



Plant Parts Introduction

Connected Next Generation

Science Standards

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals and the places they live

K-LS1-1 Use observations to describe patterns of what plants and animals need to survive.

K-2-ETS1-1 Patterns of what humans need to survive

1-LS1-1 Use Materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem

2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow

2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.

4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Overview

These lessons are all about the basics of school gardening and make a great introduction to the school garden. Students will explore all of the plant parts throughout the growing season while gaining practical garden skills like planting, harvest, and weeding. Emphasize a plant part's structure and function for one lesson, or teach all lessons to learn about plant life cycles.

Suggested Lesson Sequence

- Plant Needs & Care
- Roots and Shoots
- Look At Those Leaves
- Fruit Dissection
- Flower Dissection
- Seed Exploration
- Plant Part Harvest Party

Connected Garden Tasks

- Garden maintenance - watering and pulling weeds
- Planting seeds
- Starting seedlings indoors and transplanting
- Harvesting
- Winterizing the garden - mulching or creating season extension strategies



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MySci Connections

- Kindergarten- Unit 1, Lesson 3 & 7
- First Grade - Unit 6, Lesson 1 - 7
- Second Grade - Unit 9, Lesson 3

Favorite Plant Parts Books

- *Leaf Man* by Lois Ehlert
- *The Reason for a Flower* by Ruth Heller
- *Oliver's Vegetables* by Vivian French
- *Tops and Bottoms* by Janet Stevens
- *Pumpkin Circle* by George Levenson
- *Pick, Pull, Snap* by Lola Schaefer
- *A Fruit is a Suitcase for Seeds* by Jean Richards
- *A Seed is Sleepy* by Dianna Aston
- *In the Garden with Dr. Carver* by Susan Grigsby
- *First Peas to the Table* by Susan Grigsby
- *Weeds Find a Way* by Cindy Jenson-Elliott

Garden Further Investigations

- Press flowers for winter crafts.
- Harvest seeds to plant the following year. Store seeds in a dark, dry space. Sealed mason jars work well.
- Create a scavenger hunt that introduces students to a variety of flowers (or other plant parts) in the garden.
- Have students play Seed, Root, Flower, Fruit to reinforce the stages of a plant life cycle.
http://islandgrowschools.weebly.com/uploads/1/0/7/8/10785576/seed-root-flower-fruit_game.pdf

Indoor Further Investigations

- Start sweet potato slips indoors. How is growing a sweet potato different from growing other potatoes?
- Get inspired by the book *Leaf Man*. Collect natural materials and leaves to make your own classroom leaf people.
- Start a windowsill garden.
- Propagate plants from cuttings of old plants.
- Investigate how water travels to other parts of a plant by putting red or blue food coloring in a jar of water then adding celery stalks, white carnations, or white chrysanthemums. Observe how the color slowly travels through the plant as the roots suck up the water.
- Read *A Seed is Sleepy*, then have students count and classify seeds based on shapes and colors. Or have students create mosaic art using larger seeds (peas, beans, corn kernels, etc).



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Seed St. Louis Resources

Connect with us on Facebook or Eventbrite to discover upcoming Educator Workshops. Subscribe to us on YouTube to discover season-specific gardening how-to's.



Looking for Field Trip opportunities or need to ask a question about our educational services? Contact education@seedstl.org or 314.588.9600 ext 106.

Community & Cultural Connections

- Harvest and share the produce with the community. Students can handout the harvest at school pickup, sell produce at a mini farmer's market, or choose a community group to donate the produce to.
- Share the school garden with the wider community. Using what they have learned from this unit, students create plant label and signs about how to maintain the garden beds - how often to water, what weeds look like, and how to harvest different plants. Students can also help recruit school or community volunteers for the summer.
- Students research or ask community members for recipes that use garden produce. The class can choose their favorite to make! This is especially fun around Thanksgiving or end of the school year.

Learn character from trees, values from roots, and change from leaves."- Tasneem Hameed, Author, Peace Activist