

Materials

- A Perfect Flower for each student (See below for more info.)
- Hand Lenses
- White Construction paper - folded in half length-wise
- Glue or Tape
- Pencil
- Colored Pencils

Preparation

- Gather enough “perfect” flowers for the class.
- Fold a sheet of paper in half length-wise for each student.
- If time allows, prepare an example flower dissection so students can see end goal.

PROCEDURE

Part 1: Pre-Dissection

1. Explain to students that to “dissect” is to take apart. The purpose of dissecting a flower is to explore each individual part to see what it looks like and how it helps the flower.
2. Pass out folded booklet paper to each student. Have students write their name on back.
3. Give students 5 minutes to use the hand lens to investigate flower. (No dissecting yet!)
4. Draw the full flower on the front cover. Include name of flower.

Part 2: Dissection

1. As a class, “dissect” the flower part by part, listing names and functions that help with pollination as you go. Be careful to place “dissected” parts down carefully on desk for later use and examination. (See opposite second page for procedure.)
2. After dissection, accept questions. Then have students glue/tape and label each part name inside booklet. Write function if desired.

Part 3: Recap

At the end of class, ask students which parts of the flower help with pollination. Trace the pollen from part to part to reiterate the process. Ask students why some flowers have brightly colored and interesting shaped petals. Ask why pollination is important. Name other pollinators if time allows.

ENGAGE

Begin by having students describe the function of each part of the human body on a pre-made list (with 3 or 4 parts). Just as each part of our bodies has a purpose, each part of a flower is unique and important, too. What is pollination? The flower on a plant is usually colorful to attract bees, butterflies and birds, which help to pollinate the plant.

Objectives

- Students will be able to name at least 5 parts of the flower.
- Students will be able to describe how pollen helps flowers to reproduce.
- Students will be able to describe the function of at least 3 flower parts.

EXPLAIN

This activity works best using a “perfect” flower. A perfect flower is one with both male and female parts. Examples of perfect flowers are lily, daffodil, tulip and flowers from apple, garlic, onion, pepper and tomato plants. (Squash and melon are examples of imperfect flowers).

Parts of a (Perfect) Flower and Dissection Procedure:

- **Sepals** - Just below the flower on stem. Very small, petal-looking. Function: enclose and protect the developing flower.
- **Petals** - Function: Protect the other parts inside the flower. The color, shape and arrangement of the petals is usually designed to attract pollinators. (Gently peel off the petals.)
- **Stamens** - Located inside petals, usually yellow or orange. Function: Male reproduction - split into two parts. The **filament** (long, thin strands) holds up the **anther**, a small pod which holds the pollen. (Rub your finger on top of the anther to gather pollen just like a bee or bird might. No pollen? It’s not ripe yet). (Pull off the stamens being careful to leave the thicker tube in the middle).
- **Pistil**- Thicker, singular tube in the middle of the stamens. Function: The female reproductive parts. The sticky tip is called the **stigma**. When it’s pollinated, the pollen goes down the **style** (pistil tube) into the **ovary**. The ovary is located at the bottom of the flower where it meets the stem. This is where the seeds form. Each individual section of the ovary is called an ovule.

ADDITIONAL CONTENT INTEGRATION *(see previous page)*

Take a walk outside after completing this lesson and look for and/or pick other types of flowers. Practice identifying and labeling the parts and discuss the functions of each.

Additional Materials

- Outdoor flowers to look at or pick

EVALUATE

1. Journal prompt - List your 3 favorite flower parts and their functions. Draw and label if time allows.