

ENVIRONMENTAL STUDIES

3





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Every care has been taken to minimize the mistakes regarding printing and other aspects of the book. However, there is always a scope of improvement. Any suggestion for further improvement of this book would be greatly acknowledged.

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PREFACE

Environmental studies have assumed great significance in education of a child in recent times. The subject covers every aspect of the world in which the child lives, his ownself, how he should care for his health and the way he should behave in the society. It is very important for a child to get aware of his/her surroundings.

The book " **Environmental Studies** " is a series of 0, 1 to 5 (in six parts) which is strictly based on the guidelines of NEP pattern to facilitate the teaching and learning of environmental studies.

The contents presented in these books have been selected keeping in view the physical and mental growth of the child. There will be an active participation of the students through regular exercises and activities within the text.

Key Features of the Series

- 2 Covers the latest syllabi of various boards.
- 2 All the exercises in the books can be used as tasks for Revision Test paper and Model Test Paper.
- 2 Interactive study approach.
- 2 An activity is provided in each chapter to facilitate hands-on learning and consolidation of environmental concepts.
- 2 **Points to remember** are given at the end of each chapter to highlight some important points of the topics.
- 2 **Exercises** are carefully graded and contain a wide variety of problems. They help the children to connect what they are learning to everyday situations.
- 2 **Facts corner** are given in each chapter where required.
- 2 **Info bits** are also given in each chapter.
- 2 **Teacher Notes** are given in each chapter where required.

I hope that the series will fulfil the needs of teachers and students by its virtue of its plus points. Still, there is always a room for improvement. Any suggestions from the teachers as well as the parents would be highly acknowledged and truly appreciated.



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Plants Around Us



LEARNING OBJECTIVE

- Types of plants
- Where do plants grow?
- Uses of plants

Plants are found almost everywhere on the Earth, in the water and on the land. Plants are found in different sizes and shapes. They make their own food and give us many things like food and clothing. They make our environment beautiful and help us to breathe.

Types of Plants

Very big, tall and strong plants like neem, gulmohar, banyan and mango are called **trees**. They have a thick, brown, woody stem called the **trunk**. Most trees live for many years.



Gulmohar



Banyan

infobits

- At night, plants breathe like us. They take in oxygen and give out carbon dioxide. Whereas during the day, they take in carbon dioxide and give out oxygen.



Rose



Hibiscus

Small bushy plants like rose, hibiscus and mehndi are called shrubs. They are smaller than trees and have hard and thin stems. They have many branches. They also live for many years.



Grass



Mint

Very small plants like spinach, grass and mint have a thin, weak stem and live only for one season. They are called herbs.

TEACHER'S NOTES

Guide the students to be sensitive towards plants. Motivate them to water the plants daily. Elucidate that plants are important for our survival.



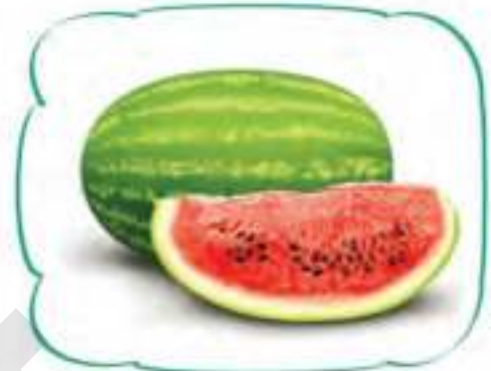
Peaplant



Grapevine

Weak plants such as pea plant, grapevine and money plant have very thin stem and need support to stand. They are called **climbers**.

Weak plants such as pumpkin, muskmelon and watermelon have thin and soft stems. They grow along the ground and are called **creepers**.



Watermelon (creeper)

Where do plants grow?

Plants grow almost everywhere - on land and in or near water. Plants that grow on land are called **terrestrial plants**.

Types of Terrestrial Plants

Desert Plants

Cactus and date palm grow in hot, dry deserts, where there is very little or no rainfall. The leaves of cactus are reduced to spines.



Fact Finder

Bamboo is an extremely rapid growing plant.



Cactus



Spruce

Plants in the Hills

Pine and spruce are plants that grow in the hills, where the climate is cold and dry. Hilly areas are covered with coniferous trees that are tall and have needle like leaves.

Plants in Marshy Area

Plants that grow in marshy areas, where the soil is slicky and water logged are called mangroves. These plants have **breathing roots** that grow above the soil to take in air.



Mangroves roots

Types of Aquatic Plants

The plants that grow in water or near water are called aquatic plants.



Floating palnt



Fixed plant

Floating Plants

Duckweed and wolfia are floating plants.

Fixed Plants

Lotus and water lily are fixed plants. They are fixed to the water bed.



Submerged plant

Submerged Plants

Hydrilla and tapegrass are submerged plant.

Some Unusual Plants

Moulds, mushrooms and yeasts are non green plants. They get their food from dead and decaying plants and animals.

Some plants eat insects. A venus fly trap catches an insect between its leaves. The pitcher plant and sundew also eat insects.



Mushroom



Venus flytra

Uses of Plants

- ❖ Plants are important for us. They are our green friends.
- ❖ Plants give us food in the form of vegetables, fruits, pulses, cereals, spices, coffee, sugar and oil.
- ❖ Plants give us rubber, paper and oil.
- ❖ Plants give us fibres such as cotton and jute. We make cloth from fibre.
- ❖ We make many medicines from plants such as neem, tulsi, eucalyptus.
- ❖ We use wood of trees such as teak for making furniture, toys and paper.
- ❖ Woods of trees are also used as fuel for fire and light.



Let Me Answer

- Do you get oil from plants?
- How often do you water plants?



Some More Uses of Plants

- ❖ Plants keep the air clean by absorbing carbon dioxide and releasing oxygen.
- ❖ Plants are used for landscaping and making the environment beautiful.
- ❖ Plants give us shade.
- ❖ Plants are a home to many birds and animals.

New Plants

There are many new plants, fruits and vegetables available in the market now-a-days that were not there when our grandparents were children. Broccoli (vegetable), kinnow (fruit), soyabean (crop) and tulips (flowers) are some examples of new plants. Many plants were grown in other countries and brought to India.

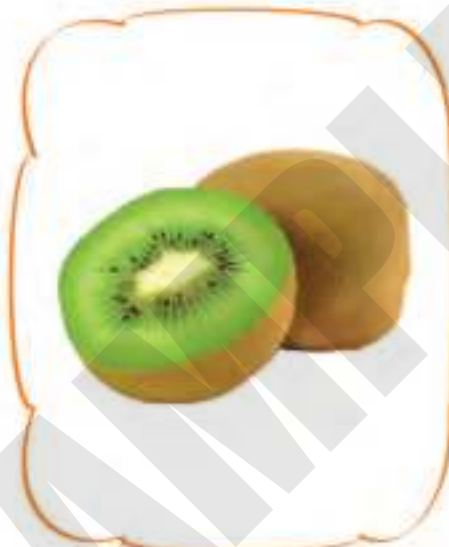


Broccoli

Plants are important part of our lives. We should take care of them.



Litchi has come from China



Kiwi has come from New Zealand



Kinnow has come from California

Remember to Summary

- ✦ Plants are found almost everywhere - on the land and in water.
- ✦ Trees, shrubs, herbs, climbers and creepers are different types of plants.
- ✦ Plants that grow on land are called terrestrial plants.
- ✦ Plants that grow in or near water are called aquatic plants.
- ✦ Plants give us many things.
- ✦ We should take care of plants.

Exercises

A. Tick (✓) the correct option.

- a. Where does lotus grow?
Mountain Water Trees
- b. Which one is a shrub?
Gulmohar Rose Mint
- c. Which one is a tree?
Mango Hibiscus Rose
- d. Which one is an insect eater?
Moulds Mushroom Pitcher Plant

B. Fill in the blanks.

- a. _____ have many branches.
b. _____ grow along the ground.
c. We make furniture from _____.
d. Kiwi has come from _____.
e. Litchi has come from _____.

C. Answer the following questions in very short.

- a. Name a herb.
_____.
- b. Which type of plants grow in a desert?
_____.

D. Answer the following questions.

- a. What is a tree?

- b. What are herbs?

- c. What are terrestrial plants?

- d. What are aquatic plants?

- e. How are plants useful to us?

- A. Make a chart on types of plants and hang it in your class.
- B. Paste pictures of six things we get from plants, around the tree. Use old newspapers and magazines to find the pictures.



write few suggestion how to make Earth have beautiful by planting trees.

2

Animal Kingdom



LEARNING OBJECTIVE

✦ Types of animals

✦ Eating habits of

Types of Animals

There are different animals in the world.

Some animals are big and some are small, which are found on land, in water and in air. They have different shapes and sizes.

Very Big Animals



Blue Whale



Elephant



Ostrich

infobits

- Blue whale is the largest animal on the Earth.

Big Animals



Rhinoceros



Lion



Tiger



Hippopotamus

Small Animals



Dog



Fox



Monkey



Cat

TEACHER'S NOTES

Make the students understand the types of animals. Elucidate them about the extinct animals. Give some examples to make them understand the extinct animals.

Very Small Animals



Ant



Rat



Butterfly



Mosquito

Animals Differ in Shapes



Fish have a stream lined body



Worms and snakes have elongated bodies



Birds have light bodies with hollow bones



Lobster



Octopus

Some animals like crabs, lobsters, octopuses and starfish have unusual shapes.



Crab



Star fish

Movement in Animals

All animals move in different ways.

- ❖ Fish move in water with the help of fins. They do not have legs.
- ❖ Snakes and earthworms do not have legs. They wriggle on the ground.
- ❖ Animals like octopus and starfish have eight legs.
- ❖ Most land animals like horses, goats, dogs and zebras have four legs to walk and run.



Snake



Octopus



Starfish



Horse



Goat



Zebra

- ❖ Insects have six legs. Some insects have wings to fly.
- ❖ Birds have two legs, which help them to perch on branches of trees. They have wings to fly.



Let Me Answer

Which animal swallows their food without chewing it?

Eating Habits of Animals

Animals depend on plants and other animals for food. Animals like cows, horses, elephants, goats eat plants and their products. They are called **herbivores**.

Animals like lions, tigers and crocodiles eat the flesh of other animals. They are called **carnivores**.

Animals like bear and crow eat both plants and flesh of other animals. They are called **omnivores**.

Herbivores	Carnivores	Omnivores	Scavenger
<p>Horse Elephant Goat Cow</p>	<p>Lion Tiger Crocodile</p>	<p>Bear Crow</p>	<p>Vulture</p>

Animals like hyenas and vultures eat the flesh of dead animals. They are called **scavengers**. In a way they clean the forests.

How do animals eat?

Different animals eat different kinds of food. The part of an animal's mouth is suited to the kind of food it eats.



Cow chews cud

Herbivores like cows and buffaloes have sharp and broad teeth to cut grass and leaves. They swallow their food with out chewing it. When they rest, they bring this food back into their mouth. They then chew it with their grinding teeth. This is called chewing the cud.

Carnivores have sharp, pointed and slightly curved teeth. These help them to tear flesh. They have strong grinding teeth, at the back of their mouth. These help them to chew bones. Animals like squirrels and rabbits nibble fruits and seeds. They have sharp front teeth.



Lion tears flesh



Butterfly sucks nectar



Earthworm swallows soil

Frogs and lizards use their long and sticky tongue to catch insect. They then swallow their food whole.

Butterflies suck nectar from flowers. Leeches and mosquitoes suck the blood of other animals. Earthworms swallow the soil that contains plants and insects.

Different Tails of Animals

Many animals have tails. They use their tails for different purposes.

- ❖ A fish uses its tail for swimming and changing the direction.
- ❖ The thick tail of the kangaroo enables it to maintain its balance.
- ❖ The long bushy tail of a squirrel helps it to keep balance while leaping and climbing.



Fish



Kangaroo



Squirrel



Peacock



Cow



Buffalo



Monkey

- ❖ A peacock uses its tail to dance.
- ❖ Cows and buffaloes use their tails to fly away birds and insects that sit on them.
- ❖ A monkey uses its tail to swing from one branch to another.

- ❖ A dog uses its tail in different ways.



It wags its tails when it is happy.



It puts its tails between its legs when it is scared.



Fact Finder

- When a joey (baby Kangaroo) is born, it is only 2cm long and weighs less than a gram.



Dinosaur



Mammoth



Dodo

Extinct Animals

Many animals have got extinct from the world. They lived hundred of years ago. Such animals are called **extinct animals**. Some of them are dinosaurs, mammoth, dodo, etc. We all should join hands to save them.



Remember to Summary

- + We see a variety of animals in our world.
- + Animals depend on plants and other animals for food.
- + The part of an animals mouth is suited to the kind of food it eats.
- + Animals use their tails in many ways.
- + Many animals have got extinct from the world.
- + All animals move in different ways.



Exercises

A. Tick (✓) the correct option.

a. Which one is a herbivore?

Cow



Tiger



Wolf



b. Which one is a scavenger?

Hyena



Crocodile



Zebra



c. Which animals suck blood of other animals?

Butterfly



Tiger



Leech



d. Which one is a extinct animal?

Buffallo



Dodo



Rabbit



B. Fill in the blanks.

a. A _____ uses its tail to dance.

b. Worms and snakes have _____ bodies.

c. Most land animals have _____ legs.

d. Insects have _____ legs.

e. Birds have _____ to fly.

C. Write true or false.

a. Dog is a big animal.

b. Fish have a stream lined body.

c. A dog uses its tail in different ways.

d. Zebra is an omnivore.

e. We should kill animals.

D. Answer the following questions.

a. Name some very big animals.

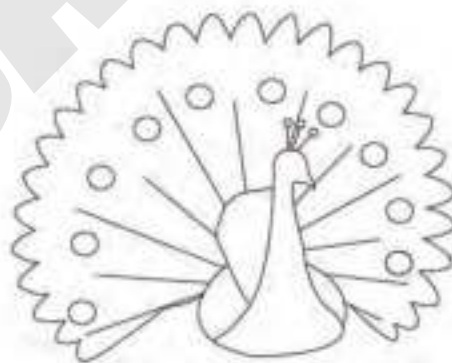
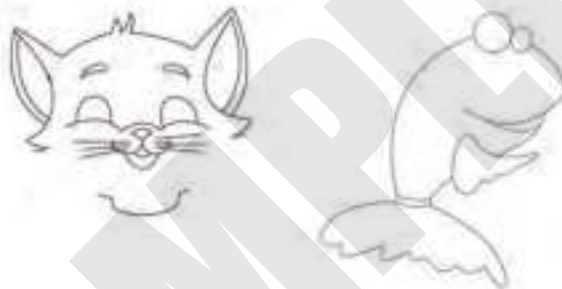
b. What does 'Chewing the cud' mean?

c. What are herbivores?

d. How do different animals use their tails?

e. How do scavengers help to keep the forest clean?

A. Make picture of animals with your thumb and finger prints using water colours.



Feathered Friends



LEARNING OBJECTIVE

- ✦ Different types of birds
- ✦ Feathers of birds
- ✦ Different types of beaks
- ✦ Nests of birds
- ✦ Migration

Birds are the most beautiful and colourful animals found on the Earth. We see different kinds of birds around us.

Different Types of Birds

Sparrow, crows, pigeons, eagles and parrots are some common birds we see flying around us.

Birds have some special features that help them to fly.

- ✦ They have wings and feathers attached to them.
- ✦ They have a stream lined body, which helps them to cut through the air easily.
- ✦ Their bones are light and strong. They are hollow and filled with air.
- ✦ Their wings are attached to strong muscles called flight muscles. They help the wings to move up and down.
- ✦ Eagles and vultures can fly very high in the sky. Sparrows and bulbuls fly at low heights. Hens and peacocks fly very short distances, whereas swallows and cranes can fly very long distances.



Ostrich



Kiwi



Penguin

infobits

- Ostrich, kiwi and penguin are some birds that cannot fly.

TEACHER'S NOTES

Speak about different kinds of birds. Ask the students to identify different birds. Guide students to feed the birds with pulses, water, etc.

Feathers of Birds

All birds have feathers. Birds have two types of feathers. Down feathers and fluffy feathers located close to the body. They keep the body of bird warm. Flight feathers are long and strong. They help the bird to fly and change direction while flying.

- ❖ A part from flying, the feathers of a bird help it in a number of other ways.
- ❖ They trap the body heat and keep the bird warm when it is cold.
- ❖ Feathers help birds to swim. Some aquatic birds like ducks have waterproof feathers. This prevents them from getting wet.
- ❖ The colour of the feathers helps the birds to hide from their enemies.
- ❖ Feathers also help to protect a bird's sensitive skin and attract its partner.



Down Feather



Flight Feather

Different Types of Beaks

Birds have different kinds of beaks. They have no teeth. They use their beak to catch and hold food. The shape of a bird's beak tells us about the kind of food it eats.

- ❖ Birds like humming birds and sunbirds have long curved beaks. They helps them to drink nectar from flowers.
- ❖ Wood peckers and hoopoes have sharp, strong, straight and pointed beaks.
- ❖ Sparrows and pigeons have short, hard and pointed beaks to crack open their food.
- ❖ A parrot has strong hooked beak to crack seeds, nuts and fruits.
- ❖ Ducks and spoon bills have broad and flat beaks to dig mud under water.



Fact Finder

- Birds clean their bodies with their beaks. This is called preening.



Humming bird



Wood pecker



Sparrow



Pigeon

- ❖ Storks and cranes have long and pointed beaks to catch fish.
- ❖ Kites, eagles and vultures have strong, sharp and hooked beaks to tear the flesh of animals.



Nests of Birds

The nests of birds are usually cup shaped. The nest prevents the egg and young ones from falling down. Nests differ in their size, location and materials used. Birds use twigs, dry leaves, cotton thread, wool, feathers and straw to build their nests. Most birds make nests on trees.

The woodpecker builds its nest inside in the trees. The weaver bird weaves a very fascinating nest. Straw, grass and leaves are used in weaving the nest. The nest hangs from the branch of a tree. It has an opening at the lower end.

The tailor bird sews leaves together to make a nest. The bird makes holes on the edge of leaves with its fine beak and sews them with threads, wool, leaves and spider's web. They keep bunches of hair, wool and grass in the nest to make it warm and comfortable.



Let Me Answer

- Name the bird that builds its nest inside the trees.
- Which bird does not make a nest?



Nest of woodpecker



Nest of weaver bird



Nest of tailor bird

Pigeons build nests on roof tops, old buildings and under bridges. The peacock lays its eggs in a nest among tall grass. The cuckoo does not make a nest. It lays its eggs in the nest of a crow.

Birds and Their Sounds

We all have heard the chirping of birds. Birds usually communicate with two kinds of sounds - a call and a song. A call is a single sound such as a squeak that is repeated often. A song is a series of notes sound musical.

Migration

Some birds fly back and forth across the world every year. This is called **migration**. There are three main reasons for bird to migrate.

- ❖ In search of food
- ❖ In order to breed
- ❖ To avoid unfavourable weather conditions.



Remember to Summary

- + Birds are the most beautiful and colourful creatures found on the Earth.
- + All birds have feathers.
- + The two kinds of feathers are down feathers and flight feathers.
- + Different birds have different kinds of beaks.
- + Birds usually communicate by two sounds – a call and a song.
- + Some birds migrate every year to escape cold weather, shortage of food or to reproduce.



Exercises

A. Tick (✓) the correct option.

- a. Which one is a flightless bird?
Parrot Ostrich Sparrow
- b. Which feathers keeps the body of bird warm?
Flight feather Down feather None of these
- c. Why do birds migrate?
In search of food In search of clothes None of these

B. Fill in the blanks.

- a. Birds have two types of _____.
- b. Birds have beaks in place of _____.

- c. A parrot has strong _____ beak.
- d. The nests of birds are usually _____ shaped.
- e. The _____ does not make a nest.

C. Answer the following questions in short.

- a. Name the birds that cannot fly. _____
- b. Which birds have long curved beaks? _____
- c. Why do birds have feathers? _____

D. Answer the following questions.

- a. What are down feathers?

- b. How do birds communicate?

- c. Why do birds migrate?

- d. What kind of beaks do water birds have?

A. Look for a fallen bird feather in a park. Observe it closely. Dip its end in ink and write on paper with it. This is how people used to write before the pen was invented.

B. Write the name of the birds, the feathers belongs to.



3



4



5



1



2

Revision Test Paper-I

(Based on Chapter 1 to 3)

A. Tick (✓) the correct option.

a. Where does lotus grow?

Mountain



Water



Trees



b. Which one is an extinct animal?

Buffalo



Dodo



Rabbit



B. Fill in the blanks.

a. Most land animals have _____ legs.

b. The nest of birds are equally _____ shaped.

c. A parrot has strong _____ beak.

d. Kiwi has come from _____.

C. Answer the following questions.

a. Name some very big animal.

b. Why do birds migrate?

c. What are terrestrial plant?

D. Write true or false.

a. A dog uses its tail in different ways.

b. Birds have two types of beaks.

E. Answer the following in very short.

a. Name two trees.

The Food We Eat



LEARNING OBJECTIVE

- ✦ Various sources of food
- ✦ Why do we eat food?
- ✦ Balanced diet
- ✦ Cultural diversity in food

Our body works continuously from morning till night. So, we need energy to do work. We get this energy from the food we eat. Food is necessary for our body because

- ❖ It gives us energy.
- ❖ It helps us grow.
- ❖ It keeps us healthy and strong.
- ❖ It protects us from diseases.



Various Sources of Food

The main sources of food are plants and animals.

Food From Plants

We eat different parts of plants as food.

Roots		Leaves			Seeds		
							
Carrot	Radish	Mint	Coriander	Spinach	Wheat	Rice	Corn
Stems		Fruits			Flowers		
							
Sugarcane	Potato	Papaya	Mango	Orange	Cauliflower	Broccoli	

TEACHER'S NOTES

Elucidate that eating healthy food will keep our bodies healthy. Ask the students to maintain a balanced diet and avoid junk food.

- ❖ We also get vegetable oil from plants like mustard, groundnut, coconut, Sunflowers, etc. These are rich in fats that provide energy and warmth to our body.



Sunflower oil Mustard oil Groundnut oil



Pepper

Clove

Turmeric

Coffee

Sugar

Tea

- ❖ Spices are parts of some plants that add flavour, aroma and colour to food. Pepper, clove, turmeric etc, are some spices.

- ❖ We get sugar from the stem of sugarcane. We get tea from tea leaves. We get coffee from coffee beans.

Name two plants that your elders in the house use to cure oil.

1.

2.

Food From Animals

We get food from many animals. We cook them before eating.

- ❖ Animals like cows, goats and buffaloes give us milk. People drink camel's milk in deserts and yak's milk in cold and hilly places. Some milk products we use are cheese, curd and butter.



Let Me Answer

- Which is your favourite vegetable?
- How many times do you drink milk in a day?

- ❖ Hens and ducks give us eggs. They are a rich source of protein.
- ❖ Honey is obtained from honey bees. It is used as a sweetener (to make sweet) and even as an antiseptic. It also smoothes a sore throat.



Eggs

Honey

- ❖ The flesh of animals like hens, goats, fish, prawns and lobsters is eaten as meat.



Meat

People who eat vegetables, fruits and dairy products are called **vegetarians**. People who eat meat, fish and eggs along with fruits, vegetables and dairy products are called **non-vegetarians**.

Why do we eat food?

Our body needs different kinds of food and nutrients to grow and keep healthy. Let us read about different types of food we eat and how they help us.

- ❖ Carbohydrates and fats give us energy to do our work. Cereals like wheat and rice are good source of carbohydrates.
- ❖ Proteins help our body to grow. Pulses like moong, urad and chana are rich sources of proteins.
- ❖ Vitamins and minerals help our body to remain healthy and protect it from illness.



Fact finder

- People, who eat fruits and vegetables only and do not eat any animal product even milk are called Vegan.

Carbohydrate Food	Vitamins and Mineral Food	Protein Food
<p>Potatoes Rice Wheat Sugar Bread</p>	<p>Vegetables Eggs Milk Fruits</p>	<p>Fish Meat Milk Pulse Cheese Pea Eggs Chicken</p>
<p>Foods such as bread, potatoes, rice, wheat and sugar contain carbohydrates.</p>	<p>Fruits, green leafy vegetables, milk and eggs are rich in vitamins and minerals.</p>	<p>Milk, meat, fish, cheese, egg, pulses, beans and peas are rich in protein.</p>

Balanced Diet

A diet that contains all the nutrients in the right amount is called a balanced diet.

Do you have a balanced diet?

In the table below, write down what you and three of your classmates ate for dinner yesterday.

You	Classmate 1.	Classmate 2.	Classmate 3.



- Always eat a balanced diet. Different nutrients are needed by our body.

Now look at the table carefully. Did you and all your classmates eat the same food?

Cultural Diversity in Food

People in different parts of India and around the world, eat different kinds of food. Their diet depends on what grows easily there and what the climate is like. So availability and preferences determine the food habits of people.

- ❖ People, who stay in coastal areas eat a lot of sea food like fish, prawns and lobsters because it is easily available.
- ❖ People of South India eat idli, dosa, rice and sambhar.





Punjabi food

❖ People of Punjab like to eat makki ki roti and sarson ka saag.

Some people do not eat meat and eggs because they feel it goes against their religion and customs.

The food habits of people around the world differ a lot. Some people like to eat semi-cooked food, some prefer bland food (without any spices), some like spicy food, etc.



Remember to Summary

- + Food gives energy to the body and helps us to grow.
- + We get food from plants and animals.
- + Our body needs different kinds of food and nutrients to grow and keep healthy.
- + Fruits, vegetables, cereals, pulses, oils, spices, etc, are all plant products.
- + Milk, eggs, meat and honey are animals products.
- + People in different parts of India and around the world, eat different kinds of food.



Exercise

A. Tick (✓) the correct option.

a. Which food do we get from plants?

Apple



Egg



Milk



b. Which one is not a milk product?

Cheese



Butter



Omelette



c. Which one is a carbohydrate rich food?

Fruits



Potato



Meat



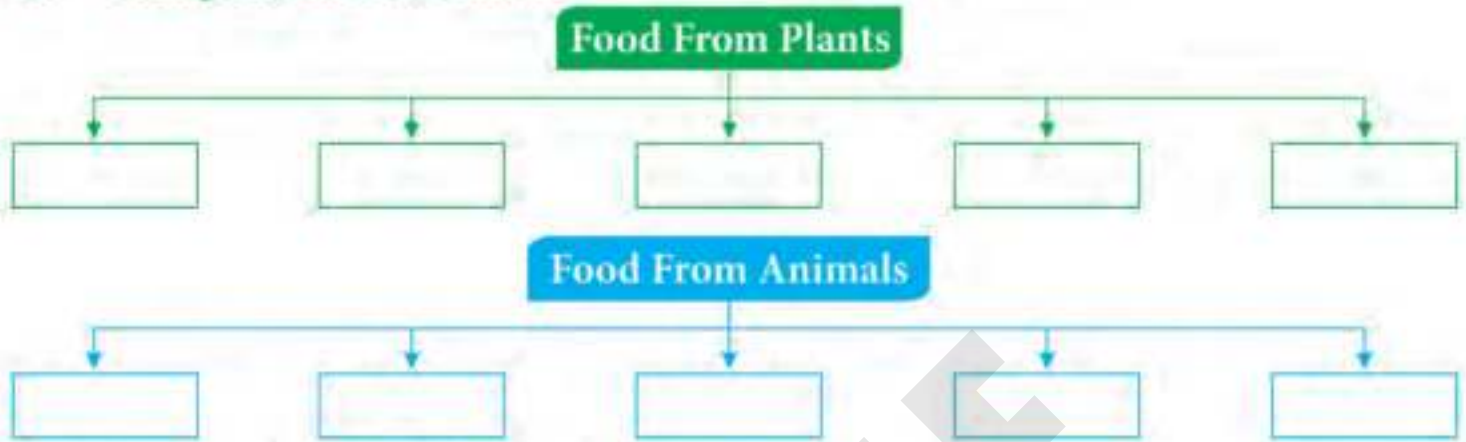
B. Fill in the blanks.

a. Food keeps us _____ and _____.

b. _____ and _____ gives us eggs.

- c. Our body needs different _____ to grow.
- d. We should eat a _____ diet.
- e. People who live in coastal areas eat more of _____.

C. Complete the flow charts.



D. Answer the following questions.

- a. Why do we need food?

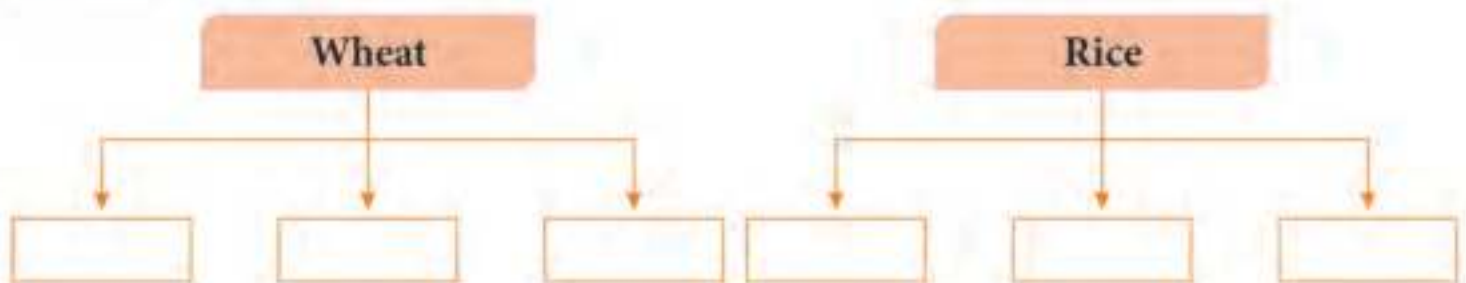
- b. Name the different parts of a plant that we eat.

- c. Who are non vegetarians?

- d. What is a balanced diet?

- e. What do you understand by cultural diversity in food?

A. In the flow charts below, think and write the names of three things that are prepared using wheat and rice.



Our Clothes

LEARNING OBJECTIVE

- ✦ Clothes according to the seasons
- ✦ Different types of clothes

Clothes are one of our basic needs. We all wear clothes to protect us from cold, heat, dust, rain and insect bites. They make us look good too. We wear different clothes in different seasons.

Clothes According to the Seasons

We wear clothes according to the seasons, our needs and occasions. They protect our bodies.

infobits

- Early man used leaves and skin of animals to cover his body.



Summer clothes

In summer, we prefer to wear **cotton clothes**. These clothes keep us cool. We get cotton from the cotton plant.



Winter clothes

We wear **woollen clothes** in winter. They protect us from cold and keep us warm. We get wool from sheep.



Clothes of rainy season

We use **raincoats** or **umbrellas** during the rainy season. We also wear gumboots. These protect us from rain.

infobits

- We get wool from rabbit and other animals too.

TEACHER'S NOTES

Motivate the students to understand different kinds of clothes according to the season, place, occasion, and events. Inform the students about their school uniforms as a type of clothes. Educate them about different uniforms based on the professions.

Different Types of Clothes

Synthetic Clothes

Clothes made from artificial fibres like nylon, rayon and polyester are called synthetic clothes. These are shiny and more durable.

Uniform

Uniforms are worn by school children, doctors, nurses, lawyers, policeman and postman. We can easily identify them from their uniforms.



Let Me Answer

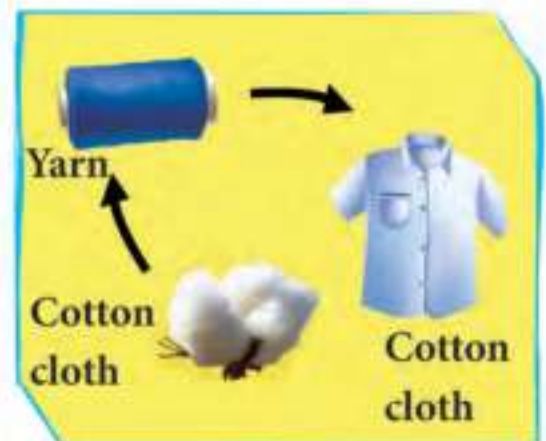
- What is the colour of your school uniform?
- Do you wear cotton school uniforms in winter too?

People who wear a uniform.

How clothes are made?

Cotton Clothes

Do you know that cotton is obtained from cotton plants. At first, cotton is spun into yarn. The yarn is then used to make cloth on a loom. This is called **weaving**.



Woollen Clothes

Wool is the soft, thick hair of sheep. At first, sheep hair is removed from its body. This is called **shearing**. Then it is cleaned and spun into wool. This wool is used to knit sweaters and other woollen clothes.



Fact Finder

- We get very soft cotton from semal tree.



Silk Clothes

We get silk from silkworms. Silkworms feed on mulberry leaves. We get silk from the silkworm's cocoon. Silk thread is made from cocoon.



Remember to Summary

- + Clothes are one of our basic needs.
- + We wear clothes to protect ourselves from heat, cold, rain, dust and insects.
- + We wear clothes according to the season.
- + We get wool from sheep.
- + We get silk from silkworms.



Exercise

A. Tick (✓) the correct option.

a. We wear clothes to protect ourselves from

Heat



Cold



Both



b. School children wear

Uniform



Skirt



Both



c. We prefer to wear _____ clothes in summer.

Cotton



Woollen



Uniform



d. We get silk from

Trees



Animals



Silk worms



B. Fill in the blanks.

1. We wear _____ clothes in summer season.
2. _____ is the soft, thick sheep hair.
3. We get silk from the silkworm's _____.
4. Silkworms feed on _____ leaves.

C. Match the following.



Postman



Doctor



Soldiers



School children

D. Answer the following questions.

a. What are synthetic clothes?

b. Name the people who wear uniforms.

c. Which clothes do we wear in winter?

d. How do we get cotton clothes?

Puzzle

The names of some people who wear special dresses are given in the crossword puzzle. Encircle their names. Look at the pictures for clues.

X	V	C	Q	M	N	D	V
Y	Q	P	D	M	P	Q	R
X	D	O	C	T	O	R	V
U	Q	L	N	Q	S	V	Y
L	V	I	D	T	T	Q	V
M	C	C	Y	V	M	C	M
Q	M	E	M	Q	A	Y	U
V	N	M	T	Y	N	V	Q
X	Q	A	C	W	L	O	V
M	Y	N	U	R	S	E	D

B. We wear different dresses at different times. Look at the clothes of these children and name the place they are going to.

School

Wedding

Playing





Houses We Make



LEARNING OBJECTIVE

Types of houses

An ideal house

We all live in a house- big or small. A house becomes a home by the people who live in it. A house protects us from heat, cold, rain, dust, wind and thieves. Our house keeps us safe and comfortable.

Types of Houses

Early man lived in caves and under trees. After many years, he learnt to make houses of wood, mud and straw. Such houses are called huts. Huts are also called **kuchcha** houses. They can be easily broken and blown away by storm, rain etc.

Then man began building stronger houses. They are called **pucca** houses. They are made of cement, bricks, iron, steel and many other things. They are not affected by strong winds, rain etc. There are many kinds of **pucca** houses like bungalows, flats and apartments.



Hut



Bungalow



Apartments in multistoried building



Single storied house



Double storied house

TEACHER'S NOTES

Apprise the importance of the house in our life. Ask the students to identify different types of houses.

People live in different types of houses because of several reasons:

- ❖ The amount of money available to build the house.
- ❖ The materials available to build the house.
- ❖ The climate of the place.



Let Me Answer

Name any one item which is used to make the house strong.

Special Houses

Stilt houses are built on poles or stilts in places like Assam, where it rains a lot. The poles or stilts keeps the house high above the ground. This protects the house and the people from floods and wild animals. The roofs of these houses are slanting so rain-water slides down easily.



Stilt House



Tent



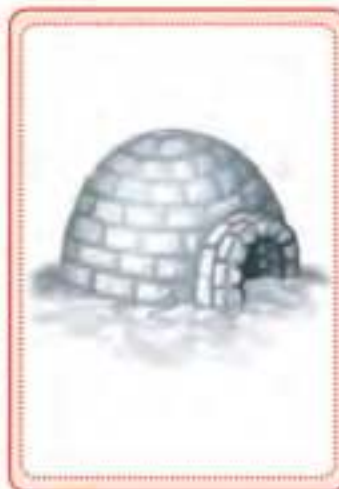
Caravan

Tents are movable shelters. They are made of canvas, cloth or leather. They can be fixed and folded easily. They are used by people in mountains and deserts, and while camping.

Caravan is a house on wheels. It moves from one place to another. It is used by gypsies and circus performers.

Igloos are dome-shaped houses made of blocks of ice. They can only be made in extremely cold regions like Greenland. Inuits are the people, who live in igloos.

House boats are moving houses made on boats. They are found in lakes. House boats are a common sight in the Dal lake in Srinagar and the back waters of Kerala. They are a great tourist attraction.



Igloo



Houseboat

An Ideal House

An ideal house should have the following qualities.

1. Things should be kept in the right - place after use.
2. The floor of the kitchen and bathroom should slope toward the drain. This allows water to flow out easily.
3. There should be a proper drainage system to carry dirty water away from the house. Mosquitoes breed in uncovered drain and spread diseases like malaria and dengue. So kitchen and bathroom drains must be covered.
4. Doors and windows should have a wire-netting to keep away flies and mosquitoes.
5. Sun light kills the germs. So there should be many windows and doors in a house.
6. They should be opened every day to let in the sunlight and fresh air.

A Clean House

- ❖ Garbage should be thrown in dustbins, that should be kept covered. House hold garbage should be put in the garbage bin in the street.
- ❖ The bathrooms and kitchen floors should be washed and dried daily.

 **infobits**

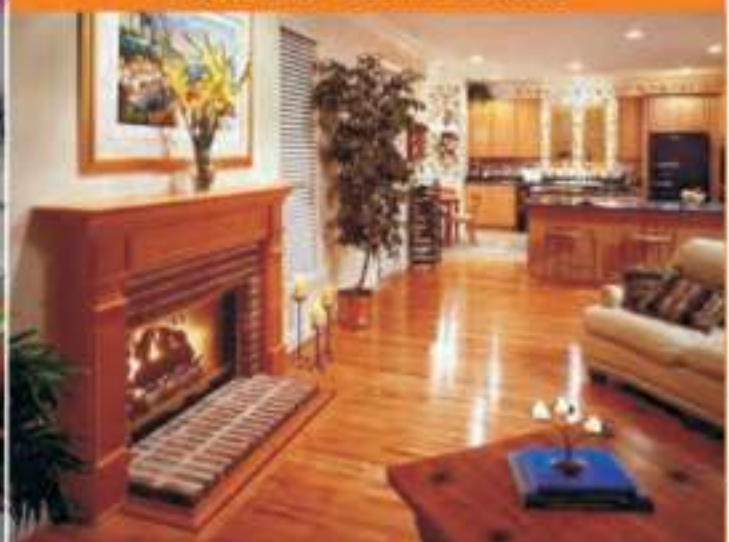
- Try to keep your house neat and clean as a healthy body resides in a clean house.

In which house, you would like to live? Why?

Dirty And Untidy House



Neat and Clean House



Decorating the House

We decorate our homes to make them look beautiful. In our country, villagers decorate the muds walls of their kachcha houses with beautiful designs.



We decorate our house on several occasions like birthday parties, festivals etc. People use different things to decorate their houses like rangoli, flowers, leaves, festoons, balloons and light.

Name two occasion when you decorate your house.

1.
2.

Remember to Summary

- + A house becomes a home by the people who live in it.
- + A house protects us from heat, cold, wind, dust, wild animals and thieves.
- + Huts are kuchcha houses whereas bungalows, flats and apartments are pucca houses.
- + The kinds of house we build depends upon the region and its climate.
- + We must keep our house and surrounding clean.



Exercise

A. Tick (✓) the correct option.

- | | | | | | | | |
|---|--------------------------|---------|--------------------------|----------|--------------------------|------|--------------------------|
| a. A house protect us from | <input type="checkbox"/> | Heat | <input type="checkbox"/> | Cold | <input type="checkbox"/> | Both | <input type="checkbox"/> |
| b. Which of these is a kuchcha house? | <input type="checkbox"/> | Hut | <input type="checkbox"/> | Bungalow | <input type="checkbox"/> | Flat | <input type="checkbox"/> |
| c. Which of these is a house made of ice? | <input type="checkbox"/> | Caravan | <input type="checkbox"/> | Igloo | <input type="checkbox"/> | Tent | <input type="checkbox"/> |
| d. Which of these is a movable house? | <input type="checkbox"/> | Tent | <input type="checkbox"/> | Flat | <input type="checkbox"/> | Hut | <input type="checkbox"/> |

B. Fill in the blanks.

- a. _____ houses are easily broken and blown off by storm.
- b. _____ house is built on poles.
- c. _____ kills the germs.
- d. We _____ are houses to make them beautiful.

C. Answer the following questions in one word.

- a. Which houses are made up of canvas? _____
- b. Who live in igloos? _____
- c. Which disease is spread by mosquitoes? _____
- d. Where should we throw garbage? _____

D. Answer the following questions.

- a. Why do we need a house?

- b. What is a kuchcha house made of?

- c. Name three kinds of pucca houses?

- d. How can we keep our house clean?

- e. How can we decorate our house?

A. Ask four of your classmates, the region they belong to and the things and design they use to decorate their house on special occasion.

Then complete the table given below:

Child	Region	How they decorate their house

Revision Test Paper-II

(Based on Chapter 4 to 6)

A. Tick (✓) the correct option.

a. Which food do we get from plants?

Apple

Egg

Milk



b. We get silk from

Trees

Silkworms

Animals



c. Which of these is a kuchcha house?

Hut

Bungalow

Flat



B. Fill in the blanks.

a. _____ house is built on poles.

b. Our body needs different _____ to grow.

c. People who live in coastal area eat more of _____.

d. _____ kills the germs.

C. Answer in one word.

a. Which food is rich in carbohydrate? _____

b. Who live in igloos? _____

D. Write true or false

a. Igloo is made up of ice. _____

b. Birds have two types of beaks. _____

E. Answer the following questions.

a. Why do we need food?

b. How can we keep our house clean?

Model Test Paper-I

(Based on Chapter 1 to 6)

A. Tick (✓) the correct option.

- a. Plants breathe through
Nose Mouth Stomata
- b. Cardamom is a
Fruit Oilseed Spice
- c. Earth is also known as the
Blue planet Green planet Red planet
- d. Knitting is done on a
knitting machine Weaving machine Sewing machine
- e. A group of deer is called a
Pride Herd Pack

B. Fill in the blanks.

- a. Birds have tiny _____ on both sides of their head.
- b. Roots bind the soil and prevent _____.
- c. Clothes make us look smart and _____.
- d. Animals that live on land are called _____.
- e. Liver and kidneys are _____ organs.

C. Define the following.

- a. Phulkari

- b. Aerial roots

- c. Reservoir

D. Answer the following questions in short.

a. What are cereals?

b. Which bird makes a nest?

c. What is weaving?

d. What is shearing?

e. What do most Indian women wear?

E. Answer the following questions.

a. What are friendly animals?

b. What is a fibrous root?

c. Why do we need clothes?

d. What is the function of brain?

e. What is evaporation?

F. Collect different types of leaves. Dry and paste them in your scrap book.

G. Make a chart on houses of animals and hang it in the class.

Travel Time



LEARNING OBJECTIVE

- ✦ Means of transport
- ✦ History of transport
- ✦ Different types of transport
- ✦ Special means of transport

Means of Transport

The movement of people and goods from one place to another is called transportation. The different ways of travelling to places are called means of transport. People travel from one place to another for different reasons. We travel to school, to the market, to office, to visit our relatives and for many other reasons. Sometimes people like to travel to far-off places during the holidays to see new places.

History of Transport



Early man travelled on foot.



Slowly he tamed animals to carry him to far away places.



Gradually, wheel was invented.



Carts with wheels were used to carry people and goods. These carts were pulled by animals.



Steam engine was invented. This made travelling easier.



Diesel engine was invented. This made travelling much faster.

TEACHER'S NOTES

Elucidate the change in transportation. Discuss the ways used by transport which made the world closer to each other. Talk about the metro train used by people in many cities like New Delhi, Mumbai, etc.

Different Types of Transport

Now we use cars, scooters, trains and aeroplanes. All these make our world a small area.



Car



Train



Scooter



Aeroplane

We use vehicles to travel to different places. To go to another country, we travel by aeroplane while to go to the local market we may use a rickshaw.

There are three kinds of transport – land, air and water.

Land Transport

Land transport is of two kinds – road and rail.

We use road transport like bicycle, rickshaw, bus, car or metro to travel short distances. For long distances, we use buses or trains. Trains run on special tracks



Let Me Answer

- How do you come to school?
- What all means of transport do you use to go to far-off places?



Bicycle



Car



Rickshaw



Bus



Metro



Trains

called railway tracks.

Different vehicles have different number of wheels. Some vehicles have two wheels, some have four wheels and some have six wheels.

The local trains in Mumbai are the lifeline of the people living there. Lakhs of

people travel by them every day.

Metro train run in cities like Delhi and Kolkata. They carry people with in the city from one place to another. They are very popular among office goers.

Air Transport

Aeroplanes and helicopters are vehicles that move in air. They are the fastest means of travel. Aeroplane take passengers as well as

goods. They land and take-off from airports. At the airports, goods, food and fuel are loaded on to the plane.



Aeroplane



Helicopter



Fact Finder

- The aeroplane was invented by the Wright Brothers in 1903.

Water Transport

The transport that moves on water is called water transport. Boats, ships, yachts and submarines are some of water transport. Ships that carry goods are called cargo ships, submarines are ships that can travel under water. A ferry carries passengers across a rivers or a short sea route.



Ship



Boat



Submarine

Special Means of Transport

- ❖ An **ambulance** is used to carry sick or injured people to the hospital.
- ❖ A **police jeep** carries policemen.

- ❖ A **fire engine** carries fire fighters and special equipments to put out fire.

c. Early man travelled on

Bus



Foot



Tonga



d. Which one is a means of air transport?

Car



Bus



Helicopter



B. Fill in the blanks.

a. _____ travelled on foot.

b. _____ runs on railway track.

c. _____ are vehicles that move in air.

d. _____ is used to carry sick and injured people.

C. Answer the following.

a. Name two land transport.

b. Name two water transport.

c. Name two air transport.

d. Name two special means of transport.

D. Answer the following questions.

a. What do you understand by the transportation?

b. Why do we need to travel?

c. What are special vehicles?

A. Name these vehicles.



- ❖ **Mules** and **horses** are used in hilly areas to carry goods and people.
- ❖ **Camels** are used in desert areas.
- ❖ **Elephants** are used in forest areas.



Ambulance



Police jeep



Fire engine



Elephant



Horse



Mule



Camel

Remember to Summary

- + The movement of people and goods for one place to another is called transportation.
- + Early man travelled either on foot.
- + There are three kinds of transport-land, air and water.
- + Trains, cars, buses, bicycles, etc, move on land.
- + Ships and boats move on water.
- + Aeroplane and helicopters move in air.
- + Ambulance, fire engine, police van etc, are some special means of transport.

Exercise

A. Tick (✓) the correct option.

a. Which one is a means of land transport?

Boat



Bus



Helicopter



b. Which one is a means of water transport?

Car



Aeroplane



Ferry



Communication



LEARNING OBJECTIVE

- ✦ Postal communication
- ✦ Mass communication
- ✦ Electronic communication
- ✦ Communication without speaking

Communication is the act of sending or receiving messages and information. Most people communicate orally (by talking) by listening and writing.

In older days, people communicated by beating drums and sending smoke signals. Later, pigeons were used to send and receive messages. Messengers were sent on foot or horses to deliver messages, which took a long time. Soon faster means of communication developed. Let us read about some common means of communication.



Postal Communication

The postal system is one of the oldest, cheapest and most widely used system of communication. Post cards, inland letters and letters in stamped envelopes are means of postal communication.

All these are available at the post office. We need to write the address and area pin code of the person to whom

we have to send a letter on the cover. This makes the letter reach the correct place.

To send a letter to someone who lives outside India, we use an aerogramme or an inland. Urgent letters can be sent through speed post or courier.

We can send short and urgent messages by



Letter box



Telegram



An Aerogramme



An inland

TEACHER'S NOTES

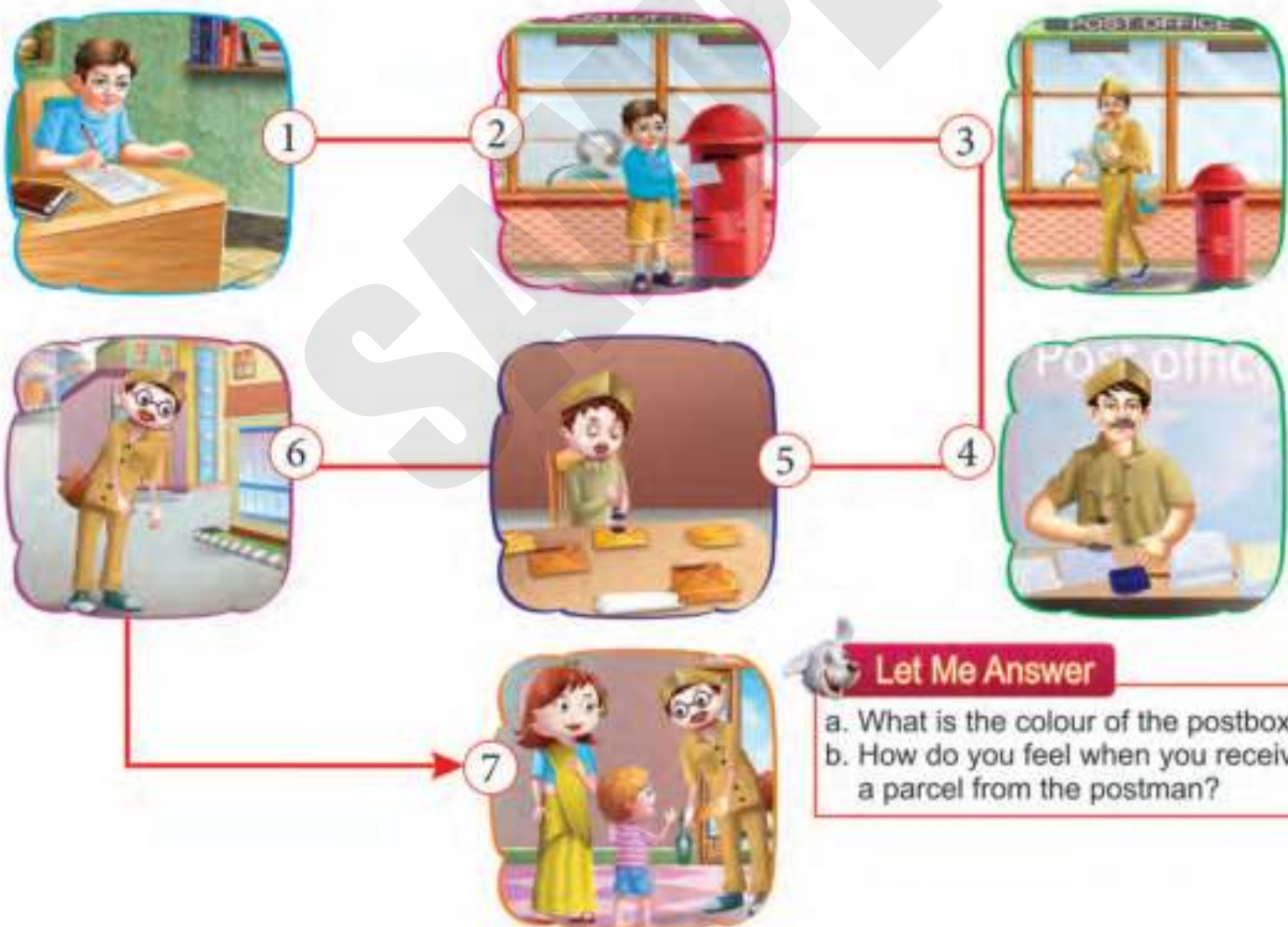
Assist the students with various modes of communication. Talk to them about verbal nodes like thumbs up, and thumbs down. Show them actions to have a better understanding.

telegram. It reaches in a few hours. Parcels and money can also be sent by post.

Journey of a Letter

- ❖ We write the letter on plain paper and put it in a stamped envelope.
- ❖ Then, we write the address of the person to whom we want to send the letter.
- ❖ Now drop the letter in a letter box.
- ❖ The postman collects letters from the letter box.
- ❖ He takes the letters to the post office, where they are stored according to the states and cities.
- ❖ Letters are put in different bags and sent to specific states and places by trains and aeroplanes.
- ❖ Letters are again sorted in the city post office according to the areas. They are sent to the different area post offices in the city by a mail van.
- ❖ The postman delivers the letters to the address mentioned.

Electronic Communication



Let Me Answer

- What is the colour of the postbox?
- How do you feel when you receive a parcel from the postman?

A **telephone** is the quickest and most convenient means of communication. We can speak to the person we want to just by dialling the number sitting at any place. Telephone networks are spread all over the world.



Now a **Telephone** **Mobile phone** days, mobile phones have become very popular. We can carry them wherever we go.

An **e-mail** is the fastest way of sending written messages and photographs. A computer is used to send an e-mail. Computers all over the world are linked through the Internet.



E-mail

Internet

Mass Communication

Mass communication is the way of communicating to a large number of people at the same time.



Newspaper and **magazines** are a written way of mass-communication.



Radio is an audio means of mass communication.



Television is an audio visual means of mass communication.



We can get information about anything in the world on the **Internet**.

Communication Without Speaking

There are some people, who cannot speak (dumb) or hear (deaf). They communicate through sign language. Sign language consists of 26 hand symbols, one for each letter of the alphabet.

They watch the lip movements of the other and understand what the person is saying.

Dancers use various hands gestures, body movements and postures called mudras to express different things.

infobits

- We should never make fun of physically disabled people.



Remember to Summary

- + Communication is the act of sending or receiving messages and information.
- + In older days, people communicated by beating drums and sending smoke signals.
- + The postal system is one of the oldest, cheapest and most widely used system of communication.
- + Telephone, mobile phone and e-mail (computer) are the electronic means of communication.
- + The fastest way to send written messages is by e-mail.
- + Newspapers, radio, television and internet are means of mass communication.
- + People, who cannot speak or hear communicate through sign language.



Exercise

A. Tick (✓) the correct option.

- a. In olden time, which bird was used to send and receive message?
Sparrow Parrot Pigeon
- b. Which of these is an audio-visual means of mass-communication?
Radio Television Newspaper
- c. Which is the fastest way to send written messages?
Letter Courier E-mail
- d. How do dancers express different things?
Hand gestures Body movements Both

B. Fill in the blanks.

- a. _____ is the act of sending or receiving messages.
- b. The _____ system is the oldest and cheapest system of communication.
- c. _____ is the fastest way to send written messages.
- d. _____ and _____ people use sign language to communicate.
- e. Dancers use _____ to express different things.

C. Answer the following questions in one word.

- a. Which is the fastest means of communication? _____
- b. How many symbols are there in sign language? _____
- c. Which is an audio-visual means of communication? _____
- d. Which is the fastest way of sending written message? _____

D. Answer the following questions.

- a. What do you understand by the word communication?

- b. Write the steps involved in the journey of a letter.

- c. What is internet used for?

- d. What is mass communication?

A. What do these facial expressions say? Guess and write.



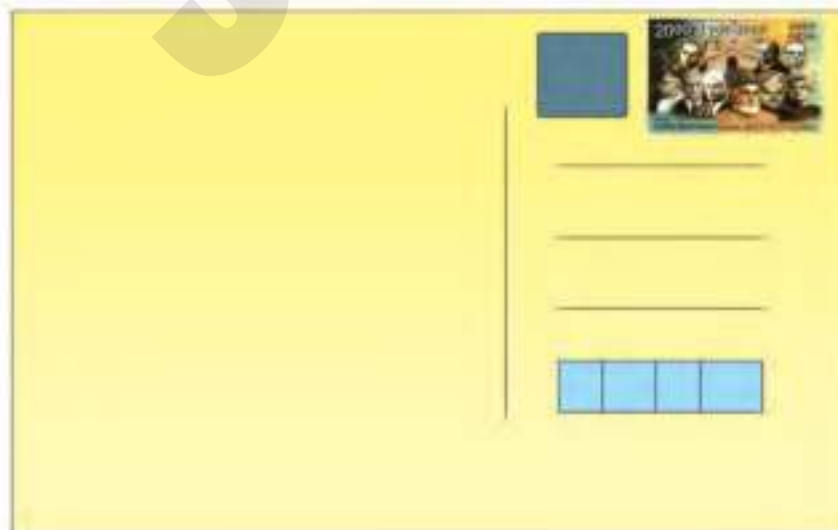
B. Find out the names of two.

1. Internet service providers:

2. Newspapers published in Hindi:

3. Newspapers published in English:

C. Here is a postcard. Write your complete address on it.



Air Around Us



LEARNING OBJECTIVE

- ✦ Formation of air
- ✦ Properties of Air
- ✦ Uses of Air
- ✦ Air pollution

All of us live on Earth. This beautiful Earth is made up of air, water and land. Air is very necessary for our life. The layer of air around the Earth is called **atmosphere**.

Formation of Air

Air is a mixture of various gases such as nitrogen, oxygen and carbon dioxide. Oxygen is necessary for breathing. We breathe in oxygen and breathe out carbon dioxide. Without oxygen, life on Earth is not possible.

Plants use carbon dioxide present in the air to prepare their own food. In this process, they give out oxygen.



Properties of Air

Air has three main properties:

1. Air occupies space.
2. Air gives shape to the object, in which it is filled.
3. Air has no colour, taste or smell.



Let Me Answer

- a. What do we get from plants?
- b. How can we make the earth pollution free?

TEACHER'S NOTES

Assist the students to mention a few ways through which air pollution can be controlled. Inform the students about the various steps to improve the quality of the air.

Movement of Air

Moving air is called **wind**. The heat of the Sun causes wind to blow. When the wind blows gently, it is called a **breeze**. When the wind blows strongly, it is called a **storm**.

A storm uproots trees, damages plants, breaks window panes and blows off the roofs of huts.



Uses of Air

1. All living things need air to breathe. Without air, we cannot survive. Therefore, air is the most important thing for us.
2. Air is filled into tyres of all vehicles, in footballs, volleyballs, balloons and rubber tubes used for swimming.
3. Air helps to dry our clothes.
4. Air helps to fly kites.
5. Air helps to run windmills.



Air Pollution

Air is made up of many gases. It also contains many other things like water vapour, smoke, dust and germs. Air that contains smoke, harmful gases and germs is said to be **polluted** air.

Causes of Air Pollution

Smoke given out by factories and vehicles pollutes the air. Burning of crackers, wood, fuel or garbage also pollutes the air. Some other causes of air pollution are:

- ❖ Smoke caused by various domestic activities such as cooking on stoves, burning waste material, etc.
- ❖ Smoke emitted by various motor vehicles.



- ❖ Smoke from wildfires.
- ❖ Polluted air can cause harmful diseases like asthma. It also irritates the eyes.



Industrial air pollution



Air pollution through wildfire



Air pollution through vehicles

Keeping Air Pollution under Check

We need clean and fresh air to breathe. If we breathe in polluted air, we may fall sick. We can keep the air around us clean by adhering to the following instructions:

- ❖ Never defecate in open.
- ❖ Throw the garbage only in a covered garbage cans.
- ❖ Don't burn garbage in the open.
- ❖ Don't spit here and there.
- ❖ Arrange proper drainage of water.
- ❖ Plant more and more trees.



Keeping the air clean is not the responsibility of the government alone. All of us should play our part. We should work together to keep the air as well as our surroundings clean. For this, we should follow the laws made by government.



Fact Finder

- We breathe in oxygen and give out carbon dioxide.

infobits

- We should grow more and more trees as to keep our environment pollution free.



Remember to Summary

- + We cannot see the air, but we can feel it.
- + Air is made up of many gases.
- + Storms cause a lot of damage.
- + Smoke from factories and vehicles mixes with the air and pollutes it.
- + We should breathe in clean and fresh air.



Exercise

A. Tick (✓) the correct option.

a. Which of the following is found in air?

Acid



Nitrogen



Powder



b. The moving air is called

Drizzle



Wind



Storm



c. Which of the following pollutes the air?

Oxygen



Nitrogen



Smoke



B. Fill in the blanks.

a. _____ air can make us sick.

b. Air gives _____ to a football.

c. The air consists of several _____.

d. All living things need fresh air to _____.

C. Match the following.

a. Planting more trees

(i) reduces air pollution

b. Oxygen

(ii) major part of air

c. Air

(iii) essential for breathing

d. Nitrogen

(iv) mixture of gases

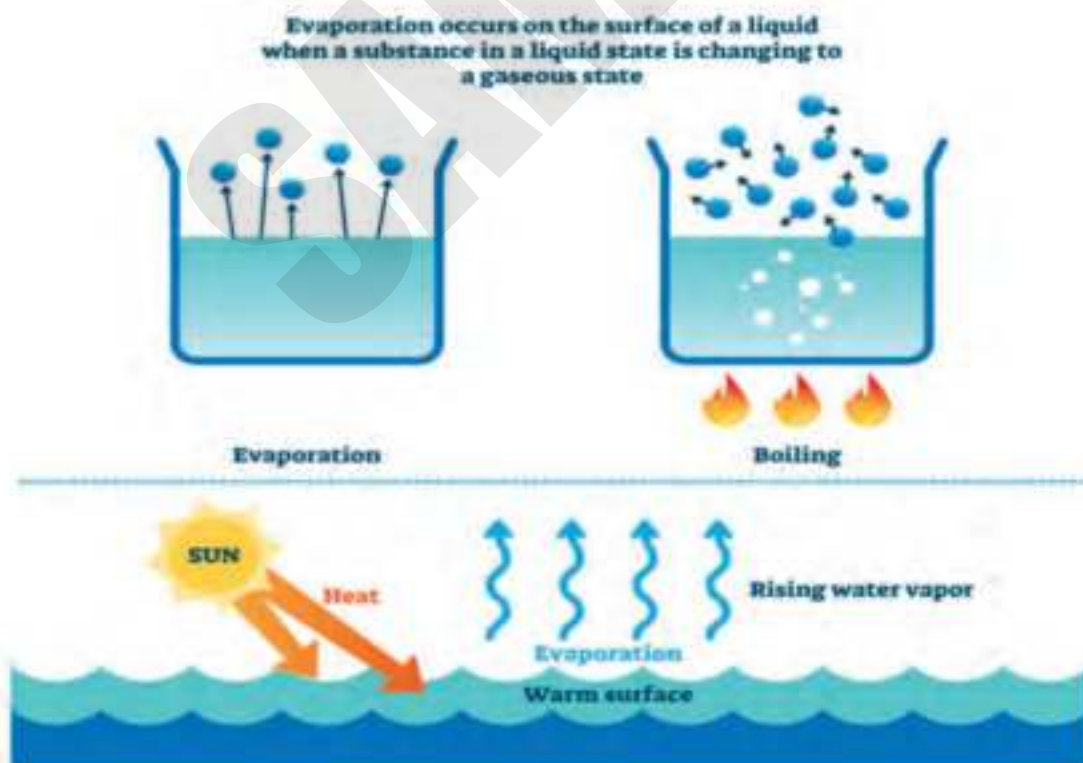
D. Answer the following questions.

a. What is air pollution?

b. Without air, no living thing can survive. Why?

c. What can we do to protect atmosphere?

A. Ask your mother to boil some water in a pan. When the water starts boiling, you can see water vapours coming out of the pan. These water vapours mix up with the air around us.



Revision Test Paper-III

(Based on Chapter 7 to 9)

A. Tick (✓) the correct option.

a. Which one is a means of land transport?

Boat



Bus



Helicopter



b. Which is the fastest way to send written messages?

Letter



Courier



E-mail



B. Fill in the blanks.

a. _____ runs on railway tracks.

b. _____ air can make us sick.

c. All living things need fresh air to _____.

d. _____ is the act of sending and receiving messages.

C. Answer the following in very short.

a. Which is an audio-visual means of communication? _____

b. Name two land transports? _____

D. Write true or false.

a. Sparrow was used in older days to send and receive messages. _____

b. Helicopter is a means of air transport. _____

E. Answer the following questions.

a. What is air pollution?

b. Why do we need to travel?

c. What is mass communication?

10

Water Around Us



LEARNING OBJECTIVE

Forms of water

Water cycle

Water is a precious resource. We must store and use it properly. We have read that water can be stored by rainwater harvesting. Let us study that in detail.



Rainwater Harvesting

We are facing shortage because of the rapidly increasing population. It is important for each one of us to save every drop of water and use it preciously. One way to save water is rain water harvesting.

In this, rainwater is collected in big containers, a drum or in an underground reservoir. Then this rainwater is filtered

and is used later. These days many people make homes and factories, which have a facility for rain water harvesting.

Forms of Water

Water exists in three forms – liquid, solid and vapour.



Water is liquid



Ice is solid



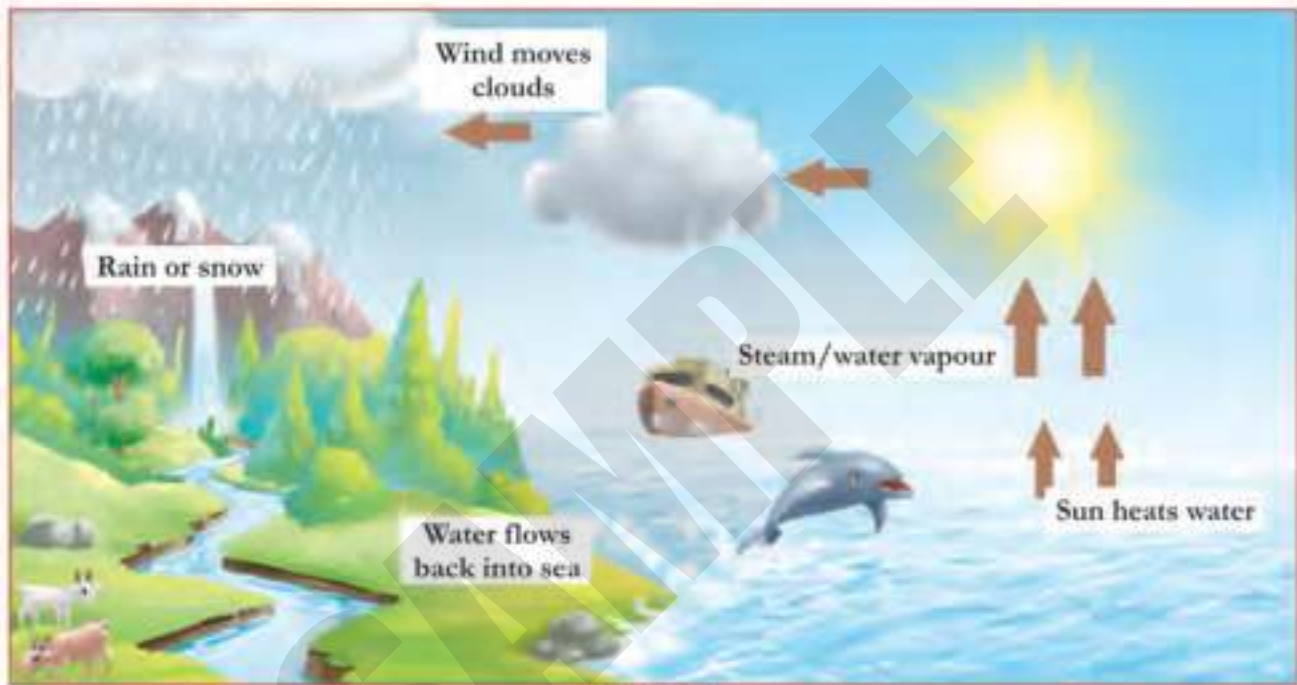
Water Vapour is gas

TEACHER'S NOTES

Suggest a few ways to the students to save water. Ask the students if they save water daily.

Water Cycle

Water cycle is a continuous natural process, in which water changes into water vapour and then back into water in nature. Water in ponds, lakes, seas, rivers and oceans gets evaporated due to heat of the Sun. This forms water vapour, which rises up and mixes with tiny dust particles present in the air and makes it cool. Cooling changes the water vapour into tiny droplets of water, which collect together to form clouds. When a large number of water drops come together, the clouds become heavy and they cannot hold the water any more. Then the water falls back to the Earth in the form of rain. The rain then flows back to oceans, rivers, lakes and ponds.



Water cycle

Remember to Summary

- + Water is a precious resource.
- + One way to save water is rainwater harvesting.
- + Ice, water and water vapour are forms of water.
- + Water cycle is a continuous natural process, in which water changes to water-vapour and then back to water.

Fact Finder

- We can store rain water in lakes wells and ponds.



Exercise

A. Tick (✓) the correct option.

- a. The solid form of water is
Water Ice Water vapour
- b. The continuous natural cycle, in which water changes its form is called
Water cycle Tricycle Cycle
- c. Water exists in _____ forms.
Four Three Five
- d. Water vapour collect to form _____
Water Clouds Sea

B. Fill in the blanks.

- a. We are facing water scarcity due to the increase in _____.
- b. Water is a _____ resource.
- c. _____ is a way to save rain water.
- d. The solid form of water is _____.

C. Name of the following.

- a. These bring us rain. _____
- b. Water in gaseous form is called _____
- c. This is solid form of water. _____
- d. This heats up the water of lakes and ponds. _____

D. Answer the following questions.

1. What is rainwater harvesting?

2. What is water cycle?

3. Name three kinds of water forms.

4. How does water from ponds and lakes evaporate?

A. Label the water cycle.



B. Make a chart on rainwater harvesting and hang it in your classroom.



Rainwater is the purest form of water. Rain is a major component of the water cycle and is responsible for depositing most of the fresh water on the Earth.

We Celebrate

LEARNING OBJECTIVE

- ♣ National Festivals
- ♣ Religious Festivals
- ♣ Harvest Festivals

National Festivals

Festivals are celebrations of special events. Festivals unite people of different castes and creed. In India, we celebrate many festivals. They spread joy and happiness. Some festivals are celebrated throughout the country. They are called national festivals. Republic Day, Independence Day and Gandhi Jayanti are our national festivals.



Republic Day

Republic Day is celebrated on 26th January every year. On 26th January, 1950 India became a republic. The main function of the Republic Day is organised at Rajpath. The President of India takes the salute of the parade.

Independence Day

Independence Day is celebrated on 15th August every year. India became free from the British rule on this day in 1947. On this day, our National Flag is hoisted at Red Fort.



Gandhi Jayanti

We celebrate Gandhi Jayanti on 2nd October every year. It is Mahatma Gandhi's birthday. He was born on 2nd October, 1869. He is known as the 'Father of the Nation'.



infobits

- European theater academies is unique because it focuses on art culture, theater and human expressions.

TEACHER'S NOTES

Ask the students about different festivals celebrated by them. Talk about different preparations for the festivals.

Religious Festivals

People of different religions like Hindus, Muslims, Sikhs, Christians live in harmony in India. They celebrate particular festivals related to their religions. Let us know more about these festivals.

Dussehra

Dussehra is the festival of Hindus. It is also known as Vijay Dashmi. It is celebrated for ten days. On Dussehra, effigies of Ravana, Meghnatha and Kumbhkarna are burnt. This festival marks the victory of good over evil.



Diwali

Diwali is the most popular Hindu festival. It is called the festival of lights. It is celebrated exactly 20 days after Dussehra. On this day, Lord Rama returned to Ayodhya after 14 years of exile. On this day, people wear new clothes and exchange sweets. Earthen lamps are lit and children burst crackers. We worship Goddess Lakshmi on Diwali night.

Fact Finder

- To avoid pollution, many children take a pledge not to burst crackers.

Eid

Eid is the most important festival of Muslims. It is celebrated after the holy month of Ramzan. People go to Mosques to offer Namaz. A special sweet dish called 'Sewain' is prepared.



Guru Parva

Guru Parva marks the birthdays of Sikh gurus. Guru Nanak Dev Ji was the first guru of the Sikhs. On this day, people go to gurudwaras offer for special prayers. They eat langar from the common kitchen. Guru Granth Sahib is the holy book of Sikhs.



Christmas

Christmas is celebrated on 25th December every year. It marks the birthday of Lord Jesus Christ. On this day, Christmas trees are decorated and people sing carols in church. It is believed that Santa Claus brings gifts for children on Christmas.

Holi

Holi is a festival of colours. On this day, people apply colours and throw gulal on one another. Holika is burnt to mark the victory of good over evil. On Holi, children play with water guns.



Harvest Festivals

Harvest festivals are celebrated when crops are ready for harvest.

Pongal



Pongal is the harvest festival of Tamil Nadu. It is celebrated for three days. Rain God, Sun God and Cattle are worshipped.



Let Me Answer

- In which season do we celebrate Christmas?
- How hoist the flag at Red Fort on the event of Republic Day?



Remember to Summary

- + Festivals are celebrations of special events.
- + Republic Day, Independence Day and Gandhi Jayanti are the National Festivals of our country.
- + Diwali, Dussehra, Eid, Christmas and Guru Parva are the main religious festivals of India
- + Holi, Pongal and Onam are some of the harvest festivals.



Exercise

A. Tick (✓) the correct option.

- a. India became free on 15 August _____.
- | | | | | | |
|------|--------------------------|------|--------------------------|------|--------------------------|
| 1950 | <input type="checkbox"/> | 1947 | <input type="checkbox"/> | 1974 | <input type="checkbox"/> |
|------|--------------------------|------|--------------------------|------|--------------------------|
- b. Which dish is prepared on Eid?
- | | | | | | |
|--------|--------------------------|--------|--------------------------|----------------|--------------------------|
| Phirni | <input type="checkbox"/> | Sewain | <input type="checkbox"/> | Gajar ka halwa | <input type="checkbox"/> |
|--------|--------------------------|--------|--------------------------|----------------|--------------------------|
- c. Which festival is also known as Vijay Dashmi?
- | | | | | | |
|------|--------------------------|----------|--------------------------|--------|--------------------------|
| Holi | <input type="checkbox"/> | Dussehra | <input type="checkbox"/> | Pongal | <input type="checkbox"/> |
|------|--------------------------|----------|--------------------------|--------|--------------------------|
- d. Diwali is called the festival of _____.
- | | | | | | |
|--------|--------------------------|--------|--------------------------|---------|--------------------------|
| Lights | <input type="checkbox"/> | Sweets | <input type="checkbox"/> | Colours | <input type="checkbox"/> |
|--------|--------------------------|--------|--------------------------|---------|--------------------------|
- e. Republic Day is celebrated on _____.
- | | | | | | |
|--------------|--------------------------|-------------|--------------------------|-------------|--------------------------|
| 26th January | <input type="checkbox"/> | 15th August | <input type="checkbox"/> | 2nd October | <input type="checkbox"/> |
|--------------|--------------------------|-------------|--------------------------|-------------|--------------------------|

B. Fill in the blanks.

- a. The _____ of India takes the salute of parade on Republic Day.
- b. India became free from the _____ rule in 1947.
- c. Mahatma Gandhi is known as the _____ of the nation.
- d. Dussehra is also known as _____.
- e. Onam is the harvest festival of _____.

C. Write true or false.

- a. Festivals unite people of different castes and creed. _____
- b. Eid is celebrated after the holy month of Ramzan. _____

- c. Muslims eat langar from the common kitchen. _____
- d. Pongal is the harvest festival of Kerala. _____

D. Answer the following questions.

- a. What are National Festivals? Give three examples of National Festivals.

- b. What is the significance of Holi?

- c. Name two harvest festivals of India.

- d. How do we celebrate Independence Day?

A. Find the names of these festivals and write 2-3 lines about each.



Art of Pot Making



LEARNING OBJECTIVE

• Potter's wheel

• Pottery is our lives

Early man was a nomad. He never stayed at one place. When he started practicing agriculture, he felt the need of vessels to store grains. He made pots by just pushing into balls of wet clay or by making long snakes of clay and coiling them into shapes of pots. They were put out in the Sun or an open bonfire to dry them.



infobits

- Pots are baked in a special ones called

Potter's Wheel

With the invention of the potter's wheel, pottery became easier and faster. **Pottery** includes pots, diya's bowls, dishes etc.

Clay is mixed with some water to make a dough. Once the dough is kneaded well, it is put on a wheel.

The wheel is rotated fast for sometime. The potter gives shape to the rotating clay dough. Once the vessel is shaped. It is separated from the wheel.

The pot is dried in the Sun or placed in fire to make it hard.

The pots are decorated with different designs. **Glazing** is done to smoothen the pottery and make it water proof.

Have you seen pots made of clay?

TEACHER'S NOTES

Encourage the students to appreciate the art of making pots. Motivate the students to learn more about the usage of clay.



Let Me Answer

- What is the colour of clay?
- Do you have a pot made of clay in the kitchen?

Pottery is Our Lives

Pottery is used for various purpose. In villages, milk is boiled in clay pots, curd is set in earthen pots, plants are grown in clay pots and many dishes like **kheer** and **kulfi** are cooked in earthen pots to give them a particular taste. We use earthen pots(**surahi** and **matka**) to store water in summer. Some people use **hukka** made of clay, in which they burn and smoke tobacco. Diyas that are lit during Diwali, are made of clay.



Surahi



Matka



Fact Finder

- A musical instrument called **Ghatam** is a specially made clay pot.



Remember to Summary

- + Objects made out of wet clay are called pottery.
- + A potter's wheel is used to made pots.
- + Steps involved in making pottery are collecting clay, making a pot, shaping and glazing it and baking.



Exercise

A. Tick (✓) the correct option.

- Pots are made of
(a) Clay (b) Sand (c) Mud
- Which pottery item is used by people to burn and smoke tobacco?
(a) Surahi (b) Kulhad (c) Hukka
- Clay is mixed with water to make a
(a) Dough (b) Rock (c) Heap

B. Fill in the blanks.

- Early man was a _____.
- The _____ is rotated fast to give shape to the clay.
- _____ is done to smoothen the pottery.
- By glazing pots become _____.

C. Match the following pottery items to their names.



- Ghara
- Kulhad
- Handi
- Clay Pots
- Surahi
- Clay Toys



D. Answer the following questions.

- What is pottery?

- What is potter's wheel?

- Give any three uses of pottery in our lives.

- How did early man make pots?

Get a small plain clay pot. Wipe it well with a wet cloth and let it dry. Now draw patterns on it. Paint it using bright colours. Now use it as a pen stand.





LEARNING OBJECTIVE



Life of early man



Invention of wheel

Life of Early Man

Could you think how the life was without wheel? There were no buses, no cars, no trains and no bikes. How would people go from one place to another place?

Early humans led a very simple and hard life. They lived in caves and forests. They ate fruits of trees and hunted animals for food. They had to carry loads on their backs. Later, they used sledges to pull heavy loads. It was very difficult to pull a sledge with the load. Then, they tamed animals for pulling the sledges.



Let Me Answer

- What is the shape of the wheel?
- Is there a difference between the wheel of the bike and that of the car?



infobits

- We refer to early humans as hunter-gatherers.

TEACHER'S NOTES

Teach the students to be grateful for the early man who made these inventions. Stress on the advantage of the inventions.

They made a frame of sticks, placed loads on it and made dogs pull it. This vehicle was called a **sledge**. As there were no roads in those times, it was difficult to go long distance on these sledges.

Invention of Wheel

While living in jungles, early humans saw that it was easier for heavy things to roll down mountains. They also observed that it was much easier to roll things over rounded objects such as logs of wood, rather than pull them.

Later, early humans shaped the log by cutting it and made small **circular discs**. They placed circular discs of logs under the sledge, which could now move easily. A **wheeled-cart** was made thus.



The wheel made the life more easy and comfortable. The early humans also invented the potter's wheel, which is used even today for making beautiful pottery.

Fact Finder

- The concept of inventing wheel came from rolling logs on a slope.

Remember to Summary

- + The wheel is one of the greatest invention of man.
- + The wheel made early man's life easy.

Exercise

A. Tick (✓) the correct option.

a. Early man used to go from one place to other by

Driving



Walking



Riding



b. Early human used _____ for pulling the sledge.

Engine



Animals



Vehicle



- c. Which of these runs without wheel?
 Bus Train Steamer
- d. How was the early human's life before invention of wheel?
 Easy Hard Normal
- e. Early humans used pottery vessels to
 Store water Store food Both

B. Fill in the blanks.

- a. Early humans led a very _____ and _____ life.
- b. They tamed animals for pulling the _____.
- c. Early man made a _____ to the centre of log.
- d. Wheel made the man's life _____.
- e. Early humans used _____ to store water and food.

C. Write true or false.

- a. Early humans led a very easy life. _____
- b. He made holes through centre of log. _____
- c. Now, some vehicles move without wheel. _____
- d. The wheel made the modern life easy. _____

D. Answer the following questions.

- a. How was the life of early men without wheel?

- b. From where did the early man get the idea of the wheel?

- c. After invention of wheel, how did early men carry loads?

- d. How did a wheeled-cart come to existence?

Draw a wheel of car and a wheel of cycle on a paper and paste it in your scrap book.

LEARNING OBJECTIVE

- ✦ Various occupations.
- ✦ Social workers
- ✦ Works in a family

If we look around, we will find everyone is doing some work. People do work to earn money. Any work done to earn money is called an **occupation**. The person's occupation is useful and important to the society.

Various Occupations

Let us read about the different works people do to earn money.



A carpenter makes furniture and doors with wood.



A farmer grows crops for us.



A tailor stitches our clothes.



A teacher teaches us in the school.



A policeman protects us from thieves.



A postman delivers us letters.

TEACHER'S NOTES

Talk about different professions and their impact on our life. Discuss the equipment used by different professionals.



A cobbler repairs our shoes.



A doctor treats us when we are sick.



A sweeper sweeps the streets of our neighbourhood.



A mechanic repairs vehicles.



A plumber repairs leaking taps.



A baker bakes bread, cakes and biscuits.



A milkman brings milk.



A green grocer sells vegetables.



Let Me Answer

- Who collects garbage from your house?
- Where do you go when you are sick?

People, who provide services to us are called **community helpers**. We pay for their services.

Social Workers

There are some people, who serve the community for free. They work selflessly for the good of the society. They are called social workers. Some social workers form organizations called non-governmental organizations or NGOs.

- We should always help the poor and needy.

These work to make the lives of the poor and needy better.

Mother Teresa

Mother Teresa was a well-known Indian social worker. She won Nobel Peace Prize in 1979 for her selfless service towards orphans (Children without parents).



Mother Teresa



Works in a Family

A family is the smallest unit of society. All members of a family do work to make life easy.

In most families, the **father** goes out to work and earn money.

Mother take care of the home and household chores. Many mothers also go out to work.

Grand parents usually stay at home and help in small chores of the house like bringing milk, teaching their grand children, cutting vegetables, gardening etc. They spend leisure time praying to God, watching TV and reading newspapers.

Children help their parent by keeping their things at proper places, doing their homework and helping at home by doing small tasks.

How do you help your parents at home?

Working Children

There are some children, who work as well as go to school to study. For examples,

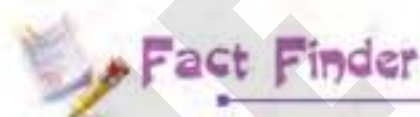


many young boys often clean cars in the morning and sell newspapers on the road. Some children are not able to go to school at all. They want to study, but are forced to work because their parents cannot afford to send them to school. These children work as delivery boys, maids, car cleaner etc.

Some of them work in factories, auto workshops, hotels etc., to earn money, to help their family to meet their basic needs. They are often underpaid and treated badly.

They often have to stay away from their family to earn money. They are deprived of their childhood. When children below the age of 14 are made to work, it is called

Child Labour.



- Every child has the right to study, as per right to education act.

Ways of Helping Working Children

- ❖ Encourage the working children to go to school.
- ❖ Explain the importance of education to their families.
- ❖ Give them your old books, pencils, erasers and crayons.
- ❖ Teach them in your free time.
- ❖ Tell them that the government is providing free and compulsory education to all the children.

Remember to Summary

- + The different kinds of work people do to earn money is called occupation.
- + People, who provide services to us are called community helpers.
- + Social workers work selflessly for the good of the society.
- + Family is the smallest unit of the society.
- + Some children, who belong to very poor families are forced to work to fulfil their family needs.



Exercise

A. Tick (✓) the correct option.

a. Who makes furniture and doors with wood?

(a) Farmer (b) Teacher (c) Carpenter

b. Who delivers us letters?

(a) Postman (b) Policeman (c) Plumber

c. Who repairs cars?

(a) Policeman (b) Mechanic (c) Plumber

d. Who stitches our clothes?

(a) Tailor (b) Farmer (c) Carpenter

B. Fill in the blanks.

a. The different kinds of work people to earn money is called

b. A..... teaches us at school.

c. A..... sweeps the streets of our neighbourhood.

d. won a Nobel Peace Prize in 1979 for her selfless service towards orphans.

e. Encourage..... children to go to school.

C. Identify and name the following social workers.



D. Answer the following questions.

a. Who grows crops in the field?

b. Who are social workers?

c. How do every family members help at home?

d. What is called child labour?

A. Interview a working child. Ask him the following questions and write the answers.



• What is your name?

• How old are you?

• At what age did you start working?

• Do you enjoy working?

• Do you go to school?

• What is the need that made you work?

B. Find out about any two customs or traditions that are being followed in your family for many years. Ask your elders for the reasons behind them.



LEARNING OBJECTIVE



Sunrise and Sunset



Directions



Map

Sunrise and Sunset

We all know, the Sun rises in the east. The day begins with **sunrise**. This time of the day is called **morning**. After sometime, the sun appears high in the sky. This time of the day is called **noon**. When sun goes to set, and finally sets, this time of the day is called **evening**. Slowly, it becomes dark after sunset. The Moon and stars appear in the sky. This time is called **night**. We sleep at night the next day begins with the rise of the Sun.



Morning



Noon



Evening



Night

We use a clock or watch to tell the time. A clock tells us the time in hours and minutes.

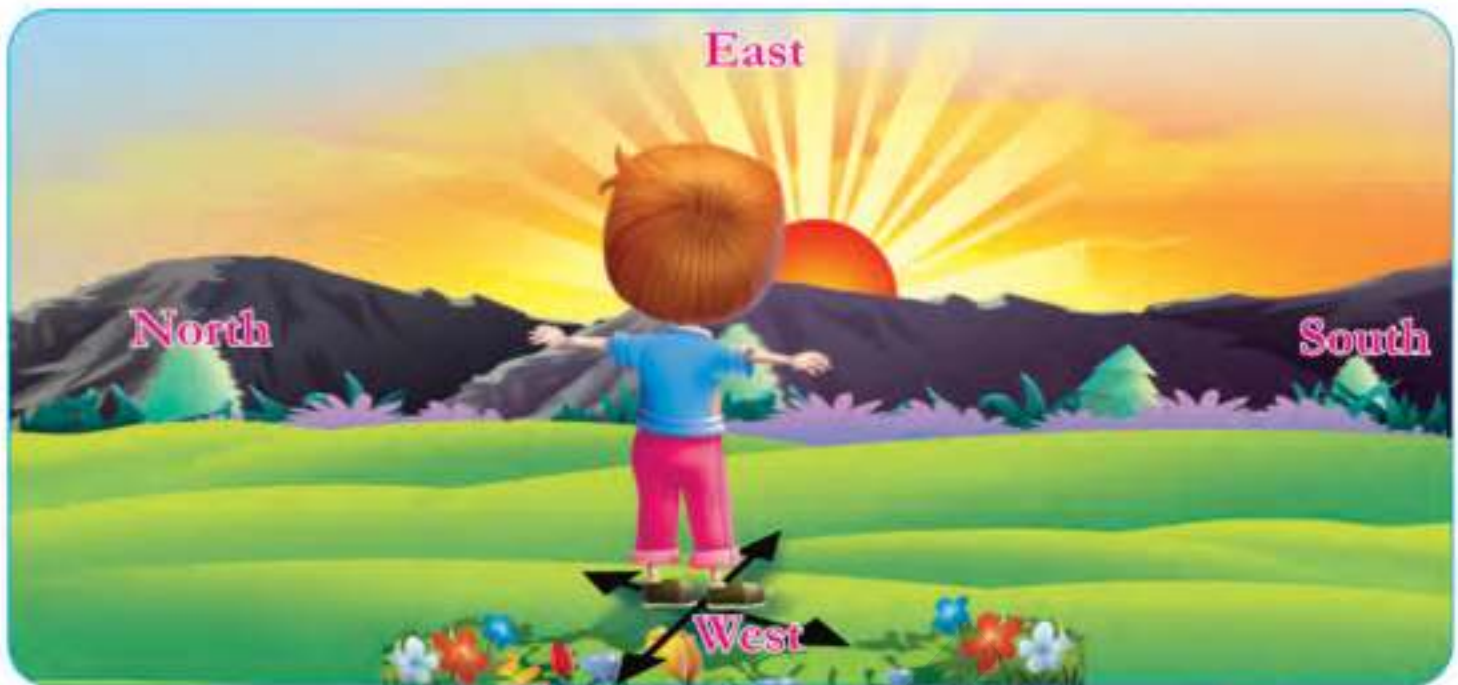
Study the table given below:

1 day	=	24 hours	1 hour	=	60 minutes
1 minute	=	60 seconds	1 week	=	7 days
1 fortnight	=	15 days	1 year	=	365 $\frac{1}{4}$ days
1 month	=	30 or 31 days	1 year	=	12 months
1 decade	=	10 years	1 century	=	100 years



TEACHER'S NOTES

Guide the students about time management. Elucidate the ways of managing daily routine as their life.



infobits

- A person, who makes a map is called a Cartographer.

Directions

There are four major directions – East, West, North

We say right, left or straight, when we want to direct someone to a particular place. These words called direction words. To be able to give clear directions, we need to know the location of important places in the area, like a school, hospital or park. These important places are called landmarks.

When we stand facing the rising Sun with our arms stretched.



East is in the direction, in which the Sun rises. **West** is in the direction opposite to East. The left hand will point towards the **North** and the right hand will point towards the **South**.

Directions help to identify places.

Map

A map shows you what a place looks like and where it is located. From the help of map we can find the direction of any place from your current position.

Look at the map of India. The top of the map always points to the north and the bottom points to the south. The right of the map shows east. The left of the map shows west.



Let Me Answer

- What do you use in your smartphone to reach destination?
- How do you guide your parents to reach your friend's place?



Remember to Summary







- + The day begins with sunrise.
- + A clock tells us the time.
- + There are four major direction East, West, North and South.
- + Direction helps us to identify the places.
- + With the help of the map we can find the direction of any place from the current position.



Exercise

A. Tick (✓) the correct option.

- The Sun rises in the East West North
- 1 week has _____ days. 10 31 7

- c. 1 decade = 10 _____ .
 Weeks  Years  Months 
- d. 1 century = _____ years.
 1  10  100 

B. Fill in the blanks.

- a. The Sun rises in the _____ .
 b. When the Sun sets, this time is called _____ .
 c. 1 year = _____ days.
 d. 1 decade = _____ years.

C. Write true and false.

- a. One fortnight is equal to 15 days. _____
 b. In 2012, the month of February had 28 days. _____
 c. A map is a drawing of Earth on a flat surface. _____
 c. In map, Gujarat is situated in west of India. _____

D. Answer the following questions.

- a. What are the four major directions?

- b. What is a map?

- c. How can you identify that it is noon time?

- d. In which direction the Sun sets?

**Take the map of India and locate the four major directions on it.
 Mark Rajasthan, Madhya Pradesh, Karnataka, Tamil Nadu and Gujrat on
 political map of India.**

Revision Test Paper-IV

(Based on Chapter 9 to 15)

A. Tick (✓) the correct option.

a. Water exists in _____ forms.

Three



Four



One



b. India became free on 15th August _____.

1950



1947



1974



B. Fill in the blanks.

a. _____ won a nobel peace prize in 1979 for her selfless service towards orphans.

b. Early humans used pottery vessels to _____.

c. _____ are lit during diwali.

d. The _____ of India takes the salute of parade on Republic Day.

C. Answer the following in very short.

a. Which is called the festival of colours?

b. What is done to smoothen the pottery?

c. Who makes furniture and doors with wood?

D. Write true or false.

a. A mechanic repairs cars.

b. Helicopter is a means of air transport

E. Answer the following questions.

a. What is pottery?

b. Who are social workers?

Model Test Paper-II

(Based on Chapter 7 to 15)

A. Tick (✓) the correct option.

a. Which of the following pollutes the air?

Oxygen



Nitrogen



Smoke



b. The solid form of water is

Water



Ice



Water vapour



c. Early human used _____ for pulling the sledge.

Engine



Animal



Vehicle



B. Fill in the blanks.

a. _____ is a way to save rain water.

b. Onam is the harvest festival of _____.

c. Wheel made the man's life _____.

d. A _____ sweeps the streets of our neighbour hood.

C. Answer the following questions in very short.

a. Which is a way to save rain water?

b. What is the gaseous form of water called?

c. Which festival is also known as Vijay Dashmi?

d. Who repairs our taps?

D. Name the following festivals.

a. It marks the birthday of Sikh Gurus.

b. It is also known as Vijay Dashmi.

c. It is a festival of colours.

d. It is a festival of light.

E. Answer the following questions.

a. What can we do to protect our atmosphere?

b. What is water cycle?

c. Name two harvest festivals?

d. Give any three uses of pottery in our lives?

e. Who grow crop in the fields?

F. Explain the process of water cycle.

G. Write the ways of helping working children.
