Abu.

Arrival in Mount Abu

At night, the train reached Abu Road station from where the children were taken by bus towards the hills of Mount Abu. As the bus started moving towards the heights of the mountains the children felt that the air has become cooler. Some children looked out of the windows and saw lush green forests, tall trees, lakes and green hills all around. The atmosphere here was calm, moist and refreshing which was a complete contrast to the hot and dry weather of Jaisalmer. As soon as they reached their destination, some children felt a little cold and wore sweaters. Jigyasa said in surprise, "Just yesterday we were in such heat and now it is feeling cold."



The Map is not to scale

The children spent the first night of their trip in Mount Abu but the excitement of the trip was still on their minds. They decided to write their experiences of this trip in their diary so that they can



remember how they experienced two different climates and natural surroundings in a same state.



Jigyasa is asking you that –

1. Do you feel any change in the weather of your city?
2. Which cities come on the way from Jaisalmer to Mount Abu?

Activity-1

- A. How did weather change on the way from Mohangarh to Mount Abu? Discuss and write.

.....

.....

.....

.....

- B. Comparison of weather of Jaisalmer and Mount Abu.

Features	Jaisalmer (Desert Area)	Mount Abu (Mountain Region)
Temperature		
Rain		
Humidity		
Vegetation		
Lifestyle		
Outfit		
Language		



Activity-2

Colour the Map

Map of Rajasthan



The Map is not to scale

Give a blank latest map of Rajasthan to the children. In it, they should fill the desert, hilly and plain areas with different colours and write their geographical features.

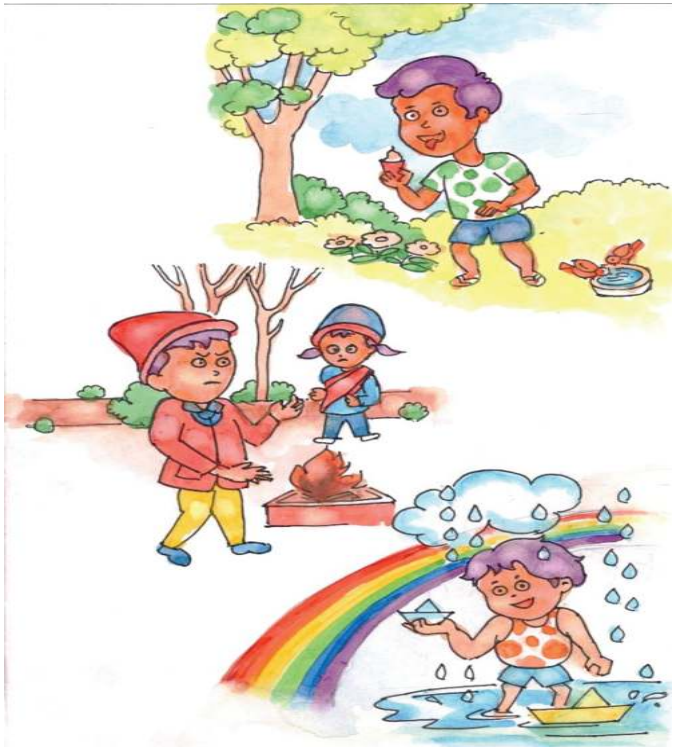
Weather

There are many types of weather like summer, winter, rainy weather. Each weather has different characteristic feature like what is the temperature, whether there are clouds or not, how much humidity is there in the air, is it dry, is the wind blowing slowly or strongly, in which direction is it blowing etc. While coming from Mohangarh to Mount Abu, you all have experienced different types of weather. The way in which weather is described is called the weather chart, which gives information about what was the weather on that day.

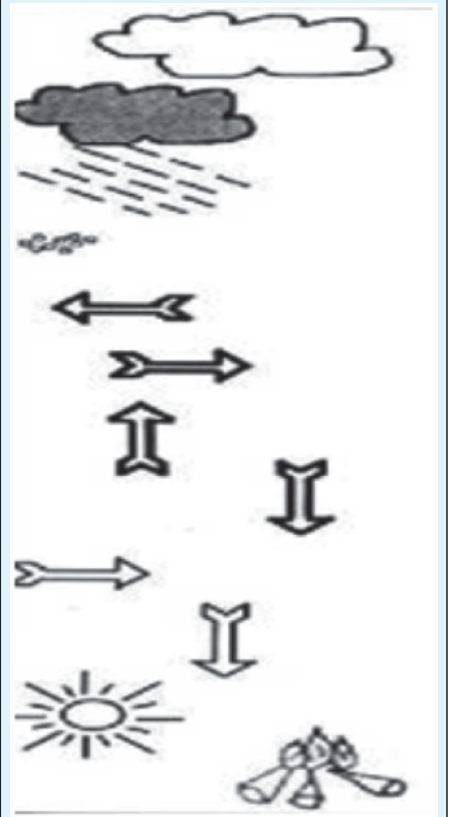
For information, we will use some symbols–

Weather Information

1. When there are white clouds in the sky.
2. When there are dark clouds
3. When it rains
4. There is dew
5. If a strong wind blows from East to West
6. From West to East



Symbols to tell the weather



7. From South to North
8. From North to South
9. If such light wind blows from West to East
10. If it moves from North to South
11. It is hot
12. It is cold

Activity-2

Here is a chart of the weather for a week. Look at the chart and tell on which day there were dark clouds and it rained and on which day there was sunshine and when did the dew fall?

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
						

Activity-3

Similarly, make a seven day weather chart in your notebook.

With the help of your teacher, divide the class into 4 groups. The first group should make a chart of the first week of the month and the second group should make a chart of the second week. Similarly, the third and the fourth group should make the charts for the third and fourth week.

Now put the charts of these four weeks together and analyze them.

In a month, how many days were cloudy, or how many days





there were strong winds blowing, how many days were hot and did the dew fall etc.

Changing Weather and its effects –

From the various aspects of weather, it is understood that weather can change everyday. Does the weather change only for a few days or remain stable for a long time? For example, there is continuous bright sunshine in summer and cold for several weeks in winter. Summer, winter and rain come at a specific time every year. When a weather lasts for a long time (2 – 3 months) then it is called a season. For example – summer from May to July.

Can you identify the change in seasons and write the characteristics of two seasons (like summer and winter). From this, we can understand that the weather is temporary and it keeps changing from time to time.

Activity-4

1. **Make 4 groups in the class and discuss–** Does the weather change in a fixed order every year (according to months) and what changes do you see?
(The teacher should encourage the children to use the calendar for this)
2. Each group should discuss and make posters about their seasons.
3. Discuss in groups and fill the following table-

Weather Information	Condition of trees and plants (like dry, green etc)	Animal Behaviour	Clothes, Food items	Festival	An Idiom or proverb
Summer					
Winter					





Rain					
Spring/ Autumn					

4. Which season do you like the most and why?

.....

.....

.....

From the above activity you can understand how the change of seasons affect our lives. Like, in summer, the days are long and the temperature is high, in winters, the sun sets early and the cold increases while in the rainy season the atmosphere become cold and humid. These changes affect our clothes, food, festival and daily activity.

Activity-5

- Impact of changing weather on those in need– How can we help them?
- What problems do the needy face in winter?
- Share your ideas and make a list (like – distributing warm clothes and warm food etc.)

Adaptation – A process according to seasons

Due to change in seasons, animals, plants and humans make many changes in their lives. This adaptation helps them to survive and remain easy, comfortable and balanced in their environment. Why and how does this change happen? Let's find out–



Adaptation and it causes

1. **Change in temperature**– This is an essential process to protect ourselves from cold in winters and to keep the body cool in summers. An example of this is sweating in summers to keep the body cool.
2. **Availability of food**– Some creatures migrate or hibernate due to lack of food in winters. For example- the domestic lizard disappears from the house as soon as winter arrives. Snakes, frogs, etc hide in burrows and in ground.
3. **Availability of water**– When there is a shortage of water in summers, some animals become less active and bring special changes in their body to save water.
4. **Reproduction and growth**– Some plants and animal reproduce only in a particular season because that time is favourable for them.
5. **Livelihood and lifestyle**– Human beings also change their clothing, food habits and daily activities according to the weather.

Adaptation of organisms according to different seasons–

Season	Adaptation of living organisms	Adaptation of plants	Measures to protect humans during seasons
Summer (Hot Season)	● A camel stores food as fat in its hump so that it does not need water for a long time.	● Cactus saves water by converting its leaves into thorns.	● Wear light and cotton clothes. ● Drink cold drinks and eat fresh fruits.



	● Dogs and wolves keep their bodies cool by sticking out their tongue. ● Some organisms (like snails, frogs) go into hibernation.	● Fruits like Mango and Litchi ripe in summers.	● Avoid going out in the afternoon.
Winter (Cold Season)	● Polar bears and penguins have a thick layer of fat under their skin that protects them from the cold. ● Bears snakes and squirrels go into hibernation. ● Some birds (like Siberian Crane) migrate to warmer countries.	● Trees like Cedar and Pines are evergreen and do not shed their leaves. ● Some trees (like Gulmohar) shed their leaves in winter to save water.	● Wear woolen clothes. ● Eat hot food and oily things. ● Use bon fires and heaters.
Rainy Season	● Frogs and earth worms become more active when humidity increases. ● Mosquitoes and insects breed rapidly in this season. ● Ducks and water birds can easily survive in water due to their waterproof feathers.	● Crops like paddy and sugarcane grow rapidly in rains. ● Moss and mold are more common on wet surfaces.	● Use umbrellas and rain coats. ● Avoid wet places. ● Like hot and dry food.

Thus, adaptation according to seasonal changes is very important for the survival of organisms.





Activity-6

Effects of weather- Heatwaves (Loo), protection from cold and disaster management.

If you were a doctor...

- What precautions should be taken to stay healthy in summer, winter and rainy Season?
- Ask them to make cards with problem (heat wave, cold, heavy rain and protection from them) on one side and the solution on the other side.

Overall, it can be understood that weather, seasons and climate are caused by the Earth's rotation around the Sun as well as the Earth's tilt on its axis. Weather patterns are caused by the Sun and long term averages of weather patterns create climate zone across the Earth. Average regional climates together make up the Earth's climate. Changes in the Earth's rotation or axial tilt affect weather patterns.

Now in your next classes you can discuss this question with your teacher, "What will happen if the seasons never change for a very long time and what will human life be like?"

1. What effect does your behaviour have on the people around you? In the table given below write down which of your behaviours brings your loved ones closer to you and which takes them away. How does it affect you and your loved ones?



Behaviour	My Siblings (Brother-Sister)	My Friends	With Oneself
Behaviour that takes you closer			
Behaviour that takes you away			

2. Similarly, think and write about how your behaviour affects the weather, air and water.

Behaviour	Weather	Water	Air
Behaviour that puts good impression			
Behaviour that puts bad impression			

1. Discuss and share the information in the class –

- How do we recognize the changes in weather? Give some examples.
- Write down the characteristics of summer and winter. Compare the two and share your experiences related to them in the class.

2. Write your experience

- What is difficult about playing outside during the afternoon in summer?
- Observe the plants in school and discuss the changes in them according to the seasons.



Practice Work

➤ Guess the correct answer –

1. What is the climate of Jaisalmer?
(a) Cold and moist (b) Hot and dry
(c) Very cold (d) It always rains
2. How was the weather in Mount Abu?
(a) Hot and dry (b) Cold and moist
(c) Very hot (d) Desert
3. How can changes in weather be observed?
(a) From clothes (b) From clouds and wind
(c) From food habits (d) From behaviour
4. How many main seasons are there in India?
(a) Three (b) Four (c) Five (d) Six

➤ Mark Right (✓) or Wrong (x) –

1. The weather remains the same throughout the year. ()
2. The air is dry in the rainy season. ()
3. In summers, the days are long and nights are short. ()
4. Mount Abu has a desert climate. ()

➤ Answer in three to four sentences –

1. What is the difference between weather and season?
2. What kind of change in weather did the children feel during their journey from Jaisalmer to Mount Abu?

- 
3. What effect does seasonal change have on plants and animals? Can you share some experiences?

➤ **Answer in ten to twelve sentences –**

1. What is the effect of different seasons of India on our lives? Share your experience
2. Is the unusual changes in seasons a cause of concern? Answer with reason
3. Draw a picture of your favourite season and show the activities you like to do in that season. Like eating ice-cream in summer, sitting in the warm sun in winter and making paper boats in the rainy season.
4. "If you had to go anywhere for a day in winter, summer or rainy season, where would you like to go?" Discuss this in the class.

➤ **Project work-**

1. Find out which fruits and vegetables are available in which season and why?
2. Observe animals living in different environments and their adaptive abilities and write them here.
 - a. Discuss with your teacher and write-

Discuss animals that live in different environments (eg. camels, polar bear, crocodiles) and how they adapt to their environments.





Animal	Environment	Adaptation Characteristics
Camel	Desert	
Polar Bear	Ice Region (Arctic)	
Crocodile	Water Area (Rivers, Swamps)	
Monkey	Forest (Trees)	
Fish	Water (River, Sea)	
Deer	Grasslands	
Elephant	Forest	
Whale Fish	Sea	



Lesson - 7

Experiment with Water



Discovery of Vikas and Vishwaas

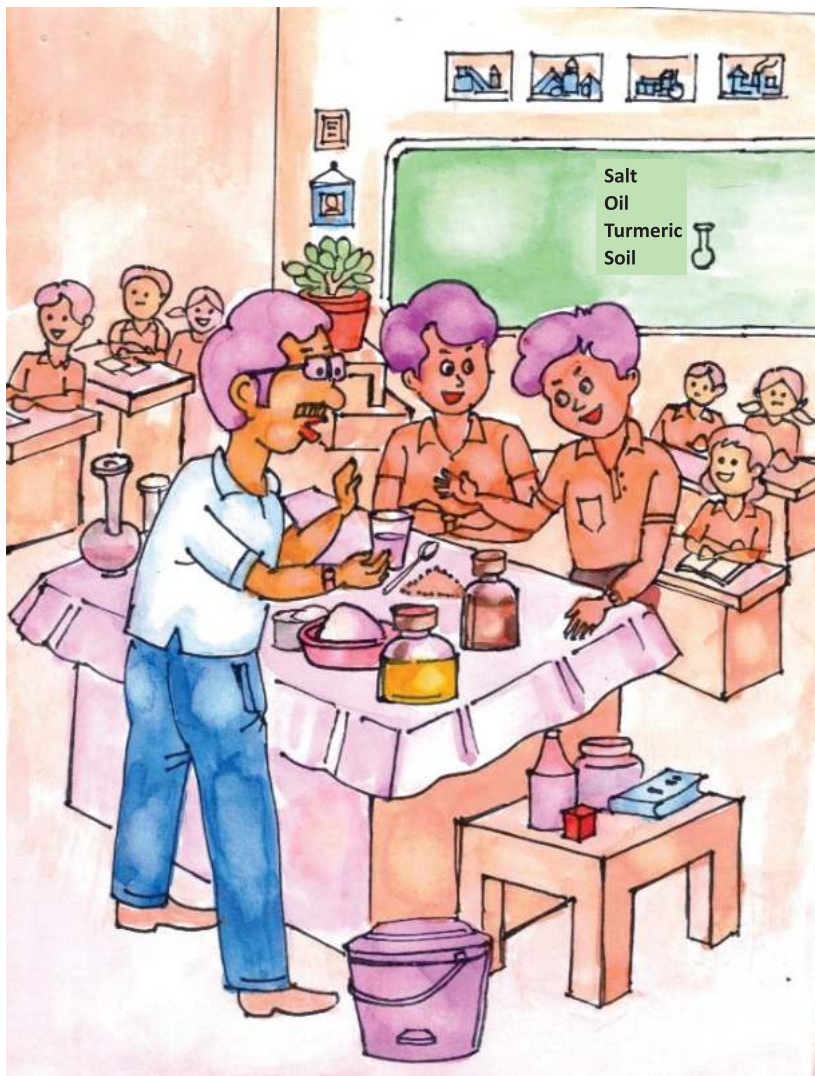
Teacher : Children, today we will learn about some interesting facts about water. Do you know that some substances dissolve in water and some do not?

Vikas (curiously) : Yes sir, when mummy mixes sugar in milk, it dissolves.

Vishwaas : Salt also dissolves in water. When I mixed turmeric in water, it also dissolved.

Teacher : Absolutely right! Substances that dissolve completely in water are called soluble substances and those that do not dissolve are called insoluble substances. Let's understand this-

Experiment 1 : What will dissolve and what will not?



Material :

- One glass of water
- One teaspoon of salt
- One teaspoon of sugar
- One teaspoon turmeric
- One teaspoon soil
- One teaspoon oil

Method :

1. Take water in a glass.
2. First add salt in it and mix it with a spoon.
3. Then add sugar and mix it.
4. Add soil and oil and see what happens.

Result :

- Salt and sugar dissolved completely in the water.
- Soil settled down at the bottom.
- Oil started floating on the surface of the water.

Activity-

Material	Dissolved in water or not	What happened after keeping it for two minutes?
Salt		
Sugar		
Chalk powder		
One spoonful of milk		
Soil		
Oil		

Experiment 2 : Which substance dissolve quickly?

On Sunday, Vikas younger brother Vishwaas came to his house to play. As soon as he arrived, he asked his Chaachi to make his favourite "Shakkarpara" (a dessert). Chachi said, "I will make it for you after coming back from the market. Why don't you help me in the meantime, by taking two glasses of water and adding to it one bowl of sugar. Mix it till it dissolves."

Vishwaas thought, "Let me finish this work quickly. Then I will watch TV."

Can you suggest some ways to Vishwaas to dissolve the sugar quickly? Discuss.

Material :

- One glass of cold water
- One glass of hot water
- One teaspoon of salt
- One teaspoon of sugar
- Stopwatch



Method :

1. Put salt in a glass of water and mix it.
2. Add sugar to another glass of water and mix it.
3. Note which substance dissolves faster.

Result :

- Sugar dissolves faster than salt.
- The temperature of the water affects the speed of dissolution.

Experiment 3 : What floats, what sinks?

Vikas was going to take a bath at home when suddenly the soap dish along with the soap fell into the water. But what he saw was that the soap drowned in the water and the soap dish started floating on the water. He started thinking why does this happen?

Material :

- Potato, wood, iron, plastic bottle, spoon, pebbles.

Method :

1. Add the items one by one into a vessel filled with water.
2. Note which objects sink and which objects float on water.

Result :

- Wood and plastic floats
- Iron and pebbles sink.

The names of some objects are given below. In your experience, which objects float on water? Circle them.

Ladyfinger

Pebbles

Piece of wood

Water melon

Poem

Some things float,
Some things sink.
A wooden boat floats
merrily in water.
An iron ship also floats,
but does not sink even
if it is heavy.
A needle is light, like a leaf,
sinks straight in water.
A soap dish floats but does not
sink even with the soap.
Think why this happens,
what secret is hidden in this?



Potato

Pencil

Plastic Bottle

Iron nail

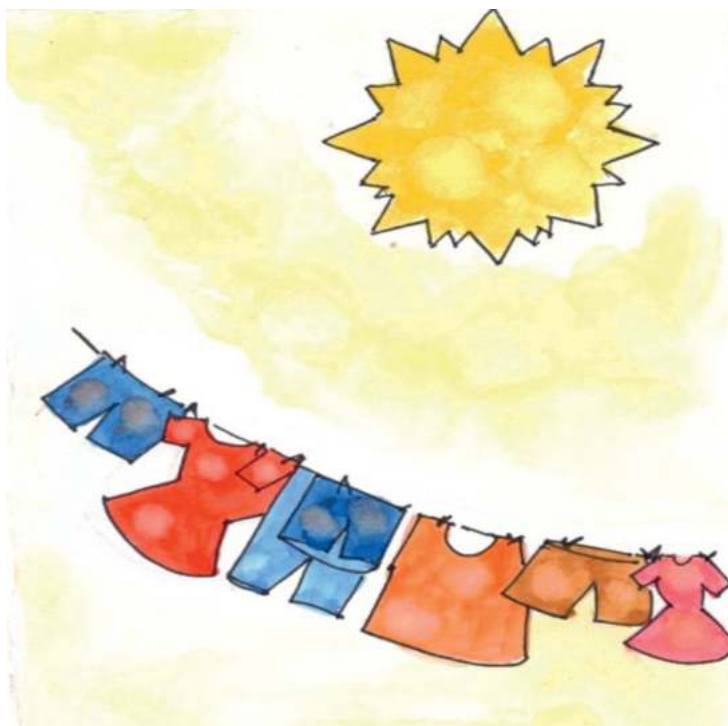
Leaves

Paper

Experiment 4 : The secret of Evaporation

Where did the water go?

One day in the morning, Chanchal's mother washed the clothes and dried them. After an hour, her mother called out to bring the clothes inside if they were dry. When Chanchal went to see all the clothes had dried. She was quite surprised that just a while ago, all the clothes were wet and now they were dry. After all, where did all this water go? This question was bothering her a lot.



Where do you think the water went?

Experiment and find out –

Take three identical glass jars, pour equal amount of water in all of them. Now cover the mouth of one of them with a transparent plastic bag or layer as shown in the picture and tie it with a thread. Cover one completely with a lid





and keep the other open.

Now keep these three vessels in open sunlight and observe them every once in a while.

Material :

- Water
- Glass jars

Method

1. Pour water in the jar and keep it in the sun.
2. After some time, observe that the water level has reduced.

Result :

- The water evaporates due to heat.
- Due to this reason, the wet clothes get dry.

Questions for Discussion –

- Is the amount of water left in the three jars is of the same quantity?
- Are some drops of water visible on the plastic layer covered on a jar? If yes or no, then why did this happen? Tell.
- Is the water in the jars slowly evaporating into the air?

Experiment 5 : Sambhar Lake and Salt production.

Do you know how salt is made from Sambhar Lake in Rajasthan?

1. Water is filled in the beds and dried in the sun.
2. The water evaporates and the salt remains.





3. This salt is collected and sold in the market.

Vishwaas : Today, I got to learn so many things.

Vikas : Yes, now we will do even more interesting experiments.

Teacher : Connect science with your life and keep learning.

Practice work

➤ Fill in the blanks-

- An Iron nail..... in water.
- A wooden boatin the water.
- When the soap falls into the water it.....
- Turmeric..... in water.

➤ State True/False

- A plastic soap dish sinks in water.
- The cap of a plastic bottle floats in water.

- 
- c. An Iron nail floats in water.
 - d. Sugar dissolves completely in water.
 - e. In summers, the water level in ponds decreases due to evaporation.

➤ **Match**

Object	Will Float / Sink
Piece of wood	Float
Iron pin	Sink
Plastic bottle	Float
Potato	Sink
Soap dish (plastic)	Float

➤ **Classify the following substances into two categories– ‘Soluble’ and ‘Insoluble’**

Sugar, Salt, Soil, Oil, Sawdust, Chalk powder, Milk.

Soluble in water	Insoluble in water

➤ **Make a List –**

- a. Five objects that float in water.





- b. Five substances which dissolve in water.
- c. Five objects that sink in water.

➤ **Answer the following –**

- a. If a soap dish can float in water, then will a soap dish filled with a soap also float in water? Explain your answer.
- b. Why does a steel plate float in water but a steel nail sink?
- c. A piece of wood floats in water but a piece of iron sinks. Why does this happen?

➤ **Do Yourself-**

(a) Experiment-

- Put different objects in water and see whether they float or sink. Write your observations in a table.
- Dissolve different substances (sugar, salt, soil, oil, turmeric) in water and see what dissolves and what does not?

(b) Environmental study-

- Why does the water level of ponds decrease in summer? Discuss its reasons.
- Find places around your house where water evaporates and dries up. Explain its reasons.

(c) Observe-

- Look at the process of a cloth getting wet and then drying and note down the changes that take place in it.
- Observe the objects floating in a river or a pond and then write down which objects sink and which objects floats in water.



Chapter - 8

We will not let the trees be cut down



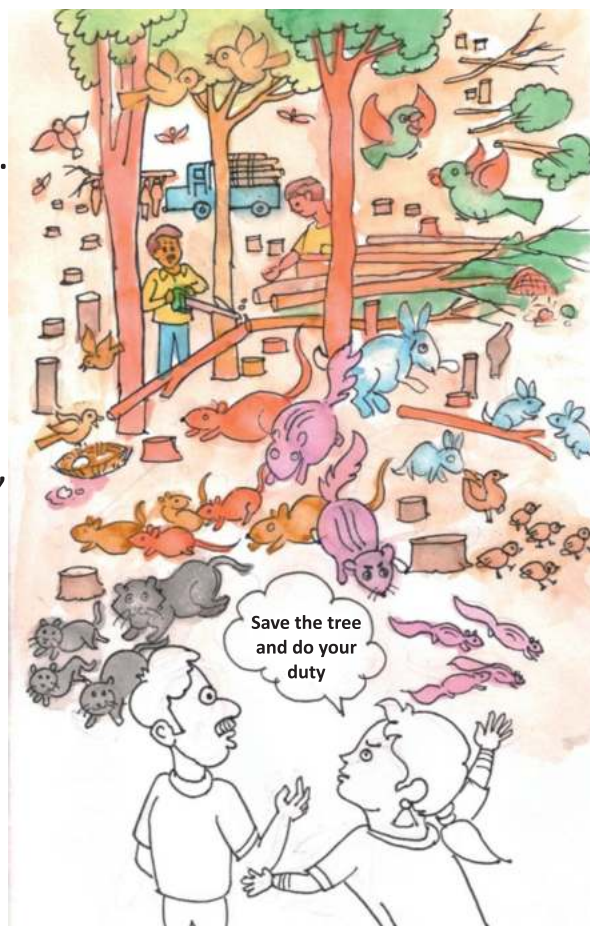
"Two hundred trees were cut down
in the forest,
And hundreds of families were displaced.
A piece of terrible news came,
A fresh newspaper in the forest.

Seeing the newspaper,
The bear made an announcement.
Listen carefully to this news of the forest,
Listen, everyone, gentlemen.

Human oppression has greatly increased
Over the entire forest.
So many families were displaced
Just by cutting down green trees.

What will happen to those families,
Who have small children in their homes?
Many nests have fallen,
Some were sturdy, and some were fragile.

If this continues,
Where will we go after leaving the forest?
Slowly, gradually increasing,
The city will come up to here."



-Dr. Surendra Vikram



Let's discuss -

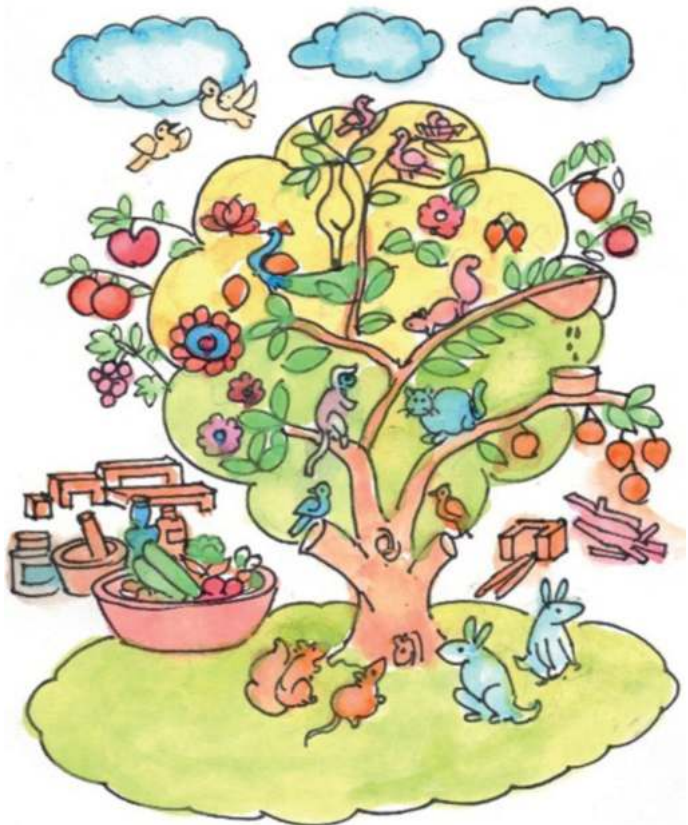
1. What thoughts and feelings came to your mind after seeing this picture?
2. Why are forests being cut down?
3. Why is it written, "So many families were displaced just by cutting down green trees?" Present your views in its favour.
4. How does deforestation impact the environment, human life, and wild animals?
5. What steps can we take to solve this problem?

Trees and plants are an integral part of our lives. Their importance is not limited to the products we get from them. You must have studied in previous classes that trees and plants also have life and can feel sensations. Have you ever thought about how our lives would be if there were no trees and plants around us?

We often see trees only as resources, but are we learning to live in coexistence with them?

What does the Khejarli movement teach us?

People did not even care about their lives to protect the trees there.





To maintain the balance of nature, we must maintain a sense of balance and respect for every natural element - forest, water, air, and soil. What can we do to take care of the trees and plants around us? Think and tell.

Let's understand the role of trees and plants in our lives in more depth.

Activity - 1 : Project Work - Study of Regional Trees

Find out which trees and plants are found in the largest quantity in your area and why? Tell us.

Phase 1 : Information Collection-

Task 1 : Look at different trees within a distance of approximately 500 meters from your home and make a list of these trees in your notebook. Also, mention the number of each tree.

Name of Tree	Number	Use	Suitable conditions for growing it
Neem	10	Medicinal use	Dry area

Task 2 : Complete this table based on the products obtained from trees and plants-





Name of Tree	Fruits and Vegetables	Fodder	Fuel-Wood, Oil	Building Materials	Furniture	Flowers	Some Others (Write their names)
Mango	✓		✓	✓			
Neem							

Step 2 : Group Work-

For the teacher- Divide the children into groups (5-6 children in each group).

Ask each group to give a summary of the information collected by its members.

Children can exchange information and ask each other the names of unknown trees.

After this, help them to prepare a summary of all the information as a whole class by combining the information from each group.

Step 3 : Analysis of Received Information - Group Presentation

For Group 1- Present the received information in the form of a graph, including the trees that are found in the largest numbers. Present a graph of such top 10 trees based on their numbers as a whole class.





For Group 2- Make and display the table given above on a chart collectively in the class. You can make such pictures in some trees from which more than one item is obtained.

Each group can present their ideas in an organized form by writing them on a chart.

Practice 1 : Plant Care and Conservation-

We have discussed a lot about the products obtained from trees and plants. Let's also find out how we think about their care and safety.

Discuss in groups and write-

1. What methods are used in your village to take care of plants?
2. How are new plants grown, and how are they taken care of?

For the teacher- Discuss the understanding, facts and ideas from all the groups of the class in a large group and help all the children to write them down individually.

Practice 2 : Experimental Work-

- Each group plants a sapling.
- Every group should name their plant like a friend.
- Carefully observe the changes taking place in this plant for the next 6 months and write them down in the notebook.

Think and tell-

- Has it got new leaves?
- Is the soil around it wet or dry?
- Do insects come to it?



- Take care of it and do weekly observations.

Name of Tree	
Seed or Plant	
Planting Date	
Place	

Date of Care/ Observation	Plant Formation Process	Method of Plant Care	Type of Leaf	Flower/ Fruit/ Vegetable	Surrounding Insects	My Feelings About the Plant

Practice 3 : Experimental Work-

An important aspect of caring for nature is also finding a solution to the problem of increasing waste.

Let's develop an understanding of it.

1. Understand the waste coming out of your school-
 - Make two small pits in a raw area of your school.
 - Put organic waste (banana peels) in one pit and plastic waste (chips/savory packets) in the other.
 - Dig up these pits after 20 days and see.
 - What happened to the banana or vegetable peels?
 - What happened to the chips packets?





Why did this happen? Have you ever thought where does the plastic bag or bottle goes when we throw it away? Plastic is a very specific substance. It does not spoil quickly, but this is also its biggest problem. Banana peels and leaves mix with the soil in a few weeks, but it takes hundreds of years for plastic to decompose.

Some plastics are used only once and thrown away. Such as: Plastic bags, water bottles, straws and spoons etc., are called 'single-use' plastic.

The problem is that these things are useful to us for only a few minutes, but their waste remains on the earth for hundreds of years. When plastic lies in the garbage or flows in the drains, it pollutes the soil, water and air. Animals get sick by accidentally eating it.

If this problem is so big, then what can we do about it?

1. In which tasks do we use things made of plastic?
2. What are the things around us that are made of plastic and are thrown away after one use?
3. Which of these things can be replaced with paper or cloth items?

Long-term use plastic items	Single-use plastic	Their alternatives
	Goods bag	Cloth bag



Practice work

➤ **Think about the problem of single-use plastic-**

1. What problems are caused by plastic?
2. What can be its solution?

➤ **Experimental work-**

1. Look around and make a list of five such things in which single-use plastic is used.
2. Discuss : Which tasks can we do without using plastic?
3. What steps can we take to reduce plastic waste in our home or school for a week? Make a plan and implement it.

➤ **Think and write-**

1. Do we have alternatives that do not harm the environment?
2. What big impact can it have if we make small changes ourselves?
3. Plastic thrown in forests and rivers is harmful to animals and birds. Make a chart.

Practice 1 : Fill in the following table with the help of the teacher-

Causes of Deforestation	
Organisms Dependent on Trees	
Evidence of the Destruction of Wildlife Homes	



Effects of Deforestation	
Solutions to Deforestation	

Practice 2 : Practical Activities and Project Work

Activity 1 : Study of Local Trees

Ask the students to prepare a list of the trees around them and encourage them to fill in the following chart-

Name of Tree	Number	Use	Favorable Conditions for Growing it
Mango			
Neem			

Activity 2 : Classification of Vegetation

Students classify the trees found in their area into the following categories-

Name of Tree	Fruits and Vegetables	Fodder	Wood	Furniture	Flowers	Other
Mango						
Neem						

Group presentation and graph creation-

- Present your collected information in class.



- Create a graph of the 10 most found trees.

Conservation and Awareness Activities

Practice 3 : Plant Care and Conservation

(Students discuss the following questions)-

1. What are the main factors that destroy plants?
2. Which plants are the most delicate?
3. What methods are used to take care of plants in your village/city?
4. How can new plants be grown and cared for?

Practice 4 : Experimental work-

- Each group plants a sapling and keeps a record of it for 6 months-

Name of Tree	Speed for Plant	Planting Date	Place	Care	Leaf Type	Feelings
Gulmohar	Plant		School Garden	Watering, Fertilizing	Green, big leaves	Happy

Practice 5 : Waste Decomposition Test

- Bury organic waste (banana peels, leaves, etc.) in one pit and plastic waste in another pit.
- After 20 days, see which substance has decomposed and





which remains as it is.

- This will help students understand the importance of decomposition and waste management.

Create a questionnaire related to waste management (example questionnaire). You can also make other similar questions from the examples of questions given below-

1. Do you know how long it takes for plastic to decompose (break down)?
2. Where does plastic come from in school, and how can it be prevented?
3. Where is plastic used the most in your home?
4. Are you ready to reduce the use of plastic in the school?

Assessment

- Run an environmental awareness campaign in the school's prayer meeting.
- Which organisms are completely dependent on trees and plants for their safety? Make a list.

We Learnt and Understood - II



(A) Oral Questions -

(To be asked by the teacher from the students and to be assessed using individual / group checklist as per requirement)

➤ Conversation Based Questions-

1. Questions related to the characteristics of Rajasthan from the children-
 - Describe the climate of Rajasthan?
 - What is the difference between the weather of Mount Abu and Jaisalmer?
 - Name the main birds found in Rajasthan.
2. Share your experience in the class about the birds nest found around you.
3. Discuss the topic –‘If there are no trees, what will be the impact on our lives ?’
4. How would you contact your distant relative if you did not have any means of communication
5. Do you know any mode of transport that is used exclusively only in Rajasthan?
6. What is the difference between weather of Jaisalmer and Mount Abu? Explain in your own language?
7. If you had to travel to any place where the weather is





different from that of Jaisalmer and Mount Abu, which place would it be and why?

8. Which methods of saving water are adopted in your home?
9. Have you ever noticed that some substances dissolve in water and some do not? Give examples.
10. Why is there a lot of water problem in Rajasthan? What suggestions would you give to reduce it?
11. If the trees are being cut in your area then what actions would you take?
12. What do we learn from khejarli movement?
13. If the forests are completely destroyed, then what will be its impact on the environment and human life?
14. Which trees are found in abundance in your village or city and what are their uses?

(B) Written Assessment –

➤ **Choose the correct answer-**

1. What type of region is Mount Abu in Rajasthan?
(a) Desert (b) Hilly
(c) Plains (d) Marshy
2. With which material does the baya weaver bird make its nest?
(a) Wood (b) Pebbles
(c) Straw and grass (d) Soil





3. What does a spider use its web for?
(a) To play (b) to take rest
(c) to catch prey (d) to drink water
4. What are the wind milles found in Jaisalmer used for?
(a) for farming (b) for electricity generation
(c) to draw water (d) to build a house
5. Which substance completely dissolved in water?
(a) Oil (b) Turmeric (c) salt (d) soil
6. When turmeric is added to water it-
(a) changes its colour (b) settles at the bottom
(c) both (a) and (b) (d) evaporates
7. What increases the speed of evaporation of water?
(a) Low temperature (b) High temperature
(c) Darkness (d) Heavy objects
8. What is affected any deforestation?
(a) Wild life (b) Climate
(c) Human life (d) All of the above

➤ **Fill in the blanks-**

1. In the desert region of Rajasthan, the days are and the nights are.....
2. A spider makes its web from
3. An example of cold region in Rajasthan is



- 
4. On the day of Sheetla Saptani, food is eaten.
 5. A carpenter makes and
 6. To control the traffic at railway stations is used.
 7. During the journey from Mohangarh to Jaisalmer, the children were experiencing and Weather.
 8. In Jaisalmer, electricity is generated from
 9. In Rajasthan average rainfall is
 10. To keep the water clean, we should use
 11. Due to the indiscriminate cutting of the forests, the balance of gets disturbed.
 12. sacrificed their lives in the Khejrli movement.

➤ **Match**

Column 'A'

Baya weaver bird
spider
rabbit
vulture
carpenter
tailor
bus
mobile
jaisalmer

Column 'B'

burrow
nest
eats dead creatures
web
sew wedding dresses
mountainous region
public transport
mandap making
desert area





➤ **Write True / False –**

1. Mount Abu is located in the desert region of Rajasthan.()
2. All birds make similar nests. ()
3. Siders use their webs to catch food. ()
4. There is no rainy season in Rajasthan. ()
5. A vulture eats only grains. ()
6. A Camel is an important means of transportation in Rajasthan. ()
7. Mobile phone is for enterainment only. ()
8. Jaisalmer gets heavy rain fall. ()
9. Mount abu is a mountainous region of Rajasthan. ()
10. Turmeric floats on water. ()
11. Sugar dissolves quickly in hot water. ()
12. Deforestation increases rainfall. ()
13. The forest is the home of birds and animals. ()

➤ **Answer in two-three lines (20-30) words-**

1. What is the difference between the weather of Mount Abu and Jaisalmer?
2. How do the birds make nests?
3. What is the use of spiders web?
4. What type of houses do people build in the desert areas of Rajasthan?
5. What ingrediants does a cook use at a wedding?





6. What can we do to reduce traffic jams?
7. What is the contribution of the sparrows to the environment ?
8. Why is the electrical work important?
9. What was the difference in the temperature of Jaisalmer and Mount Abu?
10. What natural changes did the children see during the journey?
11. Which traditional methods are adopted to save water in Rajasthan?
12. Somethings dissolve in water and some do not. What is the reason for this?
13. What harm does cutting trees cause to the environment?
14. What should we do to save forests?

(C) Do Yourself –

1. Find nests of different birds in your home, school or surroundings areas.
2. Observe their size, content and location and record them in a chart .
3. Draw a picture of your favourite bird and write five lines about it.
4. Observe the daily weather for a week and write it in your own words.
5. Make a map of the major climate zones (desert, mountainous) of Rajasthan and show it in different colours.





6. Plant a tree in your school and monitor its growth and observe.
7. Make a poster or write an essay on protection of trees and their importance.
8. Draw a picture showing cutting down of trees in the forest, falling nests, running animals and birds and a worried girl, which gives the message of environment protection.
9. Take an interview of a person from any tradition profession (like potter, carpenter, cook) and write about the importance of his work.
10. Make a poster on the characteristics of different climatic zone (desert, mountainous, plains of Rajasthan).
11. Make a small project on any traditional method of water conservation in your village / city.
12. Prepare a brief report on what types of water source (ponds, wells, stepwells) are found in Rajasthan.
13. Imagine the scene given below-

A Forest in which the trees are being cut, birds are falling from their nests, rabbits and squirrels and hares are running away.

A little girl is asking her father, “Papa, you said that trees are our friends. Who does this to friends?”

Draw a picture of this scene and write your thoughts on it.
14. Make a list of 10 important trees around you (village/city) and mention their uses.



Chapter - 9

Our Past and Present



- What would the schools and villages have been like during your grandparents' childhood?
- How do you think people used to travel in the past?

Society changes with time. Some traditions and values remain the same even today. Have you ever wondered what schools were like in olden days? Earlier, kings used to rule; now the government is elected by the people. Think-

Story : From Earthen Lamp (diya) to Bulb- Aman and Ria's time journey

During summer vacation, Aman and Ria went to their Nanaji's house, and one night the electricity went out, their Nanaji lit an earthen lamp.





Ria : "Nanaji, did the electricity go out like this in your childhood too?"

Nanaji : "Yes, there was no electricity in the village in our time. At night, we had to rely on dibbri (small oil lamp), diya (earthen lamp), and lantern. After that, gas lamps and battery-powered torches came. When electricity came, the bulb changed everything. Now look, LED bulbs and solar-powered lights have arrived."

Aman : "When there was no electricity, how did people study at night?"

Nanaji : "We used to study in the light of the diya. When the wind blew, the flame of the diya used to flicker, and sometimes the oil would run out. It was difficult to study. Now, when electricity came and bulbs started burning, it became easier to study."

Ria : "So, the journey from the earthen lamp to the bulb is a story of making our lives easier."

Nanaji : "Absolutely right! This change is not only in lighting but also it has come into every area of our lives. Earlier, people used to fan themselves by hand. After that, electric fans came, and now air conditioners! Similarly, if you look at the means of transport, first there were bullock carts, horse carts, then bicycles, scooters, motorcycles, and now cars, trains, airplanes, etc."

Aman : "Does everything have its own time and history?"

Nanaji : "Absolutely! The temple in our village is hundreds of years old. In your Nanaji's time, water was brought from the bawdi (stepwell). Havelis (mansions) are still the glory of olden days."

Let's now sequentially understand this-





1. What did not change-

Even after so much time, some things have not changed with time. Like lighting diyas on festivals, traditional attire, region-specific customs, etc.

Now tell me-

- Which customs and traditions of our festivals are still the same today?
.....
- Which tradition is being followed in your family for generations?
.....
- Are the ways of celebrating festivals the same in all states?
.....

2. What has changed-

With time, there have been many changes in society, technology and lifestyle. We find that there have been changes in many areas when comparing to the olden and modern times.

Do you know-

- **Changes in education-** Earlier schools used to be in kaccha (makeshift) buildings. Writing was done on slate and takhti (wooden tablet). Today there are pucca (permanent) buildings, digital classrooms, smart boards and online education available.
- **Changes in transport-** Earlier people used to travel by bullock carts, horse carts. Now there are fast moving cars,





buses, trains and airplanes.

- **Means of lighting-** Earlier diya, lantern and torch were used. Now, electric bulbs, tube lights and LEDs are available.
- **Games and entertainment-** Earlier children used to play with clay toys, gilli-danda (a traditional Indian game), kabaddi etc. Today these games are played as video games, mobile games.

Now Tell-

- What is the difference between your school and your parents' school?
.....
- How did people travel earlier and how do they travel now?
.....
- Is there any change that you don't like?
.....

3. Why did the change happen and its impact (cause and effect)

You may have realized that every change has happened due to some need or problem. When there was a problem in any work or the need for improvement was felt, new inventions took place. It can have many reasons and consequences.

Cause-

- **Science and Technology-** New objects were made due to the development of science and technology. For example, the formats of TV have changed.





- **Convenience and Comfort-** Humans always search for easy and fast ways. For example, every kind of change in trains.
- **Environment and Resources-** Old means consumed more resources, hence, new means were adopted. Like- now electric vehicles are coming.

Effect-

- Positive impact - Life became easier, education and health services became better, communication and travel became faster.
- Negative impact - Traditional customs weakened, pollution increased, and a busy lifestyle increased.

Activity-

What would happen if electricity had not been invented?

Can you tell?

- What would our life be like without electricity?
.....
- What did people do for lights at night in olden times?
.....
- Are all changes necessary?
.....

4. Different Perspectives of Change

No change is completely good or bad. It can have different perspectives, and it depends on how we adopt or perceive it. Like-





Positive Perspective-

- Electricity and machines made our work easier.
- Faster transport made it possible to reach far-off places.
- The world got connected through the internet and mobile devices.

Negative Perspective-

- Dependence on technology increased, due to which physical activity decreased.
- The problem of pollution and garbage has increased.
- Traditional games are decreasing.

Activity :

Debate- Divide the class into two groups. One group shares its views on the benefits of electricity and the other group on the disadvantages.

So, can you tell now that-

- What are the benefits of the arrival of electricity?
.....
- Are there any disadvantages of using electricity?
.....
- Should we still use ancient objects today?
.....

5. Understanding the Present from Old Objects-

It is understood from the earlier discussions that evidence is





very important to understand the events of history. When we see old coins, utensils, books and pictures, we understand how people used to live earlier. Like- if you have seen old photos, then tell the class about what kind of changes have come in you.

Historical Evidence-

- **Old coins and notes-** These show which currency was prevalent earlier.
- **Copper and clay utensils-** These show that earlier people used to use environment-friendly things.
- **Old books and letters-** These depict the means of education and communication.

Activity-

- Bring any ancient object from your home (grandmother's/ grandfather's objects, old coins, clay utensils, copper utensils, clay toys, old books) and discuss about them.

You tell me-

- What is the difference between the utensils of ancient times and today's utensils?

.....

- What do old objects teach us about the past?

.....

Briefly, some examples are given below from which change and continuity are understood :-





Area	Ancient method	Modern method
Lighting	Diya, Torch	Bulb, LED
Transport	Bullock cart	Motor vehicles
Education	Tradition of Gurukul (Teacher-Student)	School and Online Classes
Communication	Letters, Post	Mobile, Email
Fan	Hand Operated	Electric Operated
Water source	Bawdi, Well, Pond	Tap, Tube Well

Now you must have understood that society and objects change with time, but some traditions and values always exist, and the change in them comes slowly. Change makes life easier, but it also allows us to understand our old things. History is not only in books but also exists in the objects around us. Fill this table with your classmates-

Topic	Nanaji's/ Grandmother's Time	Mother's/Father's Time	Present Time
Means of transportation	Bullock cart	Bicycle	Bicycle/ Motorcycle
Means of sending messages			
Types of house			
Kitchen utensils			
Means of lighting			
Means of Entertainment			





Old objects-

Collect information about any old object from your home (pitcher, lantern, grinder, old camera, clay utensils, old silk saree, hand-woven clothes, old books, etc.).

1. Find the history of the objects-

- a. Ask your family
- b. How old is this object?
- c. Who did use it?
- d. What is its use now?

2. Decorate a corner of the class like a museum-

A short description should be written with each object (name, time, who gave it, what was its use?).

3. Become a 'guide'- Tell each other about these objects

You can also invite students from other classes to see this museum in class.



Practice work

➤ Write True / False-

1. The electric bulb is the oldest means of lighting. ()
2. People still light diyas on festivals. ()
3. There was no television in the olden times. ()

➤ Write your experience-

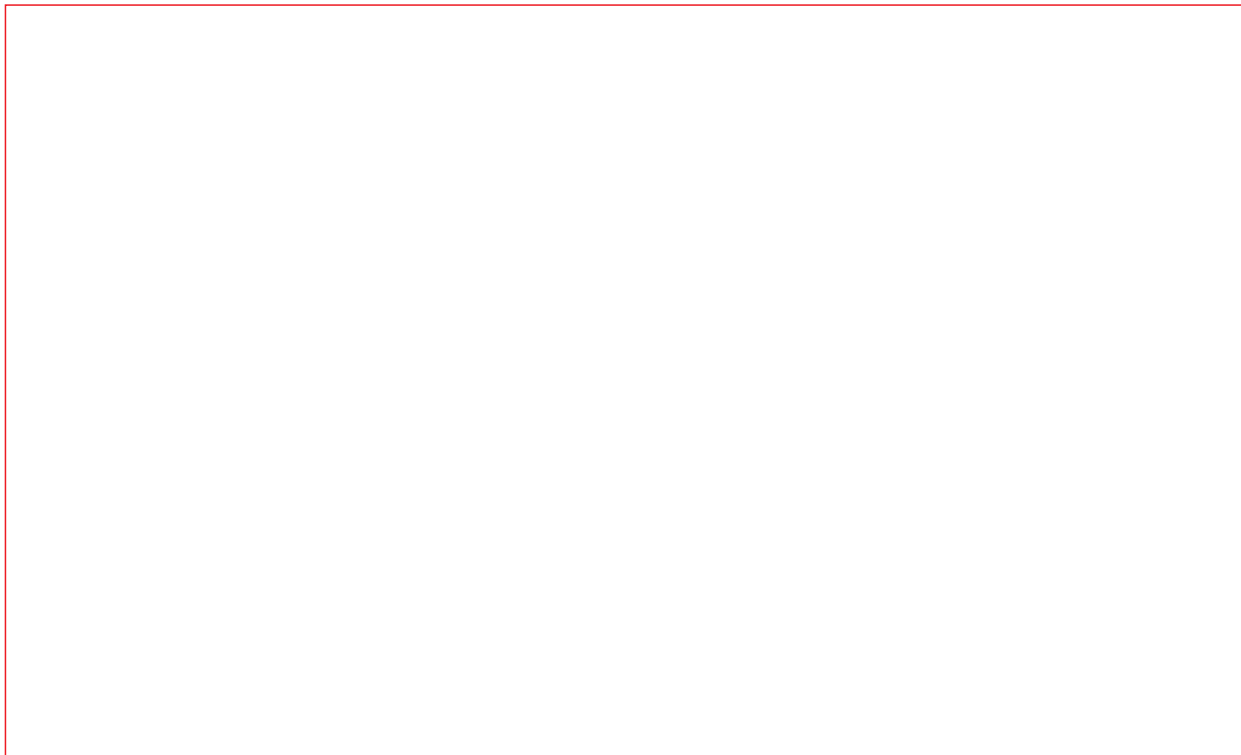
- Write 10-12 lines on 'Changes in the means of lighting'.





➤ **Draw a picture of any one of the following-**

(Diya, torch, dibbri, lantern, torch, simple bulb, tube light, CFL, LED bulb, battery-powered bulb)



➤ **Think and tell-**

- How did people study at night before the invention of electricity?
- What is the difference between a diya and a bulb?
- What changes have taken place in the means of lighting over time?
- What effect did it have on our lives?

➤ **Activity-**

Ask your grandparents what the means of lighting were in their childhood and compare them with today.





➤ **Learn this too-**

- Share your experiences about lighting diyas or old customs at festivals in your class.

Invention	Inventor
Bicycle	Macmillan
Sewing Machine	Elias Howe
Telephone	Graham Bell
Mobile Phone	Martin Cooper
Motorcycle	Gottlieb Daimler and Wilhelm Maybach



Lesson - 10

India's Map and Geographical Diversity



You must have seen the map of India hanging on the wall of our school. Recognize the states in the map of India. Read the following poem with its expression.

Rani Daughter

Rani daughter, went on walking,
From Delhi, she moved forward,
Walking, walking, walking, walking
Reached a place called Chandigarh

From Chandigarh reached Jaipur
From Jaipur she, to Rameshwar
walking, walking, from Rameshwar,
Returned back, her home was where.

Mother asked, O Rani dear,
Tell me where did you go from here?
Rani replied – No mom I went nowhere.
I was sitting in our home, just near.

In our home? O Rani dear
It is such a lie, and not clear
Not a lie, I tell true, just hear,
India is my home and I live here.

-Nirankar Dev Sevak

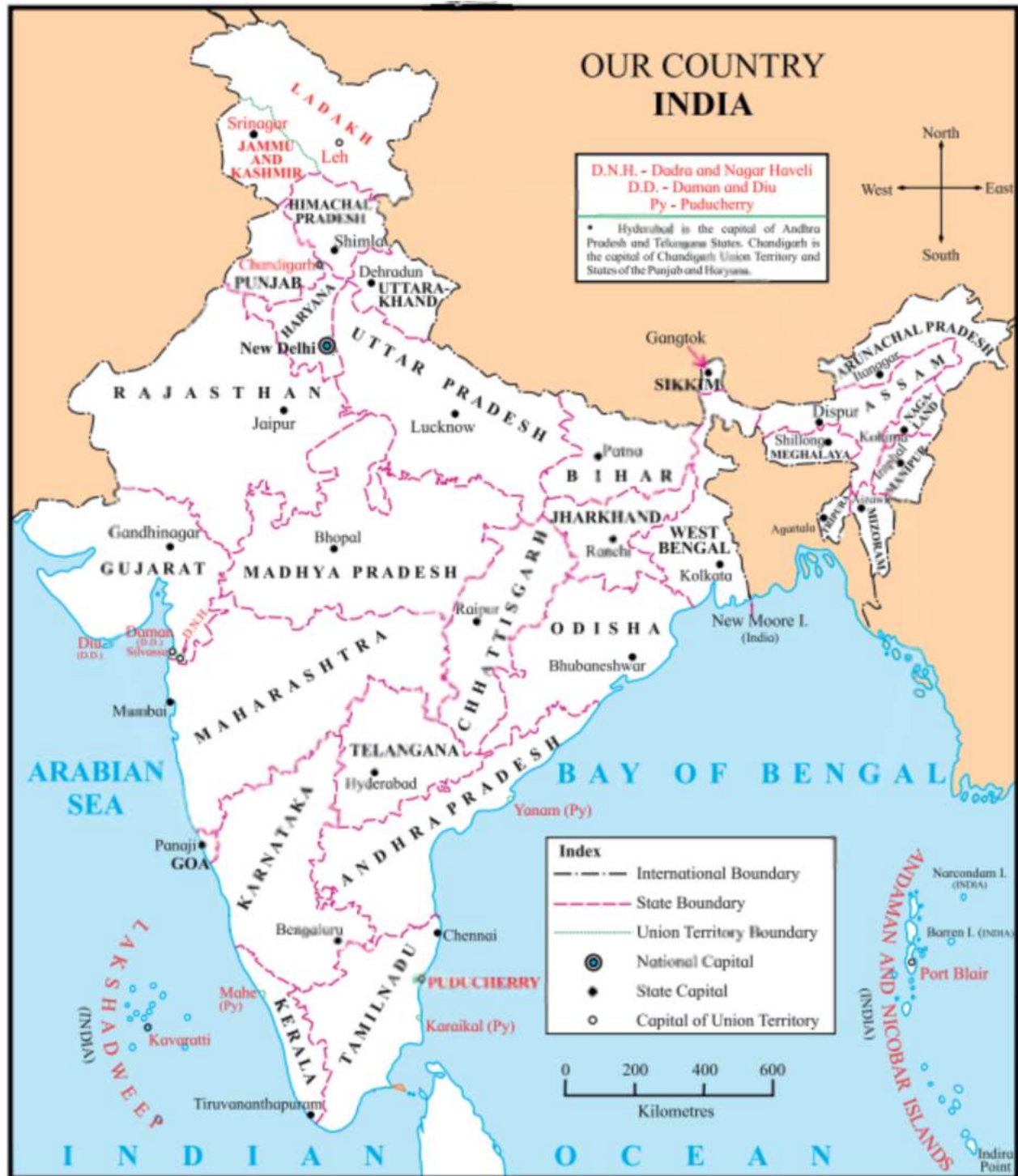
Write a short note on any of your travel or share it verbally

Search places mentioned in the poem (Delhi, Chandigarh, Jaipur, Rameshwar) in India's map and mark there places.



Activity-1

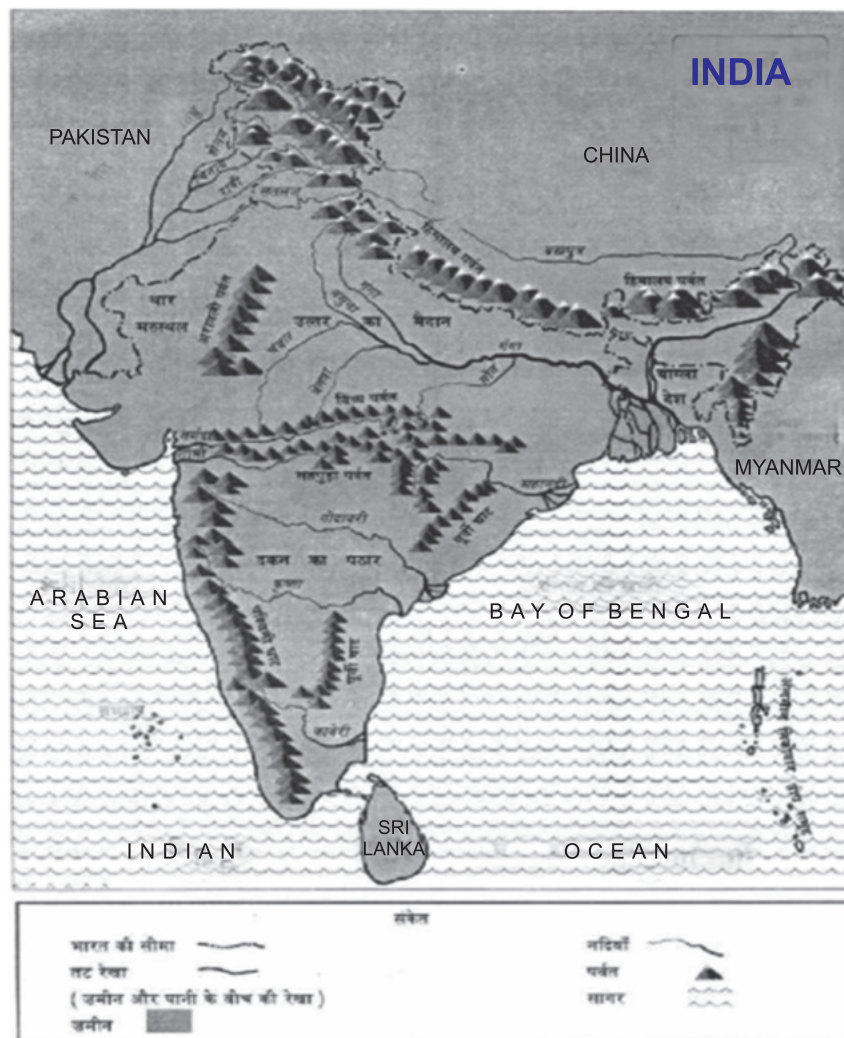
Observe the map of India given below and find out :-



Map is not to scale.

Map-1

1. Recognize your state in this map and fill it with the colour of your choice.
2. Which states are there in the north side of Rajasthan? Write their names.
3. Which states are there in the south side of Rajasthan? Write their names.
4. Fill the states situated in the east side of Rajasthan with different colours
5. Fill those three states in different colours which are larger than the other states of India.



Map is not to scale.

Map-2



Activity-2

1. Now observe , our country and its neighboring countries in the map. Can you recognize which are our neighboring countries? Write their names:
 - A. In West
 - B. In North
 - C. In East
 - D. In South

Geographical regions of India-

India is a large and diversified country which includes different types of geographical regions. There are various natural places like mountains, plateaus, rivers, sea shores, and island groups.

The coastal borders of India-

It is really enthusiastic to watch an ocean. Have you ever seen an ocean? May be in real or may be in pictures and on T.Vs. Discuss about Oceans.

The coastal regions are very far from Rajasthan, therefore if you want to see an ocean or sea, you will have to go either to Gujarat or to the other coastal states of India. Our country is covered by water at its three sides. The landscape which is covered by water at its three side is called Peninsula.

Activity-3

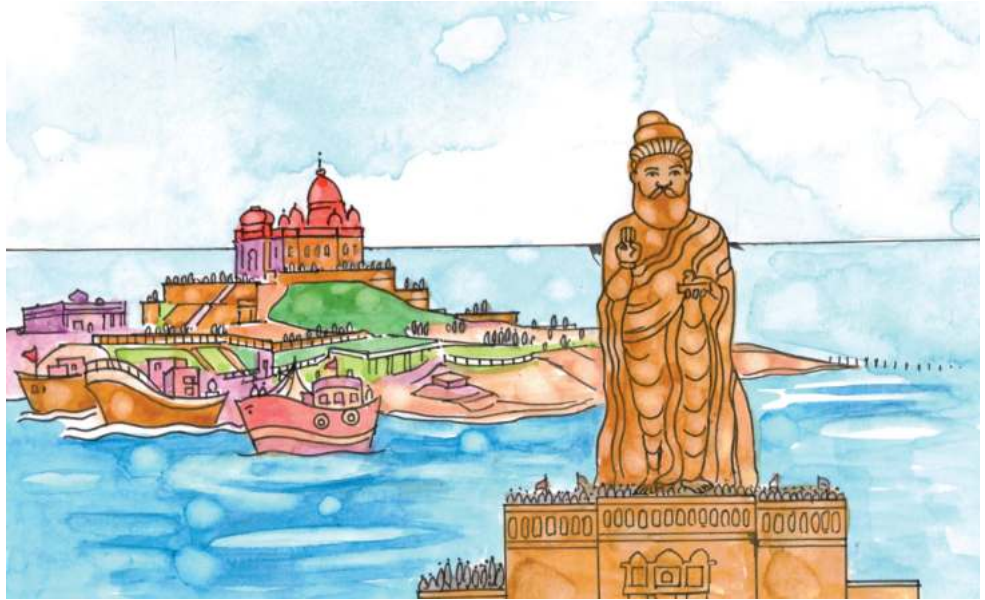
1. According to map-1 which are the coastal states of India?
2. According to map-3 recognize the coastal lines of India, find out the coastal lines of India touching the Arabian sea.



3. According to map -3 observe the Eastern part of India and find out from which place to other place does the Indian coast line touche the Bay of Bengal. It is India'scoast.

A. Western Coast –

It extends from the Ran of Kachchh in Gujarat in the North to Kanyakumari in the South. Gujarat has the largest sea coast in India. There are such parts in this coast from where heavy machinery and petroleum are imported. The southern most place of the western coast is Kanyakumari.



The areas of western coast have different names according to their geographical conditions. These names are given below in the map.

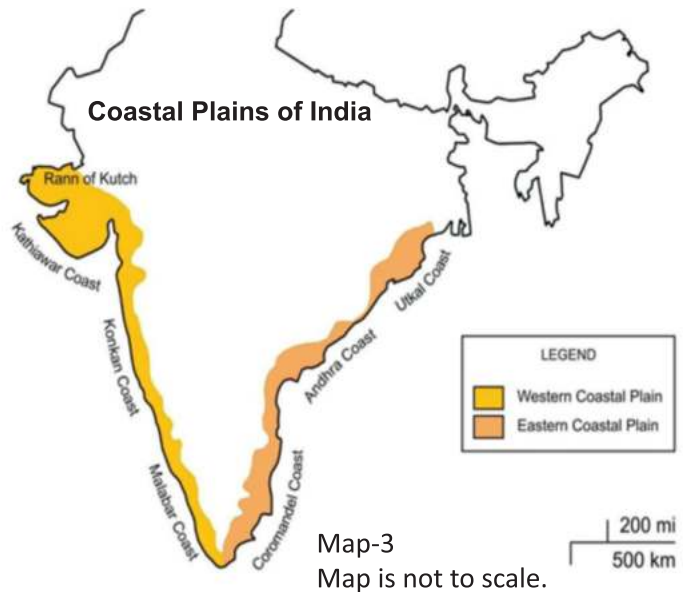
B. Eastern Coast –

From Kanyakumari, we will travel towards Eastern coast. Going towards north we will pass through many states of India. The sea coast is spread from Tamilnadu, Andhra Pradesh, Odisha to West Bengal.

On the basis of geographical specialties, the eastern coast has

been divided into three parts.

1. If you look into Map - 3 first Tamilnadu then Andhra Pradesh, Odisha and West Bengal you will find that the coastal plain of these states are very wide. In this coast we will find many rivers are falling into the Bay of Bengal.



2. Look the Indian Map and give the names of four rivers which fall into the Bay of Bengal. Do you know when these rivers reach near the coast they are divided into many different streams. What is this called? Discuss with your teacher and find out.

The places where rivers fall into the sea, fertile soil is deposited in this place and besides that water is available easily. In such areas, rice is

Do you know ?

'IndinServeyInstitute', is the major institute to make India's map. It is established in 1767. It has directly surveyed the Indian Peninsula and on the basis of various measurements many landscape maps were prepared. The headquarter of this institute is in 'Dehradun' in Uttarakhand state.





cultivated in large quantity. This is possible so because India's eastern coast has massive rainfall.

Activity-4

1. What is the difference between Western coast and Eastern Coast.
2. Make a model of Western Coast and Eastern Coast in Indian Map. In this you can show coconut trees, ports rice farming, Deltas and the culture of costal region.

II. Indian Rivers and their plains–

Now we will talk about Indian rivers and will see their effects on the land area. Come Let us see some rivers and their tributaries region. Let's search these rivers in Indian map-2 – Saltuj, Jhelum, Ganga, Yamuna, Brahmaputra, Narmada, Tapti, Mahanadi, Godavari, Krishna, Kaveri etc.

III. Rivers in Plain Region–

After flowing through the mountains, rivers spread soil in plain areas. Look into Map-2 you will find there are large plains in southern side of the Himalayas. This is the plain of Saltuj, Ganga, Brahmputra and their tributaries. This is called the northern plain. The land of this region is plain and the soil is fertile. Here mostly wheat, rice, pulses, sugarcane, fruits and vegetables are cultivated. Dense population is living in this fertile land and there are many big cities like Delhi, Prayagraj, Patna, Kolkata etc.

IV. Our Hills-Mountains–

Now let us have a small talk about mountains. In northern part of India there are sky touching mountain ranges.



Due to having one after another mountain ranges it is called the Himalaya Mountain Ranges. These mountains are spread in Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Sikkim, Assam and Arunachal Pradesh states.

V. Thar Desert–

In India's western part there is a place where rainfall is lesser than the other parts. Sand can be seen spread far and wide there and lesser vegetation is found. It is a



desert and is known as 'Thar'. We can see 'Thar' desert while going towards western part of the Aravalli Mountain Ranges. People breed sheep, goat and camel in this region.

Activity -5

1. Find out how do the people of this region live and what do they do ?
2. Which animals are found in desert region? How do the resident of these area use these animals? Write about it.

VI. Deccan Plateau-

The landscape spreads from northern plain to south is plateau. This landscape is at a height. At some places the soil is dark, somewhere the soil is rocky and light. Here at most of the places rainfall is very low. Mostly coarse grains like Ragi, Jawar are cultivated in this region. This area is called Deccan (Southern)



Plateau. The mines of Iron, Coal, Gold and Aluminum are situated in this plateau.

Recognize Deccan Plateau in Map-3 and show this area in India's blank map.

Practice work

➤ **Answer the following questions –**

1. Write the names of the Mountains situated in India's northern side.
2. Which states of India comes in the plains of Ganga and Brahmaputra ?
3. Which are the coastal states of India?
4. In which states of India is the 'Thar' Desert spread?
5. Write the names of two rivers found in the Deccan Plateau.

➤ **Use India's Map –**

1. Do the activity recognizing the geographical regions and write their names with the help of your teacher.
2. Mark Himalaya, Thar Desert, Deccan Plateau, Plains of Ganga, Coastal region and Main rivers in India's blank Map.

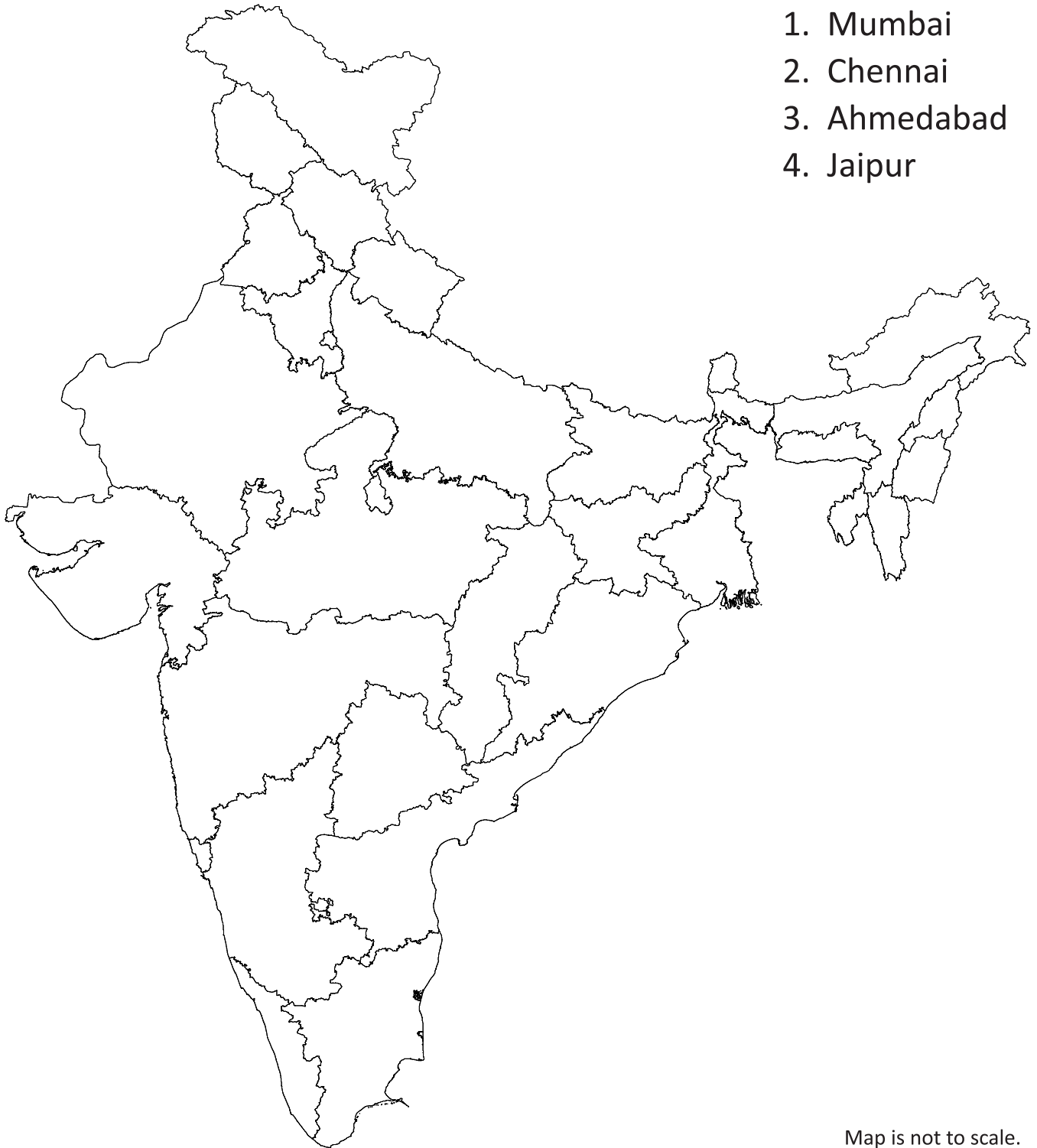
➤ **Group Discussion-**

1. What kind of advantages and Challenges do the people face living in the plain region of India.
2. How is your daily routine different if you live in hilly areas?



Mark the following Cities in India's Map with the help of your teacher-

1. Mumbai
2. Chennai
3. Ahmedabad
4. Jaipur



Map is not to scale.



Lesson - 11

The Art of Map Craft : Direction and Measurement



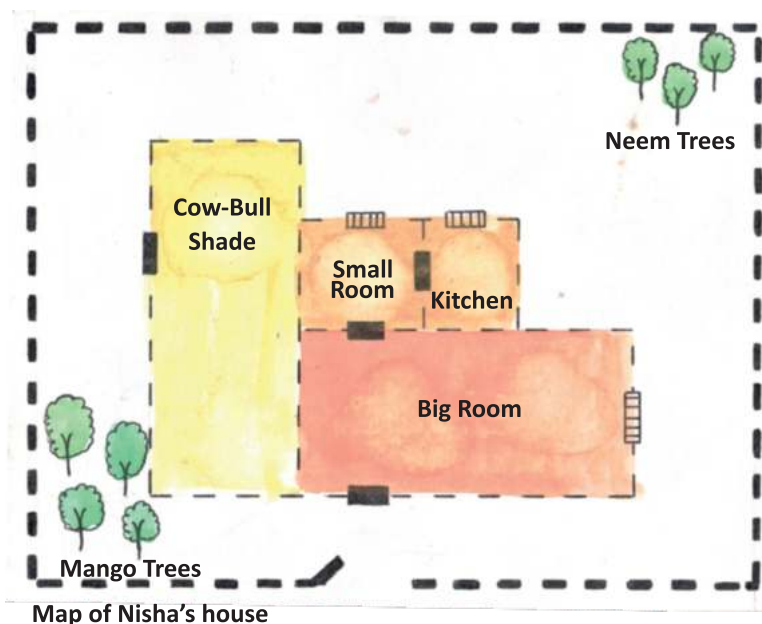
Map : From reading to the art of map craft

Everyday we go to school, market or our friends house. How can we search way without any help? For this we have to understand the direction and distance. Map can help us in this work because it shows the correct details with picture form, correct ratio and measurement. In this lesson we will learn map reading and map crafting.

Nisha's House

Nisha has prepared the map of her house. You also make the map of your school in your note book and also show the houses, trees, shops and ways in it.

In class IV you have prepared map arranging matchsticks where it was 1 matchstick = 1 footstep distance. The same way in this map 3 footsteps = 1 cm. Now carefully observe the map of Nisha's house.





Activity-1

- a. How many windows are there?
- b. How many Neem trees are there?
- c. How many Mango trees are there?

The measurement of the map of Nisha's House is given $1 \text{ cm} = 3$ footsteps

Example– If in map a place is at 3 cm distance that means in real it is at 18 footsteps distance.

Activity-2

1. If the distance between main door and the kitchen is 5 cm in map than how many footsteps it may be in real?
2. If the distance between yard and the will be to school is 10 cm in map than what will be the distance in real?

Exercise 1

- A. How many kitchens?
 - a. How many kitchens can be made in the area of big room?
 - b. How many kitchens can be made in the area of yard for cow-bull ?
 - c. If in the entire area covered by fence is converted into the rooms equal to the area of kitchen, how many rooms can be made here ?
 - d. If in the entire area covered by fence is converted into the rooms equal to the small room, how many rooms can be made here?





- e. How did you solve these problems? What other methods can be there to solve these problems?
- B. Which is longer kitchen or small room? Which longer big room or yard for cow-bull? Which is larger big room or yard for cow-bull?
- C. What else can be done in the map of Nisha's house ?
- If Nisha's father is a Farmer.
 - If Nisha's father makes earthen pots.
 - Think more different things and write and also think the symbols for them which can be marked in the map.

Add all these things in the map of Nisha's house.

What can be symbols for these things? Fill in the table -

Things in the House	Symbols
Gourd Vine	

Exercise 2

- A. Add these also in the Map :
1. A window in kitchen.
 2. One more door in the yard for cow-bull.
 3. Total 9 trees outside the fence in which 4 Mango trees and 5 Neem trees.





4. Draw 1 child in big room and 3 children in front of the house.
 5. Make paths –
 - From small room to gate and from big room to Neem tree.
 - Entering gate to yard for cow-bull.
 - Which paths can lead from gate to small room.
- B. Measure the length and of the boundary yard of Nisha's house and write.
- Length..... Width.....
 - Now you can say that the boundary yard of Nisha's house is how many footsteps long.....and about how many footsteps wide.....
 - The same way what is the length and width of Yard for cow-bull, small room and big room. Find out and write.
- C. Nisha is thinking of making one more yard measuring 9 footsteps long and 9 footsteps wide. Draw this yard in the map, remember in room three footsteps are equal to 1 cm on map. (1cm.= 3 Footsteps)

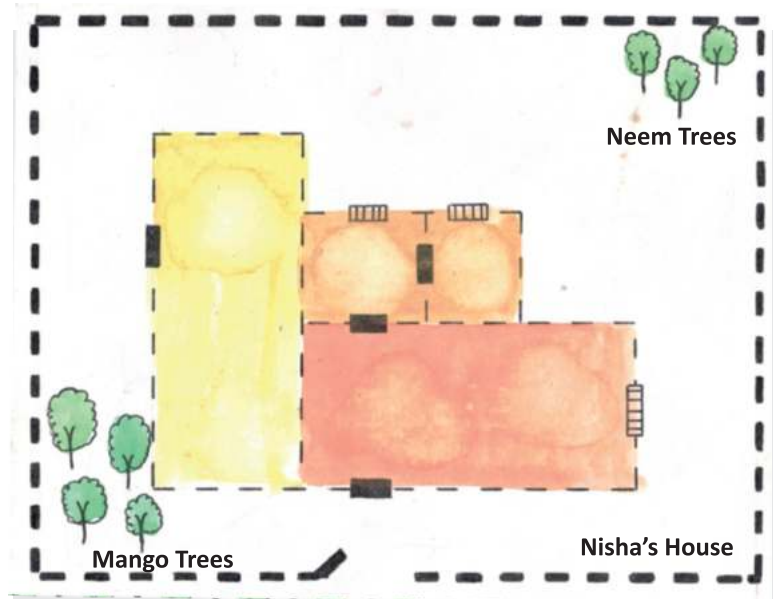
Use of Map and its making -

When we make a big map into small one it is called proportional reduction. For this the correct use of measurement is necessary. Here the map of Nisha's house is made by reducing. Make your school's map after more reducing.



Activity 3 : Make your map

1. Make a small map of your village.
2. Correctly mark the north side.
3. Mark your house, school, market and other important places in the map.
4. Use suitable symbols for trees, roads and rivers in the map.



Read the paragraph and understand the map -

Go north from Hansipur. After $\frac{3}{4}$ Hours you will reach near Dudhi river. Cross the river through bridge. In eastern side you will find Matkuli village. After walking $1\frac{1}{2}$ hour you will find an east west going road, turn west side. After some time in South you will arrive Matkipur where you can take a rest.

If you go forward to west, after an hour you will reach Gonda village. Cross the village and you will find another bridge on the Dudhi river. Before the bridge, come down towards north and give twenty rupees to the sailor in a boat, in an hour you will reach





Labdab.

From Labdab return in boat and reach near the bridge. In the south of the bridge is Pantalai but don't go there. If you will walk from Gonda village towards south in a half hour you will reach near another bridge. After crossing the bridge and walking for half an hour you will reach Pipalgota village.

From Pipalgota walk in west for an hour and you will reach Tonk village. After staying there for some time go towards east, on the way Pipalgota and after an hour you will reach Bundi village. After going half an hour in east you will reach on a road. You will find a banyan tree there. On this road turn towards South. After an hour you will reach at circle Hansipur.

Exercise 3

1. After reading the instructions can you mark the names of all the villages in a map?
 - (a) Hansipur, Labdab, Bundi are written on the map. The other names are- Matkuli, Matkipur, Gonda village, Pantalai, Pipalgota, Tank. Mark these names on the map.
 - (b) Mark the river on the map.
2. There are many things mentioned in the map many others are missing. Add the left things in the map.
 - (a) Two farms on the south side of the road connecting Matkipur village to Gonda village.
 - (b) A well on the west side of the road connecting Gonda village to Pipalgota village.



Activity 4 : Think a little

The distance between the houses of Jasraj and Nisha is 10 Km. The measurement for map is 1 cm. = 1Km . What will be the distance between the two houses in the map?

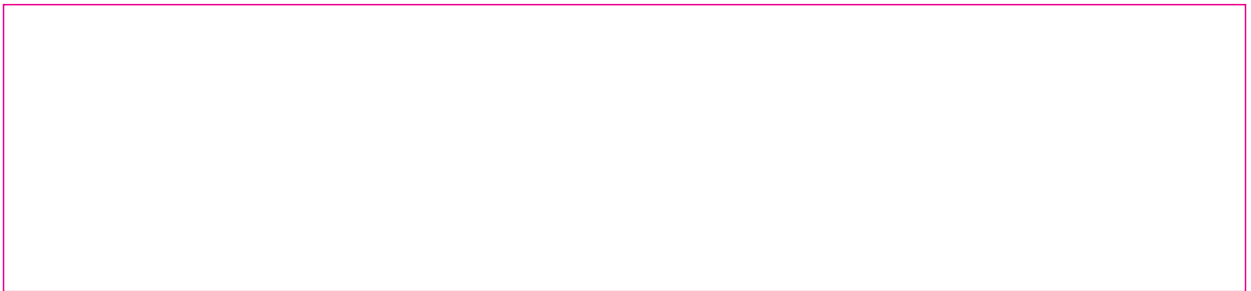
Use a scale and do it on a paper in your notebook.

Always keep this in mind-

Directions and sub directions are determined by human being. For this they took help of nature. Sun rise and Sun set are the main base of them.

Practice work

1. In which direction is Matkuli from Hansipur?
2. In which direction is Matkipur from Gonda village?
3. In which direction is Pipalgota from Bassi?
4. Bholaram has to go from Pipalgota to Matkipur. Draw a map to convey him the path.



5. Answer the following questions –
 - a. Which village/city are nearby your village?
 - b. Which city is the nearest to your village, how far is it and on which direction?

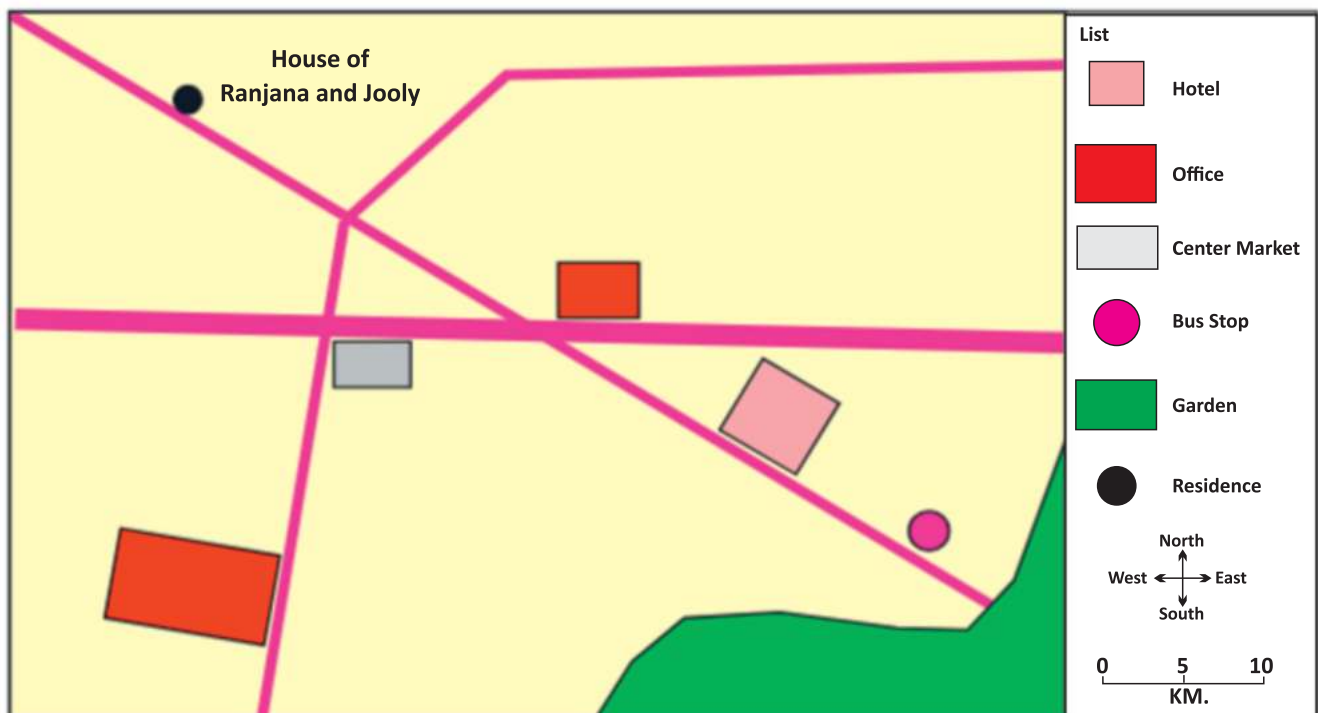


- c Which village/city is at the north side of your village?
- d Which village/city are at the South and West sides of your village?
- e Which river flows nearby your village/city?

What will you do?

Ranjana and Jooly went for a visit to another village. They have to go from their living place to the garden. They have their navigating map for that route.

1. Help them to know the distance between their living place and the garden.
2. In which direction is the garden from their living place. Help them to search it.



A microscope shows a thing enlarged on the contrary of it a map shows a large landscape in smaller form in which we can get the geographical information at a look.



Lesson - 12

Our Life Style and Climatic Changes



Adopting a healthy life style makes a person energetic, reduces stress and reduces the risk of diseases. Let's discuss healthy life style-



- Look at both the pictures carefully.
- What scene do you see in these pictures?
- What is the differences between the construction of rural and urban houses and what is their impact on the environment?
- How are the activities of people, life style and surrounding depicted in the pictures?
- Which are the signs of the pollution in the urban environment and what impact can it have on our lives?
- What is the major difference between rural and urban life, how can a balance be made between the two?

Have you ever wondered what kind of houses our grandparents lived in?

Did they also use air conditioners in summer and heaters in winter?

Now look around you- tall concrete houses, big buildings, malls and flats. Have we ever think how these changes are effecting our earth?

Our homes and climate changes-

Think, in earlier houses were made of mud, wood and straw. These houses maintained a balance in both winter and summer. Today concrete houses increase the heat further and we have to spent more electricity to keep them cool.





Also know it-

Concrete houses absorb more heat and this increases the temperature of the entire city. This is called 'Heat island effect'.

Activity 1 :

Touch the concrete wall of your house in the afternoon. Is it hot? Now touch the mud wall (if nearby). Do you feel any difference?

Effect of living and life style -

In earlier people used to live in open environment but now most of people in cities started living in closed houses which do not get fresh air and sunlight. This increases the consumption of electricity because people use fans, cooler and air conditioner more.

Activity 2 :

Ask your parents and grandparents, how they lived in their childhood and what were features of their houses? Could they live comfortably even without fans and coolers?

Changes in food habits and their effect -

Earlier people used to eat local and fresh food. Now people have started eating more packaged food. In preparing and bringing such food more energy, more fuel, plastics packing material is consumed which increases environmental pollution.

Do you know-

Eating local food is not only good for our health but also good for environment.





Activity 3 :

1. Make a list of packaged food items in your home and see how many of these items things are imported.
2. Ask your grandparents, which food items they used to prepare and preserve at home in their time.

Global Crisis and Climate Change-

The whole world is being effected by the climate change. There is drought in some places and flood in others. Due to less trees, rainfall is also decreasing and temperature is increasing.

Activity 4 :

1. Adopt a tree and look after it.
2. Why does cool wind blow during rain? Tell me.

Conclusion-

Now you have understood, how our lifestyle and food habits and living habits are affecting climate change. If we want to save our environment then we have to make small changes in our lifestyle.

Can we do this -

1. Save electricity and water at home.
2. Eat local and fresh food.
3. Plant as many trees as possible.
4. Don't buy more things than required.

Remember if we all make a little effort to protect the environment we can stop climate change and save our earth.

Classification (put in correct group) classify the following items





into two groups 'environment friendly' and 'environmentally unfriendly'-

- Packaged food
- Mud houses
- Use of air conditioner
- Shopping from local market
- Consuming more electricity
- Use of bicycle

Environment friendly	Environment unfriendly

What did we learnt-

Now you have understood that there is a deep connection between the climatic change and our lifestyle. If we want to save environment we will have to then small changes in our daily life like saving electricity, consuming local food, planting more trees and avoiding unnecessary shopping.

Remember –

Small efforts can bring big changes.



Practice work

➤ **Fill in the correct answer by choosing it.**

1. What is 'Heat island impact'?
(a) Deforestation
(b) Increase in temperature due to concrete houses
(c) more rainfall (d) formation of mountains ()
2. Which material were used to make old time houses?
(a) concrete and cement
(b) wood and straw made from soil
(c) iron and glass (d) plastic and fiber ()
3. What are the effects of eating more packaged food?
(a) Energy is saved (b) health is improves
(c) pollution is increases
(d) water consumption reduce ()
4. Which effect is seen due to the increasing urban lifestyle.
(a) less energy consumption (b) more trees and plants
(c) more pollution (d) mor rainfall ()
5. What is one major benefit of eating freshly cooked at home food?
(a) This is more expensive
(b) It is good for both health and environment
(c) It requires more fuel to make it
(d) It is not nutritious ()



➤ **Fill in the blanks-**

1. In olden days houses are made of.....and.....
2. Problems ofand are increased due to urbanization.
3. Due to more packed food....increases and energy.....
4. Due to climate changes somewhere it is..... and somewhere it is.....
5. 'Heat Island Effect' happens when due to.....the temperature of the entire city is increased.

➤ **Give answer in three to four sentences-**

1. What is the difference between rural and urban lifestyle ?
2. In which type of houses do our grandparents used to live? How did they live without Fan or Cooler?
3. How is modern lifestyle putting impact of climatic changes?
4. Which kind of changes can we bring in our lifestyle to prevent climatic changes?

➤ **Give answers in eight to ten sentences-**

1. What is 'Hot island Effect'? Which steps can be taken to prevent it?
2. How does our lifestyle affect climatic changes? Explain with examples.
3. What are the environmentally difference between traditional houses and modern houses? Which is more environment friendly and why?





4. What are the effects of eating habits on climatic changes?

➤ **Do Yourself-**

1. **Survey-** Ask your grandparents, in which type of house they used to live during their childhood and how was their lifestyle? Compare it with the modern lifestyle and make a report.
2. **Make Chart-** Make a chart showing which food ingredients can prepared and preserved for long time at home?
3. **Model of Environment Friendly House–** Make a model of house which is Environment friendly and consumes less energy.
4. **Plantation activity-** Plant a sapling, take care of it and record its growth.

➤ **Activity-**

1. Touch the wall of your house and a clay wall in afternoon and feel the difference.
2. Make a list of packed food and examine which products are local.

**If lifestyle is restrained than the
nature will be balanced,
our habits determine the
future of climate.**



We Have Learnt and Understood - III



(A) Oral Questions -

(To be asked by the teacher from the students and to be assessed using individual / group checklist as per requirement)

➤ Conversation Based Questions-

1. How do grandparents used to go to school during their childhood?
2. How do people used to travel during earlier days and how do they travel now a days?
3. What kind of differences are found in old time houses and modern hoses?
4. Which changes have come in Rajasthan's traditions?
5. What are the difference between olden houses and modern houses?
6. What is the effect of Season Changes on our lifestyle?

➤ Roll playing activity—

- Students present a climatic change problem and its possible solution in the form of a drama.

(B) Written Assessment-

➤ Choose alphabets of correct answer and fill in the brackets:

1. What did the people use in earlier days while studying?
(a) laptop (b) Slate and board





- (c) Books (d) mobile ()
2. What did the people use in earlier days for travelling?
(a) Bullock cart (b) Aeroplane
(c) Bike (d) train ()
3. Which is the highest mountain of India?
(a) Aravali (b) Himalaya
(c) Satpuda (d) Vindhya ()
3. Which kind of climate is found in Rajasthan?
(a) Wet climate (b) temperate climate
(c) dry climate (d) tropical climate ()

➤ **Fill in the blanks-**

1. In earlier days people used to study under.....light.
(lamp's/torch)
2. In earlier days in Rajasthan.....was used for water.
(Bavdi/Nal)
3. Now a days people use.....for travelling.
(Bullock cars / Buses)
4. India's longest river is..... (Ganga / Yamuna)
5. For reading a map.....is necessary.
(Direction / Mountain)
6. Elephant fill water in it's.....for bathing.
(Trunk / Ear)



- 
7. Children felt..... atmosphere in Mount Abu.
(Hot / Cold)
 8. In desert.....are prepared for preservation of water.
(well / tanks)

➤ **Write True / False-**

1. In earlier days people used to talk on mobile phone. ()
2. In earlier days people used to travel by bullock carts.
3. In earlier days electricity is easily available. ()
4. Sea coast is found in Rajasthan. ()
5. The effect of Climatic Changes is held all over the world. ()
6. Aeroplane moves very slow. ()
7. During the travel children saw dust flying in the air. ()
8. In some villages of Rajasthan 'Bavdis' are the traditional sources of water conservation. ()

➤ **Match the old things with new things-**

Old Things

Earthen Lamp

Bullock Cart

Mud House

Well

New Things

E-Mail

L.E.D Lights

Tube well

Concrete Cement House





➤ **Answer the following questions in two to three sentences-**

1. What is the difference between earlier day's school and modern schools?
2. How did the people of earlier time illuminate their houses?
3. What are the differences in mode of transport of earlier and modern time?
4. What is the main reason behind climatic changes?
5. What things to be cared while reading maps?
6. What things to be cared while using mobile phones?
7. Which precautions to be taken to remain healthy during summer, winter and rainy season?
8. What is the importance of means of transport and communication in our life?
9. How do windmills work?
10. Why is water conservation necessary?

(C) Do it Yourself-

1. Make a poster in which pictures of old time means of transport, old houses, old time education etc. are drawn.
2. Bring old things from your house (like-lantern, earthen pots etc.), show them and give information about them.
3. Collect information from your grandparents about the schools of their childhood and on the basis of it write an essay on that topic.





4. Make maps of the surrounding area of your house and school.
5. Write your ideas to prevent the climatic changes.
6. Make a chart of the components of a balanced diet.
7. Make a picture of any traditional means of transport of Rajasthan.



Lesson - 13

Urban Self-government and Our Responsibilities



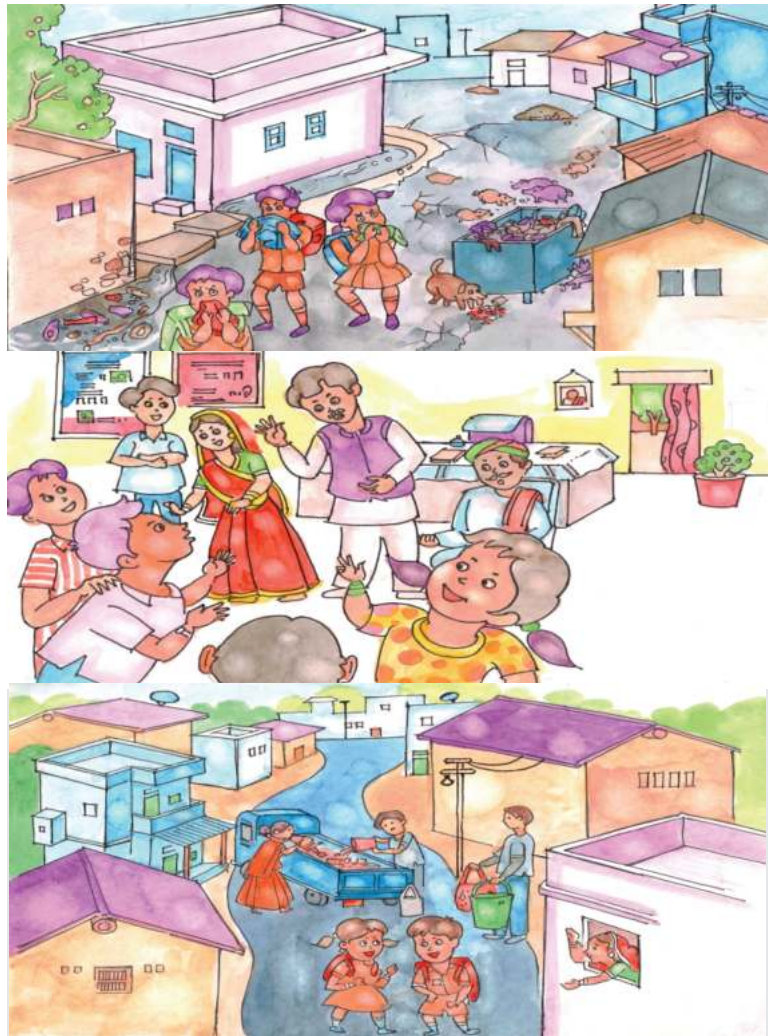
A City Troubled by Filth

For the last few days, there has been a lot of dirt spread in the city. There were heaps of garbage everywhere. Roads were broken and dirty and polluted water was flowing in the drains. There was no proper water supply in many of the colonies and many roads would become dark as soon as night fell because the roadside lights were not working.

The people of city were very upset. The children's playground were also filled with filth. Children used to get disturbed by the foul smell while going to school.

Discussion on the problem-

In the school the teacher asked the students-



Teacher : “Children, have you seen filth around you?”

Yash : “Yes Sir! A lot of garbage gets accumulated in our colony and no one comes to take it away.

Seema : “Sometimes, dirty water comes through the pipelines and there are frequent power cuts.

Teacher : “Do you know who does this work of repairing?”

Shaily : “No Sir, you tell us.”

Teacher : “ In villages, there are Gram Panchayats but in cities we have Municipal Corporations, Municipalities and Municipal councils. These are called Urban Self-government institutions which maintain the cleanliness, water supply, electricity supply, roads and gardens of the city and solves the problems arising in their management.”

Function of Urban Bodies-

Institution	Main Authority	Main Function
Municipal Corporation	Mayor	It work for the cleanliness water supply, electricity supply, roads and environment protection of big cities.
Municipal Council	Chairperson	It works for the cleanliness, water supply, roads maintenance etc. of towns and small cities.
Municipality	Commissioner	Management of small and medium sized cities.



Efforts for Problem Solving-

The children thought they would meet the Mayor of the Municipal Corporation to solve the problem. They took permission from the Principal of their school and formed a delegation and reached the Municipal Corporation office. There they were greeted by the Municipal Corporation office.

Kishan : “Mayor Sir, There is a lot of dirt in our city, and also problems of water and electricity. Can you solve this?”

Mayor : Absolutely ! But along with my work, it is also the responsibility of all of you that you put the garbage in dustbins, save water and electricity, then the city will remain clean and beautiful. The Municipal Corporation vehicles come door to door to collect garbage but the people throw garbage on the roads. If all of you take care of cleanliness, then the city will automatically become beautiful.

Green colour dustbin	Blue colour dustbin	Red colour dustbin
Leaves, dried fruits-vegetable, left over food, fruits-vegetables peels, etc.	Paper, plastic, bag, bottle of juice, broken plastic items etc.	Medical needles, surgical knives, cotton dressing, sanitary napkin, medicine rappers etc.

The Mayor described the children about the functions of Municipality and Municipal Council.

Let us Discuss-

1. What are the problems in your colony?



2. What problems can be caused by dirty and broken roads?
3. Who takes care of the cleanliness and other facilities of your village or city?
4. What are the responsibilities of Municipal Corporation and Municipality?
5. What can we do to make our city clean and beautiful?
6. What steps would you take to eradicate the problem of dirt in your colony?

Come and Let us Know What is Pollution -

Ugh! Heat ugh! this smoke

Teacher : Children! Have you felt that the heat is increasing and the air is also not as pure as before.

Yash : Yes Sir! It is difficult to go out in the afternoon.

Seema : There particularly when there is a lot of smoke and dust.

Shaily : My grandmother says that in earlier days the sky looked more clear and now there is fog everywhere.

Teacher : Absolutely! The reason for this is air pollution and cutting





of trees. Trees keep the environment cool but due to continuous cutting of trees and no plantation, the temperature and pollution increases.

Yash : Sir, what causes air pollution ?

Teacher : The smoke from factories and vehicles, the poisonous gases due to burning garbage dissolve in the air which causes pollution.

Seema : What is the solution for this problem?

Teacher : Plant more trees, use bicycles and public transport and avoid burning garbage.

Shaily : Yes, If we plant trees and keep cleanliness, then our environment will remain clean.

Teacher : Absolutely! Now I will recite a poem which will remind us of our responsibility for environment protection.

Poem : The Earth is Scared

Watching forests being cut down, now the earth is scared,
Natural disasters come and trouble us

The forests are called the green lungs of the earth,
Increase both oxygen and water
These stars are the eyes of the clouds
Stop soil erosion, and we get clean air

Increasing pollution brings tears in eyes
Watching forests being cut down, now the earth is scared,
Grows numerous herbs in itself,
it is called the shelter for world life



Uncountable benefits, from forest we get
Considered nurturer of bio-diversity.

The alarm bell repeatedly warn us
Watching forests being cut down, now the earth is scared,
One who truly love their mother land
Plant trees and, remove the curse
food and shelter, we get from them,
sensible people worship the forests

Remember the saying, As you sow, so shall you reap.
Watching forests being cut down, now the earth is scared,

Poet- Rajendra Nishesh, Publisher-Devputra

Practice work

➤ Choose Correct option-

1. In which colour dustbin should we put plastic wastages?
(a) Green dustbin (b) Blue dustbin
(c) Red dustbin (d) all of the above ()
2. In which colour dustbin should we put wet wastages?
(a) Green dustbin (b) Blue dustbin
(c) Red dustbin (d) all of the above ()
3. In which colour dustbin should we put dry wastages?
(a) Green dustbin (b) Blue dustbin
(c) Red dustbin (d) all of the above ()



➤ **Fill in the blanks-**

1. Villages have Panchayat system whereas, and is found in cities.
2. We should take.....andsteps for water conservation.
3.and.....are included in public property.

➤ **Write 'True' and 'False' -**

- (a) Sarpanch is the head of Municipal Corporation. ()
- (b) We should use natural light during day time to save electricity. ()
- (c) Plastic wastes should be put in the green dustbin ()
- (d) It is our responsibility to conserve public property ()
- (e) It is a good habit to leave the water tap open and let the water flow. ()
- (f) We should walk and cross the roads at Zebra Crossing.()
- (g) It is a good habit to paste posters at Public walls. ()

➤ **Match the following -**

A

Municipal Corporation
Municipality
Mayor
Parshad (Councilor)
Sarpanch

B

Small city
Big city
Ward representative
Gram Panchayat
Head of Municipal Corporation





➤ **Think and answer—**

- (a) Write two measures of water conservation.
- (b) Write two rules of road safety.
- (c) Tell two methods of keeping public property safe.
- (d) Write two methods of taking care of plants.

➤ **What would you have done? If you were in the following situation? Think and answer-**

- (a) If there is a problems of water supply in your ward or locality. Then how will you take this issue to the Municipal Corporation?
- (b) If people are not putting garbage in the dustbin, what steps will you take?
- (c) If someone is not obeying traffic rules near by your school, what remedy will you suggest?

➤ **Do yourself-**

(a) Draw Picture

- Draw a picture of ‘polluted city’ and ‘clean city’
- Draw a picture of measure for water and electricity conservation.

(b) Do it also

- Communicate as playing the role of Mayor, Parshad and the Officer of Municipal Corporation
- Prepare a dialogue on the topic “if I were a Mayor.....”





(c) Write question and answer-

- If there is any problem in your city what will you do?

(d) Take a Pledge

- Take a pledge that we will keep our home and school clean.
- We will adopt the methods to save water and electricity.
- We will make people aware in our locality.
- Complete the sentence- “Plant trees and save....”
- Make a poster on ‘Public Property Protection’ and ‘Water conservation’. Use pictures in it.
- Prepare a report on the methods of electricity conservation adopted in your house and school.
- Plan a road safety awareness campaign in your locality.

**A Clean, beautiful and well-organised
village / city is one where citizens perform
their duties honestly.**



Lesson - 14

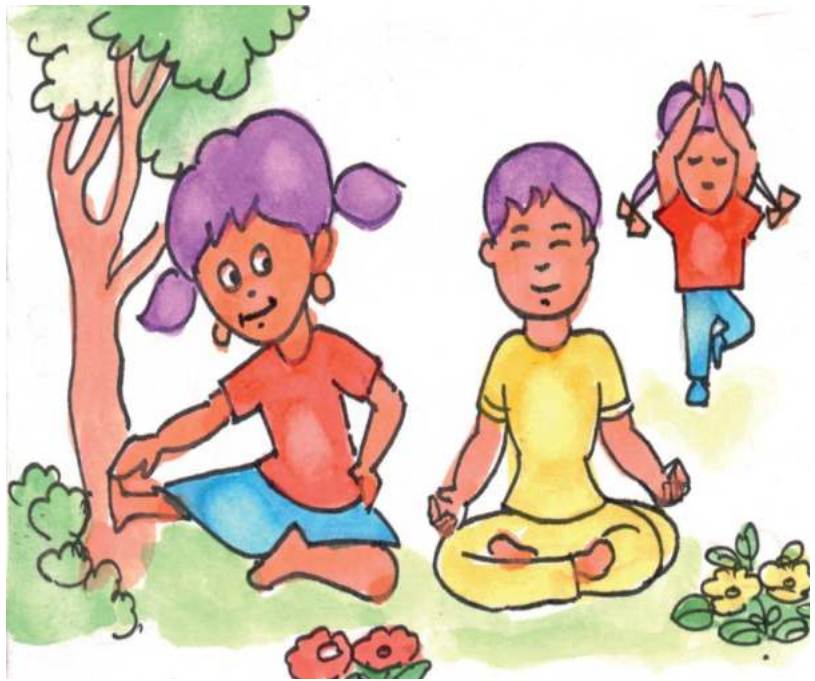
Pranayama : A Gift to Mind and Body



(Shivam and Shivani were walking in a Garden. Shivani was tired and thought of taking some rest. Then Shivam asked Shivani)

Shivam : ‘Shivani, have you ever heard about of Pranayama?’

Shivani : (head bowing) ”No, Shivam, what is it?”



Shivam : “Pranayama is a method to give peace and energy to our body and mind.” It means to control ‘Pran’ (Life energy)’s ‘Ayam’ (controlling). We get physical and mental power from Pranayama.

Shivani : “Is it easy?”

Shivam : (smiling) ”Yes, it is very easy. We have to concentrate on our breathing.”

(Shivani understood and started thinking about Shivam’s words)



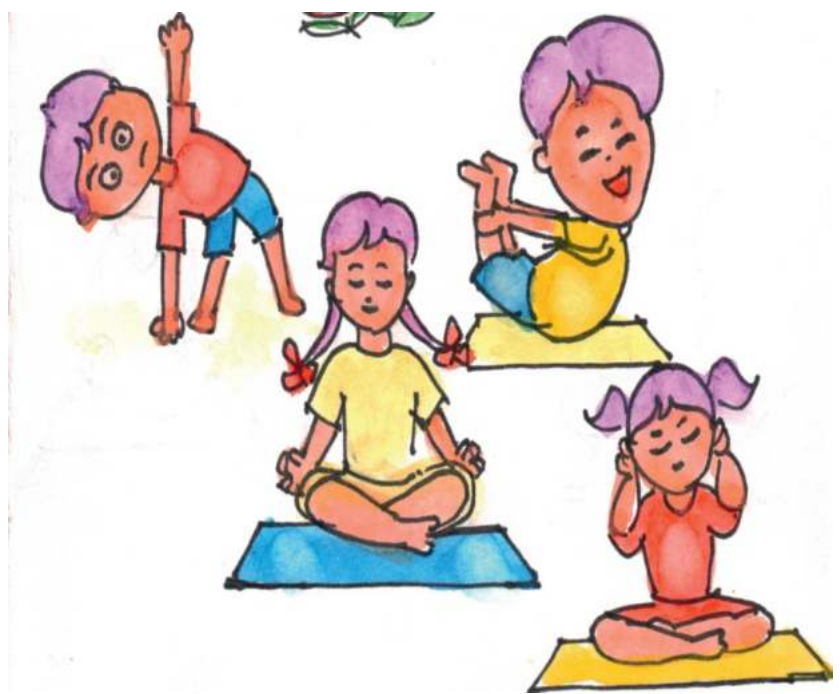
Let us Discuss-

1. What are Shivam and Shivani doing in this picture?
2. What should we keep in mind while doing Pranayama?
3. Do you ever do Pranayama? If yes, how do you feel?

Types of Pranayama and their benefits-

Shivani asked Shivam to know more about Pranayama, Shivam, How many types of Pranayamas are there?

Shivam smiled and said, there are many types of Pranayamas. Some of the main types are-



1. Bhastrika- First of all this pranayama is done. In this, the breath is taken more deeply and rapidly. Due to this maximum blood cells of our lungs are start breathing.

2. Anulom-Vilom - In this, one has to inhale from right nostril and exhale from left nostril then inhale from left nostril and exhale from right nostril. It is useful for mental peace.

3. Kapalbhati- In this pranayama, there is a practice of pull stomach inside and forcefully exhale the breath. It provides energy to the body.

4. **Bhramri-** in this pranayama, eyes and nose are closed and breath is slowly inhaled pronouncing 'Om' sound. It gives mental peace.

"What are the benefit of doing Pranayama?" asked Shivani

"By doing pranayama our body feel freshness, mind is peaceful and tension is released. It promotes physical and mental health." replied Shivam.

Come Let us discuss-

1. Do you know any of these types of Pranayama?
2. What are the benefits of Pranayama?
3. What precautions should we take while doing Pranayama?

The benefits of 'Dhyana' in learning-

One day Shivani told Shivam, "Shivam, I am unable to concentrate on my studies." Can I take help of Pranayama?"

Shivam replied "Yes, By doing Pranayama, you can get peace of mind and can concentrate on your studies."

"How?" asked Shivani.

"By doing Pranayama your mind will be peaceful and you can concentrate better on your studies. Anulom-Vilom and Kapalbhati can make your mind sharp



and agile.” Said Shivam.

“I hope Pranayama will help in studies.” Shivani said and started doing Pranayam.

Let us discuss-

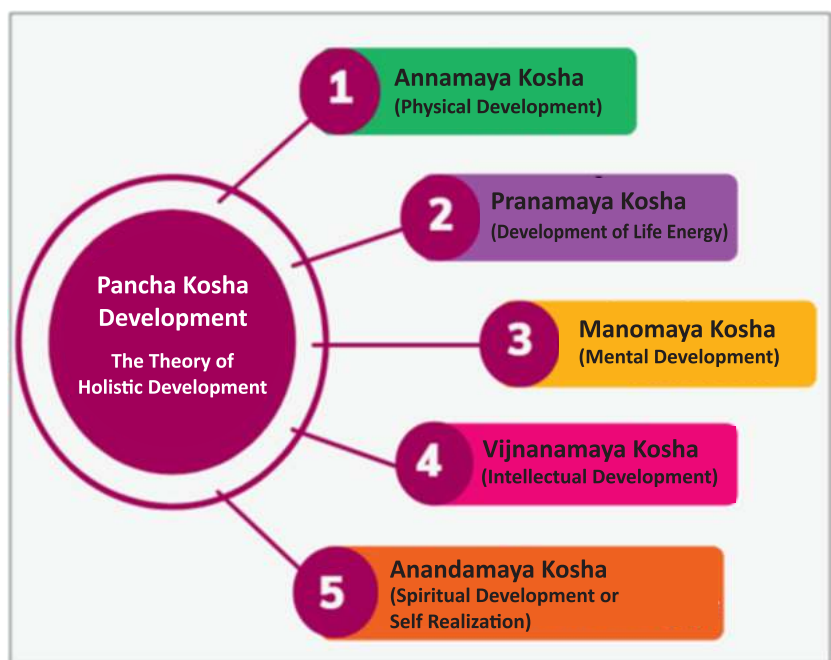
1. What problem was Shivani facing in studies?
2. How did Pranayama help Shivani?
3. Pranayama can help you concentrate on studies. How?

Discovery of inner treasure-

“Teacher entered the class smiling.” Sensing the curiosity of children, he asked a question- “If you find a treasure that makes you physically strong, mentally calm and happy from within would you like to adopt it?”

“Children curiously nodded. The teacher further said “Such a wonderful treasure already exists within us which is called “Panchkosha”. The best way to understand and develop this is-Yoga.”

Teacher made five circles on the green board and explained “Our life is developed in five stages- they are Annamaya, Pranamany, Manomaya, Vighyanmaya and Anandmaykosh. We can completely brighten our lives by controlling it through our dietary





habits and Yoga,” Together it is called Panchkosha.

1. **Annamaya Kosh (Physical Level)**- It is our body which can be kept healthy with food and yoga. Doing ‘yogasans’ we can make our body strong and flexible.
2. **Pranmanya Kosh (Energy Level)**- It is the source of energy in our life. By pranayama and deep inhaling-exhaling activities keep us energetic.
3. **Manomaya Kosh (Mental Level)**- It is associated with our thoughts and emotions. By pranayama and Dhyana can make our mind peaceful and concentrated.
4. **Vigyanmay Kosh (Intellectual Level)**- It shapes our intelligence, discretion and decision making power.
5. **Anandmay Kosh (Spiritual Level)**- It represents the deepest level of happiness. It is the reflection of the soul or the supreme ‘self’.

The teacher encouraged all student to do yoga at least 10 minutes every day. He said “If we take care of our body. Our mind will be happy and we will be able to do better in our studies.”

Discuss with your teacher for more information about panchakosha.

Swami Vivekananda has said about the benefit of Pranayama “Regular practice of pranayama brings Physical health, mental peace and Spiritual pleasure.”



Practice work

➤ Choose Correct option-

1. What are the benefits of Pranayama?
(a) Physical power (b) Mental peace
(c) both a and b (d) none of the above ()

➤ Fill in the blanks-

1. By pranayama and Dhyana can keep our peaceful and concentrated.
2. Our thinking and concentration power by pranayama and Dhyana.
3. The practice of forcefully inhaling while pulling the stomach inside is called

➤ Write 'True' / 'False'-

1. We get only physical strength by pranayama. ()
2. The blood cells of lungs start breathing freely by Bhastrika Pranayama. ()
3. The Eyes and Nose are closed and 'Om' is pronounced in Brahmari Pranayama which gives mental peace. ()

➤ Answer the following questions in three to four sentences-

1. Write the names of the five types of Pranayama.
2. Write physical and mental benefits of Pranayam.
3. What are the Panchakosh. Write their names.

➤ **Match the following-**

A

Annamaya kosha -
Pranamaya kosha -
Manomaya kosha -
Vigyanmaya kosha -
Anandmaya kosha -

B

spiritual level
intellectual level
mental level
Energy level
physical level

➤ **Prepare posters and reports-**

1. Prepare a poster on the benefits pranayama.
2. Practice any one type of pranayama regularly and write a report on the basis of your experience.

➤ **Do by yourself-**

Everyday getup before sunrise and with healthy mind do pranayama for 20 to 30 minutes and share your experience in the class and prayer assembly.

Pranayama purify the body and calms the mind.

Lesson - 15

Our Inspirations



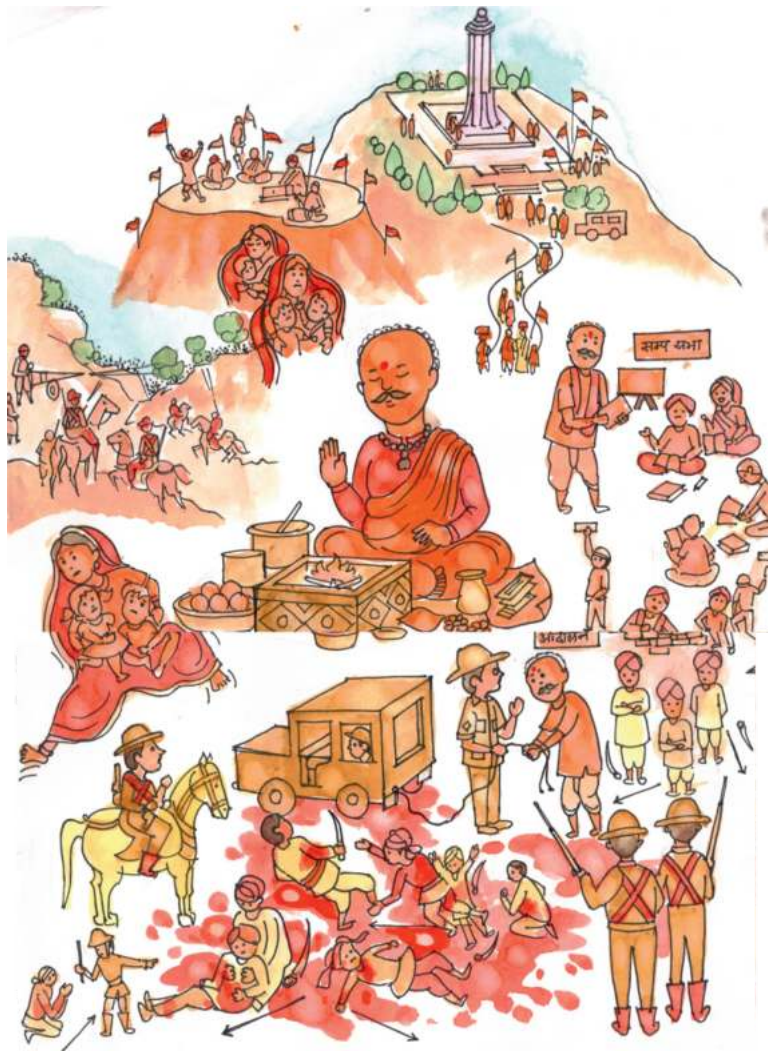
The story of Sacrifice :

Mangarh Dhuni (Mangarh Hills), Banswara (Rajasthan)

The sun was slowly hiding behind the hills but the flame of hope and faith was burning in the eyes of thousands of men and women, gathered on the top of Mangarh. They had united under the leadership of Govind Guru for their rights. The echoing of spiritual songs and reciting of mantras around the hill was filling the atmosphere with a wonderful spiritual power.

The attack of British Force-

The British Force surrounded the Mangarh hills from all sides in the morning of 17 November 1913. They had guns in their hands cannons were ready. They warned- 'Vacate the hill otherwise the results will be very bad.'





But the gathered crowd at Mangarh were adamant about their rights. They were following the rules given by Govind Guru, 'Will not tolerate injustice nor will not do any violence'.

The guns were raised at the signal of the British officer and then.....

"thud... thud... thud...!

Bullets started to be shot.

People standing on the hill were astonished, but no one stepped back. They went on with singing spiritual songs and stood there holding hand in hand.

There were cries and scream all around. Innocent people were shot with bullets but no one left the hill. Mothers martyred holding their children on their chest. Elder people standing with the support of their sticks, fell down. The youth stood firm to save their motherland.

Resolution and Struggle-

Inspired by Maharshi Dayanand Saraswati, Govind Guru gave his followers the message of non violence and self-reliance. He wanted the society to acquire education, give up alcohol and bad habits and strengthen its culture. But this was not acceptable to the British Officers and local landlords. Britishers took it as rebel and surrounded the Margharh hill. About 1500 men and women sacrificed their lives in a few hours firing. The blooded soil of Mangarh still witness this great sacrifice.

Mangarh Dhooni is a pilgrim place for the society. Today also, it is the symbol of self-respect and sacrifice. It was a unique sacrifice for the protection of self respect, culture and self- reliance. Every year, people gather here to remember this great sacrifice.





Life Introduction Revolutionary Saint Govind Guru	
● Name : Govind Guru Banjara ● Birth : 20 December 1858 Village Bansiya Dungarpur ● Death : 20 October 1931 ● Contribution : - Establishment of Samp (Unity) Sabha (1883) - Bhagat Movement (the decade of 1890) - Dhooni - Establishment of schools, use of swadeshi clothes, inspiration against injustice. - Mangarh sacrifice (17 November 1913) - Massacre of thousands of people by the British force, which is known as the 'Jallianwala Bagh of Rajasthan'.	● Status of National Monument (2022)- Mangarh Dham is declared as the National Monument by the government of India. ● His Principles : - Stay away from alcohol, non-vegetarian food, theft & prostitution. - Hard work and simple life. - Daily bathing, perform vedic sacrifice (Yagya) and keertan. - To educate children by setting up schools. - Opposing injustice and use swadeshi (indigenous) goods.

Come Let us discuss-

- What did the people do when the British forces attacked them?
- What did they do for their protection?
- What was Govind Guru doing through the medium of Dhooni?

Maharshi Dayanand Saraswati and Swadeshi Awareness-

A young Saint Govind Giri was getting education from his Guru in hills of Rajasthan. His mentor (Guru) was Maharshi Dayanand who



was a great scholar of Vedas, social reformer and supporter of Swadeshi movement in India.

One day Govind Giri asked out of curiosity-

“Sir, what should we do to make our society aware and powerful?”

Maharshi replied- “To spread equality, education and swadeshi thought in society is real nationalism. It is our duty to be aware of our rights, give up superstitions and make our motherland powerful.”



The awakening of Social Reforms-

Maharshi Dayanand has done many social reforms during his life time. He supported the ideology of ‘Formless God’ through the knowledge of Vedas and wrote book ‘Satyarth Prakash’ to eradicate the existing miracles and superstitions spread in the various sects/communities.

He supported women education and raised his voice against the caste system. In Rajasthan, he established the ‘Paropkarini Sabha’ through which he promoted cow-protection, social reforms and spread of education. Maharishi Dayanand Saraswati told his followers : “We should be excellent not only in our appearance but



also in our deeds.”

Inspiration for revolutionaries-

Inspired by the ideas of Maharishi Dayanand Saraswati, many revolutionaries laid the foundation of Swadeshi State. Shyamji Krishna Verma founded ‘India House’ in London which gave momentum to the India’s freedom struggle. Great revolutionaries like Ramprasad Bismil and Bhagat Singh also got inspiration for armed revolution from him.

Bhagat Singh once said that, “Maharishi Dayanand Saraswati taught us that slavery is the biggest curse and we must get rid of it.

His Heritage in Rajasthan-

In Rajasthan, Maharishi Dayanand Saraswati’s influence was extremely widespread. His ‘Paropkarini Sabha’ did many works for social reforms and cow protection. His ideas inspired people for becoming self-dependent.

Come Let us Discuss-

1. Which great personalities were inspired by Maharishi Dayanand Saraswati?
2. What did the revolutionaries do after being inspired by Maharishi Dayanand Saraswati’s Swadeshi ideas?
3. What works did he do for social reforms in Rajasthan?

Find out-

Like Govind Giri, which other freedom fighters/revolutionaries were inspired by the ideology of Maharishi Dayanand Saraswati.

Pioneer of Environment : Jambhoji

Jambhoji was born in 1451 in Pipasar village of Nagaur district of Rajasthan. He had been sensitive towards nature and animals

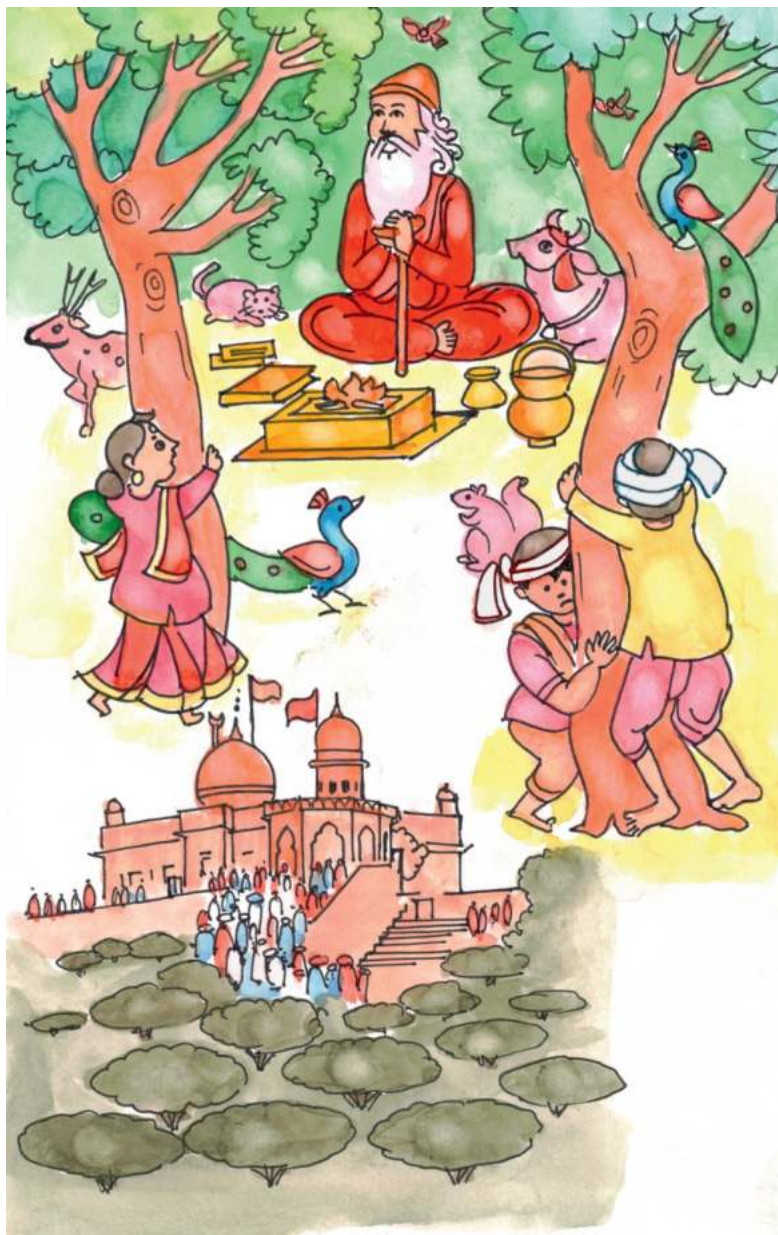


since childhood. Being brought up in desert conditions he made environmental conservation the aim of his life. Distressed by the social evils, communal discrimination and superstitions, he took a pledge to reform society and environmental protection.

Jombhoji reached a palce called Samrathal in Bikaner district when he was 34 years old and he founded Bishnoi Panth (Sect) in 1485. He gave his followers a Collection of 29 (20+9) rules or commandments in which

the important ones are- Have compassion towards all living beings, save trees, observance of non-violence and environment protection. His followers were called as Bishnois, who follow these rules even today.

Jambhoji made many efforts for environmental protection. He encouraged tree plantation and had got dug many ponds for water harvesting in Rajasthan. He had warned people about the danger of environmental pollution in the 15th century itself. In his leadership





in Rotu village of Nagaur, thousands of Khejri trees were planted, which was a big campaign.

Being inspired by his ideology, the rulers of that time like Rao Lunkaran, Rawal Jaitsi and Rao Duda banned cutting of trees and hunting wild animals in their states. The followers of Jambhoji are promoting his environmental awareness even today. In 1730, in khejarli village, 363 people sacrificed their lives to protect trees under the leadership of Amrita Devi Bishnoi. This was a big movement for environmental protection.

Guru Jambhoji died on 1536 in Lalasar. His mausoleum (Resting place) is situated in village Mukam (Bikaner) where even today environment lovers come to seek inspiration. His teaching have been compiled in a book called 'Shabadwani'. Jambhoji's ideologies on environment protection are still relevant today and his message inspire us to maintain balance with nature.

Let us Discuss-

- Why are the followers of Jambhoji protecting trees?
- We should also take care of trees and plants around us. Why and How?
- How should we behave with animals?
- Have you seen any animal nearby you, that needs to be protected?
- Do you know, why Khejarli village is important?
- Which places can be made for environmental protection?
- Is there any such place in your village or city?
- What is the importance of Khejri tree in Rajasthan?
- What are the benefits of Khejri trees for us?
- What can we do to protect trees?



Life Introduction of Guru Jambhoji

Name : Guru Jambhoji

Birth : 1451 AD, Pipasar, Nagaur, Rajasthan

Introduction : Guru Jambhoji was a great saint, social reformer and protector of environment. He founded Bishnoi Panth (Sect) and inspired the society to maintain natural balance.

Contribution in Environmental Protection-

- Gave message of tree plantation and protection of trees.
- Explained the importance of water conservation.
- Emphasized on the protection of wild life.
- Inspired the society for environmental protection through the medium of 29 rules.

Important Environment rules-

- do not cut trees.
- conserve water.
- protect wildlife.

The Sacrifice of Khejarli-

- In 1730, under the leadership of Amrita Devi, 363 people of Bishoni community sacrificed their lives to protect khejri trees.

Relevance in modern era-

- Encourage plantation.
- Use water moderately.
- Protect wildlife.
- Adopt the ideologies of Guru Jambhoji in your life.

Conclusion : The ideologies of Guru Jambhoji are very relevant even today. By adopting his ideologies, we can keep a balance of nature and can contribute in the protection of environment.



Practice work

➤ Choose correct options-

- Which is the birth place of Guru Jambhoji ?
(a) Bikaner (b) Pipasar
(c) Jaipur (d) Jodhpur ()
- For whose protection are the people of Bishnoi community ready to make sacrifice ?
(a) Wild Life (b) Trees and Plants
(c) Both (a) and (b) (d) None ()

➤ Match the following -

Column A

Govind Guru
Mangarh Hill
17 November 1913
Year 2022
Guru Jambhoji
Bishnoi Panth
Khejri Village

Column B

Mangarh declared National Monument
Social Awareness
Banswara, Rajasthan
British force attack
Sacrifice of 363 people
promoter of environment protection
collection of 29 rules

➤ Write 'True' 'False'-

- Govind Guru founded 'Samp Sabha'. ()
- Mangarh sacrifice took place on 15 August 1947. ()
- The British encouraged Indians to be self-dependent. ()
- Mangarh Hill is situated in Rajasthan. ()

- 
5. Govind Guru advised people to stay away from alcohol and bad habits. ()
 6. Guru Jambhoji lived in desert conditions. ()
 7. The followers of Bishnoi Panth used to hunt. ()
 8. Khejri tree is not found in Rajasthan. ()
 9. Guru Jambhoji got built ponds for water conservation. ()
 10. The teachings of Guru Jambhoji are relevant even today.()

➤ **Fill in the Blanks-**

1. Govind Guru established sabha.
2. Approximatelypeople sacrificed their lives at Mangarh.
3. Britishers attacked-hill on 17th November 1913 at.....hill.
4. The Indian Government gave the status of to Mangarh in 2022.
5. Guru Jambhoji was born invillage.
6. Gurun Jambhoji founded.....panth.
7. There are totalrules in Bishnoi Panth.
8. The teaching of Guru Jambhoji have been Compiled in book.

➤ **Short answer type questions-**

1. Which works were done by Guru Jambhoji for environmental protection?
2. Which rules of Bishnoi Panth are associated with environment protection?
3. What is Khejarli sacrifice?
4. What does the teaching of Guru Jambhoji teach us?
5. How can we adopt and in corporate the rules of Guru Jambhoji in our lives?



- 
6. What did Govind Giri ask his guru and what did Maharishi Dayanand Saraswati answer?
 7. Why was 'Paropkarini Sabha' founded?
 8. By which ideas of Maharishi Dayanand Saraswati were Ramprasad Bismil and Bhagat Singh inspired ?
 9. Describe three major works of Maharishi Dayanand Saraswati for social reforms.

➤ **Do Yourself-**

1. **Map Work-** Mark the Mangarh Hill and other important nearby places on the map of Rajasthan.
2. **Essay Writing-** Write a short essay on 'Mangarh Sacrifice'.
3. **Make Collage-**
 - Students should make a collage using pictures related to environmental contribution of Guru Jambhoji.
 - In this, include pictures related to tree plantation, water conservation, wildlife protection and the teachings of Guru Jambhoji.
 - Material-Paper, needle and thread, scissors, gum and coloured paper.
4. **Making Emergency Plan-** Make an emergency plan to save a wounded deer. Write your plan.

**The pride of the country lies in the patriots,
We Indians have self respect,
There is Unity in Diversity, the pride of the Nation
Is the self-respect of us Indians.**



Lesson - 16

My Rajasthan



Rajasthan is famous for its rich culture, traditions and historical heritage. Social values and awareness towards its environment is reflected in the lifestyle of the people of this area. The cultural traditions of Rajasthan are not only a means of entertainment but also have the power to connect and preserve the society. Alongwith this traditional medical practices are also popular here which are based on natural medicines. In view of the shortage of water here, unique systems of water conservation developed.

1. Cultural Traditions-

Rajasthan's cultural traditions are reflected in its folk art, dance, music and festivals. The folk dance here like Ghoomar, Kalbelia, Gair, Bhawai etc. are not only the means of entertainment but also preserve the social traditions and stories. Ghoomar dance is specially performed by ladies. Kalbeliya Dance depicts the movements of snakes is performed by the people of Kalbaliya community. Bhavai dance is performed by ladies balancing pots on head, which shows the artificial and balancing skills.

The folk song of Rajasthan is also the intimate part of its culture. The folk singers sing Mand, Fad of Pabuji, Panihari and bdhava in which love, bravery and various aspects of society is shown. Puppet art of Rajasthan is also famous in which various traditional stories are presented through puppets. This art is not only





a mean of entertainment but also a way to preserve moral values and historical events in the society.

2. Native Medicines-

In Rajasthan, the Ayurvedic and traditional medicine system have a special place. Many types of medicinal plants and herbs are found here, which are used to solve health problems. In earlier days people used these medicines as house hold remedy.

- **Neem-** It is considered a natural antibiotic. Its leaves are used to treat skin diseases, clean the mouth and remove infection.
- **Tulsi-** It is called the Queen of medicinal properties. Tulsi is consumed to prevent for cold and cough and it also increases immunity power.
- **Gwarpatha (Aloevera)-** It is beneficial for skin and stomach related problems. Its juice is used for wound, healing, burns and haire care.
- **Amla (Indian Gooseberry)-** It is a source of vitamin-C and helps in boosting immunity. It is beneficial for eyes, hair and digestive system.
- **Ashvagandha-** It is an important herb which is useful to reduce mental stress, increase body strength and maintain energy.

In Rajasthan, traditional and natural treatment is also popular. Medicines are made using herbs. Even today many people believe in these traditional medicines along with modern medicine.





3. Water Conservation-

Rajasthan is an aride state where rainfall is low and there are limited water sources. Therefore, people of this place have developed traditional water conservation systems that are extremely effective in water harvesting and management.

- **Baori (Stepwell)-** In Rajasthan, Baori have been built since ancient time. These are deep and stepped structures in which rain water is collected. The Baoris of Jaipur, Jodhpur and Bundi are famous for their beauty and utility.
- **Talab (Ponds)-** Large ponds are built for conservation of water in villages and towns. Rain water collected in these ponds, which is used for drinking water for animals, farming and domestic needs.
- **Tanka (Tanks)-** It is a small water storage tank, which is specially made to collect rainwater in houses. In the rural area of Rajasthan, even today Tanka system is used.
- **Naadi-** This is a traditional water source made from mud and stones. It is used for rain water harvesting in villages.
- **Johad (Pokhar)-** It is a small lake which is built to maintain the ground water level and to rain water.

In Rajasthan, these traditional methods of water conservation have been passed down from generation to generation. In modern times, when the water crises is deepening, the importance of these techniques have increased even more. The state government and various organisations are trying to revive these traditional systems of water conservation.





Rajasthan's rich culture, traditional knowledge and judicious use of natural resources teach us how we can maintain a balance between the society and environment. It is our responsibility to preserve traditions like indigenous medicines, water conservation and folk art. If we recognize our traditions and learn from them, we can move towards a self-reliant and prosperous society.

Practice work

> Choose correct Answer-

1. Which dance form shows the movements of snake ?
(a) kalbeliya (b) ghoomer
(c) Bhavai (d) Gair ()
2. For which purpose are Bavdis used in Rajasthan ?
(a) for dance (b) for water conservation
(c) for celebrating festivals (d) for puppet shows ()
3. For whom are the medicinal properties of Tulsi beneficial?
(a) to increase digestive power
(b) to increase immunity power
(c) remedy for cough and cold
(d) all the above ()
4. Which is not a traditional water conservation system of Rajasthan?
(a) Johad (b) Tanka
(c) Naadi (d) Canals ()



- 
5. What is presented through Puppet Art ?
(a) traditional stories (b) Agricultural methods
(c) Scientific experiments (d) games and sports ()

➤ **True or False-**

1. In Kalbeliya dance, the artist dance like a snake. ()
2. Johad is the modern system of water conservation. ()
3. Gwarpatha (Aloevera) can not be used for burns. ()
4. In folksongs, only traditional stories are sung. ()
5. Bavdis are laddered, water storage structures. ()

➤ **Fill in the blanks-**

1. is Rajasthan's famous dance in which ladies use earthen pots.
2.is a type of herb which is helpful to reduce tension.
3. The traditional system of water conservation in Rajasthan which is made by mud and stone is
4. is a water storage hole which is made for rainwater harvesting in the houses.

➤ **Short answer type questions-**

1. Which are the main folk dances of Rajasthan?
2. What is the importance of puppet art?
3. Write two sentences about the traditional methods of water conservation.
4. Write two medicinal properties of Neem.



5. How is Ashvagandha useful ?

➤ **Long answer type questions-**

1. Describe the main folk dances and folk songs of Rajasthan.
2. What is the importance of the traditional methods of water conservation? Explain with examples.
3. Describe the medicines used in Rajasthan's traditional medicine system.
4. How do the cultural traditions of Rajasthan connect the society?

➤ **Activities-**

1. **Perform a Folk Dance-** Students should practice the postures of Ghoomar or Kalbeliya dance and perform in the class.
2. **Make a model on Water Conservation-** Students should form groups and make a model of Johad, Baori or Talab.
3. **Recognise Medicinal Plants-** Tell the students to bring the leaves of Tulsi, Neem, Amla and Gwarpatha and discuss their uses.
4. **Puppet Drama-** Students should prepare a small puppet show in which they present a folktale of Rajasthan.
5. **Make Poster-** Make a poster on water conservation systems or indigenous medicines of Rajasthan and present it in the class.

We Have Learnt and Understood - IV



(A) Oral Questions -

(To be asked by the teacher from the students and to be assessed using individual / group checklist as per requirement)

➤ Conversation Based Questions-

● Story telling

1. Students will narrate, in their own words, the summary of the story “The City Troubled by Dirt.”
2. Observe the cleanliness in your surroundings or neighbourhood, describe it in class, and explain our responsibilities.

● Role Play (Acting Out)

1. Prepare a dialogue titled “If I Were the Mayor...” and perform it as a short play. One group should enact municipal officials; the other, citizens who have come to complain about cleanliness.
2. Enact the reform activities of Guru Jambhoji, Amrita Devi, and Maharshi Dayanand Saraswati.

● Picture Description

1. The teacher should show pictures such as “Clean and Dirty City,” “Children Practicing Pranayama,” and “Devotees Sitting under a Khejri Tree While Maharshi Dayanand Saraswati Preaches,” and have discussion with them.



● **Question & Answer Discussion-**

1. What is the state of cleanliness in your neighbourhood?
2. If there were no electricity, what problems might arise?
3. Have you ever seen a water source dry up?
4. Have you ever practised Yoga? What benefits did you experience?
5. What was Maharshi Dayanand Saraswati's contribution to social reform?

(B) Written Assessment-

➤ **Choose the correct answer:**

1. The function of the Municipal Council is to
 - (a) build roads
 - (b) provide electricity and water
 - (c) manage cleanliness
 - (d) all of the above
2. Which water-conservation methods are found in Rajasthan?
 - (a) stepwell
 - (b) lake
 - (c) johad
 - (d) all of the above
3. Who supervises the cleanliness arrangements?
 - (a) sarpanch
 - (b) mayor
 - (c) watchman
 - (d) both (a) and (b)
4. Who recognized the importance of the Khejri tree?
 - (a) Guru Jambhoji
 - (b) Amrita Devi
 - (c) both (a) and (b)
 - (d) none of these





5. What benefit do we get from Pranayama?
(a) reduced stress (b) increased immunity
(c) weakens the body (d) it is a useless practice
6. What was Maharshi Dayanand Saraswati's main objective?
(a) propagating the Vedas (b) helping the British
(c) promoting idol worship (d) practising meditation only

➤ **Fill in the blanks-**

1. In Rajasthan, and are used for water conservation.
2. In ancient times, people used, and to travel.
3. The distance from India's northern border to its southern border is km.
4. The distance from India's western border to its eastern border is km.
5. The head of the Municipal Council is called
6. We should always dispose of garbage in
7. One should public property, not damage it.
8. Guru Jambhoji made society understand the importance of and
9. Maharshi Dayanand Saraswati founded the society in 1875.
10. established the Samp Sabha.



➤ **Match the following-**

Column 'A'

Municipal Council

Mayor

Stepwell

Plastic

Guru Jambhoji

Amrita Devi

Arya Samaj

Column 'B'

Head of the Municipal Council

Cleans the city

Should be thrown in the blue bin

Waste

Means of water conservation

Leader of the tree-conservation movement

Propagates the Vedas

➤ **True / False-**

1. The head of the Municipal Council is the Sarpanch. ()
2. We should collect rainwater. ()
3. Plastic waste should be thrown in the green dustbin. ()
4. To save electricity, we should use natural daylight during the day. ()
5. The Khejri tree was protected by Amrita Devi. ()
6. In ancient times, all schools had digital classrooms. ()
7. The Himalayas are located on India's northern border.()
8. Practising Pranayama makes the mind unstable. ()
9. Maharshi Dayanand Saraswati promoted idol worship.()





10. The Mangarh sacrifice took place on 15 August 1947. ()
11. We should use plastic sparingly in our daily life. ()
12. In summer, the days are shorter and the nights are longer. ()
13. In summer, the water in ponds decreases. ()
14. Oil dissolves in water. ()

➤ **Write in two to three sentences-**

1. Why do birds build nests and where do they collect the materials?
2. If villagers do not help one another, how would that affect the organisation of a wedding?
3. What rules should be followed for the safe use of the Internet?
4. How do ants construct their anthills?
5. What is the main difference between ancient and modern means of transportation?
6. Name two states located in India's north and two in its south.
7. What are the functions of the municipal council?
8. Why should we conserve electricity and water?
9. Mention two methods of water conservation.
10. What are the benefits of Pranayam?
11. What was the contribution of Maharishi Dayanand





Saraswati in social reforms?

12. Write any three causes of climate change.
13. What are the reasons for Deforestation?
14. What items use the most plastic in your home?

(C) Do it yourself-

1. Write slogans as per the given example- 'Save water, save earth', 'Plant trees, save environment', 'Return to the Vedas'
2. Report writing-
 - Write an essay on traditional methods of water conservation in Rajasthan.
 - Ask your grandparents about their childhood school, mode of travel and methods of lighting. Write down their experiences and draw pictures related to them.
 - Mark the mountains, rivers, major cities and sea coasts in the geographical map of India.
 - Write a short essay on the social reforms of Maharishi Dayanand.

Phad painting is a traditional folk art of Rajasthan which is painted on a cloth. Natural and mineral colours are used in it.



Steps of Surya Namaskar

