DISSECT A FLOWER

Learn about the role different plant parts play, and how pollinators assist with plant reproduction.
Dissect a Flower

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About the Activity

Flowers are beautiful, but plants don’t make flowers for the purpose of our enjoyment. Plants are living things and their flowers serve an important function in the life cycle of the plant: to reproduce by making fruits and seeds.

In this activity you will explore the parts of a flower and how they are involved in plant reproduction.

This activity is part of our 4-H At-Home Midwestern Native Bees Series. See the rest of the activities here.

Supplies

These simple supplies are all you’ll need for this activity.

- A flower to dissect (this activity is best to do in spring or summer)
- Flower parts worksheet (Doc 12)
- Scissors
- Tweezers (optional)
- Magnifying glass (optional)
- Tape

Grades: 2-8

Topic: Environmental Horticulture, Life Science
Time: 30 minutes
Activity Steps

1. First, go outside and find a flower. The best flowers to use are lilies, but if you can’t find a lily, use a large blossom of another type.

2. Now, take a look at this flower diagram to learn about the different parts of the flower.

![Flower Diagram]

As you begin to dissect your flower during the activity, it’s helpful to know what pieces you are exploring. Looking at the diagram, can you find the stigma and the ovary? What are the different parts of the stamen?

3. Look closely at your flower. Remove the flower from the stem if it is still attached. Can you identify any parts by just looking at it? Which ones?

4. Use scissors to cut the flower in half lengthwise from the bottom. Use your fingers or tweezers to separate the flower into its different parts. If you’re using a magnifying glass, this is a great time to look closely at the flower parts.

5. When you have identified a part, tape it to the correct square on the flower parts sheet. Did your flower have all of its parts?

DID YOU KNOW? Some flower petals have signals for pollinators to show that they have nectar and where the nectar is located. Nectar is often located in the center of the flower, making it necessary for pollinators to touch the other parts of the flower to get to it.

DID YOU KNOW? Flowers contain the ovary where the fruit and seeds will develop. Anthers are the part of the flower that makes the pollen. When flowers are pollinated, they develop into fruits and seeds.

DID YOU KNOW? A flower can have many ovaries and many styles with stigma. For the fruit to develop properly, all the stigmas must be pollinated. If the flower is only partially pollinated the fruit will grow misshapen.
See how much you’ve learned about plant parts!

**QUESTION 1**
What part of the flower develops into the fruit and seeds?
- a. Ovary
- b. Anthers
- c. Stigma
- d. Stem

**QUESTION 2**
What part of the flower has nectar signals for pollinators?
- a. Anthers
- b. Style
- c. Petals
- d. Ovary

**QUESTION 3**
What part of the flower makes the pollen?
- a. Roots
- b. Style
- c. Stigma
- d. Anther

**QUESTION 4**
True or False: A flower can have more than one ovary.
- a. True
- b. False

**QUESTION 5**
Fill in the blank: What happens if a flower is only partially pollinated?

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Reflection Questions

**Bonus questions to inspire wonder:**

- In many flowers, the anthers are located close to the stigma. What is the advantage for the flower to have these structures close together?
- Flowers and pollinators have coevolved (developed a relationship over time) into a mutually beneficial relationship. How does the plant benefit from the relationship? How do the pollinators benefit from the relationship?
- Why are pollinators important for our food supply?
Take your new knowledge to the next level.

Some plants need pollen from a different plant (cross-pollination) like the apple tree, while others can self-pollinate. Some plants also have male and female flowers. Explore the flowers in your community with a magnifying glass to learn more about the plants around you.
Career Connections

If you liked learning about the anatomy of flowers, you might enjoy a career in STEM. STEM careers are exciting and rewarding, and you can pursue a STEM-related career wherever you live, whether you're in a city, a rural community, or anywhere in between.

Watch this video and learn what it takes to be a field sales representative from Wyatt Jones of Bayer Crop Science.

WATCH VIDEO

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Identify each part and tape it in the box.

Petal

Sepal

Stamen (whole)

Anther (part of the stamen)

Filament (part of the stamen)

Parts of the Pistil

Ovary

Style

Stigma