

# General KNOWLEDGE

Grade 3



NOT FOR SALE



Federal Directorate of Education  
Ministry of Federal Education and Professional Training  
Government of Pakistan

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## General Knowledge 3

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## CHAPTER

# 1

# The Earth as a Living Planet

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Recognize that heat and light of the sun help to sustain life on earth.
- Define the term habitat.
- Describe the different habitats for living things (Polar regions, desert, forest, sea and river).
- Define the term ecosystem.
- Identify the environmental factors (temperature, light, water) that support life in a habitat.
- Name plants and animals that live in each of the different habitats.
- Identify the ways plants and animals adapt to their habitat (camel, fish, polar bear, cacti, lotus, pine trees etc).
- Identify the ways human activities affect the natural habitats.
- Describe the effects of human activity on the habitats.

Earth is the only planet where life exists. All human beings, animals and plants survive on earth due to the presence and availability of light and heat from the Sun. Water, heat and light on Earth are the factors required for life.

### Habitat

The natural home or environment of an animal, plant or any other organism is called a habitat. Habitat is a big community of plants, animals and non-living things.



Cities and towns are the habitats for human beings, just like the pond is a habitat for fish and plants.

A habitat is made up of physical factors such as soil, moisture, range of temperature, and availability of light, and food.



Habitat of Elephant (forest)



Habitat for Giraffe and Zebras (forest)

## kinds of Habitat

**Habitats are of two kinds:**

**Land habitat:** Forests, deserts and grasslands.

**Water habitat:** Rivers, ponds, oceans and polar regions

## Land habitat

### Forest

Forest provides shelter for plants and animals. This is a place where many trees, small plants, bushes and animals live together naturally. Forests help in rainfall.



### Teachers Corner:

Explain to the students how life in the forest is sustained for a various animals. Also help them realize how forests help rainfall.

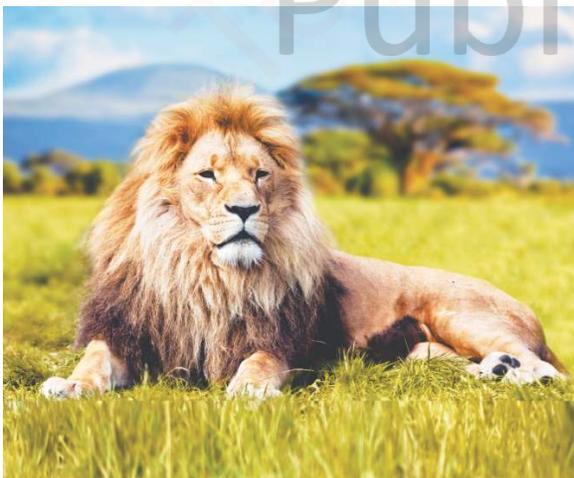
## Desert

In deserts there is sand everywhere. There is shortage of water. It is hot during day time but colder in the evening. Very few animals and plants which can survive without water for many days, are found here. Examples: Camel, snakes and scorpion are desert animals. In plants, cactus, and palm tree can grow as they can store water for many days.



## Grasslands

Grasslands are usually found between forests and deserts. Here the land is usually covered by grass. There are some trees and bushes. Grasslands do not receive enough rainfall to grow trees but they receive more rain than deserts. Big cats, wolves, cheetahs and lions live in grasslands.



## Ponds

Ponds are fresh water habitats. A pond is a body of standing water. It may be artificial or natural. Fish, tadpoles and ducks are examples of pond animals.



## Polar Regions

The regions of Earth which remain covered with snow throughout the year, are called polar regions. Life is very difficult. Very few plants and animals can survive here. Thick fur and feathers on the animals' bodies protect them from cold weather. Polar bear and penguins are examples of such animals.



## Sea habitats

Seas are the largest habitats covering more than 75% surface of the Earth. Plants like sea weeds, sea grass and other aquatic plants are found in the seas. Animals like fish, turtles, crab, octopus are found in the sea habitat.

Sea habitat



## River habitats

Many plants grow on the banks of rivers. Animals like frogs, crocodiles, snakes, and fish are found in the river.

## Ecosystem

In a habitat all living things and non living things are interacting with each other and develop a system called living organisms also interact with ecosystem. In an ecosystem living organisms interact with non-living components of the environment (weather, water and soil).

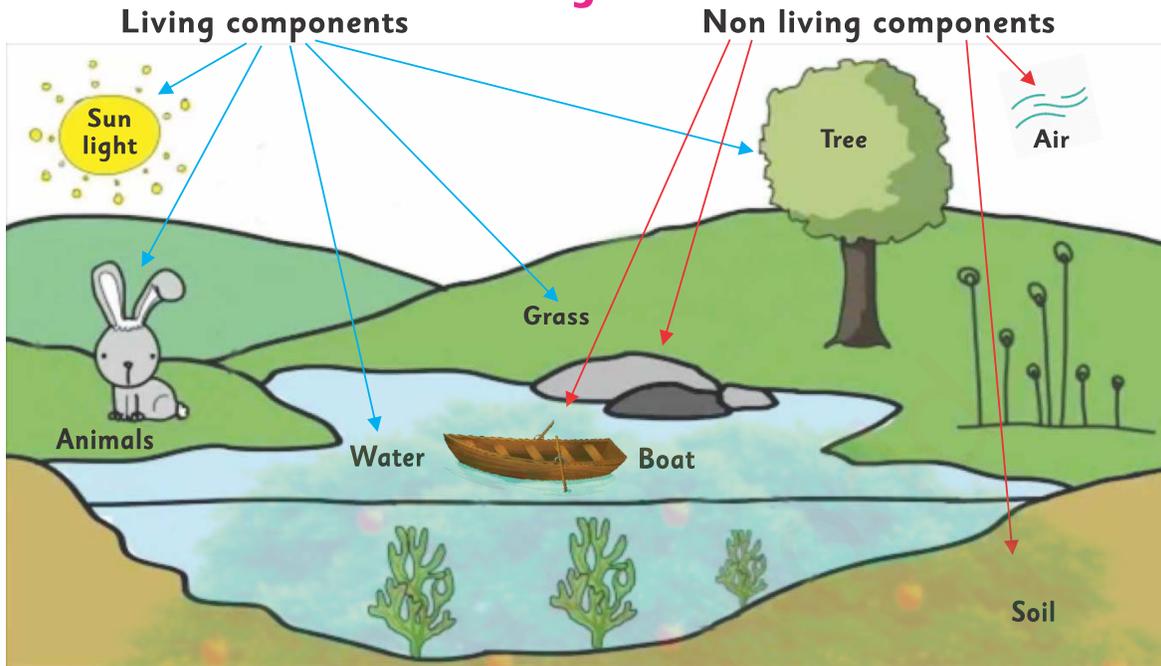


River habitat

### Teachers Corner:

Encourage the students to think about the habitats of different animals and plants they see in their surroundings. Help them identify the different elements of these ecosystems

## Ecosystem



## Adaptation to Habitats

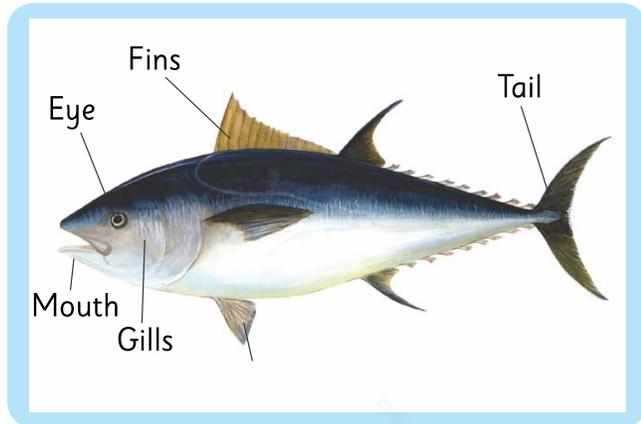
Can a fish live outside water? No, because its body is only adapted to the water habitat. It can't breathe outside water. Living things adapt to their habitat. Similarly humans cannot breathe in the water.

### Adaptation of various animals: Camel



## Fish

- a. Boat like body, fins, and tail fin help in swimming.
- b. Breathes in water through its gills.



## Polar Bear

### White Fur

Its prey and enemies can not see him easily in white snow.

### Nostrils

Its can close them when he swims for fish under water.

### Thick Skin

Layer of fats under its thick skin keeps it warm.

### Paws

Its paws are large and wide. It can easily walk on snow.

## Adaptation of Plants

### Barrel Cacti (Singular Cactus)

### Fleshy stem

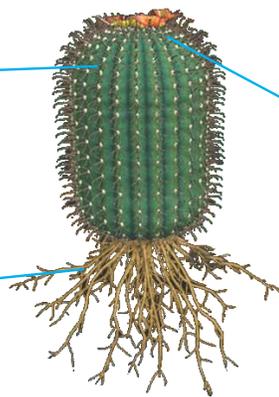
Stores water

### Deep Roots

Help find deep water

### Thorns

Save them from animals



## Lotus



### Flexible stem

Helps it to move with water current.

### Leaves

Wide and disk shaped leaves help it float on water

## Adaptation of Pine trees

### Needle like leaves

Do not fall even in strong wind

### Cones

Seeds are safe in cones



## Effects of Human Activities on Habitats



Domestic wastes  
pollute land,  
air and water



Smoke  
pollutes air



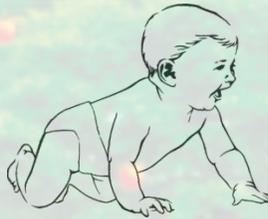
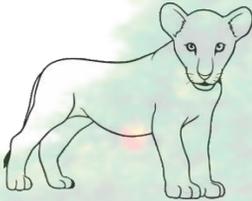
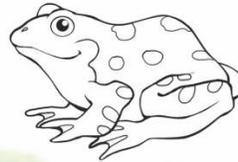
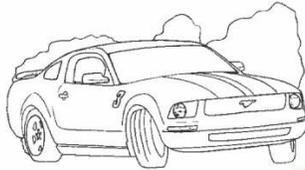
Pesticides pollutes air,  
water and soil. Destroys  
birds' and animal's habitats



Tree cutting damages  
habitats of many animals  
and plants.

## Exercise

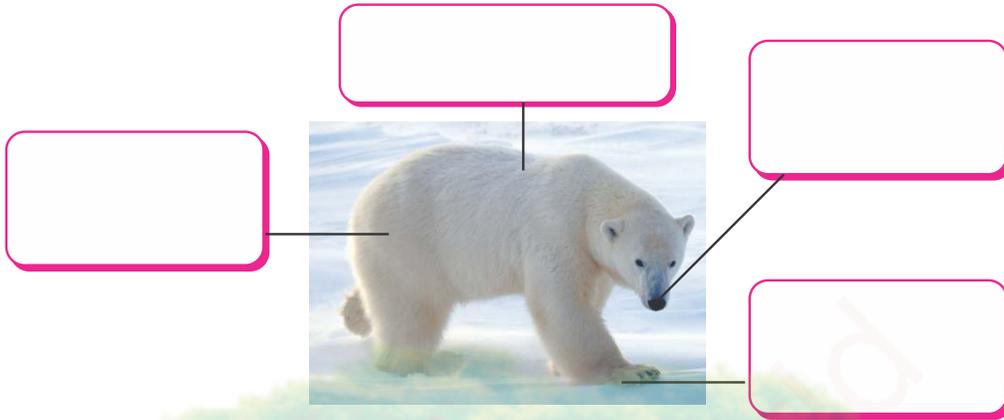
1. Colour those who need energy from the sun to grow.



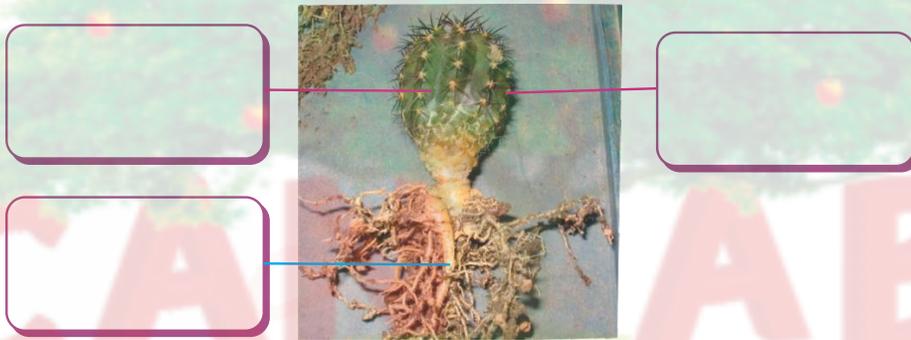
2. Read the short stories. Find out the habitat.

- i. A camel is standing on sand. He is trying to eat the cactus.
- ii. A polar bear is running after a penguin.
- iii. An alligator is resting on the bank of a river.
- iv. A frog is trying to catch a fly.
- v. A blue whale has jumped into the air from water.
- vi. A boy is going to school.

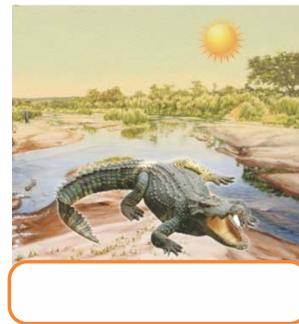
3. (a) How does the polar bear adapt to the polar habitat?



4. (b) How does a cactus adapt itself to the desert habitat?



5. Look at the pictures. Which environmental factor is helping life? Write its name.



**6. Match the animal or plant with its habitat.**

**i.**

River



Desert

Forest

Polar Region

**ii**

River



Desert

Forest

Grass Land

**iii**

Desert



Forest

Polar Region

Grass Land

**iv**

Pond



River

Polar Region

Ocean

**v**

Forest



Grass land

Desert

River

**7. Which part helps the camel in a desert habitat?**

- a. long neck
- b. brown colour
- c. broad feet
- d. short tail

**8. Answer the following questions.**

- i. Define habitat.
- ii. How has a pine tree adapted itself to its habitat?
- iii. List the effects of human activities on habitats?
- iv. What are the environmental factors that support life?
- v. Describe your favourite habitat?

**9. Who am I?**

- i. I am white. I live in white . I walk on white. I see white around me.

Animal = \_\_\_\_\_

- ii. My first name starts with the first letter of fox. Second letter is the first letter of orange. Third is the first letter of rat. Fourth is the first letter of elephant. Fifth is the first letter of snake. my last letter is the first letter of tree.

Habitat = \_\_\_\_\_

## 10. How can you help the monkey?



## 11. Activities: Work in groups of 5 and do the following activities?

- i. Suppose your school is a natural habitat. Who are the members of this habitat? Make their list. Also tell how it is affected by the activities of students.
- ii. Imagine our earth without the sun? What do you think? Will life be possible then? Will it be possible for plants to grow and make food in the absence of light and heat of the sun? **Write reasons for your answer**

### Practical Work

Observe animals and plants in your locality and note their names and habitats.

### Teachers Corner:

Help your students in their activities and practical work. Tell them how they can be useful for their environment.



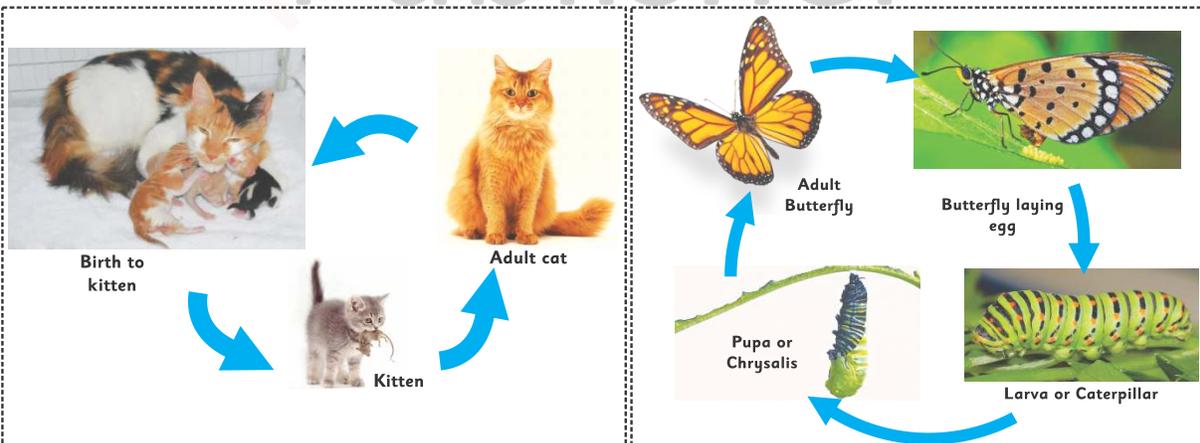
## CHAPTER 2 Changes in Living Things

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Compare young plants and animals with their parents (from pictures through observation etc)
- Recognize that plants and animals change in form as they go through different stages of their life cycles.
- Identify the changes that animals and plants undergo during their life ( hen, sunflower)
- Interpret diagrams of the life cycles of animal and plant to identify the different stages.
- Sequence the stages of the life cycle of a plant/animal.
- Identify the stages of life cycle of plants (germination, growth and development, reproduction and seed dispersal).
- Identify and describe different stages that increase the number of offspring that survive (e.g. a plant producing many seeds, mammals caring for their young ones).
- Illustrate the life cycle of an animal and a plant.

Living things need food, water and air to live and grow. All animals and plants grow to become adults. They reproduce young ones of their own kind.



## Animals and their young ones

Some baby animals look like their parents.



1. Cow \_\_\_ Calf



2. Lion \_\_\_ Cub



3. Dog \_\_\_ Pup



4. Chicken \_\_\_ Chick



5. Horse \_\_\_ Colt / Foal

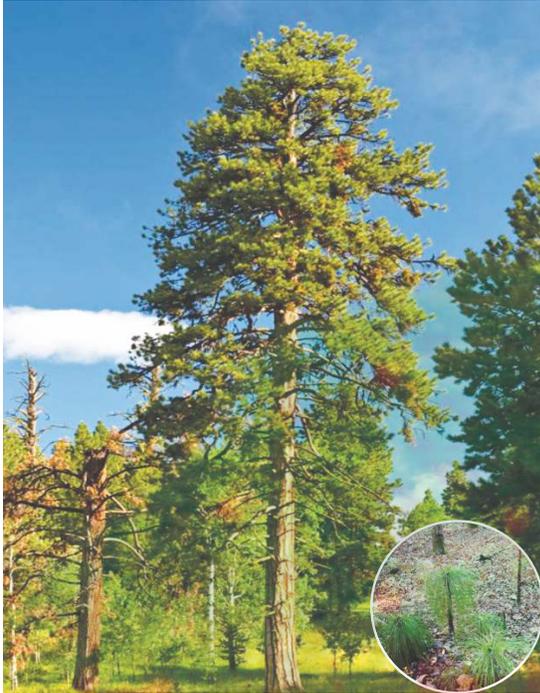


6. Duck \_\_\_ Duckling

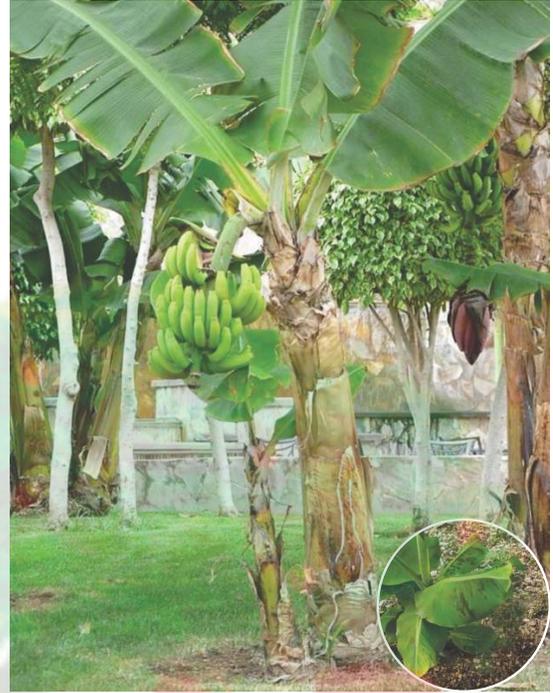
## Plants and their young ones.

Young plants are known as seedlings or saplings and grow into adult plants.

### Examples:



Pine tree and its young one



Banana tree and young banana plant



Rice plant and its young one



Wheat plant and its young one

## Life cycle of living things

Life cycle is the series of changes in the life of an organism.

### Life Cycle of Hen

The life cycle of hen completes in three stages.

#### 1. From egg to chick:

The hen lays eggs and sit on her eggs. After 21 days, the egg breaks and the chick comes out.



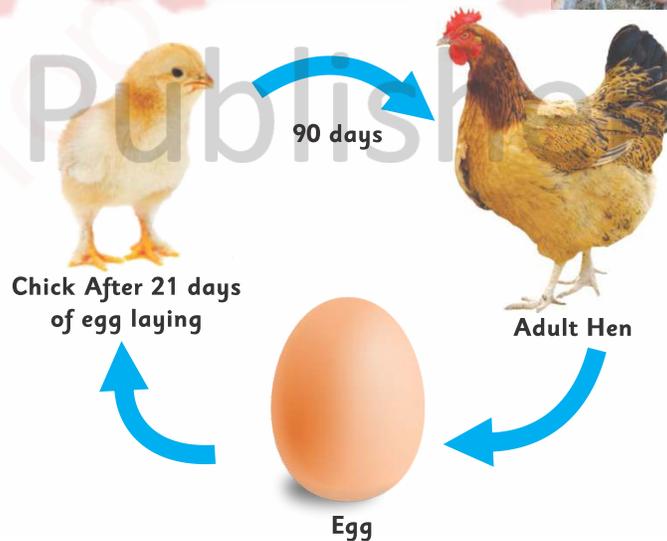
#### 2. From chick to hen:

The chick takes around 90 days to reach complete adulthood (hen/rooster).



#### 3. Hen starts laying eggs:

The adult hen lays eggs and the cycle starts again.



## Life cycle of Plants

### Life Cycle of Sunflower

#### 1. Germination:

When seeds are sown in the soil, then after sometime, they produce shoots which later become the stems & roots.

#### 2. Growth:

The roots of the small plant grows downward and the stem grows upward.

#### 3. Flowering:

The plant develops flowers after 3 weeks.

#### 4. Seed development:

One week after the flower develops, the colourful leaves fall off and seeds are developed. These seeds are ready to be sown again.



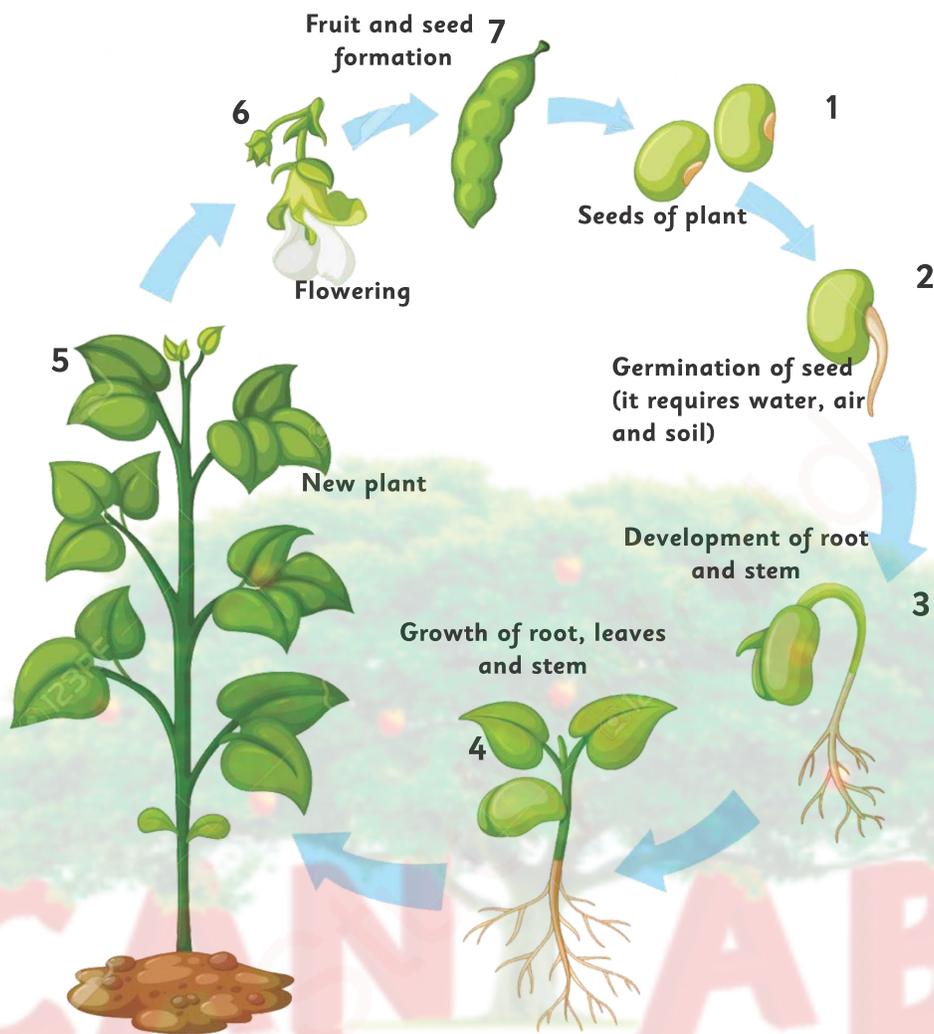
Sunflower



### Life cycle of sunflower

#### Teachers Corner:

- Help the students understand the life cycles.
- Tell your students the importance of different life cycles.
- Help your students in their activities.
- Help your students recognize a few animals, insects, birds, plants and their young ones.



### Activity

Take two small cups with a little water in each one. Place a few seeds in each one. Keep one in a dark place inside a room and the other on a window sill. Observe what happens after a few days and share with your class

## The life cycle of plant

### Teachers Corner:

Collect and paste pictures of some plants and also label them.

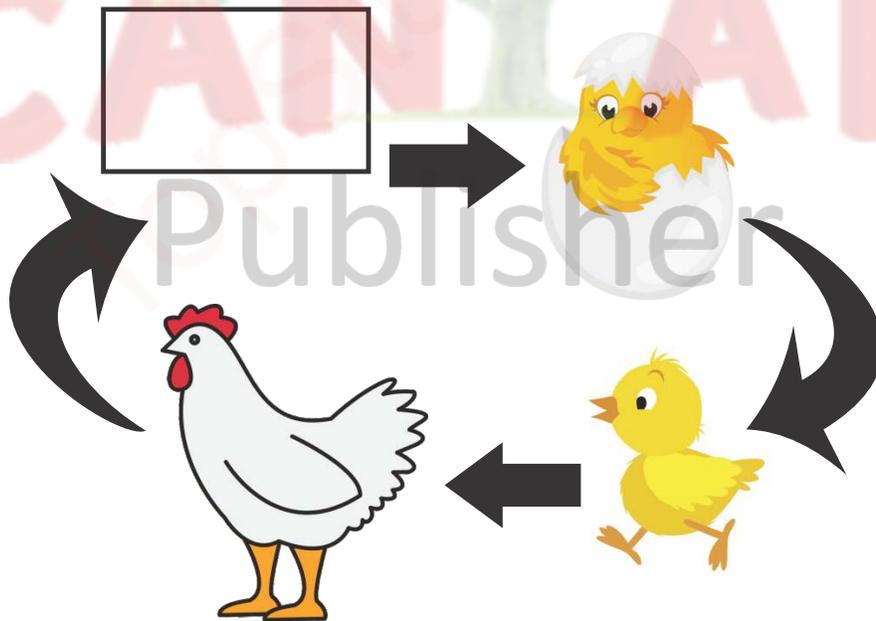
## Exercise

1. Mark (✓) and (x) in the box:

- a. The young one of a cat is called a puppy
- b. The young one of a cow is a calf.
- c. The young one of a lion is a cub.
- d. The young one of a dog is a colt.
- e. The young one of a camel is a calf.

✓	x
<input type="checkbox"/>	<input type="checkbox"/>

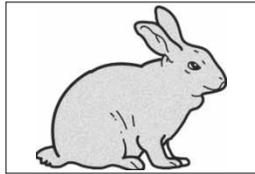
2. Look at the diagram of life cycle of hen.



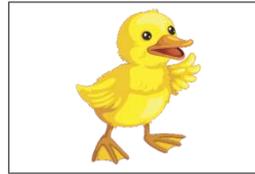
What will come in the empty box in the life cycle of hen?

**3** Match the young ones with their parents.

Rabbit

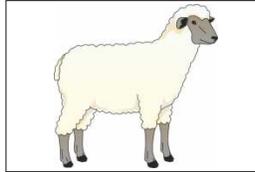


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Duckling

Sheep



•



Calf

Cow

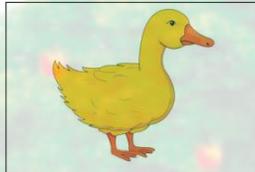


•



Poult

Duck



•



Kit

Turkey



•



Lamb

**4** Answer the following questions.

1. How would you define the term life cycle?
2. What are the seedlings?
3. What is germination?
4. What are the requirements for germination?

## CHAPTER 3

# Sun

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Recognize that while living on the Earth, we see the sun rising from the East and setting in the West.
- Name the four cardinal directions.
- Name places towards North, South, East and West of the school and home.
- Describe the size of the shadow with the position of the sun.
- Recognize that the size of the shadow created by the position of the sun was used to tell the estimated time.

## The Sun

We can see, feel and observe the sun every day on a clear day. The sun is a large, round and bright star in the sky. It gives us light and heat.

### Do you know?

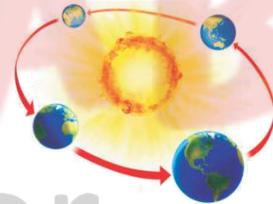
What is the name of the direction from which the sun rises everyday?



### Interesting Information

Earth revolves around the sun.

**All seasons occur due to the revolution of the earth around the sun.**

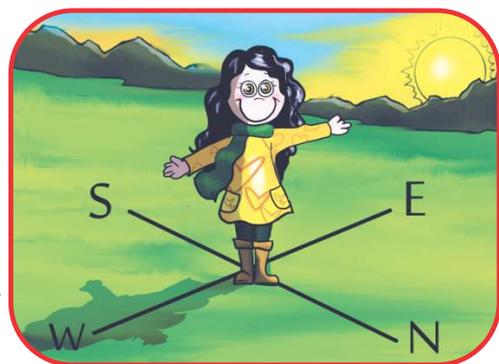


## Direction

A course along which someone or something moves is called direction.

### Four important directions

There are four important directions. Their names are North, East, West, and South.



### Activity

Look at the map of Pakistan. Find out the four directions on it.



## Shadows

Have you seen your shadow? Do you know how its made?

A shadow is a dark image formed by a body that blocks rays of the light.

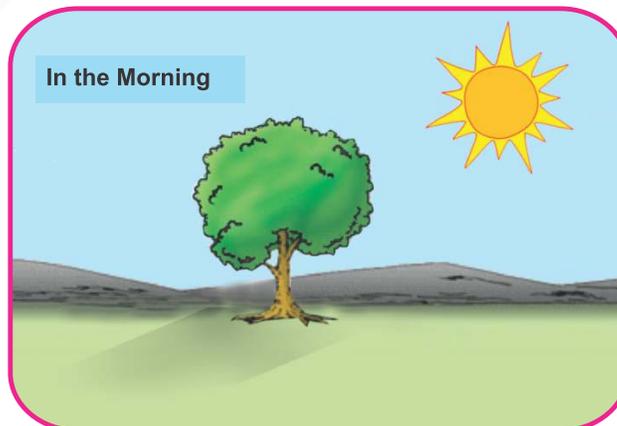
## Size of the Shadow with the position of the sun

### i. In the Morning

**Position of the sun** The sun is towards the East.

**Position of the shadow** The shadow will be towards the West.

**Size of the shadow** Shadow is longer than the body.



### Activity

Name the places towards North, South, East and West of your school or home.

Ask one group member (student A) to stand facing east with arms spread out and eyes covered.



Now ask four group members to stand around student "A" according to the four directions.

The students call out their names one by one and student "A" will tell the direction in which the student who is calling out is standing.

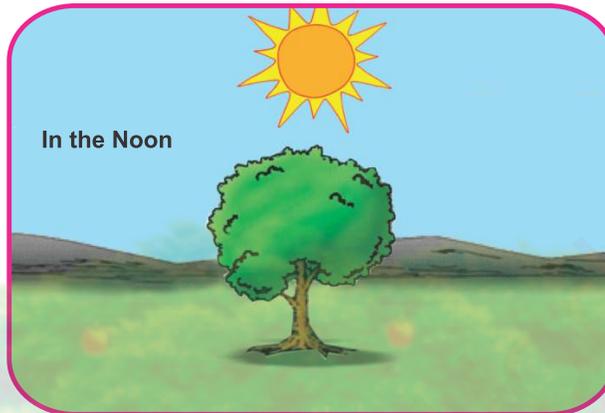
Repeat activity with different students from the group.

## ii. In the Noon

**Position of the sun** The sun is on top.

**Position of the shadow** Under the feet.

**Size of the shadow** Shadow is much smaller than the body.

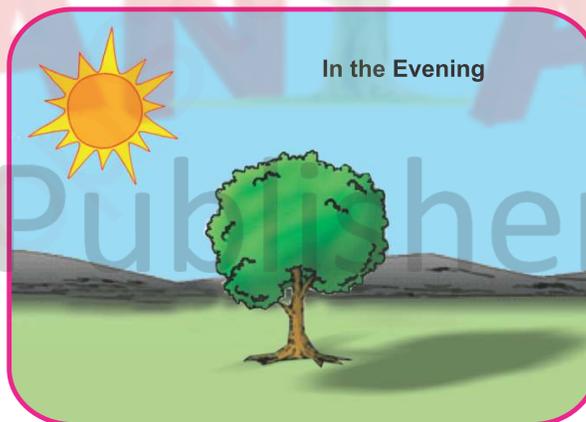


## iii. In the Evening

**Position of the sun** The sun is towards the West.

**Position of the shadow** The shadow will be towards the East.

**Size of the shadow** The shadow is longer than the body.



### Activity

Arrange a shadow competition in your class. Ask your students to make different body movements. Observe how shadow changes with the movements of the body.

## Reflections in Water and Mirrors

We see the reflections of objects in mirrors, ponds and lakes. These reflections are images of objects.



Reflection of Faisal Mosque in the side-mirror of a car



Reflection of the mountains in the lake.

## Rainbow

The water drops in the air after rainfall bend light and split it into seven colours. This appears as a rainbow.



### Do you know?

The rainbow is curved as it reflects the round shape of the sun.

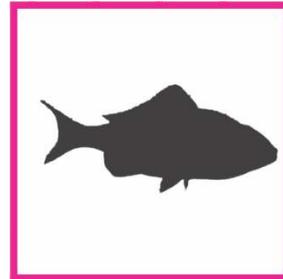
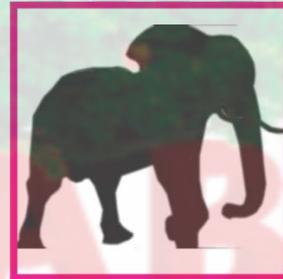
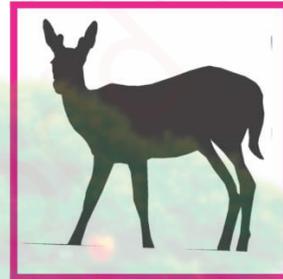
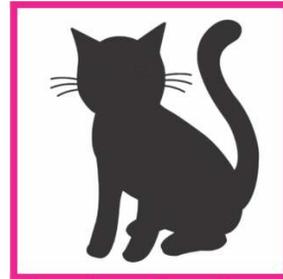


### Activity

1. To create an indoor rainbow fill a glass pan with water and place a mirror in the water so that it is leaning against the edge of the pan.
2. Completely darken the room and shine a flashlight on the mirror.
3. Carefully adjust the angle of the light until a rainbow is reflected on a wall or the ceiling.
4. You can then give children paper and art supplies to copy the order of the colors of the rainbow.

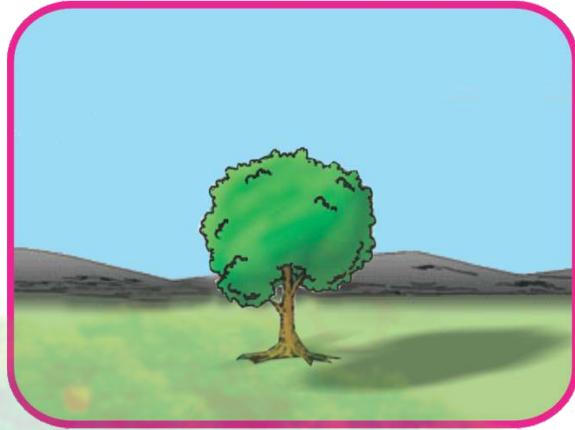


4. Match the shadow with its body.



5. Look at the shadows and draw the sun. Indicate morning, noon or evening.

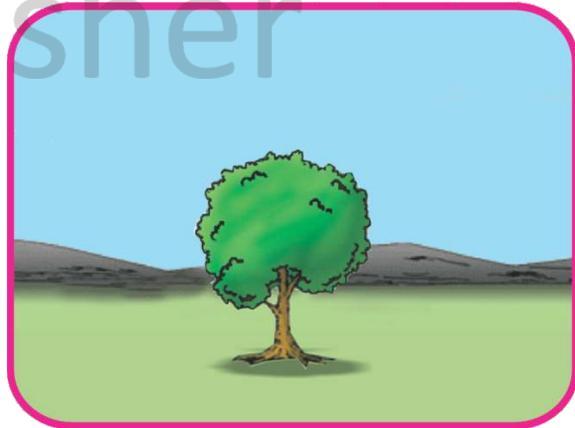
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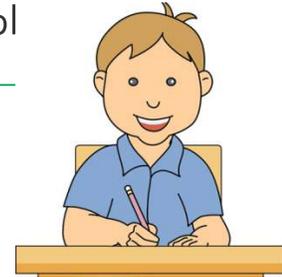
## 6. Answer the following questions.

i. Write the direction of your home from your school

\_\_\_\_\_

ii. Write the names of four important directions.

\_\_\_\_\_



### Practical Work

- ▶ Take a one meter long stick and fix it in your school ground. Look at the shadow of the stick at the end of each period.
- ▶ Observe the relation of the sun and the shadow.
- ▶ Observe shadows of different objects at daytime.
- ▶ Observe the sun when it rises and sets. Note its time in winter and summer.

### Teachers Corner:

- ▶ Help your students understand the relation of the sun and the shadow.
- ▶ Help them perform different activities.
- ▶ Help them understand different directions.



Publisher

## CHAPTER 4 Energy and Energy Transfer

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Identify sources of energy (e.g the Sun, flowing water, wind, coal, oil, gas)
- Understand that energy is needed to move object and for heating and lighting.

Energy is the ability to do work. Energy comes from different sources. We obtain energy from these sources in different forms.

### Sources of Energy

#### The Sun

Sun is the natural source of energy for all living organisms. We get heat and light from the Sun. Fruits, vegetables and plants need sunlight to grow.



#### INTERESTING FACTS

Sun light is a renewable source of energy unlike non-renewable sources such as fossil fuels. Solar panels trap the sun's energy which is then used to light homes, heat water, heat homes.

#### Flowing Water

We generate electric energy from flowing water. Usually dams are made to store water and use water for producing electricity when required. The electricity is then supplied for use in homes, markets, factories and industries.



## Wind Energy

Energy from the wind can be converted into electrical energy. Wind turbines are used to produce electricity in windy areas.



## Coal Energy

Coal burns to give us light and heat. Coal is one of the oldest source of energy that we currently use.



## Oil Energy

Oil is found deep underground. It is used to run machines. Petrol and diesel are used in vehicles.



## Gas Energy

Natural Gas also gives us heat energy. Natural gas is supplied to households in pipes. It is used for cooking and for heating homes during winters. Compressed natural gas (CNG) is used in vehicles.



### INTERESTING FACTS

Graphite is a type of coal that is used in pencils for writing.

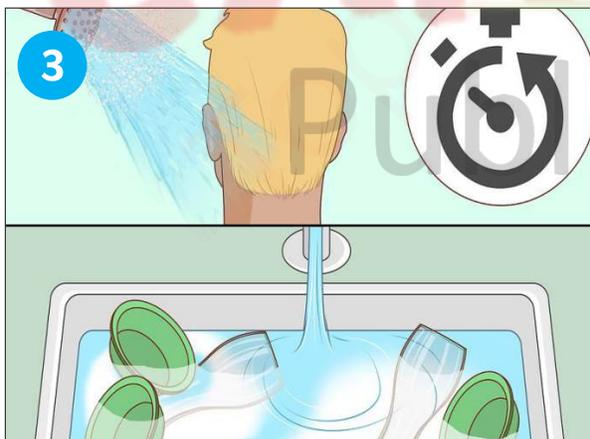
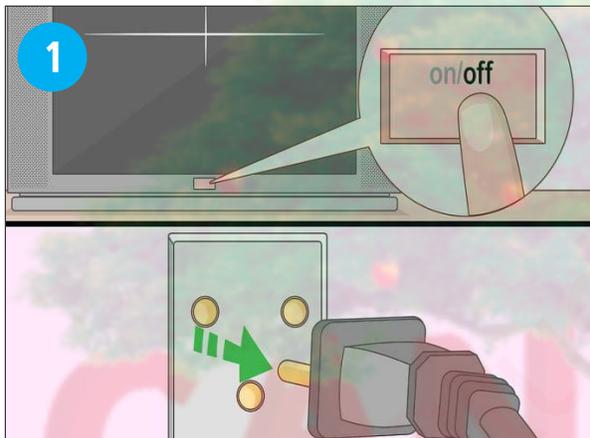
### Do you know?

Crude oil(raw oil) is refined to get petrol.

## How to save energy

In order to reduce electricity bills and conserve resources, we need to keep energy losses from our homes to a minimum level. There are lots of methods we can use to reduce of losses. Some of which are:

1. Switch off extra lights, fans and electrical appliances when not in use.
2. Use warm clothes instead of heaters.
3. Avoid wastage of water.
4. Walk or ride a bicycle to nearby places.



### Can you tell?

What source of energy do you use at home for cooking food?

### Do you Know?

Why is energy important to our bodies?  
Living organisms need energy for their bodies' for daily activities and processes.



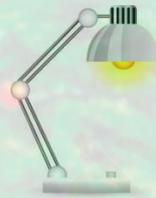
**We need energy to do our works.**

We get our energy to do work from food.

### Why do we need energy?

We need energy to do everything in our lives.

Reading a book...



...Running around the school.

...Riding a bike.



... Even resting needs energy.

**Activity:1** Identify the areas in the picture in which energy is being wasted.



**Activity:2** Take a magnifying glass and place it directly in the sunlight over a piece of paper. See what happens?



**Teachers Corner:**

Help students do this activity and warn them to be careful.



## Exercise

1. Match the form of energy with its source.

Light



Electricity



Fire



2. Name three sources of light energy.

(1) .....

(2) .....

(3) .....

**3. Which of the following things are run by electric energy?**



**4. What is energy?**

**5. Write four things you have done today using energy.**

(1) ..... (2) .....

(3) ..... (4) .....

**6. Why is it important to save energy?**

CHAPTER

5

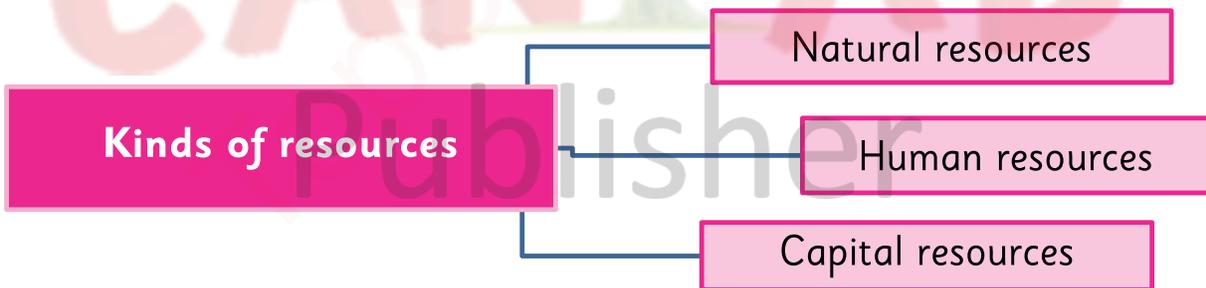
# Natural, Human and Capital Resources

## Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Define the term natural resources, human resources and capital resources.
- Identify natural resources (plants, animals, water, air, land, forests & soil) human resources (farmer, builder, painters etc.) and capital resources (trucks, computers, factory buildings etc.)
- Define the terms: goods, services, buyers and sellers.
- Identify how a good or service is made available.
- Identify the main goods and services of their local area.
- Recognize the concept of specialization.
- Recognize the need for interdependence as not all goods and services are available in their area.
- Define scarcity.
- Recognize that people make economic choices because goods and services are limited.

Allah Almighty has bestowed our Earth with many resources which are useful to us.



## 1. Natural Resources:

Resources found in nature are called natural resources, e.g. plants, animals, water, air, land, forests and soil etc.



Plants



Animals



Water



Forest



Land



Air

**Activity**

Make a list of natural resources you can see in your surroundings.

## 2. Human Resources

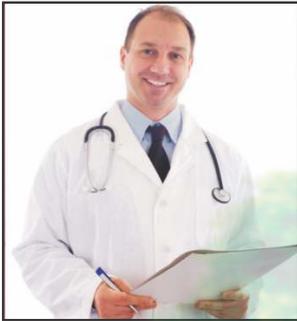
The people who are useful to society are called Human Resources.

### Examples of Human Resources:

Following are a few examples of human resources.

#### Think and tell?

Name some of the professions that contribute actively to the society.



Doctor



Farmer



Engineer



Mason



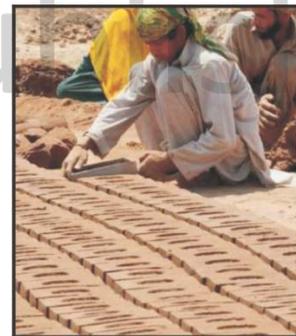
Painter



Driver



Shopkeeper



Labourer

#### Can you tell?

How can a teacher be useful to our society?  
How are each of these people useful to our society.



#### Remember

A doctor, a teacher, a lawyer and an engineer are experts in their jobs.

### Activity

Act out the role of a person you want to be when you grow up.  
How would your choice be helpful for society?

## Capital Resources:

Tools, machines and factories are called capital resources. Capital resources are goods made and used to produce other goods and services. Vehicles, ships, factories, farms, motorways and computer are capital resources.



Vehicles



Factories



Dairy farm



Motorway

### Think:

- What is the link between human and capital resources?
- How are these capital resources useful to us?

## Goods and Services

**Goods:** Goods are the things we can buy and sell. They includes items we buy for our personal use too. Goods can be used once or over and over again for example books, pencils, clothes, disposable items etc. These goods come from natural and capital resources.

**Services:** A service is something that someone does for you, like or medical treatment. Banking, cleaning, teaching and transportation are also services. It satisfies a need and fulfills a demand.

### Activity

Can you think of some services?

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_
- iv. \_\_\_\_\_

### Can you tell?

Why do you buy a book, a pencil, a pen, and a notebook?

### Activity

Name three services people do for you.

My name is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Buyer and Seller

A person who buys a thing is a buyer and the one who sells things is called a seller.

### Activity

Make a list of the things you bought in this month. From where did you buy them?

Buyer →



← Seller

## Interdependence

Interdependence means the dependence of people on each other for meeting their needs. We depend on teachers to get education. We depend on doctors to get treatment. We, the teachers and the doctors depend on farmers to get food.

### Activity

Write the correct interdependence occupation to fill in the blanks.

1. We depend on \_\_\_\_\_ to teach us.
2. \_\_\_\_\_ to care for our illness.
3. \_\_\_\_\_ to make buildings.
4. \_\_\_\_\_ to sell us things.
5. \_\_\_\_\_ to grow crops.

Think of some more examples of interdependence.

### Teachers Corner:

Arrange a shopping day for students.

## Scarcity

We say a thing is scarce when it is:

- (i) Not easily available.
- (ii) Available in small quantities.

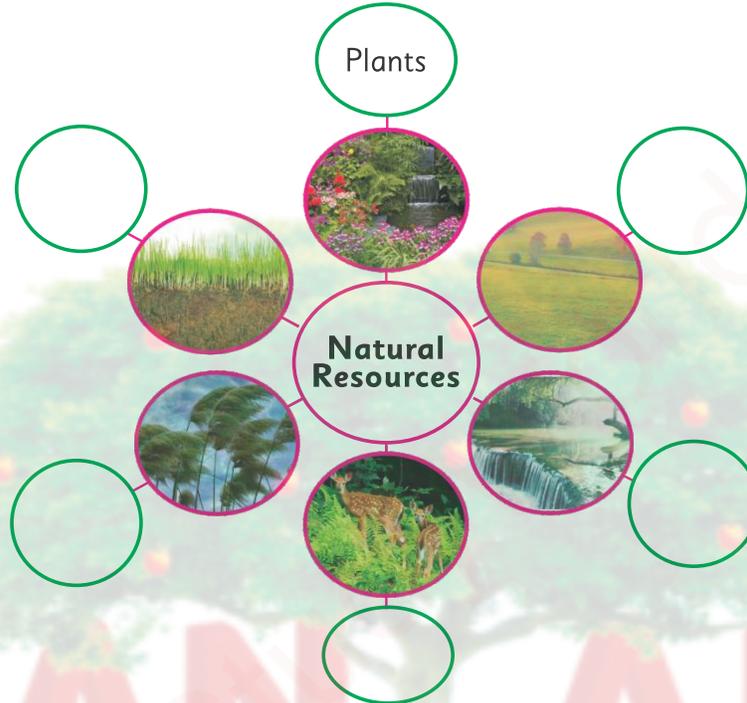


### Activity

Go to the market. Find out what things are scarce.

## Exercise

1. Can you write the names of natural resources in the circles?



2. Tick (✓) services or goods in each case.

What I paid for	What I bought
A computer	goods or services
A toy	goods or services
Teaching	goods or services
Hair cutting	goods or services
Milk	goods or services
Sugar	goods or services
Driving	goods or services
Cooking	goods or services
Chocolate	goods or services
Car washing	goods or services

**3. The picture shows three types of resources.**



- i. Draw circle around natural resources.
- ii. Draw squares around human resources.
- iii. Draw triangles around capital resources.

**4. Who am I? Circle the correct option.**

- i. I bought a pencil and a notebook for myself:  
(a) a natural resources (b) a service (c) a seller (d) a buyer
- ii. I sold a cow:  
(a) a buyer (b) a seller (c) a service (d) a thief
- iii. I come from natural and capital resources. I am solid. People buy me:  
(a) service (b) goods (c) buyer (d) seller
- iv. I am not solid. I am something people do for each other. I am useful:  
(a) service (b) goods (c) air (d) electricity

## 5. Answer the following questions.

- i. Define scarcity.
- ii. What is the difference between goods and services?
- iii. What happens when goods and services are scarce?
- iv. How do people help each other?
- v. Give two examples of interdependence in your school or home.

### Practical Work

- ▶ What did you buy yesterday? Make a list of natural resources present in your area.
- ▶ Find out what goods and services are available in your area.

### Activity:2

Draw two goods that you see around you and colour them.



### Teachers Corner:

Help your students in their activities and practical work.



## CHAPTER

# 6

# Conservation of Natural Resources

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Describe ways in which humans have changed the natural environment.
- Define the term pollution.
- List different types of Pollution (noise, air, water, land etc.)
- Predict that what would happen if natural resources were used up.
- Suggest ways to save natural resources.
- Identify the endangered animals of Pakistan.
- Suggest ways to protect the endangered animals.
- Identify animals, which are extinct.

## Natural Environment

Natural environment is made up of all living and non-living things naturally found on earth. Can you name some things found in the natural environment.



Increase in population decreases the size of forests. Humans cut trees and change the natural environment.



Smoke arising from burning of litter is spoiling our clean air.



Drain of waste water from factories is destroying our water

## Pollution

Addition of harmful matter into the natural environment is called pollution. Pollution may be of different types.



High level of unpleasant sounds is called **noise pollution**. It gives rise to mental disturbances.



Polluted water leads to spread of diseases and this is called **water pollution**.



Smoke from vehicles, burning of litter, and factories causes **air pollution**.



Open disposal of garbage causes **land pollution**.

## Effects of decreasing natural resources

Human beings depend upon natural resources. They depend upon them for their food, oxygen, clothes, houses, etc. If these resources are decreased or depleted, survival becomes difficult.

If trees are cut, there will be floods.



Crops would not be grown without water. This would lead to shortage of food and will result in famine.



Depletion of coal, oil and gas would cause shortage of energy (electricity, heat).



### Activity

Make a poster to show what would happen if all the natural resources especially water, are used up. Mention all the possible threats that we have to face.

### Teachers Corner:

Tell students why they should say no to plastic bags.  
Explain to the students what famine means and how it affects the society.  
Highlight the need for conservation of natural resources.

## Conservation of resources

Conservation means to protect or save something by using it wisely.

### Save Water



Do not throw rubbish into water bodies.



Use a watering can instead of pipe to water plants.



Use water wisely at home.

### Save Energy



Use alternative sources of energy such as wind, solar energy.



Use cycle and public transport instead of personal vehicle to save fuel.



Turn off unnecessary lights.

### Save Air



Properly dispose off garbage. Do not burn it in open air.



Tune your vehicles on time to avoid smoke emission.



Plant as many trees as you can.

## Endangered Animals

Animals live happily in their natural habitats. When human activities destroy their natural environment, animals are at the risk of disappearing forever. These are called endangered animals.

### Endangered Animals of Pakistan



Markhor



Mountain Weasel



Asian Black Bear



Balochistan Forest Dormouse



Indus River Dolphin



Branded Eagle Ray



Bigeye Tuna



Marco Polo Sheep



Snow Leopard

### Ways to protect endangered animals

1. We should stop illegal hunting of endangered animals.
2. Protect the natural habitats of endangered animals.
3. We should enhance the knowledge and awareness about endangered animals among local people.

### Do you know?

1. 17 May is the day of endangered animals.
2. Markhor is the national animal of Pakistan.
3. Chakor is the national bird of Pakistan.

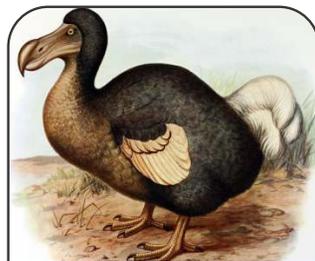


## Extinct Animals

Extinct animals lived on earth but are no more there. Their race has ended.

### Examples

Dinosaurs



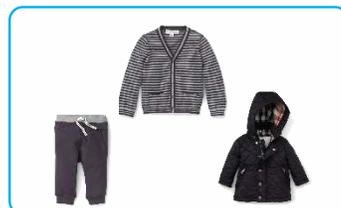
Dodo bird



Golden toad

## Exercise

1. Look at the ways through which people change the earth's environment and cause problems. Then look at the ways to save the earth from pollution. Connect the problem with the solution through a line.



2. Many things we use everyday affect the natural resources.  
Draw a line from the activity to the thing it most affects.



### 3. Predict what will happen when

- i. All petroleum on earth is used up:
- a all vehicles will stop.
  - b people will travel on animals.
  - c all vehicles will be converted to solar energy.



- ii. All natural gas on earth is used up:
- a people will burn wood.
  - b people will use solar energy.
  - c people start using biogas.
- iii. All the water is used up:
- a people will drink cold-drinks.
  - b people will use juices.
  - c all living things will die.
- iv. All the air is polluted:
- a life will end on earth.
  - b people will be sick.
  - c people will use gas masks.
- v. All the trees are cut down:
- a birds will loose their homes.
  - b humans and animals will die.
  - c people will only eat meat.

### 4. Identify and tick the endangered animals.

i.



Goat



Antilope



Markhor

iii.



Grizzly Bear



Snow leopard



African lion

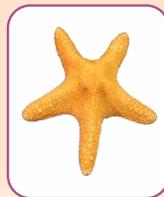
ii.



Indus Dolphin



Jelly fish



Starfish

iv.



Golden toad



Chakor



Dodo bird

## 5. Encircle the extinct animals only.

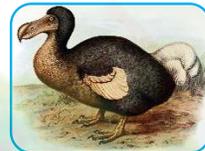
i.



ii.



iii.



## 6. Answer these questions.

- i. What is natural environment?
- ii. Describe two ways human beings have changed the natural environment?
- iii. Suggest two ways to protect endangered animals?
- iv. How can you save the natural resources?
- v. Can we live on earth if all the natural resources are used up? Give at least one example.

### Practical work

- ▶ Tell your elders “shoot the animals with camera and not with the gun.”
- ▶ Turn off the unnecessary lights of your home.
- ▶ Use your notebooks, books and pencils with care.
- ▶ Keep your room, house, street and surrounding clean.

### Teachers Corner:

- ▶ Tell environment friendly stories to the students.
- ▶ Celebrate Earth week at your school.
- ▶ Tell your students why they should say no to plastic bags.
- ▶ Put baskets or dustbins in your class and at different places of the school to keep it clean.
- ▶ Tell your students why different days like “Earth Day” or Endangered Animals day etc. are celebrated.
- ▶ Guide your students about the importance of conservation of natural resources.



## Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Identify that the shape of teeth helps animals to eat their particular foods.
- Recognize that healthy living requires eating a balanced diet, keeping clean, getting a good night's sleep and exercising regularly
- Classify foods into the basic food groups.
- Define a balanced diet.
- Identify foods for the three meals of a day to prepare a balanced diet.
- Recognize the importance of appropriate rest and a good night's sleep for healthy living.
- Identify the ways to get sufficient exercise to stay healthy.

## Food and Feeding

Food is the basic need of living things. They cannot survive without food. Animals can be divided into three groups on the basis of the food they eat.

### i. Herbivores

These animals eat green grass, plants, fruits, leaves and roots etc.

#### Examples

Cow, buffalo, rabbit, deer, sheep, horse, grasshopper, zebra and elephant are some herbivores.



Cow



Deer



Rabbit



Elephant



Grasshopper

## Teeth of herbivores

These animals have broad and flat teeth. These teeth are very sharp which help them in grinding their food.



## ii. Carnivores

Flesh eating animals are called carnivores.

### Examples



Tiger



Falcon



Fox



Polar bear

### Teeth of carnivores

Teeth of carnivores are long, sharp and pointed. They help them in tearing the flesh.



### iii. Omnivores

Omnivores eat both meat and plants.

#### Examples



Human



Mouse



Turtle



Bears



Ostrich



Crow



Chimpanzee

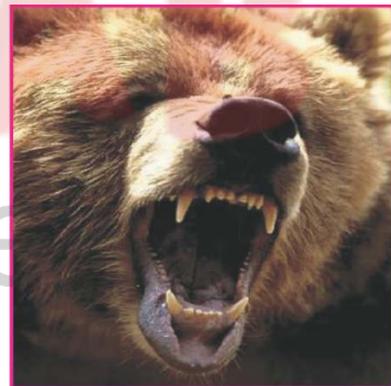
### Do you know?

Human beings are also Omnivores



## Teeth of omnivores

Omnivores have sharp and pointed teeth like carnivores. They also have broad and flat teeth like herbivores.



## Basic food groups

Following are a few basic food groups.

### i. Fruits

Apples, apricots, bananas, dates, grapes, oranges, mangoes, melon, peaches and pineapples etc.



Dates



Apples



Apricots



Bananas



Melon

## ii. Vegetables

Carrots, potatoes, spinach, radish, turnip and cauliflower etc.



Carrots



Onion



Spinach



Cauliflower



Turnip

### Activity

Name two fruits and vegetables you like the most.

### iii. Seeds or Grains

Cereals, rice, gram, pulses, green gram, horse gram.



Cereals



Pulses



Rice



Horse Gram

### iv. Dairy Food

Milk, butter, yogurt, cheese, eggs, ice cream.



Milk



Eggs



Ice cream



Cheese

#### Teachers Corner:

Explain to the students that they must always wash their hands with soap before and after eating.

## v. Meat

Beef, poultry, fish, mutton.



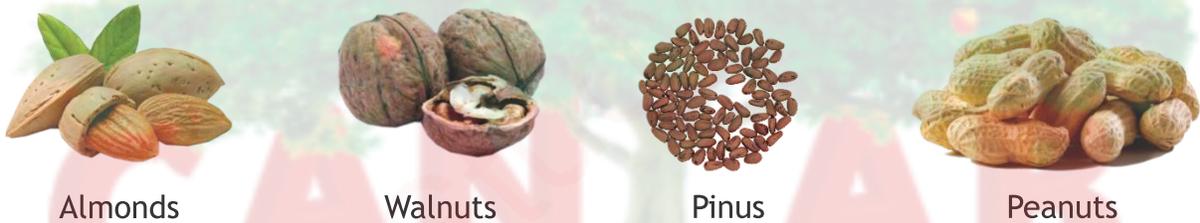
Beef

Fish

Poultry

## vi. Dry Fruit

Almonds, peanuts, walnuts, raisin, pinus.



Almonds

Walnuts

Pinus

Peanuts

## Balanced diet

Balanced diet is a diet which has right amount of all food items. A balanced diet meets all the needs of our body and keeps us healthy.

### Activity

Identify foods for the three meals of a day to prepare a balanced diet. You can take help from your teacher and family.

## Basic needs for Healthy living

Do you know how we can keep ourselves healthy? Cleanliness, proper sleep and exercise are the basic factors of healthy living.

## i. Cleanliness

Cleanliness makes us healthy. Therefore, we must keep our bodies, our clothes, our houses and our environment clean.



### Do you know?

Food gives us energy.



### Activity

Prepare a flyer (pamphlet) for the awareness of people about the importance of cleanliness for healthy living with the help of your teacher.

## ii. Proper Sleep

Proper sleep is important for good health. Going to bed early and getting up early in the morning is the best way to get proper sleep.

Proper sleep makes us active. After proper sleep we can study and play well.



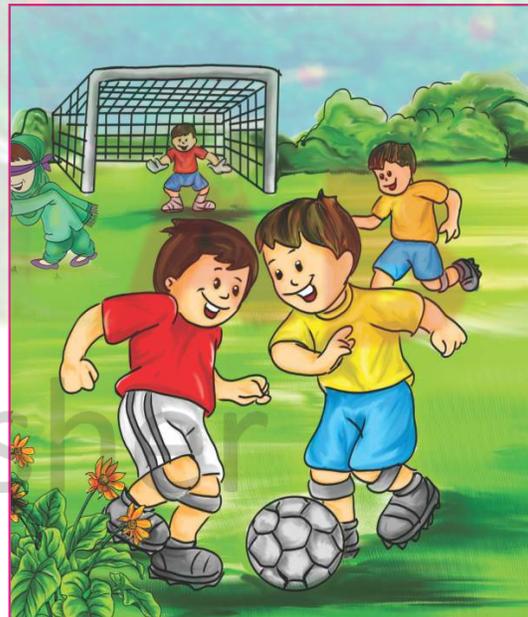
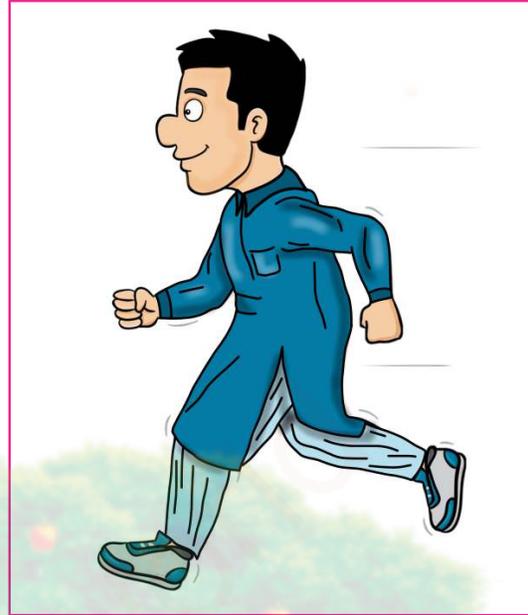
## iii. Exercise

Regular and proper exercise keeps us healthy. It protects us from many diseases. It keeps us fit, healthy, fresh and active. Walking, running, skipping, cycling, and playing etc. are some good exercises.

### Do you know?

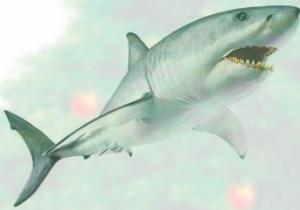
Hockey is our national game.





## Exercise

1. Match the diet with the right animal.



2. Circle the animals that eat grass.



3. Name the group of the following animals on the basis of their teeth?

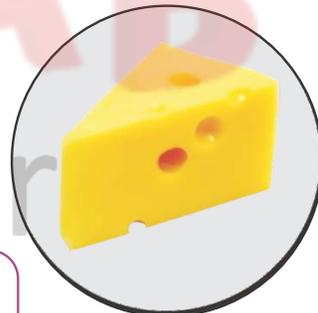


4. Name the group of the following food?

a



b



## 5. Answer the following questions.

- i. Describe the teeth of meat eating animals?
- ii. What are the basic needs of healthy living?
- iii. Classify foods into basic food groups?
- iv. What did you eat yesterday? Was it a balanced diet?
- v. Why is proper rest important?

### Practical Work

- ▶ Wash your hands with soap before eating food.
- ▶ Go to bed early and rise early in the morning.
- ▶ Brush your teeth twice a day.
- ▶ Keep your nails cut.
- ▶ Keep yourself, classroom, house and surrounding clean.

### Teachers Corner:

- ▶ Tell your students the importance of a balanced diet.
- ▶ Tell your students the importance of vegetables.
- ▶ Keep an eye on cleanliness of the students.
- ▶ Guide students to play outdoor games.
- ▶ Guide students to exercise regularly.



CHAPTER

8

# Past and Present

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Recognize the present time is different from the past
- Identify how schools, communities, transportation have changed over time (from the given picture).
- Sequence events in a narrative in chronological order.

Past is a moment or time which has gone by. It can exist in your memories but cannot be relived. For example you can say, "I got admission in the school three years back". This was in the past. Present is the existing time which is passing by. For example you can say, "I am sitting in my classroom right now". This is in the present.



### Teachers Corner:

Tell the students how the present time is different from the past through various examples.

## Difference between things of the past and present time.

Many things from the past may exist even today. For example some people in villages still cook food by burning wood. In the cities people use natural gas and electricity. Some things from the past have changed completely or to some extent. For example, in the past leather shoes were only made by hand. In the present times we have machines that make shoes out of leather. Technology has improved considerably from the past. For example tractors are now used to plough the fields. But the age old practice of ploughing the fields with the help of an ox still exists.



Farmer ploughed the field with ox.



Tractors are used for ploughing.



People used woods for making fire.



Gas stoves for cooking.

### Teachers Corner:

Help the students think of some more practices from the past that still exist in the present.

Technology has improved from the past. Communities, schools and transportation have changed for the better in present times. Many of them have adapted to modern techniques.

## Schools

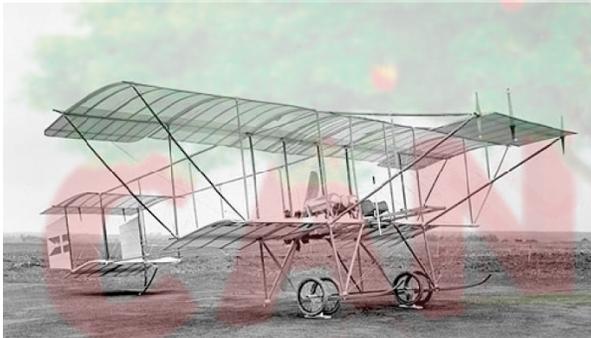


Past



Present

## Transportation



Past



Present

## Communication



Past



Present

## Exercise

### 1. Tick (✓) the correct box.

1. Mud houses were more common in the past.
2. Internet is a source of transport.
3. Mobile phones are used for communication.
4. Machines make our work easy.

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

### 2. The pictures below show means of transportation. Write "T" for today and "P" for the past.



### 3. Draw a picture of what you think communities might look like in the future.

### 4. Answer the following questions.

1. Name means of communication in the present time?
2. What were the sources of transportation in the past?
3. What facilities do you have in your school?

#### Teachers Corner:

- ▶ Discuss pictures given in the book with the students in detail.
- ▶ Display Q.no.3 drawings in the class to appreciate students.



### Things to do:

- Do you think the future will be better than the present time? Write five lines.
- Compare past things with these in the present. Also collect their pictures and paste them in your note book.
- Visit a museum and record the changes in communities over time.

## Past and Present



## CHAPTER 9 Inventors and inventions

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Explain why inventors are important.
- Identify the qualities/attributes of an inventor.
- Identify major objects invented and their inventors over the last century.
- Imagine and narrate how life would be without any one major invention.
- Classify inventions that improve farming, household chores, space exploration and communication.
- Compose a paragraph about their favorite invention.
- Predict how an invention could change life in the future.
- Identify recent inventions (personal computers, fax machines, microwave, CDs, etc.) and how they have changed the way people work and play.
- Gather and organize information and write a report about a recent invention.

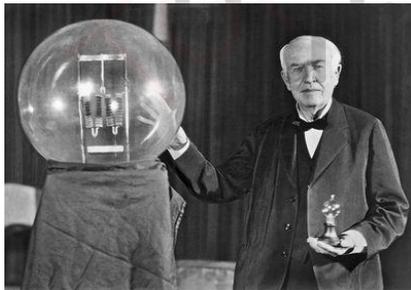
There is a marked difference between in the past and the present. It is all due to rapid inventions made by different inventors.

### Inventor

A person who invents or makes a thing for the first time is called an inventor.

### Invention

A thing that is invented/made by the inventor is called invention.



Thomas Edison invented bulb



Ibn-al-Haitham invented pin hole camera

### Do you know?

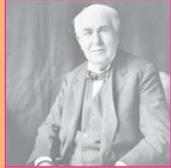
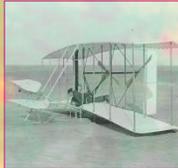
- Something seen or learnt for the first time is called discovery.
- The person who finds, explores and observes something for the first time is called a discoverer.

### Activity

What is your favourite invention? collect its different pictures and write three sentences about it.

## Famous Inventors

Following are some of the great inventors who helped change our life.

<b>Inventor</b>	<b>Invention</b>	<b>Inventor</b>	<b>Invention</b>
			
Thomas Edison	Light Bulb	Ibn Al-Haytham	Pinhole Camera
<b>Inventor</b>	<b>Invention</b>	<b>Inventor</b>	<b>Invention</b>
			
Prof. Wilhelm Rontgen	X-Rays Machine	Wright Brothers	First Aeroplane
<b>Inventor</b>	<b>Invention</b>		
			
Charles Babbage	Computer		

### ► Qualities of an inventor

Here are a few common qualities of inventors. They are

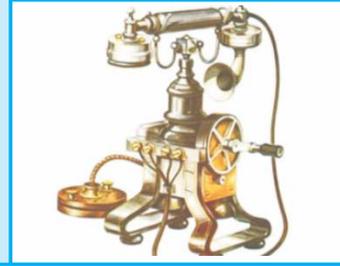
- **Honest**
- **Devoted**
- **Punctual**
- **Hardworking**
- **Committed**
- **Passionate**
- **Intelligent**
- **Courageous**
- **Curious**
- **Dedicated**

**Inventor**



Alexander Graham Bell

**Invention**



Telephone

**Inventor**



Tim Berners Lee

**Invention**



Internet

**Inventor**



John Logie Baird

**Invention**



Television

**Interesting Information about Edison**

- i. Edison built his first lab at the age of 10.
- ii. Edison lost his hearing at the age of 12.

**Teachers Corner:**

Tell students to think of some more inventors and their inventions including some recent ones.

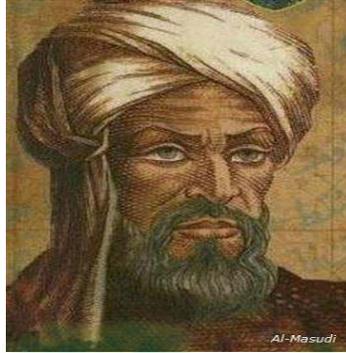
## Muslim Inventors



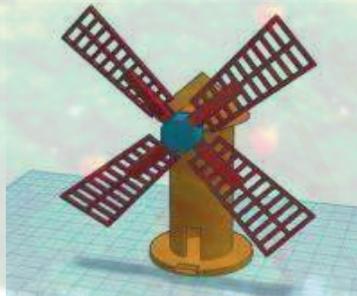
Ibn-e Sina



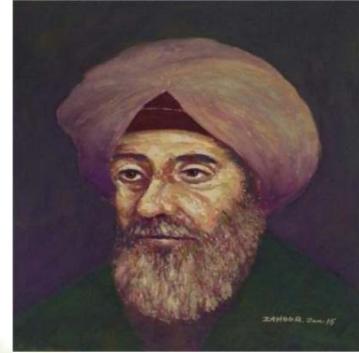
Rose Essence



Al- Masudi



Windmill



Ibn- Al- Haytham



Pinhole camera

## Modern Inventions

### Computer:

Modern digital computer was invented by J.V Atanosoff. It has changed the way we communicate, study, play, talk and work.



Computer



Fax Machine

### Fax Machine:

Alexander.Bain invented it in 1843. It is used to send and receive documents, letters and pictures immediately.

### Microwave oven:

Percy Spencer invented the microwave oven. Microwave oven cooks and heats up various types of food in seconds.



### Electricity:

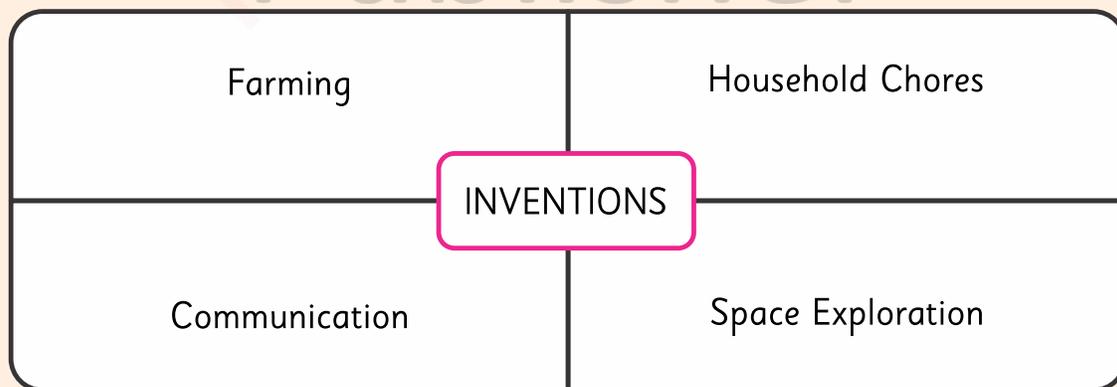
Electricity was invented by Michael Faraday . It is one of the inventions which completely changed the human life. With the help of electricity we use computer, microwave, television etc.



### Questions

- ➔ How would life be without the invention of electricity?
- ➔ How would life be without the invention of computer?
- ➔ How would life be without the invention of a phone and now for cell phone?
- ➔ How would life be without the invention of wheel?
- ➔ How would life be without the discovery of fire?

1. Here are names of a few modern inventions. Write their names in appropriate circles. Refrigerator, Tractor, Rocket, Mobile phone, washing machine, telescope, internet, thrasher, television, bulb, reaper or binder, iron, air conditioner, space ship, fax machine.



## Exercise

### 1. Fill in the blanks.

1. Thomas Edison invented the \_\_\_\_\_.
2. Ibn-e-Sina invented the \_\_\_\_\_.
3. Alexander Graham Bell invented the \_\_\_\_\_.
4. Pinhole camera was invented by \_\_\_\_\_.
5. \_\_\_\_\_ brothers made the first successful flight.

### 2. What will you invent to serve the humanity?

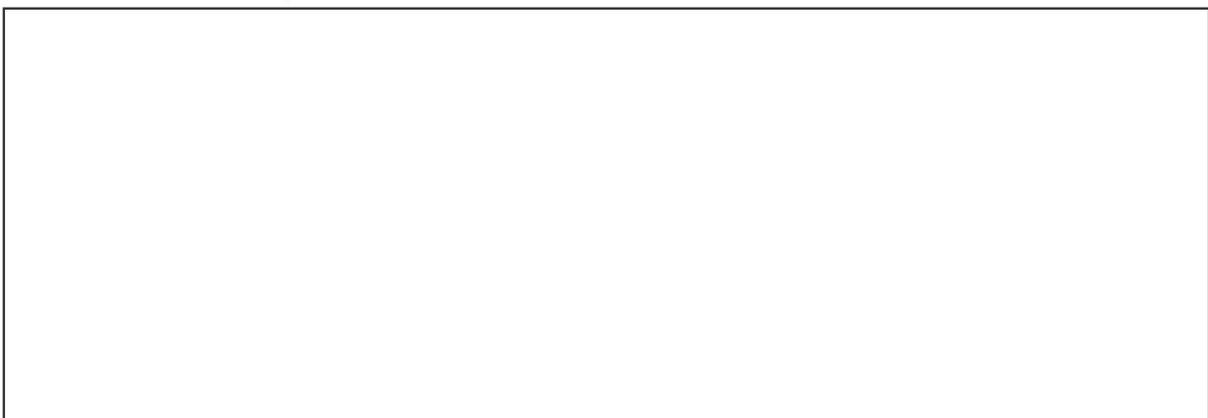
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### 3. Draw a picture of your idea.



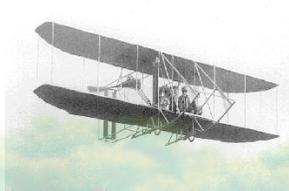
#### 4. How will it be useful?

.....

.....

.....

#### 5. Write names of the inventors and inventions



#### 6. Write a paragraph about your favourite invention.

#### 7. Answer the following questions.

1. Define invention with examples?
2. What is the importance of an inventor?
3. Name muslim inventors and their inventions.

#### Teachers Corner:

- ▶ Tell the students about the importance and uses of inventions to students.
- ▶ Tell a story of inventions to your students.
- ▶ Arrange a discussion on the topic, what will I invent in future.
- ▶ Collect pictures of Dr. Abdul Qadeer Khan, Dr. Abdul Salam and Dr. Samar Mubarak. Paste them in your note book. Write down their inventions.



## CHAPTER 10 Tools & Machines

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Recognize that people in the past used tools to make their work easier.
- Name the tools from the past given in the pictures and describe their functions.
- Recognize that people today used different tools and machines to make their work easier.
- Name some simple machines they see/use at home (scissors, hammer, pliers).
- Explain how simple machines make work easier.
- Recognize that the position and shape of an object can be changed by a force (push and pull).
- Recognize that push and pulls move things fast or slow.
- Recognize from pictures of the past that force applied by humans and animals moved vehicles while today vehicles are moved by machines (Tonga, bullock cart, cycle, push cart, bus, motorcycle and car).
- Observe and describe how motion of vehicles can be changed by applying force (speed up, slow down, change direction etc)
- Recognize that the greater the force, the greater the change in the motion of an object).

### Common Tools used in the Past

In old times people used tools to make their work easy. Long long ago people used stone tools for hunting. These tools made their lives easier and more comfortable.

With the passage of time people learnt to cultivate land. They also made tools to make farming simpler and easier.

Along with agricultural tools, people also developed tools related to day to day life.



#### Do you know?

A tool is a device that can be held in the hand to carry out a particular function.



Axe is used to cut woods.



Spear is used for hunting.



Hammer is used to break the things.



Lever is used to lift heavy load.



Sickle is used to cut crops.



Needle is used in sewing.



Plough is used to plough.



Rope and Pulley are used to draw water from the well.



Saw is used for cutting wood or other materials.

### Some Modern Tools



Electric Saw



Electric Drill



Mouse



Wrench



Sharpener



Key board

**Activity** Match the simple tools with their relevant modern machines.

### Simple Tools



### Modern Machines



### The tools that were in use in the old times

In past many people used tools to make their work easier. Here are some people using simple tools.



Farmer



Blacksmith



Tailor



Goldsmith

**Activity**

- i. Do you know the profession of the person in the picture?
- ii. Can you name the tools in the pictures?
- iii. Do you know how he will use them?



**Teachers Corner:**

- ▶ Tell students how tools make our work easier.
- ▶ Help students understand what tools people used in the past.

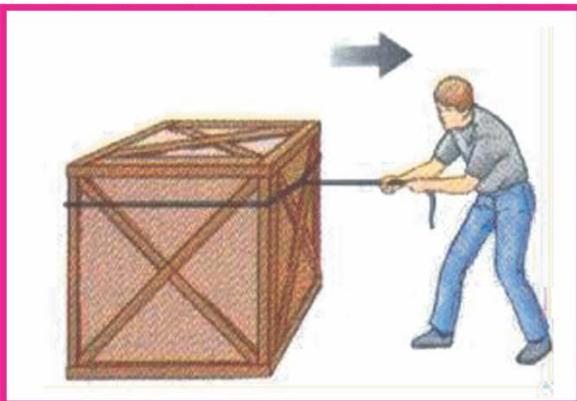
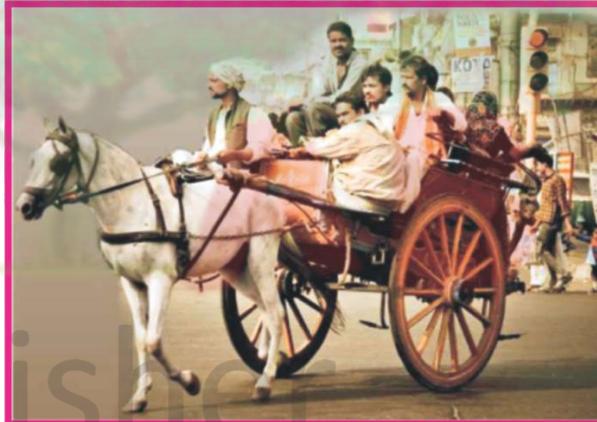


## Force as Push and Pulley Machines

Force is used to push or pull an object.

**Pull:** when we move something to bring it closer, it is called a “pull”

Look at the following pictures carefully.



**Push:** When we move something away from ourselves, it is called a “push”.  
Look at the following pictures carefully.



**Activity**

Ask the students to carefully push and pull the objects in the class room i.e. tables and chairs etc.

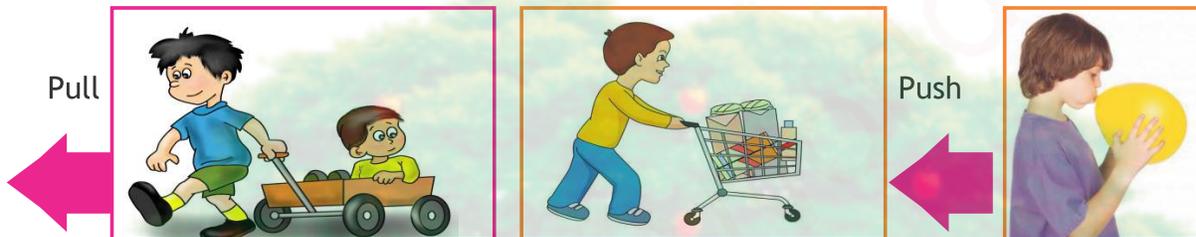
## Uses of Force:

Following are the uses of force.

- i. Force can move static objects.
- ii. Force can stop moving objects.
- iii. Force can push and pull objects.
- iv. Force can slow down the moving objects.
- v. Force can change direction of a moving object.
- vi. Force can change the shape of an object.

### Activity

Practice all the uses of force carefully with your friends.



## Machines:

A machine is a device which makes our work easier.



## Force and Motion:

Force and motion are closely related with each other. A thing can only move when a force is applied on it.

In old times bullock cart moved when the animal tied in front of it applied a force. Now a days cars, buses and motorcycles move when their engine (machine) applies force on them.

## Look at the Picture.

Who will win the race and why?



## Exercise

### 1. Match column A with column B.

#### Column A

Barber  
Farmer  
Tailor  
Gardener  
Blacksmith

#### Column B

Plough  
Scissors  
Hammer  
Sewing Machine  
Sickle

### 2. Choose the correct option to fill the blanks.

- i. A woodcutter uses his \_\_\_\_\_ to cut woods.  
a. axe      b. hammer      c. scissor      d. anvil
- ii. Lever is a \_\_\_\_\_ machine.  
a. simple      b. complicated      c. big      d. small
- iii. A sweeper sweeps with the help of a \_\_\_\_\_.  
a. saw      b. hammer      c. broom      d. axe

### 3. Tick (✓) the correct and Cross (✗) the incorrect.

- i. Tools and machines make our work easier.
- ii. Plough is used for cutting
- iii. When we move some object to bring it closer is called push.
- iv. Force can stop moving object.
- v. Force can not change the direction of an object.

**4. Answer the following questions.**

- i. Name the tools you use in the class?
- ii. What are three uses of force?
- iii. Name some simple machines your parents use at home?
- iv. Which one from the following pairs moves fast and why?
  - a. Tonga or car
  - b. Bullock cart or bus
  - c. Cycle or motorcycle
  - d. pushcart or truck
- v. Tell how simple machines make work easier?

**5. Encircle the tools used by a student.**



**6. Tick (✓) the tools that your mother uses at home.**



**7. Look at the pictures with care. Write push or pull for each action.**



### Practical Work

- ▶ Ask children to meet the people in their locality who use tools or simple machines to earn their living.
- ▶ Visit a children park or play land. Observe “push” and “pull” forces.

### Teachers Corner:

- ▶ Help students perform their activities.
- ▶ Help students use some simple tools.
- ▶ Help students understand the concept of “push” and “pull” in the playland / park.



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## CHAPTER 1 Making The World A Better Place

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Describe the activities that individuals perform for the welfare of the local community.
- Identify the key public issues in their local area (drinking water, school, sewage system etc.)
- Understand what basic human needs and rights are.
- Inquire into an issue, identify its causes, suggest solutions and take a responsible action to solve the issue.
- Recognize that people organize themselves to meet their needs.
- Describe what government does to meet the needs of the people.
- Suggest ways the government and people can work together to meet people's need in the area.
- Identify ways they can demonstrate good citizenship (playing fairly, helping others, following rules, taking responsibility for one's actions.)
- Identify the personal traits of good citizens (trustworthiness, respect for law, responsibility, honesty and respect for the rights of others.)



## ▶ The activities that an individual performs for the welfare of a local community

Following are a few activities that an individual performs for the welfare of a local community.

- ▶ Grows more and more trees.
- ▶ Throws litter in the dustbins.
- ▶ Keeps his body, house, street, school, village, town and city clean.
- ▶ Always turns off extra lights.
- ▶ Does not waste water.
- ▶ Performs his duties sincerely.
- ▶ Sends his children to school.
- ▶ Helps others in time of need.

### Think and promise

- ▶ Where do you throw the litter from your home?
- ▶ Where will you throw it in the future?



### Activity

Identify key public issues in your local area. Tick (✓) the issues of your locality.

1. Absence of clean drinking water.
2. Absence of drainage system.
3. Absence of boys' school.
4. Absence of girls' school.
5. Absence of school building.
6. Absence of electricity.
7. Absence of hospital, dispensary.
8. Traffic Jam.
9. Pollution.
10. Filthy streets.
11. Absence of playground/Parks



### Key Public Issues and Their Solutions

Is your water nice and fresh?



Yes! it comes from the water filtration plant.



What does the water filtration plant do?

It cleans water.



Who installed the water filtration plant?

The government installed it at the request of our people.



I will request the government to build a girls' school in our village.

Sure! Best of luck.



### Activity

Write a dialogue between two students. Talk about disposal of sewerage water from your area.

### Role and Responsibility of the Government

A Government should provide the following facilities to the citizens.

1. Make schools, colleges and universities.
2. Make hospitals
3. Make roads
4. Protect people
5. Supply clean drinking water
6. Recycle wastage



## ► Coordination between Government and people

Wow! Your street is very clean today.

Yes! it is. We throw our litter in the trash bins provided by the government.

That's excellent. We will also practice this in our area.



That is the best example of coordination between government and the people.

We can solve many of our problems in this way.



## Basic human rights

Every human has some basic rights. The basic rights includes education, health care facilities and playgrounds. These needs are fulfilled by government. The government makes schools, hospitals, and parks to facilitate the people.

## ◆ Good Citizen

Good Citizen is one who



Goes to his / her school  
learns his / her lessons



Helps Others



Plays fairly



Throws litter in dustbin



Makes queue at a  
public place



Walks on a footpath

## ► Traits of a Good Citizen

Here are traits of a good citizen

- i. Always speaks the truth.
- ii. Always follows the rules.
- iii. Respects the law.
- iv. Always works with honesty.
- v. Respects the elders.
- vi. Respects the rights of others.

### Group Discussion

Make groups in the class.  
Discuss the qualities of good citizens. Make a poster.



## Exercise

1. Tick (✓) the activities related to the welfare of the community. Cross (✗) the activities harmful to the community.

- i. Cutting trees.
- ii. Planting trees.
- iii. Throwing juice carton in the streets.
- iv. Throwing juice carton in the dustbin.
- v. Leaving water tap opened.
- vi. Keeping water tap closed.

**2. Write three qualities of a good citizen.**

i.

ii.

iii.

**3. Name any three facilities provided by the government in your locality.**

i.

ii.

iii.

**4. Write two public issues of your locality.**

i.

ii.

**5. Give short answers.**

i. What can you do for the welfare of your school?

ii. How do people fulfil their needs?

iii. How does the government help people?

iv. How can you solve the problem of waste disposal?

## 6. Survey.

Make groups in your class. Each group should conduct survey of an area to identify key issue of the area. Try to solve it.

## 7. Colour the traits of good citizenship.

Friendship

Honesty

Dishonesty

Carelessness

Cleanliness

Respect for law

Freedom

Trustworthiness

Faith

Responsibility

Ignoring law

Rights

### Practical Work

- ▶ Arrange a poster competition in the class on the importance of cleanliness.
- ▶ Find out qualities of good citizenship in your friends. Write them on a piece of paper. Share them with your class.
- ▶ Celebrate a cleanliness week in your school.
- ▶ Organize a debate competition on the importance of drinking clean water.

### Teachers Corner:

- ▶ Help students understand the pictures.
- ▶ Help your students in their activities.
- ▶ Help them in making posters, charts and banners.



## CHAPTER 12 Working out Disagreement

### Students' Learning Outcomes:

After studying this chapter, the students will be able to:

- Know that difference exist across space and time.
- Identify the disagreement/ conflicts that occur in their surroundings.
- Identify the feeling of people in different conflicting situations.
- Identify reasons for disagreement.
- Identify the ways in which people resolve conflicts/ disagreements at home and in school.
- Use discussion and problem solving methods to work and disagreement.

### Common Conflicts

A conflict is defined as “an act to oppose the will/idea of another or others”. Conflicts are very common. We see them everyday. They occur at home, in school, among neighbours, among players and among class fellows etc.

#### Feelings of people in different disputes

The conditions and feelings of people differ from dispute to dispute. People are sad or angry or unhappy during disputes.

#### Causes of conflicts:

Have you ever had a conflict? What was its cause? Following are a few causes of conflicts.

- i. Clash of Interest.
- ii. Difference between choices.
- iii. Difference between beliefs and values.
- iv. False thinking that one person does not like the other.
- v. When one acts opposite to our expectations.



## Impact of Conflicts

As we have observed a conflict is not a positive and healthy attitude. Hence its impacts are as follows.

- i. Negative not positive.
- ii. Creates hatred not love.
- iii. Results in sadness not happiness.
- iv. Results in quarrel not friendship.
- v. Creates enmity not friendship.
- vi. Creates jealousy not sincerity.
- vii. Creates isolation not cooperation.



## Resolving Conflicts

### a) Resolving Conflicts at home

When the conflict is between children, parents resolve the conflicts. When the conflict is between parents, elder family members resolve the conflicts.

### b) Resolving Conflicts at local community

Conflicts in a local community are resolved by the near and dear ones of the conflicting parties. Community leaders also play an important role in it.

## Preventing Conflicts

**Following are a few ways to prevent conflicts.**

- i. Respect the feelings of others.
- ii. Express your views in a polite way.
- iii. Do not impose your thoughts and ideas upon others.
- iv. Wait for your turn.
- v. Respect the beliefs of others.
- vi. Always be patient.
- vii. Sacrifice for others.
- viii. Listen to what the other person is saying.
- ix. Recognize and accept your faults.

## The ways to resolve conflicts.

The solution of a problem can resolve the dispute. It consists of some stages which are given as under.

- To point out the actual problem, dispute or difference.
- To plan how to resolve the dispute.
- To consult both the parties.
- Listen to both the parties without bias.
- To take decision based on facts.
- Avoid blaming each other.

### Activity

- Describe the story of the conflict you observed last week.
- Have you ever had a conflict with your brother, sister, mother, friend, class fellow, teammate?
- Describe the beginning points, causes and effect of that conflict.

## Exercise

1. Tick (✓) the activities related to the welfare of community. Cross (✗) the activities harmful to community.

- i. Do not wait for your turn.
- ii. Sacrifice for your brothers, sisters and friends.
- iii. Parents resolve the conflicts between their children.
- iv. Children resolve the conflicts by force.
- v. Teachers resolve the conflicts at school.

2. Answer the following questions

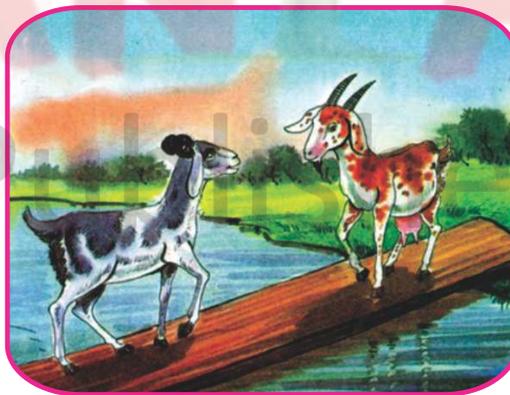
- i. What are the main causes of your conflicts with your brothers and sisters?
- ii. How can you stop conflicts with your bothers and sisters?

- iii. Who resolves your conflicts at home?
- iv. How do you feel at the time of conflict?
- v. How do you feel when the conflict is resolved?

**3. Complete the given chart about a conflict.  
(real or imaginary)**

Conflict	
What was the problem?	
Who were involved?	
Where? (house, classroom, playground)	
Causes?	
How was the conflict resolved?	

**4. Look at the picture. Write a story about conflict and resolving conflict with the help of your teacher.**



**Teachers Corner:**

- ▶ Explain the picture stories to your students.
- ▶ Teach students the art of avoiding/resolving conflicts.
- ▶ Tell a story to the students about the importance of peace in our society.



**Students' Learning Outcomes:**

**After studying this chapter, the students will be able to:**

- List the various hazards they can face at home or in school (naked wires, damaged roof, broken glass, fire burns etc.)
- Understand risk and dangers associated with use of electric appliances.
- Practice safety measures while using electrical appliances.
- Understand the ways of being careful and safe.
- Recognize the fact that some natural and manmade disaster can be dangerous for human beings.
- Recognize basic features of natural disasters ( earthquakes, floods, typhoons, fire etc.)

Safety is the state of being "safe" or the condition of being protected from harm or other undesirable outcomes. There are various hazards which can be faced at home or outside such as electric shocks, fire burns, injuries and from broken glass or walls etc.

**Indoor Safety**

To play it safe around your home, just remember the rules for using electricity the right way.

**1. DON'T plug too many electrical appliances into one extension cord**

It could damage the electrical system in your house or even cause a fire.



**2. DON'T yank an electrical cord from the wall**

Pulling on a cord can damage the appliance, the plug or the outlet.



**3. DO make sure all electric cords are tucked away, neat and tidy:**

Pets might chew on electrical cords, and people might trip and fall.



**4. DO ask a grown-up for help:**

When you need to use something that uses electricity.



**5. DO look up and look out for power lines before you climb a tree:**

The electricity can go right through the tree branch - and right through you.



**6. DON'T ever climb the fence around an electrical substation:**

If a ball or pet gets inside the fence, ask a grown-up to call the electric company - they will come and get it out for you.



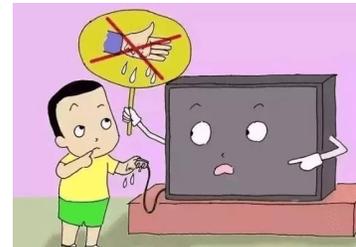
**7. DO remind your mom or dad to watch out for power lines:**

When they are using a ladder, chainsaw or other outdoor equipment.



**8. DO keep electrical stuff far away from water:**

Most electrical accidents around the house happen when people use electricity near water.



## Never hide

Whenever you go out to play,  
and your dress gets dirty with clay.

Whether gloomy or a bright day,

Any thing good or bad....

Always tell your mom and dad.

Someone touches you good or bad,

Never ever should you get sad.

Show him anger or get mad!

Anything good or bad,

Always tell your mom and dad.

If a stranger gives you something,  
All you have to do is accept nothing.

Always be aware of who is leading

Anything good or bad

Always tell your mom and dad.



### Teachers Corner:

Discuss the poem with the children. Particularly, focus on the need of their safety and the importance of sharing information /experiences with their parents. Also discuss why they shouldn't accept gifts from strangers.



## Outdoor Safety

When you are outside the house you should be very careful in the following ways:

1. Do not play on a busy road.
2. Cross the road carefully.
3. Do not touch electricity poles.
4. Do not touch or take anything from strangers.
5. Be careful spending time near water.



### NATURAL DISASTER

Natural disasters are caused by natural forces.

Examples: tsunamis, floods, landslides, hurricanes, wildfires, droughts, earthquakes, etc.

Steps can be taken to minimize the effects.

### MAN MADE DISASTER

Man made disasters are caused by the activities of men.

Examples: hazardous material spills, explosions, chemical or biological attacks, etc.

Can be avoided with careful planning and prevention methods.

### Activity

Demonstrate through a role play how to rescue themselves and others during a disaster.

## Natural disasters

### Earthquake

An earthquake is the shaking of the surface of the Earth.



### Flood

An over flow of water that covers an area of land that is usually dry.



### Fire

A destructive burning (as of a building).



### Typhoon

An extremely powerful, and destructive storm.



## Exercise

1. Write what safety measures you will adopt in following conditions.

1. On a busy road.

\_\_\_\_\_

2. Electricity poles.

\_\_\_\_\_

3. Playing at road side park.

\_\_\_\_\_

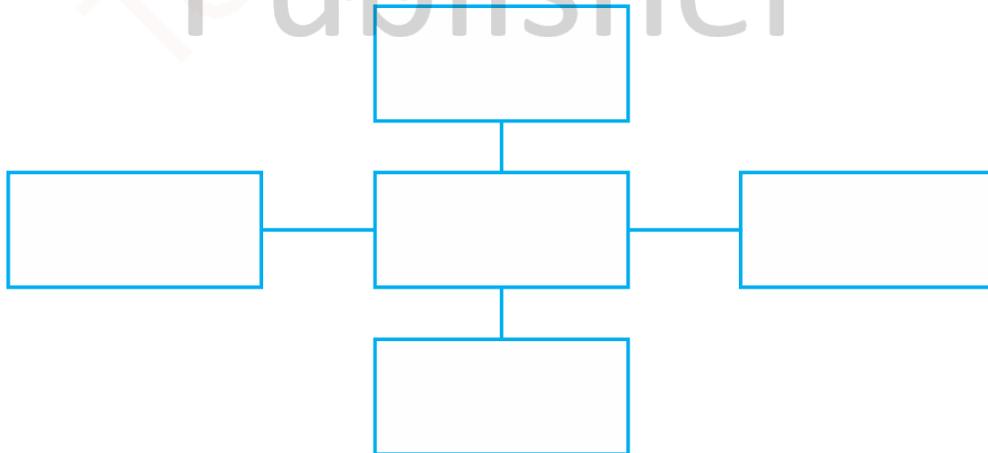
4. Going on a hike.

\_\_\_\_\_

5. When some stranger gives you something to eat.

\_\_\_\_\_

2. Make a mind map of RULES USING ELECTRICITY.



**3. Write names of natural disasters.**

_____	_____
_____	_____
_____	_____
_____	_____

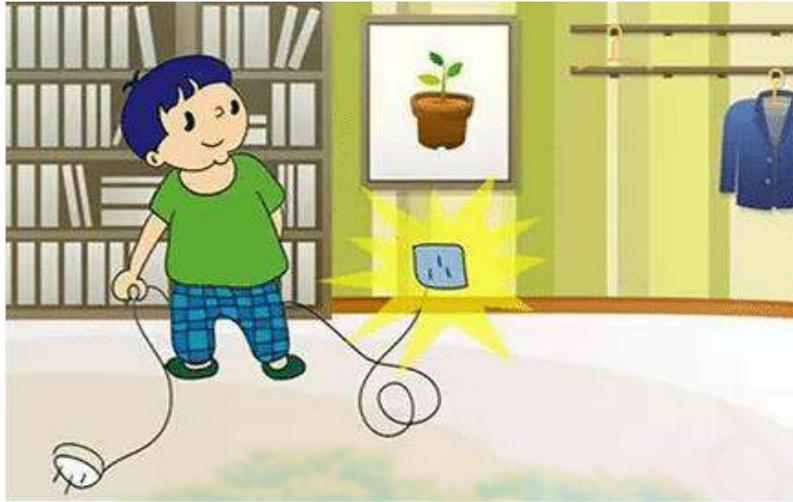
**4. Have you ever experienced a natural disaster? Share with your class.**

**5. Look at the situations and write your comments below.**



.....

.....



**Teachers Corner:**

- ▶ Help students perform their activities.
- ▶ Tell students by role play what to do when there is any danger.

