



The Plant Life Cycle

Lesson Description

In this lesson, students review the 6 parts of a plant and the job of each plant part. They sing the Plant Parts Song to reinforce these concepts. An Elder guest instructor reviews traditional names and uses of plants. Students listen to an interactive story to understand the plant life cycle. They conclude with a scavenger hunt in the garden to identify plant parts and which part of the life cycle each plant is currently in.

- Time required: 60 minutes
- Location of lesson: Garden

Learning Objectives

- Recall the 6 plant parts and their functions.
- Describe the process of plant growth and the plant's life cycle.
- Identify traditional names for plant parts.
- Describe traditional uses for plant parts.

Materials and Preparation

- Crayons; at least 2-3 per student
- Computer with speakers or other device to play the MP3 file
- Invite an Elder to join the class and introduce the traditional names of plant parts and some traditional uses of plant parts
-  **Plant Parts Song Lyrics**; print enough copies for all students
-  **Plant Parts Song MP3**
-  **Flower Fantasy** (story)
- Prepared vegetable snack of the week – 1 for each student
- Water to drink during the Class Warm-up – water dispenser in the classroom and 1 cup or a water bottle for each student

Class Warm-up: Champion Cheer and Veggie Taste Test (5-10 minutes)

- Give each student a cup of water or ensure that they have a filled water bottle in front of them.
- Give each student the prepared veggie snack of the day.
- Lead the students in enthusiastically reciting the  **Champion Cheer**.
- At the end of the cheer, drink water and eat the veggie snack together.
- Have students complete their  **Taste Test Observations** about the vegetable snack of the week.

Review of Last Lesson (2-3 minutes)

- Review the evaluation questions from last week’s lesson. Evaluation questions from all lessons are listed at the end of the workbook .

Class Discussion: Review of Plant Parts and Functions (5 minutes)

Raise your hand if you remember the 6 different parts of a plant. What are they? (Answers: roots, stem, leaf, flower, fruit and seed)

Raise your hand if you remember the job of each plant part. What does each plant part do?

- *The **roots** support the plant and take in water and food for the plant.*
- *The **stem** supports the leaves and transports water and food.*
- *The **leaves** catch the sunlight to make food for the plant.*
- *The **flower** produces the fruit and helps make seeds.*
- *The **fruit** protects the seed and helps with spreading seeds around.*
- *The **seed** produces a new plant.*

Let’s go over the jobs of each plant part again. What do the roots do? What does the stem do? What do the leaves do? What does the flower do? What does the fruit do? What does the seed do?

Activity (5 minutes)

-  **Plant Part Song (5 minutes)**
 1. Distribute copies of the  **Plant Part Song** lyrics.
 2. Sing the chorus of the  **Plant Part Song** to the students.
 3. Do body movements to help connect the part of the plant (for example: for the roots, point to their feet; for the stem, point to their legs; etc.).
 4. After singing the chorus to them, have the class stand up and sing it as a group.
 5. Play the **Plant Part Song** MP3 and have everyone sing along.

Class Discussion with an Elder Guest: Traditional Names and Uses for Plant Parts (10 minutes)

Introduce the traditional names for the 6 plant parts, pointing to the parts on the harvested plants. Have students repeat each name after it is introduced.

Discuss traditional uses for plants and discuss how different plant parts are used in your community.

Class Discussion: Introduction to the Plant Life Cycle (10 minutes)

What do we mean when we say ‘life cycle’? Do we have a life cycle as humans? This is also called the ‘circle of life’. What does that mean to you? Has anybody heard about the life cycle of a plant?

Just like people and animals, plants have a life cycle. The life cycle of a plant starts from a seed and continues through the plant's growth until the plant starts to die. Any seeds that the plant produces can be planted or stored for later use, so the plant's life cycle repeats itself over and over again.

Activities (20 minutes)

-  **“Flower Fantasy Story” (10 minutes):** Refer to the Flower Fantasy Story.
 1. Give the following directions to students:
 - a. *Stand up and make a circle, arm's length apart.*
 - b. *Use your imagination while I read this story.*
 - c. *You are each going to be a plant in this story.*
 - d. *Make movements with your body as I read the story to you.*
 2. Read the story aloud and make body movements along with the students.
 - a. *What kind of flower did you become?*
 - b. *What did your flowers look like?*
 - c. *How did your flowers smell?*
 - d. *What kinds of insects and birds came to your flowers?*
 3. *You just experienced the life cycle of a plant. Let's review what happened to you* (note: make body movements and encourage students to do the same as you go through these steps).
 - a. Seed in the ground.
 - b. Seed sprouts and roots and stem start to grow.
 - c. Seed leaves push out of the soil.
 - d. Stem grows longer and strong, with leaves.
 - e. More leaves and flower buds.
 - f. Roots feed the plant.
 - g. Flower buds open to the sunlight.
 - h. Insects visit, bringing pollen.
 - i. Seeds form where flowers were.
 - j. Birds and animals eat the seeds or bury them.
 - k. Stems, leaves, and flowers brown and die.
 - l. The plant decomposes (breaks down and turns into soil).
 4. Have students return to their seat with their workbooks and then distribute crayons.
 - a. *Draw a picture of yourself as a flower in the blank box in your workbook.*
- **“Scavenger Hunt” (10 minutes)**
 1. Split the class up into 2-3 groups depending on how many teachers are present.
 2. Have the students go outside and give them 5 minutes to find different parts of plants that are at different stages of the life cycle.
 3. Reconvene as group and have each student share what they found.

4. Discuss what stage of the plant life cycle each part represents.

Evaluation Questions (5 minutes)

1. *What are the 6 parts of a plant?* (Answers: roots, stems, leaves, flowers, fruit, seeds)
2. *What are the traditional names for plant parts?*
3. *What are some traditional uses of plants in our community?*
4. *What are the main steps in the plant life cycle?* [Answers: 1) seed in the ground; 2) seed sprouts – roots and stem start to grow; 3) seed leaves push out of the soil; 4) stem grows longer and strong, with leaves; 5) more leaves and flower buds; 6) roots feed the plant; 7) flower buds open to the sunlight; 8) insects visit, bringing pollen; 9) seeds form where flowers were; 10) birds and animals eat the seeds or bury them; 11) stems, leaves, and flowers brown and die; 12) the plant decomposes (breaks down and turns into soil)].
5. *How much water should you drink every day?* (Answer: at least 6 cups of water a day)
6. *How many fruits and vegetables should you eat every day?* (Answer: at least 5 fruits and vegetables a day)
7. *Does gardening connect you to your culture and help you learn new words in your language?* (Answer: yes)

Preparation for Future Lessons – Reminder for the Instructor

- Review the materials and preparation needed for the next lesson.
- Remember that an Elder guest instructor is needed for these Fall lessons: Lesson 2 (The Plant Life Cycle), Lesson 4 (Seed Saving), Lesson 6 (Drying Foods the Traditional Way) and Lesson 10 (Companion Planting and Traditional Cooking).

Notes
