

Plants

A Science A-Z Life Series

Word Count: 543



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KEY ELEMENTS USED IN THIS BOOK

The Big Idea: Many aspects of our lives are affected by or dependent upon plants. In addition to learning about plants, students may gain an appreciation for the amazing diversity of plant life on Earth, and the extensive roles plants play in their lives.

Key words: air, animals, cactus, cones, energy, float, flowers, food, fruit, grow, healthy, kelp, leaves, light, live, nuts, plants, rainforest, roots, seed, soil, sprout, stems, stored, sunlight, water

Key comprehension skill: Main idea and details

Other suitable comprehension skills: Compare and contrast, summarize information, classify information, identify facts, elements of a genre

Key reading strategy: Ask and answer questions

Other suitable reading strategies: Connect to prior knowledge, summarize, visualize

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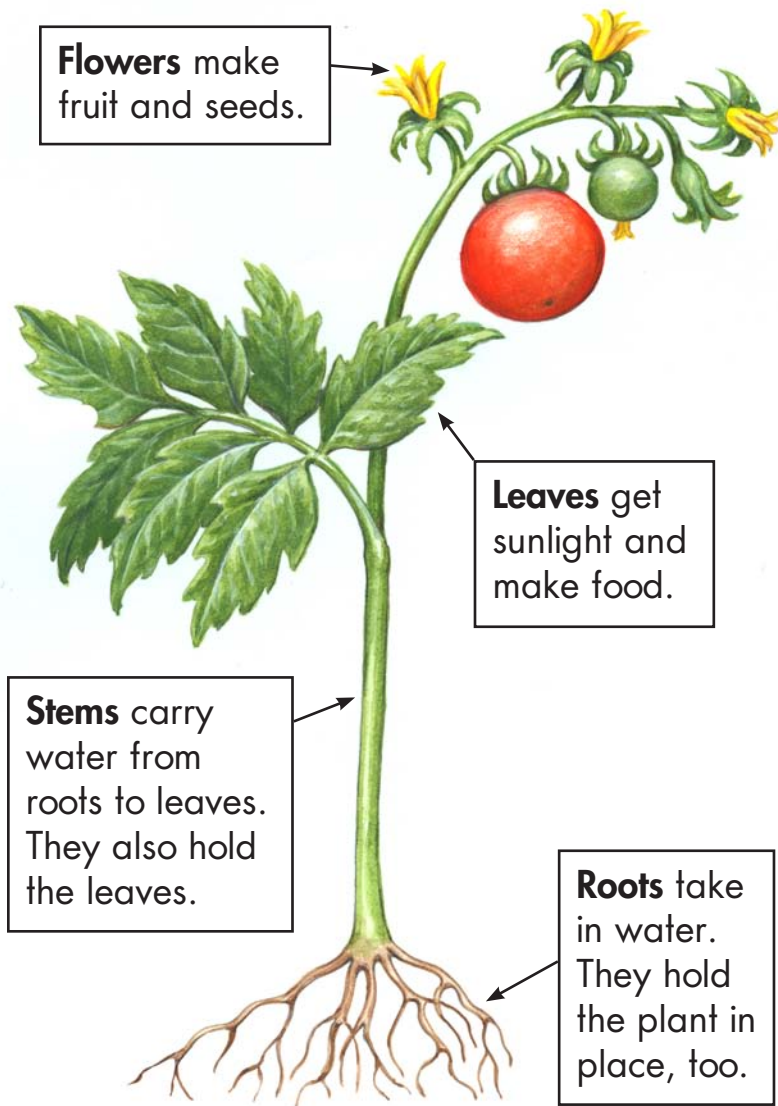
Introduction

Plants are living things. To stay alive, plants have certain needs. Each part of a plant helps it get the things it needs.

In this book you will learn about:

- What plants need.
- What each plant part does.
- How plants make food.
- Where plants live.

Plant Parts



Each part helps a plant get what it needs to live.



What Plants Need

Most plants need six things to live.

- Air
- Light
- Soil
- Food
- Water
- A place to live

Plants use air, water, and light to make food. This is a very important role. Animals cannot make their own food. They eat plants or other animals that eat plants.

Most plants get the water they need through their roots. The roots soak up water found in soil. Some plants have one big root. Other plants have many smaller roots that spread out. Usually the bigger a plant is, the larger its roots are.

A carrot is the root of its plant.



Grass has many small roots.



These trees each have one big stem that is hard.



This grass has many small stems that are soft.

Stems carry water from the roots to the leaves and other plant parts. Plants have either soft or hard stems. Some plants have one large stem. And some plants just have lots of smaller stems.

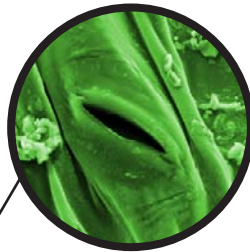
Most plants make food in their leaves. The leaves use air and water to make food. Air enters through tiny holes on the under side of leaves. The leaves also gather sunlight.

Leaves come in many shapes and sizes.



Small grouped leaves

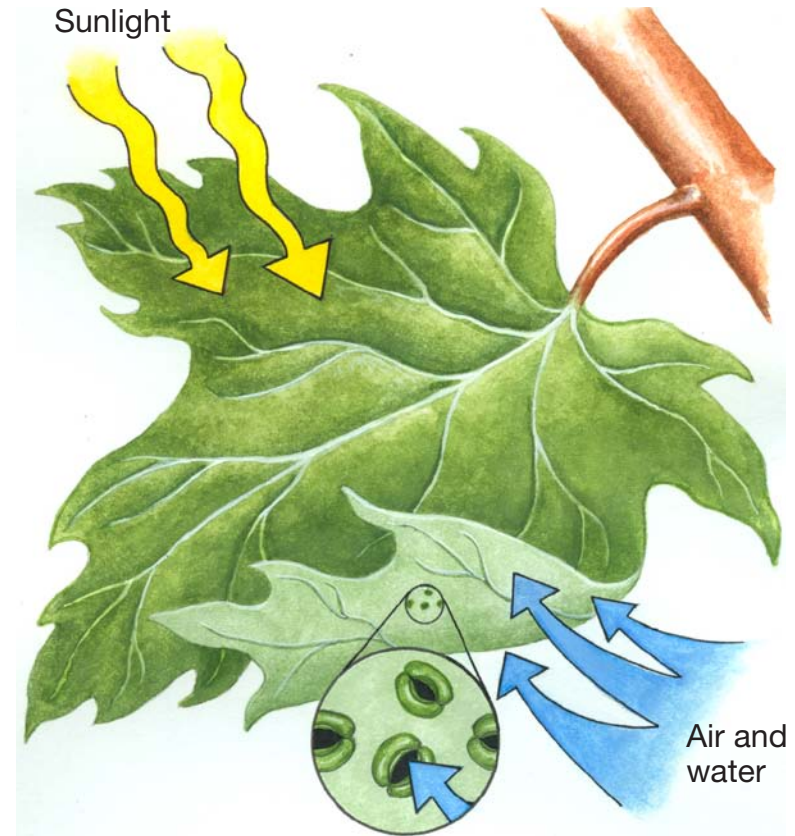
Air enters leaves through tiny holes



Long thin leaves



Large flat leaf



Air and water enter leaves through tiny cells. The leaf combines them with sunlight and makes food.

Stems grow toward the sun to help leaves get sunlight. The energy from sunlight helps the plant combine air and water. This makes the food that plants need. Stems carry the food to different parts of a plant.

Food from Plants

Much of the food we eat comes from plants. Plants store the food they make in different parts. Some is stored in roots and stems. Some is stored in leaves. And some is stored in fruits and nuts. People and other animals eat these parts.



Lettuce – leaves



Potatoes – roots



Apple – fruit



Sunflower plants grow from sunflower seeds.



A sunflower plant

From Seed to Plant

Most new plants grow from a **seed**. Seeds are made by flowers. Many flowers become fruit. Seeds are found inside the fruit.

Some plants, like pine trees, have cones instead of flowers. Seeds are made inside the cones.



Pine cones and seeds

Seeds come in many shapes and sizes.

Every seed can become a plant. Seeds need water and air to sprout.

Seeds are carried by air, water, and even animals. If they land in a good place, they can begin to grow.



The seeds of a dandelion are carried by the wind.



This coconut is the seed for a tree.



Plants grow in and near water, but they also grow where it is dry.

Where Plants Grow

Plants are found growing all around the world. They grow on land and in water. They grow best where it is warm and wet. They can grow in cold places and dry places, too.

Plants that grow where it is dry have parts that are different from plants that grow where it is wet.

This **cactus** grows where it is dry. It has a thick green stem. Food is made in its stem.

Water is stored in its stem.



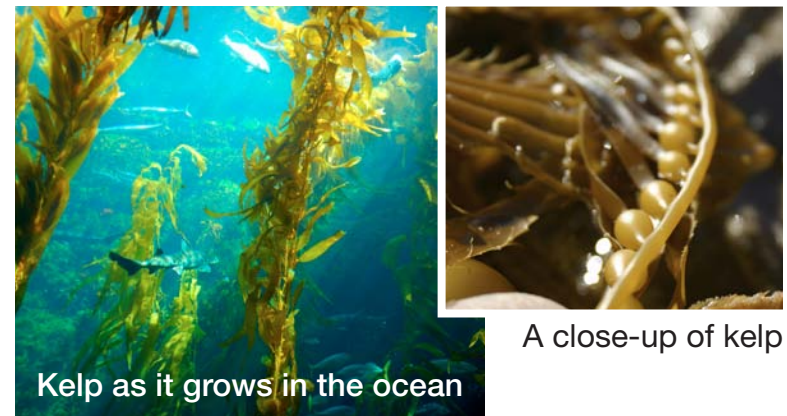
A saguaro cactus grows very slowly.



Plants in the rainforest gather sunlight.

This plant grows in a rainforest. It has large leaves to gather sunlight.

This **kelp** plant grows in ocean water. It has large leaves and air sacs that float in the water.



Kelp as it grows in the ocean

A close-up of kelp

Conclusion

Plants are living things with different parts. Plant parts help plants make their own food. The food they make becomes food for other living things. You eat plant parts every day. They help you grow and keep you healthy.



Bread is made from wheat grains.

Glossary

- cactus** a desert plant with spines (p. 15)
- flower** plant part that grows seeds (p. 5)
- kelp** tall seaweed plants that grow in the ocean (p. 16)
- leaf** plant part that catches light and makes food (p. 5)
- roots** plant part that takes in water and holds it in place (p. 5)
- seed** plant part that can grow into a new plant (p. 12)
- stems** the stalk or trunk of a plant that holds it up and takes water to the leaves (p. 5)