

## Plant Structure - The Parts of a Plant

Plants are so important because they make their own energy from sunshine through photosynthesis. They are the bottom of the food web supplying food and energy for all other life on earth. They store extra sugars in their stems, roots, seeds or fruit. That energy is passed on to any animal that eats them, including us. We are part of the food web when we eat plant parts like apples, carrots, rice or potatoes.

Learn here the names of plant structures, their job, and what they look like on the plant.

- **Flower** – Flower's petals are often showy because they are designed to attract pollinators like birds and insects who will fertilize them. The flower's job is help to make seeds.
- **Sepals** – The sepals are at the base of the flower and cover and protect the flower before it blooms.
- **Fruit** – After a flower has been pollinated the ovules inside it grow into seeds. The ovary grows into a protective, fleshy fruit around them. In nature when an animal eats a wild fruit, it spreads the seeds inside it. Each seed might grow into another plant in the right conditions.
- **Leaf** - A plant's leaves collect sunlight for the process of photosynthesis. Photosynthesis is the process where green plants use sunlight, carbon dioxide and water to make food and oxygen. Little openings in the leaves, called stomata, collect carbon dioxide from the air and release oxygen. Tiny veins in the leaves spread water and nutrients throughout the leaf. The process of photosynthesis occurring in green plants around the world is what makes the oxygen we breathe.
- **Stem** - A plant's stems help support the weight of the plant and all its leaves. Water and minerals are brought up from the roots. Nutrients made by photosynthesis in the leaves are sent down and all around the plant.
- **Roots** - A plant's roots anchor it into the ground. They also collect water and minerals from the soil and transport them up into the plant.
- **Reproductive Organs** – The reproductive organs of a flower are the male stamens and the female pistil.

The **stamen** includes an anther on top where the pollen grains (haploid) are made. A long filament holds the anther up to meet the wind or pollinating insect.

The **pistil** has 3 parts.

- 1) The **stigma** is the sticky tip where pollen grains stick.
- 2) The **ovary** is at the base of the pistil and contains the ovules.
- 3) The **style** is the thin stalk that connects the stigma down to the ovary. When fertilized, the ovules become the plants seeds.

The ovary becomes the plant's fruit. The fruit protects the seeds and attracts animals that will carry the seeds away to grow (seed dispersal).

# Label (and Color) the Parts of the Plant



flower

fruit

leaf

root

stem