

# UNIT 3. PLANTS



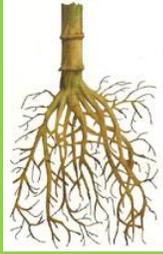
**PRIMARY 4/ Natural Science**

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# PLANTS



## Roots

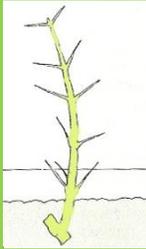


They help to keep it in place.

They **take in the water and minerals** a plant needs to make its food.

## Stem

\*(In a tree it is called **trunk**)



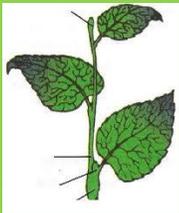
They **support the leaves**.

It helps the plant to stay upright.

It **transports the nutrients to other parts of the plant**.

Inside the stem, **there are two types of ducts**.

## Leaf (S) Leaves (P)



They make food from the plant. They turn water and minerals into nutrients.

- They can make **their own food**.
- They live **attached to the ground**.
- Most plants have **roots, a stem and leaves**.

# CLASSIFYING A PLANT



“We classify plants depending on how they look and feel and how they perform their vital functions”



## Stems

We also classify plants according to the look and feel of their stems

### Woody plants

**They have a hard stem.**  
There are two groups:

- **Trees**
- **Shrubs** (They have multiple very thin stems that branch from the ground)

### Herbaceous plants

**They have a thin and flexible stem.**

They are: **herbs or daisies.**

## Flowers

They are the reproductive organ of most plants



### Flowering plants

**They have flowers, fruits or seeds.**

- For example:
- **Cherry tree**
  - **Apple tree**

### Non-flowering plants

They **don't have seeds.**

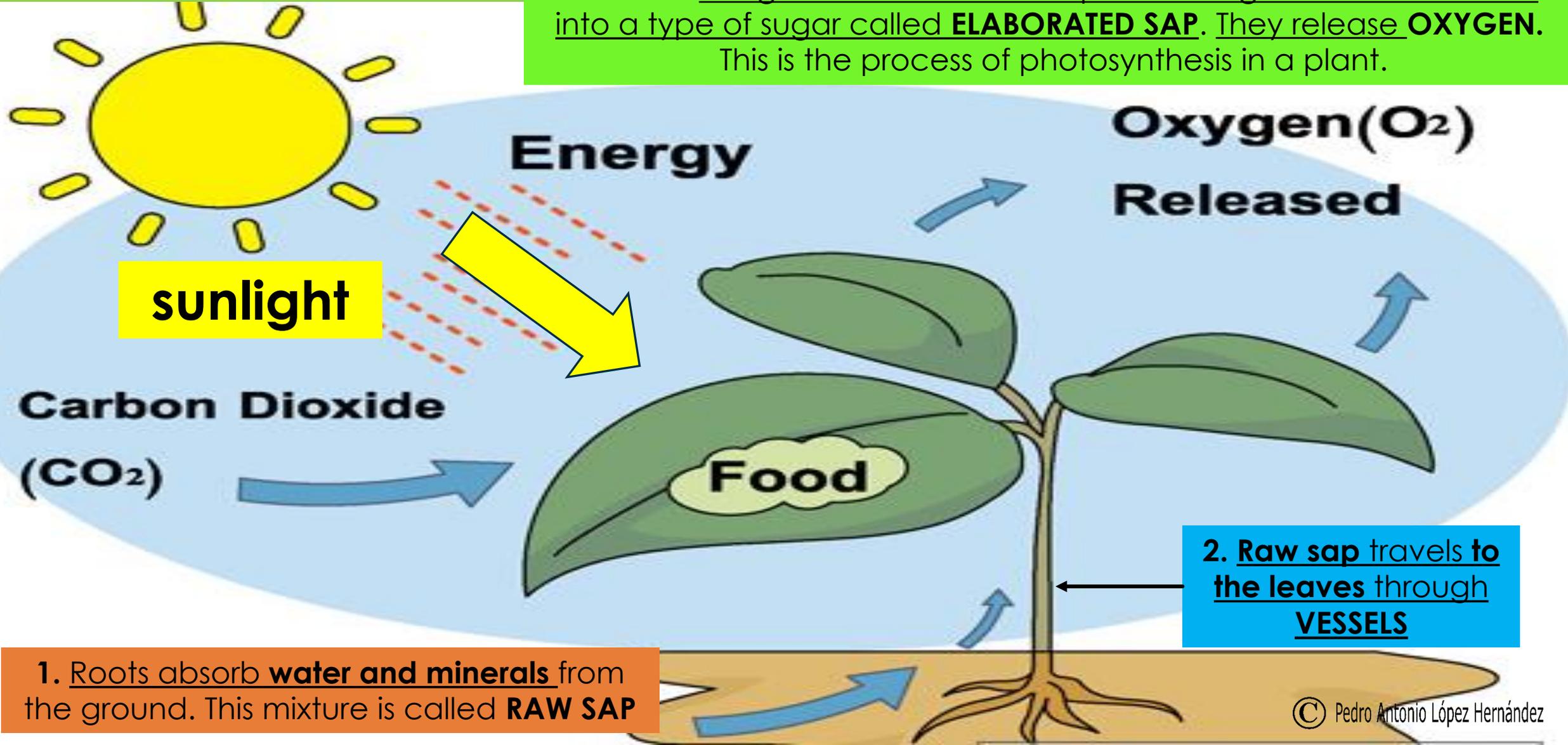
They are: **Moss or fern.**

# NUTRITION IN PLANTS

→ Plants make their own food using **water, minerals, air and sunlight**.

The process of PHOTOSYNTHESIS:

3. Leaves of a plants breathe in a gas from air called **CARBON DIOXIDE**. This gas mixed with raw sap and sunlight and it transforms into a type of sugar called **ELABORATED SAP**. They release **OXYGEN**.  
This is the process of photosynthesis in a plant.



1. Roots absorb **water and minerals** from the ground. This mixture is called **RAW SAP**

2. **Raw sap** travels to the leaves through **VESSELS**

# THE PARTS OF A FLOWER

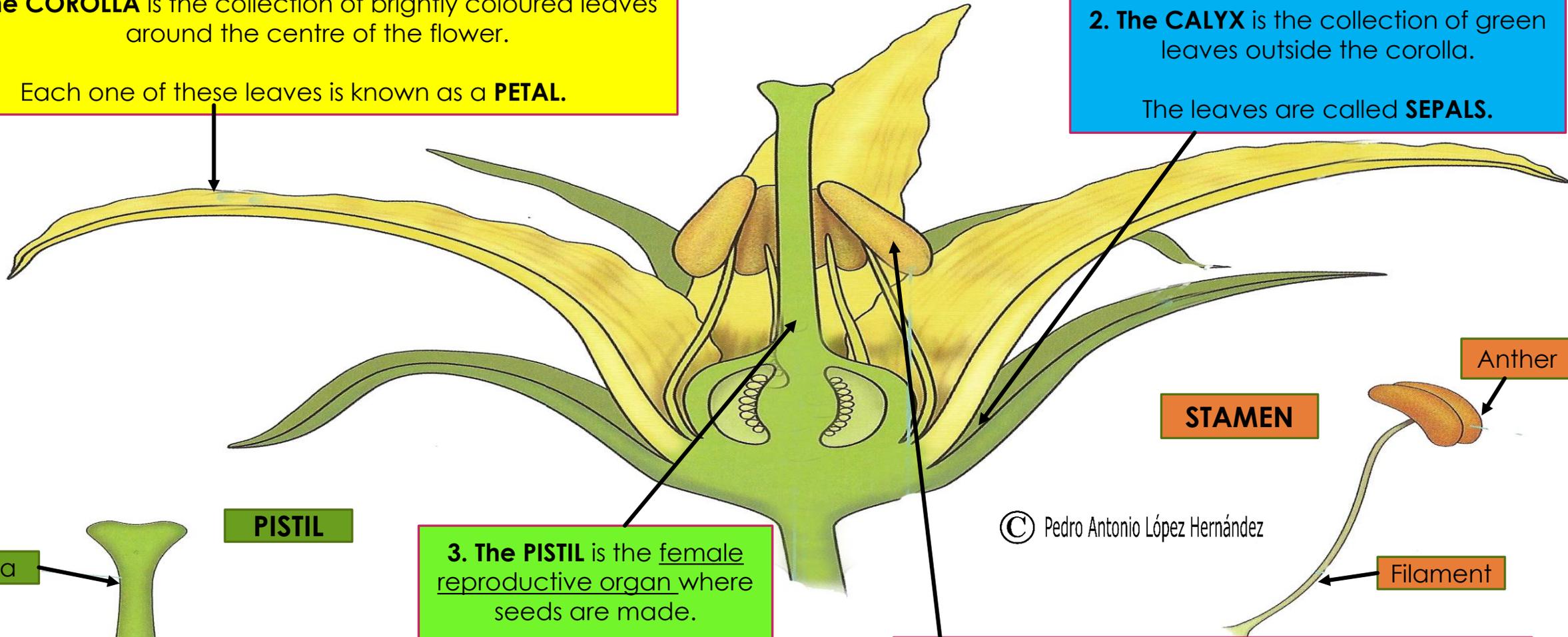
→ The most important parts of a flower are the **COROLLA**, **CALYX**, **STAMENS** and **PISTIL**.

1. The **COROLLA** is the collection of brightly coloured leaves around the centre of the flower.

Each one of these leaves is known as a **PETAL**.

2. The **CALYX** is the collection of green leaves outside the corolla.

The leaves are called **SEPALS**.



**PISTIL**

Stigma

Style

Ovary

Ovule

3. The **PISTIL** is the female reproductive organ where seeds are made.

It is made up of the **STIGMA**, **STYLE** and **OVARY**.

Inside the ovary there are **OVULES**.

**STAMEN**

Anther

Filament

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4. **STAMENS** are the male reproductive organs of a flower.

Each stamens is made up of a **ANTHER**, which contains **POLLEN**, and a **FILAMENT**.

# HOW DO FLOWERING PLANTS REPRODUCE?



Plants reproduce through **SEEDS**. The flower is the **reproductive organ of most plants**. In order for a flower to reproduce, the pollen of one plant has to reach the pistil to another plant.

1. Pollen is transferred from one plant to another by the wind or by some animals, like bees.

This process is called **POLLINATION**.

2. When pollen reaches the pistil, it moves down to the ovary. A grain of pollen attaches to an ovule and creates a seed.

This is called **FERTILISATION**.

3. After fertilisation, the calyx and corolla wither and fall off. Meanwhile, a fruit begins to grow in **the ovary**.

Its main function is to protect the seed as they develop.

4. When the fruit is ripe, it falls to the ground. The seeds go into the soil and a new plant begins to grow.

This part of the process is called **GERMINATION**.

