

Plant Parts We Eat

Skills: Science, Art, Language Arts, Math

Objective: Students will be introduced to an assortment of vegetables and will learn to locate the parts humans use for food.

Background

Which parts of the plant do we usually eat? The seed? The fruit? When we eat asparagus, 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 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 tomato plants 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.

Science

1. Bring an assortment of root, stem, fruit and seed vegetables to class. (See list on Page 2.) Ask students to identify the vegetables them one by one. Ask if anyone has ever eaten any of the vegetables. Which ones are their favorites? Ask 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 Student 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 Student 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,

P.A.S.S.

Pre-K

Creative Skills—1.2,4

Oral Language—1.1,2

Life Science—3.1,2,3

Visual Art—1.2; 3.2

Math—3.1; 4.1; 5.2

Kindergarten

Science Process—1.1

Life Science—2.1,2

Language Arts—1.1; 6.4

Math—4.1; 5.2

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, potato,
parsnip

seeds: peas or beans
in pod, corn on the
cob

fruit: eggplant,
squash, tomatoes,
cucumber

leaves: lettuce,
cabbage, spinach,
mustard greens, beet
greens

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e.g., turnips, kale, mustard greens, 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 chalk board for several days, and have students place it in the correct category.

Art

1. Discuss the colors of the plant parts we eat. Have students color the pictures on their worksheets.
2. Have students use an assortment of vegetables to make vegetable prints with tempera paint.
3. 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.

Language Arts

1. 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.
2. Have students write detailed descriptions of one or more of the vegetables you have brought to class, using all five senses.
3. Provide copies of the reading page, and have students answer the questions at the end.

Math

1. Use a gram scale to weigh each of the vegetables.
2. Have students measure the circumference, length, etc., of the vegetables and create fraction problems using their measurements.
3. 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.
4. 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.

Additional Reading

Brown, Marcia, *Stone Soup*, Aladdin, 1997.

Ehlert, Lois, *Eating the Alphabet: Fruits and Vegetables: From A to Z*, Harcourt, Brace Jovanovich.

Martin, Jacqueline Briggs, and Alec Gillman, *The Green Truck Garden Giveaway: A Neighborhood Story and Almanac*, Simon and Schuster, 1996.

Stevens, Janet, *Tops and Bottoms*, Harcourt Brace, 1995.

Plant Parts We Eat

A

Color the vegetables. Make them look good enough to eat.

You eat our roots.



beets



carrots



radishes

You eat my stems.



asparagus

You eat our leaves.



cabbage

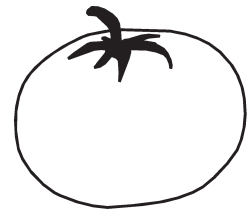


lettuce

You eat our fruit.



pepper

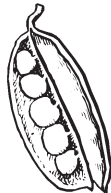


tomato

You eat our seeds.



corn



peas

You eat my flowers.



cauliflower



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Plant Parts We Eat

B

Match the plants to the parts we eat.



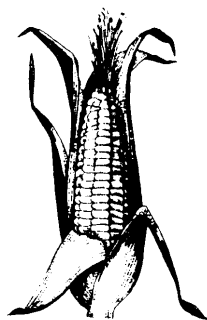
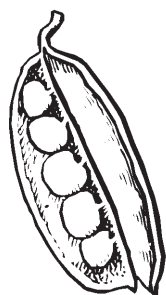
roots

stems

leaves

seeds

flowers

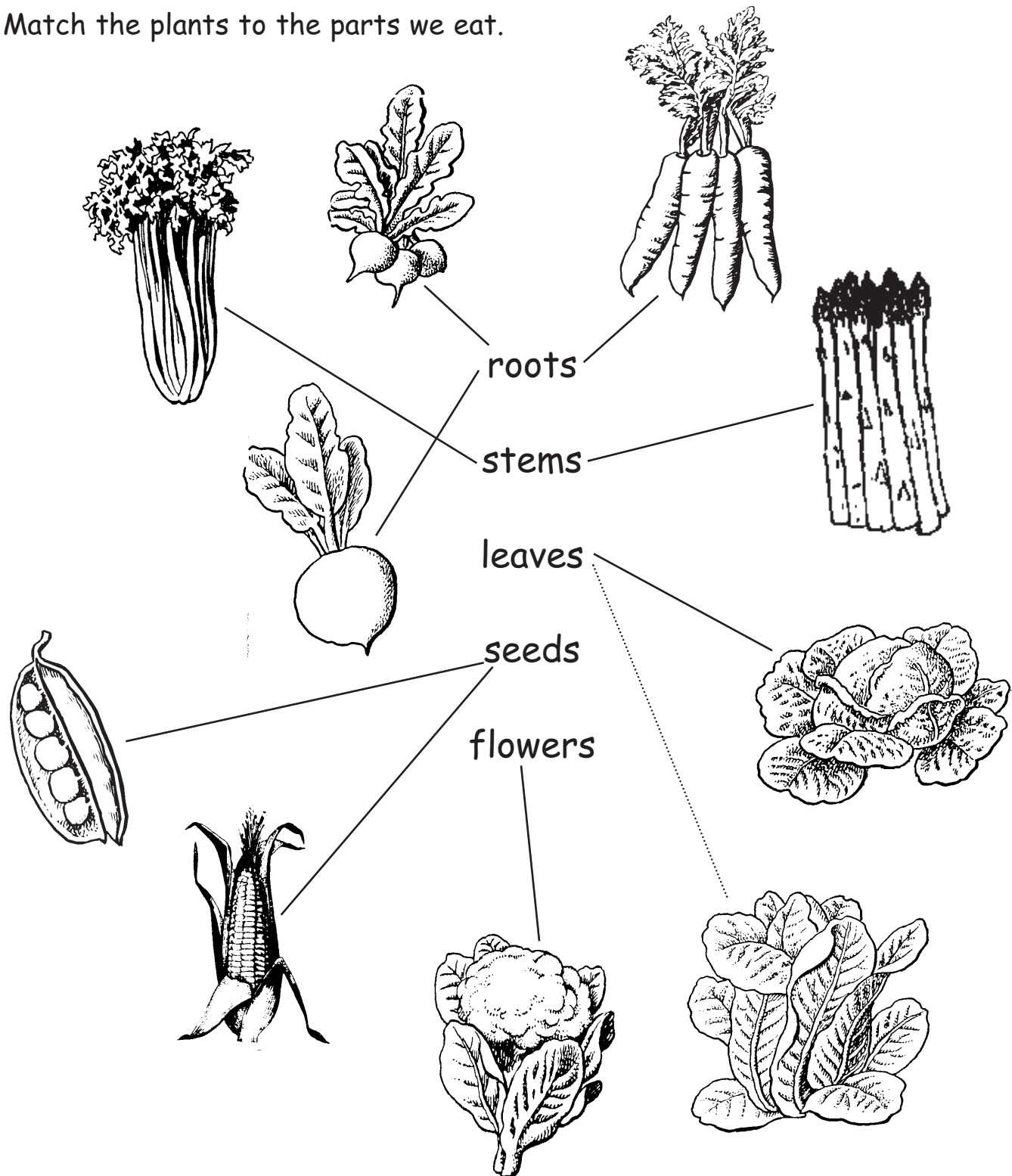


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Plant Parts We Eat (answers)

Match the plants to the parts we eat.



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Plant Parts We Eat



Which parts of a plant do we usually eat? The seed? The fruit? When we eat asparagus, 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 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. We can eat beet leaves in salads when the leaves are young and tender. When they get bigger, they taste better cooked. We usually eat the root of the onion plant. The stems taste good too, when they are young and tender.

Some of the plants we eat are poisonous if we eat the wrong part. The leaves of tomato plants are poisonous. For many years people would not even eat tomatoes, because they thought the entire plant was poisonous. Now we know the fruit of the tomato plant has vitamins that are very good for us. Tomatoes are also delicious.

1. Which part of the plant do we eat? (Circle all the correct answers.)

a. stem b. leaves c. fruit d. seeds e. flowers

2. We eat more than one part of which plants? (Circle one.)

a. spinach and lettuce b. okra and tomatoes
c. beets and onions d. radish and carrot



3. Beet leaves taste better cooked when they get _____ ,

4. The fruit of this plant is delicious, but the leaves are poisonous.

Answers: 1. all are correct; 2. c. beets and onions; 3. older; 4. tomato

