

Plant Parts We Eat

Grade Level: K

Approximate Length of Activity: One - two class periods

Objective

Teacher

1. Introduce students to the parts of a plant that are consumable.
2. Challenge students to distinguish between the parts of a plant.

Students

1. Are introduced to an assortment of vegetables.
2. Learn to locate the parts humans use for food.

Michigan Content Standards: (Science) S.IP.00.11; S.IA.00.12; S.RS.00.11

Background

Which parts of the plant do we usually eat? The seed? The fruit? When we eat celery, we are eating the stem of the plant. When we eat spinach or lettuce, we are eating the plant's leaves. We eat the fruit of squash, cucumber and tomato plants. When we eat corn or peas we are eating seeds, and when we eat radish or carrot we are eating the roots. Cauliflower and broccoli plants produce flowers we like to eat.

With some plants we eat more than one part. The root of the beet plant is what most people like to eat, but the leaves are also good to eat-in salads, when the leaves are young and tender, and cooked when they get bigger. We eat the root of the onion plant but can also eat the stems, for a milder flavor.

Some of the plants we eat are poisonous-if we eat the wrong part. The leaves of a tomato plant are poisonous. For many years people would not even eat tomatoes, because they thought the entire plant was poisonous. Now we know that the fruit of the tomato plant has vitamins that are very good for us. They are also delicious-sliced or chopped fresh into salads, cooked into spaghetti sauce or processed into ketchup.

Materials Needed

- Assorted examples of fresh vegetables that are roots, leaves, stems, seeds and flowers
- Stems: asparagus, celery
- Flowers: cauliflower, broccoli
- Root: radish, beet, carrot, parsnip
- Seeds: peas or beans in pod, corn on the cob
- Fruit: squash, tomatoes, cucumber
- Leaves: lettuce, cabbage, spinach, mustard greens, beet greens

Activity Outline

1. Bring an assortment of root, stem, fruit and seed vegetables to class. (See Materials Needed)
 - Ask students to identify the vegetables one by one.
 - Ask if anyone has ever eaten any of the vegetables. Which ones are their favorites?
 - Ask the students to sort the veggies in piles according to which part we eat, the root, the seed, the stem or the leaves.
2. Hand out Worksheet A. Read the worksheet with your class and discuss the different plant parts. Help students identify the plant parts we eat.
3. Hand out Worksheet B and have students draw lines from the plants pictured to the correct words, using Student Worksheet A as a guide.
4. Bring samples of some vegetables students might not ordinarily eat. Examples: Turnips, mustard seeds, etc. and invite students to taste them and guess which part of the plant they came from.
5. Take a trip to the produce section of a grocery store, and have students identify vegetables and designate which part of the plant is eaten.
6. Early in the fall or spring, help students plant some fast-growing cool weather vegetables (radishes, lettuce, spinach, peas, beets, etc.) to harvest and eat.
7. Write the cafeteria menu on the chalkboard. Look at the vegetable of the day and have students say whether it is a stem, seed, flower, etc. Write the vegetable of the day on the chalkboard for several days, and have students place it in the correct category.

Related Activities

1. Activities related to art
 - Discuss the colors of the plant parts we eat. Have students color the picture on their worksheets.
 - Have students use an assortment of vegetables to make vegetable prints with tempera paint.
 - Have students create their own plants using common materials such as straws, buttons, strings, balloons, etc. Make sure the fantastical plants have roots, stems, leaves, flowers, fruit and seeds.
2. Activities related to language arts
 - Read the story "Stone Soup" to your students. As you read the story, have students identify the vegetable ingredients as root, fruit, etc. Bring a crock pot to class and use assorted plant parts to make your own classroom stone soup.
 - Have students write detailed descriptions of one or more of the vegetables you have brought to class, using all five senses.
 - Provide copies of the reading page, and have students answer the questions at the end. Correct answers: 1. All are correct; 2. beets and onions; 3. Older; 4. Tomato.
3. Activities related to math
 - Use a gram scale to weigh each of the vegetables.
 - Have students measure the circumference, length, etc., of the vegetables and create fraction problems using their measurements.
 - Bring vegetable dip, and have students sample the vegetables you have brought. Have students vote on which vegetables they like best-root, stem or flower. Graph the results.



- Bring grocery ads to class, and have students find the price for one pound of roots, one pound of stems, one pound of fruit and one pound of flowers. Have students create math problems using the prices.
4. The lesson “Fresh from the Farm” located in the math section of this curriculum guide.
 5. The lesson “Be a Food Explorer” located in the health section of this curriculum guide.

Discussion Questions

1. What is an example of a stem we eat?
2. What is an example of a seed we eat?
3. What is an example of a root we eat?

Resources

1. “Stone Soup” by Marcia Brown
2. “Eating the Alphabet: Fruits and Vegetables: From A to Z” by Lois Ehlert
3. “The Green Truck Garden Giveaway: A Neighborhood” by Jacquelin Briggs Martin and Alec Gillman
4. “Story and Almanac” by Simon and Schuster
5. “Tops and Bottoms” by Janet Stevens

Acknowledgement: Adapted from “Plant Parts We Eat” Oklahoma Agriculture in the Classroom.

Plants We Eat

Worksheet A

You eat our roots.



beets



carrots



radishes

You eat my stems.



celery

You eat our leaves.



cabbage



lettuce

You eat our fruit.



pepper



tomato

You eat our seeds.



corn



peas

You eat my flowers.



cauliflower

Plants We Eat

Worksheet B

Directions: Match the picture with the correct word.

roots

stems

leaves

seeds

flowers

Plants We Eat

Answer Key

