Name _____ Date _____

Nonfiction

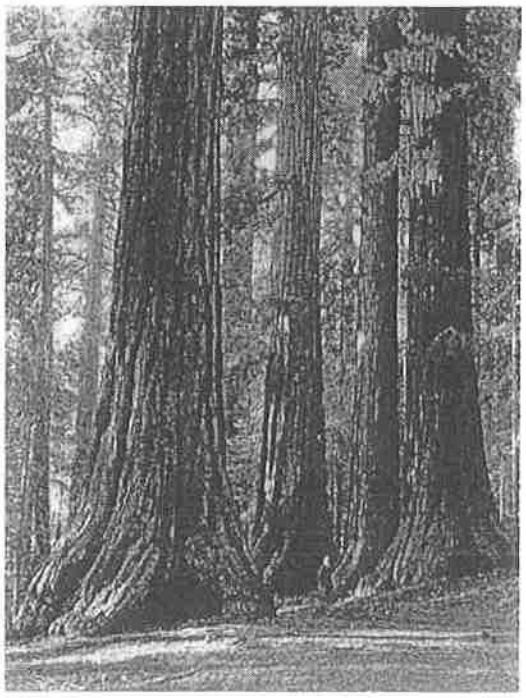
Directions: Read the article and then answer the questions that follow.

The World' s Tallest Trees

by Tracey Vasil Biscontini

Have you ever seen a tree that was taller than the Statue of Liberty? If you have, you have seen a redwood tree. With an average height of 300 feet, redwood trees are the tallest in the world. A redwood can grow as tall as a 35-story skyscraper! Some redwoods grow wider than a school bus! The average lifespan of these majestic trees is 500 years, but some are as old as 2,000 years.

In the United States, redwoods grow only in northern California. This is because redwoods grow best in a very specific climate. They thrive in an area that is cool and moist with lots of fog. Northern California, with its cool breezes and midst from the Pacific Ocean, is the perfect place for redwoods. The climate in northern California keeps redwoods moist even during summer droughts. Northern California's redwood park covers 51,000 acres and has more than 17,000 acres of redwood trees. Most of the redwoods in this park are very tall and old.



Redwoods also need the air to be moist for a different reason. Because redwoods grow so tall, it is very difficult for water from their roots to reach their uppermost branches. So, a redwood tree actually pulls moisture from the air and fog into the needles in its highest branches.

People have tried to grow redwoods in places other than northern California. Some redwoods have grown in Florida and Arizona. Since the climate in these states is different, however, these redwoods do not grow as tall as those in northern California. Scientists believe that, millions of years ago, redwoods grew in many places on Earth. Because the climate was cooler and more humid back then, many more places were suitable for redwoods.

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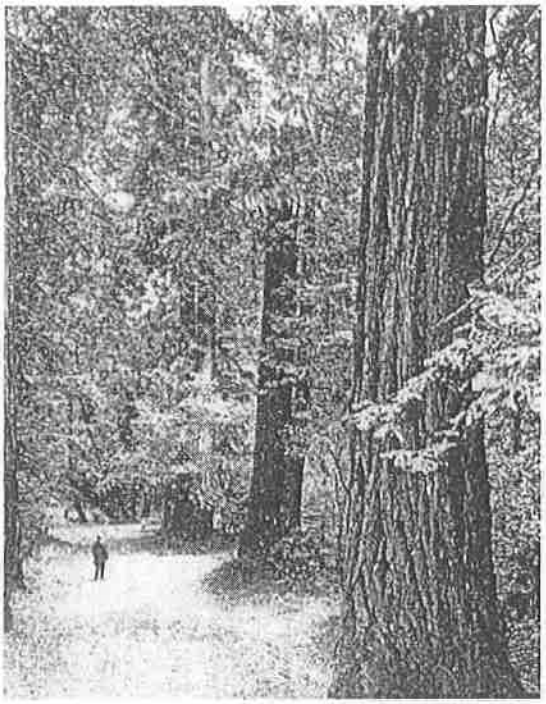

Redwoods have amazing survival skills, which might be the reason why they have lived on Earth so long. For starters, they have very thick bark. The bark on some redwood trees is one foot thick! This keeps the wood inside the tree safe. The bark on a redwood tree is also fire-resistant. If forms a kind of heat shield that prevents the entire tree from burning. So, a forest fire might not destroy a redwood tree. Redwoods that do catch fire have an amazing ability to heal their scars. The bark grows over the burned area, so it looks as if the fire never happened. If a fire does harm a redwood tree, the tree often will stay alive and only the burned area dies. A few redwood trees have hollow tunnels through them from fires. People visiting redwood parks like to walk through these tunnels. Some of the tunnels are so large that cars can drive through them. In addition to being fire-resistant, a redwood tree's bark also has a chemical in it that makes it poisonous to insects. This chemical keeps away such pests as termites and ants.

Do you know how most trees reproduce or grow new trees? Most trees reproduce through seeds that fall from the tree and then blow into the air. Sometimes a seed will land in a new place where it can grow into a seedling, or a baby tree. Redwood trees reproduce through seeds, too—but they also have an even better way to grow new trees. A redwood tree can grow new trees from its roots! These new trees are much hardier than those that grow from seeds and they sprout in a place that is suitable for growing. Trees that sprout from the roots of a full-grown tree have the same genetic makeup as the full-grown tree. Because of this, they are called "clones." A circle of trees—a redwood and its clones—is called a "family." Even if a redwood tree dies, its roots may keep sprouting new trees. Scientists have studied fossils of redwood trees. They have discovered that redwoods grew on the earth when dinosaurs lived during the Jurassic Era over 160 million years ago! Dinosaurs became extinct, but the redwoods are still here! Some redwoods in northern California are actually clones of the redwoods from that much earlier time.

Redwood trees are often called "Trees of Mystery." This is because no one knows for sure how they have survived storms, droughts, and fires throughout so many years. People also still don't know why redwoods grow so tall or how they manage to grow so much more quickly than other trees.

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1 According to the article, how does a redwood get water to its uppermost branches?

A through its roots
B from the air
C from the rain
D through its bark

2 According to the article, the climate a million years ago was **different** from the climate today because then it was

F warmer
G dryer
H colder
J stormier

3 According to the article, how does a redwood's bark protect it from insects?

A It acts as a heat shield.
B It is very hard.
C It contains chemicals.
D It is very thick.

4 According to the article, what is a redwood clone?

F a seed
G a new tree
H a circle of trees
J a family of trees

5 The **main** purpose of the opening paragraph of the article is to show that redwood trees

A are extremely big
B grow in a specific place
C are liked by many people
D live a long time

Name _____ Date _____

6 Explain how a redwood tree creates new trees. Use details from the article to support your answer.

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7 Why are redwood trees called the 'Trees of Mystery'? Use details from the article to support your answer.