



Plant Life Cycles

Plants With Seeds

What? Most plants come from seeds. When a seed opens, it germinates, and a small plant grows out of it. After some time, the plant grows into an adult plant, which forms flowers in some types of plants.

Flowers enable plants to reproduce. Flowers have male and female parts, which is why they are able to reproduce.



When a seed is in soil and watered, it breaks open and germinates. The tiny plant that comes out of it is a seedling.

Define: - Small plant that grows from a seed.



What does?

The seedling grows into an adult plant. The adult plant makes flowers. In a flowering plant, seeds are produced in the flowers.



Inside each seed is a plant in its first stage of development. The hard covering is the seed's protection.



The flower falls off the plant, then the plant makes fruit in its place. The fruit then has the seeds in it, and when it falls to the ground, the cycle starts again.

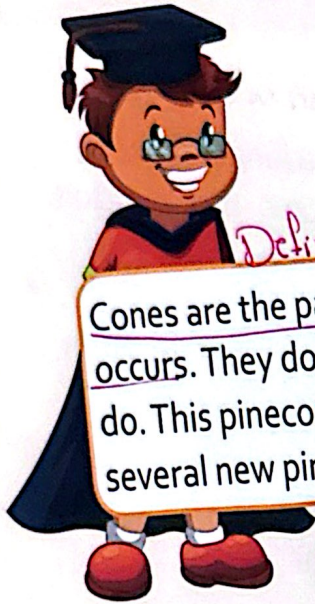


Fast Fact

Popcorn is a seed, too. When popcorn is heated, it explodes!

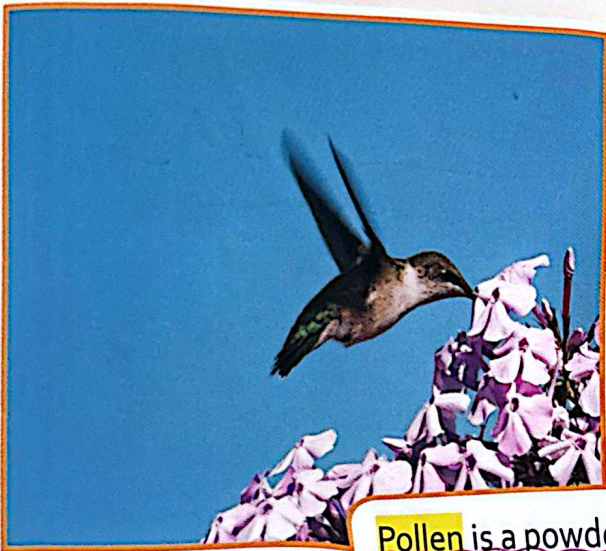
What happened when the fruit falls to the ground?

Some plants form their seeds in **cones**, without the help of flowers.



Define Cones

Cones are the part of a plant where reproduction occurs. They do not develop into fruit, like flowers do. This pinecone has seeds in it that will grow into several new pine trees.



Define Pollen?

Pollen is a powder-like substance that helps plants reproduce. (Pollination occurs when pollen is moved from a male plant part to a female plant part.) Different animals, (like birds and bees, help move pollen from plant to plant.) Wind and water also help in the pollination process. Once a plant is pollinated, (seeds form in the female part of the flower and eventually form into a fruit.) The part of the flower that surrounds the seeds grows into a fruit. Without pollination, a flower will not make seeds or grow fruit.

who helps move pollen?

**Why is pollination important?*

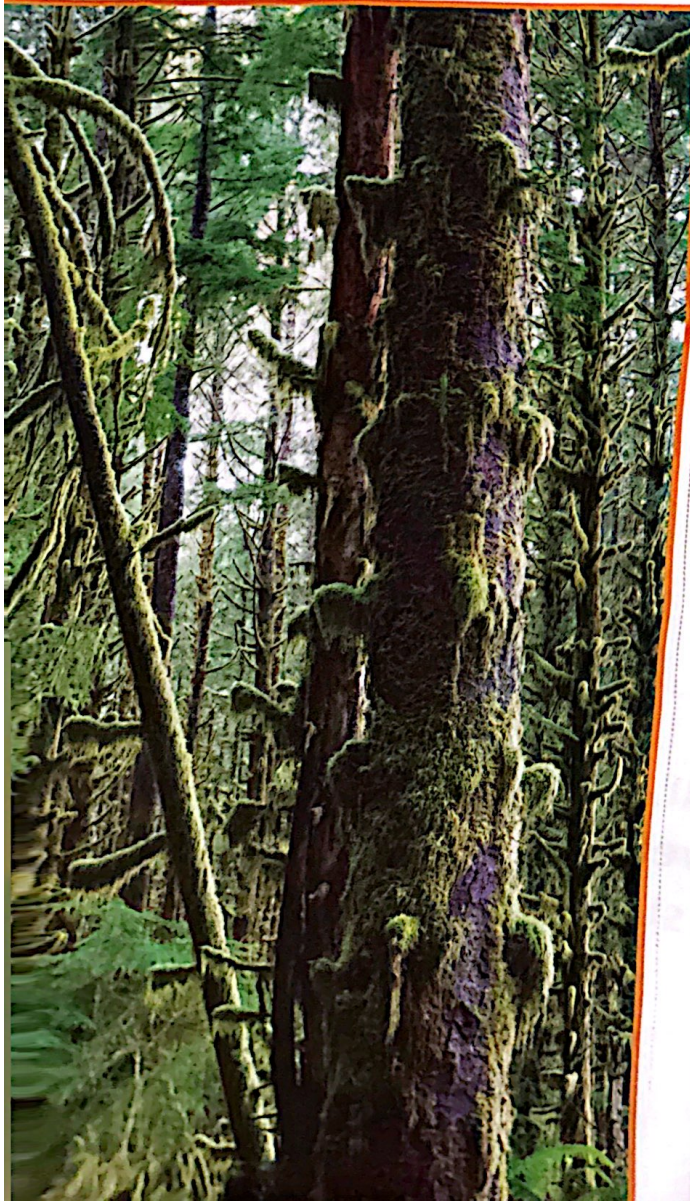
↳ it helps plants make seeds and grow new plants

What happens after Pollination?

Plants With Spores

~~x~~ what do some plants use to reproduce instead of seeds?

Some plants do not reproduce through the help of flowers, seeds, or cones. They only reproduce through **spores**. Like seeds, spores grow into new plants as well.



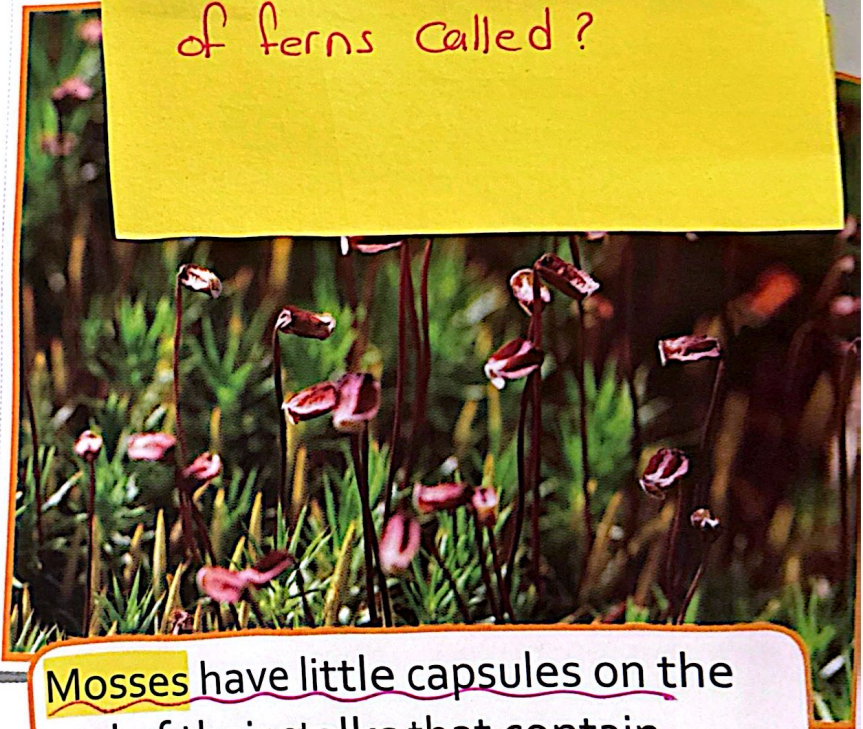
Ferns have leaves, which are called fronds; spores are attached in groups on the underside of the fronds. Each group contains hundreds of spores!

what are the leaves of ferns called?



Ferns have leaves, which are called fronds; spores are attached in groups on the underside of the fronds. Each group contains hundreds of spores!

What are the leaves of ferns called?



Mosses have little capsules on the end of their stalks that contain spores. When the capsules dry out, they release the spores into the air.

What happens when moss capsule dry out?