

Conservation for Kids!

All About Pollination!



www.Gardeners.com

Pollination: is the process where pollen is transferred from the anther, the male part of a flower, to the stigma, the female part of a flower. Once pollination takes place, seeds begin to grow!

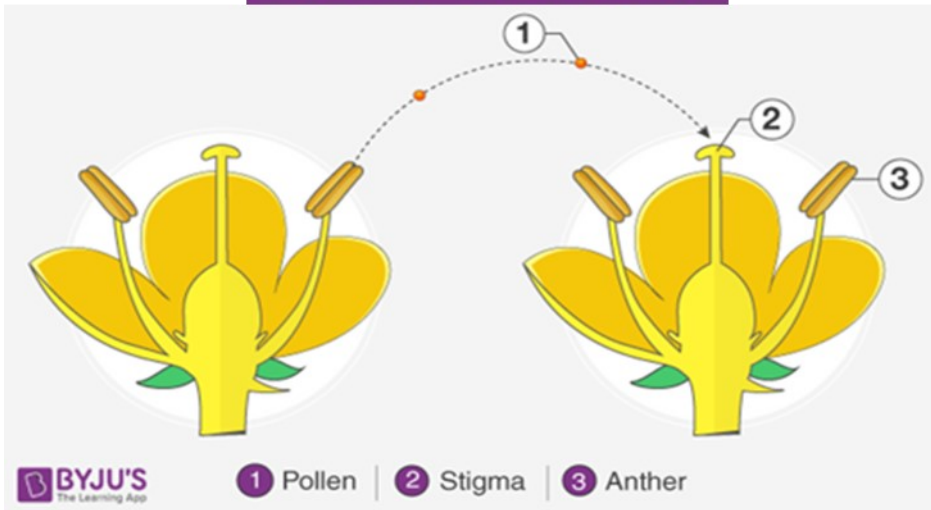
Pollination is a very important part of the life cycle of a plant and they cannot produce fruit or even seeds unless they are pollinated. Pollination usually occurs naturally and is transferred by **pollinators**.

Pollinators: Are animals that move pollen from the anthers to the stigmas of flowers. In New York State, our primary pollinators are insects like bees, flies, beetles, and butterflies, although some birds such as hummingbirds also pollinate. Some plants are entirely wind pollinated. Honeybees do more pollination than any other insect.

Pollinators visit flowers in their search for food (nectar and pollen). During a flower visit, a pollinator might brush against the flower unknowingly depositing pollen from a different flower. The plant then uses the pollen to produce a fruit or seed. Some pollination is done as insects such as bees collect pollen for food, and when they move from flower to flower they spread the pollen.

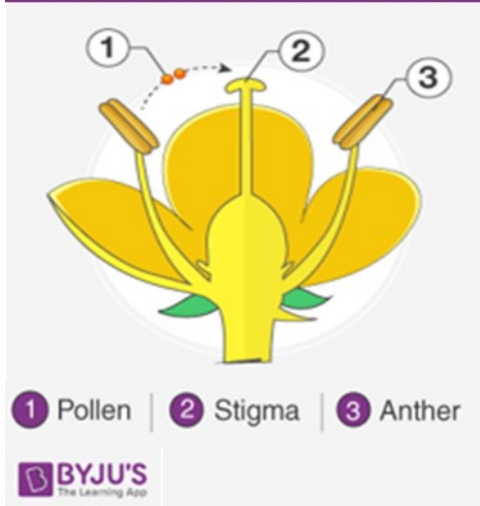
Pollination!

CROSS POLLINATION



Cross pollinations occurs when pollen grains are transferred to a flower from a different plant

SELF POLLINATION



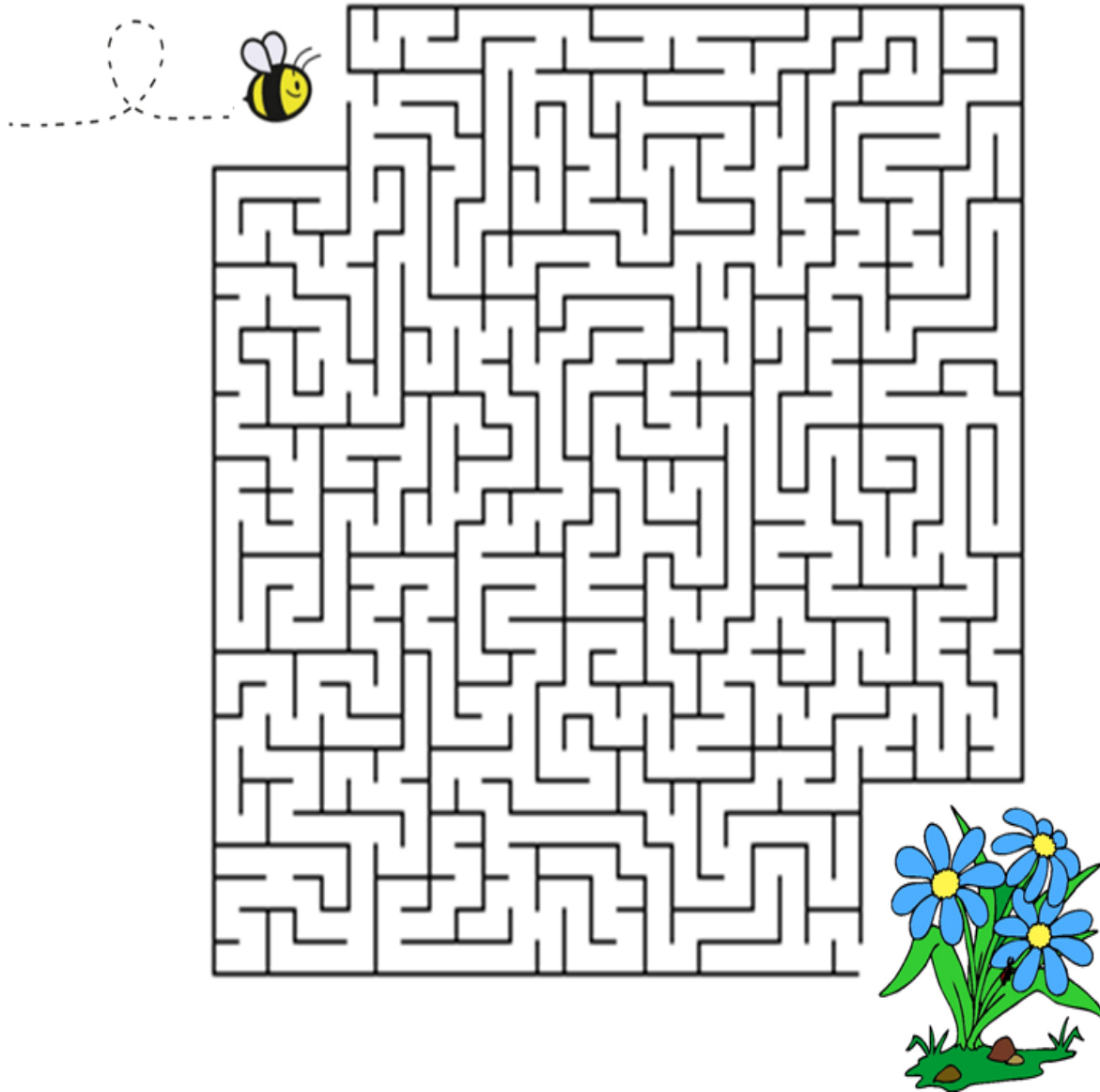
The pollination of a flower from the same flower or from another flower on the same plant.

What attracts pollinators?

- The color or markings on a flower. A flower's fragrance (especially at night when moths and bats are out). And the flowers shape.
- Bees are often attracted to bright blue and violet colors.
- Butterflies enjoy bright colors as well as fragrant ones.
- Butterflies prefer flowers with flat petals that act like a landing strip for them to sit on.
- Long, tube shaped flowers attract hummingbirds since their long beaks can easily fit into the flower when gathering nectar.

Conservation Activity

Get the bee through the maze to pollinate the flowers!



Fun Fact! The fruit crops :apple, almond, avocado, blueberry and cranberry are reliant on insect pollination !

Conservation Activity: Bug Hotel!

A back yard bug hotel provides shelter year round for an assortment of beneficial insects!

- **Solitary bees** will nest and lay their eggs in the bamboo tubes and the holes drilled in the logs. These pollinators are always welcome.
- **Ladybugs and Lacewings** will hunker down and nest in the leaves, pinecones and straw and devour any unwanted aphids and mites
- **Ground beetles and hoverflies** will burrow in the bundles of sticks and twigs. Both of these insects love to feast on aphids, hoverflies also do a good deal of pollinating!

What you need

- A large plastic bottle or drink carton
- Twine
- Mix of natural materials: Sticks, twigs, leaves, wood chips, pieces of bark, nut shells, acorn caps, shells, pinecones

Lets get started!

1. Go outside into your garden or yard and collect a mix of natural materials!
2. Have an adult cut a "window" in the front of the drink carton or plastic bottle., like in the photograph.
3. Start to build your bug hotel with all the items you collected! Layer sticks, leaves and materials inside the container, there is no

right or wrong way, be creative!

4. Once your hotel is packed tie twine to the top so you can hang it outside,

5. Remember to check up on the bug hotel after a few weeks to see who has moved in. Just to careful not to scare them!



What can we do to help pollinators?

- * Plant a variety of native pollinator friendly plants! Shrubs and trees such as dogwood, blueberry, cherry, plum, willow, and poplar provide pollen or nectar, or both, early in spring when food is scarce . Or Plant a wildflower patch in your yard!
- * Include plants to feed all stages of pollinators' life cycle. There are no butterflies without caterpillars! For example, while adult monarch butterflies feed on many kinds of flowers, their caterpillars feed exclusively on milkweed plants.
- * Provide homes or other forms of shelter for bees, put out nectar feeders for butterflies and hummingbirds
- * Provide clean water for pollinators with a shallow dish, bowl, or birdbath with half-submerged stones for perches.
- * Spread the word! Share information with your school community, neighbors and friends about the importance of protecting pollinators.



*Monarch caterpillar consuming milkweed.
Photograph by Shannon Jenkins*



Hummingbird feeding on a flower blossom www.fs.fed.us/wildflowers/pollinators

For more information :

- * <https://www.nrcs.usda.gov/> and locate to the "Insects and Pollinators" page
- * <https://kidsgardening.org/ten-tips-to-help-pollinators>