Table of Contents

Welcor	me to TEAM		4
UNIT	Earth's Re	sources	5
	Lesson 1	Disappearing Forests	6
	Lesson 2	The Environmental Movement	0
	Lesson 3	From the Earth	4
	Beyond Ea	arth	8
	Lesson 4	Connected Through Space and Time 4	9
	Lesson 5	Cleaning Up Space 6	53
	Lesson 6	Another World 7	77
	Obstacles	and Achievements 9	21
	Lesson 7	New Ideas, New Inventions 9	2
		New Ideas, New Inventions	
		Wonders of the World	6
	Lesson 8 Lesson 9	Wonders of the World	0
	Lesson 8 Lesson 9 On the Jo	Wonders of the World10Racing for the Prize12	6 0 4
	Lesson 8 Lesson 9 On the Jo Lesson 10	Wonders of the World 10 Racing for the Prize 12 b 13	6 0 4 5
	Lesson 8 Lesson 9 On the Jo Lesson 10 Lesson 11	Wonders of the World10Racing for the Prize12b13Artists of All Kinds13	96 00 34 35



Before We Read

MY LEARNING GOALS

I can

○ identify the main idea.

O discuss the importance of forests.

Disappearing Forests

When settlers first arrived in America, nearly half the continent was covered with forests. Today, the United States has lost around 90 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.



Before We Read

Recognizing 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.

> 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.

> > Main Idea

Fill in the main idea for the paragraph above.

Detail

Forests also provide wood and medicines.

Detail

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

Detail

Many animals make their homes in forests

Detail

Their leaves provide food for many animals.

To find the main idea of a whole passage, identify the main ideas of the sections or paragraphs and think about what they have in common.



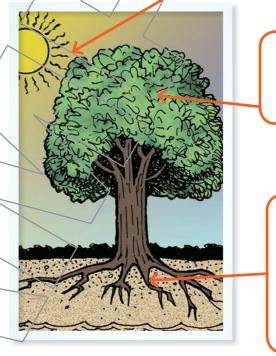
The Future of Earth's Forests

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.

During photosynthesis, the leaves of plants absorb carbon dioxide from the air. Inside the leaves, a green material called chlorophyll uses the energy from sunlight to mix the carbon dioxide with water. The combination

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

Forests are homes 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.



MY LEARNING GOALS

I can

 read and understand an informational text.

O recognize the main idea, stated or unstated.

The sun shines on the leaves.

> The leaves release oxygen into the air.

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

Highlight the word that names the process by which plants absorb carbon dioxide and release oxygen.

What types of plants would you see in a forest?

I would see _____.

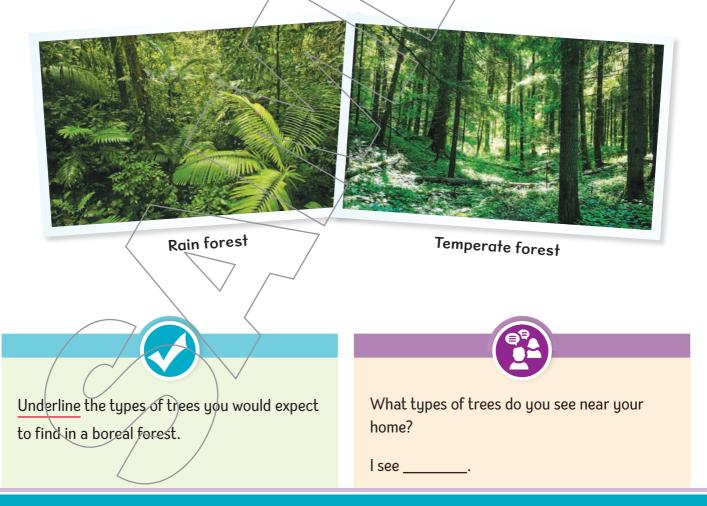


Different Types of Forests

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 contains 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.

The use of trees for lumber is one of the main causes. People need homes and other buildings. Trees are also cut down to be made into paper. Just think of all the things you use every day that are made from paper or cardboard. People use paper for books, newspapers and magazines, paper towels, toilet paper, and tissues.

People also use wood for heat and cooking. In some places, wood is the only available fuel. As the forests disappear, people cannot find enough wood to keep warm.

Finally, pollution is damaging many of the world's forests. Cars, factories, and power plants all cause pollution. As the pollution gets into the air, it falls on the trees. In some places, the trees are dying because of the toxic air.







What things do you use that are made from trees?

l use _____.



How Can People Protect Forests?

There are ways people can protect Earth's forests. They can manage resources more carefully. For one thing, they can recycle paper. The used paper can be cleaned and used again. This saves many of the world's trees. People can use less paper in many ways. They may choose to receive bills electronically to avoid paper in the mail. They can opt to not print out a document if they do not need a physical copy of it. They can print or write on the back of a piece of paper to use it twice.

Foresters are learning to cut down trees without destroying the forests completely. When trees are cut, other trees are planted in their place. This way, there will continue to be trees when people need them. The world needs forests. It is up to everyone to use forests wisely.



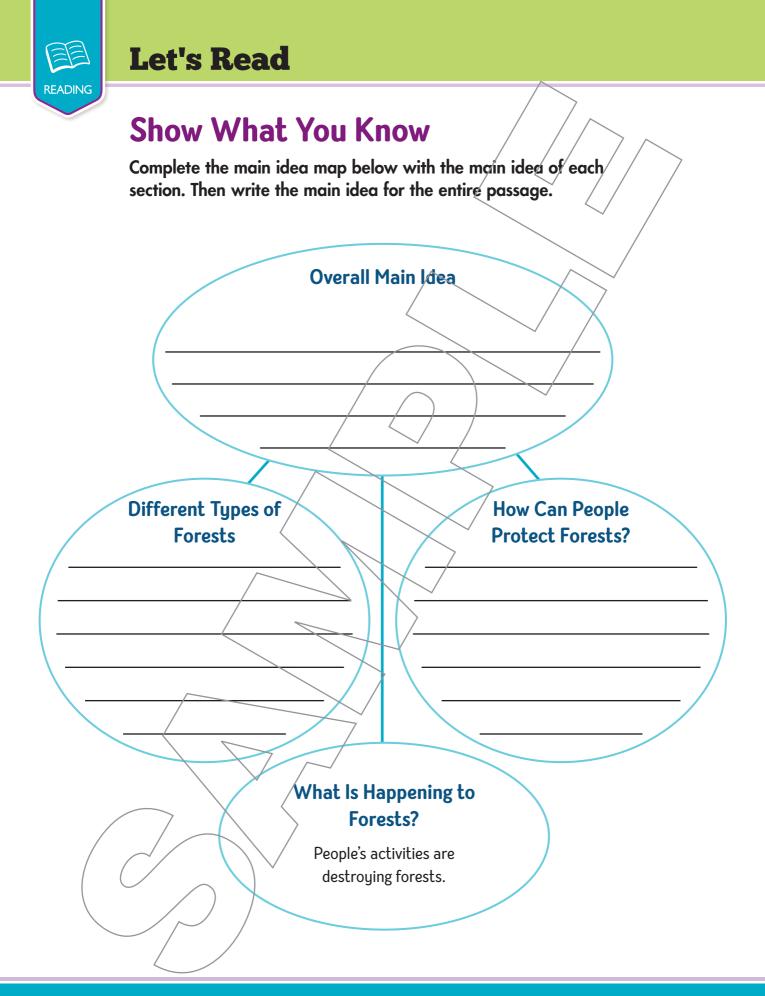
People place used paper in bins to be collected for recycling.

Underline one way that you can help to protect the forests.



What is something that you can do today to help save the forests?

Today, I can _____.



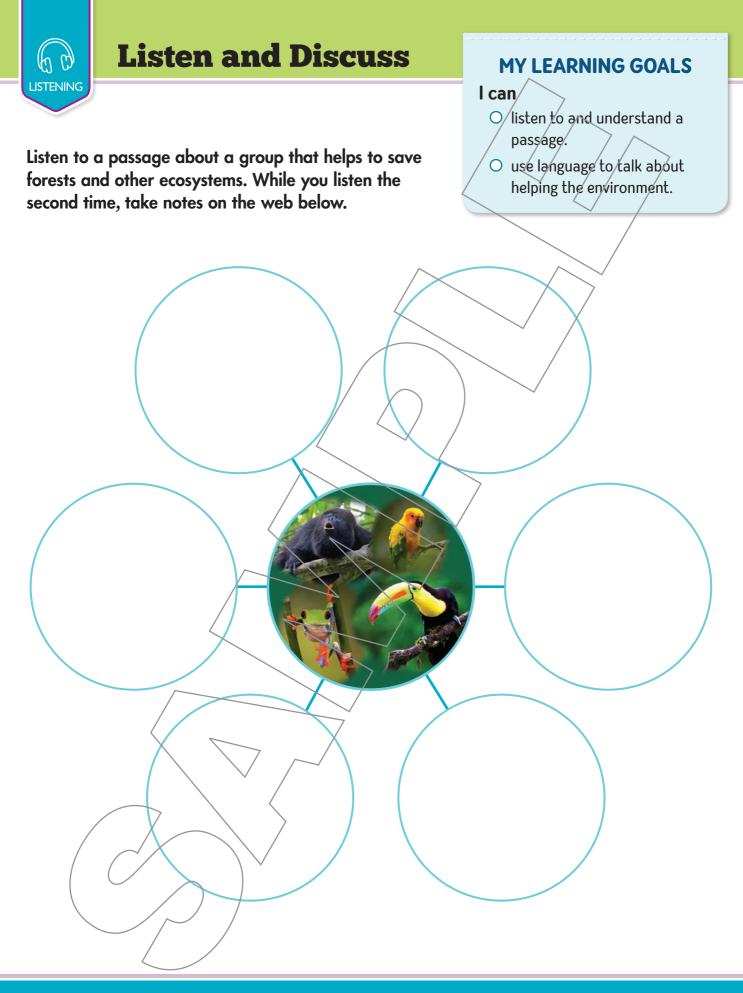
12 Unit 1 ★ Lesson 1



What Did You Learn?

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

- 1. Boreal forests do not grow very tall because of ____
 - A extremely warm conditions
 - B extremely cold winters
 - C too much rainfall
 - **D** mild climates
- 2. What is one cause of deforestation?
 - A recycling
 - **B** planting trees
 - C managing resources
 - D using trees for lumber
- **3.** Which word in the passage means "the introduction of harmful substances into the environment"?
 - A process
 - **B** pollution
 - C fuel
 - **D** resources
- 4. What types of trees grow in a tropical rain forest?
 - A pine, fir, and spruce
 - B maple, birch, and oak
 - 🧷 teak, rubber, and mahogany
 - D fir, palm, and teak





Learning About Language

Root Words

The basic part of a word is called a **root word**. Many times, you can determine the meaning of longer words by looking for their root words.

Combine is the root word of combination.

Combine means "to mix," so combination means "a mixture."

Read these sentences from the passage. Then write the root word for each underlined word.

- 1. For one thing, they can recycle paper.
- 2. Today, much forest land has disappeared.
- 3. As the pollution gets into the air, it falls on the trees.
- 4. Boreal forests grow in the northern parts of the world.
- 5. There are many reasons for deforestation.



MY LEARNING GOALS

• recognize root words.

O use root words to figure out the meaning of a word.

Learning About Language

Read the sentences below. Write the root word of each word in parentheses on the line.

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

Read the words below. Each word has a root with a prefix, a suffix, or both added to it. Write the root word on the line. Then write the meaning of the original word.



(invaluable) forests.

1. scientist	
2. buildings	
3. international	
4. unhealthy	



MY LEARNING GOALS

use details to persuade.

Ø write an/email.

l can

When you write to persuade, you try to convince other people to think the same way that you do about something. Use details to support your points. Be sure you use facts, not just opinions, in your writing.

Write an email to a friend telling the friend why conservation is necessary and why we should protect Earth's forests. Persuade your friend to begin doing something to help protect this important resource.

Plan My Writing

Fill in the chart with information about protecting Earth's forests. Use this information in your email.

Details

Why This Is Important

Many animals live in forests.

Writ	e About It	Ø
		WRITING
Message		
Message Message Message Message Delete Reply Reply All Forward & Move Junk * Unread Categorize Fo	Inow Up	100
Hi,,		
I am learning about Earth's forests. Did you know		
		?
Forests have	/	
	<u> </u>	·
Rain forests		
		·
Forests are very important because		
	7	<u> </u> .
We need to		
		·
It is important to be	cause	
		<u> </u> .
		·
Everyone should		
		·
How do you think you can help? I am going to		
		<u> </u> .
I can't wait to hear what you decide to do!		
Your friend,		