



UNIT 1 • Plants Are Living Things

What Is a Plant?



Bamboo Plants



Sequoia Tree

Can you imagine grass that can grow as tall as a ten-story building? The grass is called bamboo. Can you picture a tree that has a trunk wide enough to drive a car through? This tree is called a sequoia.

There are two large groups of living things on Earth. One group is called plants and the other is called animals. Bamboo and sequoias are two kinds of plants. In this book, you will learn about many kinds of plants. The study of plant life is called botany.

There are many different kinds of plants. Scientists who study plants put those plants that are alike into groups. It is easier to study groups of plants than to study each plant by itself.

All plants are made up of tiny parts called cells. Cells are so small that they cannot be seen without a tool called a microscope. Most plants are made of millions of cells.

There are other ways that plants are alike. All plants grow. Plants also have ways to reproduce. This means that plants can make new plants just like themselves. Different kinds of plants have different ways to reproduce.

All plants are different from animals in two important ways. First, plants cannot move from place to place as animals do. Also, green plants can make their own food. No other group of living things can do that.

Write the word or words that best finish each sentence.

1. Bamboo and the sequoia tree are two kinds of _____.
2. All plants are made up of parts called _____.
3. Cells cannot be seen without a tool called a _____.
4. When plants _____, they make new plants like themselves.
5. Green plants are the only living things that can make their own _____.
6. Plants cannot move from place to place as _____ do.

Answer True or False.

1. There are many different kinds of plants. _____
2. All plants are made up of parts called cells. _____
3. Different kinds of plants have different ways to reproduce. _____
4. Some plants can move from place to place. _____
5. Only a few animals can make their own food. _____

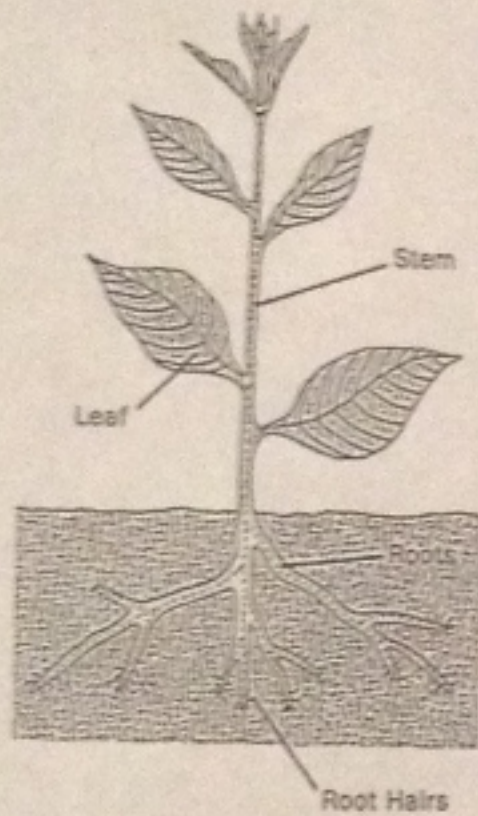
Answer the questions.

1. Why do scientists put plants that are alike into groups? _____

2. What are three ways that all plants are alike? _____

3. What are two ways that plants are different from animals? _____

Parts of a Plant



Plants are made up of different parts. Most plants have three main parts. The **roots, stems, and leaves** help plants to live and grow.

The part of the plant that is in the ground is called the root. Some plants have only one main root. Other plants have roots that are branched. Roots hold plants in the soil. The roots of some plants store food. The root of the carrot plant stores food.

The tips of roots are covered with tiny **root hairs**. These root hairs take in water from the soil. The water and soil contain **minerals**. Minerals are substances that plants need to grow. The water that is taken in by the root hairs carries the needed minerals.

The part of the plant that is easiest to see is its leaves. Most plants have green leaves. The material that makes leaves green is **chlorophyll**. Chlorophyll helps plants make food.

On the underside of a leaf are tiny openings. Air enters through these openings. The leaves use a gas called **carbon dioxide** from the air in making food. The leaves give off another gas called **oxygen** into the air. People and other animals take in oxygen when they breathe.

The stem is the part of a plant that helps hold up the plant. The stem carries water and minerals from the roots of the plant up to the leaves. The stem also carries food from the leaves down to the roots.

A Answer True or False.

1. Most plants have three main parts. _____
2. A plant's leaves carry water to the roots. _____
3. Chlorophyll helps plants make food. _____
4. Roots hold plants in the soil. _____
5. Stems give off carbon dioxide into the air. _____
6. Some plants have roots that are branched. _____
7. Root hairs take in oxygen from the air. _____

B Use each word to write a sentence about plants.

1. roots _____

2. leaves _____

3. stem _____

C Answer the questions.

1. What are the three main parts of a plant? _____

2. What gas from the air do leaves use? _____

3. What gas do leaves give off? _____

4. What is the material that makes leaves green? _____
