



GOVERNMENT OF TAMIL NADU

STANDARD TWO

TERM - III

VOLUME - 2

MATHEMATICS ENVIRONMENTAL SCIENCE

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Environmental Science 2

Term-III

Environmental Science

Class II (Term III)

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Textbook



Evaluation

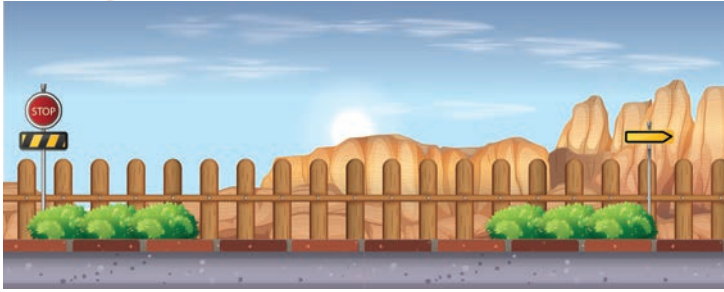


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Unit
1

Materials Around Us



You will learn about

- ❖ Natural sources, man-made materials and things
- ❖ Matter - definition and properties



We are oranges. We grow on orange trees.

I am a basket. I am made of wood. Wood is got from trees.



We use many kinds of materials in our life. Nature is the source of all of them (e.g., tree). From these **natural sources** man makes many **materials** (e.g., wooden planks) which are used to make many other things (e.g., wooden basket).

Sources of Natural Materials

The sources of natural materials are plants, animals, rocks and soil.



Plants



Animals



Rocks and Soil

From Plants...



Logs



Cotton



Coconut Frond

From Animals...



Leather



Wool



From Rocks and Soil...



We get metal ores from rocks and soil

Think....



For today's need you are cutting me but for tomorrow's need plant more trees like me...



Write 'A' for the animal, 'P' for the plant and 'M' for the metal sources of the given materials.



Wood



Let Us Discuss

Why do we make windows and cupboards from wood?

- ❖ Wood is a **strong material**. So furniture can be made from it.
- ❖ It is long lasting.
- ❖ It can be cut into pieces and can be given different shapes.
- ❖ Wooden pieces can be joined together to make many useful things.

Natural source



Man-made materials



Man-made things

Natural source



Man-made materials



Using some tools, tree trunks are cut into **wooden logs** and **planks**.

Man-made things



Toys



Shelf



Door



Cart



Chair



Swing

DO YOU KNOW?

Paper is made from wood pulp.

Rubber

Do you know from what material your eraser is made?



Rubber is made from the **sap** (a milky substance) of the rubber tree.

- ❖ Rubber is **elastic**; so **rubber bands** are made from it.
- ❖ It is also **waterproof**; so **hand gloves** are made from it.

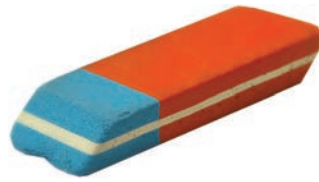


- ❖ **Elastic** - Comes back to its original shape after being stretched
- ❖ **Waterproof** - Does not allow water to enter inside

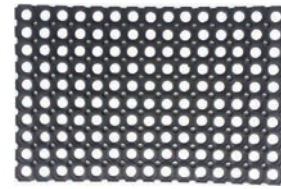
The following things are also made of rubber.



Slipper



Eraser



Mat



Tyre



Ball

Observe the pictures and fill in the blanks.



Shelf



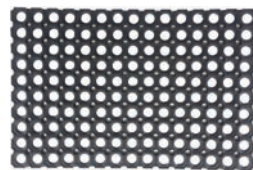
Rubber Band



Spoon



Cycle Tube



Mat



Chair

Write the names of the man-made things from wood.

1. _____ 2. _____ 3. _____

Write the names of the man-made things from rubber.

1. _____ 2. _____ 3. _____

Fibre



Do you know how clothes and ropes are made?

Fibre is a material obtained from **both plants and animals**. Cotton and jute are the **fibres** got from **plants**. Wool and **silk** are **fibres** obtained from **animals**.

Plant Fibres



Cotton



Jute



Silk



Wool

Fibre from the coconut tree is called coir.
Many things are made from it.



DO YOU KNOW?

Silk thread is a strong material and is used in making parachutes.

The jute fibre is **long**, **shiny** and **strong**. Silk is the strongest natural fibre. We make many things like bags, mats and sarees from these fibres.

Wool keeps us warm; so sweaters, caps and socks are knitted using it.

Leather is **flexible**; so belts, watch straps and bags are made from it.

From Jute



From Wool



From Silk



From Leather



Put a tick (✓) for the correct pair and a cross (x) for the wrong one.





Clay

Do you like playing with clay?



- ❖ **Clay** is a **natural material**. It is a type of soil. When it is mixed with water, it becomes soft.
- ❖ It hardens as it dries; so, pots and other things can be made from it.
- ❖ A potter uses his tool, the **potter's wheel**, to make clay pots and other things.



I give you cool water without using electricity.

**Metals**

Have you seen the different vessels in your kitchen?

Metals are materials got from **metal ores** - e.g., Gold, Silver, Iron and Copper.

- ❖ Since metals are **strong** and **hard**, vehicles, gates and cooking vessels can be made from it.
- ❖ Metals are **shiny**.
- ❖ When heated, metals can be **shaped** into any form - small paper clips or a huge aeroplane.



Aeroplane



Paper clips



Gold bangles



Steel vessels



Aluminium vessels



Copper vessels

Matter

Anything natural or man-made that occupies space is called matter.

Matter has properties like taste, smell, size and shape.



Orange is a natural thing.
It occupies space.

A wooden basket is a man-made thing.
It occupies space too.



These yellow laddus occupy the space
in the bowl.

They are small, round in shape and are
sweet to taste.



Many materials are used in making an object. Choose and write the correct pair of materials found in the given objects.



1. Materials found in motor bikes are _____.

- a. metals and clay
- b. rubber and clay
- c. metals and rubber



2. _____ are found in these pots.

- a. Clay and rubber
- b. Metals and clay
- c. Metals and rubber



3. This belt is made of _____.

- a. fibre and rubber
- b. metals and clay
- c. metals and leather



4. This chair is made of _____.

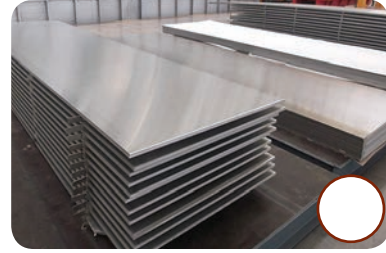
- a. metals and wood
- b. fibre and rubber
- c. metals and clay



Evaluation



1. Number the natural sources as '1' and the man-made materials as '2'.



2. Write 'T' if True and 'F' if False.

a. Most metals are strong.

b. Wood cannot be cut.

c. Rubber is not elastic.

d. Wool keeps us warm.

3. Write the names of the materials that the given objects are made of. (Leather, Rubber, Metal, Clay)



_____ objects



_____ tube



_____ shoe



_____ chain

4. Complete the tabulation by using the given pictures and by adding one more object on your own.



Purse



Gloves



Key



Wooden box

S.No	Sources	Man-made things
a.	Wood	1. 2.
b.	Rubber	1. 2.
c.	Leather	1. 2.
d.	Metal	1. 2.

Self Evaluation

- ❖ I can identify natural sources, man-made materials and the things made from them.
- ❖ I know some properties of matter.



Unit
2

My Beloved Motherland



You will learn about

- ❖ National days
- ❖ National leaders
- ❖ National and State symbols
- ❖ Caring for public property



National Days and National Leaders



August

15

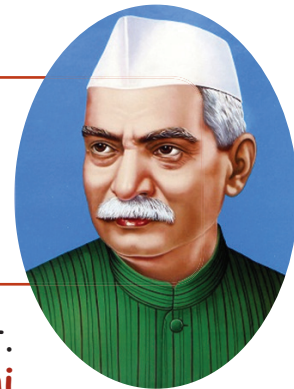


For many years our country - India, was ruled by another country called Britain. We became free from their rule on August 15th, 1947. India celebrates this day as '**Independence Day**' every year.

January

26

Our own laws (Constitution of India) came into force on 26th January 1950. It is celebrated as '**Republic Day**'. **Dr. Rajendra Prasad** was the first President of free India.



Many leaders worked hard to make India independent. Two important leaders among them were **Mahatma Gandhi** and **Jawaharlal Nehru**.



October

2

Mahatma Gandhi is affectionately remembered by all of us as '**Bapu**' or the '**Father of our Nation**'. He followed the path of non-violence. He led a simple life and always spoke the truth. His birth day, 2nd October, is celebrated as '**Gandhi Jayanthi**'.





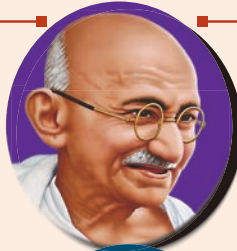
Pandit Jawaharlal Nehru was the first Prime Minister of India. He was very fond of children. He was lovingly known as '**Chacha Nehru**'. His birth day, 14th November, is celebrated as '**Children's Day**'.

Connect the pictures of the leaders to columns A and B.

A

B

First President of India



Dr. Rajendra Prasad

Father of our Nation



Mahatma Gandhi

First Prime Minister of India



Pandit Jawaharlal Nehru

National Flag - The Tricolour

Our National Flag called the Tricolour is rectangular in shape. It has three equal bands of different colours.



Saffron



Sacrifice

White



Truth and Peace

Green



Prosperity



The navy blue wheel in the centre of the white band is called the **Ashoka Chakra**. It has 24 spokes which stand for progress and values.



We respect our National Flag

National and State Emblems



National Emblem



Tamil Nadu State Emblem (Srivilliputhur Temple)



National Symbols of India

National Animal



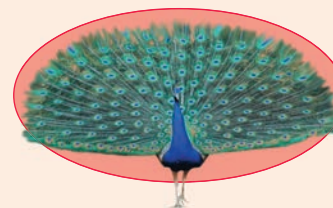
Bengal Tiger

National River



Ganges

National Bird



Peacock

National Tree



Banyan Tree

National Flower



Lotus

National Fruit



Mango



The Dolphin of the Ganges river is the National Aquatic Animal of India.



State Symbols of Tamil Nadu

State Animal



Nilgiri Tahr

State Flower



Gloriosa Lily

State Bird



Emerald Dove

State Tree



Palm Tree

State Game



Kabaddi

State Fruit

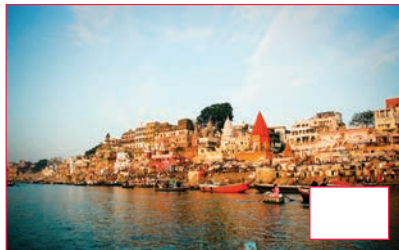


Jackfruit

Write 'N' for the National symbols and 'S' for the State symbols in the box given. Name the pictures.



(Nilgiri Tahr, Lotus, Banyan Tree, Mango, Ganges, Emerald Dove)



Our Responsibility



Some places and things like public toilets, roads, street taps, parks, hospitals, schools and classrooms are used by all of us. It is our responsibility to keep them neat and clean.



Do not spit in public places.



Do not scribble on walls.



Do not throw waste in public places.



Form a queue.



Use the public toilet. Do not use the road/open spaces.



Maintain silence in the public library. Do not tear or scribble in the books.

Think and Discuss

Why do we need to use a toilet?



Colour the circle **red** for the Don'ts and **green** for the Do's.



Evaluation



1. Write the names of the National Days for the given dates.

(Independence Day, Gandhi Jayanhti, Children's Day, Republic Day)









2. Circle the odd one.

- | | | | |
|---------------|--------------|-------------|--------------|
| a. Mango | Bengal Tiger | Banyan tree | Jackfruit |
| b. Palm tree | Nilgiri Tahr | Lotus | Emerald Dove |
| c. Saffron | Green | Red | White |
| d. January 26 | August 15 | October 2 | November 12 |



3. Select and circle the name for the given picture.

a.		Bengal Tiger	Lion	Elephant
b.		Duck	Peacock	Dove
c.		Ganges	Cauvery	Vaigai
d.		Mango Tree	Banyan Tree	Neem Tree
e.		Jackfruit	Banana	Apple

4. Draw a line connecting the symbol with its name.

Emerald Dove



Lotus

Gloriosa Lily



Mango

Palm Tree



Kabaddi



5. Fill in the blanks.

(Dr.Rajendra Prasad, Pandit Jawaharlal Nehru, State fruit, Mahatma Gandhi, Nilgiri Tahr)

- a. _____ was the first Prime Minister of India.
- b. The First President of India was _____.
- c. _____ is the Father of our Nation.
- d. The State animal of Tamil Nadu is the _____.
- e. Jackfruit is our _____.

6. Tick (✓) the correct behaviour and cross (x) the wrong one.









Self Evaluation

- ★ I can name some National days and National leaders.
- ★ I can identify National and State symbols.
- ★ I care for public property.



Unit 3

Shakthi's Journey



You will learn about

- ❖ Different modes of transport
- ❖ Road safety



Roadways



Shakthi, his father, mother and sisters Kayal and Kavitha lived in Trichy.

They planned to go on a **tour** of Chennai for their **holidays**. They had to reach the railway station to board the train.

Shakthi: "How are we going to the station?"



Vehicles on the Roadways

Bus



Needs fuel
Carries
50+people

Car



Needs fuel
Five people can
travel

Auto rickshaw



Needs fuel
Two / three people can
travel

Lorry



Carries goods

Ambulance



Takes sick people to hospital

Fire and Rescue Vehicle



Puts out fires

Scooter



Two people
can ride

Bullock cart



Does not need fuel to
move - **eco friendly**

Bicycle



The simplest
form of transport
Eco friendly
Cycling keeps us fit

- ❖ Which vehicle should Shakthi's family choose to reach the railway station? Discuss the answer and write it here. _____



Think and Discuss

We know that smoke from vehicles makes the air dirty. Can you name some vehicles that do not give out smoke?



Tick (✓) the slowest vehicle. Discuss why it is slow.







Railways

Shakthi and his family reached the railway station. They saw the vendors selling food and magazines, the station master waving a flag, porters loading the parcels and many kinds of trains. Kayal said, "What a busy place the station is!"



Mother replied "Yes, it's because the trains carry many people from place to place in a short time".

Kinds of Trains

Trains that carry people

Passenger train
Stops at all stations
Used within and between cities



Metro rail
Used within cities



Superfast express
Stops at specified stations



Trains that carry goods



Goods trains

Some trains use coal or diesel as fuel to move; therefore they give out smoke. **Electric trains** are **smokeless**. Trains **move** on **tracks**.

Shakthi and his family boarded their train and reached Chennai.

Can you identify the kind of train that Shakthi and his family chose to reach Chennai?

Fill in the blanks.



- The _____ train stops at all stations.
- The _____ train carries goods.
- _____, _____, _____ trains carry people.

Waterways



Shakthi and his family took a tour around Chennai. They visited the **harbour**.

Shakthi: "There are so many boats".





Mother: "The smaller ones are called boats and the bigger ones are the ships. **Ships** carry a **large number of people and goods** from one country to another".



Do vehicles that move on water have any wheels? How do they move?

Vehicles on the Waterways



Catamaran (Kattumaram)
Uses oars to move
Used for fishing



Motor boat
Uses fuel to move
Used for fishing and for pleasure rides



Sailing boat
Sails help it move
Used for travel and sport



Ship
Uses fuel to move
Carries goods and people over long distances

The **coracle** is used to travel on lakes and rivers for **short distances**. It can carry five to six people.



The children played on the sea shore.

Kavitha: "What a lovely visit!"

Write the names of the vehicles.





Airways

The vacation was coming to an end. The family reached the Chennai Airport as they were flying back to Trichy. Shakthi, Kavitha and Kayal were really excited to see the aeroplanes.

Kayal: "Look at the planes landing and taking off. I want to be a pilot Appa".

Father: "Sure, you can. Observe the speed at which the aeroplanes are moving. They are the **fastest means of transport**".

Shakthi: "Does the aeroplane use fuel too?"

Father: "Yes, a special kind of fuel".

Kinds of Aircraft

This is a **helicopter**. It can carry a **few people**. It is used by the **army** to save lives and bring supplies during **floods** and other difficulties.



This is an **aeroplane**. People use aeroplanes to **go from one city or country to another**. It also carries goods.

These are **hot-air balloons**. They are used to tell us about the weather, for advertisements and as a sport.



Have you seen white lines like these in the sky?
What are they?

Think and Discuss



Tick (✓) the vehicles that move in the air.



Road Safety



Have you seen this symbol?
Discuss it with your teacher.

Always use the foot path for walking.

If there is no foot path,
make sure that the road is
to your right.





While riding a motor cycle, wear a helmet.



While driving a car, use the seat belt.



Do not run across the road.



Never go alone on the road. Always go with an elder.



Use the foot over bridge or subway to cross the road. If there are none, use the pedestrian crossing (Zebra crossing).



Cross when the traffic symbol of a person walking turns green.





At some places, the road and the train track meet. It is called a level crossing. Never try to cross it when the gates are closed.



Common and Important Road Signs



School Zone
(Drive slow)



Unmanned Level Crossing
(Be careful when crossing)



Pedestrian Crossing
(Cross here only)



Bus Stop
(Bus stops here)



Level Crossing
(Check before you cross)



Do Not Horn
(Do not horn here)



No Parking
(Do not park your vehicle here)




Hospital Zone
(Do not horn)



'U' Turn
(Allowed to turn)



Choose and write the correct answer.

1. The road sign  shown here means that a _____ is nearby.
- a. hospital zone b. school zone c. bus stop

2. This road sign  indicates a _____.
- a. bus stop b. no parking c. level crossing

Evaluation



1. Who am I? Tick (✓) the right answer.

- a. I can run without fuel. (Car/Bicycle)
- b. I stop at all stations. (Passenger train/Superfast express)
- c. I fly in the sky with a few people. (Aeroplane/Helicopter)
- d. I can travel both on a lake and a river. (Boat/Ship)

2. Connect the words with the related pictures.



Sea

Air

Lake

Road

Track

Signal





3. Choose and write the correct answer.

- a. Fishermen use me to fish. _____
 i) Catamaran ii) Bus iii) Train
- b. I am used by the army to save people. _____
 i) Scooter ii) Aeroplane iii) Helicopter
- c. Electric trains _____ .
 i) are smokeless ii) produce smoke iii) use diesel

4. Identify the incorrect pair based on the mode of transport and put a (✓) mark.

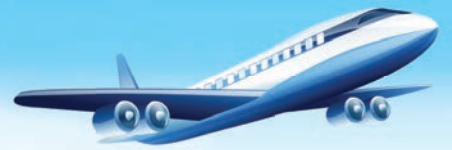
- a. Ship, Sail boat b. Helicopter, Aeroplane
 c. Bicycle, Lorry d. Car, Coracle

5. Write two actions that you should not do on the road.

a. _____ b. _____

6. Tick (✓) the vehicles that move using fuel.





7. Observe, think and tick (✓) the correct actions.



Self Evaluation

- I can identify the different modes of transport. ★
- I follow road safety rules. ★

Unit
4

Day and Night

You will learn about

- ❖ The sky during the day and night
- ❖ Rhythms of the day and night
- ❖ Directions

Observe the picture. What do you see?

Day Sky



The Sun

The **Sun** gives us **light** and **heat**. It helps plants grow. The Sun is much **bigger than the earth** where we live. The Sun looks small because it is far away from the earth. There will be no life on earth if there is no Sun.

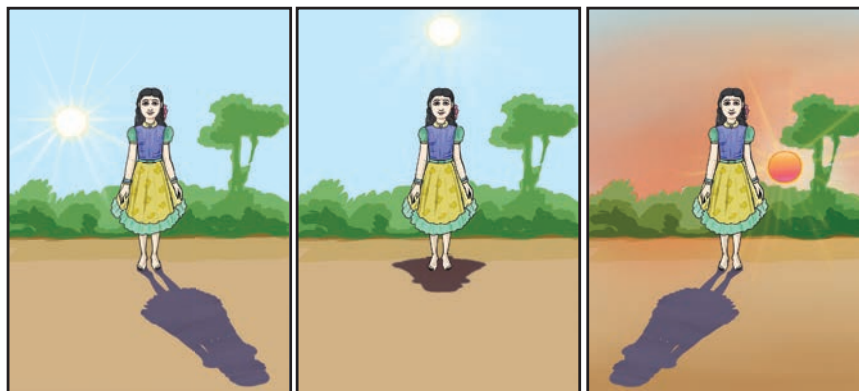


The sunlight takes around 8 minutes to reach the earth.

Shadow

When an object does not allow light to pass through it, a **dark area** is formed. This is called a **shadow**.

Stand with your back to Sun. Look at the ground in front of you. What you see is your shadow. Find out if your shadow moves with you.



- ❖ Observe the things around you that make shadows and share it with your friends.

Have you noticed that the size of your shadow changes? Observe your shadow in the morning, afternoon and evening and find out its size.



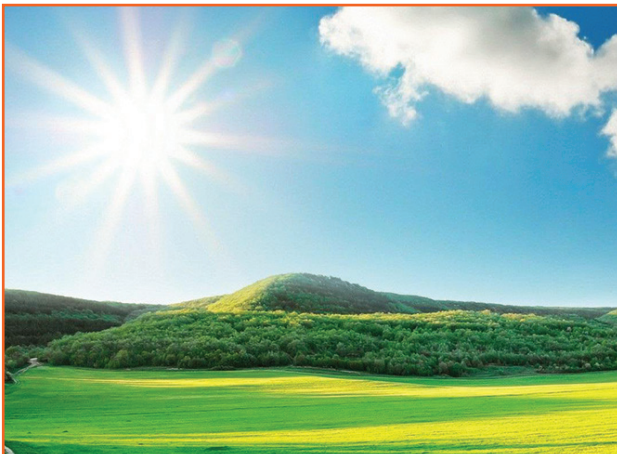
Shadow	Morning	Afternoon	Evening
Long / Short			

Night Sky



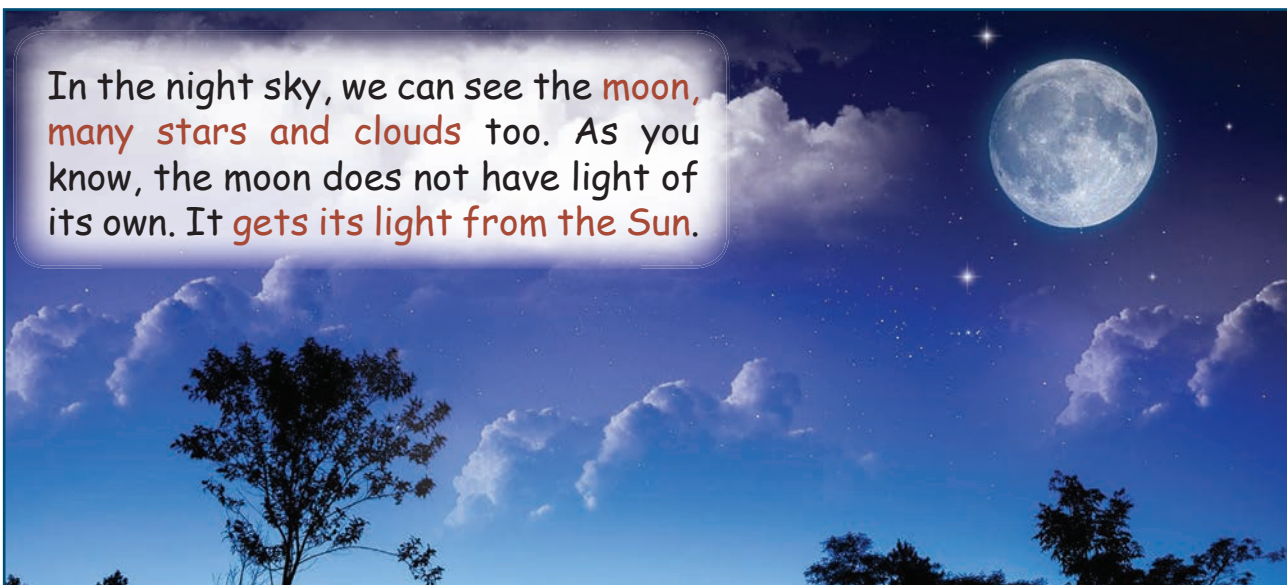
Let Us Discuss

Can we see in the dark? We need light to see things. Observe the pictures. How is the night sky different from the day sky?



The Moon

In the night sky, we can see the **moon**, **many stars** and **clouds** too. As you know, the moon does not have light of its own. It **gets its light from the Sun**.



Phases of the Moon

Let Us Discuss

Does the moon look the same every day? Observe the moon in the sky every night for fifteen days and find out.



The moon appears to change shape every night. On the night when we see it in its complete form, it is called the **full moon** (**Pournami**).

On the night when we cannot see the moon at all (even when the sky is clear), it is called the **new moon** (**Amavasai**).

Many festivals are celebrated based on the **phases of the moon** - e.g., **Eid, Mahalaya Amavasai**.



Neil Armstrong was the first man to step on the moon.

The Stars

There are **countless** stars in the sky. The Sun is the nearest star. The **stars shine** during the day too, but we cannot see their light because the Sun is much brighter than the other stars. We see that a group of **stars** appears to form a **pattern** in the sky. Have you seen any star patterns?

Observe the example given below.



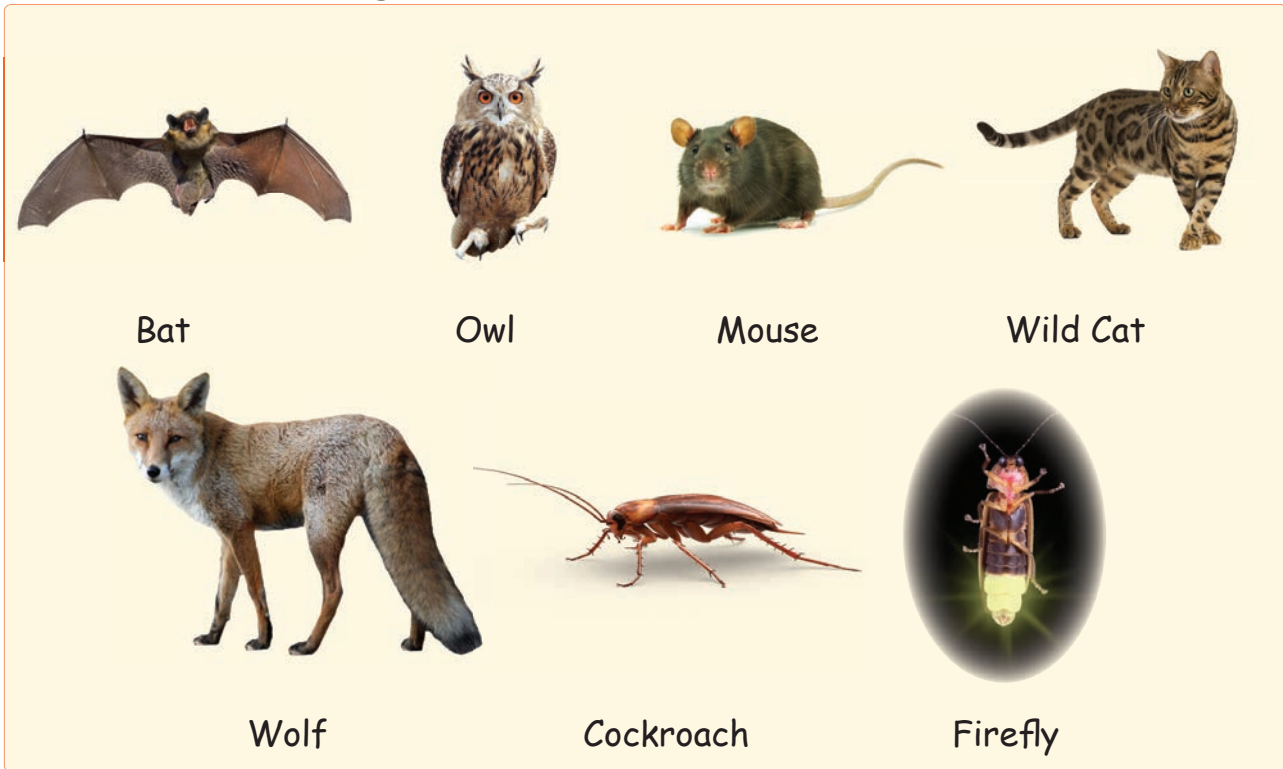
The position of the pattern of stars helped people to know when to sow and harvest crops. They also helped to people find directions during travel.

Match the following.

- | | | |
|-----------|---|----------------------------------|
| a) Sun | - | a dark area that travels with me |
| b) Stars | - | does not have its own light |
| c) Moon | - | form patterns |
| d) Shadow | - | helps plants grow |

Rhythms of Day and Night

Day and night follow each other in a rhythmic way. Most animals and plants are active during the day and sleep at night. Some plants close their leaves by evening, e.g., Rain tree (Thoongu-Moonji Maram). However, some animals are active at night. The bat, owl, wild big cat, mouse, wolf, cockroach and firefly are examples of animals that are active at night.



They are active at night to:

- ❖ Catch other animals wandering at night for their food
- ❖ Avoid animals that eat them during the day
- ❖ Avoid the heat of the day

They have:

- ❖ Big eyes (owl, cat)
- ❖ A sharp sense of smell (mouse, dog)
- ❖ Good hearing (bat)

DO YOU KNOW?

Bats use sound waves to fly and hunt. Owls can see what is behind them by rotating their heads almost fully.



Most flowers bloom in the morning. However some flowers bloom at night. Examples are *Jasmine*, *Water lilies*, *Tuberose*, *Cactus flower*, *Datura flower*. Many of them have a lovely fragrance. Many are white in colour though some have attractive colours.



Jasmine (Malligai)



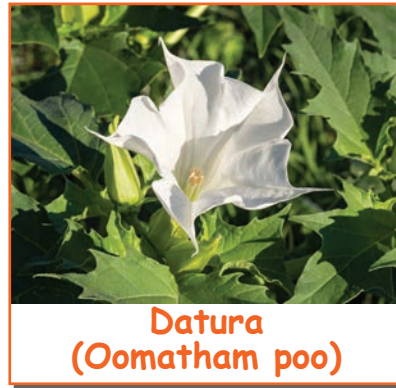
Water lily (Alli)



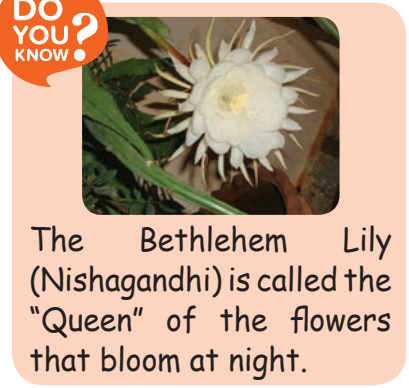
Tuberose (Sampangi)



Cactus flower (Chappathi kalli)



Datura (Oomatham poo)





DO YOU KNOW?

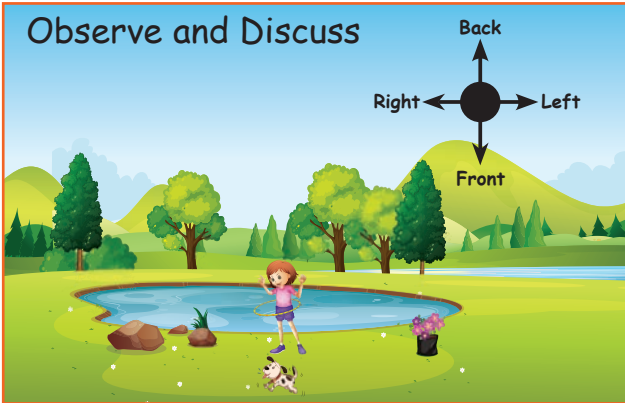
The Bethlehem Lily (Nishagandhi) is called the "Queen" of the flowers that bloom at night.

Identify and tick (✓) the animals that are active at night.



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

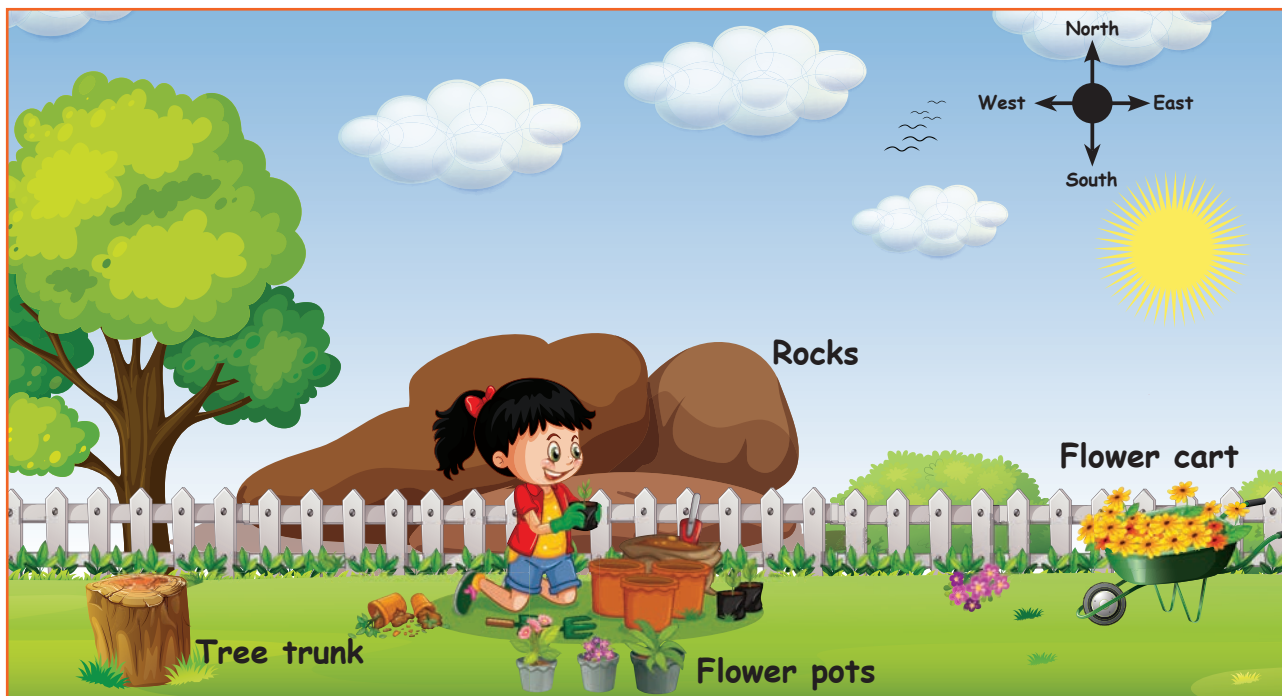
Directions



Front, back, right and left tell us where things are, based on a reference point. North, South, East and West tell us where places and things are, based on the position of the Sun. They are called directions. Directions help us reach a place without getting lost.

The **Sun** appears to **rise** in the **East** and **set** in the **West**. Now stand facing the Sun in the morning (i.e. East). Behind you is West. To your right is South. To your left is North.

Observe the picture given below. **In the centre is Meera**. To her South are the flower pots, to her North are the rocks, to her East is the flower cart and to her West is the tree trunk.



In your school, identify the eastern direction by finding out where the Sun rises. Ask your teacher to help you. Then find the direction in which the following are situated - water tank, flag post, playground, toilet, kitchen, gate and water tap. Tabulate your answer.



North	South	East	West

Evaluation



1. Label the pictures. (Moon, Earth, Stars, Sun)



2. Write the names of the animals that are active at night.
(cow, wolf, deer, cockroach, monkey, firefly, rabbit, squirrel, rat)



3. Write 'T' if True and 'F' if False.

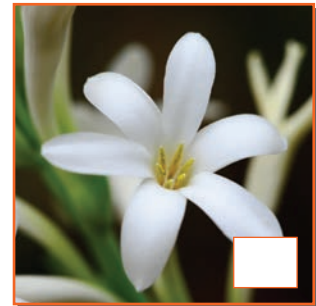
- a. The Sun gives us light and heat.
- b. The shape of the moon changes every night.
- c. Groups of stars appear in many patterns.
- d. The Jasmine blooms during the day.
- e. When you stand facing East, to your right is West.

4. Observe the given picture and fill in the blanks.
(tree, flowers, pond, dog)



- The _____ is in the South side of the garden.
- The _____ is in the North side of the garden.
- The _____ are on the East side of the garden.
- The _____ is to the West side of the garden.

5. Identify the flowers that bloom at night by putting a tick (✓) mark.



Self Evaluation

- ★ I have observed the features of the day and night sky.
- ★ I can identify some animals and plants that are active at night.
- ★ I can identify the directions.



Unit
5

Wonders of Nature



You will learn about

- ❖ Some wonders of nature - plants and animals
- ❖ Colours and fragrance of flowers



Wonders of Nature - Plants



Nature is full of wonders. Shall we explore some of them?

Lily

Why does water not stay on the leaf of the lily?



The leaf of a lily has a **waxy coat** on the **upper surface**. It has a notch too. Water does not stay on the leaf because of the **notch** and the **waxy coating**.

Notch



EIZV42

Nuts under the soil

Usually nuts are seen on the stem part of the plant. In **groundnut** plants, the nuts are under the soil.

Nuts are also called seeds.



Kurinji



The **Kurinji** or **Neelakurinji** shrub is found in the **Nilgiri** mountains in Tamil Nadu.

The flowers of the Neelakurinji **bloom** only once in **12 years**.

They are **purple blue** in colour. **Nilgiri**, the **Blue Mountain**, gets its name from these flowers.

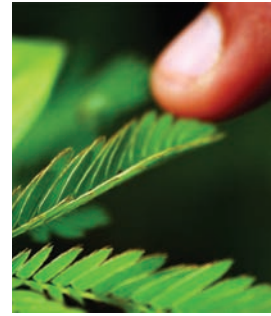
Touch Me Not Plant

Have you seen this plant? It is found in many places.

It is a small herb. When you touch the **leaves** of this plant, they **close**. So it is called the 'Touch Me Not' plant. The leaves open a few minutes later.



Leaves open



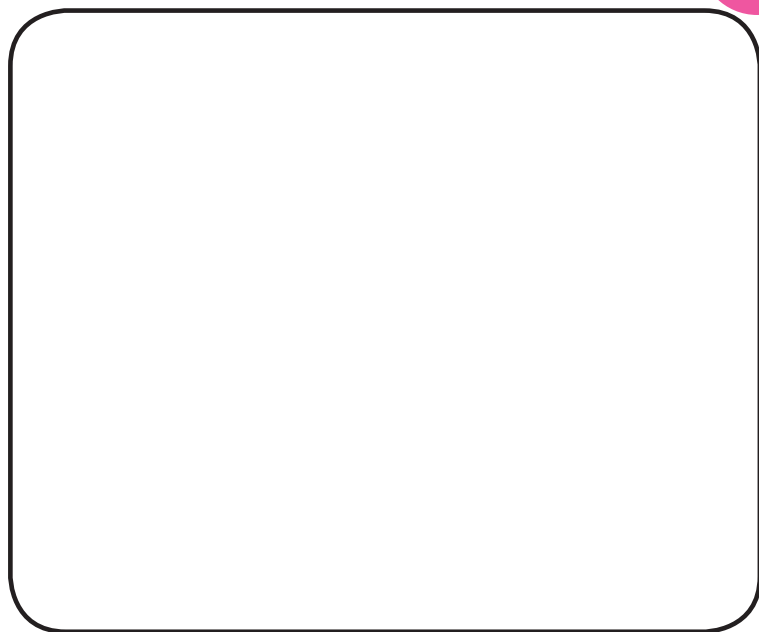
Leaves closed

Calotropis - Erukku

Calotropis is a shrub. It has a group of **waxy flowers**. Its flowers are either **white** or **lavender in colour**. It is also known as the '**Crown Flower**' since it looks like a **crown**.



Draw and colour the Erukku leaf.



Colour and Fragrance of Flowers



Flowers have beautiful colours and many have fragrance. Insects are friends of the flowers. They are attracted by the colour and smell of flowers. Flowers have nectar. **Insects and birds** come to **suck** the **nectar** from the **flowers**.



Many of the flowers that **bloom at night** are **white in colour** and they have a wonderful **fragrance**.



Night- Flowering Jasmine
(Pavazhamalli)

Spanish Cherry
(Magizhampoo)

Jasmine
(Malligai)

Many of the flowers that **bloom during the day** have **attractive colours** and are less fragrant.



Butterfly Pea
(Sangu Poo)

Jungle Flame
(Vetchi Poo)

Periwinkle
(Nithiyakalyani)

Join the dots and colour the picture.



Wonders of Nature-Animals

Chameleon



Have you seen this animal? It is called a **chameleon**. It is a type of **lizard**. It changes its **skin colour** to **merge** with the **surroundings**. This helps it to **escape** from its **enemies**.



Lizard

Have you seen a lizard clinging upside down on the ceiling? Lizards have toe pads that help them stick on to the wall. If the tail of the lizard is cut, it grows back in one or two months.



Spider

Do you remember that insects have only six legs? Spiders are **not insects** because they have **eight legs**. Spiders make threads called **spider silk** with which they create **spider webs**. The threads in the web are very strong and sticky. The webs help the spider catch insects like flies for its food.



Dog

Dogs can smell much better than us. They can even **hear very soft sounds** and sounds from far away. They are trained and used by the police to **identify thieves**. These dogs are called **sniffer dogs**. They are also used to search for people during natural disasters like earth quakes.



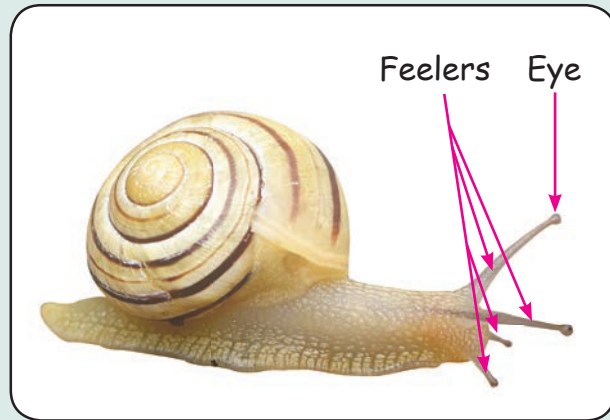


Rat

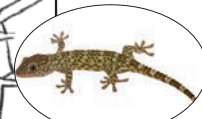
The rat is a small animal that lives in houses and fields. Rats can live without water for even longer periods of time than camels. They can bite hard wood with their teeth. Some of their teeth keep growing. Rats grind their teeth to prevent them from becoming too big.

Snail

The snail has two pairs of feelers on its head. One pair is long and the other is short. The eyes are on the longer pair. If we touch the snail, it pulls its body back into its shell like a tortoise.

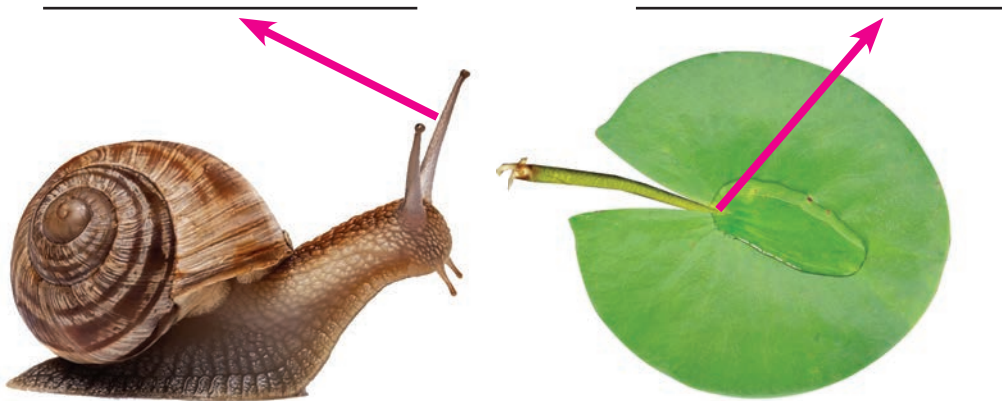


Spot and count the different animals.



Evaluation

1. Label the parts. (Notch, Feeler)



2. Fill in the blanks and identify the plant and animal.



I bloom in the _____ . (mountains / deserts)
 I am _____ in colour. (brown / purple blue)
 The name _____ is because of me. (Nilgiri/ Yelagiri)
 Who am I ? _____



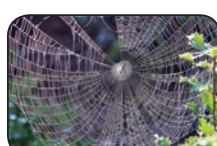
I have _____ pairs of feelers. (2/4)
 My eyes are seen on the _____. (feelers/tail)
 I pull my body back into my shell.
 Who am I? _____

3. Match the following.

a.



b.



4. Fill in the blanks with suitable words.

- In groundnut plants, the nuts are seen _____ the soil.
(above / under)
- In the Erukku plant, the flowers are _____ shaped.
(crown / spherical)
- Insects suck the _____ from the flower.
(milk / nectar)
- The _____ is not an insect. (bee / spider)
- In a _____ the tail grows again when cut. (dog / lizard)

5. Choose and write the name of the flowers and the animal.

(Jasmine / Calotropis)

(Spider / Snail)

(Jungle Flame / Rose)



Self Evaluation

I observe and admire the wonders of the plant and animal world around me.



Environmental Science - Class - II, Term-III

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