



New Approach to

ENVIRONMENTAL STUDIES



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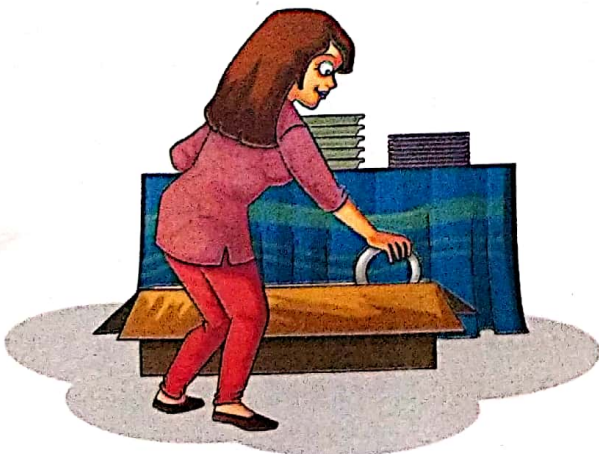
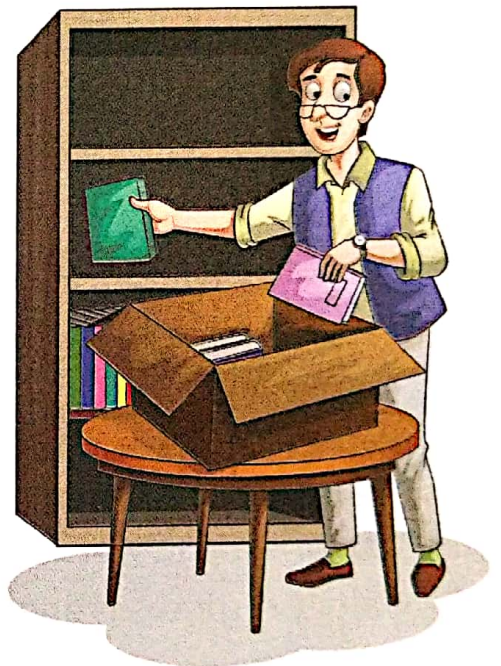
The Changing Family

LET'S RECOLLECT

We have already learnt about our mother's life as a child and about our extended family members. In this chapter, you will learn about the impact of social and economic changes on the family structure.

Our family is important for us as it fulfils all our basic needs. It gives us emotional and financial security. A good family has values that make it strong and close-knit. A family creates an environment where every member develops his or her individual character.

Earlier, people used to live at one place for many generations. But nowadays due to several reasons, people shift to new places. Some people move from one region to another. They are called **migrants**. People leaving their land to settle permanently in another country are called **emigrants**. People entering another country are called **immigrants**. Though both emigrants and immigrants seem similar, they are different. Emigration



refers to leaving a country while immigration refers to entering a country. Many times people are forced to leave their country because of natural calamities and disasters and take shelter in another country. Such people are called **refugees**.

Relate

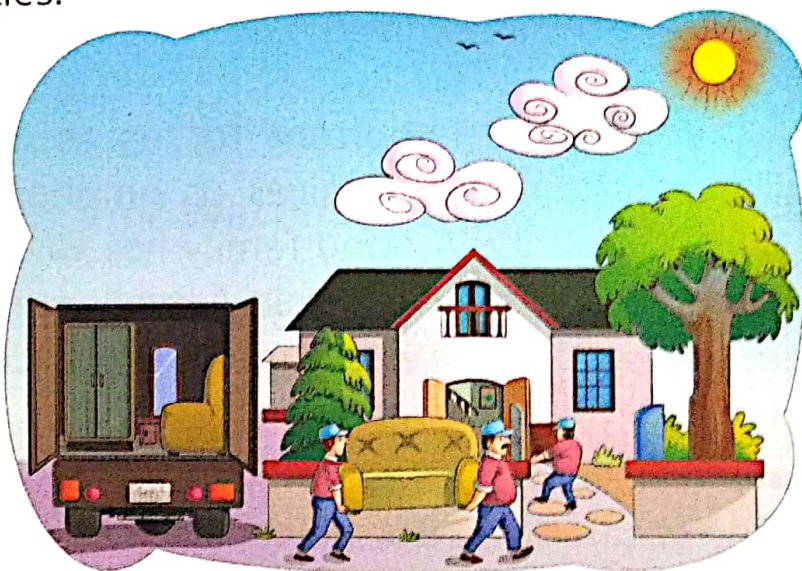


- What values have you learnt from your family?

👤 Migration of people

There are many reasons that are responsible for the migration of people. Let us read about some of them.

- ❑ Better job and educational opportunities and improved lifestyle attract people to bigger towns and cities.
- ❑ Adjustment problems in a joint family set-up force people to migrate. They move to places where it is easier to settle in a nuclear set-up.
- ❑ Natural calamities like earthquakes, tsunamis, floods and famines force people to move to safer locations.
- ❑ Man-made calamities like terrorism and wars also force people to relocate.
- ❑ Family disputes is another reason for people to migrate.
- ❑ Transferable job is one of the major reasons for migration.
- ❑ Demolition of slums force people to move elsewhere.
- ❑ People living near areas where dams are constructed, are also forced to move to other places.



Relate



- Have you always lived at the place that you now live in?
- Do you know anyone who has gone to some other state or country for a better job?
- How does displacement affect the lives of different people?

👤 Effects of migration

Migration from one place to another can be due to compulsion or at one's own will. Whatever the cause, there are certain effects of migration on the

lives of people. Let us read about some of them.

Migration due to construction of dams and demolition of slums involves shifting of a large number of people.

They have to leave their homes and relocate. They face many social, economic and cultural changes in the new place. Migrants often find it difficult to adjust to these changes. Their children have to change their school, which gives rise to adjustment problems. When a younger generation migrates, the older generation becomes lonely.

The members of younger generation are also deprived of the love and care of their elders. The progress of any place is affected when their young and talented people migrate to other countries. This migration is referred to as **brain drain**.

Migration has many positive effects also. It leads to better job and educational opportunities. It usually results in improvement of lifestyle. It also leads to mixing of cultures and cooperation.

Relate

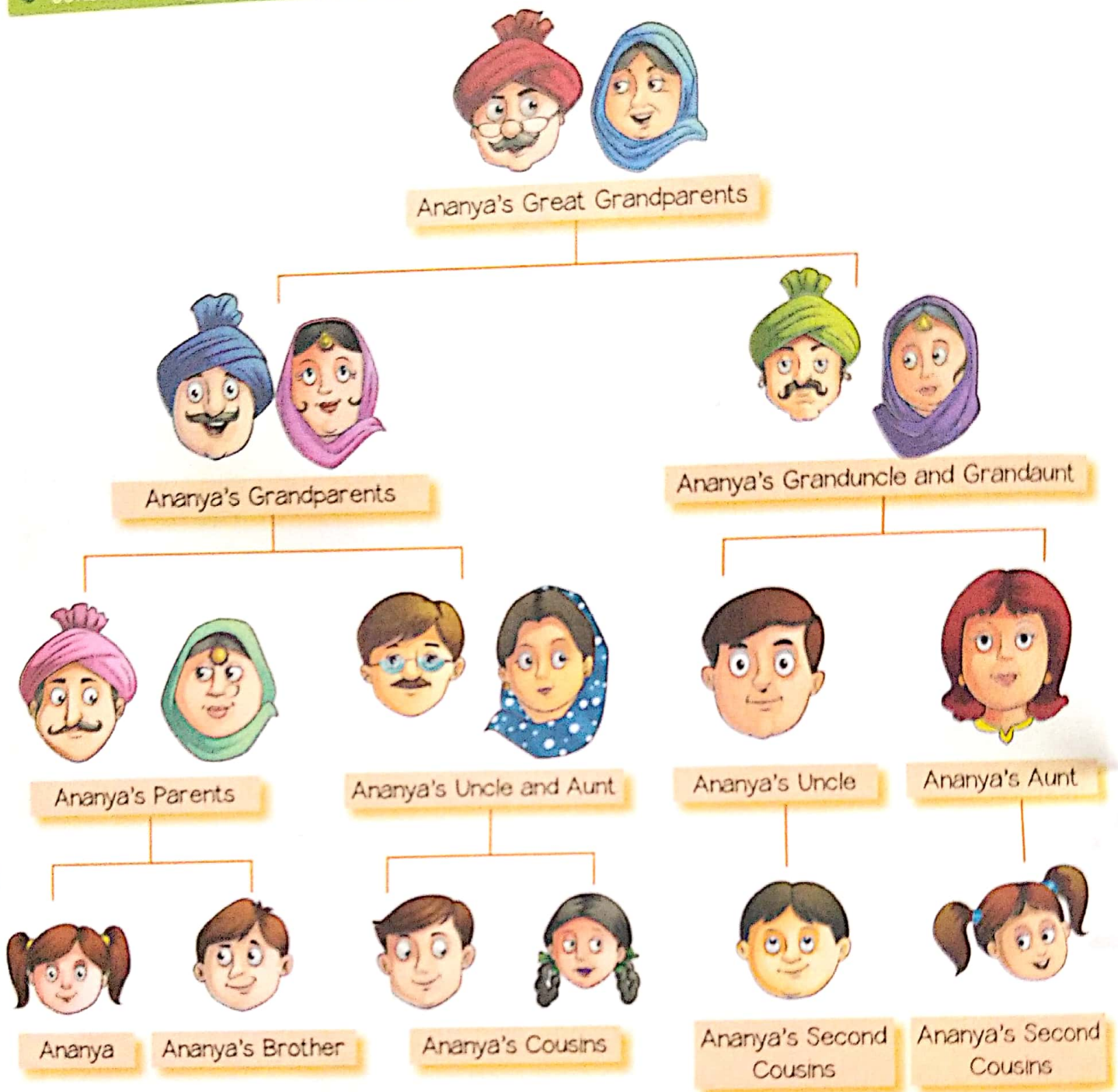
- Do you live in the same house where you were born?
- Ask your grandparents where they lived when they were young.

Change of family structure

Many socio-economic forces are changing the family structure and quality of life in families today. Let us meet Ananya to understand this better. One day, Ananya was sitting with her paternal grandmother and was going through a family album. She saw pictures of many relatives whom she had never met. Her grandmother narrated that many years ago, all of them lived together in a *haveli* in Jaipur. Many family members later moved out of Jaipur due to various reasons. Their joint family split into a number of nuclear set-ups. Ananya's grandmother made a family tree of the joint family they had in Jaipur for Ananya.



- What type of family do you have?
- Do you have relatives whom you have never met?
- Where do they live?



Ananya's grandmother then made the family tree of their current family. Ananya asked about the relatives she had never met. Grandmother told her that Ananya's great grandfather had a big showroom of gold jewellery in Jaipur. Due to some family disputes there was a division in the business. Some members of the family migrated to Mumbai, where they live now.

**did
you
know**

According to Migration and Remittances Factbook 2011, 3 per cent of the world population lives in a country other than the one they were born.

Daughters of the family got married and went to their new homes. They have adjusted well there. Two of Ananya's father's cousins went to London for higher education. Later they settled there with their families. Ananya got very excited. She asked her grandmother about her aunt Neha, who is a pilot in the Indian Navy.

Grandmother told her that Neha was one of the most intelligent girls in the family. She got selected in the Indian Navy on merit. She said that earlier people did not encourage girls to go for higher studies. They were usually taught household chores by their mothers. But nowadays, girls are encouraged to take up higher education. Today, girls are doing what once were considered jobs meant only for men. Since many women are working, family structures have undergone a lot of changes.



Relate

- Do you know any woman who has entered a field which was once considered a man's field?
- What does your mother do?
- What would you like to become when you grow up?

**did
you
know**

Over the past four decades, the global increase in women's education has prevented more than four million child deaths.



- Our family fulfils our basic needs of life.
- A family gives us emotional and financial security.
- People who move from one region to another are called migrants.
- People who move from their country are called emigrants.
- People who enter another country are called immigrants.
- Refugees are people who are forced to leave their country because of calamities and disasters. They take shelter in other places.
- Migration has both positive and negative effects on the lives of people.
- Many socio-economic forces are changing the family structure and quality of life in families.



Practice Time

A. Answer the following questions.

1. Why do we need a family?
2. Give four reasons why people migrate from one place to another.
3. What is the difference between emigrants and immigrants?
4. Who are refugees?
5. What are the positive and negative effects of migration?

B. Fill in the blanks.

1. People who move from one region to another are called _____.
2. _____ and _____ are natural calamities.
3. _____ families are common nowadays.
4. The movement of young and talented people to another country _____.
5. A family gives _____ and add security.

C. Write (T) for true and (F) for false statements.

1. Construction of dams involves shifting of a large number of people.
2. Nowadays, nuclear families are more common than joint families.
3. Relocating to a new place has no disadvantages.
4. Today, girls are encouraged to take up higher education.
5. Our family is not important for us.

D. Make a scrap book of your family. Include your maternal family.

E. Fill out the following table with the help of your parents.

Write down the names of your family members who have the following features. Write your relationship with them.

Features		Name	Relationship
1.	Who laughs the loudest?		
2.	Who speaks the loudest?		
3.	Who is the best cook?		
4.	Who is the softest and kindest?		
5.	Who has the longest hair?		
6.	Who is the smartest?		
7.	Who brings you the most gifts?		
8.	Who shares toys and books with you?		
9.	Who loves to play with you?		
10.	Who is the naughtiest of all?		

environment Awareness

Population of cities is increasing due to migration of masses from rural areas to urban areas. This has brought about undesirable changes in the environment of towns and cities. It may cause harmful effects on our lives. It's high time we start thinking and doing something before it gets too late.



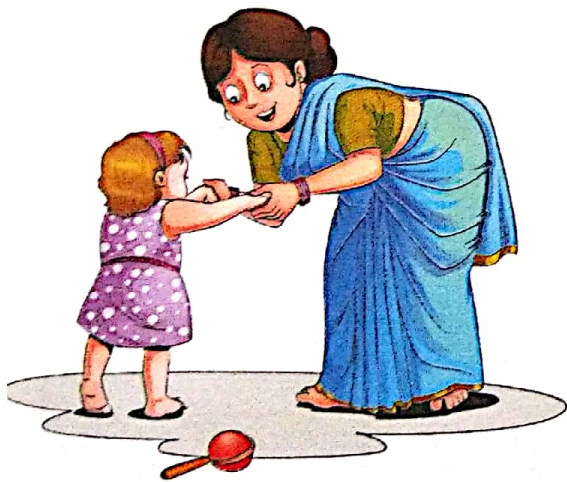
All of Us Grow

LET'S RECOLLECT

We have already learnt about the mother-child relationship and the importance of sensitivity towards people around us. In this chapter, you will get a basic idea of how we grow and how our sense organs determine our likes and dislikes.

🌱 A baby

A baby cannot speak, eat, sit or stand. It depends on its mother for all its needs. A mother has the natural ability to understand



the needs of her baby. A baby communicates by crying or through facial expressions. Babies usually cry when they are uneasy, wet or hungry. A baby grows up to become a child.



🌱 Growing up

The growth in our body is natural. Eating food helps in growth and development.

🌱 Stages of growth

Our body is made up of millions of cells. These cells keep growing bigger till they divide into two. With time, these cells divide into four cells and this process continues. At one stage our body starts destroying more cells than it



makes. That is the stage when our body stops growing. It happens between the age of sixteen to twenty-two. After that our body does not grow any taller.

Relate

- Have you ever observed a baby?
- When does a baby cry the loudest?
- What does it do when it is hungry?

🐞 Measuring height

Our height is measured in inches, centimetres and feet. To measure your height, stand straight against a wall. Your father or mother can put a mark on the wall by keeping a ruler straight on your head in a horizontal position. Then the distance between the floor and the point marked on the wall is measured.

The distance measured is your height. Measure your height every year. That is the best way to keep a track of your growth. We can take our family members or doctor's help to measure our height and weight.



Common units for measuring weight are gram and kilogram.

$$1000 \text{ (g)} = 1 \text{ kilogram (kg)}$$

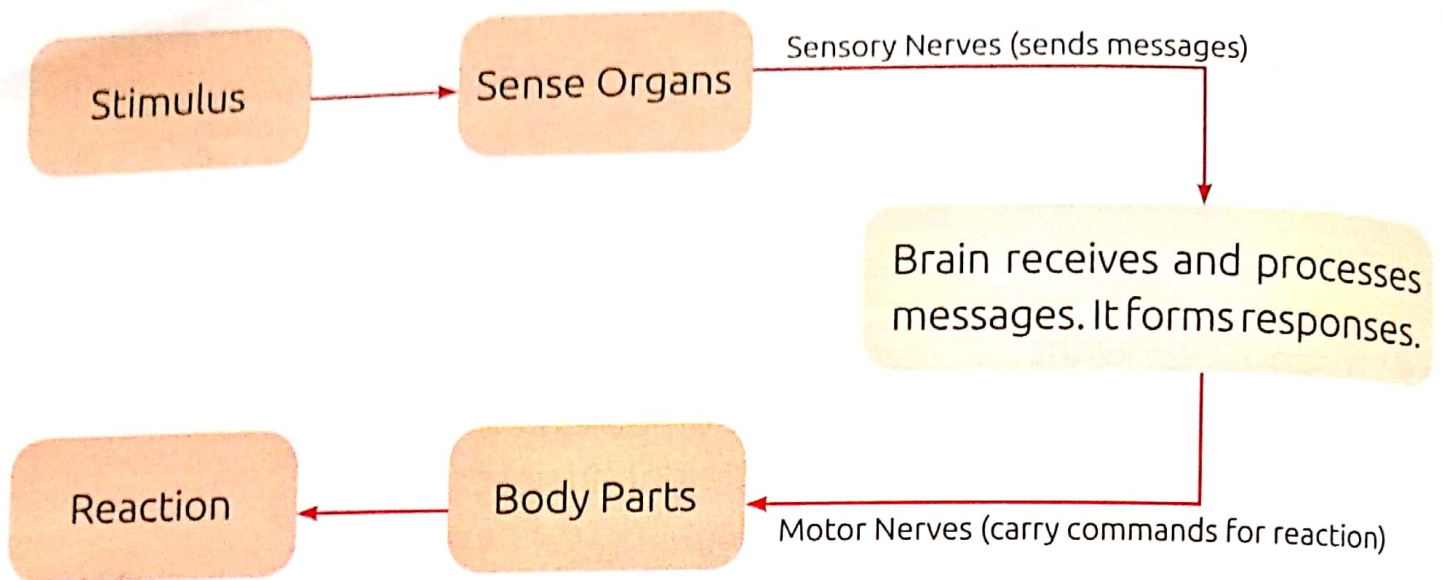
Relate

- How tall are you?
- Who is the tallest member in your family?
- Who is the shortest in your family?
- What is your weight?

🐞 Likes and dislikes

Our sense organs help us to hear, see, taste, smell and feel things around us. We all have similar sense organs that perform the same functions but our brain senses them differently. That is the reason we have different likes and dislikes. Our likes and dislikes in food and clothing may be similar to some of our family members or may be entirely different. They are determined by our environment, taste, exposure, traditions and our mental state.

When our sense organs sense something, the information is carried to the brain by the sensory nerves. The sensory nerves send messages to the brain. The brain then processes the messages. After that, it sends commands through motor nerves to the body parts to act accordingly.



Let us read about the various reasons due to which we sense things differently.

1. **Family background:** Members of a family, besides sharing physical features and other characteristics, also share many likes and dislikes. Children of musician parents will tend to show interest and talent in music. Likewise, children of parents who are actors might show interest in acting. Children of a vegetarian family are usually vegetarians. They would not be inclined towards non-vegetarian food.
2. **Cultural and regional background:** People with different cultural and regional backgrounds have different likes and dislikes. *Punjabis* like to eat fried and spicy food. *Gujaratis* generally put sugar in their dishes. People who do not eat garlic and non-vegetarian food do not like the sight and smell of it, whereas those who eat them are not only fond of it but also find it aromatic.



Relate 

- Do you know the likes and dislikes of your friends?
- Compare your likes and dislikes with that of your friends.
- Ask a person who is vegetarian if s/he likes the smell of non-vegetarian food.

3. **State of mind:** Our mental state also determines our likes and dislikes. During vacations, we enjoy music, play games and watch television. But during examination days, we try and stay away from loud music and restrict our playtime and also stop watching television.

4. **Occupation:** The nature of our job also determines our likes and dislikes. Sweepers who collect the garbage and clean the sewers are used to the foul smell. But a passer-by covers his or her nose because such smell is offending to them. Therefore, we should not criticise the likes, dislikes and occupation of others.

Special people

All the body parts of a healthy person function normally. However, there are some people whose certain sense organ or body part does not work, while some other sense organ becomes extra active. People who cannot see have an extraordinary sense of touch. People who cannot see are blind, people who cannot hear are deaf while people who cannot speak are called **mute**. Some children may have a weak brain or some physical disability. Physically and mentally challenged children are **special children**. Special children need care and lots of love and attention. Elderly people also need our care and love.

Relate

- Have you come across any special child?
- How do you think you can help him/her?
- How do you take care of your grandparents?

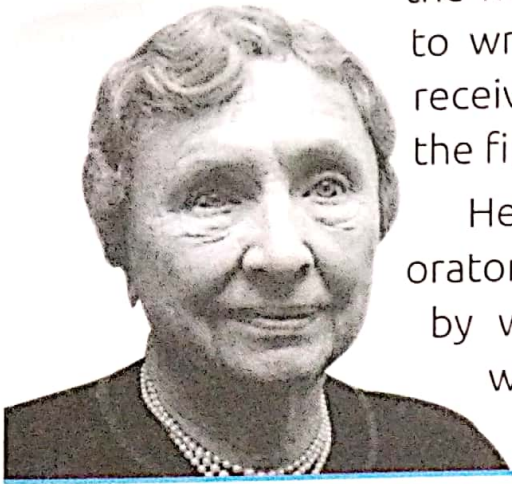
Visually challenged

People who are blind read books written in a special script called **Braille**. It is written on a thick paper by making a row of raised dots with a pointed tool. It is read by feeling the raised dots by rolling fingers on them. All the letters of Braille are made up of one to six dots. This alphabet was invented by a blind teacher, Louis Braille. Braille can be written using a special computer, as well.



Physically challenged people

There are many physically challenged people who have attained great heights in spite of their handicaps. **Helen Keller** became deaf and blind due to an illness when she was only eighteen months old. She was very intelligent and wanted to study. Her father appointed a teacher named Anne Sullivan to teach her. She began her special education in reading and writing with



the help of her teacher. She learnt to read Braille and to write with a specially constructed typewriter. She received her Bachelor of Arts degree in 1904, becoming the first deaf and blind person to earn a degree.

Helen Keller became a very famous author and an orator. She worked with soldiers who had been blinded by war. She always encouraged blind people. She wrote many books like **The Story of My Life** which is available in 50 languages. Keller died on June 1, 1968 at the age of 88.

Relate 

- Do you know someone who finds it difficult to walk or speak?
- How do you think physically challenged people handle their problems?

Stephen Hawking is a well known physicist, cosmologist and a scientist. He suffers from an incurable motor neuron disease since the age of 21. He is famous for his prediction that black holes emit radiation. His lectures are highly sought after and his books are bestsellers. He received the 'Presidential Medal of Freedom', the highest civilian award in the USA, on August 12, 2009.



did you know

October 15 is celebrated as 'World White Cane Day' for the Blind people.



- A baby communicates by crying or through its facial expressions.
- A baby grows to become a child.
- We can keep a track of our growth by measuring our height regularly.
- We all have the same sense organs that perform the same functions but our brain senses them differently.
- There are various reasons due to which we sense things differently. Family background, cultural and regional background, state of mind and occupations are some of these reasons.
- Physically and mentally disabled children are called 'special children' because they need special love and care.
- Blind people read through a special script called Braille.
- Helen Keller and Stephen Hawking are two special people who in spite of their handicap have achieved great feats in life.



Practice Time

A. Answer the following questions.

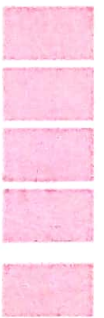
1. Why do people have different likes and dislikes?
2. Who are special people?
3. How do blind people read with the help of Braille?
4. Who was Helen Keller?
5. Write a short note on Stephen Hawking.

B. Fill in the blanks.

1. Braille script was invented by _____.
2. People who cannot see are _____.
3. _____ nerves carry messages from sense organs to our brain.
4. _____ has a natural ability to understand the needs of her baby.
5. _____ was Helen Keller's teacher.

C. Write (T) for true and (F) for false statements.

1. Height can be measured in grams.
2. Common units for measuring weight are gram and kilogram.
3. Braille can be written using a simple computer.
4. People who cannot hear are called deaf.
5. Motor nerves carry commands for reaction from brain to different parts of the body.



D. Give reasons for the following.

1. Special children need special love and care.
2. A baby communicates by crying.
3. People who eat vegetarian food cannot tolerate non-vegetarian food.

Environment Awareness

Louis Braille lost his eyesight when he was 3 years old. This French boy began inventing the script for the blind when he was 15 years old. Now practically every country uses Braille. Try to read Braille and know how blind people use it. Be sensitive towards the blind and other physically and mentally challenged people around you!



ACTIVITY FUN

Learning by doing

1. Find out the names of four dishes that your family enjoys and write their recipes in your notebook.
2. Organisations like the Red Cross Society, Missionaries of Charity and many NGOs work for the community. Take the help of your teacher or the Internet to find out about their work.
3. Make a family tree and paste photographs of your family members on it.
4. Bring a Braille sheet to the class and try to read it.
5. Measure your height with the help of your friends.
6. Take a cloth bag and put different types of objects in it, such as a ball, a toy, some fruits and vegetables. Let each child come forward blindfolded one by one. Put his or her hand in the bag and tell them to guess the name of the object by feeling it. This activity will help you to understand how the blind identify things with the sense of touch.

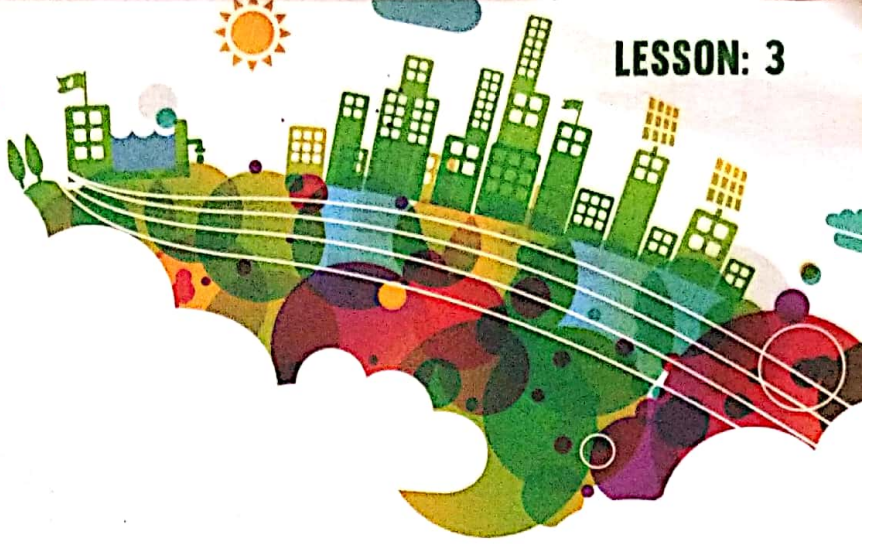
Find out

1. Difficulties faced by a family (known to you) due to migration.
2. Who is Wilma Rudolph? What are her achievements?

Fact

- Partition of India and Pakistan in 1947 forced lakhs of people on either side to migrate.
- The Paralympics are games for physically disabled people. They are held immediately after the Olympic Games.
- Finger nails grow nearly 4 times faster than toe nails. The fastest growing nail is the nail on the middle finger.

Games and Sports



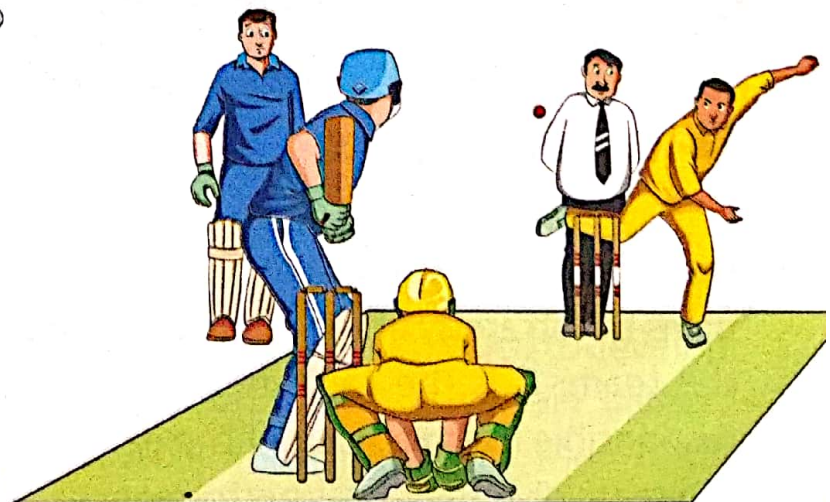
LET'S RECOLLECT

We have learnt about fun and fights at play and enjoyment at a fair/circus. In this chapter, you will learn about different team games, team spirit and know about some famous players.

A **game** is an activity undertaken usually for enjoyment and relaxation. It provides pleasure and excitement and develops our physical, mental and social abilities. A game in which a person or a team competes against another person or team is called a **sport**. Games and sports are a kind of exercise, which provide mental and physical strength to our body.

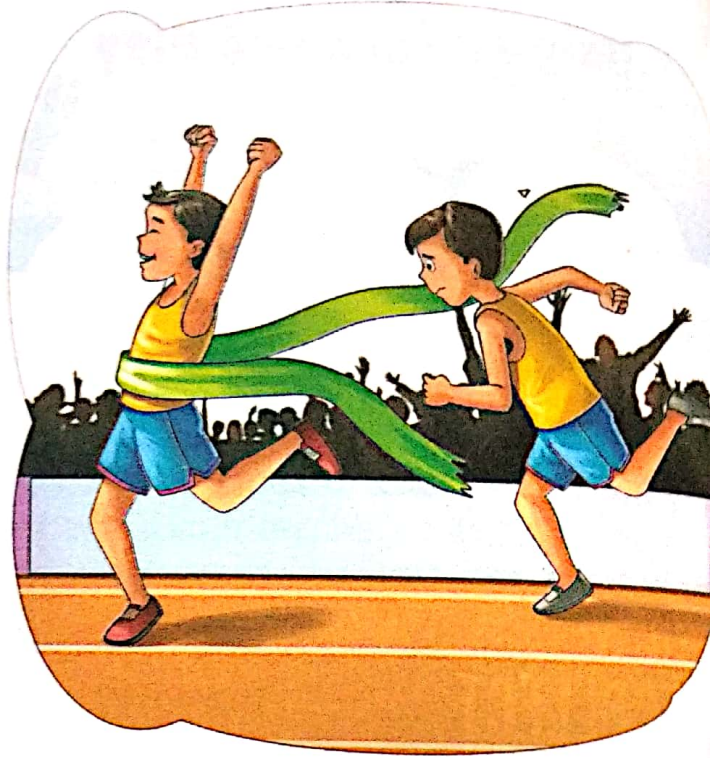
Different types of games and sports

- ☐ Games like chess, ludo, snakes and ladders, carrom, etc., are played inside homes, schools, clubs, etc. They are called **indoor games**.
- ☐ Games like cricket, hockey, football, golf and tennis are played in an open ground, stadium or a court. They are called **outdoor games**.



- There are many games that are played by a single person or an individual. These games are known as **individual games**. Swimming, gymnastics, skating, cycling, etc., are some of them. Here a player has to achieve success for himself or herself.

Some games and sports are played in groups or teams. Sports like cricket, football and hockey are played between two teams. Each team has a definite number of players. In team games, there is an umpire or a referee who supervises to see that both the teams follow rules and regulations.



Team spirit

In a team game, every player plays according to the need of the team on the basis of understanding, respect and coordination among the team members. This is called team spirit. Players in a national team usually belong to different regions, religions and economic backgrounds. They play together to represent their country and their main objective is to win honour for their nation. Team spirit creates selflessness and happiness among players. A good team is one in which the members feel free to contribute their individual ideas. They have confidence and trust on their self as well as in all the other members of the team.

- Write the names of two of your favourite indoor and outdoor games.
- Name an individual game and a team game that you like to play.

Relate 

Captain on the go

Captain is the head of the team. He has a great responsibility as he plans the strategy of the game with the team. It is the captain who is responsible for the result of the game. He makes sure that all the members of the team give their best performance.

**did
you
know**

Leander Paes was the first Indian to win Junior US Open Title. Later he teamed up with Mahesh Bhupathi to play doubles. The duo has won a number of Grand Slam titles.



Kapil Dev

The Indian cricket team's win in the World Cup in 1983 was a result of team spirit. It was under the able captaincy of Kapil Dev that the Indian team did the miracle.

Mahendra Singh Dhoni did the miracle again by winning T20 World Cup in 2007 and Cricket World Cup in 2011.

The captain of a team must possess these qualities:



Mahendra Singh Dhoni

- ☐ S/he should be trustworthy, dedicated, passionate and focussed.
- ☐ S/he should have a fair attitude towards every team member.
- ☐ S/he should be calm, tolerant and composed in all situations.
- ☐ S/he should be an example for the others in their commitment towards excellence.

It is very important that all the team members respect their captain and give their wholehearted support to him/her. A good captain is one who gives credit and recognises the contribution of each member of the team.

Relate 

- Can you name some more sportspersons who have been cricket captains of India?
- Have you played any team game?

Super girls in games and sports



Sania Mirza

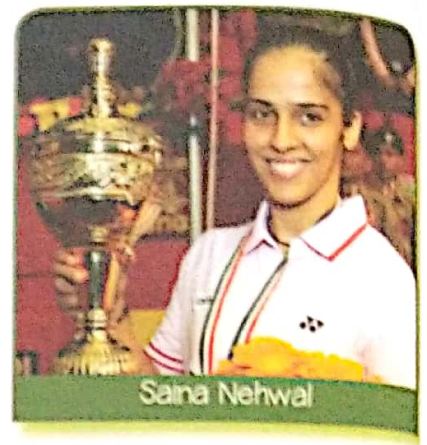
Every person whether a boy or a girl has a right to sound health and physical fitness. Till a few years ago, there were many games which girls were not allowed to play. But nowadays, girls are encouraged to develop their skills in all type of sports. In certain games, girls have proved that they are better than boys.

Sania Mirza in tennis, Saina Nehwal in badminton

and Mary Kom in boxing have made a name for themselves through their hard work and dedication.

Commonwealth Games 2014 saw a lot of women bringing laurels to the country.

Apurvi Chandela in air rifle, Rahi Sarnobat in pistol, Vinesh Phogat, Babita Kumari in free style wrestling, Khumukcham Sanjita Chanu in weightlifting, Joshna Chinappa and Dipika Pallikal in squash are some of them who made the country proud.



There are many games which girls and boys can play together. Kho-Kho is one such game. In tennis world competitions, there is a tournament of mixed doubles. But many games like cricket, hockey and football are separate for boys and girls.

National teams

A **national team** is the team that is selected to play a sport for the country. It consists of players from all parts of the country. When our national teams go out to play for our country, they have only one identity—Indian. When our national team wins a tournament, the whole country celebrates its victory. The national game of our country is field hockey. So far, India has won eight Olympic gold medals in hockey. Cricket is a popular sport in India. It is also played in New Zealand, South Africa, West Indies, Pakistan, Australia and Sri Lanka.



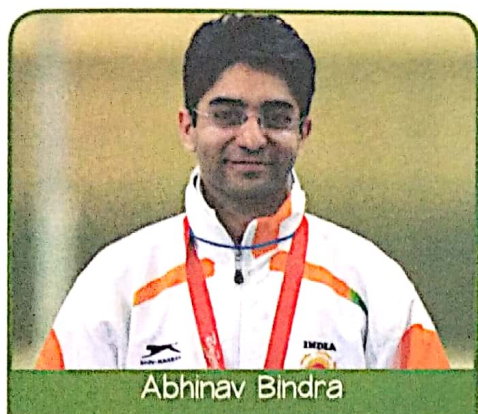
Eminent sports personalities

Sachin Tendulkar: Compared to none other than Don Bradman, Sachin Tendulkar or 'Master Blaster' as he is popularly known as, has been a batting

sensation. The former cricketer has been hailed as the greatest batsman of all time, thereby holding the title 'God of cricket'. He crossed many milestones by breaking records of cricketers like Sir Garfield (Gary) Sobers, Brian Lara and Sunil Gavaskar. He became the first cricketer to score the highest runs in One-Day cricket, in test matches and maximum centuries. His wax statue is displayed at Madame Tussauds Museum in London. He retired on 16 November 2013 after playing his 200th and final Test match against West Indies in Mumbai.

Relate

- Find out the names of some more sportswomen in India.
- Find out the names of the members of India's women hockey team.



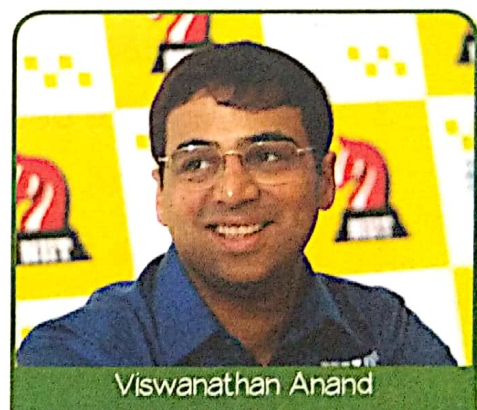
Abhinav Bindra

Abhinav Bindra: He won India's first individual Olympic gold medal in 108 m air rifle shooting event at the Beijing Olympic Games, 2008. In 2014, Abhinav won gold in Men's 10 m air rifle singles event in Commonwealth Games.

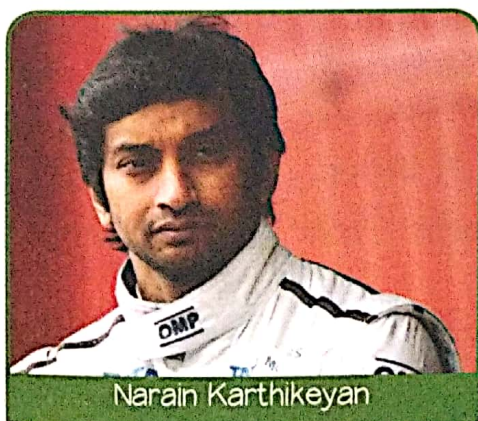
Viswanathan Anand: Described as one of the most

versatile chess champion ever, Viswanathan Anand has been the undisputed World Champion

from 2007-2013. He became India's first grandmaster and also the first recipient of the Rajiv Gandhi Khel Ratna Award. He was also awarded the Padma Vibhushan for his achievements in chess.



Viswanathan Anand



Narain Karthikeyan

Narain Karthikeyan: He is the first Indian to drive in Formula One.

Relate

- Have you ever heard of any Indian team playing in another country?
- Write the names of the national game of two neighbouring countries of India.

**did
you
know**

Milkha Singh was the first Indian athlete to reach Olympic Finals. He reached the finals of 400 m at the 1960 Rome Olympics.



- A game is an activity undertaken usually for relaxation and enjoyment.
- A game in which a person or a team competes against another is called a sport.
- Different types of games are—indoor games, outdoor games, individual games and team games.
- Team spirit creates selflessness and happiness among players.
- Captain is the head of the team. He has a great responsibility as he plans the strategy of the game.
- The captain of the team should be trustworthy, dedicated, passionate and focussed.
- Sania Mirza, Saina Nehwal and Mary Kom are some Indian women players who have made a name for themselves.
- Sachin Tendulkar, Abhinav Bindra, Vishwanathan Anand and Narain Karthikeyan are eminent sports personalities of India.



Practice Time

A. Answer the following questions.

1. What is the difference between games and sports?
2. What is team spirit?
3. Differentiate between individual games and team games.
4. What are the qualities of a good captain?
5. Name some famous Indian sportswomen.
6. How many Olympic gold medals has India won in hockey so far?

B. Fill in the blanks.

1. _____ is the national game of India.
2. India won the World Cup in 2011 under the captaincy of _____.
3. _____ is the first Indian to drive in Formula One.
4. In team games, a _____ or an _____ supervises to see that both the teams follow rules and regulations.
5. _____ has won a great name for herself in athletics.

C. Write (T) for true and (F) for false statements.

1. Captain is the head of the team.
2. Team spirit develops selflessness amongst the players.

3. *Kho-Kho* is played only by girls.
4. Sachin Tendulkar is also called 'God of Cricket'.
5. Abhinav Bindra won silver medal in the 2014 Commonwealth Games.

D. Explain the following terms.

1. Game _____
2. Sport _____
3. Team spirit _____
4. National team _____
5. Indoor game _____
6. Umpire _____
7. Captain _____
8. Individual game _____
9. Team game _____
10. Championship _____

Environment Awareness

Playing games and sports improves our health. It is a good exercise for our body. It enhances our stamina and concentration and is good for our body. So, enjoy playing sports and games and experience their benefits.

