

## Parts of a Plant

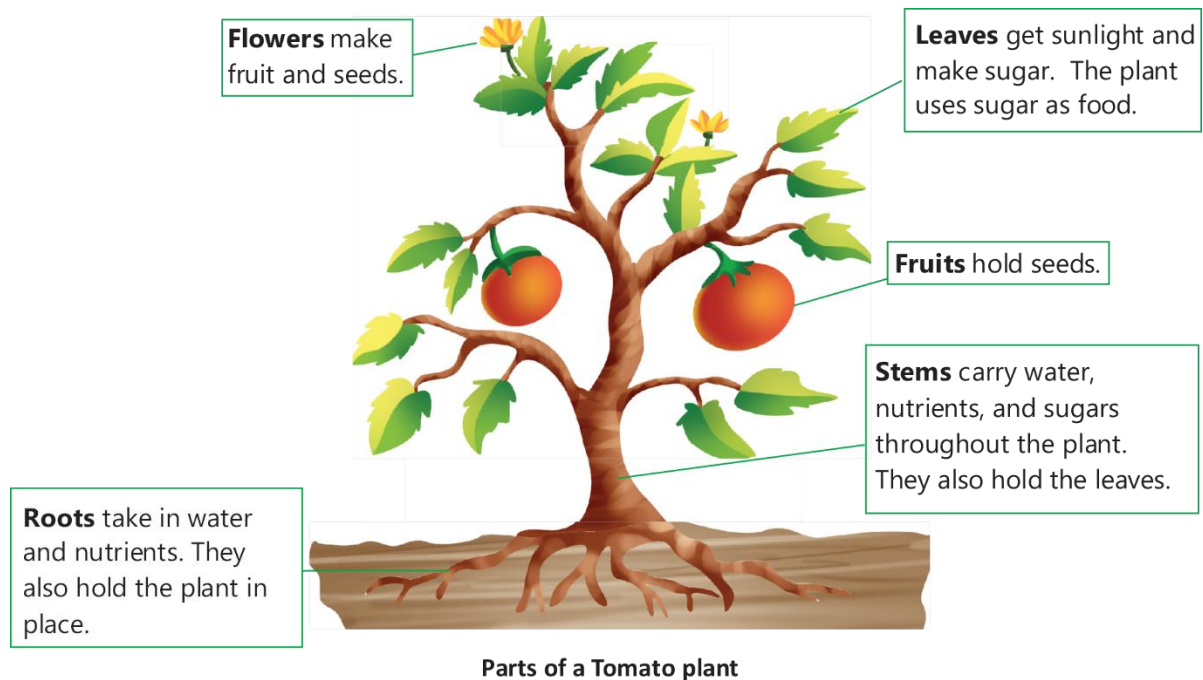
### What is a Plant?

A plant is a living thing that grows in the earth and has a stem, leaves, and roots. Just like our body has different parts that do different jobs (like our hands for holding and our legs for walking), plants have different parts that help them live, grow, and make new plants.

**Plants need three main things to live:**

- Sunlight (for energy)
- Water (for drinking)
- Air (for breathing)

The main parts of most plants are the roots, stem, leaves, flower, fruit, and seeds.



### The Main Parts of a Plant and Their Jobs

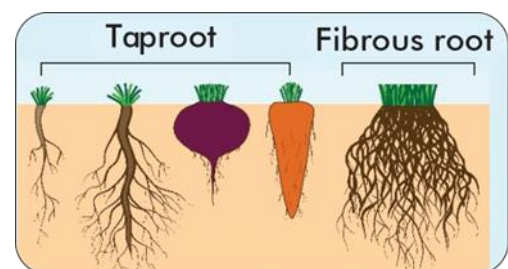
Let's explore each part and its special job!

#### i. The Roots: The Plant's Anchor

**What they are:** The part of the plant that usually grows down into the soil.

**Their Jobs:**

- **Anchor the plant:** They hold the plant tightly in the ground so it doesn't fall over.
- **Absorb water and nutrients:** They act like straws, sucking up water and important minerals from the soil.
- **Store food:** Some roots, like carrots, store extra food for the plant.



## ii. The Stem: The Plant's Highway

**What it is:** The part that connects the roots to the leaves. It grows up from the ground.

**Its Jobs:**

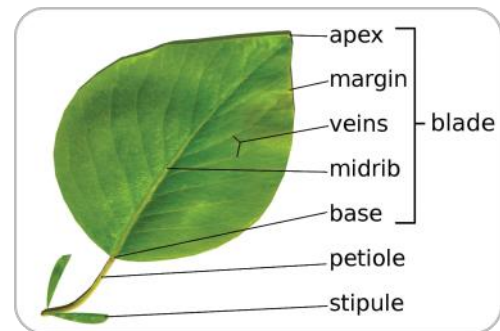
- **Support the plant:** It holds up the leaves and flowers so they can get sunlight.
- **Transport water:** It acts like a highway, carrying water and nutrients from the roots up to the leaves.
- **Transport food:** It carries the food made by the leaves down to the other parts of the plant.

## iii. The Leaves: The Plant's Kitchen

**What they are:** The flat, green parts that grow on the stem.

**Their Jobs:**

- **Make food:** Leaves are like little food factories! They use sunlight, air, and water to make food for the plant. This special process is called photosynthesis.
- **Breathing:** Plants "breathe" through tiny holes in their leaves.



## iv. The Flower: The Pretty Part that Makes Seeds

**What it is:** The colorful and often sweet-smelling part of a plant.

**Its Jobs:**

- **Attract pollinators:** Their bright colors and nice smells attract bees, butterflies, and birds.
- **Make seeds:** The main job of the flower is to make seeds so that new plants can grow. After pollination, the flower turns into a fruit.

## v. The Fruit: The Seed Protector

**What it is:** The part of the plant that grows around the seeds.

**Its Jobs:**

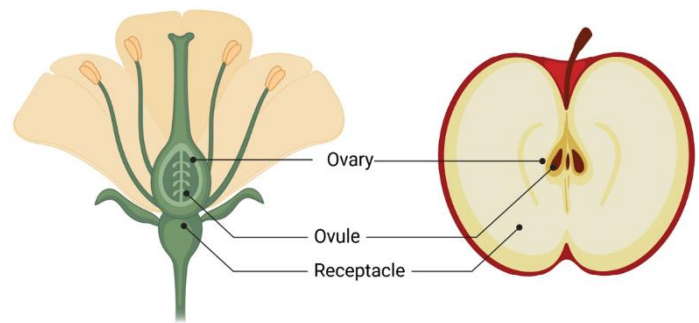
- **Protect the seeds:** The fruit keeps the seeds inside safe.
- **Help spread seeds:** When animals eat the fruit, they move the seeds to new places.

## vi. The Seeds: The Baby Plant

**What they are:** The small parts inside the fruit.

**Their Job:**

- **Grow a new plant:** Each seed contains a tiny, baby plant (embryo) and enough food for it to start growing.



## Key Points and Important Terms

- **Roots:** Hold the plant and absorb water.
- **Stem:** Supports the plant and carries water and food.
- **Leaves:** Make food for the plant using sunlight.
- **Flower:** Makes seeds and attracts insects.
- **Fruit:** Protects the seeds.
- **Seed:** A tiny part that can grow into a new plant.
- **Photosynthesis:** The process where leaves use sunlight, water, and air to make food.
- **Nutrients:** "Vitamins" or food for the plant found in the soil.

## Practice Problems with Step-by-Step Solutions

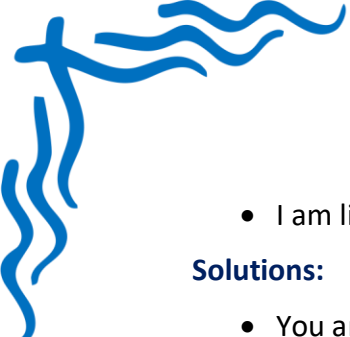
Plant Part	Job
1. Leaf	A. Holds the plant in the soil.
2. Stem	B. Grows into a new plant.
3. Root	C. Makes food using sunlight.
4. Seed	D. Carries water from roots to leaves.

**Solution:**

- 1 → C: The leaf is the "kitchen" that makes food.
- 2 → D: The stem is the "highway" that carries water.
- 3 → A: The root is the "anchor" that holds the plant.
- 4 → B: The seed is the "baby plant."

## Activity: What Am I? (Riddles)

- I am usually underground, and I drink water for the plant. What am I?
- I am the most colorful part of the plant, and I attract bees. What am I?

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- I am like a little kitchen, using sunlight to make food. What am I?

**Solutions:**

- You are the Roots.
- You are the Flower.
- You are a Leaf.

**Activity: What Part Are You Eating?**

Look at the food and name the plant part.

- When you eat a carrot, you are eating the...
- When you eat celery, you are eating the...
- When you eat an apple, you are eating the...
- When you eat spinach, you are eating the...

**Solutions:**

- Root (It's a root that stores food).
- Stem (A celery stalk is the stem of the celery plant).
- Fruit (It grew from a flower and has seeds inside).
- Leaf (Spinach is the leaf of the plant).

**Summary of Main Concepts**

- Plants are living things with different parts that work together.
- The Roots anchor the plant and absorb water.
- The Stem supports the plant and moves water and food around.
- The Leaves make food for the plant through photosynthesis.
- The Flower helps the plant make seeds.
- The Fruit protects the seeds.
- The Seed can grow into a whole new plant.
- Every part is important and helps the plant to live, grow, and make more plants for our world