

The Plants We Eat

Summary: Students discover that people eat many of the parts of various plants and explore examples of each. Students will also review the parts of plants and their functions.

Objectives:

The students will:

- List or name the parts of plants that people eat.
- Give at least one example of each of the parts of plants that people eat.
- Identify the five basic parts of a plant and their functions.

Materials:

Activity #1:

- edible plants to illustrate each plant part (roots, stems, leaves, flowers, seeds), paper or plastic plates
- paper, pencils, crayons, markers

Activity #2:

- several edible examples of each plant part (after identifying, student will eat them)

Activity #3:

- edible plant parts (could be ones left over from Activity #1)
- tempera paints, paint brushes, plastic plates
- construction paper, poster board, or card stock

Getting Started:

- You will need edible plants (fruits, vegetables, etc.) for all three activities. Some will be consumed and others will be observed and used in an art project. Examples of what types of plants to get are included in the background section below.



Background:

People eat many types of plants, and therefore, eat all of the parts of many plants. Do students think of the fruits and vegetables that they eat every day as plants?

We eat roots such as carrots, radishes, beets, sweet potatoes, and turnips, and stems such as celery and asparagus. Lettuce, cabbage, parsley, spinach, and basil are examples of leaves that we eat, and broccoli and cauliflower are flowers. Seeds that we eat include peas, kidney beans, and lima beans, and examples of fruits, which protect seeds, are tomatoes, apples, oranges, watermelons, pumpkins, cucumbers, and peppers.



Grade Level: K-6

Topic: Plant parts, Plants as food

PA Environment & Ecology Standards Addressed:

Agriculture and Society:

4.4.4.B: Identify the role of the sciences in Pennsylvania agriculture.

- Identify the parts of important agricultural related plants.

Teaching Methods:

- Discussion
- Observation
- Identification

Multiple Intelligences Utilized:

- Naturalistic
- Intrapersonal
- Interpersonal
- Logical/Mathematical
- Visual/Spatial
- Bodily/Kinesthetic



Activity #1: Draw Your Food

- Provide edible plant parts (roots, stems, leaves, flowers, and seeds) on plates for students to examine. Place roots at one station, stems at another and so on.
- Ask the student to draw each part on a piece of paper and label it properly after determining which part it is.
- Review the job of each plant part.

Activity #2:

Identify And Eat

- Bring in several edible examples of each plant part.
- Ask the students to identify which ones are roots, stems, leaves, flowers, and seeds.
- Have they ever eaten this plant before? Which is their favorite way to eat it?
- Eat and enjoy the many different plant parts! (Try your fruits and vegetables with dips or make creative edible crafts. See idea below:)

Ants On A Log

- stalks of celery
- peanut butter
- raisins

Cut celery stalks in half.
Spread with peanut butter.
Sprinkle with raisins.



Activity #3: Palatable Printmaking

- Set up an art station in the classroom where the students can use the edible plant parts they have been inspecting (can use the ones from Activity #1) to make fruit and vegetable prints.
- Cut several pieces of the fruits and vegetables and dip them into tempera paints (or paint it on with a paintbrush). Then, encourage the students to make unique designs on construction paper, poster board, or card stock. Frame and decorate the room with this delicious artwork!

Fun Facts!

The sugars and starches stored in the plant foods we eat give our bodies nutrients called carbohydrates, which give us most of the energy we need!



Extensions/Variations:

- Grocery Store Field Trip:** If you have the resources, take your students to a local grocery store and find as many plant parts as you can. There are also many other opportunities to tie in other lessons to such a field trip, so get the most out of this experience.

Evaluation:

Rubric: The Plants We Eat

3	2	1	0	The student can list or name the parts of plants that people eat.
3	2	1	0	The student can give at least one example of each of the parts of plants that people eat.
3	2	1	0	The student can identify the five basic parts of a plant and their functions.
3	2	1	0	The student can draw each of the five basic plant parts and label them correctly.
12	8	4	0	Total Score: /12

Resources:

Brennan, G., & Brennan, E. (1997). *The children's kitchen garden: A book of gardening, cooking, and learning.* Ten Speed Press: Berkeley, CA.

Carlson, L. (1995). *Green thumbs: A kid's activity guide to indoor and outdoor gardening.* Chicago Review Press: Chicago.

Ehlert, L. (1987). *Growing vegetable soup.* Harcourt Brace & Company: San Diego.

Lovejoy, S. (1999). *Roots shoots buckets & boots: Gardening together with children.* Workman Publishing: NY.

Scott, E., & Duffy, C. (1998). *Dinner from dirt: Ten meals kids can grow and cook.* Gibbs Smith Publisher: Salt Lake City.

