

INDOORS, OUTDOORS ❁ GRADES 4-6 ❁ SPRING ❁ ACTIVITY



Flower Power, Part One

DESCRIPTION

Students dissect and draw flowers to learn about their parts.

OBJECTIVE

To learn the structure and function of flower parts.

TEACHER BACKGROUND

Evolutionarily advanced plants (angiosperms) produce flowers, where the sex cells are contained for the plant's reproduction. The *stamen* is the male organ for reproduction and is composed of the *anther* and the *filament* (or stalk). At the tip of the filament is the anther, the organ that produces the pollen. *Pollen* is composed of fine powder-like grains that contain the male sex cells. The *pistil* is the female organ; its parts are composed of the *stigma*, *style*, and *ovary*. During pollination, male pollen lands on the stigma, travels down the style, and fertilizes the ovary. This fertilized egg develops into the seed. *Sepals* are the leaflike parts under the petals. They are usually green and photosynthetic (able to produce food from the sun). *Petals* can be all colors and shapes, and have a variety of smells. They serve to attract pollinators.

Note: Members of the daisy family (*Asteraceae*), such as daisies and sunflowers, are not good examples to use in this activity because they have composite flowers. What looks like one flower is actually made up of many – the “disk” flowers in the center and the “ray” flowers that look like petals. Each disk flower and each ray flower is a separate reproductive unit, with its own pistils and stamens, though many of them are actually sterile.



MATERIALS

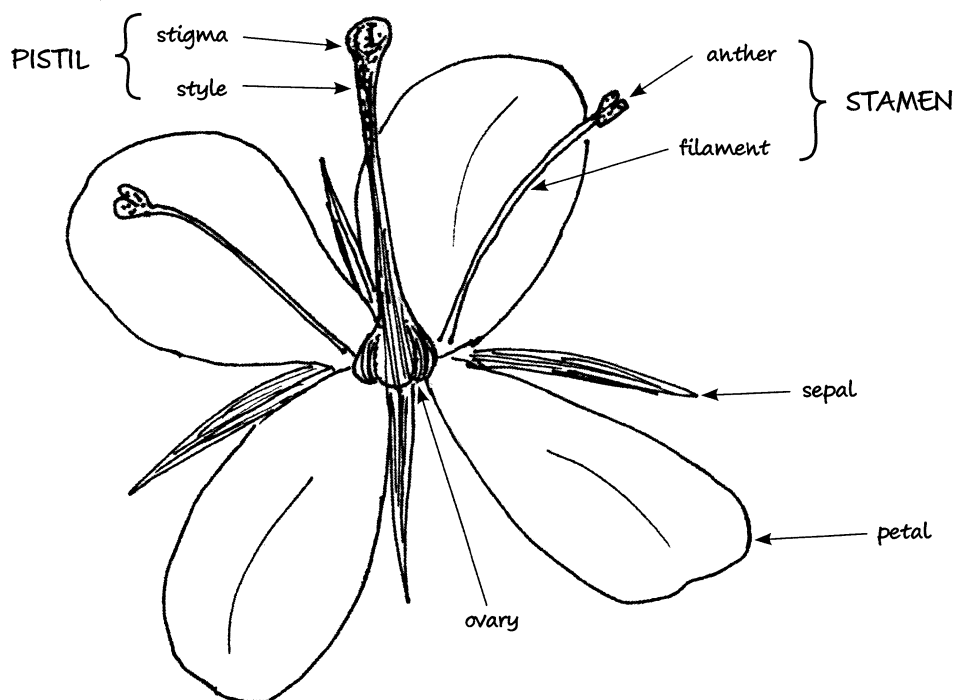
❁ drawing and coloring materials

CLASS DISCUSSION

Each flower seems to be unique, with its own special beauty. But all flowers are composed of the same parts. You and your friends are all unique, but you all have the same parts, too: eyes, ears, noses, fingers, and so on. The difference is that different types of flowers have different numbers of these parts; for example, one type of flower might have four petals while another type has five.

ACTION

1. Divide the class into small groups.
2. Ask each group to go into the garden and carefully collect one flower, preferably one that no other group has. Simple flowers with easily identifiable parts are foxglove, sweet pea, tomato, potato, bean, mustard, poppy, lily, nasturtium.
3. When groups return, ask them to look carefully at their flower; then have them spend some time drawing a colored picture of it.
4. Ask the students to take their flowers apart gently and draw each part. Use the drawings as a guide to flower parts and discuss the function of each part.
5. Students should examine, draw, and label the sepals, petals, pistil, and stamens.

**WRAP UP**

What is the name of the pollen-bearing, male part of the flower? What is the female part? What part of the flower swells to become the fruit and seeds? How does pollen get to the pistil? List things that would change if there were no more flowers.

