

Pollinator Pages

Pollination is when pollen from one plant is transported by insects, birds, animals, and even wind to another plant of the same type. When that pollen reaches the eggs of the second plant, its eggs are fertilized and become seeds.

The part of the flower called the anther makes the pollen. The part of the flower called the pistil collects the pollen and transports it to the plant's eggs. Once the pollen gets to the eggs, it becomes a seed.

Pollinators are bees, butterflies, and other garden animals that transport pollen from one flower to another as they collect nectar to eat.

Butterflies, Bees, Hummingbirds, Bats, and Ladybugs are all pollinators! Wind can also be a pollinator.

Pollination is one of the most important activities that take place in the garden and in nature. Without pollinators there would be no roses. There would be no apples. There would be no pumpkins or petunias or plums or flowering plants of any kind. Pollinators do the heavy lifting in the garden—fertilizing plants as they collect nectar as their own reward.

National Pollinators Week is observed in late June of each year. Consider hosting your school's own Pollinators Week during the spring. Incorporate a week's worth of activities for your class or host a Ladybug Picnic...or a Butterfly Bonanza...or a Bumblebee Jamboree! A pollinator event should include a variety of hands-on learning activities combined with crafts and games.

Craft Ideas for Pollinator Picnic:

Antennae -

Cut headband strips from poster paper (long enough to wrap around a child's head)

Have students color and decorate their headband.

Students select two chenilles and two pompoms for each antennae. Wrap one end of the chenille around the pompom and the other around the headband.

Loop the headbands and use stapler or tape to connect the ends.

Caterpillars -

Caterpillars can be made with cardboard egg cartons. Students paint or decorate the body of the caterpillar. Antennae can be made by making two small holes in the "head" of the caterpillar. Push a chenille (cut in half) up through the holes. Finish the face with eyes and a mouth.

Butterflies—

Trace students hands. Have students color and decorate their hands and then cut them out. These will be the wings. Have each student decorate a toilet paper tube with paint or stickers. Attach wings to the "back" of the toilet paper tube. Use half of a chenille to make antennae and attach to the top of the toilet paper tube. Make a face for the butterfly.

Activity Ideas for Pollinator Picnic:

Explore the gardens with hand lenses looking for insects and specifically pollinators. Also use the hand lenses to get up close to the flowers and examine the parts.

“Bug Eyes” are glasses that show the world from the perspective of insects. These can be found in many toy stores or gift shops at museums or online. Let students wear these glasses around to find out how bugs see.

Invite a beekeeper to be a guest speaker and host a honey tasting.

Make strawberry smoothies (strawberries are fertilized by pollinators) and drink them from straws. Discuss how butterflies drink nectar with a proboscis which acts like a tongue and a straw for the pollinator.

Liiteracy Bookworms:

Encourage literacy by building a class bookworm. This bookworm has a face with a paperchain body. It starts out very small (just a face). As students read books, have them write their name, the title of the book, and the book’s author on a strip of paper and add it to the bookworm’s (paperchain) body. Challenge your students to have their bookworm wrap all around the class!

Instant Idea:

Waiting for Wings by Lois Ehlert

Waiting for Wings Activity – Students will make art similar to Lois Ehlert’s.

Prepare various shaped cut-outs of colorful paper. One set of shapes will be flower petals and blossoms; one set of shapes will be stems and leaves; and one set of shapes will be caterpillars and butterfly bodies and butterfly wings.

Provide students with large pieces of paper. Have students select paper flowers. Students will decoupage (use a glue and water mixture) flowers to their background paper.

Read the story Waiting for Wings. Discuss the story and compare to the pictures of flowers the class has made. What is in the book that is missing in the pictures? Butterflies, caterpillars, and eggs.

Let students select additional shapes to be butterflies, caterpillars, and eggs and add to their pictures.

Take students to the garden or an outdoor area to explore and look for flowers, butterflies, caterpillars, and eggs.

Pollination Game

Place five to seven “flower garden” stations scattered along one side of a room. Have several flowers of multiple colors in each “garden.” Place a cup with small pieces of colored paper (matching the various colors of the flowers) in the garden. These colored pieces of paper are pollen. Have at least one garden with only one piece of pollen in the cup. Have students sit on the floor on the other side of the room from the “gardens.”

Tell your students that they are this garden’s pollinators (bees). Their job is to pollinate the gardens. They must collect pollen from each garden and take it to flowers in the other gardens. When they collect pollen of a specific color, they must take it to a flower in another garden of the same color.

Bees have scouts that look for food sources for the rest of the hive. When bees find a good food source they fly back to the hive and do a special bee “waggle dance” to communicate the location, distance, direction, quality, and quantity of that food source. If the food source is pretty good, the bee may do their dance 10 times. If the food source is fabulous, the bee may do their dance 300 times. They do this dance to convince the other bees to follow them to the food source.

Select two children to be the first scout bees. Have them each flap their arms like wings and “fly” to a garden of their choice. Without talking, have each one come back to the group and attempt to convince the other bees to follow them to the new food source. Select another group of students and have them choose which of the dancing bees to follow. If they think the garden they are pollinating is also good food source (lots of colored paper pollen in the cups), they fly back to the group and do a waggle dance.

Allow all students to fly around the gardens and pollinate. They may not talk, but if they can do the waggle dance to encourage other bees to follow them. Continue until all the flowers are pollinated.

After all the flowers are pollinated, assign small groups of students to each of the “gardens.” Have students count how much pollen is in each flower (how many pieces of paper). Make a chart with the results. Remind students that when pollination takes place, a flower will produce fruit and seeds. Low levels of pollination result in fewer flowers, fruits, and seeds, smaller fruit, or increased disease. If there is no pollination, plants lose the ability to reproduce and flower blossoms will wither away without producing fruit. If all pollination stopped, eventually all flowering plants (and everything that depends on them) would disappear.

End the activity with a honey or apple tasting.