Flower Parts

Life Science | Lesson Guide

2nd Grade

Photo Description

This image shows a beautiful pink flower with a long, thin middle part sticking up from the center. The middle part has yellow bumps at the very top and small thread-like pieces along its sides. These special parts help the flower make seeds and spread pollen to other flowers.

Scientific Phenomena

Anchoring Phenomenon: Why do flowers have these tiny, colorful parts in the middle?

Flowers have these structures because they need to make seeds to create new plants. The yellow bumpy parts at the top (the stigma) catch pollen from other flowers. The thread-like structures (the stamens) produce pollen—a fine powder that helps make seeds. This process is called pollination, and it's how plants reproduce. Without these flower parts, we wouldn't have new flowers, fruits, or many of the plants we eat!

Core Science Concepts

* Flower Structure and Function: Flowers have different parts that work together. The colorful petals attract insects and animals, while the middle parts (stamens and pistil) are responsible for making seeds.

* Plant Reproduction: Flowers are the part of plants that help create seeds. Pollen from one flower travels to another flower, which allows new seeds to grow.

* Pollination: Insects, birds, wind, and water help move pollen between flowers. This movement is necessary for plants to make seeds and reproduce.

* Observable Characteristics: Scientists observe and describe what they see in nature using their senses. The different colors, shapes, and textures of flower parts are clues to how they work.

Pedagogical Tip:

For Second Grade learners, use concrete, hands-on exploration before abstract terminology. Allow students to gently touch and observe real flowers (or high-quality images) and describe what they see in their own words before introducing scientific names. This builds observational skills and vocabulary naturally.

UDL Suggestions:

Provide multiple means of engagement by offering choice: students can draw flowers, build 3D flower models with craft materials, or sort real flower pictures by parts. Reduce cognitive load by focusing on just 3 main parts (petals, stamens, pistil) rather than overwhelming students with many terms. Allow students to use manipulatives (beads, yarn, straws) to physically construct a flower's structure.

Discussion Questions

1. What job do you think the yellow bumpy parts at the top of the flower do? (Bloom's: Understand | DOK: 1)

2. Why might insects visit this pink flower? What do you notice that might attract them? (Bloom's: Analyze | DOK: 2)

3. If we didn't have flowers, what foods or plants might disappear from our world? Why? (Bloom's: Evaluate | DOK: 3)

4. How is this flower similar to and different from other flowers you have seen? (Bloom's: Compare | DOK: 2)

Extension Activities

1. Flower Part Hunt: Take students on a nature walk or show pictures of 4-5 different flowers. Have them identify and draw the petals, stamens, and pistil in each flower. Create a simple chart comparing the colors, sizes, and shapes of parts across different flowers.

2. Build a Flower Model: Provide students with craft materials (straws, tissue paper, pipe cleaners, beads, yarn) to build a 3D flower model. Label each part and have students explain what each part does. Display models in the classroom and have students do a gallery walk.

3. Pollinator Detective: Show students pictures or videos of different pollinators (bees, butterflies, hummingbirds). Have students predict why these animals visit flowers and what they might carry away on their bodies. Create a simple diagram showing how pollen sticks to a bee and travels to the next flower.

NGSS Connections

Performance Expectation:
2-LS2-1: Plan and conduct investigations to provide evidence that plants get the materials they need for growth chiefly from air and water.

Disciplinary Core Ideas:
* 2-LS2.A - Plants depend on water and light to grow.
* 3-LS1.B - Flowers are the part of the plant used for reproduction.

Crosscutting Concepts:
* Patterns - Flowers have recognizable patterns and structures that serve specific purposes.
* Structure-and-Function - The different parts of a flower have specific jobs that help the plant survive and make seeds.

Science Vocabulary

* Pollen: Tiny yellow or orange powder made inside flowers that helps make new seeds.

* Stamen: The thin thread-like parts inside a flower that make pollen.

* Pistil: The middle part of a flower that catches pollen and helps make seeds.

* Pollination: When pollen moves from one flower to another, usually with help from bees or wind.

* Reproduce: When living things make new living things just like themselves.

* Petals: The colorful leaves around the outside of a flower.

External Resources

Children's Books:

Flowers Are Blooming!* by Gail Gibbons (Informational picture book with clear diagrams)

A Flower's Life* by Shelley Rotner and Sheila Kelly (Photographic exploration of flower growth)

From Flower to Fruit* by Gail Gibbons (Traces the journey from flower to seed)

YouTube Videos:

* "How Do Flowers Make Seeds? — Crash Course Kids" — A 5-minute animated video explaining pollination and flower reproduction in kid-friendly language. https://www.youtube.com/watch?v=nNV6g0kf5QM

* "The Life of a Flower" — National Geographic Kids — An engaging 3-minute video showing time-lapse flower growth and structure with beautiful visuals. https://www.youtube.com/watch?v=Av5TRfP0EjI

Teacher Tip: Use this lesson as a foundation for exploring plant reproduction and the role of pollinators in ecosystems. Consider connecting it to seasonal observations in your school garden or nearby park!