

Nova's Botanical Wonders: How Plants Grow and Thrive

Get growing with Nova: Discover the secret science of the world beneath our feet and above our heads!

- The roots anchor the plant in the soil and absorb essential water and minerals to transport up the stem.
- The stem acts as a highway for nutrients, moving water from the roots to the leaves and sugar from the leaves to the rest of the plant.
- Leaves are the primary site for photosynthesis, using chlorophyll to capture sunlight and create food energy.
- Flowers are the reproductive organs of the plant, containing both male (stamen) and female (carpel) parts to produce seeds.
- Pollination occurs when pollen is transferred from the stamen to the carpel, often with the help of insects, wind, or water.
- Germination is the process where a seed begins to sprout and grow into a new plant once it has access to water, warmth, and oxygen.

Did you know? Did you know? Plants are nature's own solar-powered factories! Through a process called photosynthesis, they turn sunlight, water, and carbon dioxide into oxygen and glucose. Without these green heroes, life on Earth would be very difficult indeed!

Key vocabulary: Photosynthesis · Stamen · Carpel · Germination · Transpiration · Xylem · Phloem · Pollination