LiveWell Kids
Garden and Nutrition Program

Lesson 4: Plants From Pollination to Food

KINDERGARTEN

OBJECTIVES

By the end of this lesson, students will:

- Observe the anatomy of a flower and understand that each part has an important job.
- Identify the main parts of a plant.
- Recognize that people eat a variety of foods that are parts of plants.
- Learn about a plant's life cycle, including the role of seeds.
- Understand the role of pollinators and observe pollination in the school garden.

SUPPLIES

Supplies to bring from home - **provided by volunteer**:

- One or more flowers with clearly visible reproductive parts.
  - Examples: lily, tulip
- One or more fruits or seed pods with visible seeds.
  - Examples: tomato, milkweed pod

Store flowers in water or refrigerate prior to lesson to prevent wilting.

Supplies to bring from the shed:

- Laminates:
  - *The Life Cycle of a Plant*
  - *Anatomy of a Flower*
  - *Flower to Fruit Process*
  - *Parts of a Plant*
  - *Plant Parts We Eat*
- 2 cafeteria trays
- Knife
- Cutting board
- Magnifying lenses
- Tweezers
- Whiteboard and dry-erase markers

Supplies to bring from the classroom (arrange ahead):

- Paper – one piece per student
- Writing tools (crayons, markers, or colored pencils)

PREPARATION

- Refer to the LiveWell Kids Volunteer Manual on the LiveWell Kids webpage for details.
- **Check with the teacher for insect allergies.**
- Cut flower and fruit just before lesson if possible.

SET-UP INSTRUCTIONS

SET UP THE INTRODUCTION AREA

- Set out the laminate *The Life Cycle of a Plant.*

SET UP THE FLOWER DISSECTION ACTIVITY

- Cut one flower in half lengthwise and place it on a tray.
- Place any additional whole flowers around the cut flower.
- Cut the fruit or pod in half and place it on the second tray.
- Place magnifying lenses, tweezers, and laminates (*Anatomy of a Flower* and *Flower to Fruit Process*) next to the trays.

SET UP THE PLANT PARTS ACTIVITY

- Place the following laminates near the activity area:
  - *Parts of a Plant*
  - *Plant Parts We Eat*
- Set out the whiteboard and markers.

INTRODUCTION & MINDFUL BREATHING *(2 MINUTES)*

- Introduce yourself and any other volunteers.
- Guide students through a brief mindful breathing exercise.
- Explain: *"Today we are going to learn how plants grow, how flowers help plants make food, and how pollinators help plants."*

Life Cycle of a Plant Supplies – Laminate: *The Life Cycle of a Plant*

• Show the laminate.
• Explain:
  ○ All plants start as seeds.
  ○ When seeds get soil, water, sunlight, and nutrients, they grow roots and sprouts.

- Plants grow bigger until they are ready to make more plants.
- Plants make flowers, which can turn into fruit or seed pods.

Keep the discussion visual and brief.

****Divide Class into Two Groups****

Divide students into two groups.

- One group goes to the **Flower Dissection Activity** with you.
- The other group goes to the **Plant Parts Activity** with your co-volunteer or teacher.
- Both activities run at the same time.
- Switch groups after 8 minutes.

GARDEN DISCUSSION & ACTIVITY *(8 MINUTES)*

Students will learn about the process of pollination and the development of fruits/pods and seeds in this three-part discussion activity.

Part 1: Anatomy of a Flower

Supplies – Laminate: *Anatomy of a Flower*

- Show the *Anatomy of a Flower* laminate.
- Explain:
  - Flowers have many parts.
  - Pollinators visit flowers to drink nectar.
  - While visiting, pollinators pick up pollen.

Avoid requiring students to memorize names.

Part 2: Looking Inside a Fresh Cut Flower

Supplies – Fresh flower, laminate: *Anatomy of a Flower*

- Refer to the cut flower on the tray.
- Use tweezers to gently expose flower parts.
- Point out the pollen and central structures.
- Pass the tray so students can look closely.
- Important:
  Students should look only. The flower is fragile.

Part 3: Flower to Fruit

Supplies – Use above supplies plus cut half of fruit/pod, laminate: *Flower to Fruit*

- Show the fruit or pod.
- Ask students what they notice inside.
- Explain: "When a flower gets pollinated, it can grow into fruit or a pod with seeds inside."

NUTRITION DISCUSSION & ACTIVITY *(8 MINUTES)*

Happening at the same time as the Garden activity.

Important safety reminder:

Not all plant parts are safe to eat. Only eat plants given by a trusted adult.

I Can Eat a Plant!

Supplies: Laminate - *Parts of a Plant, Plant Parts We Eat, Whiteboard and dry-erase marker*

- Explain that every day we eat foods that come from plants.

- Show the *Parts of a Plant* laminate and briefly review the main plant parts:
  - Roots
  - Stems
  - Leaves
  - Flowers
  - Fruits
  - Seeds

- Show the *Plant Parts We Eat* laminate and explain that different foods come from different parts of plants.

- Activity: Build-a-Plant (Interactive Drawing)
  - Tell students that together they are going to build a plant by adding foods they eat to the correct plant parts.
  - Before drawing each plant part, use the steps below to keep all students engaged:

    Step 1: Body Prediction

    Before naming the food, say: "Before we draw, show me where this food grows."
    - Roots → point down or crouch down
    - Stem → stand tall
    - Leaves → arms wide
    - Flower → fancy pose
    - Fruit → hands in a circle

    Step 2: Mystery Clue

    Give a short clue instead of naming the food right away.

- Examples:
  - "This food grows underground and is crunchy."
  - "This food grows on a plant and is round and red."

Have students guess the food.

Step 3: Student Direction

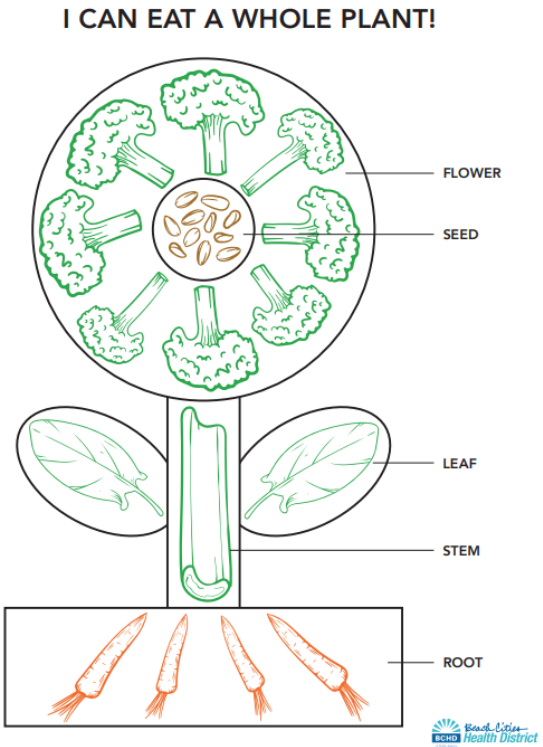
- Once the food is named, ask students to help direct the drawing.
- Prompts:
  - "Should it be big or small?"
  - "Where exactly should it go?"
  - "Is it straight, curly, or round?"

Draw the food in the correct location on the whiteboard.

Step 4: Call-and-Response Reinforcement

- As you draw, reinforce learning with quick call-and-response:
  - "Roots grow…" → DOWN!
  - "Leaves reach…" → UP!
  - "Fruits grow…" → ON THE PLANT!

- Repeat the steps above for each plant part until the plant is complete.
- If time allows, add one additional food or build a second plant.



****Gather Class Together****

POLLINATION OBSERVATION *(6 MINUTES)*

Supplies – Laminate: *Anatomy of a Flower*

- Pollinators move pollen from flower to flower.
  - Examples: bees, butterflies, flies
- Allow students to engage in Garden Observation.
- Look with eyes only.
- Move slowly.
- Look for pollinators visiting flowers.

*If there are no pollinators, discuss different types of pollinators such as butterflies, bees, hummingbirds, and wasps, and how they pollinate flowers. Ask students to be mindful when they are outside to see if they can spot them wherever they see plants.

CLOSING *(2 MINUTES)*

- Bring students together to close the lesson and thank the students, teacher, and other volunteers.
- Ask:
  - What do flowers help plants do?
  - Name one plant food you like

Key Takeaway: "Flowers help plants make food."

- If you have time, have students draw a "Reflection Page" after the lesson, either in the garden or with the teacher when they return to class. If you see any that you'd like to share with BCHD, take photos of their work and email them to mishell.balzer@bchd.org.

- Thank the volunteers and dismiss the students.

***Remember to report your lesson as delivered with either the online form or this QR code.**

From your phone, scan this QR code below to report lessons as delivered. Once the page opens, select the 'grid view'. From the computer, click the link **LiveWell Kids Tracking Links 2025-26**