

SOCIAL SCIENCE

IV STANDARD

Term I

TEXT BOOK TEAM

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What these icons stand for!



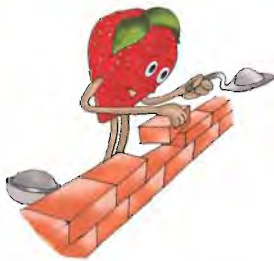
Think and answer



Choose the best option



Collection of data



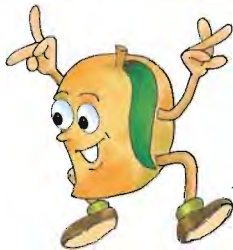
Fill in the blanks



Gather informations from references



Point out



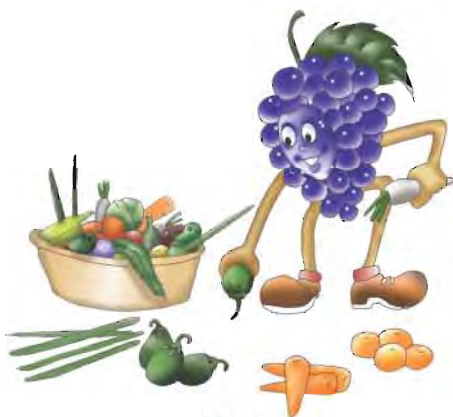
Say True or False



Think and write



Match the following



Sort out



Project work(or)Group work



WONDERS IN THE SKY

Hearing the voice of the postman, Divya came out and received the parcel from him.



Sir, post



It was a DVD from her uncle . She was very curious to know what the DVD contained.



She inserted the DVD into her laptop. The title of the DVD was 'The magical universe'

UNIVERSE

Earth is a home to all living things. It is **geoid** in shape. It is surrounded by a layer of gases called atmosphere.



The space above the atmosphere is known as **universe**. It consists of countless number of celestial bodies which include Sun, stars, Moon etc.

Have you ever observed the sky?

Have you counted the stars?

STARS



Stars are huge luminous bodies. They have their own light and heat .They are made of hot gases and dust . The **Sun is also a star** .

When you look at the sky at night, the stars appear smaller though they are bigger than the sun .Why? _____

Do you know what makes these stars twinkle? _____

When the light rays from the stars enter the atmosphere, they get scattered and makes the stars look as though they twinkle.

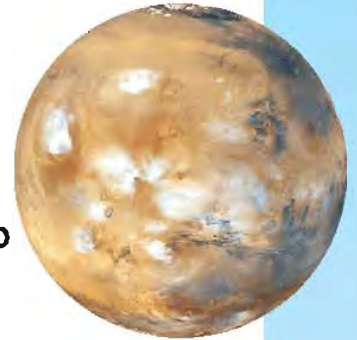


PLANETS

Planets are celestial bodies which revolve around the sun on their elliptical paths called **orbits**. They do not have their own light and heat but they reflect that of the Sun.

SATELLITES

Satellites are objects that go around a larger object such as a planet. The moon is the only satellite that goes around the earth, our planet. The other planets too have their own satellites.



ASTEROIDS



Asteroids are also called as **planetoids**. These are big pieces of rock or rock and metal. They orbit around the Sun between Mars and Jupiter in their own elliptical orbit called **Asteroid Belt**.

METEORS

Meteors are a streak of bright light that can be seen from Earth when a meteorite enters the atmosphere. The actual object entering the atmosphere is called **meteorite**. It looks like a bright light. We call it the **falling star** or the **shooting star**.



Falling star or shooting star is the common name for the visible path of a **meteoroid** as it enters the atmosphere to become a **meteor**. If a falling star survives impact with the Earth's surface, then it is called a **meteorite**.

MOON

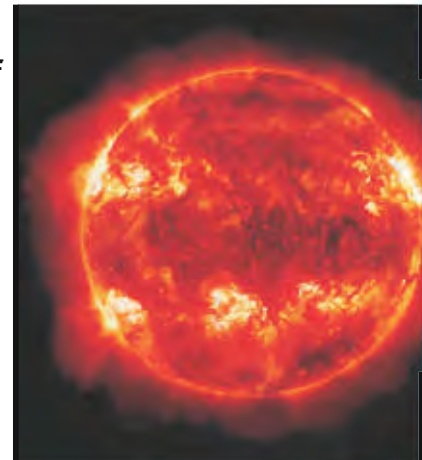


Moon is the natural satellite of the earth. It is made of rocks. It has no air. The surface of the moon has many craters and mountains. It does not have its own light and heat. It reflects the light of the Sun. It revolves around the earth on its elliptical orbit and it takes **27.3 days** to complete one revolution. The gravity on the moon is lesser than that of the earth.

Chandrayan-1 was launched by India on 22.10.08. to probe the moon.

SUN

The Sun is the biggest star in our solar system. It is a bright star and is at the centre of the **solar system**. It is a big ball of fire and gives heat and light to the Earth. The light from the sun gives energy and strength for things to grow. Without the light from the sun the Earth would be a cold dark place. It also gives light to other planets of the solar system.



About three quarters of the Sun's mass consists of **hydrogen**, while the rest is mostly **helium**. Less than **2%** consists of heavier elements, including **oxygen, carbon, neon, iron**, and others.

LET US TRY AND FIND OUT

Take a rope of 1 metre length. Tie a ball to one end. Then hold the other end and rotate the rope above your head so that the ball moves in circles. The ball is in continuous motion until you hold the end of the rope. Like wise, the sun keeps the other planets intact because of its force of attraction.

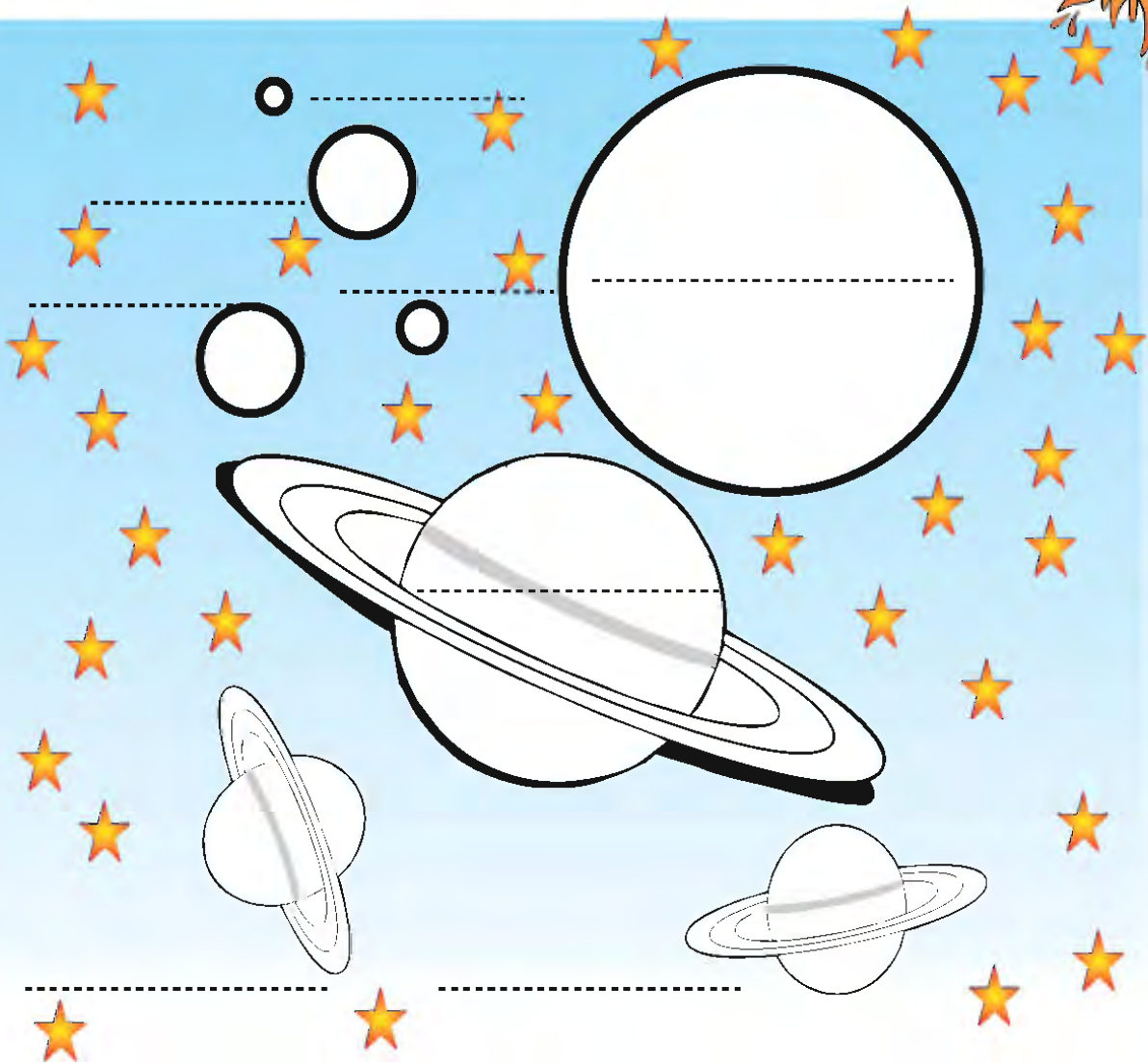
THE SOLAR SYSTEM

The Sun is at the centre of the **solar system**. The planets, comets, meteors and satellites move around the sun on a fixed path called an orbit. The sun and its eight planets make up the solar system.



Look at the sentence, The starting letters of the planets are given in colour, With the clues given try and write the names of the eight planets and colour them.

My **V**ery **E**fficient **M**other **J**ust **S**aved **U**s **N**ow



1. MERCURY



This is the smallest and closest planet to the Sun. It takes only 88 Earth days to go round the Sun once. It has no satellites and no atmosphere.

2. VENUS

It is the second planet in the solar family. It revolves around the Sun from east to west. After the Sun and the Moon, Venus is the brightest natural object in the sky. It is also called the **morning star or the evening star** because on some days we can see it with the naked eye just before the sunrise or sun set.



3. THE EARTH



The third planet from the sun is the Earth. It is the home to all living things as it fulfills their basic needs. The earth is neither too close nor too far away from the Sun. It supports life and hence called **the living planet**. The surface of the earth is made up of land and water. About 71% of the earth's surface is covered by water and 29% with land.

4. MARS

It is the fourth planet in the solar family. Inactive volcanoes, rocky deserts and ice covered poles were discovered on this planet. The minerals and the iron present in the soil in Mars give a **red colour** to this planet. It is a cold and dusty planet. It has 2 moons.



Collect articles and pictures related to space from the newspapers and make an album.

5. JUPITER

It is the fifth and the largest planet in our solar system. The surface of the planet is surrounded by dark red and yellow clouds made of gases and dust. The colour of the clouds depends on the gases. It takes 12 years to make one revolution. It has 16 moons.



6. SATURN

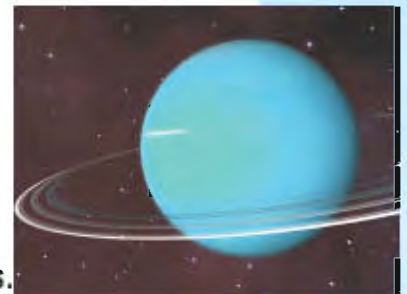
Saturn is the sixth planet. It is a light planet, and mostly made up of helium and hydrogen. It is surrounded by gases, dust, rocks and icy boulders which make it look beautiful with its ring. For that reason, it is also known as 'ringed planet'. It has 30 moons.

Galileo Galili was the first person to discover the rings around Saturn.



7. URANUS

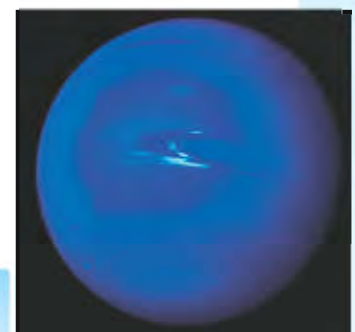
Uranus is the seventh planet. Unlike the other planets it does not spin on its axis. It rolls around the sun. This planet is made up of hydrogen, along with methane and helium. It is bluish green in colour. The dust around it looks like a ring around it. It has 15 moons.



8. NEPTUNE

It is the eighth and the farthest planet. It appears blue like an ocean. So the Romans named it after the God of the sea. It is made up of hydrogen, helium, water and methane. It has 13 known moons.

Do you know : Pluto is not considered a planet. Find out why.



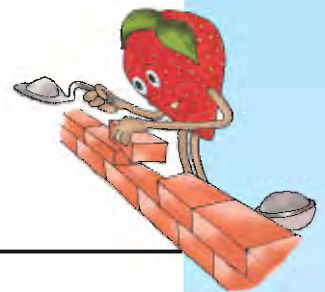
Watching all this through the DVD, Divya was amazed. She clearly learnt about the solar system. She started writing a thank you letter to her uncle for sending her a DVD worth watching several times.

EXERCISES



I. CHOOSE THE CORRECT ANSWER

- _____ are luminous bodies.
a) stars b) planets c) moon
- Satellite that moves around the earth is _____.
a) Sun b) Venus c) moon
- There are _____ planets in the solar family.
a) eight b) five c) ten
- Gas which is not present in the sun is _____.
a) methane b) hydrogen c) oxygen
- The largest planet in the solar family is _____.
a) Mars b) Jupiter c) Neptune.



II. FILL IN THE BLANKS

- The only planet which is suitable for living things is _____.
- The Sun is a ball of _____.
- The planet that can be seen in the sky in the morning and in the evening is _____.
- The surface of Mars is covered with _____ and dust.

III. ANSWER THE FOLLOWING

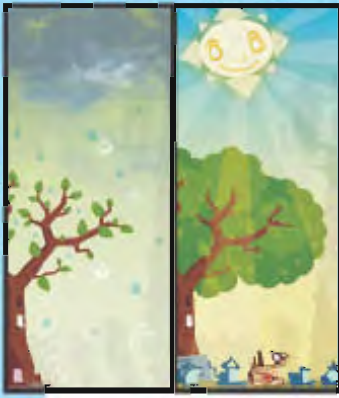
- Name the planets in the solar family.
- Why do stars appear small?
- Write a short note on meteors.
- Why is the light of the moon not as hot as the sun's light?
- How do planets remain intact in space?



IV. ACTIVITIES

- Conduct a quiz programme on the topic 'Solar System'.
- Collect pictures related to the solar system and paste them in your scrap book.
- Make a model of the solar system with beads and balls.
- Ask the students to enact the features of the solar system by taking the roles of the planets.





HOME PLANET

Does it surprise you when I say that, while you study and play at school in the afternoon, children in America are having their breakfast, and children in Japan would have gone back home from school?



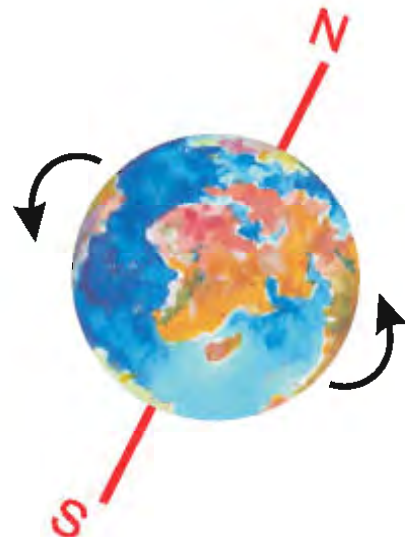
Different parts of the earth get the sunlight at different times. Do you know why? It is because of the Earth's movements.

They are

1. Rotation
2. Revolution.

ROTATION

The earth spins with its $23\frac{1}{2}^\circ$ tilted position, on its own axis. It takes 24 hours or one day to complete one round. This movement of the Earth on its own axis is called **rotation**. The axis joins the North Pole and the South Pole.

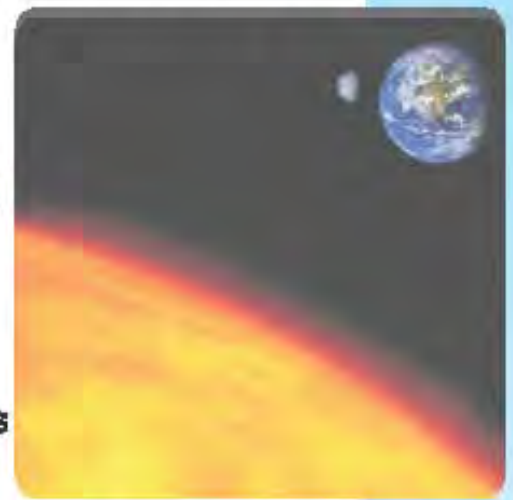


EFFECTS OF ROTATION ON THE EARTH

1. It causes day and night.
2. Earth rotates from west to east [anti-clockwise]. So places in the east experience the day first.
3. We understand that the Sun rises in the east and sets in the west. This gives us a sense of direction.

REVOLUTION

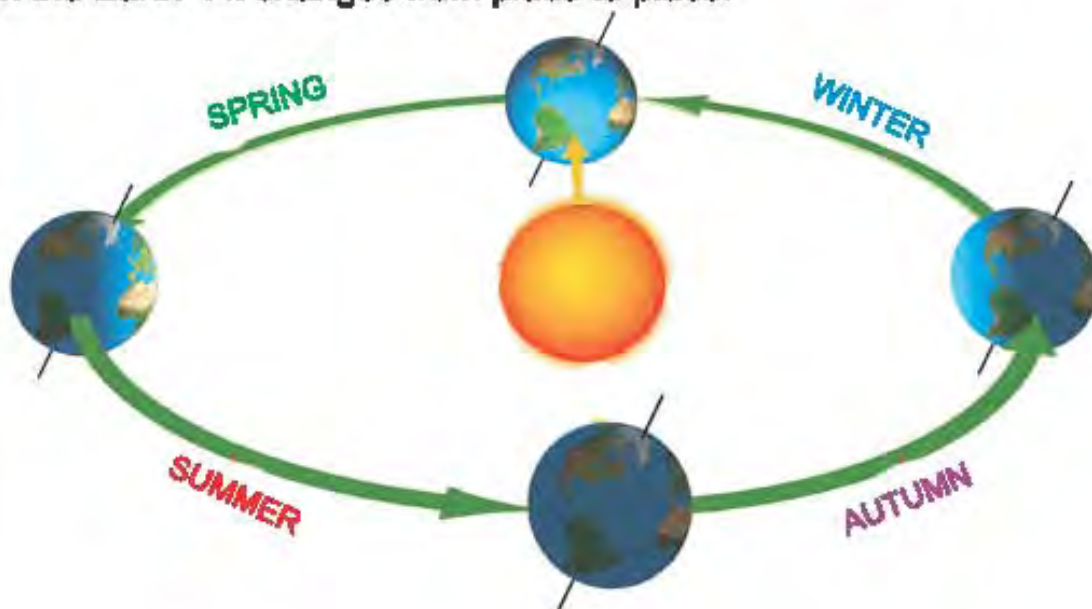
The annual motion of the earth around the Sun along its 'elliptical' [oval shaped] orbit is called **Revolution**. That is, while spinning on its axis the Earth also moves around the Sun along its fixed path. The earth takes 365¼ days or 1 year to go round the Sun once. This movement of the earth is called Revolution.



Purvika is three years old. How many times would she have travelled around the sun?

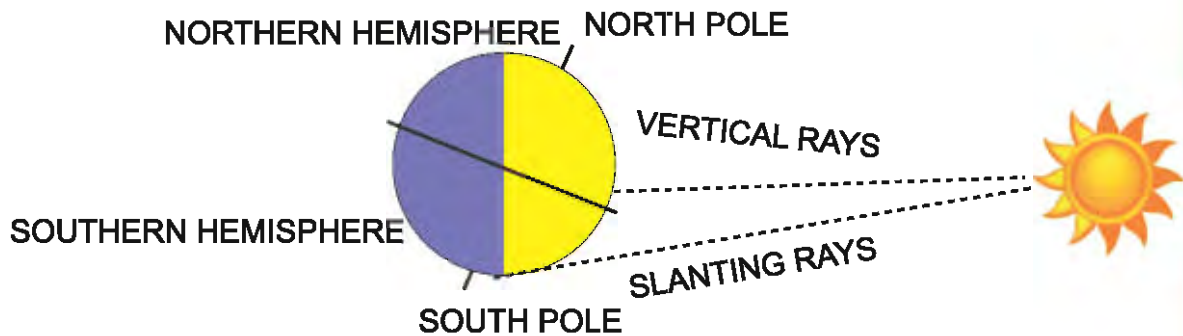
EFFECT OF REVOLUTION ON THE EARTH

The major effects of the revolution is the Seasons that are caused on the Earth . It changes from place to place.



DO AND LEARN

You can track the changing seasons for yourself. Note down the time of sunrise and sunset of your place everyday for a month. Mark the time on a line graph. Are the days getting longer or shorter? Why ?



SEASONS

Generally we talk about four seasons – **spring** [flowering season], **summer** [hot season], **autumn** [fall] and **winter** [cold season]. The season changes once in three months.

SPRING

It is a pleasant season that comes between winter and summer. We can see the new leaves on the trees, the flowers are in full bloom. There is a promise of new beginnings and colour in the spring time air..



SUMMER



Summer is the hottest season among the four. During this season we have longer days.

What comes to your mind when you hear the word Summer?

Which season do you like the most? Why?

AUTUMN

Autumn is the season between summer and winter. The air begins to cool. The trees shed their leaves. This season does not occur in India because of its geographical location.



WINTER



Winter is the coldest season. Our winters bring us cool weather. During this season the days are short and the nights are long. Snowfall occurs in some countries and hilly regions.

SEASONS IN INDIA

India has only three predominant seasons. They are summer season, rainy season and winter season.



1. SUMMER SEASON

During summer season many parts of India are scorched with heat. Days are very hot. March, April and May are the summer months.

2. WINTER SEASON

The Indian winter is usually mild and enjoyable when compared to the other countries of the world.

In our State, we have vegetables and fruits that grow in different landscapes during this season.

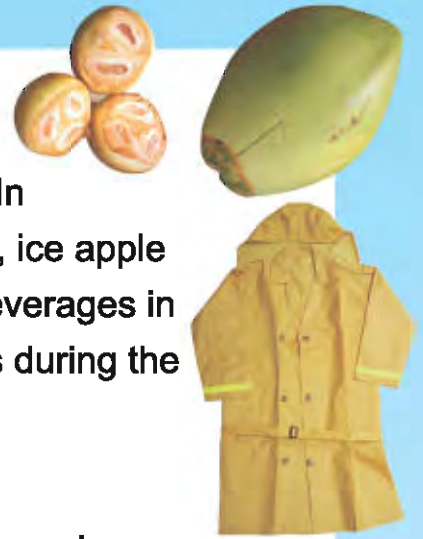
Can you name some? _____.

3. RAINY SEASON

During this season the north-east monsoon and the south west monsoon bring heavy rainfall to most parts of the country.



The longest day in the northern hemisphere-22nd June.
The shortest day in the northern hemisphere-22nd December.



INFLUENCE OF SEASONS ON HUMANS

Our lifestyle changes according to the climate. In summer, we like to drink tender coconut, fruit juice, ice apple (nungu). We like to have hot steaming food and beverages in winter. We use raincoats, gum boots and umbrellas during the rainy season.



Do you know why?

The houses in the places which receive heavy rainfall and snowfall have slopping roofs.

INFLUENCE OF SEASONS ON PLANTS

Fruits, vegetables and flowers that are available in a particular season may not be available in the other seasons.

In which season are fruits like mangoes and water melon available in abundance? _____

Are they available in winter also?

Example: summer vegetable - drumstick
summer flower - jasmine

Find out the vegetables and flowers available in winter.

INFLUENCE OF SEASONS ON ANIMALS

Winters are extreme in the polar regions. In the Arctic, animals like whales move from North America to the coastal region of Gulf of California before winter starts to escape from the harsh weather.



Similarly, birds like the Arctic tern move in flocks to places where the weather conditions are suitable. This movement is called **migration**.



The Polar regions remain frozen in winter. In the extreme cold condition food is scarce. So the Polar bears undergo long winter sleep called **Hibernation**. The excess fat stored in their body provides energy and helps them to survive during the hibernation.

WEATHER AND CLIMATE



WEATHER	CLIMATE
<ol style="list-style-type: none"> 1. Short period of time. 2. It changes from time to time and place to place. 3. Weather condition of a place is decided by the factors like sun, wind, rain and clouds. 	<ol style="list-style-type: none"> 1. Climate is the average weather conditions at a place over a long period of time. 2. It is stable weather condition of a larger area and does not change easily. 3. It means average temperature, rainfall etc., of a region.

LET US FILL THE TABULAR COLUMN !

	AVAILABLE IN ALL SEASONS	AVAILABLE IN PARTICULAR SEASON
VEGETABLES		
FRUITS		
FLOWERS		



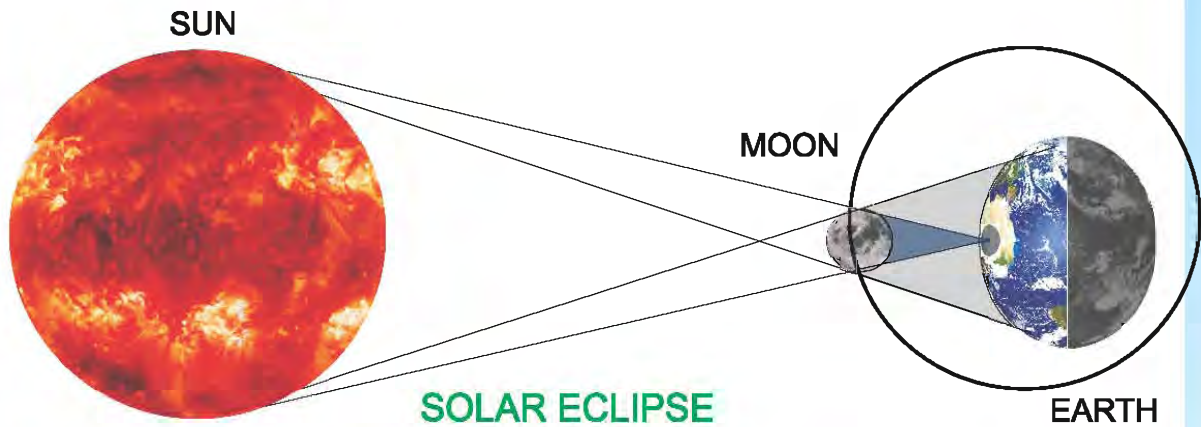
ECLIPSE

Eclipse is an astronomical event that occurs when one celestial object moves into the shadow of another.

There are two types of eclipses.

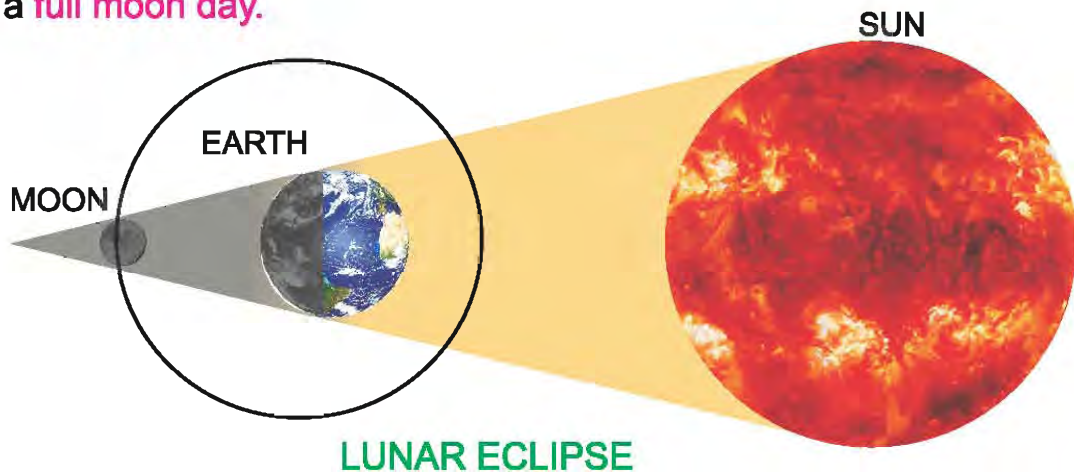
THE SOLAR ECLIPSE (solar-sun; eclipse-hidden)

When the moon comes between the sun and the earth the shadow of the moon falls on the Earth. People who are in that part of the earth cannot see the Sun. This is called solar eclipse. This can occur only on a **new moon day**.



LUNAR ECLIPSE (lunar - moon; eclipse - hidden)

A lunar eclipse occurs when the earth blocks the sun's rays from reaching the moon. This can occur only when the Earth comes in between the Sun and the moon. A lunar eclipse can occur only on a **full moon day**.



SOME INTERESTING FACTS!

1. If you feel cold during winter, just remember that in parts of North America and Europe, the temperature in winter can be as low as minus 50°C [ice everywhere]
2. The ideal room temperature is 25°C.
3. The wettest place on Earth is in India, at a place called Mawsynram - it receives 12 metres of rainfall every year!
4. The world's driest place is in Chile, the Atacama desert.



Mawsynram, Meghalaya



Atacama Desert, Chile, S. America

ACTIVITIES – (Pair Work)

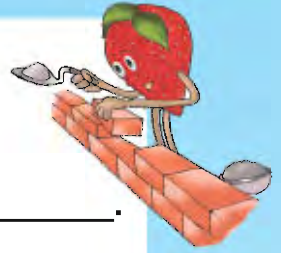
1. Talk to each other and share your experiences of weather and climate.
2. List the things necessary for different kinds of weather and climate.
3. Observe the phases of the moon and trace it in your note books or prepare it with cream biscuits and paste it.



4. Find out if 2 full moon days occur in any single month this year
5. Spot the weather, climate associated words from the grid.

W	I	N	T	E	R	H	U
L	I	T	H	I	S	O	N
P	R	A	I	N	U	T	E
U	A	C	O	L	D	O	W
R	S	U	M	M	E	R	S
I	M	O	N	S	O	O	N

EXERCISES



I. FILL IN THE BLANKS

1. The movement of the Earth on its own axis is called _____.
2. The number of days the Earth takes to go round the Sun is _____.
3. The days are short and the nights are long in _____.
4. The average temperature of a particular place over a period of time is called _____.
5. The revolution of the Earth around the Sun and the tilt of the Earth's axis causes _____.



II. WHAT IS IT?

1. It can be seen in the coming of new leaves on the trees. _____.
2. It appears as a dark circle in the night sky on certain days. _____.
3. It occurs when one celestial object moves into the shadow of another. _____.
4. It is usually mild and enjoyable when compared to the other countries of the world. _____.
5. It rotates from west to east. _____.



III. WRITE 2 THINGS YOU DO ON THE FOLLOWING DAYS.

- Sunny Day _____.
- Cloudy Day _____.
- Rainy Day _____.
- Windy Day _____.

IV. ANSWER THE FOLLOWING

1. What is an axis?
2. Why do we get seasons on Earth?
3. How does the moon get different shapes?
4. What happens when the Earth comes in between the Sun and the Moon?
5. Name the seasons of India.





EARTH'S GIFT

Natural resources are materials that are available naturally on the earth. The Sun, air, land, water, natural gas, coal, oil, petroleum, minerals, wood, topsoil, fauna, flora, forests and wildlife are not made by human beings. Therefore they are natural resources.

Identify the resources in the pictures and complete the boxes provided.



THERE ARE TWO TYPES OF RESOURCES

RENEWABLE RESOURCES



WATER



SUNLIGHT



LAND



AIR

NON-RENEWABLE RESOURCES



MINERALS - GOLD



PETROLEUM



COAL



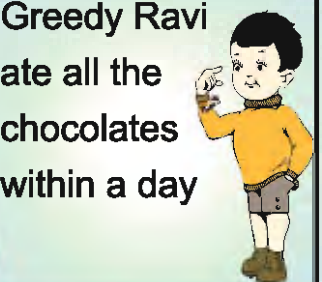
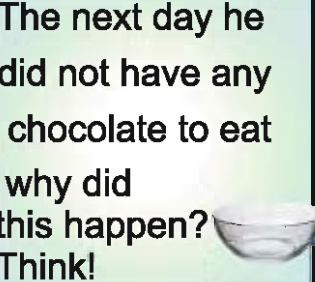
1. RENEWABLE RESOURCES

Renewable resources are those that can be used again and again
Eg. Air, Water, and Sunlight.

2. NON-RENEWABLE RESOURCES

Non renewable resources are those that cannot be produced again and again Eg. Coal, Petroleum. These natural resources are found under the surface of the earth. With every advancement in technology, our needs are growing and we tend to over indulge with the available natural resources. It is our responsibility to use the resources judiciously and conserve some for the future generations.

THINK.....

 <p>Ravi's mother gave him 10 chocolates</p>	 <p>Asked him to eat one a day</p>	 <p>Greedy Ravi ate all the chocolates within a day</p>	 <p>The next day he did not have any chocolate to eat why did this happen? Think!</p>
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WATER

Water is important for all living beings. We depend on the monsoon for rain. Though 71% of earth is covered by water only 2% is fresh water which is usable. Therefore our main source of water is rain. Rain water gets collected in rivers, lakes, ponds etc. and it is used for domestic purposes, irrigation, and also for the industries. So it is our duty to conserve water.

Look at this picture and discuss in groups about the method of rainwater harvesting.




HIRAKUD DAM




The Bhakra Nangal Dam is the Highest Dam in India.
The Hirakud dam is the longest Dam in the world.

METHODS OF CONSERVING WATER

 Rain Water Harvesting means the accumulation and storing of rainwater. It recharges the groundwater. Rainwater collected from roofs of houses, tents etc can make an important contribution to drinking water.

 Dams should be built across the rivers to prevent floods and to store water.

 We should not throw garbage and industrial wastes into, rivers, lakes, etc., to prevent water pollution.

March 22nd is celebrated as World Water Day .

Man utilises nearly 125 litres of water a day.



SOIL

Soil is an important natural resource. It takes thousands of years to form a layer of soil. It is formed by breaking up of rocks and decayed organic matter. Soil varies from region to region depending on the surface, climate and rainfall.

TYPES OF SOIL

The main types of soil found in different regions of India are



ALLUVIAL SOIL **BLACK SOIL** **RED SOIL** **LATERITE SOIL** **DESERT SOIL**

SOIL FERTILITY

Soil contains dead plants and animals, minerals, water and air which make the soil rich and fertile. It is the **top layer** of the earth's surface on which plants and trees grow.



METHODS OF CONSERVING SOIL

1. Soil has to be tested periodically to check the fertility of the soil.
2. Use organic fertilisers instead of chemical fertilisers to retain the fertility.
3. The effluents from the industries should be treated before they are let out.
4. Overgrazing on the hill slopes leads to soil erosion. It should be controlled.
5. Grow trees and plants to prevent soil erosion.
6. Avoid using plastic.

The following methods of farming are practised to prevent soil erosion and to increase the fertility of the soil.

METHODS OF FARMING

TERRACE FARMING



The hill slopes are cut into broad steps called terraces and farming is done. It helps to slow down the flow of water. It reduces soil erosion and land slides. The crops that are grown here are coffee, tea and underground vegetables.

Do you wish to become a farmer? Give one reason for your answer.

CROP ROTATION

Successive planting of different crops on the same land is called crop rotation. This helps us to improve soil fertility and to control insects and diseases. In a rotation a cultivated crop is alternated with a legume. Eg. Rice, Groundnut, Sugarcane. It balances the fertility of the soil.



MIXED FARMING



Mixed Farming means combining two independent crops on the same farm. They support each other and add to the farmers' profitability. eg. groundnut and bengalgram.

These methods protect the fertility of the soil

AIR

Air is one of our basic needs. All living things need air to breathe. Air consists of nitrogen, oxygen and other gases. Fresh air keeps us healthy. It is an important natural resource.

In Coimbatore, Tiruppur, Tirunelveli, Kanyakumari and Theni districts wind is harnessed to produce electricity.



But unfortunately the air is polluted by dust, smoke etc. due to increase in number of industries and vehicles. It affects human beings, plants, animals and the atmosphere as a whole.

The energy we get from the sun is called Solar energy. It is the eco-friendly energy of the future. Today, solar energy is used to heat water and light up homes. Solar energy is tapped to burn LED bulbs !

WAYS TO CONTROL AIR POLLUTION

There is a need to keep the air clean.

1. Vehicles should run on cleaner fuels like CNG. (Compressed Natural Gas)
2. We should not burn garbage, plastics and other wastes in the open.
3. Factories should filter and check the harmful gases before they are let out into the atmosphere.

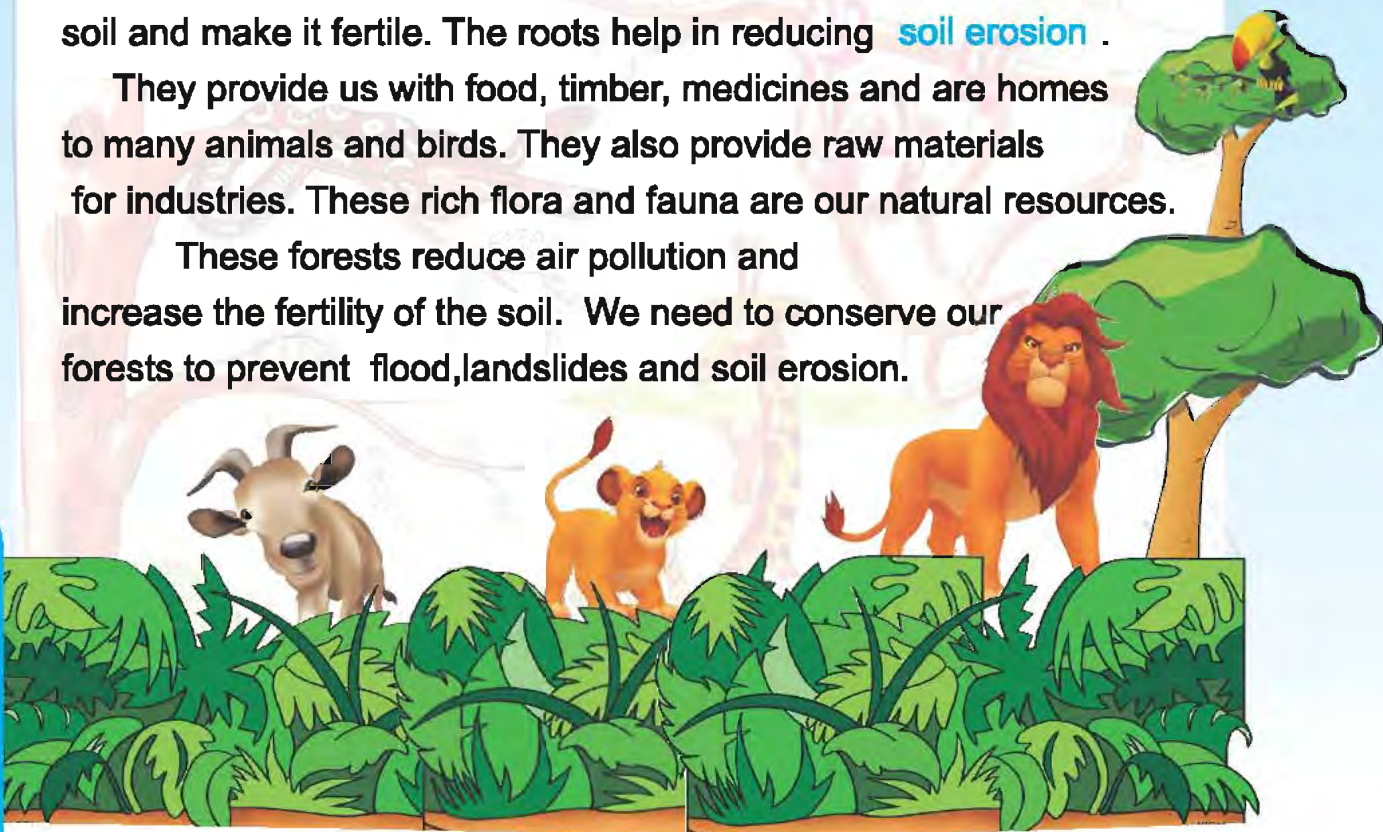


FOREST

A Forest is a large area of land thickly covered by trees. One fifth of the land in India is covered by forests. Forests improve the quality of soil and make it fertile. The roots help in reducing **soil erosion**.

They provide us with food, timber, medicines and are homes to many animals and birds. They also provide raw materials for industries. These rich flora and fauna are our natural resources.

These forests reduce air pollution and increase the fertility of the soil. We need to conserve our forests to prevent flood, landslides and soil erosion.



METHODS OF CONSERVING FORESTS

1. Should prevent over grazing by cattle.
2. Afforestation (planting of trees).

The government has made a conscious effort to safeguard our environment by launching many programmes to plant more trees .



Amazon forest in South America provides 25% of oxygen

The age of the trees are known from its rings in the bark

GLOBAL WARMING

Global warming means the increase in the average temperature of Earth's surface and oceans, due to human actions like emission of gases from factories, vehicles, burning forests etc. This rise in temperature changes the climate, melts the ice sheets and there is a rise in the sea level. This will cause danger to Earth - our planet.

So, it is the responsibility of every one of us to take care and save the Earth from any such danger.

Draw a picture and write a slogan on the topic "Save our Earth"



ACTIVITIES

I. We are the water bodies. Can you find us in the word grid ?

S	L	A	K	E	R	T
O	P	R	Q	E	I	U
W	E	L	L	R	V	B
C	G	J	H	D	E	F
P	O	N	D	W	R	Z

II. Find out the difference between the two pictures and write the difference in the given pollution column.



LAND
WATER
AIR

- III. Initiate a discussion on the Earth and its resources.
- IV. Encourage the students to use water judiciously at home and at the school.
- V. Ask them to find out the types of Soil in their region.
- VI. Have a debate on the hazards of Air pollution.
- VII Teach them the benefits of growing trees.
- VIII.Let each class sow and maintain a plant at school.
- IX. Collect data of the dams of India and discuss the advantages and disadvantages of dams.

EXERCISES

I.CIRCLE THE CORRECT WORD IN THE FOLLOWING SENTENCES.

1. Water and sunlight are renewable / non renewable resources
2. Soil erosion increases / decreases the fertility of the soil.
3. We need / do not need air to breathe.
4. We must plant/ not plant more trees.

II.SAY WHETHER THESE SENTENCES ARE TRUE OR FALSE

1. There are two types of resources ()
2. Coal is a renewable resource ()
3. Our main source of water is rain ()
4. The government does not encourage people to grow more trees ()

III. ANSWER THE FOLLOWING

1. Write any four methods by which soil can be conserved.
2. Name the two social forestry programmes.
3. How can air pollution be avoided?
4. What is global warming?
5. Suggest ways to protect our planet.

IV. UNSCRAMBLE THESE WORDS TO GET THE USES OF WATER.

1. I D N G K R I N _____
2. C K G O O I N _____
3. G S A H I W N _____
4. S R P C O _____



AN ELEPHANT SPEAKS

I am Velan, an Indian elephant (also known as Asian elephant). I am an old tusker [male elephant]. I have lived long and have seen many events and changes. Now I am very old and I live in **the Mudumalai Sanctuary**.

What is a sanctuary?

A Sanctuary is a protected area where the birds and animals live in their natural habitats.



Listen to my story ..

I was born in the Nilgiri Hills. The forests in the Nilgiris are thick and have a variety of trees. The river **Moyar** flows through this region. This river remains as a border between **Karnataka** and **Tamil Nadu**. We live in groups called herd. Like any other group ours also had a tusker as a leader.



We were also a close knit group like others. In a herd the young ones are looked after very carefully. I still remember the way I rolled in the mud and played in the water enjoying life with the others.

I loved eating the tender **bamboo shoots** and the **wild sugarcane** that grew in the forest. I cherish those days; they will remain ever green in my memory!

They shifted me to the Mudumalai sanctuary as I have become old. I live safely now. If you come here you can see me.



What beautiful days they were!!!





I must tell you about my life in Mudumalai. Look at this man. He is Palanisami. His family has lived in the forest for years. Today he works for the forest department that looks after the forests. His job is to make sure that there are no forest fires, to see how many animals are there and to bring sick animals to the animal hospital. He informs the department if he sees people hunting animals. He takes tourists on trips to certain areas where they can see the wildlife and birds.

He also makes sure that tourists do not throw plastics and garbage in the protected area. He also takes care of me and the others like me. He has taken a special training to work in the forests. He knows a lot about the sanctuaries and national parks in India. He talks about them enthusiastically and interestingly. Just listen to him.



Hello! My name is Palanisami. Velan has already told you about me. I just want to add one more thing about myself. Right from my childhood I always wanted to be a part of this forest and I enjoy being here. I have worked in a few other **Sanctuaries and National Parks**. But out of interest I gather information about the others. I am very happy to share them with you.

1. MUDUMALAI SANCTUARY AND NATIONAL PARK

'Mudumalai' means 'ancient hill-range.' It was made a sanctuary as early as 1940. The bird life here is beautiful. It is also one of the **Tiger Reserves**. The road connecting Mysore and Ooty passes through this sanctuary. Some times, the speeding vehicles run over the crossing animals, particularly at nights.



The tourists who travel in the vehicles throw plastic bottles and bags. This affects the animals.



2. INDIRA GANDHI WILDLIFE SANCTUARY - NATIONAL PARK



It is in the **Anamalai Hills**. The hills are high and the endemic forest is the **Shola**, with bamboo too!

Look at the animals.
Which is your favourite one?



TIGER

There are many species like



ELEPHANTS



GAUR



LEOPARD



JACKAL



FLYING SQUIRREL



PALM CIVET

Bird species like



BARBETS



BABBLERS



DRONGOS



PEAFOWL

can also be sighted.

3.POINT CALIMERE [KODIKKARAI] SANCTUARY

This is a coastal sanctuary. It has sandy coasts and backwaters. Apart from animals this sanctuary is also famous for the sea turtle **Olive Ridley** which lays its eggs on the shore here.



OLIVE RIDLEY



OLIVE RIDLEY EGGS



STAR TURTLE

During winter, thousands of migratory birds visit the sanctuary. Do you know what **migration** is? When the climate gets very cold or hot birds go to a place that is suitable to them. Sometimes they travel thousands of kilometers for this.



PLOVERS



WADERS



TERN



GULLS



DUCKS

These birds spend the winter in warm places . Thousands of greater flamingo also flock here. The migratory birds are best seen between November and March. Why do these birds migrate? Think _____



4. SRIVILLIPUTHUR GRIZZLED SQUIRREL WILDLIFE SANCTUARY

This Sanctuary spreads over an area of 480 sq.km. It was opened in 1989 to protect the grizzled squirrel. The endangered grizzled squirrel is the key species. This squirrel is larger than the three-stripped palm squirrel and it is brownish grey in colour. Its under portion is dirty white and its tail has white bands. This squirrel lives in tamarind, vagai, naval, neer maruthu and neem trees.



5. GULF OF MANNAR MARINE NATIONAL PARK

Gulf of Mannar Marine National Park is part of the 10,500 sq.km. of Gulf of Mannar Biosphere Reserve.

It is situated on the south-east coast of India. It is known for its rich marine life.

Marine elements like algae types, sea grasses, coral reefs, salt marshes and mangroves combined with mudflats and estuaries, allow 3,600 kinds of plants and animals to exist.



6. GUINDY NATIONAL PARK

The Guindy National Park is the eighth smallest national park in India and it is in the heart of Chennai. It was the hunting place of Gilbert Rodericks for the British. The Tamilnadu Forest Department took over the park in the year 1958. The park has more than 350 types of plants.

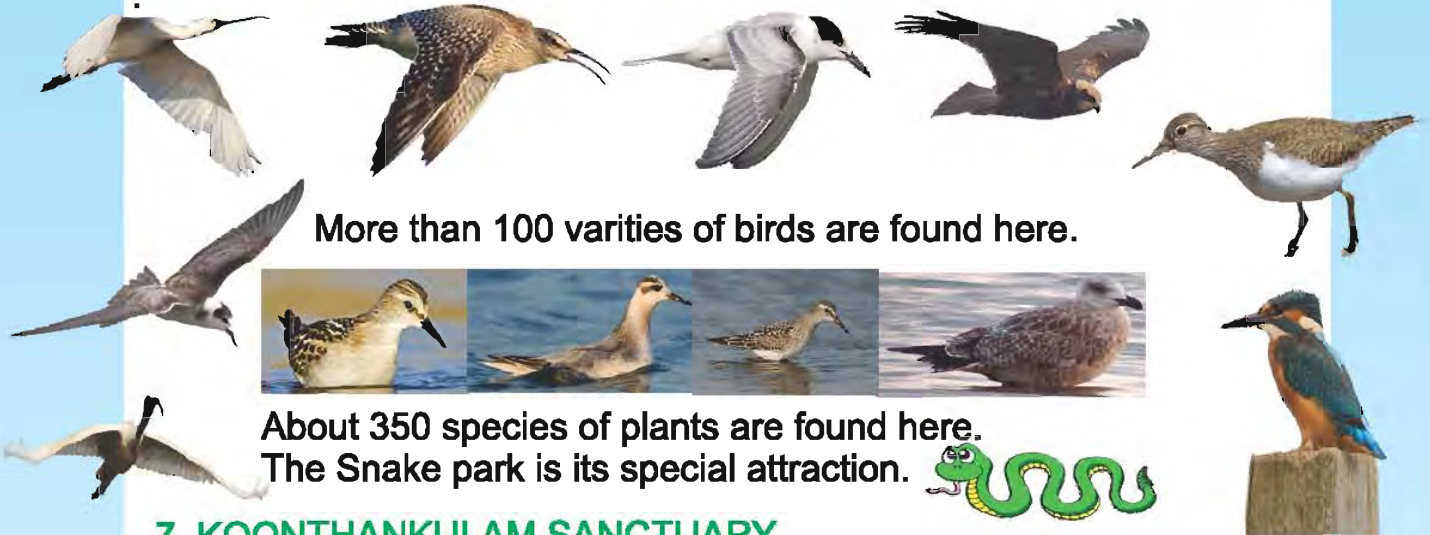


Have you ever been to Guindy National Park? _____

With whom did you go? _____

Name the animals and birds you saw there.

We can see varieties of animals like Deer, Mongoose, Fox etc...



More than 100 varieties of birds are found here.



About 350 species of plants are found here.

The Snake park is its special attraction.



7. KOONTHANKULAM SANCTUARY



Koonthankulam is a village 38 kms away from Tirunelveli town. People of this village have always been the protectors of birds that visit the village and the nearby ponds and lakes. They do not burst crackers during Deepavali. For they fear that it may disturb the birds there. Even when the chicks fall off the nests by accident, the villagers take care of them.

5 DECLARED NATIONAL PARKS IN TAMIL NADU .

1. Indira Gandhi National Park [1989]
2. Mudumalai National Park. [1990]
3. Mukurthi National Park.[1982]
4. Gulf of Mannar Marine National Park [1980]
5. Guindy National Park. [1976]



There are **7 wildlife sanctuaries** and **13 bird sanctuaries**. I will give you the list; you can go through them leisurely. I am sure you enjoyed listening to me as much as I enjoyed talking to you. Here is the list for you.

7 WILDLIFE SANCTUARIES IN TAMILNADU

1. Grizzled Squirrel Wildlife Sanctuary, a Giant Squirrel Sanctuary near Srivilliputhur is in **Virudhunagar district**.
2. Indira Gandhi Wildlife Sanctuary is near Indira Gandhi National Park in **Coimbatore District**.
3. Kalakkad Wildlife Sanctuary in **Tirunelveli District** is part of the Kalakkad Mundanthurai Tiger Reserve .
4. Kanyakumari Wildlife Sanctuary is a tiger habitat in **Kanyakumari district**.
5. Mudumalai Wildlife Sanctuary in **Nilgiris district** is close to Mudumalai National Park.
6. Sathyamangalam Sanctuary in **Erode District**, was made a sanctuary in 2008.
7. Vallanadu Wildlife Sanctuary, a Black Buck Antelope sanctuary is in **Thoothukudi District**.



13 BIRD SANCTUARIES IN TAMILNADU

- | | |
|--|-------------------------|
| 1. Chitrangudi Bird Sanctuary | - Ramnadapuram District |
| 2. Kanjirankulam Bird Sanctuary | - Ramnadapuram District |
| 3. Karaivetti Bird Sanctuary | - Perambalur District |
| 4. Karikili Bird Sanctuary | - Kancheepuram District |
| 5. Koonthankulam Bird Sanctuary | - Tirunelveli District |
| 6. Melselvanur-Keelselvanur Bird Sanctuary | - Ramnadapuram District |
| 7. Point Kalimar Bird Sanctuary | - Tanjore District |
| 8. Pulicat Lake Bird Sanctuary | - Thiruvallur District |
| 9. Udhayamarthandapuram Bird Sanctuary | - Thiruvarur District. |
| 10. Vaduvor Bird Sanctuary | - Nagapattinam District |
| 11. Vedanthangal Bird Sanctuary | - Kancheepuram District |
| 12. Vellode Bird Sanctuary | - Erode District. |
| 13. Vettangudi Bird Sanctuary | - Sivagangai District |



Apart from these 13 birds sanctuaries we have Veralimalai Peacock Sanctuary-Pudukottai district. Kallaperambalur lake located in Tanjore district has been recently announced as a bird sanctuary by the forest department.

With the help of Tamilnadu political map do this activity.

Draw  in the districts where we find birds sanctuaries .

Draw  in the districts where we find wild life sanctuaries.

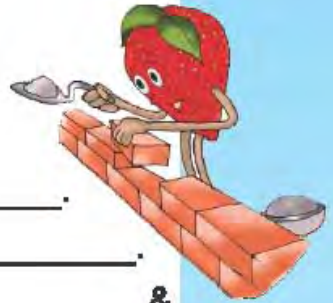
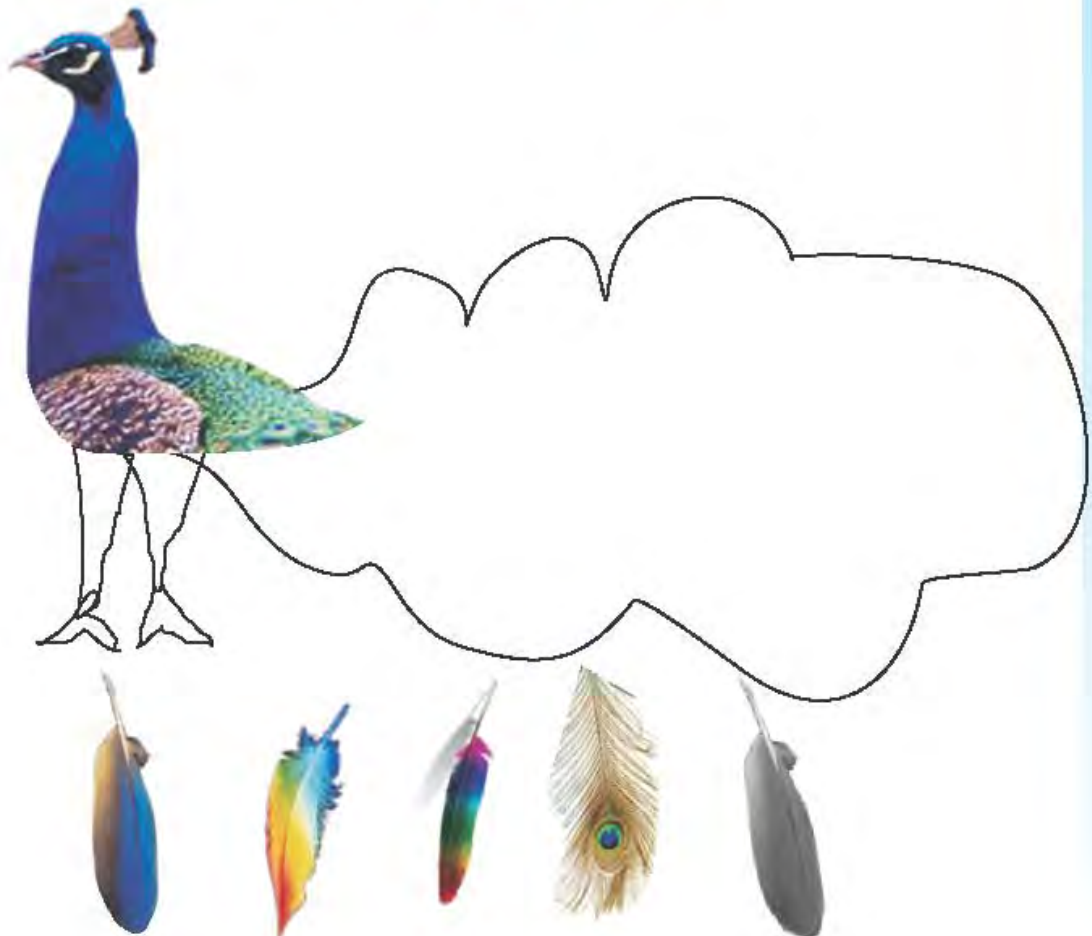


EXERCISES

I. FILL IN THE BLANKS

1. The sanctuary that protects the shola forest is _____.
2. The sanctuary that protects the turtles is _____.
3. The sanctuaries where people protect birds are _____ & _____.
4. The sanctuary that protects a variety of squirrels is _____.
5. The sanctuary that is in a city is _____.
6. The sanctuary that protects marine life is _____.
7. The sanctuary where many migratory birds come is _____.

II. COLLECT FEATHERS OF DIFFERENT BIRDS AND DECORATE THE PEACOCK BY PASTING THE FEATHERS.





THE FREEDOM STRUGGLE

August 15th is the most important day for the people of India. It is the day which is celebrated with pride and patriotism by every Indian citizen. What is so special about this day?

It was on this date in 1947A.D that India was declared a free and independent nation by the British.

But how did India come under the British?

In 1600A.D, Queen Elizabeth granted a **charter** to trade freely with the countries of the east. The **East India Company** came into India. It first established a trading centre at Surat and then began building factories. During this time India was divided into several small states and there was no unity among the rulers. The East India Company took advantage of the situation and began to interfere in the Indian affairs. Soon they conquered the entire country and India became the market for the English goods.

The Indian weavers suffered a lot, as the machine-made cloth of the British was sold at a cheaper rate in the Indian markets.

THE VELLORE MUTINY -1806



1. The main reasons for the mutiny were the changes in the **sepoy dress code**.

2. Hindus were prohibited from wearing religious marks on their foreheads and Muslims were required to shave their beard and trim their moustache.

3. The plan of restoring the kingdom of Mysore to the sons of Tipu Sultan was also a reason for this mutiny.

SEPOY MUTINY- 1857

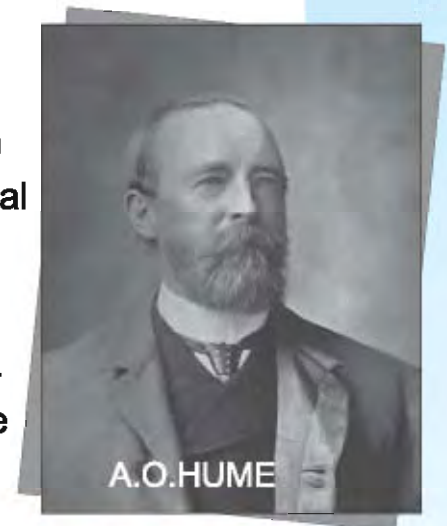
Though there were many causes for this mutiny, the immediate cause was when the sepoys were asked to use cartridges greased with cow and pig fat. This affected the religious sentiments of both the Hindus and the Muslims. **Bahadur Shah, Nana Sahib, Tantia Tope and Rani Lakshmi Bai** played an important role in this revolt.



The British put down these revolts with their **military power** [armed forces]. The power of the East India Company was transferred to the Queen of England and the British became a strong power in India.

THE INDIAN NATIONAL CONGRESS -1885

The Indian National Congress was founded upon the suggestion of **Allen Octavian Hume**, a British official in 1885 in Mumbai. The aims of this congress were to include the educated Indians in the British administration in India and to bring economic reforms. This organization later became the stirring force of the freedom movement.



Gopalakrishna Gokhale, Dadabhai Naoroji, Surendranath Banerjee, Bipin Chandra Pal and Lala Lajpat Rai were some of the early leaders of the Congress. These leaders united the people for the cause of freedom with patriotic messages. Poet **Rabindranath Tagore's** patriotic songs brought the people together to a great extent.

THE PARTITION OF BENGAL 1905



BURNING FOREIGN CLOTHES

The British were worried about the growth of nationalistic [patriotic] feelings among the Indians. In order to prevent this, **Lord Curzon** divided Bengal (the source of all revolts) into East and West in **1905**. The eastern part of Bengal had Muslim majority and the western part had Hindu majority. By doing so he tried to destroy Hindu-Muslim unity.

This partition of Bengal angered the people and led to the **Swadeshi movement**. Indians began to use only goods made in India and **boycotted** [refused to use] the British goods by throwing them into bonfires lit in public places.

JALLIANWALA BAGH MASSACRE 1919

The British passed the **Rowlatt Act in 1919** to control the growing nationalist movements. To show their disagreement to this act in a peaceful way more than 10,000 men, women and children had gathered at **Jallianwala Bagh** on the **13th April 1919** General Dyer, a British official arrived with a troop and gave shooting orders on the innocent unarmed people. This ruthless massacre became the turning point in the freedom movement.



THE NON COOPERATION MOVEMENT 1920

Gandhiji used the Jallianwala Bagh incident as an opportunity to unite the people. He felt that if the Indians refused **to cooperate with** the British, their rule in India would collapse and India would become free. So he launched the **Non Cooperation Movement in 1920**.

THE CIVIL DISOBEDIENCE MOVEMENT 1930

In 1930 Gandhiji launched the **civil disobedience** movement. He asked people to disobey all the British laws. Gandhiji took up Dandi March (Salt Satyagraha) against the **tax on salt** because Indians were asked to pay money to the British in order to produce salt! In the south, under the leadership of Rajaji (C. Rajagoplachari) people marched from Tiruchi to Vedaranyam to break the salt tax law.

THE QUIT INDIA MOVEMENT 1942

In 1942 during the Second World War the British wanted India to join the war. India demanded complete independence in return. Since the British were not willing Gandhiji launched **Quit India Movement in 1942**.

INDIA BECAME INDEPENDENT 1947

Gandhiji asked the people to 'Do or Die'. The movement gained great momentum. Slowly the British agreed to leave India. Thus India attained Independence on 15th August 1947. **Jawaharlal Nehru** became the **first Prime Minister** of independent India.

LEADERSHIP AND INSPIRATIONS

MOHANDAS KARAMCHAND GANDHI

He was born on 2nd October 1869 at Porbandar (Gujarat). He had his early education in India and went to England to study law. In 1893 he went to South Africa to practise law. During his stay there he saw the racial discrimination and oppression committed against the Indians and began to fight against the whites.

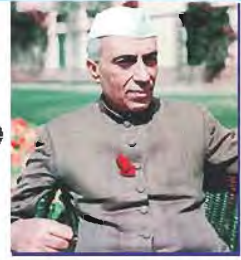
It was only then the concept of **Satyagraha** (satya- truth, agraha- fight) which is based on truth and non-violence, evolved in him.

He came back to India in 1915 and visited every nook and corner of India and set up the **Sabarmati Ashram in Gujarat** in 1916. He called the oppressed section of people as Harijan or children of God. He worked for the revival of village craft. He popularised **charka and khadi** as symbols of **self-reliance**.



JAWAHARLAL NEHRU

He was born on 14th November 1889. He was the son of Motilal Nehru who was one of the important Congress leaders. Nehru studied in England.



In 1912 he joined the **National Movement**. He was an ardent follower of Gandhiji and his principles. He took part in the national movements and was sent to jail several times. He believed that improving the condition of the common people cannot be separated from the freedom struggle. He became the first Prime Minister of independent India.

V.O. CHIDAMBARAM PILLAI

V.O. Chidambaram Pillai was born in Ottapidaram, in Tuticorin district of Tamil Nadu, on 5th September 1872. He is also known by his Tamil initials **Vaa. Oo. Ce.** He was a lawyer and a trade union leader. He entered politics in 1905 soon after the Partition of Bengal and became a member of Indian National Congress. He was the first Indian to start a **Steam Navigation Company** that ran a ferry service between **Tuticorin(Thoothukudi)** and **Colombo**.

This Swadesi Steam Navigation Company was bold enough to compete with the British trading ships. For this bold action of his even today we call him '**Kappalotiya Tamilan**' He was accused of talking and writing against the British and sentenced to life imprisonment. He was ill-treated by the British in the prison.

THILLAIYAADI VALLIAMMAI

She was born on 22nd February 1898 at Thillaiyaadi in Nagapatnam district. Her parents migrated to South Africa from India. Valliammai had never been to India. Right from her childhood she had seen only hatred for Indians and the racial discrimination. As a young girl she joined her mother in the march against the marriage law passed by the South African government. Along with the others she was put in jail where she took ill. Later she died at the age of 16. Gandhi said that her sacrifice gave him the inner force to fight for Indian Independence.



Establishment of
East India company 1600 A.D

Trade centres

Surat, Madras (Chennai), Calcutta (Kolkata)

Looting Indian wealth

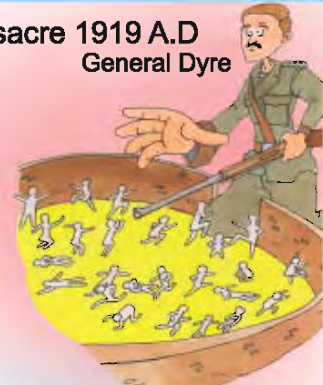
Quarrel among Indian kings

Vellore mutiny 1806 A.D

Jansi Rani Lakshmbai

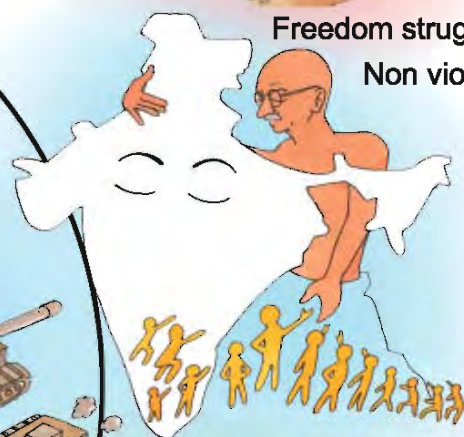
Sepoy Mutiny 1857 A.D

Jallian wallahbagh massacre 1919 A.D
General Dyre

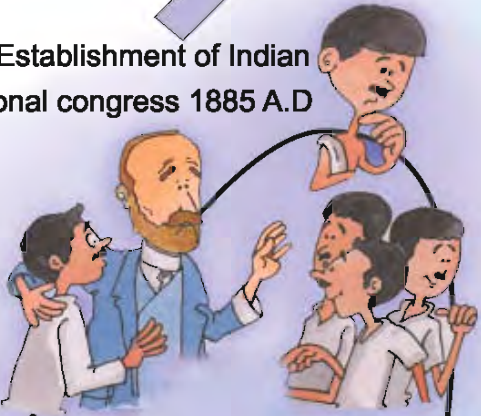


Bengal partition
Swadesi movement

Freedom struggle through
Non violence



Establishment of Indian
national congress 1885 A.D



India gained independence in 1947 A.D



TIME LINE CHART

YEAR	EVENTS
1600	Establishment of East India Company
1806	Vellore Mutiny
1857	Sepoy Mutiny
1905	Partition of Bengal
1919	Jallianwallabagh Massacre
1920	Non Cooperation Movement
1930	Civil Disobedience Movement
1942	Quit India Movement
1947	India gained Independence
1950	India became a Republic

ACTIVITIES

I. WORK IN GROUPS

Find out the various steps through which our National flag was developed - draw and show.

Collect pictures of your favourite freedom fighter and make a chart to say why he / she is your favourite.

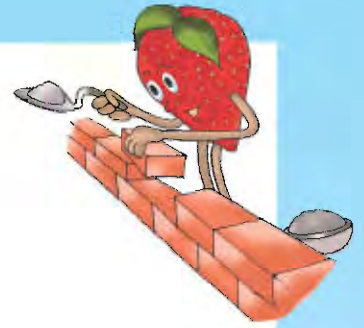


II. FIND THE LEADERS HIDDEN IN THE GRID

1. V _____
2. V _____
3. N _____
4. G _____
5. G _____
6. T _____

A	V	R	D	B	J	N	D	N
V	A	A	O	O	C	E	L	S
E	L	D	G	S	N	H	B	L
O	L	M	T	E	C	R	J	G
W	I	A	C	Q	U	U	Y	O
G	A	N	D	H	I	F	T	K
X	M	W	E	Y	G	H	C	A
A	M	N	Y	S	I	F	N	L
C	A	W	Q	S	E	D	J	E
V	I	R	I	F	W	U	D	S
T	U	J	T	A	G	O	R	E

EXERCISES



I. COMPLETE THE FOLLOWING SENTENCES

1. The East India Company established its first trading centre in India at _____.
2. The main reason for the 1806 Vellore Mutiny was change in _____.
3. A.O. Hume a British official suggested the formation of _____.
4. Rabindranath Tagore brought the people together through his _____.
5. In 1920 Gandhiji launched _____.

II. GIVE REASONS

1. East India Company began to interfere in the Indian affairs.
2. Jawaharlal Nehru worked for the welfare of the common people.
3. Thillaiaadi Valliammai was imprisoned.
4. V.O. Chidambaram Pillai is known as 'Kappalotiya Tamilan'



III. FILL THE TABULAR COLUMNS

MUTINY	YEAR	REASON	YOUR OPINION
VELLORE			
SEPOY			

IV. ANSWER THE FOLLOWING

1. What was the immediate cause for the Sepoy Mutiny?
2. Why did Gandhi organize the Non Cooperation Movement?
3. Write three sentences about Salt Sathyagraha.
4. When did the concept of sathyagraha evolve in Mahathma Gandhi?



LET US RECALL

What comes to your mind when you think of each lesson?

Write in the given space .

