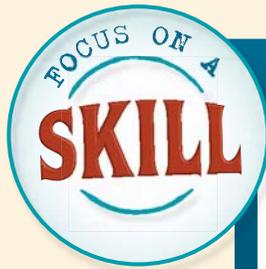


# Disappearing Forests

When settlers first arrived in America, nearly half the continent was covered with forests. Today the United States has lost 95 percent of its forests with trees that are at least 120 years old. The figures for rain forests are equally dramatic. Each year, 37.5 million acres of rain forests disappear. Luckily, using forests wisely can help preserve and protect these valuable resources.



## Recognizing the Main Idea

Authors of nonfiction texts frequently organize their texts by **main ideas** and **details**. They state a general idea and then support it with more specific information. Main ideas are often stated at the beginning or end of a paragraph. When they are unstated, think about what the details have in common.

**Read the paragraph below. The graphic organizer shows the unstated main idea and the details that support it.**

Trees and other forest plants absorb carbon dioxide and release oxygen. Their leaves provide food for many animals. Many animals make their homes in forests. Forests also provide wood and medicines.

Trees and other forest plants absorb carbon dioxide and release oxygen.

Their leaves provide food for many animals.

**Main Idea**  
Living things depend on forests.

Many animals make their homes in forests.

Forests also provide wood and medicines.

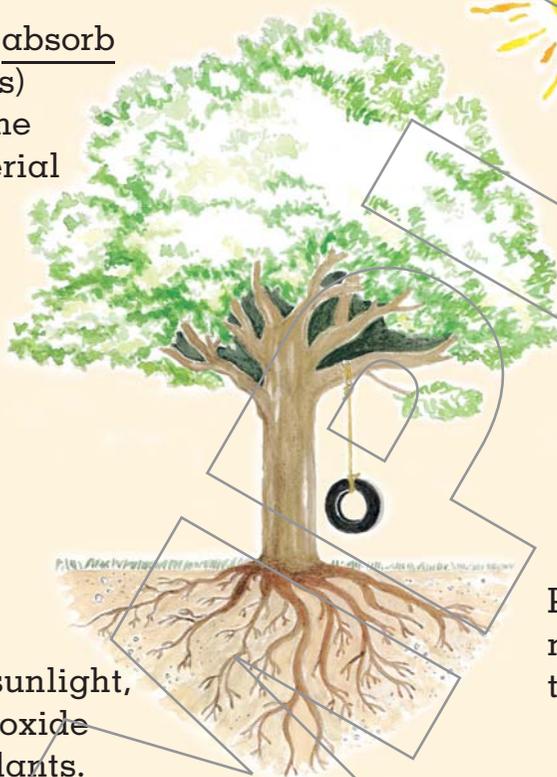
To find the main idea of the whole article, identify the individual main ideas and think about what they have in common.



# VOCABULARY

Photosynthesis (foe-toe-SIN-thuh-sis) is the way plants manufacture food for themselves. Forest plants in each climate around the world go through photosynthesis. Photosynthesis occurs in the warm tropical rain forests and the cold northern forests. This process happens to all species of green plants.

The leaves of plants absorb carbon dioxide (a gas) from the air. Inside the leaves, a green material called chlorophyll (KLOR-o-fill) uses the energy from sunlight to mix the carbon dioxide with water.



The sun shines on the leaves of plants.

The leaves release oxygen into the air.

Plants get water and nutrients from the soil through their roots.

The combination of sunlight, water, and carbon dioxide makes food for the plants.

Read each of these definitions. Then write the best word for the definition in the blank space. Use the underlined words from the diagram above.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*n.* mixture

*v.* to take in; to soak up

*n.* a group of similar animals or plants

*v.* to make

*n.* the usual weather in a place

*adj.* typical of the warm regions of Earth

## The Future of Earth's Forests

Every living thing on Earth depends on forests. Through a process called *photosynthesis*, trees and other plants absorb carbon dioxide and release the oxygen that people breathe. Their leaves manufacture food used by other living things.

Forests are home for many animals and some people. They contain some of the best examples of Earth's **biodiversity**. More animals live in forests than in any other environment on land. A single acre of forest may contain thousands of different species. Forests also provide important resources that people need, such as wood, food, and even medicines.

### **biodiversity**

*n.* the many different kinds of life found in an area

## Different Types of Forests

There are three primary types of forests. *Boreal* forests grow in the northern parts of the world. These forests contain "evergreen" trees, such as pine, spruce, and fir. Short growing seasons and cold winters make it hard for trees in a boreal forest to grow very tall.

*Temperate* forests grow in milder climates. They contain a combination of evergreens and *hardwoods* such as oak, maple, and birch. Because the winters are neither too long nor too cold, trees in temperate forests can grow very tall.

*Tropical* forests grow in the warmest places on Earth. Most of the world's rain forests are tropical forests. Rubber, teak, and mahogany are among the trees that grow there. Some scientists think that tropical rain forests may contain nine of every ten plant and animal species on Earth.

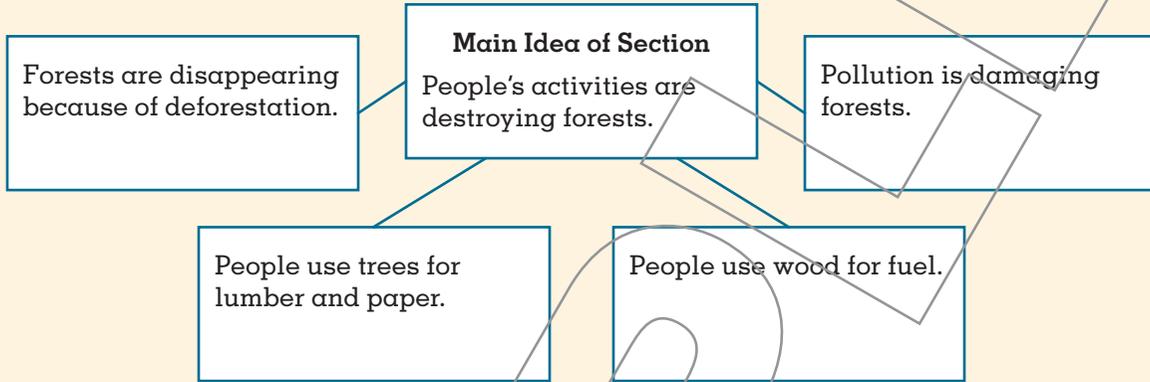
## What Is Happening to Forests?

Thousands of years ago, forests covered about half the land on Earth. Today, much forest land has disappeared. Most of this change has happened since 1950. There are many reasons for deforestation. But the biggest reason is because people cut trees without thinking about the future.

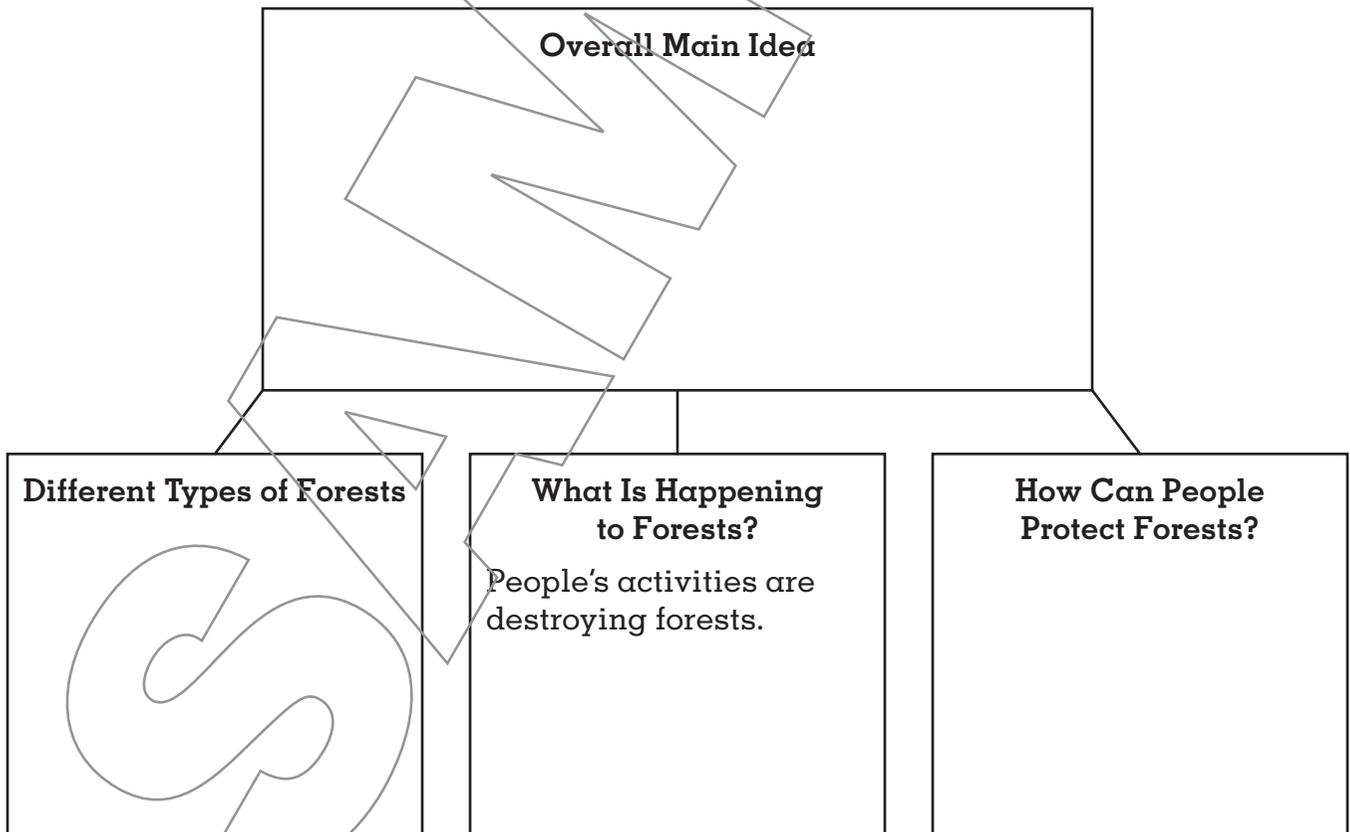


Some scientists think that tropical rain forests may contain nine of every ten plant and animal species on Earth.

Identifying the **main ideas** and the **details** that support them can help you better understand the information in the text. For each section of an article, write the main ideas. Then use the individual main ideas to write one overall main idea. The map below shows how the individual main ideas in the section "What Is Happening to Forests?" can help you determine the main idea of that section.



Complete the main idea map below with the main idea of each section and then determine an overall main idea for the article.



# COMPREHENSION

Think about what you learned from the article about forests. Then circle the letter of the correct answer.

Recalling  
Details

1. One reason boreal forests don't grow very tall is \_\_\_\_\_.
- A extremely warm conditions
  - B extremely cold winters
  - C too much rainfall
  - D mild climates

Using  
Context Clues

2. Which word in the article means "the introduction of harmful substances into the environment"?
- A process
  - B pollution
  - C fuel
  - D resources

Determining  
the Sequence  
of Events

3. What has happened to forests since 1950?
- A They have become home to more animals.
  - B They have disappeared completely.
  - C They have decreased in number.
  - D They have increased in number.

Identifying  
Cause-and-Effect  
Relationships

4. What is one cause of deforestation?
- A recycling
  - B planting trees
  - C managing resources
  - D using trees for lumber

Making Inferences  
and Drawing  
Conclusions

5. You can decide from the article that \_\_\_\_\_.
- A forests are more important to animals than to people
  - B tropical forests are the most useful of all forests
  - C it is impossible to use forests wisely
  - D all living things depend on forests

Writing a  
Response

6. Write a short essay persuading your class to use forests more wisely. Use details from the article to explain why protecting forests is important.

## WORD STUDY: Roots and Root Words

The basic part of a word is called a **root word**. Many times, you can figure out the meaning of longer words by looking for their root words. For example, *combine* is the root word of *combination*. If you know *combine* means "mix," you can figure out that *combination* means "a mixture."

Read the words below. Each word has a root with a prefix, suffix, or both added to it. In the blank next to each longer word, write its root word.

1. scientist \_\_\_\_\_
2. pollution \_\_\_\_\_
3. buildings \_\_\_\_\_
4. deforestation \_\_\_\_\_
5. international \_\_\_\_\_
6. specialty \_\_\_\_\_

Now read the sentences below. Write the root word of each word in parentheses on the line. In some sentences, you may have to add a letter to make the spelling of the root word correct.

1. People are learning to (manageable) their resources more effectively. \_\_\_\_\_
2. It is (wisely) to avoid destroying forests completely. \_\_\_\_\_
3. Recycling shows that people (invaluable) forests. \_\_\_\_\_
4. In the future, it may not be (illegal) to cut down ancient forests. \_\_\_\_\_
5. Around the (global), people must work to protect forests. \_\_\_\_\_