BACKYARD ECOSYSTEM

POLLINATION

Grades 3-6

A SCIENCE @ HOME ACTIVITY

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James E. Richmond Science Center

UNIT BACKYARD ECOSYSTEM LESSON 4

Parent Resources for

Pollination: Bees & Butterflies

Goals of this lesson:

- **Student will read facts about pollination**
- **Student will identify pollinators and complete a pollinator matching activity**

For Additional Information cut and paste the links into your browser:

Eden Project:

https://www.edenproject.com/learn/for-everyone/what-is-pollination-a-diagram-for-kids

Pollination for Kids

https://youtu.be/CUPzbTuJlgc

Like Fruit? Thank a Bee!

https://www.youtube.com/watch?v=txv2k7OoY7U

Pollination: Trading Food for Fertilization

https://www.youtube.com/watch?v=LiczM-w3V-U

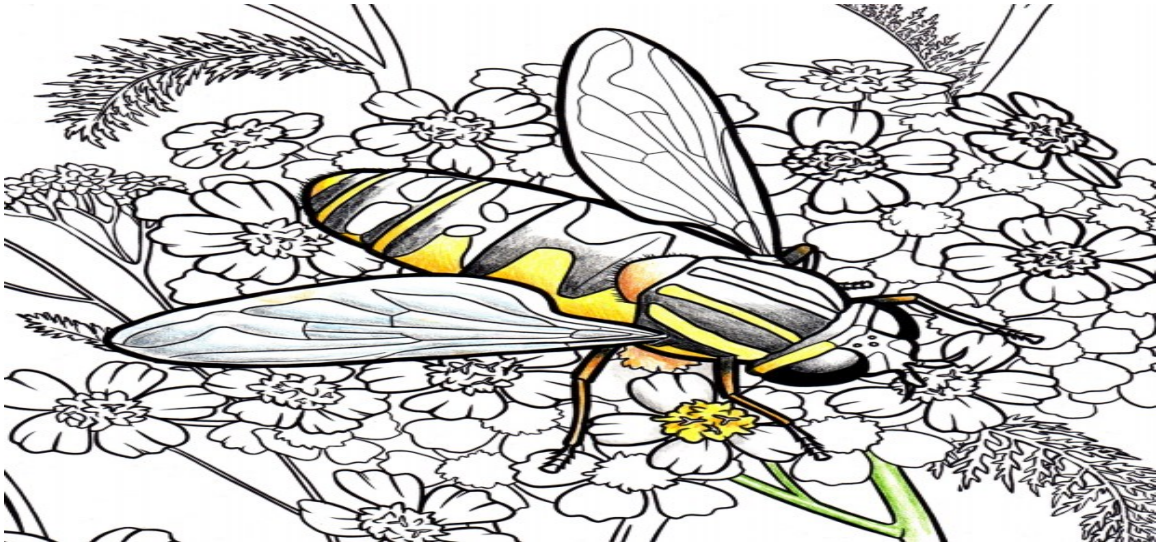
We would love to see your creativity and hear about your experience with our lessons, so please tag us at James E. Richmond Science Center on Facebook and Twitter.

Pollination: Bees & Butterflies

How does pollination work?

Have you seen how bees surround your garden? If you observe them carefully, you will see bees go from one flower to another as they try to gather nectar (a sugary drink) from the flowers.

Nectar which turns to honey serves as food for the bees, and as the bees pass through each flower the pollen sticks from the plants' anther onto the bees' legs, and then gets transported to the stigma.

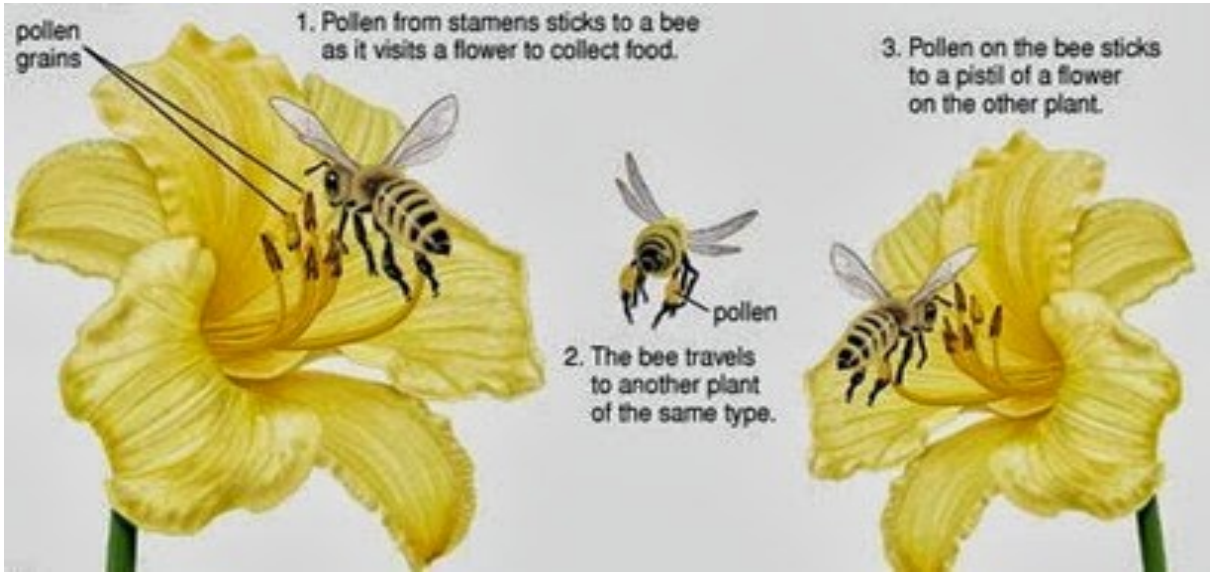


Pollination: Bees & Butterflies

Pollination happens when pollen created from the plant's male reproductive system (stamen) is moved to the female reproductive system (called the pistil). This fertilizes the plant's cells to produce seeds.

This is pollination.

Most plants rely on bees and other insects or animals for pollination, although certain plants can be pollinated by wind or water. The agents of pollination are animals, wind, water and winged insects.



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Pollination: Bees & Butterflies

What are pollinators?

A pollinator is a living organism or animal that helps pollination. These animals may not be aware that they are helping in pollination, but isn't it great to know that they aid in this function?

(a) Honeybee drinking nectar from a foxglove flower

(b) Ruby-throated hummingbird drinking nectar from a trumpet creeper flower

Animals that help plants in pollination include insects such as bees, butterflies, moths, beetles birds and bats. Flowers have bright petals to appeal to bees and butterflies. Hummingbirds go to long tubular flowers that allow them to get nectar. Bats are usually drawn to flowers that open only at night. All of these animals help with pollination.

Why are bees and other insects so important?

Without bees and animals that act as pollinators, pollination would not happen.

Most plants are designed for insects and animals to help transfer pollen and start fertilization of seeds. If bees and insects die, no one will be able to pollinate plants and we will lose our source of food and oxygen. We need bees and other animals to help encourage pollination and help to cultivate plants.

Tell you family and friends how bees and other insects are great contributors to plants and make them aware of why they are important to the environment and to us.

How cool is it that all of this happens in YOUR Backyard?!

Pollination: Bees & Butterflies

Pollinator Research

Look at the chart below and circle the pollinator with the item they help create. You may need adult help.

FOOD	POLLINATOR (circle the correct answer)
Avocado	Flies Bats Both
Bananas	Birds Fruit Bats Both
Cherries	Honey Bees Bumble Bees Both
Cashews	Moths Fruit Bats Both
Macadamia Nuts	Beetles Wasps Both
Mango	Flies Wasps Both
Papaya	Moths Birds Both
Peppermint	Flies Bees Both

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Pollination: Bees & Butterflies

Color the pictures of pollinators at work!

Which pollinators are missing?

Do you have a favorite pollinator?