



# WONDER WORLD

*A Book of Environmental Studies*



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▶ **e-Resources**

Audio E-book



▶ **Online Test Generator**



▶ **Tear-Away Worksheets**

3

# LOOK INSIDE

Let's take a look at all resources provided with "Wonderland" series.



## Inside Textbooks

## Key Words



### Self Survey

*It provides questions based on thinking skills to enhance critical thinking.*

### Quick Brush Up



It consists of terms after every chapter to revise the concepts learnt.



### Teacher's Tip

*It provides nuggets of wisdom to the children to make them socially and morally aware and responsible.*



### Let us Do

It consists of a wide variety of questions for students to practice.



### Brain Twister

*It consists of oral questions for quick recapitulation of concepts learnt.*

### Activity Session

It consists of plenty of knowledge testing activities.

## Life Skills

It consists of discussions based on values and life skills to inculcate values and enhance interpersonal skills.

## Creative Corner

It consists of fun activities included in the last of every chapter.

### FOR TEACHER'S

### Assessment Tools

**Exercises :** These is a huge variety of exercises in the form of oral, descriptive and objectives questions to assess the performance of the students.

**Tear Away Worksheet :** Worksheets are given at the end of the book to assess the students for checking purpose, teacher can ask the students to tear them.

**Activities and Projects :** A variety of activities and projects are given to assess the thinking and creative skills of the students.

## Digital Tools



### Teacher's App

Teacher's App is provided with each book that consists of the following components.

Teacher's App

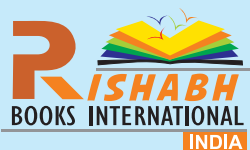
- E-book
- Test Generator
- Animated Lessons



### Online Support

- Answer keys
- Worksheets
- Test Papers

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Chapter

1

# MY FAMILY AND SOCIETY

## Learning Treasure

- Types of Families
- Relationship
- Family Tree
- Family Resemblance
- Things We Learn From Our Family
- Things We Do For Our Family



### Self Survey

What do you call your following relatives :

- |                                |       |                    |       |
|--------------------------------|-------|--------------------|-------|
| 1. Father's Father             | _____ | 2. Father's Mother | _____ |
| 3. Mother's Father             | _____ | 4. Mother's Mother | _____ |
| 5. Your real brother or sister | _____ |                    |       |

Family is the basic unit of society. A group of people who share a home and are related to each other is called a family. All family members are usually very close to one another. They live together and try to help one another in many ways.

### TYPES OF FAMILIES

According to the number of family members. Families are mainly of three types.

- |                 |               |                 |
|-----------------|---------------|-----------------|
| 1. Small Family | 2. Big Family | 3. Joint Family |
|-----------------|---------------|-----------------|

1. **Small Family** : A family which consists of parents and one or two children is called a small family or a small **nuclear family**.



Small Family

### Fact Treasure

Some children do not have parents. They are called orphans. They live in a special home called an orphanage.



### Teacher's Tip

Tell the students the importance of a family. Encourage them to help their family members in their work.

2. **Big Family** : A family which consists of parents and more than two children is called a big family or a big **nuclear family**.

3. **Joint Family** : A family in which more than one set of parents and their children live together is called a **joint family**.



*Big Family*

A joint family may be of two types :

### **Small Joint Family**

In small joint families, grandparents, parents and their children live together.

### **Big Joint Family**

In big joint families, grandparents, parent, uncles, aunts and their children live together.

*Small Joint Family*

Except these families. We can see some special families such as :



*Big Joint Family*

◇ **Single-Parent Families** : Some families have only the father or the mother with the children. Such families are called **single-parent families**



*Single Parent Family*

- ◇ **Without Children Families** : Families which does not any children only husband and wife live together are called **without children families**.



*Without Children Family*

## Relationship

People who are related to each other in a family are known as relatives. For better understanding of this topic, let us meet the family of Bhumi. Who lives in a joint family. Bhumi's father and mother are her parents. She is their daughter. Bhumi's brother is their son.

All family members who are related to Bhumi's father are Bhumi's paternal relatives. Parents of Bhumi's father are her paternal grandparents. She calls them Dadaji & Dadiji or Dadima. She has two paternal uncle one is elder i.e. her Tauji and one is younger i.e. her Chacha ji. All the family members who are related to Bhumi's mother are Bhumi's maternal relatives. Her mother's parents are her maternal grandparents. She call them Nanaji & Naniji or Nanima. Her maternal uncle is her Mama ji. Her mother's sister is her aunt i.e. Mausi Ji. Her father's sister is her aunt i.e. her Bua ji.

## Fact Treasure

- ◇ *Your uncle's and aunt's children are your cousins.*
- ◇ *Your brother's or sister's, son is your nephew and daughter is your niece.*
- ◇ *Your real brother or sister is your siblings.*

## A Family Tree

A family tree is a tree like Chart or a diagram that help us to know how all the members of a family are related to each other. It shows many generations.

- ◇ A family tree starts from grandparents. They belongs to the first generation.
- ◇ Parents, uncle and aunts belongs to the second generation.
- ◇ Parents, uncle and aunts children belong to the third generation.

## Fact Treasure

*Every family has a common name which is called their surname.*

## Family Resemblance

The members of a family look like each other. This is called family resemblance. We look a like our family members or relatives in some way or the other. We take or get some of their characteristics or special qualities. A child may have black eyes like his/her mother or father and curly hair like his/her father or mother. Children often resemble their parents, grandparents or any other member of the family.

Some times, two children are born to the same mother at the same time. Such children are called **twins**. Twins may or may not be identical. Some times they look exactly the same. They are called **identical twins**.

### Fact Treasure

*Some twins do not look alike. They are called fraternal twins.*

Some times we share certain physical features and habits with our family members. These are called **hereditary traits**.

## Things We Learn From Our Family

Our family gives us support and a lot of love and care. We share our joys and sorrows with our family. We learn all elementary habits from our family so it is called the first teacher of a child. As a member of the family, it is our duty to do our best for the family. Some of the things we learn from our family are :

- ◇ Good habits
- ◇ Our Customs
- ◇ Sharing and Caring for others
- ◇ Good Manners
- ◇ Love & respect for others

## Activity Session

**Write any two features that you have inherited from your parents.**

\_\_\_\_\_

## Things We Do For Our Family

- ◇ We should also help our parents.
- ◇ We should keep our room neat & tidy.
- ◇ We should respect our parents & elders.
- ◇ We should obey our parents instructions.

## Quick Brush Up



- Family is the basic unit of society.
- A family tree helps us to know the relationship in a family.
- Families are mainly of three types :  
Small Family                      Big Family                      Joint Family
- People who are related to each other in a family are known as relatives.
- We share our joys and sorrows with our family.
- Family is called the first teacher of a child.

## Key Words

Paternal : From father's side  
Hereditary : genetic

Maternal : From mother's side  
Resemble : look like



### A. Choose the correct option.

- A small family is also a \_\_\_\_\_.  
(a) small nuclear family       (b) big nuclear family   
(c) joint family
- Maternal grandparents are the parents of your \_\_\_\_\_.  
(a) uncle       (b) mother       (c) father
- \_\_\_\_\_ is the basic unit of society.  
(a) Family       (b) Small family       (c) Big Family
- We should respect our parents and \_\_\_\_\_.  
(a) children       (b) younger       (c) elders

### B. Fill in the blanks.

- Families are mainly of \_\_\_\_\_ types.
- Bhumi's father and mother are her \_\_\_\_\_.
- Your uncle's and aunt's children are yours \_\_\_\_\_.
- Twins may or may not be \_\_\_\_\_.

C. Write True or False.

1. Children generally resemble their parents.
2. A family tree tells us about our neighbours.
3. Joint families are called single-parent families.
4. Your real brother or sister is your cousin.

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

D. Match the following :

- |                |                            |
|----------------|----------------------------|
| 1. Grandmother | (a) Uncle's children       |
| 2. Grandfather | (b) Father's mother        |
| 3. Siblings    | (c) Father's father        |
| 4. Cousins     | (d) Real brother or sister |

E. Answer the following questions.

1. What is a family?
2. What is a nuclear family?
3. Write any two things which you can do to keep your parents happy.
4. What are the hereditary features?
5. Who are twins?
6. What does a family tree tell us about?



## Brain Twister

1. What do you need for a family?
2. Why is our family called our first school?

## Creative Corner

Draw your family tree and label the photos of the family members.

## Life Skills



Get to know your neighbours. Is there any old lady or old couple staying alone? Go and talk to them. Ask them if they need any help.



Chapter

# 2

## HELPING AND CARING

### Learning Treasure

- Old People
- Sick People
- Physically Challenged People
- Care of Physically Challenged or Special People



### Self Survey

Write True or False:

1. Love and care make a person old.
2. We all live in a society.
3. People who cannot see are dumb.
4. We all have five sense organs.

|  |
|--|
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We all live in a society. We learn the value of Kindness, sharing affection and helping each other in a society.

Unfortunately, all the people living around us are not healthy enough to look after themselves. These are people who are old, sick physically or mentally challenged etc. These people need our special care and love.

Let us know about them and learn how we can help them.

### OLD PEOPLE

Everybody grows old and becomes weak and inefficient with age. They are not able to work as swiftly as they used to work in their youth. At this age, they get various health problems too. So we cannot look after themselves, when they fall ill. Then it is our duty to do small things for them, and make them feel comfortable in every way.



Old couple



### Teacher's Tip

*Make the students understand the problems that old, sick and physically challenged people feel in their daily lives. Encourage them to help those people.*

## Care of Old People

Here are some ways in which we can take care of them :

1. We should help them in his daily work.
2. We can read out magazine, newspaper etc to them.
3. We should listen to him carefully and should not laugh at his advice.
4. We should spend our space time with them so that they do not feel lonely.
5. We should accompany them for walks and for medical check ups.
6. We should be given them healthy and hygienic food.
7. We should involve them in all family celebrations like marriage anniversary, birthday etc.



*Helping an old lady.*

### Fact Treasure

*Old age day is celebrated on 1st October every year.*

### Fact Treasure

*As people grow old, their hair turns grey and face becomes wrinkled.*

Now a days in many cities have old age homes in which old people, who are alone, can live and look after themselves. They enjoy and share their sorrow and joy among themselves.

## SICK PEOPLE

Some times we can get sick. We can get ill by any disease and have to be confined to bed. This can happen to our friends or relatives. It is not good to avoid or ignore people who are sick. One always feels bad when he/she is ill. The words of affection and encouragement are soothing when you are ill. The sick person needs more care and attention. Here are some ways in which we can take care of sick people :



*A sick boy*

1. We should help them in their daily chores.
2. We should keep the patient in a clean room with fresh air.
3. We should be polite and nice to sick people.
4. We should give them healthy food as prescribed by the doctor.
5. We should take them to the doctor regularly and help them in taking medicines.

6. We should spend time with the people admitted in a hospital.
7. We should be washed patient's clothes with dettol or savlon.

Some people are ill for a long time with serious diseases like AIDS and cancer. They have to make certain changes in their life style to live comfortably. We should never laugh at them. Love and proper care makes a person recover fast.

## PHYSICALLY CHALLENGED PEOPLE

Most of the people in the world are fighting fit because their sense organs are functioning well. They can do all types of work with ease and comfort. But there are some unfortunate people whose one or the other organs do not function normally. They may be unable to hear, speak, see or walk. Such people are physically challenged people or special people.

Louis Braille, a blind french student developed Braille script in 1824.

There are some people who take birth as physically handicapped and some become differently challenged because of some accident.

A deaf person cannot hear at all. One can also be hard of hearing. A deaf person uses hearing-aids, a machine which helps him/her to listen properly.

People who cannot see are **blinds**. Some people have eye-right in one eye only. A blind person uses Braille script to read and write. In this script letters and numbers are printed as raised dots that can be read by running fingers on them.

A dumb person cannot talk. This kind of people use a sigh language to communicate. In this language fingers of the hands are moved to different positions to represent various letters of the alphabet.

Some children suffer from **polio**. It is a disease that deforms your arms or legs. People usually get suffered from this disease in childhood and are not able to walk

### Fact Treasure

*We all have five sense organs : eyes, ears, nose, tongue and skin. They help us to see, hear, smell, taste & feel.*

### Fact Treasure

*Blind people can write Braille on a six key machine called a*



or work properly. They were walking around with the support of calipers. But some people lose a part of their body like a leg or an arm in an accident. A person walking on one leg uses a crutch to help him walk. Those who cannot walk even with a crutch move on a wheelchair.

Some children are born with immature or totally inactive brains. They cannot talk, listen, work or even use their limbs in a normal way. They are called **mentally challenged** or spastics people.



## CARE OF PHYSICALLY CHALLENGED OR SPECIAL PEOPLE

1. We should be kind and respectful to them.
2. We should be friendly with them and don't make fun of them.
3. We should be polite towards them and give respect and attention.
4. They should be taken to the doctor, if they are sick. Give them enough rest, a healthy diet and medicines on time.
5. Request the people not to stare or make comments about them.
6. We should encourage them to go to special schools to study. We all should help them as you help your friends, taking it as your duty and not a favour. You feel good when you do a good deed.

### Fact Treasure

*Helen Keller, a famous writer and orator who was blind. The famous movie 'Black' is based on the life of Helen Keller.*

It is our duty to help people with special needs whenever they need help. These small deeds on your part can make them feel very easy and comfortable.

## Quick Brush Up



- ◉ We all live in a society.
- ◉ Everybody grows old and becomes weak and inefficient with age.
- ◉ The sick person needs more care and attention.
- ◉ A deaf person cannot hear at all.
- ◉ It is a disease that deforms your arms or legs.
- ◉ It is our duty to help people with special need whenever they need help.

## Key Words

Sharing : To distribute

Dumb : A person cannot talk

Physically Challenged People : People whose one or the other organs do not function normally.



### A. Choose the correct option :

- Braille script was designed by \_\_\_\_\_.  
(a) Helen Keller  (b) Louis Braille  (c) Stephen Hawking
- Old Age Day is celebrated on \_\_\_\_\_.  
(a) 13th October  (b) 24th October  (c) 1st October
- \_\_\_\_\_ deforms our legs or arms.  
(a) Polio  (b) Cholera  (c) Malaria
- A partially deaf person uses \_\_\_\_\_.  
(a) wheel chair  (b) hearing-aids  (c) braille script
- People who cannot see are \_\_\_\_\_.  
(a) deaf  (b) dumb  (c) blind

### B. Fill in the blanks :

- People affected with \_\_\_\_\_ walk with the help of calipers.
- Love and care make a person \_\_\_\_\_ faster.
- People whose brain does not function properly are called \_\_\_\_\_ people.
- Blind people can write Braille on a six key machine called a \_\_\_\_\_.
- Everybody \_\_\_\_\_ old and becomes weak and \_\_\_\_\_ with age.

### C. Write True or False :

- Sick people should be kept in clean surroundings.
- All of us become old and weak one day.
- Deaf people often use hearing aid to hear well.
- Helen keller was a famous writer and orator.
- One always feels bad when he/she is healthy.

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**D. Match the following :**

- |                   |                          |
|-------------------|--------------------------|
| 1. Hearing aid    | (a) Suffering from polio |
| 2. Braille script | (b) Unable to walk       |
| 3. Wheel chair    | (c) Blind people         |
| 4. Calipers       | (d) Deaf people          |

**E. Answer the following questions :**

1. What do we learn in a society?
2. Who are mentally challenged people?
3. Who are physically challenged? Give some examples.
4. How should we treat the old people?
5. What is Braille?
6. Suggest two ways to help the sick people.



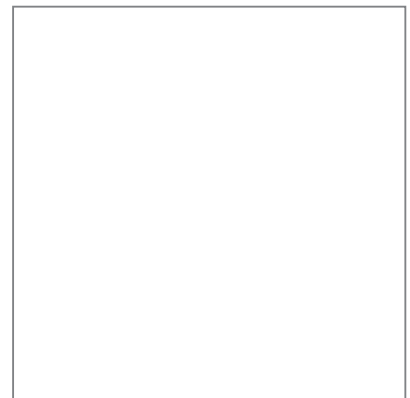
**Brain Twister**

1. *How do blind people read the Braille script?*
2. *What happen when people grow old?*

**Creative Corner**

**Draw or Paste here a picture of Mother Teresa in the given space and write five lines about her.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_



**Life Skills**



Visit an old age home or orphanage with your parents to understand their problems and try to help them.



Chapter

3

# WORK PEOPLE DO

## Learning Treasure

- Different Occupations In Our Community
- Work at Home
- Child Labour
- Preventing Child Labour



### Self Survey

Identify, who am I?

1. I drive a taxi \_\_\_\_\_.
2. I treat sick people \_\_\_\_\_.
3. I teach students \_\_\_\_\_.
4. I help to put out fire \_\_\_\_\_.

Work is very important in our life. If we look around, we will find everyone doing some work. Different people do different kinds of work to earn money. They earn money to meet the daily need of their family. The work people do to earn money is known as occupation. Let us read.

## DIFFERENT OCCUPATIONS IN OUR COMMUNITY

### Making Goods Occupation

Some people make new things to earn money. They use different material to make things. For examples :

◇ A **tailor** stitches our clothes.

◇ A **mason** builds houses.



Tailer



Mason



Black smith



Carpenter



Baker



### Teacher's Tip

By explaining to the children initiate the lesson, that every occupation is important for the society. Tell them the concept of dignity of labour.

- ◇ A **blacksmith** makes things from iron.
- ◇ A **carpenter** makes wooden things.
- ◇ A **baker** bakes bread, biscuits, buns etc.

### Things Selling Occupations

Some people sell things to earn money. For examples :

- ◇ A **pharmacist** sells medicines.
- ◇ A **florist** sells flowers and bouquets.
- ◇ A **jeweller** sells jewellery.
- ◇ A **draper** sells cloths.
- ◇ A **greengrocer** sells vegetables and fruits.



Pharmacist



Florist



Jeweller



Greengrocer

### Things Repairing Occupation

Some people repair our faulty or broken things to earn money. For examples :

- ◇ A **mechanic** repairs machines like car, AC, phone etc.
- ◇ An **electrician** repairs electrical gadgets.
- ◇ A **plumber** repairs taps and water pipes.
- ◇ A **cobbler** repairs shoes and foot wears.



Mechanic



Electrician



Plumber



Cobbler

## Some Other Occupations

- ◇ Some people **entertain** us to earn money. They do different works to entertain us. For examples : Singer, dancer, actor, clown, musician etc.
- ◇ Some people provide useful **services** to earn money. For example : Doctor, postman, teacher, policeman etc.



Dancer



Postman



Musican



Doctor



Singer



Policeman

## Activity Session

**There may be many more occupations. Find out about them and make a chart on different occupations.**

### Work At Home

In most families, father's go out to work in the mornings. They may have their own business or they work in offices and other places. Mother's look after the house, cook food and do household jobs. They are called **home makers**. In some families, mother's also go to work.

They manage their work, household work and look after their families as well. Children also help their parents, younger brother and sisters and themselves. Girls generally help mother in cooking, boys go to nearby market to buy things. They keep their things tidy. They arrange school bags before going to bed according to the next day's timetable.

Many of us also have domestic helps—maid, washerman and driver who make life easy for us. We must always be kind to them.

## CHILD LABOUR

Many families in our country are poor and do not have enough money. In these families, children aged between 5 to 14 years don't go to school and are forced to work and earn money for the family. This is known as **child labour**.

They work as domestic helps, work on farms, sell things on streets, work in factories and work in dhabas etc. They also do some dangerous work like making glass, fire works, match sticks etc. They do many such things by which they can earn some money.

Preventing child labour there are many organization like ILO (International Labour Organization), UNICEF (United Nations International Emergency Children's Fund) etc, that look after the rights of children and help them fight against child labour. Several steps have been take such many organisations to protect the children from this kind of exploitation. In India, the **Sarva Shiksha Abhiyaan** is a government programme that helps give free education, bags, books, uniforms and even mid-day meals to children going to schools.



*Child labour is a criminal offence*

### Quick Brush Up



- ◉ Work is very important in our life.
- ◉ The work people do to earn money is known as occupation.
- ◉ Some people make new things to earn money.
- ◉ Some people provide useful **services** to earn money.

### Key Words

- Occupation : The work that one does to get money regularly.  
Ban : To say that something must be stopped.  
Deprived : Those who do not have things to lead a comfortable life.



**A. Choose the correct option.**

1. The plumber repairs our \_\_\_\_\_.  
(a) shoes  (b) utensils  (c) water pipes and taps
2. Which of the organizations fight against child labour?  
(a) ILO  (b) UNICEF  (c) Both of these
3. \_\_\_\_\_ repairs scooter, car, phones etc.  
(a) Doctor  (b) Mechanic  (c) Carpenter
4. Greengrocers earn money by selling \_\_\_\_\_.  
(a) vegetables  (b) fruits  (c) both of these

**B. Fill in the blanks.**

1. An \_\_\_\_\_ repairs electrical gadgets.
2. Working children are often beaten by their \_\_\_\_\_.
3. In India, \_\_\_\_\_ is a government programme that helps give free education.
4. Children aged between \_\_\_\_\_ are forced to work and earn money.

**C. Write True or False.**

1. Child labour is banned in India.
2. Woman who stay at home to look after their families are called home makers.
3. Work is not important in our life.
4. A chemist sell medicines.

**D. Answer the following questions.**

1. What is an occupation? Name any four occupations.
2. What is child labour?
3. What is Sarva Shiksha Abhiyaan?
4. Why people are required to do work?



**Brain Twister**

1. How is your life different from the life of a child labour?
2. How can you help poor children?

**Creative Corner**

Collect some pictures and make a scrapbook of various jobs that people do to earn a money.



Chapter

4

# Fun and Games

## Learning Treasure

- Means of Recreation
- Playing Games
- Traditional Games
- Adventure Sports
- Visit of A Fun Places



### Self Survey

Tick (✓) the correct answer from the brackets:

1. Carom and chess are (Indoor/Outdoor) games.
2. Cricket and hockey are (Indoor/Outdoor) games.
3. Sachin Tendulkar is a famous (Tennis/Cricket) player.
4. Sania Mirza is a very famous (Tennis/Chess) player.

We all get tired after working the whole day long. We can not always keep on working without any relaxations. So, it is very important to take a break or free time for refresh the mind.

The free time when we can do what we want do is known as Leisure. An activity done for pleasure or to relax is called **Recreation**. We need recreation to have fun, to feel fresh and to spend time with our family.

### MEANS OF RECREATION

People have various means of recreation depending on their interests. For examples : Playing games, visit to a fun place, reading books and magazines, watching television, listening to music, fairs, cycling etc.

### PLAYING GAMES

Out of all the leisure activities games are the most popular. They not only help us relax but also keep us fit and healthy. Games are mainly of two types:

◇ Indoor Games

◇ Outdoor Games

### Fact Treasure

*Chess was invented in India in 6th century. It is also called Shatranj in India, Makruk in Thailand and Shogi in Japan.*



### Teacher's Tip

*Tell the children about the different ways of recreation and also tell them the benefits of recreation.*

## Indoor Games

The games that we play inside the house are called **indoor games**. They can be played at any time of the day and in all types of weather. We do not need a large space or ground for these games.



*Ludo*



*Chess*

Ludo, Chess, Scrabble, Snakes & Ladders, Cards, Billiards, Snookers, Table Tennis etc are the examples of indoor games.



*Scrabble*



*Billiards*



*Snooker*



*Table Tennis*

## Outdoor Games

The games that we play outside the house are called **outdoor games**. Some outdoor games can be individual games like golf, bad minton, lawn Tennis etc. Some outdoor games can be team games like hockey, football, basket ball, cricket etc. Team games should be played with team spirit and sportsman ship spirit. The whole team plays with the common aim of achieving victory.



*Cricket*



*Football*



*Golf*



*Hockey*

Except these games we play some traditional or adventure sports.

## TRADITIONAL GAMES

Kho-Kho, Kabaddi, Gilli danda, Kushti etc are traditional games of India. These games were earlier played in India. But some of these traditional games are still popular in villages and small towns of India.

### Activity Session

Here are given pictures of some games. Identify and write the name of the games.



## ADVENTURE SPORTS

Adventure sports are games that are a little dangerous to play. They provide thrill excitement and a sense of adventure to the players. Therefore, these games are called **adventure sports**. River rafting, wind surfing, bungee jumping etc are the examples of adventure sports.



Traditional Game

Adventure Game

## Fact Treasure

Now a days most of the children spend hours playing strategy games on computers, tabs and mobile phones. These games need skill and presence of mind. These games are called

## Fact Treasure

National sport is a sport or game that is a part of the culture of a Nation.  
Hockey is the National Game of India.

Some people play games to earn money. Play is like work for them. They are known as **professional players**. Famous players like Sachin Tendulkar (Cricket), Vishwanathan Anand (Chess), Abhinav Bindra (Shooting), Sardar Singh (Hockey), Mary Kom (Boxing) and many others earn a lot of money by playing their respective games.



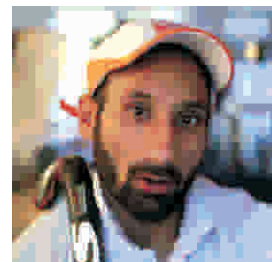
Sachin Tendulkar



Vishwanathan Anand



Abhinav Bindra



Sardar Singh



Mary Kom

## VISIT TO A FUN PLACES

There are so many viriding places of recreation in most of the towns or cities. The fairs, zoo, circus & museum are such places of recreation.

- ◇ Fairs and exhibitions are one of the oldest means of recreations. Fairs often take place on festivals like Diwali, Baisakhi etc. There are some special fairs which are held for commercial purposes. For examples : Book fair, Trade fair etc.
- ◇ Visit the zoo and watch the wild animals and their life is also a fun.

## Fact Treasure

An activity which is practiced for fun is called hobby.



Circus



Zoo



Fair

- ◇ We go to a circus to watch bold feats. We laugh at clown's actions.
- ◇ A museum is a place where things related to a particular subject or period are kept.

## WATCHING T.V.

We can entertain ourselves by watching T.V. We see different types of cartoon films on cartoon channels. Cartoon films make us laugh and refresh our mind. In fact T.V. is most popular means of recreations.



Watching TV

## Reading Books

Reading is another favourite past time of many people. Some people have a habit of reading newspapers as the first thing in the morning. Reading is an enriching source of entertainment. Children also love to read comics, fairytales and other books.

## Music and dance

Music helps the mind to relax and calms our senses. Music has an universal appeal. Every state of India has its own kind of folk dance. These dances are traditional. Chhau, Bihu, Bhangra, Dandia, Garba, Ghoomer etc are some of the folk dance.

“A folk dance has a story to tell about a festival, nature, religions beliefs or customs”.



Dance

Schools also help the students in relaxation. Sports have become an important part of school curriculum. Students are encouraged to play different games and participate various athletic competition and team games.

## Quick Brush Up



- An activity done for pleasure or to relax is called Recreation.
- Games are mainly of two types:
  - (i) Indoor Games
  - (ii) Outdoor Games
- The games that we play outside the house are called outdoor games.
- Adventure sports are games that are a little dangerous to play.
- Hockey is the National Game of India.
- Fairs and exhibitions are one of the oldest means of recreation.
- A museum is a place where things related to a particular subject or period are kept.

## Key Words

Recreation : Things that we do in our free time.

Folk dance : A folk dance has a story to tell about a festival, natural, religious beliefs or customs.



### A. Choose the correct option.

- The games that we play inside the house are called \_\_\_\_\_.  
(a) Outdoor games  (b) Indoor games  (c) National games
- Abhinav Bindra plays \_\_\_\_\_.  
(a) Shooting  (b) Hockey  (c) Cricket
- The National game of India is \_\_\_\_\_.  
(a) Cricket  (b) Football  (c) Hockey
- People play games for \_\_\_\_\_.  
(a) fun  (b) relaxation  (c) both (a) and (b)

### B. Fill in the blanks.

- Carrom and Scrabble are \_\_\_\_\_ games.
- Games which are played outside are called \_\_\_\_\_ games.
- \_\_\_\_\_ is an enriching source of entertainment.
- A \_\_\_\_\_ are games that are a little dangerous to play.
- \_\_\_\_\_ and \_\_\_\_\_ are one of the oldest means of recreation.

### C. Write True or False.

- We need recreation to have fun.
- Games are mainly of three types.
- Kho-Kho is a traditional game.
- Cricket is the national game of India.
- Schools also help the students in relaxation.

|                          |
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**D. Match the following.**

- |                    |              |
|--------------------|--------------|
| 1. Virat Kohli     | (a) Boxing   |
| 2. Sania Mirza     | (b) Tennis   |
| 3. Mary Kom        | (c) Football |
| 4. Baichung Bhuita | (d) Cricket  |

**E. Answer the following questions.**

1. Why do we play games? Name any two famous sports man personalities.
2. What are indoor games? Name any two indoor games that you like to play.
3. Write the two types of special fairs.
4. What is recreation?
5. How do schools help in relaxation?

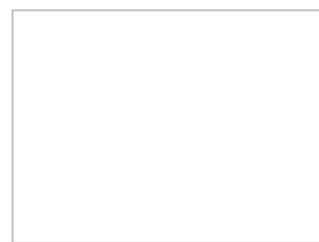
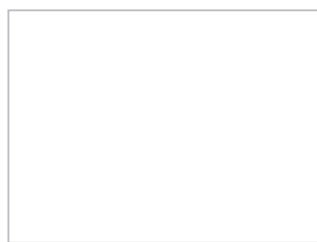
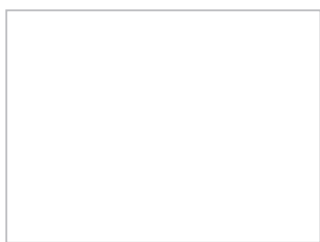
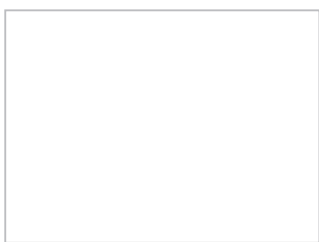


**Brain Twister**

1. *What precautions should be taken while playing outdoor games?*
2. *Team spirit is very important for a game. Do you agree? If yes, give reason for your answer.*

**Creative Corner**

**Stick the pictures of your favourite four famous players in the space given and write two lines each of them about their achievements.**



\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Life Skills**



We should not play computer games for too long. It is not good for our health as it may affect our eyesight.



Chapter

# 5

## FOOD AND WAYS OF COOKING

### Learning Treasure

- Sources of Food
- Kinds of Food
- Cooking the Food
- Ways of Cooking
- Fuels and Stoves for Cooking
- Good Eating Habits



### Self Survey

Complete the table with the names of some plants needs that we eat.

Cereals

Wh\_\_at

Mai\_\_e

Ri\_\_e

Fruits/Vegetables

P\_\_p\_\_y\_\_

O\_\_io\_\_

Sp\_\_n\_\_ch

Oil seeds

S\_\_nf\_\_ower

M\_\_star\_\_

C\_\_c\_\_nut

All living things like human being, plants and animals need food to survive. Food help us to grow, gives us energy and keep us strong and healthy. The food we take daily is called **our diet**. We eat different meals, breakfast, lunch, dinner at different times of the day at our diet.

### SOURCES OF FOOD

All the different kinds of food that people eat comes either from plants or animals.

#### Plants

Plants are an important source of food. Plants make their own food by the process of photosynthesis. Some food is used by plants for their growth. The rest of food is stored in different parts of plant (like roots, stems, flowers, seeds, leaves and fruits etc) and is eaten by us.

#### Food from Plants

- ◇ **Cereals** such as wheat, rice, maize and millets are important part of our food. They contain high amount of starch and hence they are excellent source of energy.

### Fact Treasure

- ◇ *Plants make their own food. This is why plants are called producers.*
- ◇ *Animals cannot make their own food. This is why animals*



### Teacher's Tip

The objective of this lesson is to make students aware to the importance of food.

- ◇ **Pulses** are dried seeds of some plants. They are rich in protein. Common pulses are arhar, moong, urad, masoor, chana etc.
- ◇ **Spices** are used to flavour food and have some medicinal value. Pepper, chilli, cinnamon, nutmeg, clove, turmeric are some of the commonly used spices.
- ◇ **Vegetable oil** is one of the main ingredients of cooking food. We get vegetable oil from some plants such as mustard, groundnut, coconut, sunflower, soyabean etc.

Vegetable add taste to the food. They contain vitamins and minerals that keep us healthy. Carrot, spinach, garlic, lady finger, cauliflower etc are the examples of vegetables.

**Fruits** are nutritious. Most fruits are sweet in taste and act as rapid source of energy. Fruits also contain vitamins and minerals. They protect our body from diseases. Mango, banana, apple, grapes papaya are the some examples of fruits. In addition to the above food items, we get sugar, nuts, coffee, tea and chocolate from plants

**Fact Treasure**  
*The oils that are used in cooking are called edible oils.*



Cereal



Pulses



Spices



Fruits & Vegetables

## Animals

Animals are also a rich source of food.

### Food From Animals

- ◇ **Meat** : We rear many animals like pig, hen, goat to eat their meat as food.
- ◇ **Milk** : Much animals like cow, buffalo, goat etc provide milk, cheese, curd, butter, ghee, ice-cream are made of milk and are called **milk products**.

**Fact Treasure**

- ◇ *People who eat meat, fish and eggs are called non-vegetarians.*
- ◇ *People who eat only plant products*

Milk is known as a complete food as it is rich in almost all nutrients required by our body.

- ◇ Egg : Birds like hen, duck and turkey give us egg.
- ◇ Honey : Bees make honey that is collected from their beehives.



Hen



Cow



Duck



Bees

## KINDS OF FOOD

We eat different Kinds of food. All foods contains many nutrients like carbohydrates, proteins, minerals and vitamin, fats etc. They give us energy, help in building our body & also protect us from diseases. According to presence of three nutrients in food, food product can be grouped into three categories.

1. Protective foods
2. Energy-giving foods
3. Body-building foods.

### Protective Foods

Foods rich in vitamins and minerals are called **protective foods**. They help the body for fighting against diseases. Fruits, green vegetables and milk are rich in vitamins and minerals. They keep our skin healthy and improve our eyesight. Milk, cheese, fish, eggs, etc make our bones strong. They are full of calcium and protein.



Milk



Cheese



Fish



Egg

*Protective foods*

### Energy-giving Foods

Foods that give energy to our body are called **energy-giving foods**. Energy is required by the body to do work and to perform all the physiological functions of the body. Carbohydrates like rice, wheat, potato and fats like ghee and oil belong to this group. Wheat and corn are used for making breads, chapatis and flakes.



Rice



Wheat



Ghee



Oil

*Energy-giving foods*

### Body-building Foods

Foods that contain proteins make the body strong. They are called **Body building foods**. Our body needs to grow. Due to constant wear and tear in the body, new cells have to be built to repair the damage parts. Proteins like milk, eggs, meat, cheese and dal help in body building. Proteins are essential for our body. Growing children need more protein than adults. Soyabean and milk are rich in proteins.



Milk



Pulses



Meat



Egg

*Body-building foods*

## Activity Session

Name the vegetables you eat in each category.

**Roots**

**Leaves**

**Stems**

|       |       |       |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

### Fact Treasure

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

## COOKING THE FOOD

Different types of foods items are eaten by us. Some food items can be eaten by raw like onion, fruits, tomato, beetroot etc. Other need to be cooked like meat, vegetables, pulses etc. Some can be eaten either raw or cooked or both raw and cooked like carrot. Today most of the food that we eat is cooked.

Cooking makes food soft, tasty and easy to digest. It also kills disease carrying germs in the food.

## WAYS OF COOKING



*Boiling with boiled water*

There are various ways of cooking the food.

### Boiling

Boiling tea and coffee are also made with boiled water. You can boil vegetables, eggs, rice etc by covering them with water and heating to the boiling point (100°C). This is the most common method of cooking rice, pulses and vegetables in home.

### Steaming

Steaming means to cook with the help of steam. Popular South Indian food- Idli, dosa and North eastern food-momos etc are cooked by steaming.



*Steaming*



*Frying pan (karahi)*

### Frying

Frying means to cook in hot oil. It is usually done in a frying pan or a wok. French Fries, Pakoras, cutlets and kachoris are prepared in by **deep-frying** for which a large amount of oil is used.

**Shallow frying** can be done on a griddle. A griddle is a flat round iron plate that is heated on a stove or over a fire. Parathas are prepared on griddles by shallow frying for which less oil is used.



*Griddle (Tawa)*



*Roasting*

### Roasting

Roasting means to cook food over direct heat or in an oven. Papad and popcorn are often roasted, chicken and fish can also be roasted.

## Baking

Baking is done in the dry heat of an oven. Cakes, Bread biscuits are baked.



Baking

## FUELS AND STOVES FOR COOKING

Food is cooked on a stove in which fuel is used. Let us read about different fuels and kinds of stoves used for cooking food.

| Types of stove       | Fuel used                     |
|----------------------|-------------------------------|
| Gas stove            | Liquefied Petroleum Gas (LPG) |
| Kerosene stove       | Kerosene oil                  |
| Solar cooker         | Sunlight (Solar energy)       |
| Microwave oven       | Electricity                   |
| Hotplate (Induction) | Electricity                   |
| Tandoor              | Wood and coal                 |
| Chullah              | Wood, coal and cow dung cakes |



## Activity Session

Think and fill the chart given below:

|   |  |
|---|--|
| Food that is eaten raw.                                   |  |
| Food that is cooked before eating.                        |  |
| Food that can be eaten raw as well as after being cooked. |  |

## GOOD EATING HABITS

To stay healthy, we need to eat good food. But having good eating habits is an important thing. Let us read now some good eating habits.

- ◇ Wash your hands with soap before and after taking the food.
- ◇ Wash vegetables and fruits in fresh water before eating and cutting them.
- ◇ Always cover all the food do not eat uncovered food.
- ◇ Eat slowly and chew the food properly.
- ◇ Never leave half-eaten food in plate, take only as much food on our plates as we can eat.
- ◇ Avoid talking while eating.
- ◇ Avoid eating food that is sold in the open.
- ◇ Drink plenty of water it helps us to digest the food that we eat.

### Quick Brush Up



- All living things like human being, plants and animals need food to survive
- All the different kinds of food that people eat comes either from plants or animals.
- Milch animals like cow, buffalo, goat etc provide milk.
- Foods rich in vitamins and minerals are called protective foods.
- Steaming means to cook food with the help of steam.
- Food is cooked on a stove in which fuel is used.
- Drink plenty of water it helps us to digest the food that we eat.

### Key Words

- Cereals : The seeds of plants like wheat, rice, maize etc.
- Pulses : Protein-rich foods like arhar, moong etc.
- Nutrients : Substances needed by our body for health and growth.
- Fuel : A material burnt to produce heat.





**A. Choose the correct option.**

- Roasting is done in a \_\_\_\_\_.  
(a) cooker  (b) tandoor  (c) wok
- Hens and ducks give us \_\_\_\_\_.  
(a) milk  (b) eggs  (c) both (a) & (b)
- The food we take daily is called our \_\_\_\_\_.  
(a) skin  (b) diet  (c) bone
- We use \_\_\_\_\_ as fuel for cooking.  
(a) CNG  (b) LPG  (c) both (a) & (b)
- We cook rice and pulses by \_\_\_\_\_.  
(a) boiling  (b) baking  (c) frying

**B. Fill in the blanks.**

- Cooking makes food tasty, soft and easy to \_\_\_\_\_.
- Pakoras, samosas and chips are cooked by \_\_\_\_\_.
- Foods rich in vitamins and minerals are called \_\_\_\_\_ foods.
- People who do not eat meat are called \_\_\_\_\_.
- We must wash \_\_\_\_\_ and \_\_\_\_\_ properly before eating them.

**C. Write True or False.**

- In roasting we use direct heat to cook.
- Microwave oven is used for storing food.
- Steaming means to cook with the help of steam.
- We should eat uncovered food.

**D. Match the following.**

- |                 |                    |
|-----------------|--------------------|
| 1. Omelette     | (a) boiling        |
| 2. Idli         | (b) boiling        |
| 3. Rice         | (c) deep frying    |
| 4. Chowmein     | (d) shallow frying |
| 5. French fries | (e) stir frying    |

E. Answer the following questions.

1. What are different ways of cooking food?
2. Who are vegetarians and non-vegetarians?
3. Why do we need food?
4. What are protective food? Give two examples.
5. Why is milk considered a complete food?
6. What are nutrients? Name any four nutrients of food.
7. List any three rules of healthy eating.
8. What is a balanced diet?
9. Why do we cook food?

F. Give three examples of each.

1. Protective Food \_\_\_\_\_
2. Body-building Food \_\_\_\_\_
3. Energy-giving Food \_\_\_\_\_



## Brain Twister

1. Why should we cook food in a pressure cooker?
2. Why should we eat at least one meal in a day with our family?

## Creative Corner

Food covers a long journey from fields to reach our plates. The journey of food is given below. Write numbers from 1 to 6 to put in proper sequence.

|                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|
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## Life Skills



We should not eat over cooked or uncooked food. It may not be good for our health.



Chapter

# 6

## PRECIOUS WATER

### Learning Treasure

- Need or Uses of Water
- Sources of Water
- Formes of Water
- Water Cycle
- Water Shortage
- Water Pollution
- Clean Water
- Water Conservation
- Rain Water Harvesting



### Self Survey

1. An animal which lives in water \_\_\_\_\_.
2. A plant which lives in water \_\_\_\_\_.
3. Three forms of water \_\_\_\_\_.
4. Two methods for purifying water \_\_\_\_\_.

Just food is important for us to remain healthy, so is water. Water is the precious gift given to us by nature. Without water, there is no life possible on the earth. Almost 3/4 of our planet earth is covered by water. That is why the earth is often called the **Blue planet**. But 98% of water is sea water and it's too salty for us to use. Moreover, since most of this remaining 2% fresh water is ice, less than 0.3% of water on earth is directly available to us.

### NEED OR USES OF WATER

All living things need water to live, to work properly and to grow. Let us read about the need or uses of water.

We need water for drinking, cooking, washing, bathing, cleaning and even putting our fire.

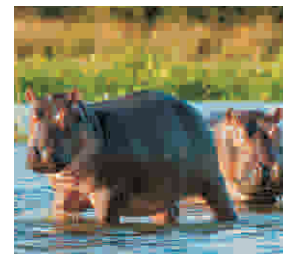
- ◇ Farmers need water to grow crops. Irrigate the fields and grow



### Teacher's Tip

*Importance of water in our lives can be discussed with strees on conservation of water.*

- ◇ Some factories need water for production of goods we use.
- ◇ Water is used to produce electricity.
- ◇ Water is used for many sports like surfing, rafting, swimming etc.
- ◇ Water is also a medium of transport. Ship, boat, cruise etc move on water. They carry goods and people from one place to another.
- ◇ Water is the home of aquatic plants like (lily, hydrilla) and animals like (fish, octopus).
- ◇ Animals also need water to drink and bathe. Some animals like hippopotamus, elephant, buffaloes etc stay in water for a long time to keep their body cool.
- ◇ Plants also need water for their growth and to prepare their food plants get water from soil through their roots.
- ◇ Water is a universal solvent since it can dissolve a number of substance in it.



## SOURCES OF WATER

Rain is the main source of water on the earth. Some rain water gets collected in water bodies on the surface of the earth such as rivers, lakes, ponds, tanks, seas and oceans etc. This is called surface water. Some rain water seeps into the soil and gets collected as ground water. It can be drawn out using hand pumps, tube wells dug wells that are made by man. Taps, canals, dams and tanks are some more man-made sources of water.

### Fact Treasure

- ◇ Water is used to generate electricity that is called hydro electricity.
- ◇ Around 70% of our body is made of water.
- ◇ A camel stores water in its hump and can stay without water for



Natural Source of Water

Man-made Source of water

## Properties of Water

Main properties of water are :

- ◇ It is transparent or colour less. It has no taste and smell.
- ◇ It has no shape. It take the shape of the container in which it is put.

## FORMS OF WATER

Water exists in three forms such as-

- ◇ Solid
- ◇ Liquid
- ◇ Gas

In summers, we put water in ice trays and keep it in the refrigerator. There it gets cold and freezes to form ice. Ice is a **solid** form of water.

The water we drink is **liquid** form of it.

It we heat water, it changes into water vapour or steam. Steam is a **gaseous** form of the water.

Changing of water into water vapour on heating is called **evaporation**. Changing of water vapour into water on cooling is called **condensation**.

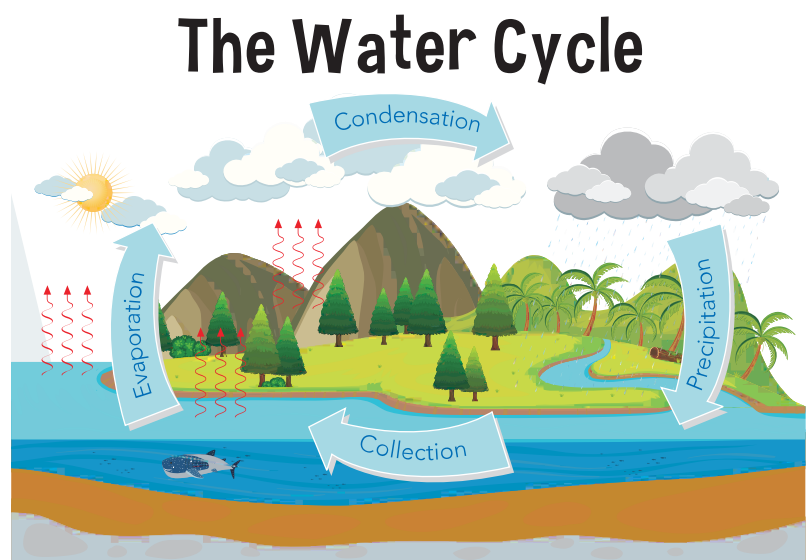
All these forms are interchangeable.

Ice      \_\_\_ Melting      \_\_\_ Water      \_\_\_ Heating      \_\_\_ Steam.

Steam      \_\_\_ Cooling      \_\_\_ Water      \_\_\_ Freezing      \_\_\_ Ice.

## WATER CYCLE

On the earth not a single drop of water is wasted in nature. Nature recycles and reuses water. The water from the oceans seas and rivers heats up with sun's rays. This heated water rises up in the form of water vapour. These droplets join together to form clouds. As the clouds become heavy, they fall down as rain. This rain water again goes back to the oceans, rivers and other water bodies till they are heated again to form the clouds. This is continuous on-going process. This process is the **water cycle**.



## WATER SHORTAGE

There are many human activities that cause water shortage :

Wastage of water or over use of water.

- ◇ Increase in consumption of water in industries.
- ◇ Poor ground water resources.
- ◇ Increasing demand of water due to increase in population.
- ◇ Water pollution. In many parts like Rajasthan of our country, the water is scarce.
- ◇ Woman have to walk several kilometers everyday to fetch water.
- ◇ Water shortage is more acute in the summer months.



## WATER POLLUTION

We see how much we depend on water in our daily life. On the other hand, we unconsciously cause a lot of damage to the water everyday.

### Fact Treasure

Only 1% of the total water on earth is fit for drinking.

Washing clothes, bathing, using chemical soaps and detergents, industrial wastes disposal of other water in water, all these pollute water and make it unfit for consumption.



Water pollution

## CLEAN WATER

The water that reaches our homes is not totally clean. It has be made safe for drinking. If we drink water that is not clean we may suffer from diseases like jaundice, cholera and typhoid.

We can purify water by using a water filter, or by boiling it.

Boiling kills the germs in the water and filtering removes impurities such as sand and gravel.

Water can also be purified by using water purifiers which kill germs using ultraviolet rays. We also can use some chemicals like chlorine, bleaching powder etc to kill germs present in water.



Boiling of water



Water purifier

## WATER CONSERVATION

There is very little potable water available on the earth. So it is very important to use water wisely. Wise and careful use of water is called water conservation. Here are some points which should be kept in mind to conserve water:

- ◇ Do not leave the taps open use water wisely
- ◇ Some water is left after washing clothes. We can use it in cleaning floors.
- ◇ We should not pollute the water bodies.
- ◇ We should use a bucket and mug to take a bath rather than using a shower and reuse left over water in bottles for watering the plants.
- ◇ We should plant as many trees as you can as they help to conserve water.
- ◇ We should practice rainwater harvesting.

## RAIN WATER HARVESTING

When it rains, most of the water flows down to lakes and rivers, and finally into the sea. Very little water seeps into the ground. So the quantity of water under the ground decreases. In summer, when the lakes and rivers dry up, there is very little water left for use. So there is water shortage.

If we can store the rainwater during the rainy season, we will have more water to use in the summers.



*Rain water harvesting*

### Fact Treasure

*In the Dead Sea, the water is so salty that people can float in it without swimming.*

We can store the rainwater in underground tanks by digging small drains up to the tanks. This is called rainwater harvesting. Water is very precious. We must not waste it, we must save it.

### Quick Brush Up



- Water is the precious gift given to us by nature.
- We need water for drinking, cooking, washing, bathing, cleaning and even putting our fire.
- Rain is the main source of water on the earth.
- Water exists in three forms such as : (i) Solid (ii) Liquid (iii) Gas
- There is very little potable water available on the earth.
- Rainwater harvesting is the process by which rain water is collected and stored for use or for eaten use.

## Key Words

|                      |  |         |                 |
|----------------------|--|---------|-----------------|
| Natural              | : Available in nature                                    | Potable | : Safe to drink |
| Filter               | : To purify water by passing it through special device   |         |                 |
| Scarcity             | : Shortage, Cycle- Series of events occurring regularly. |         |                 |
| Rainwater harvesting | : Special process of collecting rainwater.               |         |                 |



### A. Choose the correct option.

- The main source of water on earth is \_\_\_\_\_.  
(a) river  (b) pond  (c) rain
- We use a hand pump to draw \_\_\_\_\_.  
(a) surface water  (b) river water  (c) underground water
- The solid state of water is  
(a) steam  (b) ice  (c) juice
- Water in \_\_\_\_\_ and oceans in not fit for drinking.  
(a) rain  (b) pond  (c) seas
- In nature, not a single drop of water is  
(a) stored  (b) used  (c) wasted

### B. Fill in the blanks.

- Without \_\_\_\_\_ there is no life possible on the earth.
- \_\_\_\_\_ is an aquatic plant.
- There is very little \_\_\_\_\_ available on the earth.
- The water we drink is in \_\_\_\_\_ state.
- Farmers need water to grow \_\_\_\_\_.

### C. Write True or False.

- Water has no shape.
- There can be no life without water.
- Ice is a gaseous form of water.

4. We should pollute the water bodies.
5. Water can be cleaned by boiling and filtering.

**D. Define the following term.**

1. Evaporation \_\_\_\_\_
2. Condensation \_\_\_\_\_
3. Rain Water Harvesting \_\_\_\_\_
4. Water cycle \_\_\_\_\_

**E. Answer the following questions.**

1. Why do we need water?
2. What is water pollution?
3. How is water made fit for drinking?
4. Explain water cycle?
5. Why is water so scarce on the earth?
6. What do you understand by rain water harvesting?
7. Define water conservation.



## Brain Twister

1. Why do we have a shortage of water during summer?
2. Why should we drink pure water?

## Creative Corner

**When it rains it makes everything clean and fresh. Draw a picture of rainy day in the space given below and describe how you enjoy the rain.**

## Life Skills



When it is very hot in summer keep one or two earthen pitchers outside your house along with a drinking cup. Observe how many people drink water from the pitchers in one day.



Chapter

7

## THE SHELTER

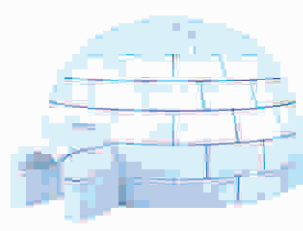
### Learning Treasure

- Need of A Houses
- Types of Houses
- An Ideal Houses
- Taking Care of Our Houses
- Decorating The House



### Self Survey

Look at these pictures of houses and then write the name of houses:



Early Man did not live in houses. They lived in caves or on trees and later started making simple houses.

A house is the place where we live with our family. Our house that is our home is our shelter. Living together in our shelter teaches us lessons is sharing, caring and love.

### NEED OF A HOUSE

A house is the basic necessities of our life.

We need shelter for the following purposes:

- ◇ A house protects us from hot weather, cold weather, rain, stormy wind and dust.
- ◇ It also protects us from wild animals, birds, harmful insects, snakes, thieves, robbers and burglars.



### Teacher's Tip

The picture of different kind of houses should be shown to the children. They should also be told why people build different types of houses in different regions.

- ◇ A house gives us space and protection to keep our clothes, jewellery and household appliances.

## TYPES OF HOUSES

People living in different regions or countries have different kinds of houses. The type of houses depends on the following factors.

- ◇ The climate of our region.
- ◇ The requirement of the owner.
- ◇ The raw materials available to build the house.
- ◇ The amount of money we can spend.
- ◇ From the above discussion we can divide the houses in the following types:

### Kuchcha House

Kuchcha houses are mostly built in villages and backward areas because the materials needed to build them are easily available there. They are built by straw, bamboo, mud, cowdung etc. The roofs of these houses are made of thatch and palm leaves or asbestos sheets. They are not expensive and take less time to build. They are not strong and durable. They need regular care and maintenance. They are also called **Temporary houses** or Huts.



*Kuchcha House*

### Pucca House

In cities, towns and how even in many villages houses are made of bricks, cement, wood, steel and iron. They are pucca houses. They are very strong, expensive and last for many years. They vary in size. Some are small while some are big.



*Bungalow*



*Multi-story Building*

All bungalows, flats in multi-storeyed building and apartments, are pucca houses. They are also called detached **Permanent houses**.

### Fact Treasure

- ◇ Bungalows are large Single-storeyed houses.
- ◇ A multistoreyed building consists of a number of apartments.

## Stilt Houses

In places like Assam where it rains a lot, people build houses on stilts. Such houses are made of wood and have sloping roofs. So that rain water can easily slide down. These houses rest on strong bamboo poles, 10-12 feet above the ground. This keeps people safe from moisture, insects, rains and floods. To enter the houses, a ladder is used. This type of house is also known as a shelter on poles.



*Stilt Houses*



*House Boat*

## House Boat

A **house boat** is a floating house with well furnished rooms. It is found in Dal Lake in Kashmir and in back waters of Kerala.

## Caravan

A caravan is a house on wheels that can move from one place to another. It is a mobile house. It is pulled by animals, horses, and ox or engine. Nomads and Gypsies are live in caravans.



*Caravan*

## Fact Treasure

◆ *People who do not stay in one place are called nomads.*



*Tent*

## Tent

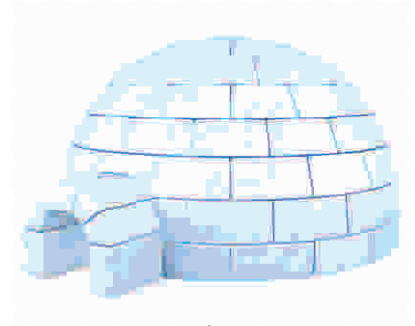
A tent is made from thick cloth called canvas. It is used by soldiers, scouts, guides, nomads and people who are camping. It is like a temporary house erected in mountains, forests and deserts. It can be pitched and folded easily.

## Fact Treasure

◆ *Tapee is a house made of animal skin.*

## Igloo

An igloo is a house which is built out of snow or blocks of ice. It is a dome shaped structure. People who live in igloos are called Inuits or Eskimos. These houses are found in the Arctic regions or the region where it shows all year round.



*Igloo*

## Slums

You must have seen *jhuggi* colonies in your city where small temporary houses are built very close to one another. These are called slums. Poor people like construction labourers, rickshaw pullers and factory workers live in these slums. They make kachcha houses with cheap and readily available materials like plastic and tin sheets. The people in slums live in unhygienic conditions. There is no safe drinking water and proper toilet facilities for them. Stagnant water and garbage is found all over. It is an ideal breeding ground for mosquitoes and flies.

## AN IDEAL HOUSE

Whatever be the type of house we live in, it should be neat, clean and comfortable. But for a good house, we should remember the following things :

- ❖ A good house should have a separate place for cooking, eating, sleeping, bathing, entertaining, guests etc.
- ❖ A good house should have enough doors and windows to let in fresh air, and sunlight. Proper sunlight and fresh air kill germs in the house. The system of letting in fresh air and letting out stale air is called ventilation.
- ❖ The house should be free of insects like flies and mosquitoes. Wire netting on the doors and windows keep them out.
- ❖ The house must have a proper drainage system to carry out the dirty water.
- ❖ Balconies and verandahs are the open spaces in the house which help come direct contact with sunlight and fresh air.

### Fact Treasure

*In Kutch, Gujarat there are single cylindrical houses with conical roofs. These are called bongas.*



*An ideal house*

## TAKING CARE OF OUR HOUSES

We must care of our house and keep it clean. We can keep our home clean by doing the following things :

1. Keep all the house hold things in their proper places.
2. Throw the household waste only in covered **dustbins**. Household garbags should be disposed at proper place.
3. Sweep and mop the floors of the house daily. Use phenyl and other floor cleaners.
4. Keep the kitchen clean and free from insects like ant. The kitchen should have a good chimney or exhaust fan to drive away any smoke. We must clean the dirty utensils soon after their use.
5. Keep the bathrooms and toilets clean and dry. We must see to it that all the drains are well covered and clean.



6. Do not allow cobwebs to collect in the house.
7. The surroundings of the house should be kept clean. Remove any dirty water collected in puddles. Dirty water encourages mosquitoes to breed. It is a joint responsibility of all the family members to keep the house clean.

## DECORATING THE HOUSE

We decorate our house using different things like show pieces, paintings, photographs, various types of wall hangings, aquariums, plants, artificial plants in vases and carpets.

In villages people use vegetable dyes to make colourful designs on walls. These designs based on the tradition of the place.

During festivals, houses are cleaned and painted, people make rangoli patterns in front of the main door on the ground. On some occasions people hang a string of mango leaves on their doors.

## Quick Brush Up



- Early Man did not live in houses.
- A house is the basic necessities of our life.
- People living in different regions or countries have different kinds of houses.
- They are build by straw bamboo, mud, cowdung etc.
- In places like Assam where it rains a lot, people build houses on stilts.
- An igloo is a house which is built out of snow or blocks of ice.
- A good house should have a separate place for cooking, eating, sleeping, bathing, entertaining, guests etc.
- Do not allow cobwebs to collect in the house.

## Key Words

- Kuchcha house : A house made with mud and straw.  
Pucca house : A strong house made of cement, bricks, steel and iron etc.  
Igloo : A house made of ice.



### A. Choose the correct option.

1. A house made from blocks of ice is \_\_\_\_\_.  
(a) igloo  (b) stilt house  (c) caravan
2. All bungalows and flats in multi-storeyed buildings are :  
(a) kachacha houses  (b) pucca houses  (c) tent
3. A house boat is formed in \_\_\_\_\_.  
(a) Kerala  (b) Kashmir  (c) both (a) & (b)
4. A caravan is a house on :  
(a) sticks  (b) shoes  (c) wheels
5. Door and windows should have wire-netting to keep away \_\_\_\_\_.  
(a) wind  (b) flies  (c) water

### B. Fill in the blanks.

1. A tent is made up of \_\_\_\_\_.

2. People who live in igloos are called \_\_\_\_\_.
3. Kuchcha house are also called \_\_\_\_\_.
4. Caravans are pulled by \_\_\_\_\_, \_\_\_\_\_ or \_\_\_\_\_.
5. Early man did not live in \_\_\_\_\_.
6. Pucca houses are also called \_\_\_\_\_ houses.
7. A house must have a proper \_\_\_\_\_ system to carry out the \_\_\_\_\_ water.

**C. Write True or False.**

1. Flats are found in villages.
2. Kuchcha houses are mostly build in villages.
3. Bungalows are small single and storeyed houses.
4. A carvan is a floating house.
5. The people is slums live in unhygienic conditions.

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

**D. Who am I?**

1. I am a house made of thick cloth. \_\_\_\_\_
2. I am a house made of ice. \_\_\_\_\_
3. I am a house made of floating on water. \_\_\_\_\_
4. I am a house made of on wheels. \_\_\_\_\_
5. I am a house made of on stilts. \_\_\_\_\_

**E. Answer the following questions.**

1. Why do we need a house?
2. What is an igloo?
3. List any three ways to keep your house clean.
4. On which factors the types of houses depend?
5. How can you decorate your home?
6. What is the differece between a kachcha house and a pucca house?
7. What is ventilation?
8. What is a slum?



**Brain Twister**

1. How do Eskimos protect themselves from cold inside an igloo?
2. Do you think it was easier to build houses in olden days as compared to these days? Why?



## Creative Corner

Many people make rangolis in and outside their houses on festivals and other special occasions. Draw and colour a rangoli design in your note book.

## Life Skills



All of you live in your houses. Discuss with your elders and find out the following things:

1. What things were required during construction of your house?
2. How do you clean your house?



Chapter

# 8

## FINDING PLACES

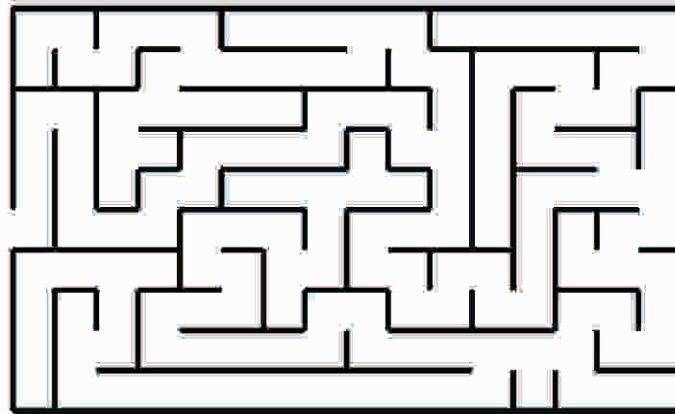
### Learning Treasure

- Directions
- Maps
- More About Maps



### Self Survey

Help Shubh to go to the greengrocer from his house.



We all go to different places for different purposes. We go to school to study. We go to market with our parents to make purchases. Sometimes we go to places, like restaurant, cinema, park etc. So we must know where these places and how to reach there. We must therefore have an idea of the street in the locality and places we visit frequently and in what direction they are located? When we go some where for the first time we must have an idea of the direction to find our way.

### DIRECTIONS

There are four main directions: North, South, East and West. If we face the rising sun, we are facing east. We will have west behind us. South is on our right and north is on the left side.



### Teacher's Tip

*Explain the children about the importance of map and symbols in tracing router.*

We can find out directions by using a magnetic compass. It has a needle which always point to the north direction. It is used by astronomes, sailors, mountaineer etc.

## MAPS

Our earth is huge, we represent the whole earth on a globe. But it is difficult to use it or carry along places. So we use maps.

A **map** is a picture of a place and its location on a piece of paper. It shows land, seas and other physical features. It also shows the distribution of things like rain, weather, forests, population, crops etc.

A map is very handy and informative. A book of maps is called an Atlas. There are two types of maps - Physical Maps and Political Maps.

### Physical Map

A map which shows mountains ranges, hills, plains, plateaus, deserts and water bodies is called physical maps.

### Political Map

A map which shows divisions of the world into countries, countries into states and states into districts etc is called political maps.



## Fact Treasure

*The science of making maps is called cartography and the person who makes maps is called a cartographer.*

## MORE ABOUT MAPS

There are many thing like scale, legend, and colours are used in maps.






### Scale

Since maps are much smaller than the areas they represent, we use a map scale. A scale is the number of Kilometres that a certain distance on the map shows.

For example : Scale: 1 cm 100 Kilometres

## Legends

As a map represents big places on a small scale it uses many symbols for cities, towns, hilly areas, railways and road routes. The table of these symbols is called **legend**. Some of the important symbols are shown in the following table:

|   |          |   |            |
|---|----------|---|------------|
| ●   | City     |  | Railway    |
| ~   | Road     |  | Rain place |
| ~   | Highway  | ----  | Boundary   |
| ~   | River    |  | Temple     |
|  | Hospital |  | Park       |

### Fact Treasure

*A symbol is a sign. It represent a land work. The explanation of symbols is called a Key.*

## Colours

Colours used in maps are:

**Blue** : Blue colour is used for water bodies.

**Green** : Green colour is used for plains.

**Light brown** : Light brown is used for deserts.

**Dark brown** : Dark brown is used for mountains.

### Fact Treasure

*A rough drawing of a place is called a sketch.*

*Land mark is an important place or thing that one can easily recognize such as post office, school, hospital,*

## Quick Brush Up



- We all go to different places for different purposes.
- There are four main directions: North, South, East and West.
- A map is a picture of a place and its location on a piece of paper.
- A scale is the number of kilometres that a certain distance on the map shows.
- A rough drawing of a place is called a sketch.

## Key Words

**Magnetic Compass** : An instrument which help us to find directions.

**Atlas** : A book of maps.

**Cartographer** : A person who makes maps.

**Sketch** : A rough drawing of a place.



**A. Choose the correct option.**

- The needle of a compass always points towards the \_\_\_\_\_.  
(a) east  (b) west  (c) north
- There are \_\_\_\_\_ directions.  
(a) three  (b) four  (c) six
- We represent the whole earth on a \_\_\_\_\_.  
(a) table  (b) book  (c) globe
- We locate the places with the help of \_\_\_\_\_.  
(a) directions  (b) directories  (c) pencils

**B. Fill in the blanks.**

- A book of maps is called \_\_\_\_\_.
- A rough drawing of a place is called a \_\_\_\_\_.
- The science of making \_\_\_\_\_ is called cartography.
- We can find out directions by using a \_\_\_\_\_ compass.
- A map is very handy and \_\_\_\_\_.

**C. Write True or False.**

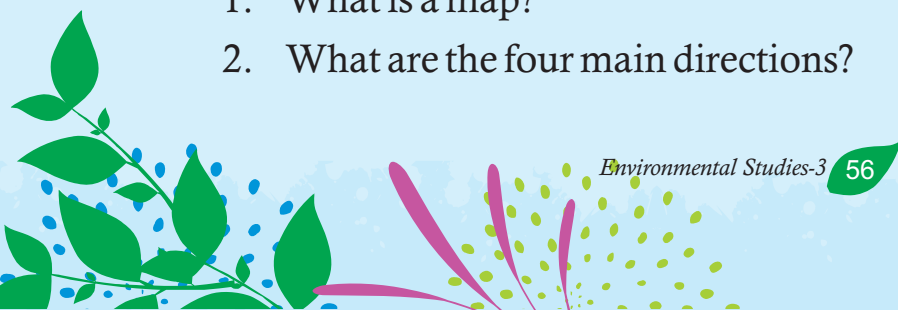
- We all go to different places for some purposes.
- There are three main directions.
- We represent the whole earth on a map.
- On maps, blue colour is used for water bodies.
- The explanation of symbols is called a landmark.

**D. Define the following terms.**

- Land marks \_\_\_\_\_
- Sketch \_\_\_\_\_
- Atlas \_\_\_\_\_
- Physical maps \_\_\_\_\_

**E. Answer the following questions.**

- What is a map?
- What are the four main directions?



3. What is an atlas?
4. What is cartography and who is cartographer?
5. What is the difference between a physical and a political map?



## Brain Twister

*How do landmarks help in locating a place? Explain with the help of an example.*

## Creative Corner

**Read the instructions and draw the following in the space given below:**

1. a hut in the centre
2. hills behind the hut
3. sun in the sky to the left of the hills
4. a tree to the right of the hut
5. flowers in front of the hut
6. cat next to the tree

## Life Skills



We should always give clear and easy directions to people whenever they need them. This would help people in locating a place easily.



Chapter

# 9

## PLANTS AROUND US

### Learning Treasure

- Types of Plants
- Habitats of Plants
- Some Unusual Plants
- Uses of Plants



### Self Survey

Give three examples of each of the following :

1. Trees \_\_\_\_\_
2. Waterplants \_\_\_\_\_
3. Creepers \_\_\_\_\_
4. Desert plants \_\_\_\_\_

There are many types of plants around us. Some plants are big while some are small. Some grow on land and some in water. Most of plants are green in colour but a few may be yellow, red or even purple. Some plants bear flowers but some are not. All plants have roots, stems, branches, and leaves.

### TYPES OF PLANTS

Based on their shapes and sizes, plants can be classified into five categories.

#### Tree

Trees are the largest of all the plants. They are strong and big in size. They have a tall and a strong woody stem, called a 'Trunk'. The stem is covered with bark. Banyan, Peepel, Mango, Neem, coconut, etc are the examples of trees. A tree lives for many years.



Banyan tree



Mango tree



Coconut tree



### Teacher's Tip

Tell the students about the types of plants. Also tell them how useful the plants are for human beings.

## Shrubs

**Shrubs** are smaller than trees. They have thin but hard stem. They are of medium size and low height. Shrubs live for several years but not as long as tree lives.



*Rose Plant*



*Cotton Plant*



*Hibiscus*

Rose, cotton, hibiscus, bougainvillea etc are the example of the shrubs.

## Herbs



*Tulsi*



*Tomato*



*Coriander*

**Herbs** are small plants having soft green stems. Herbs grow in the gardens and in the forests. Their height is usually less than one meter. Herbs are seasonal

plants and they live only for a few months. Jasmine, tulsi, mint, coriander, tomato, spinach, etc are the examples of herbs.

## Climbers

Some plants have very weak stems. They cannot stand straight. Such plants climb other trees for support. They are called **climbers**. Many plants, grapevine, pea, bitter gourd are the examples of climbers.



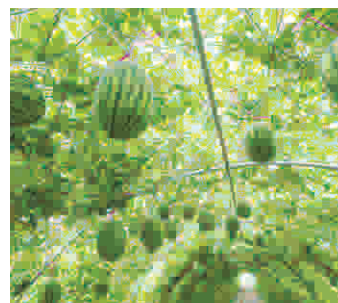
*Grapevine*



*Bitter gourd*



*Pumpkin*



*Watermelon*

## Creepers

There are some plants that have very weak stems but their fruits are big and heavy. They creep on the ground. They are called **creepers**. Watermelon, pumpkin and cucumber are the examples of creepers.

## Fact Treasure

*Creepers can't climb on the support because their fruits are very heavy.*

## HABITATS OF PLANTS

Habitat is defined as a place where a plant or animal lives and grows. Plants are found in different types of habitats. They adjust their ways of growing according to their surroundings. This is called adaptation.

According to the Habitats of plants, plants can be divided into the following categories.

### Terrestrial plants

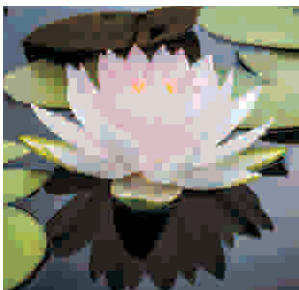
Plants that grow on land are called terrestrial plants. These plants have broad leaves. They hold on to the soil with the help of roots. Banyan, neem, wheat etc are the examples of terrestrial plants.



*Banyan*



*Neem*



*Lotus*



*Hydrilla*



*Tapegrass*

### Aquatic Plants

Plants that grow in water are called water plants. They are also called aquatic plants. Lotus, waterlily and water hyacinth are the

examples of water plants. Some plants like water hyacinth float on the surface of water. They are called floating plants. Some plants like hydrilla and tapegrass live completely under water. They are called submerged plants.

### Desert Plants

The plants that can grow well in dry, sandy deserts are called desert plants. They have long roots to grow deep in soil to absorb water. Since there is very little water and hardly any rainfall in the desert very few plants grow there. For example : Cactus, date palm etc.

Leaves of cactus are reduced to spines that reduces loss of water and protects plants from being eaten by animals.



*Cactus*

## Coniferous trees

Trees that grow on high mountains are called coniferous trees. They have hard needle-like leaves and wooden flowers called cones that can with stand show fall. Pine, deodar, chir, etc are the examples of coniferous trees.



Pine



Chir

## Fact Treasure

- ◆ *Plants the bear flowers are called flowing plants like mango, neem, rose, etc.*
- ◆ *Plants that do not bear flowers are called non-flowing plants like fern, etc.*



Rose



Fern

## Mangroves plants

Mangroves are the plants that grows in marshy areas.

Marshy areas are areas with lots of water and sticky soil.

## SOME UNUSUAL PLANTS

Some plants like venus flytrap, sundew and pitcher plants eat insects. A venus fly trap catches an insect between its leaves.

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

## Activity Session

**Circle the odd one. Give the reason for your answer :**

- |            |       |          |         |
|------------|-------|----------|---------|
| 1. banyan  | neem  | mountain | coconut |
| 2. chair   | shrub | creeper  | herb    |
| 3. coconut | tulsi | mint     | spinach |

## USES OF PLANTS

Plants are useful to us in many ways. In our everyday life, we use many things made from plants and plants products.

- ◇ We get foods such as cereals, pulses, fruits, vegetables, oil, tea, spices, coffee, sugar and cocoa from plants.
- ◇ Plants give us fibres like cotton, jute and flex for clothes.
- ◇ Neem, tulsi, mint, clove etc are some other plants used for medicinal purposes. Cinchona plant gives us medicine for treating malaria.
- ◇ Plants like jasmine, rose etc, produce fragrant flowers which are used to make perfumes.
- ◇ Plants help us to make things like soaps, toothpastes points, rubber and gum.
- ◇ The wood or timber of plants like teak, rosewood etc is used in making furniture and houses.
- ◇ Paper is also obtained from plants such as the bamboo plants.
- ◇ Plants release oxygen that purify air and keep environment green and clean.
- ◇ Plants provide shelter to many animals and birds. They give us shade to some animals and birds.

## Quick Brush Up



- There are many types of plants around us.
- Based on their shapes and sizes, plants can be classified into five categories.
- Herbs are small plants having soft green stems.
- Habitat is defined as a place where a plant or animal lives and grows.
- The plants that can grow well in dry, sandw deserts are called desert plants.
- Some Plants like venus flytrap, sundew and pitcher plants eat insects.
- Plants release oxygen that purify air and keep environment green and clean.

## Key Words

Habitat : A place where a plant grows.

Plains : Flat land

Shelter : Home



**A. Choose the correct option.**

- Which of these plants floats on the surface of water?  
(a) water hyacinth  (b) tapegrass  (c) hydrilla
- Which of these plants does not bear flowers?  
(a) fern  (b) hibiscus  (c) lotus
- The cactus plant grows in \_\_\_\_\_.  
(a) mountains  (b) warm places  (c) desert
- Which of these have hard and thin stems?  
(a) herbs  (b) shrubs  (c) climbers

**B. Fill in the blanks.**

- The \_\_\_\_\_ plants do not bear flowers.
- Trees have hard and thick stem called \_\_\_\_\_.
- The water lily plant grows in \_\_\_\_\_.
- \_\_\_\_\_ are the plants that live for two seasons.
- \_\_\_\_\_ grows in hot deserts.

**C. Write True or False.**

- Herbs have many branches.
- Shurbs live for many years.
- Climbers are the plants that can't stand up like trees.
- Fir and pine trees grow on mountains.

**D. Define the following terms.**

- Habitat \_\_\_\_\_
- Aquatic plants \_\_\_\_\_
- Adaptation \_\_\_\_\_
- Mangrove \_\_\_\_\_

**E. Answer the following questions.**

- What is a tree? Give three examples.
- What are herbs? Give three examples.
- What is are creepers? Give three examples.



4. What are the non-flowering plants?
5. How are plants useful to us?
6. What are terrestrial plants?



## Brain Twister

1. *Are most plants growing around us flowering?*
2. *How does the stem of cactus help it to survive in the desert?*

## Creative Corner

- A. **Paste pictures of different plants having dry-leaves in your note book.**
- B. **Divide your class into groups of five. Collect various plants products that are used by us. Example: wood, spices, oil, sugar, paper and cotton. Put them in small plastic packets. Staple them on a chart paper and label them. Display the chart on the class bulletin board.**

## Life Skills



Adopt a tree in your neighbourhood. Give your tree a name. Give it water and a hug everyday. Observe the changes in the tree from time to time. Which are the animals that visit your tree?



Chapter

# 10

## THE GREEN LEAVES

### Learning Treasure

- Parts of a plant
- Leaves
- Characteristics of Leaves
- Uses of Leaves



### Self Survey

Find out the correct names.

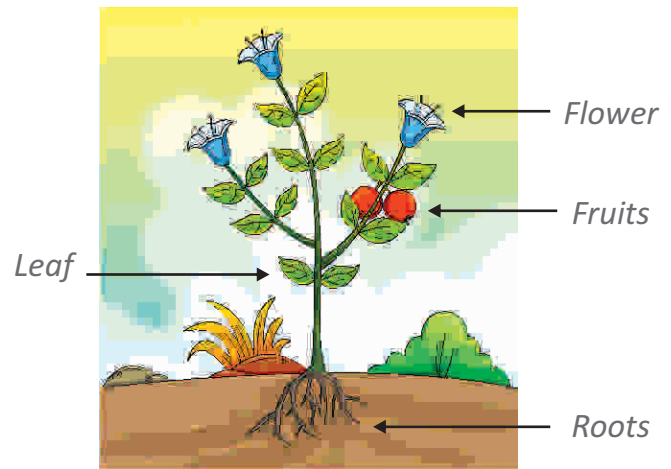
1. Leaves used to make medicines.
2. Leaves used of give flavour to the food.
3. Leaves used as food.
4. Many people chew these leaves.

\_\_ EE \_\_  
 C \_\_ \_\_ R \_\_  
 \_\_ A \_\_ \_\_ K  
 B \_\_ \_\_ E \_\_

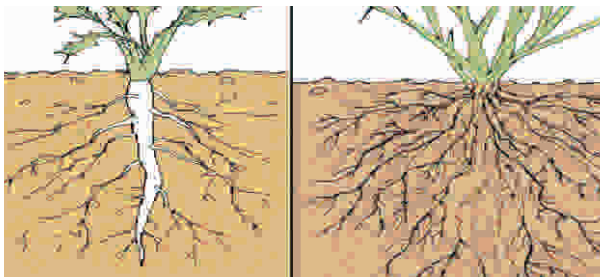
We all know that plants have certain common parts such as roots, leaves, flowers etc. Each part of plant is equally important.

### PARTS OF A PLANT

The part of the plant above the soil is known as the **shoot system**. The shoot system is further divided into stem, branch, leaves, flowers, fruits etc. The part of the plant below the soil is known as the **root system**.



Parts of Plants



Taproot

Fibrous roots

### Roots

All roots grow in the soil. There are two types of roots : Tap root and fibrous root.

They absorb water and minerals from the soil through root hair.



### Teacher's Tip

Draw a picture of a plant on the board. Be sure to include roots, a stem, a flower, and leaves in your drawing. Ask your students to tell what you're just drawn.

## Stem

The part of plant above the soil is called stem. They bear branches, leaves, flowers and fruits.

## Flower

A bud on the stem opens into a flower. They make the plant look colourful and beautiful.

## Fruits and seeds

A flower changes into a fruit slowly. Almost all fruits have seeds inside them. Seeds have a baby plant or embryo inside them that grows into a new plant if it gets the required air, water and warmth.

### Fact Treasure

*Raffleria is the largest flower in the world.*

## LEAVES

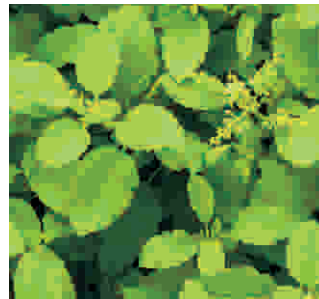
Leaves are very important part of a plant. They are known as the kitchen of the plant. They make food for the plant with the help of a special green pigment called **chlorophyll**. Leaves make their food with chlorophyll, water, soil, sunlight and a gas called carbon dioxide which is present in air. This process is called **photosynthesis**.

## CHARACTERISTICS OF LEAVES

Leaves of trees are different from one another. They can be grouped in many ways.

### Size

Size of leaves varies from very small (like tulsi, tamarind) and fine to very big, wide and long (like banana, raffia, palm).



Tulsi



Banana



Peepal



Papaya

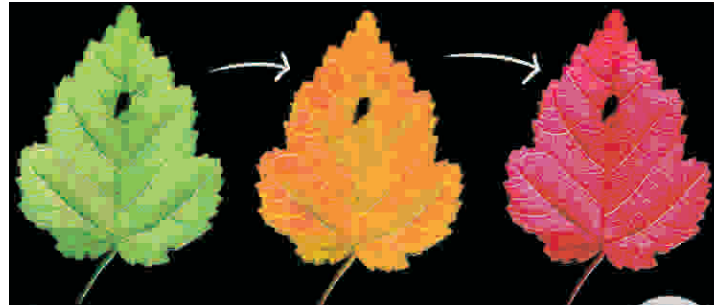
### Shape

Leaves have different shapes also. A peepal leaf is triangular whereas a mango leaf is long and slender.

A pine leaf looks like a needle whereas a papaya leaf is star-shaped.

## Colour

Most of the leaves are green but some have different colours. Leaves of the maple tree are orange while croton leaves are yellow and red in colour. Some leaves change their colour with the changes of season.



## Texture

Different leaves have different types of surfaces. The leaves of mint are rough while the leaves of hibiscus has a soft touch. The leaves of lotus are oily, glossy and slippery to touch.



*Mint*



*Lotus*



*Hibiscus*

## Aroma

The smell of a leaf is called its aroma. Some leaves have simple scent others are highly scented. Leaves of plants like grass also have aroma. Leaves of some plants give off repelling smell. For example- tulsi, mint, neem, curry leaves, eucalyptus etc.



*Curry leaf*



*Mint leaf*

## Number

The number of leaves on plants ranges from a few to several thousands.



*Banana*



*Neem*

## USES OF LEAVES

- ◇ Leaves of plants like mint, lettuce, spinach and cabbage are eaten as food.
- ◇ Leaves of plants, like neem, tulsi and mint have medicinal values.
- ◇ Mehndi leaves are used to make floral patterns on hands and feet.
- ◇ Tea is made from dry leaves of the plant.
- ◇ Betal leaves are used to make paan.
- ◇ Leaves of coconut palm and date palm are used to make roofs of hut.
- ◇ Design of different leaves are used as motifs on table cover, bed sheets, crockery etc.
- ◇ Banana leaves and mango leaves are used for decoration during religious ceremonies.
- ◇ Except above uses of leaves there are several uses of leaves in our daily life.

### Quick Brush Up



- The part of the plant above the soil is known as the shoot system.
- There are two types of roots : Tap root and fibrous root.
- A flower changes into a fruit slowly.
- The part of plant above the soil is called stem.
- Leaves are known as the kitchen of the plant.
- Some leaves changes their colour with the changes of season.
- The smell of a leaf is called its aroma.
- Betal leaves are used to make paan.

### Key Words

- Chlorophyll : green pigment found in leaves.
- Photosynthesis : Process by which green leaves prepare their food.



**A. Choose the correct option.**

- The colour of chlorophyll is \_\_\_\_\_.  
(a) yellow  (b) green  (c) red
- Pine leaves look like \_\_\_\_\_.  
(a) eggs  (b) stars  (c) needles
- The plants prepare their food with the process of :  
(a) dropping  (b) wiping  (c) photosynthesis
- The part of the plant below the soil is known as :  
(a) root system  (b) shoot system  (c) both (a) & (b)
- A flower changes into a \_\_\_\_\_.  
(a) leaf  (b) stem  (c) fruit

**B. Fill in the blanks.**

- All roots grow in the \_\_\_\_\_.
- A \_\_\_\_\_ plant has few leaves.
- The smell of a leaf is called its \_\_\_\_\_.
- Generally leaves are \_\_\_\_\_ in colour.
- \_\_\_\_\_ and \_\_\_\_\_ leaves are used as thatch for roofs.

**C. Write True or False.**

- Plants need methane gas for photosynthesis.
- Leaves of all plants look similar.
- Peepal leaf is triangular in shape.
- Tulsi and mint have big leaves.
- Lotus leaves have an oily surface.

**D. Unscramble the words to get the correct answer.**

- Big leaf NABAAN \_\_\_\_\_
- Orange coloured leaf ELAMP \_\_\_\_\_
- Leaf of a yellow coloured fruit MNOEL \_\_\_\_\_
- Small leaf RNEF \_\_\_\_\_



**E. Answer the following questions.**

1. What is photosynthesis?
2. Write any four uses of leaves.
3. Name any four leaves used as food.
4. How many types of roots are there? Name them.
5. Write down any five characteristics of leaves?



## Brain Twister

1. *Why should we not burn the fallen leaves?*
2. *What will happen to a plant if its roots are cut off?*

## Creative Corner

**Collect different types of leaves and dry them. Paste these leaves in your scrap book with the help of cello tape. Also write their name below each.**

## Life Skills



Grow herbs such as pudina, dhania in pots in your backyard.



Chapter

# 11

## ANIMALS AROUND US

### Learning Treasure

- Types of Animals
- Types of Animals Based on Their Size
- Types of Animals Based on Their Habitats
- Types of Animals Based on Eating Habits
- Special Body Parts of Animals For Eating
- Animals Tail



### Self Survey

Write the names of three:

1. Aquatic Animals \_\_\_\_\_
2. Arboreal Animals \_\_\_\_\_
3. Scavengers \_\_\_\_\_
4. Herbivores \_\_\_\_\_

Different types of animals live on the earth. The animal kingdom has a variety of animals-big and small, wild, domestic and pet, land and water animals.

### TYPES OF ANIMALS

We can categorize the animals in the bases of their size, habitat and eating habits.

### TYPES OF ANIMALS BASED ON THEIR SIZE

On the bases of their sizes, animals can be divided into two groups such as :

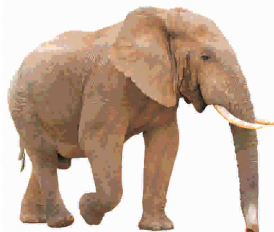
- ◆ Big animals
- ◆ Small animals

#### Big Animals

Animals such as elephant, whale, giraffe, hippopotamus, rhinoceros, tiger, cow, ostrich etc are **big animals**.



Whale



Elephant



Giraffe



Tiger



Rhinoceros



### Teacher's Tip

Tell students the difference between various animals on the basis of their size, habitats and food habits.

## Small Animals

Animals such as rat, rabbit, dog, squirrel, duck, bear, worm, grasshopper etc are small animals.



Rabbit



Squirrel



Grasshopper



Rat



Dog

### Fact Treasure

- ◆ The blue whale is the biggest animal on the earth.
- ◆ The elephant is the largest animal on the earth.
- ◆ The giraffe is the tallest animal on the earth.

## TYPES OF ANIMALS BASED ON THEIR HABITATS

Based on their habitats, animals can be divided into the following groups.

### Land Animal

The animals that live on land are called **land animals** or **terrestrial animals**; lion, cow, deer, giraffe, elephant, tiger etc are some land animals.

### Fact Treasure

- ◆ The animals that live in jungles are known as wild animals like lion, zebra, deer etc.
- ◆ The animals that can be kept in our houses or on farms and very useful to us are



Lion



Deer



Cow



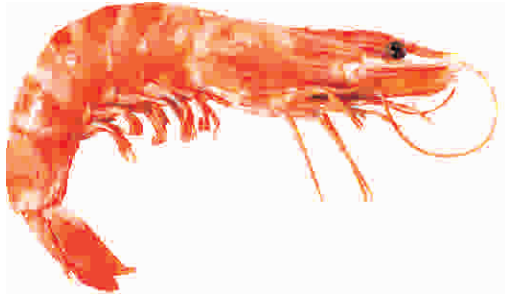
Tiger



Dog

### Water Animals

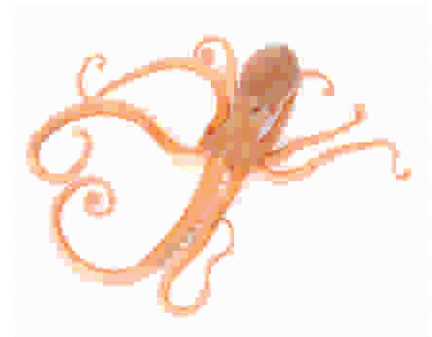
Animals that live in water are called water or **aquatic or marine animals**. Fish, Crab, Sea horse, prawn, octopus and whale are some aquatic animals.



*Prawn*



*Sea horse*



*Octopus*

## **Amphibians**

Animals that live both in water and on land are called **amphibians**. Frogs, toads, crocodiles, turtle etc are some amphibians.



*Frog*



*Turtle*



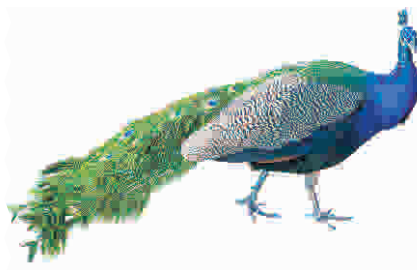
*Crocodile*

## **Aerial Animals**

The animals that fly in the air are called **aerial animals**. Crow, peacock, pigeon, sparrow, vulture, etc. are some aerial animals.



*Crow*



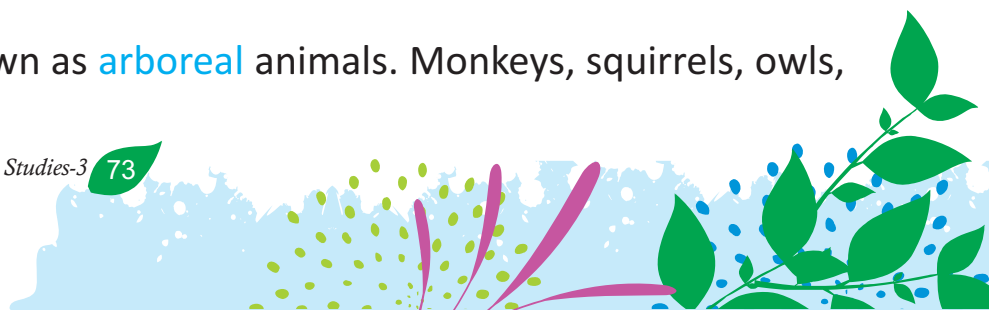
*Peacock*



*Pigeon*

## **Arboreal Animals**

Animals that live on trees are known as **arboreal** animals. Monkeys, squirrels, owls,



sloths, chimpanzees lizard, chameleon, leopard and even birds are some arboreal animals.



Monkey



Lizard



Owl

### Crawlers

Animals that crawl and live under the ground are known as **crawlers**. Ants, termites, earthworms, etc. are some crawlers.

## TYPES OF ANIMALS BASED ON EATING HABITS

Based on eating habits, animals can be divided into the following groups:

### Herbivores

The animals that eat only plants and plants products are called **herbivores** or plant eaters. Deer, goat, cow, zebra, giraffe, etc are some herbivores.



Zebra

Deer



Wolf



Crocodile

### Carnivores

The animals that eat only flesh of other animals are called **carnivores** or flesh-eaters. Tiger, crocodiles, wolf, leopard, etc are some carnivores.

### Omnivores

The animals that eat both plants and flesh of other animals are called **omnivores**. Human, bears, dog, crow, etc are some omnivores.



Dog



Man

## Scavengers

The animals that eat flesh of dead animals are called **scavengers**. Vultures, jackals, hyenas, fox, etc are some scavengers. They help in keeping the forest clean.



Vulture



Hyena

## SPECIAL BODY PARTS OF ANIMALS FOR EATING

Some animals also have some specialized body parts that help them to survive.

- ◇ Long sticky tongue of frog to catch insects.
- ◇ Herbivores have strong grinding teeth to chew the plant and their parts.
- ◇ Carnivores have sharp pointed teeth to tear the flesh.
- ◇ Strong thin legs of deer and zebra to outrun their predators.
- ◇ Long flexible neck of giraffe to eat leaves from tall trees.
- ◇ Sharp front teeth of rabbit and squirrel to gnaw the food (like nuts & seeds).

### Fact Treasure

- ◇ An elephant has a long thick trunk which helps it to eat and drink.
- ◇ Butterflies, bees and mosquitoes have long sucking tubes which help them suck juice from flower and blood from

## For movement

Animals move from one place to another in search of food and shelter and to escape from enemies. Animals move in different ways. Some walk, some fly, some crawl and some swim. To do this they use their legs, fins, wings and even tails.

Human beings have two legs to walk and run. Most land animals have four legs to move, walk, run, climb or jump. Birds have a pair of legs to walk and a pair of wings to fly in the air. Fish and other water animals swim with the help of fins and tails. Insects have six legs and two pairs of wings. Spiders have eight legs. Centipedes have a large number of tiny legs which help them to crawl. Snakes and earthworms have no legs. They also crawl on the land.

### Fact Treasure

Kangaroos & rabbits





**A. Choose the correct option.**

- Animals that live in water are called \_\_\_\_\_.  
(a) aquatic animals  (b) amphibians  (c) herbivores
- The animals who eat flesh of other animals, are called \_\_\_\_\_.  
(a) omnivores  (b) herbivores  (c) carnivores
- One of these animals have six legs \_\_\_\_\_.  
(a) insects  (b) aerial  (c) amphibians
- One of these animals can live both on land and in the water.  
(a) fish  (b) amphibians  (c) aquatic
- \_\_\_\_\_ is a herbivores.  
(a) Fox  (b) Bear  (c) Cow

**B. Fill in the blanks.**

- Wild animals live in the \_\_\_\_\_.
- The \_\_\_\_\_ is the largest animal in the world.
- Animals that eat plants are called \_\_\_\_\_.
- \_\_\_\_\_ are the animals that crawl and live underground.
- Birds fly with the help of their \_\_\_\_\_.
- The tallest animal on the earth is \_\_\_\_\_.

**C. Write True or False.**

- Humans are not herbivores.
- Domestic animals are useful to us in many ways.
- Wild animals can be kept at home.
- An elephant eats and drinks with its long trunk.
- The largest animal on the land is elephant.

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**D. Define the following terms.**

- Land animals \_\_\_\_\_
- Amphibious \_\_\_\_\_
- Carnivores \_\_\_\_\_
- Omnivores \_\_\_\_\_
- Aerial animals \_\_\_\_\_



E. Answer the following questions.

1. What is the difference between domestic and wild animals?
2. Differentiate between carnivores and omnivores.
3. What are aquatic animals? Give two examples.
4. What are scavengers? Give two examples.
5. What are the different categories of animals on the basis of their eating habits?
6. What is a habitat?



## Brain Twister

1. *Why fish cannot survive outside water?*
2. *Why do ruminants developed the habit of chewing cud?*

## Creative Corner

**Collect pictures of different types of animals and paste in your scrapbook. Write their names below the pictures.**

## Life Skills



Look at a ten rupee note. Name the animals you see on it. What do you think why these animals are there on the note?



Chapter

# 12

## BIRDS

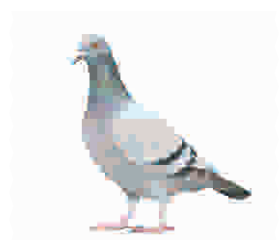
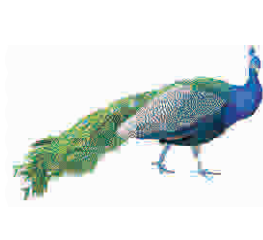
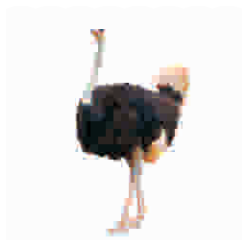
### Learning Treasure

- Parts of a Bird's Body
- What makes the Birds Fly?
- Types of Feathers
- Flight of the Bird
- Nests of Birds



### Self Survey

Write the names of the three:



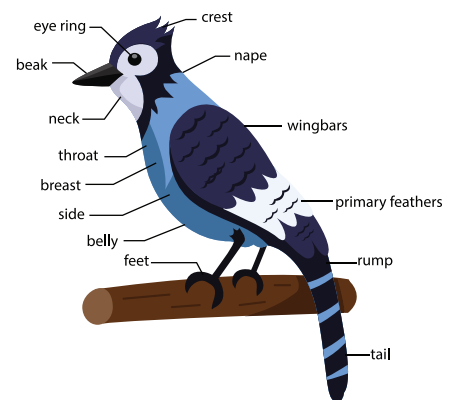
Birds are the most amazing creatures of the world. A bird belongs to the family of animals that can fly.

### PARTS OF A BIRD'S BODY

Birds are the only animals with feathers on their body. They have a pair of wings instead of limbs. They have two legs with claws and a beak.

A bird's body is divided into a head, a neck, a trunk and a tail.

Trunk bears feathers, wings and legs.



Body parts of bird



### Teacher's Tip

Take them to the field and let them observe birds quietly. Help them notice the different size and their food habits. Encourage them to write down their observations.

## WHAT MAKES THE BIRDS FLY ?

A bird is able to fly because :

- ◇ It has very light body.
- ◇ It has a stream lined ( Boat - shaped ) body.
- ◇ It has strong muscles that move the wings up and down. These are called flight muscles.
- ◇ It has a pair of wings covered with feathers that help them to fly.
- ◇ It has a tail to change its directions while flying.

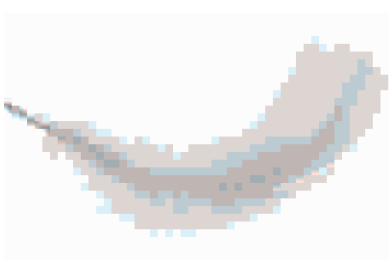
## TYPES OF FEATHERS

Feathers are mainly of three types :

**Down Feathers** : These feathers keep the body of the bird warm. They are soft, short and fluffy. They lie next to the birds skin.

**Body Feathers** : The entire body of the bird is covered by these feathers. They give shape to a bird's body.

**Flight Feathers** : They are long, flat and strong. These feathers cover the bird's wing and tail. They help the bird to fly.



*Down feather*



*Body feather*



*Flight feather*

## FLIGHT OF THE BIRD

Wings of the bird have two types of movements :

- ◇ **Upstroke** : In upstroke the wings move upward and backward
- ◇ **Downstroke** : In downstroke the wings move downward and forward.



*Upstroke*



*Downstroke*

These two stroke make the birds fly.

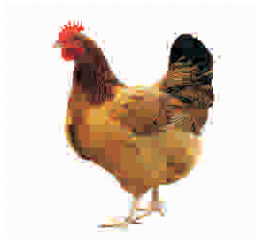
- ◇ Some birds like eagle and vulture fly very high.
- ◇ Some birds like crow, crane, pigeon and swallow fly long distances.
- ◇ Some birds like peacock, hen and duck can fly only short distance.
- ◇ Some birds like emu, penguin and ostrich can not fly. These birds are called flightless birds.
- ◇ Some birds live in water like swan, gull and crane are called aquatic birds.



Vulture



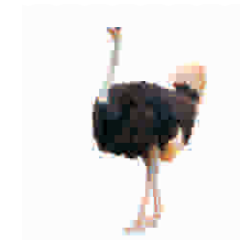
Crow



Hen



Penguin



Ostrich

## NESTS OF BIRDS

Nest is the home of a bird. Birds build nests to lay eggs in them. They take care of their young ones till they are old enough to fly. Birds choose their nesting place with great care so that the eggs and the chicks remain safe from enemies and bad weathers. Most birds build nests on tree tops, ventilators, building tops or even on the ground.

Tailorbird stitches large leaves with the help of its beak and uses thread, straw, wool to stitch its nest. This is the reason it is called the tailorbird.

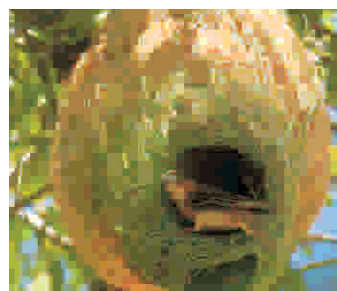
- ◇ **Partridge** digs a hole in the ground among the plants and lines it with grass and dry leaves.
- ◇ **Wood Pecker** builds its nest in a hole in the tree trunk.
- ◇ **Pigeons** builds its nest on roof tops, old building and under bridges.
- ◇ **The cuckoo** does not make a nest. It lays its eggs in the nest of crow.

### Fact Treasure

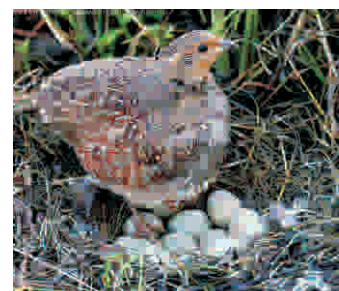
*Kiwi is the only living bird which does not have wings.*

### Fact Treasure

*A humming bird has a long, thin beak which helps it to suck nector from the flowers.*



Tailor bird nest



Partridge's nest

- ◇ **Weaver bird** is very small. It makes a beautiful nest by weaving the grass in and out rapidly. The nest hangs from a branch. It enters the nest through a tunnel-like opening from the bottom.
- ◇ **Penguin** collects few pebbles and stones to make a nest on the ground.

## Fact Treasure

*Bee humming bird is the smallest and ostrich is the largest and fastest running*



Woodpecker nest



Pigeons nest



Weaver bird's nest



Penguin nest

## Quick Brush Up



- Birds are the most amazing creatures in the world.
- The bird's body is divided into a head, a neck, a trunk and a tail.
- Wings of the bird have two types of movements.
- Some birds like emu, penguin, ostrich can not fly. These birds are called flightless birds.
- The cuckoo does not make a nest. It lays its eggs in the nest of crow.

## Key Words

|             |  |
|-------------|--|
| Creatures   | : Living Animals   |
| Stream Line | : Boat shaped  |
| Movement    | : Changed the position of a body with a stationary object. |
| Nest        | : A bird's house.  |



**A. Choose the correct option.**

- Nest is the home of a \_\_\_\_\_.  
(a) cow  (b) bird  (c) fish
- Birds build nests \_\_\_\_\_.  
(a) to lay eggs  (b) to keep their young ones safe   
(c) both (a) & (b)
- Which of these birds do not fly?  
(a) Owl  (b) Penguin  (c) Hen
- The feathers give shape to a bird's body \_\_\_\_\_.  
(a) flight feathers  (b) down feathers  (c) body feathers

**B. Fill in the blanks.**

- The tailor bird stitches its nest with its \_\_\_\_\_.
- Birds like \_\_\_\_\_ and \_\_\_\_\_ fly very high.
- \_\_\_\_\_ lays its eggs in the nests of other birds.
- \_\_\_\_\_ are the only animals with feathers on their body.

**C. Write True or False.**

- Birds have very light body.
- Wings of the birds have three types of movements.
- Penguin is a flightless bird.
- Tailorbird stitches leaves using thread to make its nest.

**D. Match the following.**

- |  |                 |
|--|-----------------|
| 1. Stitches leaves using grass as thread | (a) Woodpecker  |
| 2. Collects pebbles to make nest         | (b) Penguin     |
| 3. Digs the ground to make nest          | (c) Partridge   |
| 4. Makes nest in the hole of a tree      | (d) Weaver bird |

**E. Answer the following questions.**

- Why do birds build nests?
- How many types of feathers found on a bird's body? Name it.
- How does a weaver bird make its nest?



4. Mention any four features that help the bird to fly.
5. What is the use of down feather?
6. What are the two types of movements that birds show?



## Brain Twister

1. *Why do the penguins, emu and ostrich cannot fly in spite of having feathers?*
2. *Why do birds like some trees more than the others?*

## Creative Corner

- A. Collect the feathers of at least 10 birds and paste them in your scrap book. Also write the name of the birds.**
- B. Look for a fallen bird feather in a park. Dip its end in ink or paint and write on paper with it. This is how people used to write before the pen was invented!**

## Life Skills



We should never harm birds by throwing stones on them. We should never touch their nests or break their eggs.



Chapter

# 13

## MEANS OF TRANSPORT

### Learning Treasure

- Needs of transport
- Means of transport
- Fuel for vehicles
- Some special means of transport



### Self Survey

Put these vehicles in the right column :

*Car, Glider, Ship, Bus, Aeroplane, Van, Helicopter, Boat, Ferry*

| Air Transport | Water Transport | Land Transport |
|---------------|-----------------|----------------|
|               |                 |                |

Hundreds of years ago, man travelled on foot. Later he learnt to use animals. They drew the carriages and carts. As man progressed, cars, aeroplanes, ships and trains were invented.

### NEEDS OF TRANSPORT

Going from one place to another is called travelling. We need to travel for various purposes like shopping, going to school, office, visiting relatives, for entertainment etc. People also travel when they migrate from one place to another.

### MEANS OF TRANSPORT

The vehicles that we use to travel and carrying goods from one place to another are all known as means of transport.

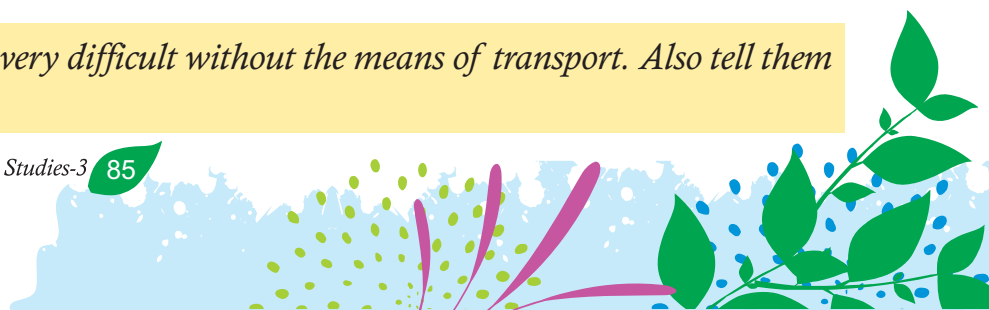
There are mainly three kinds of transport :

- ◇ Land transport
- ◇ Water transport
- ◇ Air transport



### Teacher's Tip

*Explain the children how life can become very difficult without the means of transport. Also tell them about the development in transport sector.*



## Land Transport

All the vehicles that run on roads or rails are known as land transport. It is the most common kind of transportation. We use road transport like cycle, car, scooter, bus, mini metro, motorcycle and auto rickshaw when we travel short distances within the city. When we go to a far off place or another city or state we travel by train. All these vehicles are engine-powered and move on wheel.

### Fact Treasure

- ♦ India has the largest railways network in Asia and fourth largest in the world.
- ♦ India has one of the world's largest network of roadways.
- ♦ Bullet trains of Japan are too



Car



Mini metro

The **local trains** in Mumbai are the life line of the people living there. Lakhs of people travel by them everyday.

Now a days, metro trains are used in big cities like Delhi, Kolkata which make the life much easier.



Bus



Metro train



Scooter



Cycle

## Water Transport

All the vehicles that run in water are known as **water transport**. Water transport is the oldest and cheapest mode of transport. Raft was the first step in the development of water transport. Slowly man-made small boats were rowed with the help of a bamboo. After sometimes the man made boats, steam-boats, engines fitted ships were used to carry goods and passengers through water.

Now a days, some huge ships called **liners** carry hundreds of passengers on long holiday cruises. A journey by water is also known as **voyage**.

A harbor is a place on the coast where ships and boats can safely load and unload their goods & passengers.

A city with a harbour is known as a **port**. India had eleven major ports all along its coast. Mumbai is the biggest part of India.

## Fact Treasure

- ◆ Submarines are boats that can travel under the sea.
- ◆ A hovercraft can move over both land and water on a



Raft



Boat



Ship



Hovercraft

## Air Transport

Air transport is the fastest as well as the most expensive means of transport in the world. Aeroplanes, helicopters, hot air balloons, jumbo jet, gliders are some important means of air transport. An aeroplane needs a runway to land and take off at the airport. It is used to travel long distances.

Journey by air is known as a flight. Helicopters are used for travelling short distances as compared to planes. It can take off and land almost everywhere. It is often used for rescuing people in danger.

Astronauts use rockets and space ships to travel into space but they are not used by common man.

## Fact Treasure

There are six international airports in India-Delhi, Mumbai, Kolkata, Chennai, Amritsar and



Aeroplane



Helicopter



Rocket



Space ship

## FUEL FOR VEHICLES

Most vehicles need some fuel to move. Petrol, diesel and CNG (Compressed Natural Gas) are the most commonly used fuels.

Now a days some vehicles/ run on electricity and batteries. Air transport are powered by an expensive fuel called ATF (Aviation Turbine Fuel)

Some vehicles like cycles, cycle rickshaws, bullock carts and horse carts runs without engine Boats do not need any fuel and hence are pollution free.

## Activity Session

Name the means of transport that rhymes with the following words.

Hip

Far

Hooter

Rain

Sorry

Coat

## SOME SPECIAL MEANS OF TRANSPORT

- ◇ An **ambulance** is used to carry patients.
- ◇ **Carts** are used by hawkers and vendors to sell vegetables, fruits and even clothes.
- ◇ **Camels** are used for transport in deserts. The camel is called the ship of the desert.
- ◇ **Elephants** are used to carry loads in the forest areas.
- ◇ **Bullock & horse carts** are common vehicles in villages.
- ◇ **Road Rollar** are used to made the roads.
- ◇ **Palanquins** (palki) were used to carry the bride from her father's place to the place of her in-laws. Ladies used it to travel from one village to another.
- ◇ In the polar regions, the land is covered with ice and snow. Here, animals like dogs and reindeer are used to draw wheel-less carts called sledge.



Road roller



Carts



Bullock cart



Palki

## Quick Brush Up



- Hundreds of years ago, man travelled on foot. Later he learnt to use animals.
- Going from one place to another is called travelling.
- The vehicles that we use to travel and carrying goods from one place to another are all known as means of transport.
- All the vehicles that run on roads or rails are known as land transport.
- It is the fastest as well as the most expensive means of transport in the world.
- Air transport are powered by an expensive fuel called ATF (Aviation Turbine Fuel)
- Elephants are used to carry loads in the forest areas.

## Key Words

- Transport** : A way of carrying people or goods from one place to another.  
**Vehicles** : Used to transport goods and people.



### A. Choose the correct option.

1. A means of land transport is \_\_\_\_\_.  
(a) ship  (b) aeroplane  (c) car
2. The most expensive means of transport is \_\_\_\_\_.  
(a) air transport  (b) water transport  (c) land transport
3. Which is the cheapest mode of transport?  
(a) bus  (b) ship  (c) aeroplane
4. In desert area people use \_\_\_\_\_.  
(a) elephant  (b) giraffe  (c) camel

### B. Fill in the blanks.

1. \_\_\_\_\_ are used to carry heavy logs of wood in the forest areas.
2. \_\_\_\_\_ is the most common means of transport.
3. \_\_\_\_\_ transport is the fastest means of transport.
4. Metro trains are found in \_\_\_\_\_ and \_\_\_\_\_.
5. A journey by water is known as a \_\_\_\_\_.

**C. Write True or False.**

1. Air transport is the fastest and most expensive means of transport.
2. Train and Bus are means of water transport.
3. An aeroplane needs airport.
4. A ambulance is used to carry goods.
5. Air transport are powered by an expensive fuel called ATF.

|  |
|--|
|  |
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|  |

**D. Match the following.**

- |                    |                |
|--------------------|----------------|
| 1. Air transport   | (a) Bus        |
| 2. Water transport | (b) CNG        |
| 3. Land transport  | (c) Boat       |
| 4. Fuel            | (d) Helicopter |

**E. Answer the following questions.**

1. What are means of transport?
2. Name some means of water, air and land transport.
3. Write down the three names of special means of transport.
4. List some reasons why people need to travel.
5. Name the animals that are used to carry goods.
6. What are water transports? Give four examples.
7. What are land transports? Give four examples.
8. What are air transports? Give four examples.
9. What types of fuels are needed by the vehicles to run?



**Brain Twister**

1. *Why is water transport considered to be the cheapest means of transport?*
2. *Why CNG vehicles are preferred by environmentalists over petrol or diesel vehicles?*

**Creative Corner**

**Do you have a means of transport at your home? Draw its picture on a drawing sheet and show it to your teacher and parents.**

**Life Skills**



We should choose our mode of travel very wisely, depending on the distance to be travelled and the amount of fuel used.



Chapter

# 14

## MEANS OF COMMUNICATION

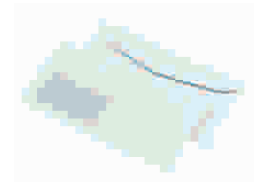
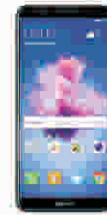
### Learning Treasure

- Types of Communication
- Means of Personal Communication
- Means of Mass Communication



### Self Survey

Look at these pictures and write the name of these means of communications.



Communication means exchange our views, ideas and thoughts with other. We communicate in many ways like speaking, writing, talking, expressions, gestures, typing on a keyboard, dancing etc.

All those means of sending and receiving messages to a person or masses are called 'Means of Communication.'

### TYPES OF COMMUNICATION

There are mainly two types of communication such as :

- ◇ Personal Communication
- ◇ Mass Communication

### MEANS OF PERSONAL COMMUNICATION

#### Letters

Letters are the most inexpensive and widely used means of sending long messages.



### Teacher's Tip

*Explain the importance of television, newspaper, radio, telephone and computer in our daily life to the children.*

Letters are a means of postal communication. There are different types of letters :

**Post cards** : Post cards are small card like letters used to write small messages.

**Inland letters** : Inland letters are foldable sheets of coloured paper on which we can write long messages.

**Aerogrammes** : Aerogrammes are special letters sent to people in other countries.

Telegram are very brief messages that reach within a few hours. Today's, urgent letters can be sent through speed post or courier.

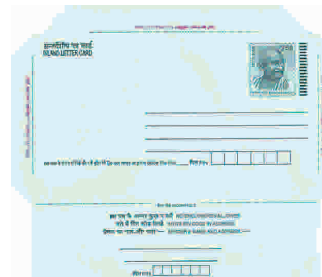
We require stamps to send these letters. These stamps and letters are easily available in the post office. It is important to write address and pin code (Postal Index Number) clearly on the envelope as it helps the letter to reach the place in time.



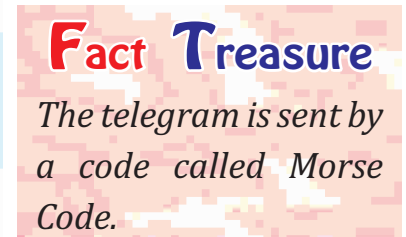
Postcard



Aerogramme



Inland letter



## Telephone

Telephone is one of the most important inventions of our time. It is the fastest means of communication. To call a person in another city we use STD (Subscriber Trunk Dialling) and outside the country we use ISD (International Subscriber Dialling).

Now a days people carry small wireless phones. These phones are called **cell phones** or **mobile phones**. They are very convenient to carry and we can talk to anyone anywhere and anytime.



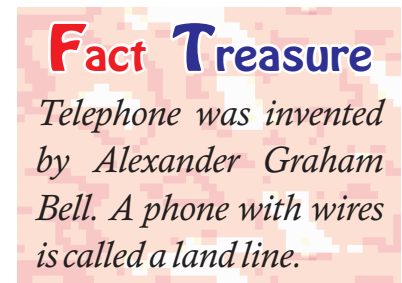
Telephone



Mobile



Fax machine



## **Fax (Facsimile Automated Xerox)**

Fax is another means of personal communication. It is used to send text and pictures through telephone lines using electric signals.

## **MEANS OF MASS COMMUNICATION**

Mass communication is used when we have to send a message to a large number of people at the same time. Television, radio, computer, newspapers, magazines, books and satellites etc are different means of mass-communication. These means of communication are also called Mass Media.

### **Radio and Television**

They are a boon to people who cannot read and write. Messages can reach faster if we broadcast them on radio or television. On radio, we can only listen to a message but on television we can also see the image and pictures.



*Radio*



*TV*



*Newspapers*

### **Books, Newspapers and Magazines**

It is the easiest means of communication. They provide a lot of information on local, national and International events. They are available in various languages for the people to read.

### **Computer with Internet**

Internet is the facility on the computer and smart phones that connects computers and smart phones all over the world. It also called WWW (World Wide Web).

The internet allows us to fax, send e-mails, chat and surf for information.



*Computer*



*Satellites*

### **Satellites**

Satellites are used for long distance communication. They have made communication faster. With the help of satellites we can watch the live telecast of any event taking place in any part of the world.

For example, a cricket match, olympics games etc. Weather forecasts are also possible through satellites.

## Activity Session

### Cross the odd one in each group?

- (a) Radio, telephone, television, newspaper
- (b) e-mail, internet, computer, peon
- (c) telegram, television, radio, train

In olden times people send message through a messenger. They used to go on foot or horse back. Sometimes trained pigeons carried messages from one place to another. Some people also used smoke signals, drumbeats, etc to communicate.

## Quick Brush Up



- Communication means exchange our views, ideas and thoughts with other.
- There are mainly two types of communication such as :
  - \* Personal Communication
  - \* Mass Communication
- Aerogrammes are special letters sent to people in other countries.
- Telephone is one of the most important inventions of our time.
- Mass communication is when we have to send a message to a large number of people at the same time.

## Key Words

- Communication : To convey our views and ideas
- Internet : A computer network
- Language : Words used for communication
- Mass : Large number of people.



**A. Choose the correct option.**

1. Aerogramme is used to send letters to people in other \_\_\_\_\_.  
(a) villages  (b) cities  (c) countries
2. Telephone is the \_\_\_\_\_ means of communication.  
(a) slowest  (b) fastest  (c) both (a) & (b)
3. Weather forecast is possible due to :  
(a) radio  (b) satellite  (c) television
4. E-mail can send through \_\_\_\_\_.  
(a) computer  (b) radio  (c) fax machine

**B. Fill in the blanks.**

1. We send e-mails through the \_\_\_\_\_ on computer.
2. There are mainly \_\_\_\_\_ types of communication.
3. We require \_\_\_\_\_ to send these letters.
4. \_\_\_\_\_ are used for long distance communication.

**C. Write True or False.**

1. We can buy postcards from bank.
2. Inland letters are foldable sheets of white paper.
3. Telephone is the slowest means of communication.
4. Books are the easiest means of communication.

**D. Give one word for the following.**

1. Which letters are card-like? \_\_\_\_\_
2. What do we use to send urgent letters? \_\_\_\_\_
3. What is the full form of PIN? \_\_\_\_\_
4. What is a phone with wires called? \_\_\_\_\_

**E. Answer the following questions.**

1. What do you understand by communication?
2. What do you understand by Mass Communication?
3. What is Internet?
4. Name any four means of personal and mass communication.
5. How did people send messages in olden time?





## Brain Twister

*Why should we write our address and PIN at the back of the postcard before posting it in a letter box?*

### Creative Corner

- A. Collect various items you can get from post office and paste them in your scrap book.**
- B. Write an e-mail to your friend:**
  - 1. Type the e-mail address
  - 2. Type the subject
  - 3. Type the letter
  - 4. Click on send
- C. Collect an old postcard, inland letter and stamped envelope and stick them in your notebook.**
- D. Plan a visit to nearby post office. Ask the postmaster about its working.**

### Life Skills



Send invitation card of your birthday party to your uncle in another city. Do not forget to write the complete address and the PIN code.



Chapter

# 15

## POTTERY

### Learning Treasure

- Need For Pots
- Steps of Making Pots
- Uses of Pottery
- Indian Pottery



### Self Survey

Match the following:

- |            |                      |
|------------|----------------------|
| 1. Kullhad | (a) Creamy substance |
| 2. Matka   | (b) Tea              |
| 3. Kilu    | (c) Hot furnace      |
| 4. Slip    | (d) Water            |

### NEED FOR POTS

In earlier times people lived a nomadic life. After some times when they settled at one place they started growing food crops. Now they felt a need for pots to cook and to store food. They used their hands to shape the clay to build small pots, they also made lengths of coils and stacked them one over the other to make pots. But all these types of pots were weak and could be used only once. With the invention of the potter's



### Fact Treasure

*A Potter's wheel is a round platform made of wood on which the pot is shaped.*

wheel. They made pots of various shapes and sizes at a faster speed. They often decorated their pots with beautiful designs and patterns. The art of making useful things out of clay is called **pottery**.



### Teacher's Tip

*Tell the students about the art of pottery practised in India.*

## STEPS TO MAKING POTS

There are four steps in making pottery :

1. Preparing the clay
2. Shaping the clay
3. Decorating
4. Firing and glazing

### Preparing the Clay

The clay is prepared by pressing and squeezing it so that the clay is made soft and smooth, and air bubbles are eliminated.

### Shaping the Clay

The kneaded clay is shaped to give different shapes. This can be done by various methods:

**Hand building Method-** In this method only hands are used to shape the clay.

#### Slab Method

The slab method forms pottery from flat pieces of clay. Kneaded clay is pounded by these lists or by flattening it with a rolling pin just like chapati. Using one slab as the base, the potter places other slabs on the base and gives desired shapes. The slabs are attached together by a creamy substance called slip.



### Fact Treasure

*Baking of dry pots at high temperature is called Firing.*

### Potter's Wheel Method

The ball of clay is put on the spinning potter's thin wire is used to cut off the pot loose from the wheel.



*Firing*

### Firing

The pottery is first dried in the sun and then baked in an oven called the Kiln. Baking makes pottery hard and strong.



*Potter's wheel method*

## Glazing

A glass-like material called glaze is used to cover the pot to make the pot water proof and smoothen. It is again baked for some time in the kiln.

## Decoration

Now these pots are decorated artistically using paints of different colours. Some potters can put simple decorations on their pots by pressing figures into the soft clay or by scratching lines into it.



*Decorated Pots*

## USES OF POTTERY

- ◇ Pots like matka and surahi used by the people to store water. They keep the water cool during the summer months. They are also called poor vean's refrigerators.
- ◇ A cup like container called Kullhad used to serve tea, milk or water at any places.
- ◇ Ghatam is a musical instrument made by clay. It is popularly used in Carnatic music.
- ◇ Decorative items like elephants, horses, dolls, lamp stands and idols of God are made of clay.



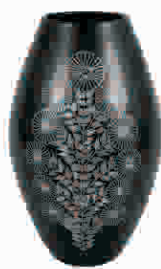
## INDIAN POTTERY

Indian pottery is famous all over the world. Different areas of our country have different styles of making pottery.

Uttar Pradesh is famous for **black pottery** with silver work on it. Khurja and Jaipur are well known for **blue pottery**. Khurja pottery includes pots, vases, dinner sets, mugs, etc. They are very popular with people in cities.

Alwar Krcth and Kanpur are well known for paper thin pottery. It is also called Kagzi.

Besides the pots made of clay, a large variety of metallic pots are also used by people in the cities to store things. People prefer to use metallic pots as they are more durable than pot made of clay.



Black pottery



Blue pottery



Kagzi pottery

## Quick Brush Up



- In earlier times people lived a nomadic life.
- The kneaded clay is shaped to give different shapes.
- The pottery is first dried in the sun and then baked in an oven called the Kiln.
- Pots like matka and surahi used by the people to store water.
- Uttar Pradesh is famous for **black pottery** with silver work on it.

## Key Words

Clay : Sticky soil  
Knead : Mixing soil

Pottery : Objects made of clay  
Kiln : Furnace for baking



### A. Choose the correct option.

- The early men felt need for pots to \_\_\_\_\_.  
 (a) store food  (b) cook food  (c) both(a)&(b)
- The \_\_\_\_\_ method forms pottery from flat pieces of clay.  
 (a) potter's wheel  (b) hand building  (c) slab
- Pots are made from \_\_\_\_\_.  
 (a) sand  (b) mud  (c) clay

4. We use \_\_\_\_\_ to cut off the pot from the wheel.  
 (a) Knife  (b) spoon  (c) thread or wire
5. We knead clay with \_\_\_\_\_.  
 (a) water  (b) oil  (c) milk

**B. Fill in the blanks.**

- The pottery is baked in an oven called the \_\_\_\_\_.
- \_\_\_\_\_ makes the pot waterproof.
- The earlier times people lived a \_\_\_\_\_ life.
- The slabs are attached together by a creamy substance called \_\_\_\_\_.
- Potter's wheel is a round platform made of \_\_\_\_\_.

**C. Write True or False.**

- Ghatam is a musical instrument made by clay.
- Baking makes pottery hard and strong.
- India pottery is famous all over Asia.
- Jaipur are well known for black pottery.

**D. Define the following items.**

- Potter's wheel method \_\_\_\_\_
- Glazing \_\_\_\_\_
- Firing \_\_\_\_\_
- Pottery \_\_\_\_\_
- Slip \_\_\_\_\_

**E. Answer the following questions.**

- Name the various potteries of India.
- Why are matkas called the poor man's refrigerators?
- What is pottery?
- What is Kagzi pottery?
- What is meant by pottery?
- Why does potter baked the pots?



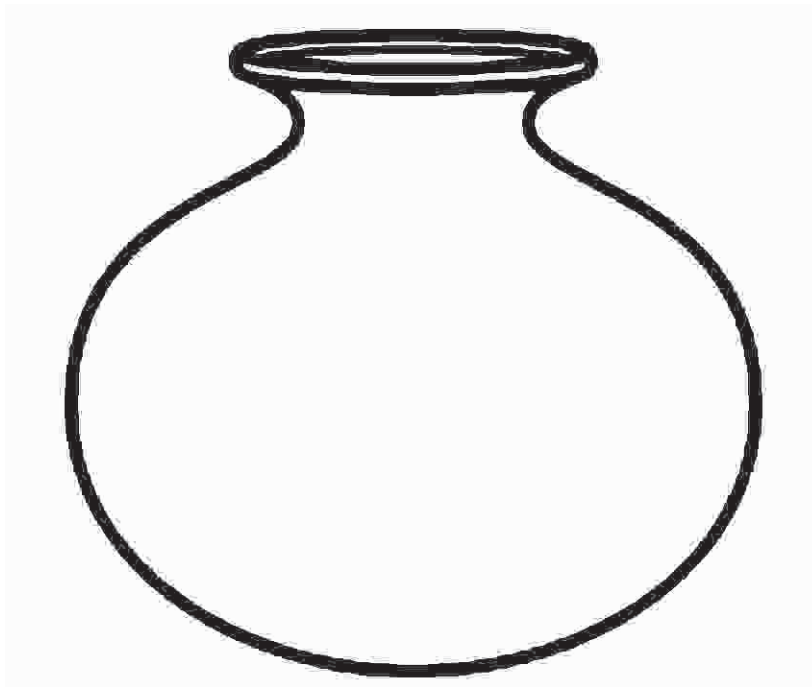
**Brain Twister**

- Why do we use only clay to make posts? Why can't we use other types of soils?
- Why does water in a clay pot remain cool?



## Creative Corner

Make your own pottery design! Draw a design of your choice. Paint this baked clay pot red and your design in black and white.



## Life Skills



Try to use pots made of clay. They are healthier and environment friendly. You may use them for cooking as well as serving food.

# TEAR AWAY WORKSHEET-1

Time :

Name : .....

## A. Choose the correct option.

1. A small family is also a \_\_\_\_\_.  
(a) small nuclear family  (b) big nuclear family  (c) joint family
2. People who cannot see are \_\_\_\_\_.  
(a) deaf  (b) dumb  (c) blind
3. \_\_\_\_\_ repairs scooter, car, phones etc.  
(a) Doctor  (b) Mechanic  (c) Carpenter
4. The solid state of water is \_\_\_\_\_.  
(a) steam  (b) ice  (c) juice
5. People play games for \_\_\_\_\_.  
(a) fun  (b) relaxation  (c) both (a) and (b)

## B. Fill in the blanks.

1. Carrom and scrabble are \_\_\_\_\_ games.
2. Love and care make a person \_\_\_\_\_ faster.
3. Twins may or may not be \_\_\_\_\_.
4. People who do not be \_\_\_\_\_.
5. Early man did not live in \_\_\_\_\_.

## C. Write True or False.

1. Deaf people often use hearing aid to hear well.
2. We should eat uncovered food.
3. A carvan is a floating house.
4. A chemist sell medicines.
5. Your real brother or sister is your cousin.

## D. Answer the following questions.

1. What us Braila?
2. What is recreation?
3. Explain water cycle.
4. What is child labour?
5. Who are twins.

## TEAR AWAY WORKSHEET-2

Time :

Name : .....

### A. Choose the correct option.

- Pots are made from \_\_\_\_\_.  
(a) band  (b) mud  (c) clay
- E-mail can send through \_\_\_\_\_.  
(a) computer  (b) radio  (c) fax machine
- Pine leavers look like \_\_\_\_\_.  
(a) eggs  (b) stars  (c) needles
- The cactus plant grow in \_\_\_\_\_.  
(a) mountain  (b) warm places  (c) deserts
- There are \_\_\_\_\_ directions.  
(a) three  (b) four  (c) six

### B. Fill in the blanks.

- A book of maps is called \_\_\_\_\_.
- The smell of a leaf is called its \_\_\_\_\_.
- The tallest animal on the earth is \_\_\_\_\_.
- Birds like \_\_\_\_\_ and \_\_\_\_\_ fly very high.
- \_\_\_\_\_ grows in hot deserts.

### C. Write True or False.

- Herbs have may branches.
- Humans are not herbivores.
- Penguin is a flightless bird.
- Tulsi and mint have big leaves.
- Shurbs live for may years.

### D. Answer the following questions.

- What is photosynthesis?
- What is tree? Give three examples.
- What is habitat?
- What are means of transport?
- What its internet?