Parts of the Flower: sexual propagation part 1

Grade: 7

GPS: S7L3. Students will recognize how biological traits are passed on to successive generations.

b. Compare and contrast that organisms reproduce asexually and sexually (bacteria, protists, fungi, plants & animals).

Essential Question: What are the parts of the flower, and what are their functions?

Teacher Note: This is meant as an introduction to flower parts and complete flowers. This lesson occurs mostly inside, but contains a walk through the garden, and school campus.

Interest Approach: Put the following exercise on the board…

On a sheet a paper write down something that is…

Sticky
a passageway/connector
a container
has lots of little pieces
tall
protects something OR holds something together
is pretty

Key (for later in lesson)

Sticky - stigma, sticky to collect pollen
a passageway/connector – style, passageway between stigma and ovary
a container – ovary, contains all of the eggs
has lots of little pieces – anther, holds many pollen granules
tall – filament, tall to provide better access for pollination
protects something OR holds something together – sepal, protects bud and holds the flower together once it has bloomed
is pretty – petals, pretty to attract pollinators

Ask students to share some of there answers. If possible, give a small prize for creative answers. Ask students to guess what these words have in common; what they are describing. Explain that all of these words and phrases describe parts of a flower and their function, and that you will be learning how flowering plants (angiosperms) reproduce.

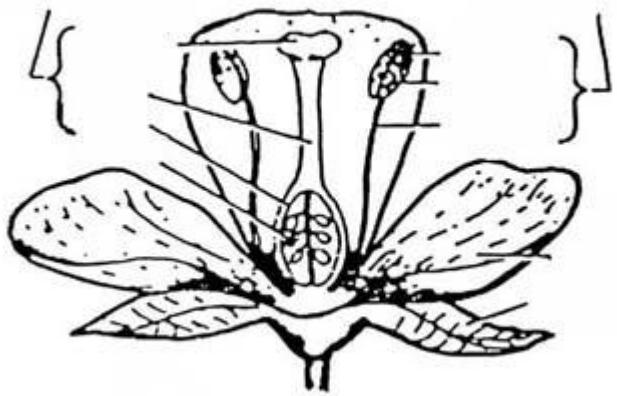
Lesson/Learning Activity:

While teaching about parts of the flower, have students fill in the graph below. For the "is like" column, have students transcribe the analogies the came up with in their opening exercise, for instance… a stigma is like glue because they are both sticky. Make sure when talking about the function of each part you bring the wording from the opening activity into play so that students have an easy way to remember the function of each part. For the male and female column, have students write both male/female as well as stamen/pistil. Writing both words at the same time will help them remember. For the flower dissection portion have students glue each part of the flower in the box. As you talk about each part, dissect it in front of the class, then have students repeat the process at their desks. This works great if you have an ELMO projector so students can easily see each part. Daylilies (or other lilies) work great, because the parts are large and easy to see. Other complete flowers include tulips, roses, and peas. If you cannot procure the flowers, have students color, cut, and paste a paper copy.

Check for Understanding: Go on a flower scavenger hunt around the school campus. Pick flowers from the plants to take inside. Ideally, each student or pair of students should have at least one flower. If picking flowers from fruit or vegetables in the garden, make sure to place a picking limit so the potential crop is not destroyed. Encourage students to examine their flower while on the walk to determine if it is a complete (has male and female parts, as well as sepals and petals) or incomplete flower (missing one of the four parts). When back in the classroom, have students glue their flowers to one of two poster boards, one for complete and the other for incomplete flowers, and label the parts of the flower they can identify. Check and make sure that all flowers are in the correct location. Place the boards up in the classroom where students can see.

Flower Parts and Functions

Flower part	function	Is like…	Male/female	flower dissection



Perfect Flower