

DeKalb County
School District
Fernbank Science Center

Title: Pollination Power

Level: 2

Location: School (outdoor classroom / garden)

Type: Outreach

Length: 60 minutes

Limit: 1 class

Program Description

Get a bug's-eye view of pollination! Students will explore the parts of flowers and how pollination fits into the plant life cycle. They will uncover the identities of various pollinators, with a focus on monarch butterflies, their life cycles, and their unique relationship to milkweed. Students will also play interactive games to learn the importance of pollinators and maintaining pollinator habitats.

Standards

S2L1. Obtain, evaluate, and communicate information about the life cycles of different living organisms.

- a. Ask questions to determine the sequence of the life cycle of common animals in your area: a mammal such as a cat, dog, or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an *insect such as a butterfly*.
- c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants.**
- d. Develop models to illustrate the unique and diverse life cycles of organisms other than humans.

Vocabulary

Pollen	Pollinate	Pollinator	Flower
Stigma	Style	Stamen	Anther
Petal	Ovary	Seed	Nectar
Life cycle	Pupa	Molt	Migration
Habitat			

Pre-Visit Activities

Review the parts of a plant (stem, leaves, flower, roots, seeds, and fruit) and the stages of the plant life cycle (seed, seedling/shoot, adult plant, flower, etc.).

Post-Visit Activity

1. Have students sit quietly by a flower in the garden and observe it for pollinators for 5-10 minutes. Have students record their observations – which pollinator visited? How many visits did each pollinator make? How long were the visits? Students can then graph their own data or combine it with the class data to graph the number of visits to the flower by type of pollinator, type of flower, or other factors.
2. Flowers attract pollinators in many different ways – how they smell, their color, their shape, and more. Visit these two websites for more information:

- 1) <https://www.buglife.org.uk/sites/default/files/B-Lines%20-%20How%20plants%20attract%20pollinators.pdf>
- 2) <http://sciencelearn.org.nz/Contexts/Pollination/Science-Ideas-and-Concepts/Attracting-pollinators>

Share some of this information with students. Then have students choose a pollinator (e.g. a bee, bat, or butterfly) then design a flower that is suitable for that pollinator using the attached worksheet.

3. Learner.org's Journey North program tracks the seasonal migrations and emergence of plant and animal species across North America. Visit their Monarch Butterfly page to see when the monarchs will be reaching your school yard. You can also report your students' monarch butterfly sightings to help with tracking the migration. <https://www.learner.org/jnorth/monarch/index.html>

Resources:

Buglife is a UK-based website with lots of great info and lesson plans for teaching students about insects: <https://www.buglife.org.uk/activities-for-you/children-and-schools/bug-resources-schools>

Note:

Activity will take place outdoors (in an outdoor classroom / school garden) or in a large, open space. Students should be prepared to be outside for an hour, possibly in mild inclement weather. Students should wear footwear and clothes suitable for active, running games.