



## Have you ever wondered where young trees and plants come from?

Plants and trees produce their young through pollination.

Pollination is the transfer of pollen from a male flower or cone to a female flower or cone with a seed inside. Once the pollen fertilizes the seed, the seed will grow into a new tree or plant.



Because trees and plants can't move around, they can't get close enough to each other to transfer pollen on their own. That's why they rely on helpers to transfer pollen for them!

#### Draw the pollination clues you see.



#### **Pollination Reflection**

The most exciting thing I learned about pollination is

I'm curious about

I want to learn more about

Many trees in forests don't produce flowers with nectar. Instead, they produce two different kinds of cones or modified flowers. Male cones and modified flowers (sometimes called "catkins" are filled with pollen, while female cones and modified flowers have seeds inside them.)

seed cone

large and

(female).

hard

pollen cone

catkins

(male

(male), small and soft

Other trees that produce cones:

(Pinus lambertiana)

Let's look at some examples:

Cones

sugar pine

spruces (Picea spp.), firs (Abies spp.), junipers (Juniperus spp.)

Modified flowers

valley oak (Quercus lobata)

# Other trees that produce catkins:

elms (Ulmus spp.), birches (Betula spp.), aspens and cottonwoods (Populus spp.)

modified

(female)

flower with seed inside



When it's time to reproduce, male cones or catkins release millions of pollen grains that are carried by the wind to female cones, catkins, or modified flowers on other trees. All this pollen can look like a dust cloud released from forest trees!





Use your detective skills to find some of the following clues:



### **Observation Notes**

Date and Time:			
Weather:			
Circle the pollinators you see:			
bees	butterflies	birds	other
Interesting observations:			



These helpers are called "pollinators." They are attracted to flowers filled with nectar, a sugary food source. When pollinators land on a flower, pollen sticks to them. When they move from flower to flower, they transfer pollen. That's how pollination works.

Did you know that some flies, ants, beetles, and even mosquitoes are also pollinators?

Which pollinators have you seen?

What is your favorite pollinator and why?