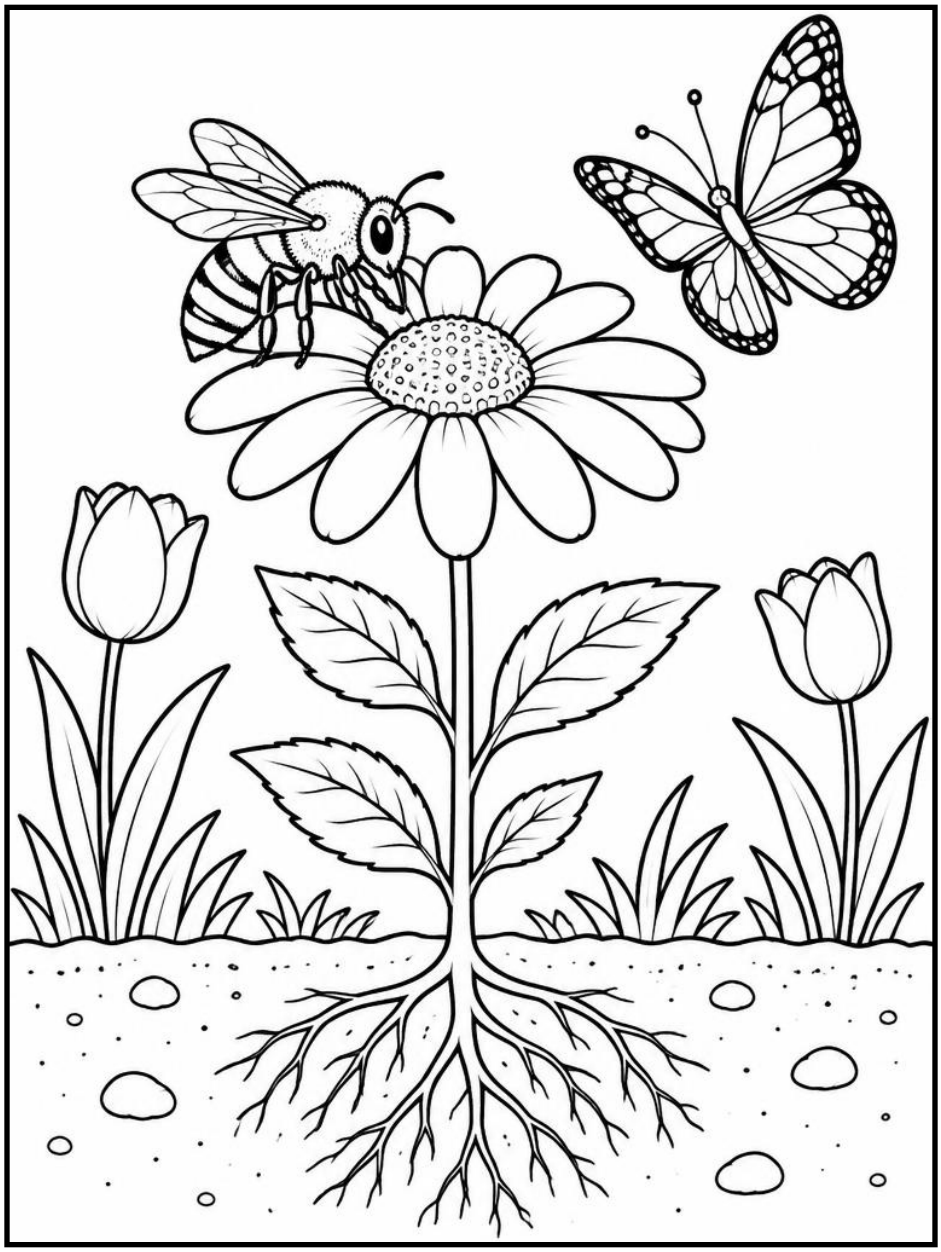
Plants & Pollinators

Learning Pack · Color It. Learn It. Explore It.

Ages 6–10 · Grades 1–4 (approximate) · Life Science / Botany & Ecology · 30–75 minutes

Name: _____



Inside: facts · vocabulary · label a plant · pollination · pollinators · quiz · answer key · notes

What you will learn

Learning objectives

- ☐ Name the main parts of a flowering plant.
- ☐ Explain what plants need to grow.
- ☐ Describe pollination in simple words.
- ☐ Name several kinds of pollinators.
- ☐ Explain why flowering plants and pollinators are important.

Five plant facts

Fact 1: What plants need

Most green plants need light, water, air and nutrients. Leaves use light energy to make their own food (sugars) — this is called photosynthesis. Plants do not get their food from the soil.

Fact 2: Parts of a plant

Roots take in water and minerals and hold the plant in place. Stems hold the plant up and carry water and food. Leaves make most of the plant's food. Many plants have flowers, which help them make seeds.

Fact 3: What pollination means

Pollination is when pollen moves from the anther of a flower to the stigma of a flower of the same kind. After pollination, the flower may be able to make seeds.

Fact 4: Many pollinators

Bees, butterflies, moths, some flies, beetles, birds and bats can carry pollen between flowers. Not every animal that visits a flower pollinates it.

Fact 5: Why pollinators matter

Pollinators help many plants make fruits and seeds, including some foods people eat. Not all plants need animals: some, like grasses, use the wind to move pollen.

Sources (checked October 2026)

Facts 1–2: U.S. Forest Service, fs.usda.gov/wildflowers/beauty/pollinators (plant basics); USDA, usda.gov/peoples-garden/pollinators
Facts 3–5: U.S. Forest Service, fs.usda.gov/wildflowers/pollinators/What_is_Pollination/index.shtml
Facts 4–5: U.S. Forest Service, fs.usda.gov/wildflowers/pollinators/animals/index.shtml

Plant and pollinator words

Root	The part of a plant, usually underground, that takes in water and minerals and holds the plant in place.
Stem	The part that holds a plant up and carries water and food between the roots and leaves.
Leaf	A part of a plant that uses sunlight to make food for the plant.
Flower	The part of many plants that helps them make seeds.
Pollen	A tiny, dust-like powder made by the anthers of a flower.
Pollination	Moving pollen to the stigma of a flower of the same kind.
Nectar	A sugary liquid made by some flowers. It is not the same as pollen.
Pollinator	An animal, like a bee or a bat, that carries pollen from flower to flower.
Seed	A small part made by a plant that holds a tiny baby plant and its food.

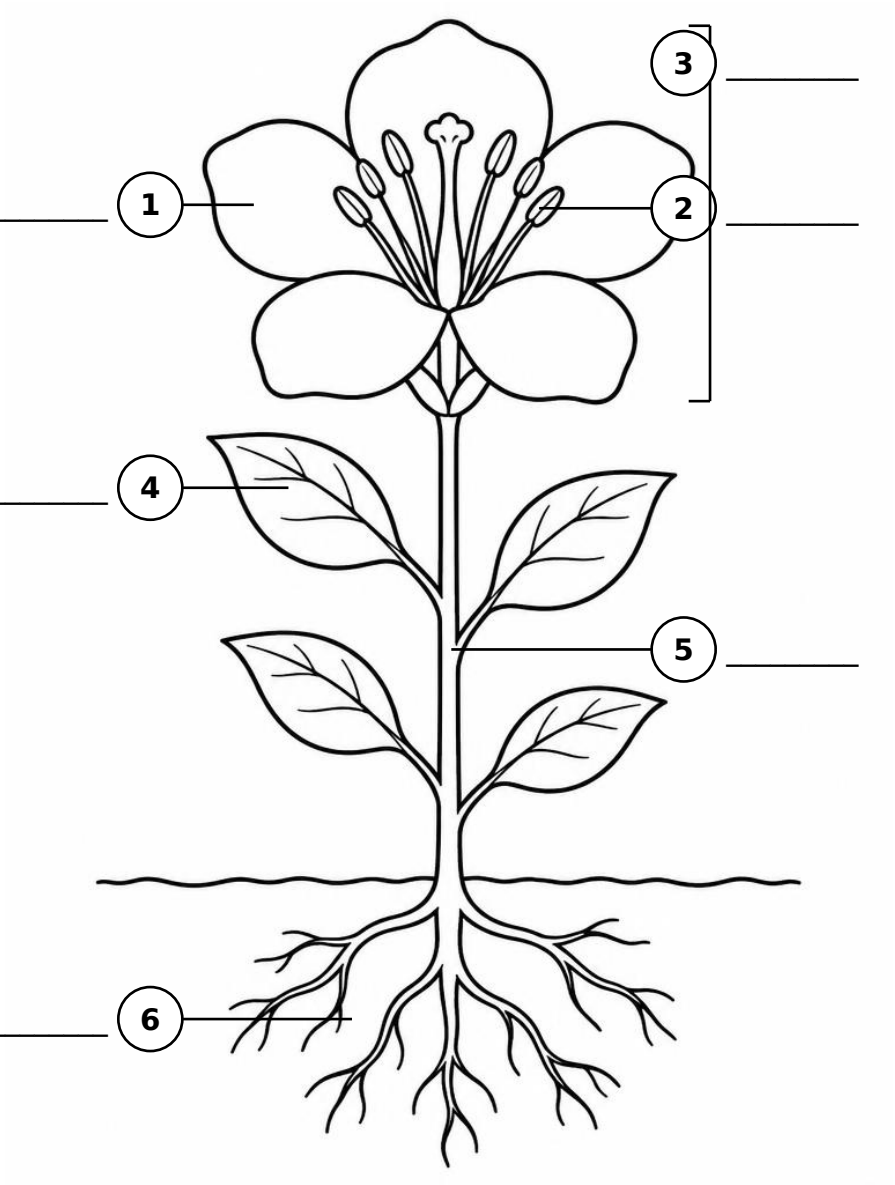
Your turn: write a sentence using two of the words.

Label a flowering plant

Name: _____ Date: _____

Write each word from the word bank on the line with the matching number. Each word is used once.

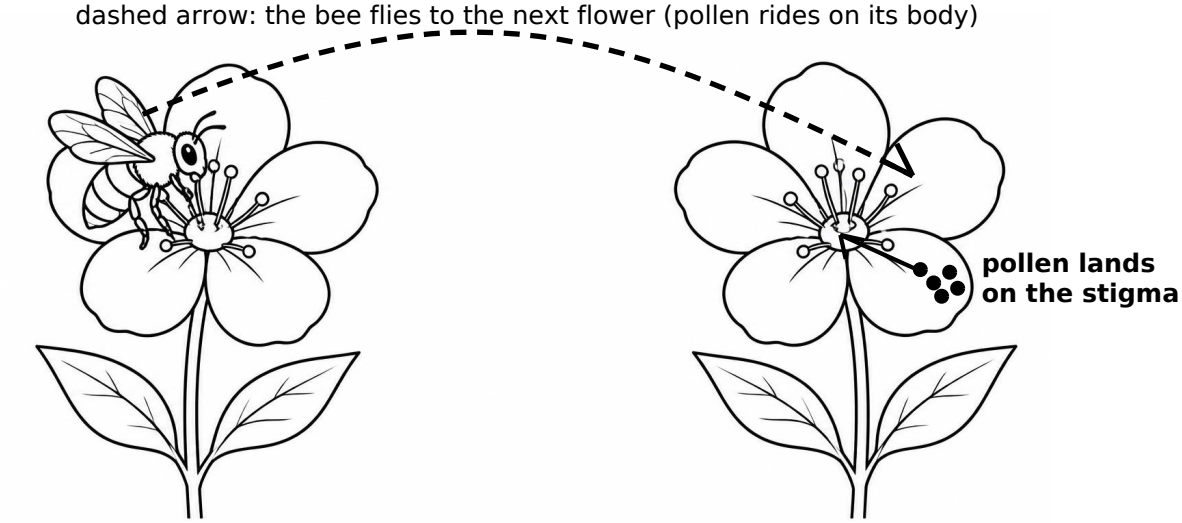
roots · stem · leaves · flower · petals · anther



Pollination science

Name: _____ Date: _____

Activity A: One example of animal pollination

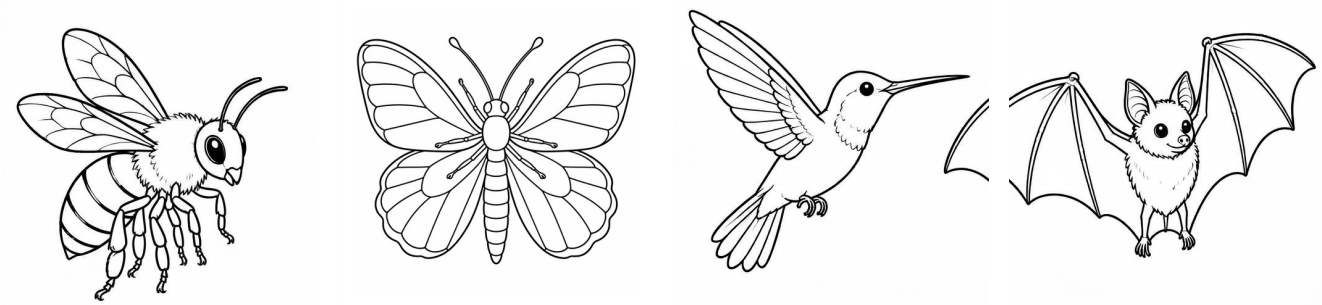


Number the steps 1 to 5 in the order they happen in this example. (Real pollination does not always happen this way, and not every visit moves pollen.)

- ☐ The bee flies to another flower of the same kind.
- ☐ A bee visits a flower to drink nectar.
- ☐ Pollination has happened! The flower may now be able to make seeds.
- ☐ Pollen from the anthers may stick to the bee's hairy body.
- ☐ Some pollen may rub off onto that flower's stigma.

Activity B: Who helps pollinate?

Circle every animal that can be a pollinator. Different flowers attract different pollinators — no animal pollinates every plant.



Bee **Butterfly** **Hummingbird** **Bat**

Pick one animal. How does it carry pollen? _____

Plants and pollinators quiz

Name: _____ Date: _____

Fill in the circle next to the best answer.

1. What do roots do?

- ◯ a) Take in water and minerals and hold the plant in place
- ◯ b) Make the flower's color
- ◯ c) Catch insects

2. What do most green plants need to grow?

- ◯ a) Only soil
- ◯ b) Light, water, air and nutrients
- ◯ c) Only sugar

3. What is pollen?

- ◯ a) A sweet liquid inside flowers
- ◯ b) A tiny dust-like powder made by the anthers
- ◯ c) A kind of seed

4. Pollination means...

- ◯ a) moving pollen to the stigma of a flower of the same kind
- ◯ b) planting a seed in the ground
- ◯ c) watering a plant

5. Why are pollinators important?

- ◯ a) They help many plants make fruits and seeds
- ◯ b) They make the rain fall
- ◯ c) They help plants grow roots

Bonus: What could you do to help pollinators in your neighborhood?

Answer key

Label a flowering plant

1. petals
2. anther
3. flower
4. leaves
5. stem
6. roots

Activity A: pollination steps

Box 1 → 3: The bee flies to another flower of the same kind.

Box 2 → 1: A bee visits a flower to drink nectar.

Box 3 → 5: Pollination has happened! The flower may now be able to make seeds.

Box 4 → 2: Pollen from the anthers may stick to the bee's hairy body.

Box 5 → 4: Some pollen may rub off onto that flower's stigma.

Activity B: who helps pollinate?

All four should be circled: bee, butterfly, hummingbird and bat can all be pollinators. Each one visits certain kinds of flowers, not every plant.

How does it carry pollen? (answers vary) — e.g., pollen sticks to a bee's hairy body or a butterfly's legs, a hummingbird's head and beak, or a bat's furry face.

Quiz

1. a) Take in water and minerals and hold the plant in place
2. b) Light, water, air and nutrients
3. b) A tiny dust-like powder made by the anthers
4. a) moving pollen to the stigma of a flower of the same kind
5. a) They help many plants make fruits and seeds

Bonus (answers will vary): for example, grow flowers that local pollinators like, leave some wild areas, give pollinators a little water, or ask an adult to avoid using bug sprays that harm pollinators.

Teacher and parent notes

Who it is for

Ages 6–10 (about grades 1–4). Younger children can do the coloring, vocabulary and pollinator pages with help reading.

Time

30–75 minutes, depending on the activities selected.

Suggested order

1) Read the facts. 2) Discuss the vocabulary. 3) Label the plant. 4) Pollination activities. 5) Quiz. 6) Color a sheet from the free Bugs & Butterflies collection.

Hands-on: pollinator watch

On a warm, calm day, watch a patch of flowers from a safe distance for 10 minutes. Record the flower color, the kind of animal visiting, how many visits you count, and the weather. Indoor option: watch a short pollinator video or use photos instead.

Safety

Watch bees and other insects without touching or disturbing them. Do not touch unknown plants or insects, and stay away from nests and hives. Wash hands after outdoor activities. Children with allergies should follow their own safety plan and an adult's guidance.

Extension

Compare two different flowers (shape, color, smell). Why might each one attract a different pollinator?

Discussion questions

Why do flowers make nectar? How can pollen move between flowers? Why are pollinators important? How can people protect pollinator habitats?

A note on the science

Many flowering plants depend on animals to move pollen, while others use the wind (like grasses and many trees) or other methods. Pollination is not the same as making a seed: seeds form later, after fertilization.