

Lesson 2



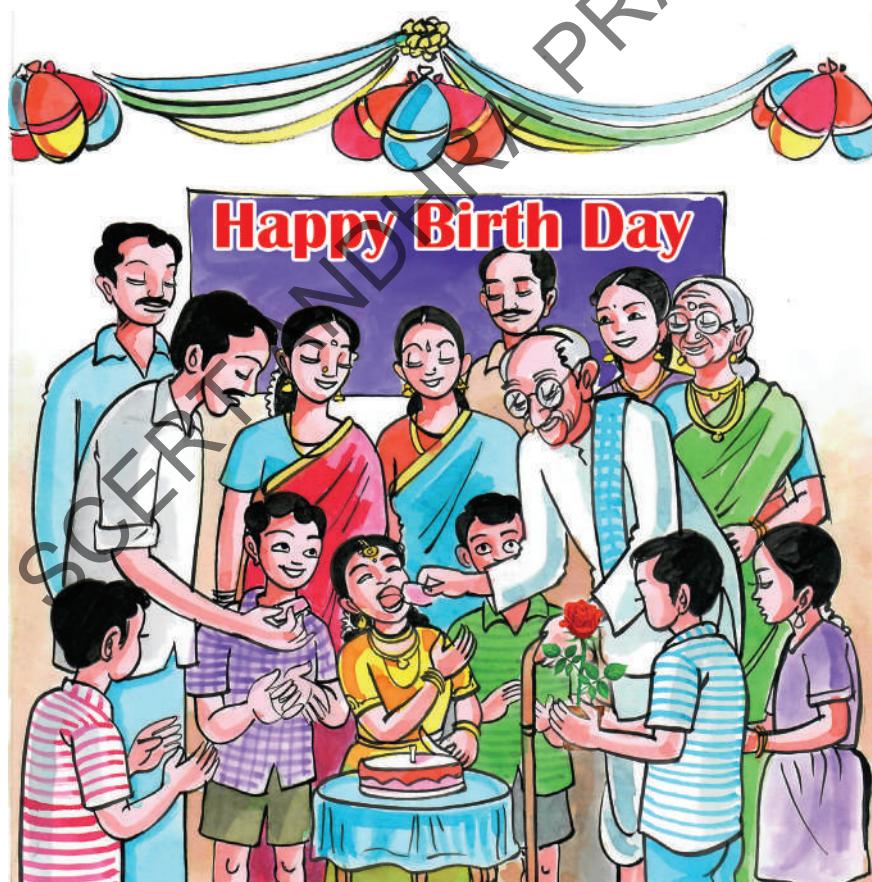
Plants Around Us



Learning Outcomes

Pupils will be able to:

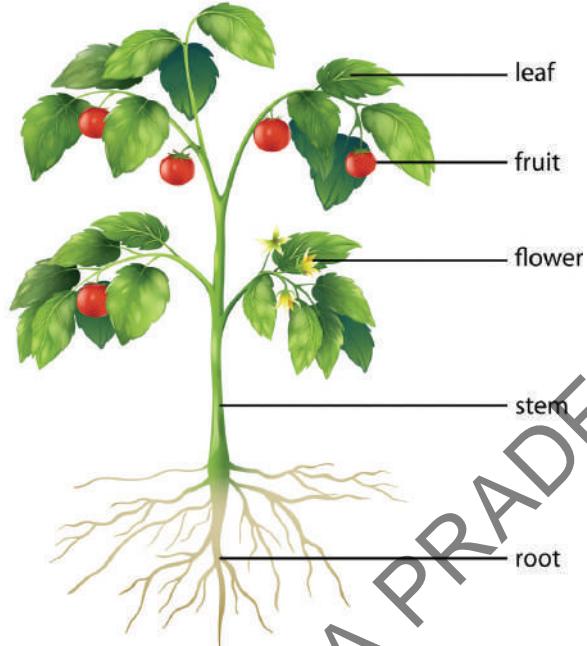
- understand the need for plants and trees and speak about them.
- identify the simple features of plants like shape, colour, texture, aroma of leaves, trunk and bark.
- tell about the various uses of plants.
- develop concern towards nature.



It was Ramya's birthday. Ramya got a lot of gifts from her family and friends. Ramya's father gifted her a rose plant and asked her to water it daily. Next day, while watering the plant, she asked her father:

Ramya : Naana, How does the plant take water from the soil?

Father : Come Ramya, I will show you. Observe this tomato plant. It has roots, stem, leaf, flowers and fruits.



Have you ever observed a plant? *yes*

Can you identify the parts of a plant? *yes*

Do you know how roots help the plant? *No*

Roots of the plant are below the soil and are the most important part of the plant. They fix the plant in the ground. They absorb nutrients and water from the soil and send them to the stems, leaves etc. *Food*



Water the plant daily or it will die.

Let us Do

Collect the roots of some plants. Do all roots look the same? Discuss with your friends.

Ramya : Naana, If the roots are so important, what is the use of a stem?



Father : The stem carries the water and nutrients from the root to all the other parts of a plant and supports it. *help*

Ramya : The stem of this tomato plant is very thin and hairy.



Think and Discuss

- Have you observed the stem of a neem plant? *No.*
- How is it different from a tomato plant? *hard.*



There are different types of stems. Some are soft and green, some are brown and hard. Some plants have thick stems and some plants have thin stems.

As the plant grows bigger, the stem strengthens. These thick stems are called trunks. The trunks are covered by bark.

Big and strong plants are called trees.

Example: Banyan, Tamarind



Shrubs are small plants with hard stems.

Example: Rose, Hibiscus



Trees - big plants with strong stems (brown)

Shrubs - Small plants with hard stems (brown)

Herbs are very small plants with soft and green stems.

Example : Tulsi, Wheat.



Climbers are the plants that grow on support.

Example: Grapevine, Bitter gourd.



Creepers are the plants that creep on the ground.

Example : Watermelon, Pumpkin.



Fill in the given blank with some more examples.

| Trees | Shrubs | Herbs | Climbers | Creepers |
|--------------------|--------|-------|----------|----------|
| Coconuts, jasmines | mints | | grapes | Pumpkins |

Let us Do



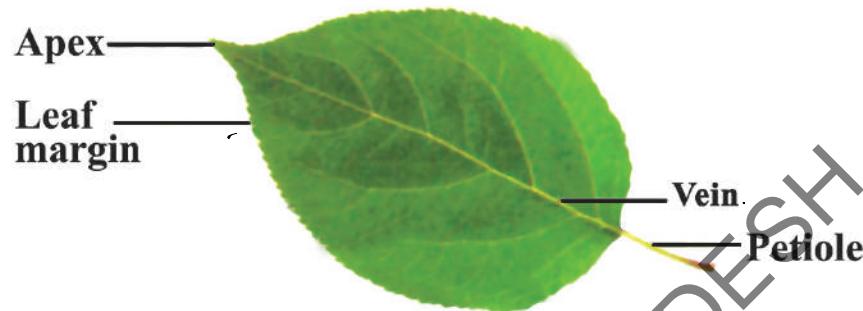
Observe the plants in your surroundings and write them in the space given. One is done for you.

| Plants with thin stems | Plants with thick stems |
|------------------------|-------------------------|
| Tulsi | Mango |
| Rice | Coconut |
| | peach |
| | apple |
| | |

Ramya : Wow! There are so many types of stems. Then why do plants have so many leaves Naana?

Father : Just as you need food to grow, plants also need food to grow. All the leaves prepare food for the plant and help them to grow.

Observe the parts of a Leaf.

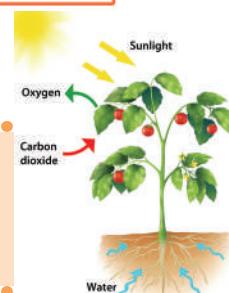


Have you observed the leaves of different plants? *yes*
Are all the leaves same in size, shape, colour and smell? *No*



Do You Know

Leaves are the food factories of a plant. Plants prepare their food in the green leaves with the help of air, water and sun light.



The leaves are of different sizes, shapes, colours, smell.

The leaves of banana plant are very big.

The leaves of hibiscus are broad and the margins are like a saw.

The leaves of papaya plant look like our palm.

The leaves of coconut tree have long veins.

The leaves of tamarind tree are very small.

The leaves of pudina, coriander and tulsi have different aroma.

smell

Let us Do

Collect a few leaves of lemon, mango, neem, tulsi, pudina and coriander. Crush the leaves and smell them. Do they smell the same? Discuss with your friends. Do you know how leaves are useful to us? No

Uses of leaves

We use leaves in many ways.

- We eat the leaves of many plants like coriander, curry leaves, drumstick leaves etc.
- Tea is made from tea leaves.
- Leaves of neem and tulsi are used in medicines.
- Leaves of banana tree, banyan tree, sal tree are used to make disposable plates and bowls to serve food.

Activity

- Collect some leaves and trace them in your note book. Colour the pictures and name them.

Let us Do

Make a leaf album.

- Collect leaves of various shapes, sizes, colours and tips.
- Paint one side of a leaf using poster colours.
- Place the coloured side of the leaf on a paper.
- Press the leaf firmly to get the imprint of the leaf.
- The image of the leaf is ready.



Do You Know

We use fallen leaves to make manure.



Let us Do

Material that gives nutrients to soil

Make your own kitchen garden. You can grow mint (పుద్దన), coriander (కొత్తమీర), green chillies, tomato, brinjal, spinach (పాలకూర) etc...

How to make manure?

- Dig a pit in the ground. Keep the fallen leaves and the left overs (kitchen scraps, egg shells) in it and cover the pit. Leave for a few days. They decompose and turn into manure. Use this manure for healthy growth of your plants in the garden.

Project work

Look at the beautiful pictures given below. They are made of dry leaves.

Make pictures of animals with dry leaves and paste them in your notebook



Ramya : Naana, there are many flowers and fruits in our garden.

Father : Yes Ramya, we get flowers, fruits and vegetables from plants. Flowers are of many colours. Flowers develop into fruits. Many fruits have seeds in them. These seeds when sowed in soil grow into new plants.

Ramya : Wow! There is so much about a plant. I will keep it safe inside my room.

Father : No, if you want to keep it safe you must keep it outside because plants need sunlight to grow, apart from water and nutrients.

Ramya : Naana, my teacher told me that plants help us in many ways.

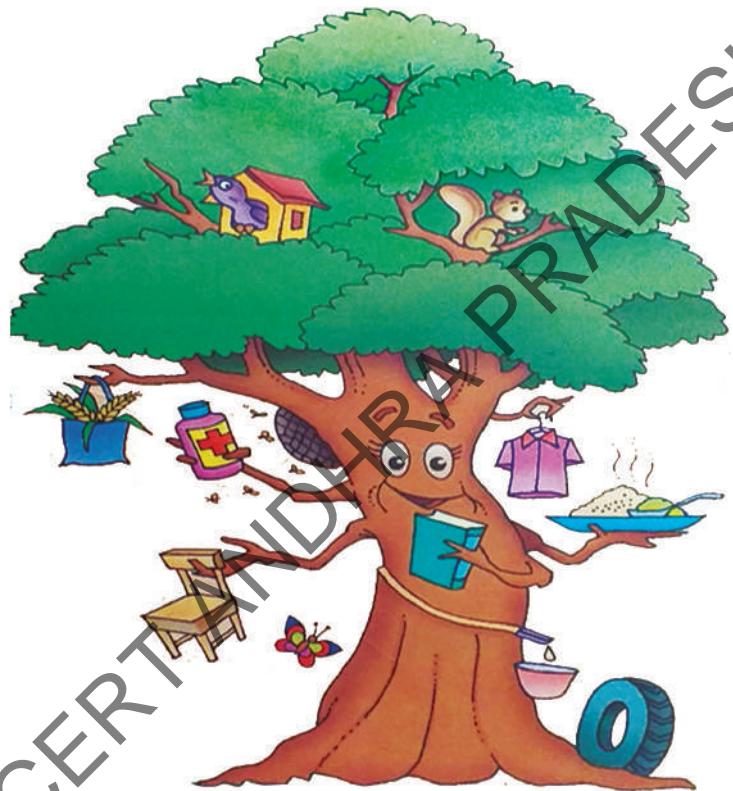


Do you know how a plant helps us ?



Whole class activity

Observe the picture and tell us and write the uses of plants.



Plants give us food.

I.....t.....gives.....us.....paper.....

I.....t.....gives.....us.....medicen.....

I.....t.....gives.....us.....flowers.....

Plants are gifts of nature. Plants give us food. We get fresh air from the plants.

Plants absorb carbon dioxide and release oxygen which we breathe. The roots of big plants hold the soil and prevent soil erosion.



If we destroy the plants, it will be difficult for us to survive. It is our responsibility to take care of plants and save this Earth.



Key words

nutrients, veins, creatures, living beings, carbon dioxide, oxygen, erosion.



What we have learnt

- Roots, stem, leaves, flowers and fruits are the main parts of a plant. Every part of a plant has a special function.
- **Roots:** The roots are the most important parts of a plant. They fix the plant to the ground. They absorb nutrients and water from the soil.
- **Stem:** Carries the water and nutrients to all the parts of a plant and it gives support to the plant. All the stems are not alike. The thick stems of trees are called trunks. Trees like mango, peepal and neem have thick trunks. Their trunks are covered by bark.
- **Leaf:** The leaves are of different sizes, shapes and colours. All the leaves have veins.



Improve Your Learning

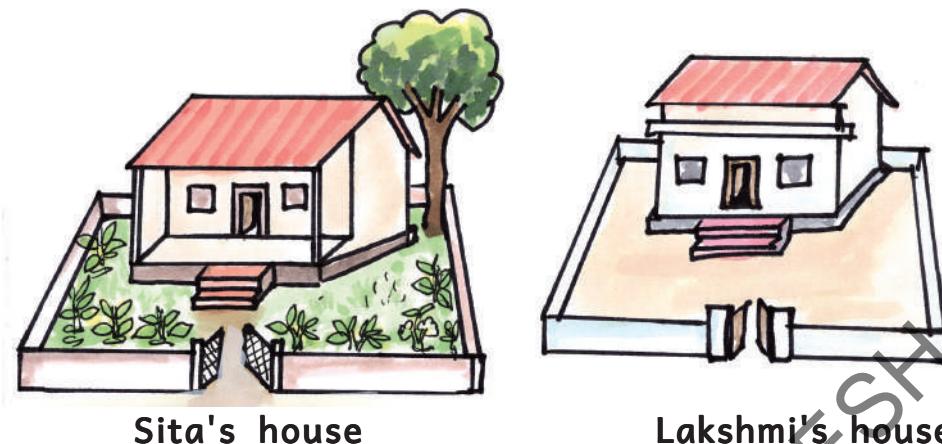
I. Conceptual Understanding (Tell and write).

Answer the following questions.

1. What are the parts of a plant ? root, stem, leaves, flower, fruit.
2. How do roots help the plant ? Holds The plant & sends water, food to the plant.
3. How does stem help the plant? It sends food to the plant from root.

II. Questioning

4. See the houses of Sita and Lakshmi.
What questions would you ask them regarding plants?



Ask a few questions :

Questions to Sita : *how did you grow these many plants?*

Questions to Lakshmi : *Why did you not grow any plants?*

III. Experiments and field observations.

5. Observe trees, shrubs, herbs, climbers and creepers in your surroundings and name them.

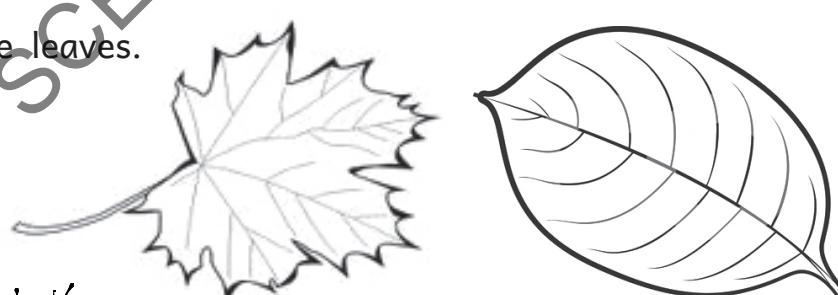
IV. Information skills - Project work.

6. Collect some aromatic leaves in your surroundings and name them.

V. Drawing pictures and model making.

7. Draw a tree which you find in your surroundings. Colour it.

8. Colour the leaves.



VI. Appreciation, values and creating awareness towards biodiversity.

9. How do you feel if you see some one cutting the branches of the trees around you. What will you do then ? *I will tell them not to cut.*
10. What will you do if you see the fallen leaves in your school ground? *I will play.*