

Week 5: Trees

Lesson 1

Notes for students to copy

Caring for our trees

Why are trees important?

Trees are important to us because we use trees in so many ways to sustain our life in our communities and also, we use trees as a way to making money.

Trees are important for the land

They hold the soil from being washed away. The roots of the trees hold it in place. When it rains, the top soil is washed away, there is no good soil or ground left to grow things, there are not trees, nothing to protect us from cyclones.

Discussion Questions

1. What happens if we clear some ground on a hillside to keep cattle?
2. What happens if we cut down trees along the banks of a river?
3. What happens if we cut down the trees along the coast?
4. Do you know of anything like this happening near where you live?

Lesson 2

Notes for students to copy

Trees are important for the plants and animals that live in and around them

Living things need trees for food and shelter and as a place to have their young. If we cut down the trees where they live, they will die. Even the fish and sea creatures will suffer, if we cut down the trees in the mangrove swamps.

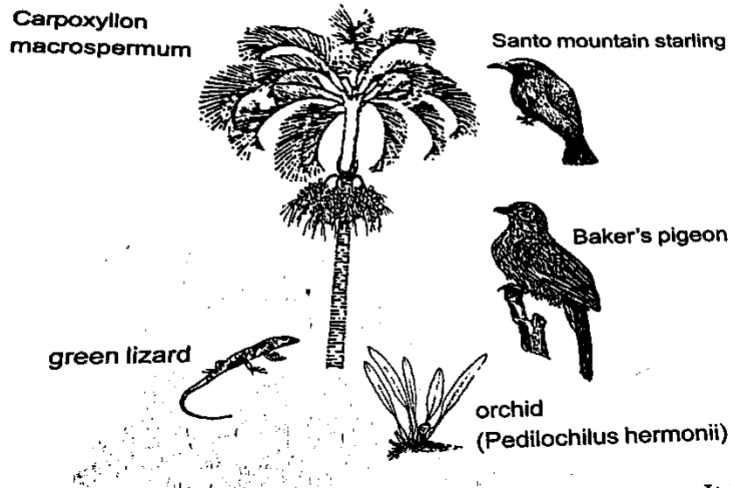
In some parts of our forests, especially in the primary forests, we can find trees and other plants and animals that belong specially to Vanuatu. We cannot find them anywhere else. We call them **endemic**. If we cut down the endemic trees, we will lose them from our world forever. If we cut down the forest where the endemic plants and animals live, we will lose those plants and animals forever.

Discussion questions

1. What plants, animals, birds, reptiles and insects live in our forests?
2. Why do we say some plants or animal 'endemic' to Vanuatu?

Here are some pictures of endemic plants and animals

Here are pictures of some of our endemic plants and animals.



The Santo Mountain startling is the rarest bird in Vanuatu. It is found only in the high mountains of Santo. The Carpoxyllon macrospermum is an endemic palm tree that has recently been discovered. We have many other plants and animals in Vanuatu that are interesting and unusual. Even if they are found in other countries as well, it is important that they go on living here.

Lesson 3

Notes for students to copy

Trees are important for all living creatures.

It is during photosynthesis that the trees give out extra oxygen into the air. All animals need oxygen to breathe. If there is not enough oxygen in the air, they will die. They need the plants to provide the oxygen that they need to stay alive.

In another way too, plants keep other living things alive. Animals eat plants, or they eat other animals that have eaten plants. If there are no plants to eat, they die.

Lesson 4

Notes for students to copy

Looking after our trees

All over the world, people are beginning to be concerned about our earth. All countries of the world have held meetings to discuss the problems that we are making for ourselves by not looking after our natural environment.

Discuss and list down five reasons to why people cut down trees

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People have cut down trees that have grown up naturally in the primary forest where they belong. We cannot continue cutting down our forests forever without preparing for the future.

In Vanuatu, the government has prepared a national conservation plan to help us look after our environment properly. It shows us ways we can go on using our trees and all living things around us without destroying them forever. If we act wisely we can take all things we need from our land and still leave enough for the people who will live here after us. This is called **conservation**. It also shows us how to take care when we are **logging**, or cutting down trees.

Lesson 5

Notes for students to copy

What can our children do to protect our trees?

There are ways which we can help to make sure that we have enough trees for the future

- Not to cut names in the barks or destroy young trees by slashing at them with bush knives.
- Breaking branches when collecting or picking fruits.
- Clear up any rubbish under the trees such as plastic bags, old tires and old batteries, which can poison them
- Do not light fire under the trees.

We must all understand that trees can be easily damaged.

Week 6: The sea

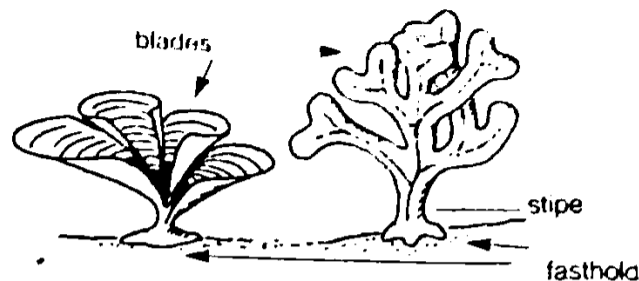
Lesson 1

Sea plants

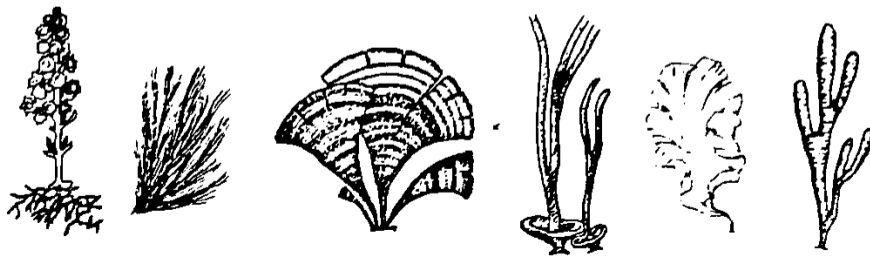
Scientists divide plants into two main groups: flowering and non-flowering kind plants. Sea plants include algae and sea grass.

Algae (seaweed)

Algae are also called seaweed. Algae do not have leaves but have blades instead. They do not have roots but have a part called the **fasthold** which anchors the plant to the bottom. Algae do not produce flowers. They are non-flowering plants. Algae provide food for a lot of sea creatures such as fish and shellfish. They also help in holding the reefs together.



Here are some examples of algae that you may find on the reef:



Sea grass

Seagrass is usually found in the shallow water in sandy areas of the reefs. It is eaten by some reef creatures, for example, the dugongs. It provides nursery areas and homes for many reef animals such as eels, fish, crabs, shellfish and octopus. The seagrass has leaves, a stem and roots and produces flowers.

Lesson 2

Sea animals: Invertebrates

Animal groupings

Scientists divide animals into two groups: **Vertebrates and invertebrates**

Vertebrates are animals with backbones. Invertebrates are animals without backbones. **Marine** means belonging to the sea. Marine invertebrates are divided into six smaller groups. They are:

- Sponges
- Coelenterates
- Worms
- Molluscs
- Crustaceans
- Echinoderms

Sponges

Sponges are very simple animals, not plants. They are found growing over rocks or corals. They are soft and very colorful bodies.

Lesson 3

Coelenterates

Coelenterates are animals that are bag – shaped and catch food with the tentacles at the entrance of the bag. Some animals in this group are:

- Hard corals
- Soft corals
- Sea anemones
- Jelly fish
- Hydra

Hard corals

There are about 500 types of hard corals, all very colorful. Corals grow where the sea water temperature is between 18 and 24 'c and at a depth of up to 100 m. they tiny animals out of the water. Some common types of hard corals are:

- Brain coral
- Mushroom coral
- Staghorn coral

- Table coral
- Boulder coral