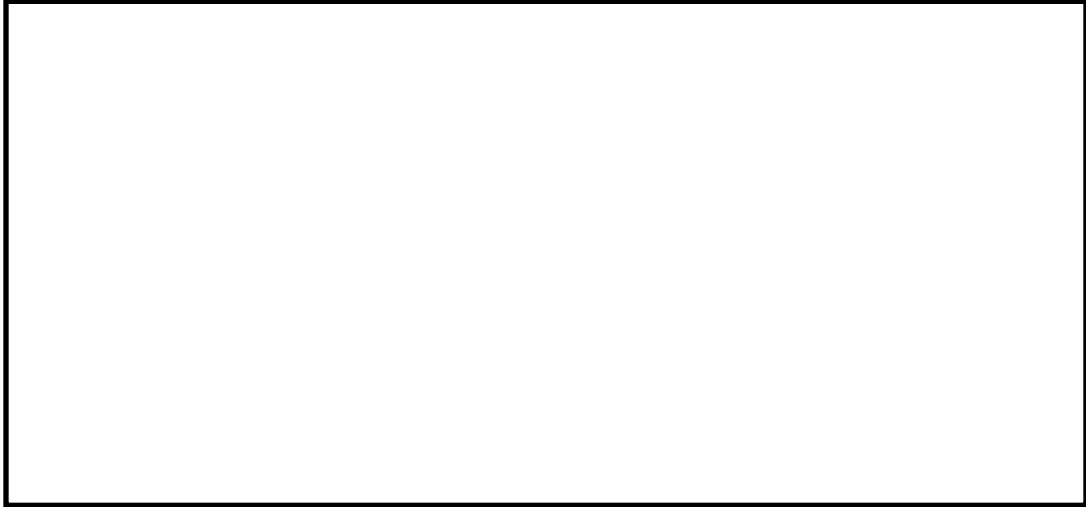


Name _____

My Tree

1. Location of my tree:

2. Labeled drawing of my tree:



3. Words that describe my tree (adjectives):

4. Kind of tree: _____

5. Photo or drawing of its seed:

From Seed to Tree



The Largest Trees on Earth

Giant sequoias are the most enormous trees on Earth. The largest of them all is a tree named “General Sherman.” This tree measures over 11 meters across at the base and stands almost 84 meters tall. Other trees are taller or wider at the base, but no other living thing on the planet exceeds its volume. Scientists think that General Sherman is more than 2,000 years old.



A Tiny Seed

If you look at a giant sequoia *seed*, it’s hard to believe it could grow into the largest tree on Earth. These seeds are only about the size of a pinhead and are enclosed in a scalelike seed case less than a centimeter long. It is remarkable that such a gargantuan tree comes from such a small seed. Here’s how it happens: Inside of each seed is a tiny *embryo* that can develop into a new tree if the conditions

are right. If the seed gets water and the temperature is warm enough, it can begin to grow into a seedling. It uses food stored inside the seed to sprout, but once that food is gone, the tree must begin to make the food it needs to grow.

Making Food

Trees are a type of plant. Unlike animals, plants do not take in food. In other words, they don’t eat. Instead, plants make their food through a process called *photosynthesis*. Plants take in *carbon dioxide* from the air through their leaves and absorb *water* through their roots, but carbon dioxide and water are not the food for the plant. Plants use the energy from sunlight to start a chemical reaction that turns these two ingredients (water and carbon dioxide) into *sugars*. These sugars are the food that a plant uses to grow and carry on its life processes.

Soil Is Not Food for Plants

Most plants grow in soil, but soil does not provide food for a plant. Remember, plants do not take in food; they make food in their leaves. However, soil can provide nutrients that help plants stay healthy. These nutrients are not considered food. They are simply vitamins and minerals. Sometimes we put fertilizer in the soil, but fertilizer is not food either—it just adds additional vitamins and minerals.

A Giant From Water and Air

When you look at General Sherman it is amazing to think that the matter in that gigantic tree originally came from air and water. Using energy from sunlight, the tree combined these two ingredients to create the food (sugars) that allowed it to grow into the largest tree on Earth.

Name _____

From Seed to Tree

Close Reading

1. Read the article "From Seed to Tree" silently to yourself.
2. Write a brief summary of the article highlighting the most important points the author is making.

3. Share your summary with a partner. Discuss how your summaries are the same and how they are different.
4. Listen closely as your teacher reads the article aloud.

5. Reread the article to answer the following questions:

a. Where does the embryo inside of a seed get the energy it needs to sprout?

b. Why are water and air not considered food for a plant?

c. What is the role of sunlight in photosynthesis?

d. At some garden stores, fertilizers are labeled as “plant food.” Why is this name incorrect?

If a _____

grows and becomes

a _____

can a _____

grow and become

a...

... _____ ?

Yes or No

More Books to Read

What's Alive?

By Kathleen Weidner Zoehfeld

Illustrated by Nadine Bernard Wescott

ISBN: 9780064451321

Grades K–2

Synopsis: From the *Let's-Read-and-Find-Out Science* series, this book introduces students to the differences between living and nonliving things and the needs of plants and animals.

Plant Packages: A Book About Seeds

By Susan Blackaby

Illustrated by Charlene DeLage

ISBN: 978140480384X

Grades K–2

Synopsis: Explains that a seed is like a little package that contains everything it needs to make a new plant...just add water, sunlight, and space for it to grow.

From Seed to Pine Tree: Following the Life Cycle

By Suzanne Slade

Illustrated by Jeff Yesh

ISBN: 9781404851627

Grades 3–5

Synopsis: Describes the life cycle of a shortleaf pine tree from seed to tree, including a simple explanation of photosynthesis.