

## Introduction

- Forest gives us oxygen in large scale.
- Forest purifies the air and water as it plays an important role to balance the water table.
- Forests and trees recharge the ground water by absorbing the rainwater and ground water.
- Cutting down trees and forest for our needs leads to a great disturbance in nature as it affects the water cycle and the quality of air.

## Visit to a forest

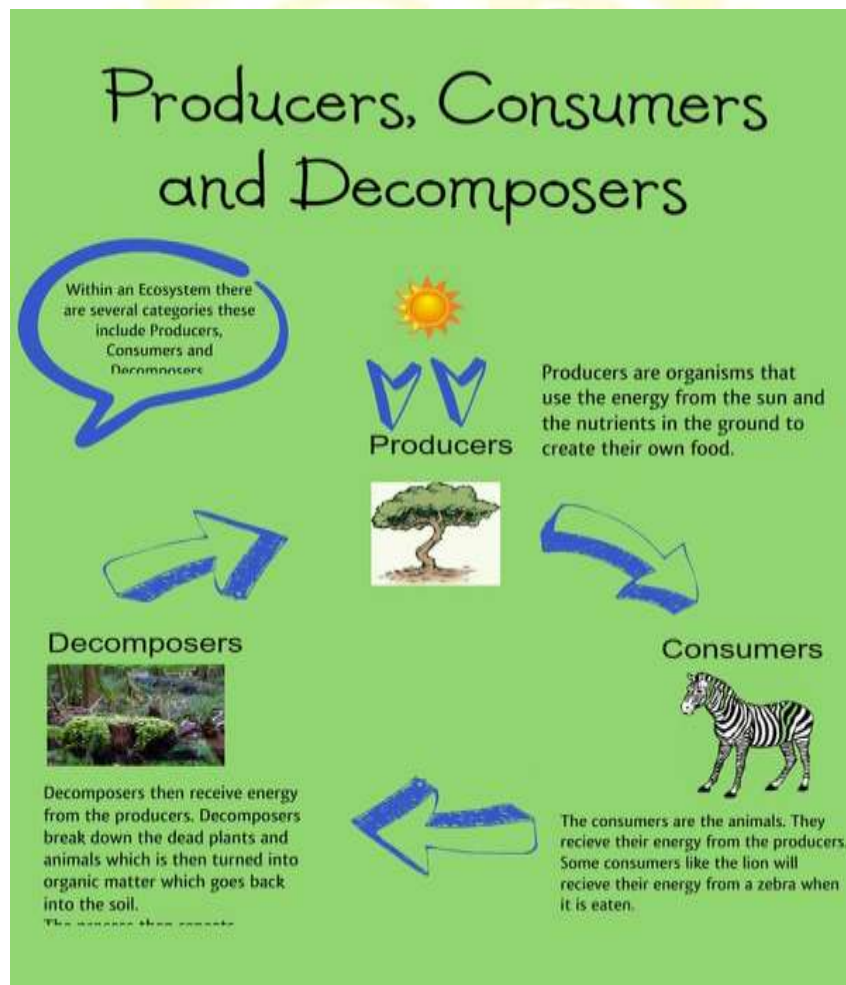
- A large part of land area is covered by forest.
- Forest is the home of many animals like monkeys, birds, boar, bison etc. some animals live in the deeper areas of forest like jackals, porcupine, elephants etc.
- In forest types of plant and animals lives together.
- Various types of trees like sal, teak, semal, sheesham, neem, palash etc. and various shrubs and herbs are present in forests.
- Forests provide us with many products like fuel wood, plywood, boxes, paper, matchsticks, furniture, gum, oils, spices, fodder for animals and many medicinal plants.
  - **Activity 1**
    1. Visit a nearby park or if possible, visit a forest.
    2. Identify different types of trees observe their characteristics.
    3. Write down the different characteristics of different trees like the height, shape of leaves, crown, flowers and fruits.
    4. Different types of tall and giant trees are called canopy and understoreys are the pant and shrubs that are between the canopy and the floor of the forest.
- Type of trees and animals varies from place to place because of the different climatic conditions.
- The floor of the forest consists of dried and decaying leaves, twigs, seeds and small herbs.



## ➤ Activity 2

1. Take out some domestic waste from our kitchen like leftover foods, vegetable and fruit waste and also dried and decaying leaves.
  2. Put these wastes into a pit and cover it with soil.
  3. After 3 to 4 days remove the layer of soil from the waste materials.
  4. You will find that the pit is warm from inside.
- The decaying matter on the floor of the forest is warm and moist.
  - Forests consist of many abiotic and biotic components and there is interdependence between each and every component.
  - In the forest there are different types of animals like herbivore animals that eat only plants, carnivore animals that eat other animals, omnivore animals that eat both animals and plants and scavengers that eat dead and decayed animals.
  - There are many food chains we can find in the forest for example: eagle eats snake. Snake eats frog. Frog eats insects. Insects eat grass. Every food chain is linked with each other.
  - Apart from animals there are some organisms and microorganisms that live in the soil in the forest.
  - These organisms and microorganisms like mushrooms, insects, millipedes, ants and beetles are known as decomposers that eat dead plants and animal tissues and convert them into humus.
  - The nutrients of the dead plant are absorbed by soil with the help of humus which then these nutrients are absorbed by the roots of the plant.
  - Forest provides oxygen for the animals through the process of photosynthesis for respiration.
  - Forest plays an important role in forming water cycle as it releases water vapours through transpiration.
  - Cutting down trees is badly affecting the water cycle.

- People from many tribes live in the forest. The forest is home for those people and provide them with food, shelter, water and medicines.
- Dark forests help animals like deer and other herbivores to hide themselves from carnivores.
- We can recognize the presence of animals by their droppings and footprints.
- Animal's dropping disperses the seedlings of many plants, herbs and shrubs which help the forest to grow and regenerate.
- The decaying dung act as the manure for plants.
- Large variety of herbivores means large number of carnivores in all we can that large variety animals help forest to grow.
- Decomposers provides the nutrients to the growing plants.
- The raindrops do not directly hit the floor of the forest because of the canopy and understories.
- Seepage of rainwater is done by the roots system of the of the trees of the forest.
- By the seepage of rain water the ground water recharges and in this way the water table is also maintained by the forests.



- Trees hold the soil and prevent it from being washed away by the heavy rain.
- Forest also helps in preventing the flood because it absorbs the rainwater.
- Forest started vanishing out because of the developing industries, constructions and high demand of woods.
- We should rather focus on sustainable development to preserve our forests.
- If forests disappear then the water cycle, water table, amount of rainfall, flora and fauna of many places will be badly affected.
- The lives of many people belong to different tribes will be endangered.
- Many animals and plants will not get their food and shelter if the forest disappears.
- Forests balance the amount of carbon dioxide and the oxygen in nature therefore it is also known as the green lung. If forests disappear then amount of carbon dioxide will be greater amount in the air than the oxygen and this will directly affect the human life.
- Forest prevents us from flood like situation by absorbing and holding water so if forests disappear then many areas will be affected by floods on regular basis.

