



Essential Question

What Are Some Plant Life Cycles?



Engage Your Brain

Find the answer to the question in this lesson.

What does the flower part of a dandelion make?

It makes

_____.



Active Reading

Lesson Vocabulary

- 1 Preview the lesson.
- 2 Write the 4 vocabulary terms here.

Plant Start-Ups

Plants are living things. They grow and change. They have life cycles. Most plant life cycles begin with a **seed**. New plants grow from seeds. The growing plants start to look like their parent plants.

Active Reading

Find the words that tell about seeds.
Draw a line under the words.

The plants in this garden grew from seeds.

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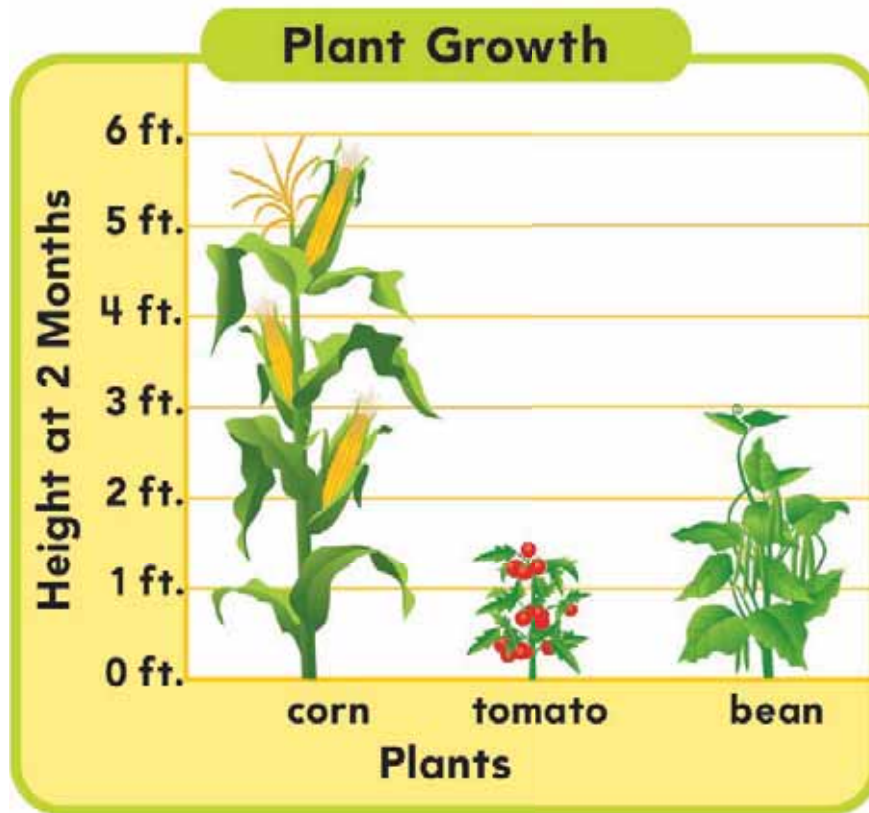
How Fast Do Plants Grow?

Some plants grow quickly. Plants in a vegetable garden take just a few months to become adult plants. Other plants, such as trees, take many years to become adults.

123 Do the Math

Interpret a Table

Use the chart to answer the question.



► How much taller did the corn plant grow than the bean plant?

Start with a Seed

What happens when you plant a seed? When a seed gets warmth, air, and water, it may germinate. **Germinate** means to start to grow. The stem of the tiny plant breaks through the ground. The plant gets taller and grows leaves.

▶ Which plant parts grow from the seed first?



A tiny plant is inside a seed.

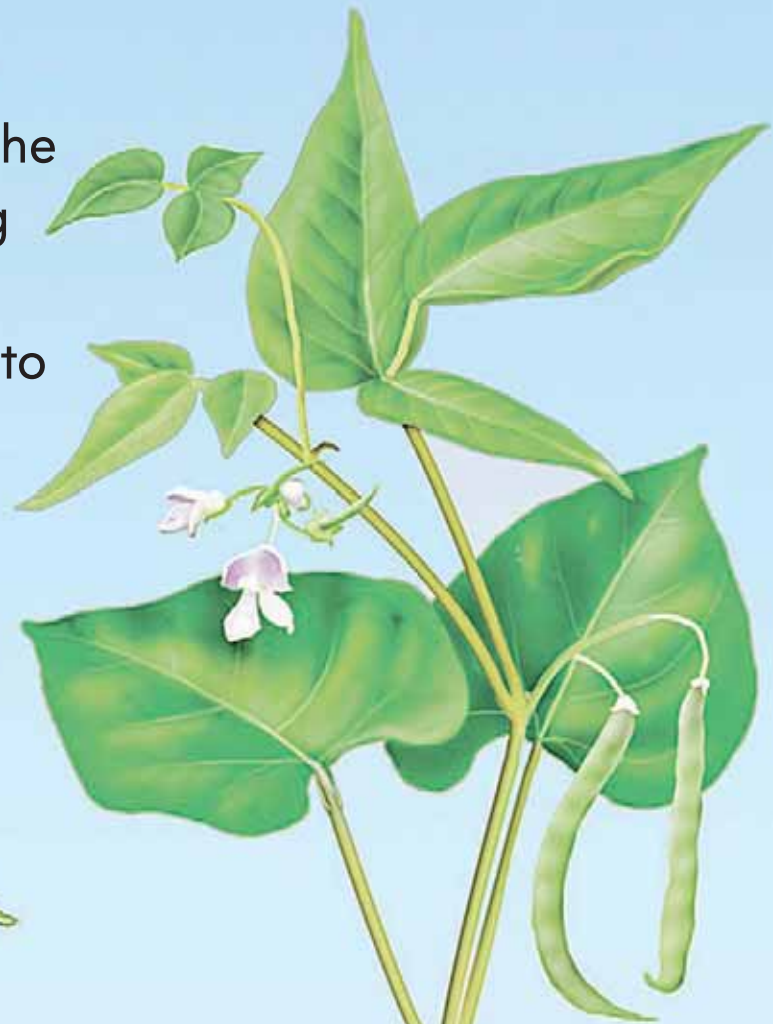
The seed germinates. The roots grow down.

The stem grows up toward the light.

Growing Up

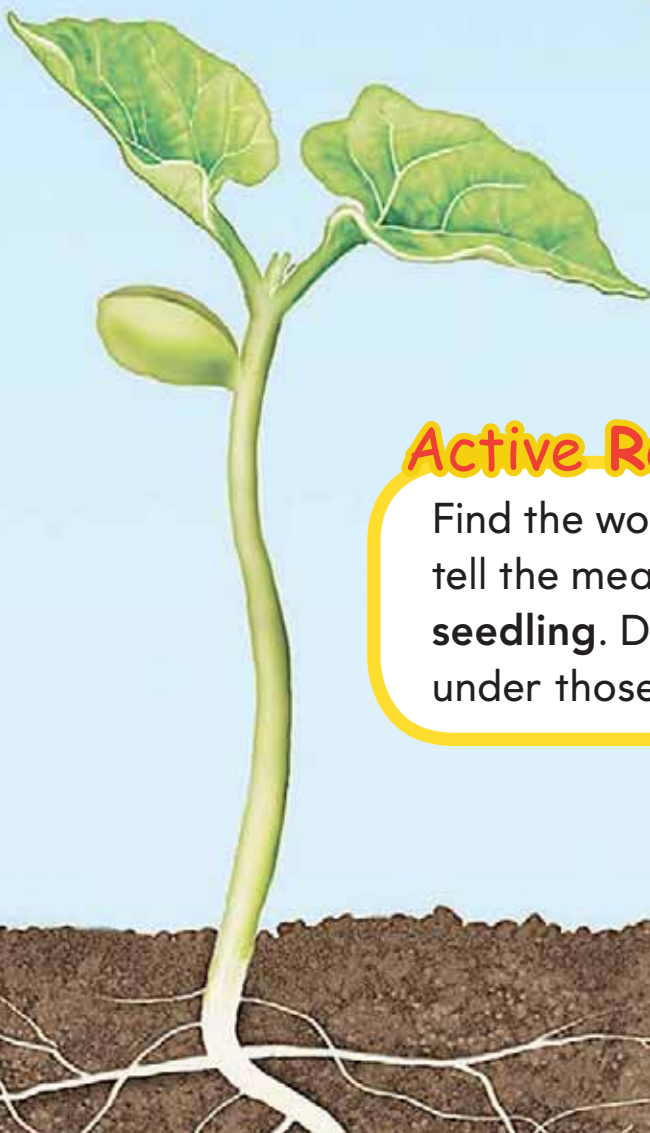
The tiny plant inside the seed has become a young plant called a **seedling**.

The seedling grows into an adult plant. An adult plant can make flowers and seeds.



Active Reading

Find the words that tell the meaning of **seedling**. Draw a line under those words.



The plant grows more roots and leaves.

The adult plant grows flowers.

Apples

All Around

Some plants have flowers that make seeds and fruit. Parts of the flower grow into fruit. The fruit grows around the seeds to hold and protect them.

Active Reading

Circle the word **seeds** each time you see it on these two pages.

apple blossoms

Parts of apple blossoms grow into apples. The apples grow around seeds.



A Long Life

Some plants have short lives. They die soon after their flowers make seeds. Other plants, such as apple trees, can live for many years. An apple tree can live for a hundred years or more!

adult apple tree



▶ What do apple blossoms make?

Inside a Cone

Some plants, like pine trees, do not have flowers. But they do have seeds. Where do their seeds grow? A **cone** is a part of a pine tree and some other plants. Seeds grow inside the cone.



closed pinecones



open pinecones with seeds

The cone protects the seeds until they are ready to germinate. Then the cone opens up, and the seeds can fall out.

► Where do pine seeds form?

Pine Tree Beginnings

Pine seeds fall to the ground and germinate. As the seedlings grow, they start to look like their parent plants. After a few years, the pine trees grow cones and make seeds. The life cycle begins again.

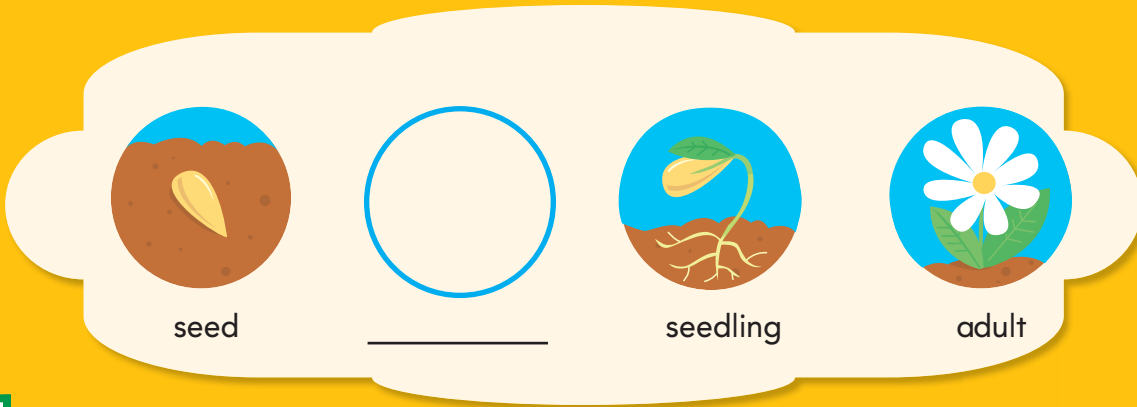
adult pine trees

► What happens after an adult pine tree grows cones and makes seeds?

Sum It Up >>

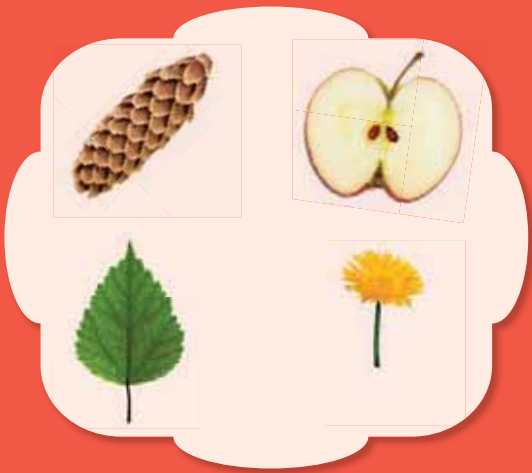
1 Draw It!

Draw the missing step in the plant's life cycle.
Label your picture.



2 Mark It!

Draw an X on the plant part that does not have seeds.



3 Think About It!

How are flowers and pinecones alike?



Name _____

Vocabulary Review

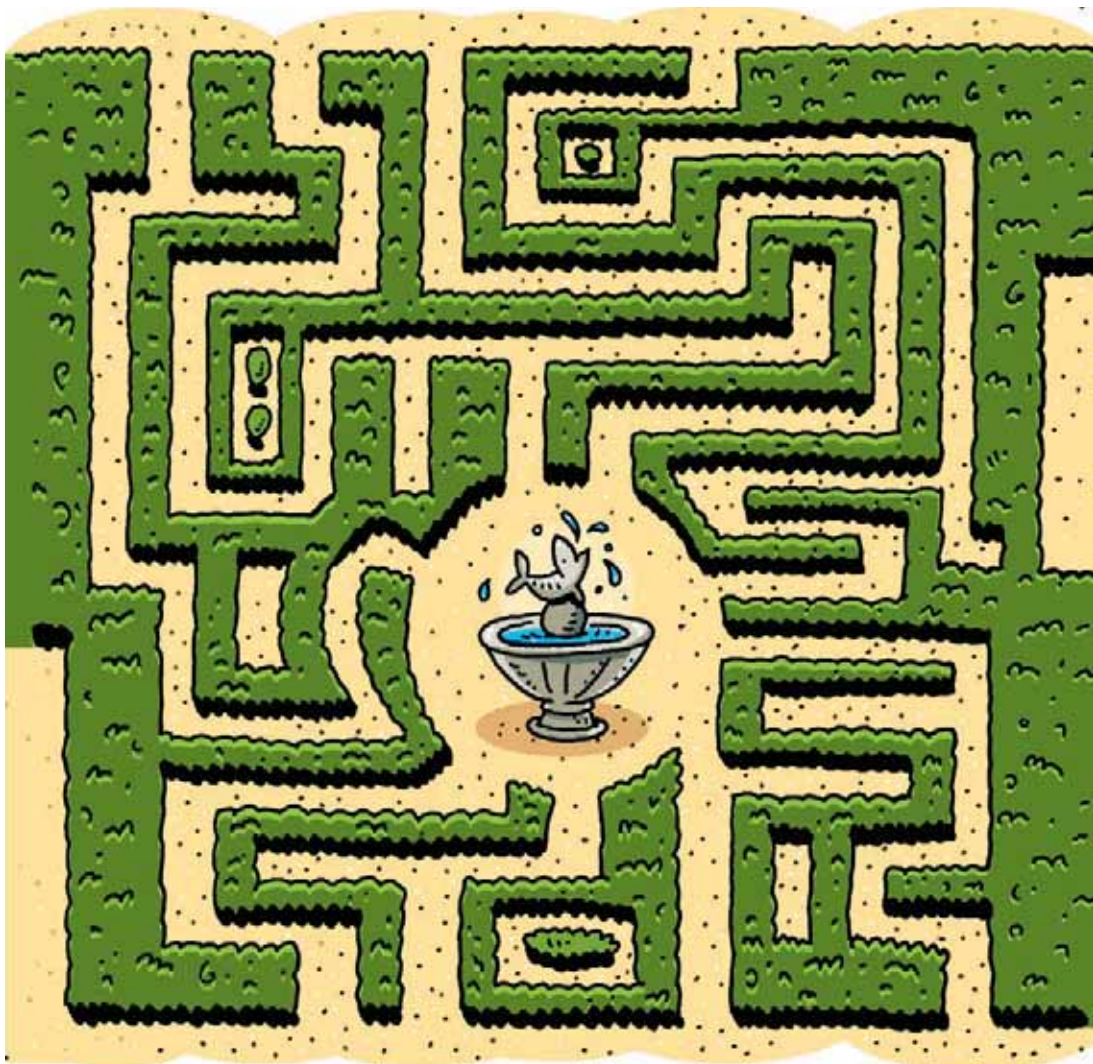
Read each word. Trace a path through the maze to connect each word to its picture.

seed

cone

flower

seedling



Apply Concepts

Write to tell about the life cycle of a plant.
Use the words germinate, seed, and seedling.

Life Cycle of a Plant

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graph TD; A[ ] --> B[ ]; B --> C[ ]; C --> D[ ]
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Take It
Home 

Family Members: Ask your child to tell you about plant life cycles. Then take a walk around your neighborhood. Talk about the plants you see.