

How a Tree Grows

by Luka Berman

HOUGHTON MIFFLIN HARCOURT

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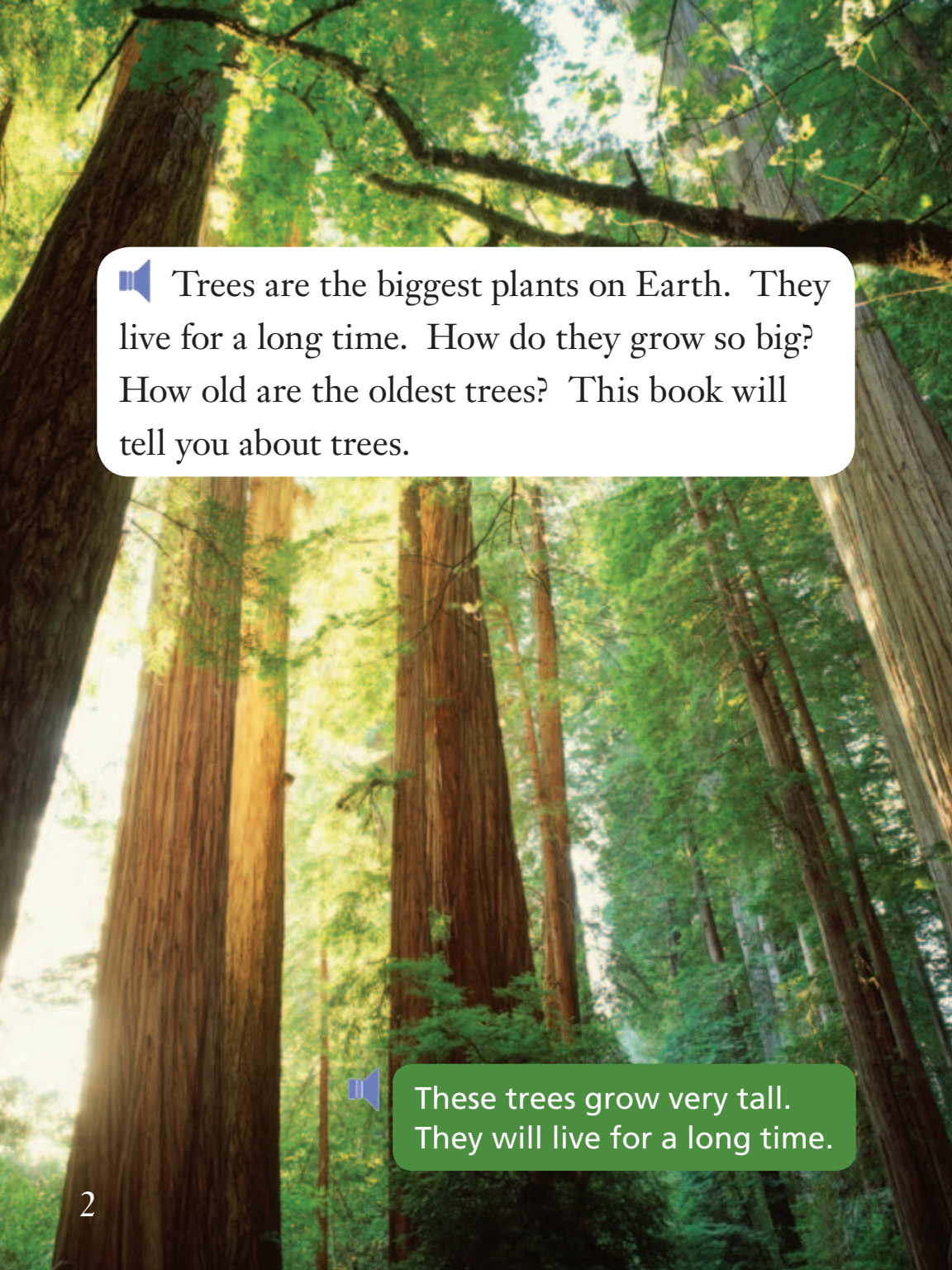
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 Trees are the biggest plants on Earth. They live for a long time. How do they grow so big? How old are the oldest trees? This book will tell you about trees.



These trees grow very tall.
They will live for a long time.



 The green trees in this picture have needles.

 There are two kinds of trees. One kind of tree has leaves. Sometimes the leaves turn colors. The leaves die when the weather gets cold. Then new leaves grow on the tree in the spring.

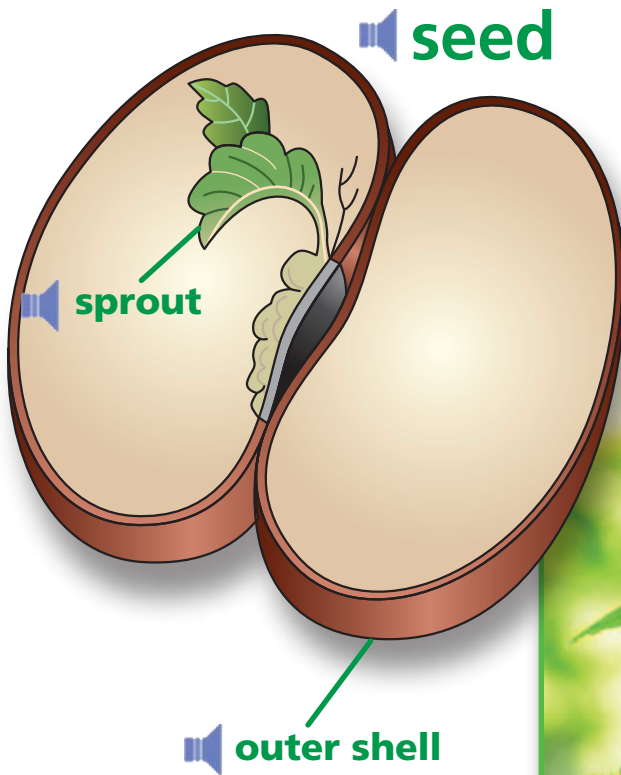
The other kind of tree does not have leaves. This kind of tree has needles. The needles do not fall off when the weather gets cold.



🔊 All trees grow from seeds. Trees have different kinds of seeds. Some seeds come from a **pod**. Some seeds come from a cone. Some seeds come from nuts. Some seeds come from fruit.

🔊 Some tree seeds come from flowers. Flowers have **grains**, or little bits, of pollen. Pollen is a yellow powder. Animals and bees carry the pollen to other trees. The pollen helps the trees make flowers. Then the flowers make new seeds.


🔊 A tree seed falls to the ground. First it needs to **soak** up rain. The rain will **soften** the seed so it is not hard. Sun and rain will help the seed grow **roots**. Then a tiny **shoot** will grow up through the dirt. It will grow up and up.



🔊 This small shoot will grow into a tree.





 A tree makes branches when it grows. The branches grow up and out to the side.

Branches are important. Leaves or needles grow on each branch. The branches get light from the sun. The tree uses this light to make food. Tree branches grow longer to get more light. Then the tree can make more food.

🔊 New twigs and leaves grow on the branches in the spring. Cones, pods, or flowers grow on the branches too. They will drop seeds on the ground in the fall.





🔊 These branches are covered with flowers.



 tree bark

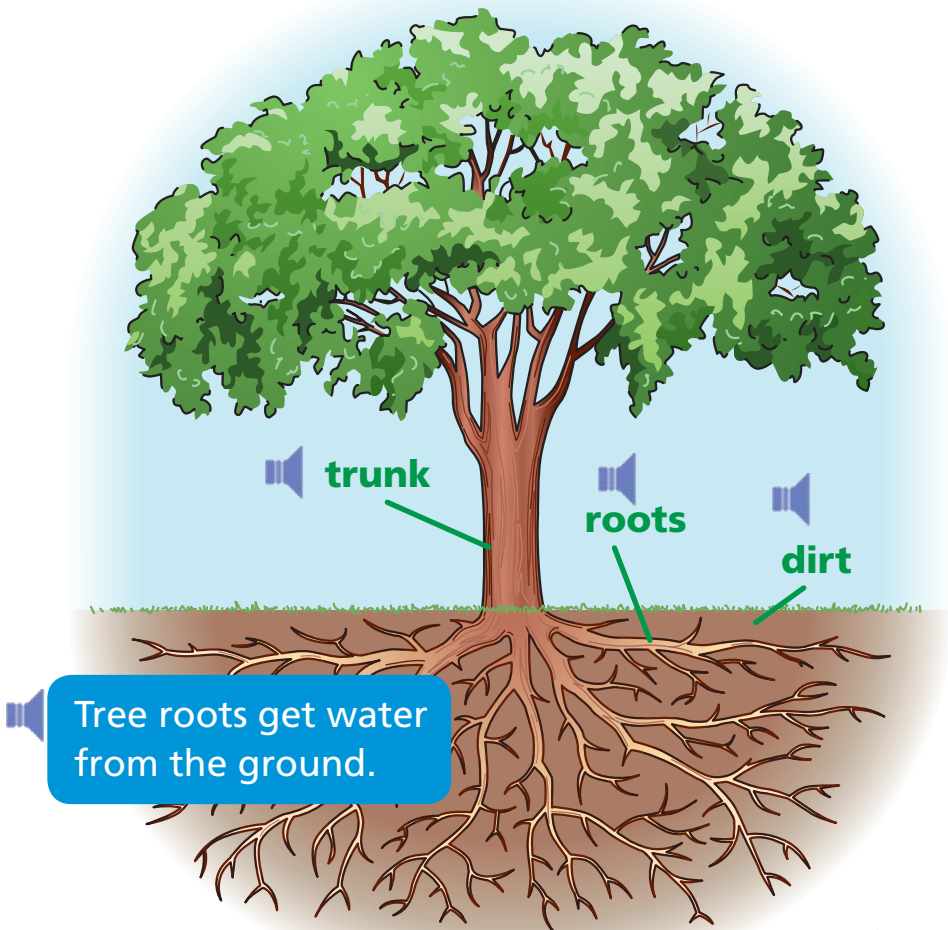
 trunk

 Bark helps a tree in important ways.

 The trunk is the main part of the tree. The branches grow out of the trunk. The trunk carries food and water inside the tree. The outside part of the trunk is the bark. Bark is strong and thick. Bark protects the tree. It helps keep water inside the tree.

Some animals think a tree is a **tasty** snack. Bark is hard to chew, so most animals cannot eat the tree.

Tree roots grow below the ground into the dirt. There is food and water in the dirt. A tree needs water and food to stay alive. The roots get food and water for the tree. The roots keep the tree strong.



🔊 How fast do trees grow? Trees grow very fast in warm places. Trees grow more slowly in cold places. Some trees grow for hundreds of years.

🔊 These trees grow in warm places. They often grow fast.





Redwood trees grow very tall and wide.

How big will a tree grow? Some kinds of trees grow very tall. Other trees stay small.

One kind of tree is very, very small. It may grow only two inches tall! The tallest tree is the redwood tree. The redwood tree can grow more than 300 feet tall. That is as high as a tall building! A redwood tree is very wide, too.



Some trees in a forest will not grow as big as other trees.



Trees grow big when they have good **nutrition**, or food. Trees get nutrition from rain, sun, and dirt.

A small tree may not grow big if it grows near bigger trees. The bigger trees will keep out the sun. Then the small tree will not get enough light. Big trees may take most of the water in the ground. Then the smaller tree will not be strong.


🔊 Some kinds of trees live for 1,000 years. Many trees live even longer. Redwood trees can live for thousands of years!

The oldest tree is in Sweden. It is about 9,550 years old!





🔊 oak tree

🔊 This oak tree may be 1,500 years old!

 A dead tree is still an important part of the forest. Animals often live in a dead tree. Insects may live in the tree, too. A dead tree can add food to the dirt. Then other trees and animals can use that food to live.

 squirrel

 dead tree

 Animals make their homes in dead trees.

Responding



TARGET SKILL Text and Graphic

Features What do the photos in this book show you about trees? Copy and complete the chart.

Photo	Page	What it Shows
redwood trees	page 11	that trees grow tall



Write About It

Text to World What else would you like to know about trees? Use an encyclopedia or other source to research more about them. Then write a paragraph that includes the facts you learn.



TARGET VOCABULARY

grain

nutrition

pod

root

shoot

soak

soften

tasty



TARGET SKILL

Text and Graphic

Features Tell how words go with photos.



TARGET STRATEGY

Monitor/Clarify

Find ways to figure out what doesn't make sense.



GENRE **Informational text** gives facts about a topic.

Level: L

DRA: 24

Genre:

Informational Text

Strategy:

Monitor/Clarify

Skill:

Text and Graphic Features

Word Count: 587



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