

Plant Parts We Eat Lesson

Concept Objective: AK Vegetables and Plant

Parts

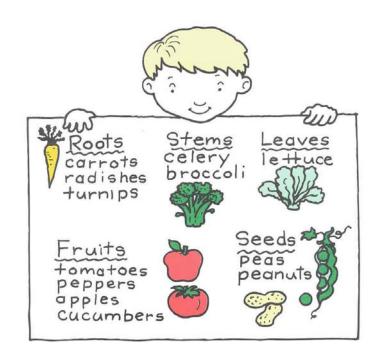
Time: 40-45 minutes

Setting: Indoors

Activities: Plant Parts We Eat

Materials Needed:

Vegetable Samples/Salad parts
Plant Parts Diagrams
Plant Parts Coloring Page
Crayons and Colored Pencils
Plant Plumbing Book by Susan Blackaby



Procedure:

1. Discussion. Plants are an important part of our everyday life. We need them to make air and they provide food and fiber so that we can have something to eat and something to wear. They are also used to give us homes and believe it or not they provide us transportation. In some way we use every part of the plant.

We eat the root of some plants, the leaves of other plants, and we eat the fruit. It is seldom that we eat the entire mature plant. Usually when we eat plants we call them either fruits or vegetables. Since most plant foods are grouped into the two groups many of the foods we eat as vegetables are actually fruits. Some of the foods we call vegetables are not vegetables at all. They belong in another group. Plant scientists have given us some ways to tell if a plant is a leafy food (vegetable) and root food (not a vegetable) and a tuber (not a vegetable) and a fruit.

Optional: Read the Plant Plumbing book here or at the end of the lesson

Introduce new vocabulary:

Fruits, vegetables, roots, tubers, seeds

and tubers:
-----A **fruit** is a fruit if the seed is surrounded by a fleshy part that we eat. Foods such as apples, bananas, cucumbers, peppers, tomatoes, squash are all fruits because there is a fleshy part around the seed that we eat.
-----True **vegetables** are the leaves, stems or immature flowers of plants. They include things like lettuce, cabbage, turnip greens, celery, cauliflower and asparagus.
------We also eat the **roots** of some plants. A root is under the ground and has many hair-like parts that get minerals and water from the soil. Root foods include carrots, radishes, parsnips, and turnips.
------Potatoes are not root, even though they grow underground. They are not vegetables either. They are actually **tubers** (underground swollen stems).
------Onions are not roots either. They are stems and leaves that grow under the ground.
-------Sometimes we eat only the **seeds** of a plant. Some of these foods include corn, peas, and beans. But they also include nuts like pecans, walnuts and almonds. Other seeds we eat are

Put on the chalkboard or whiteboard the simple definitions of fruits, vegetables, roots

Brainstorm a list of foods that students might eat from the categories fruit, vegetable, roots or tubers. Write each idea on the board under the appropriate heading.

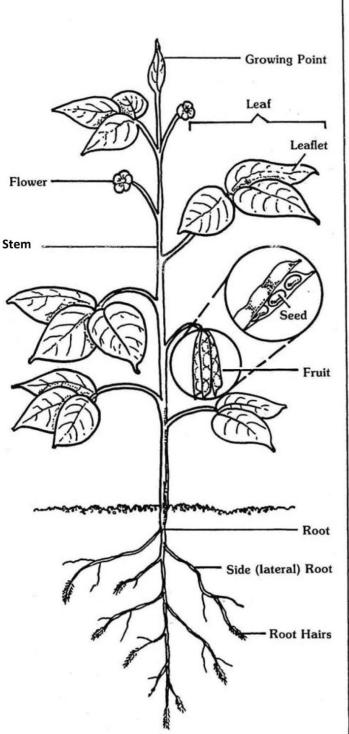
- **3. Look at the Plant Parts We Eat handout and the Plant Part Diagram**. Discuss the parts just talked about in the introduction. Let them color the plant parts page.
- **4. Examine the plants**. Ask the students to examine each fruit or vegetable that has been brought to class. Once again go over the definition of a fruit. Examine the foods brought in. Determine where the seed might be. Cut the foods in half. Examine for seeds. If there are no seeds what part of the plant did this food come from?
 - Determine how many foods brought were fruits.

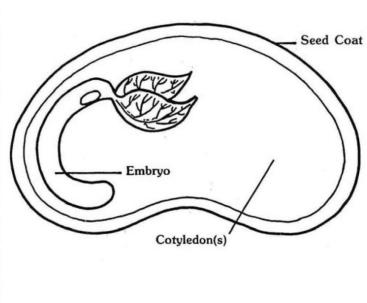
rice, wheat and oats.

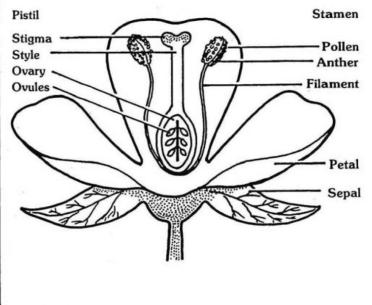
- Determine how many foods brought were vegetables (leafy or immature flowers)
- Determine how many foods brought were roots or tubers.
- Determine how many foods brought were seeds.
- **5. Eat the Plants!** Read one of the books about plant parts while they are eating. Sing the Plant Parts Song.
- 6. Have students take the Plant Parts Quiz (optional)

Written by Susan Blackaby A Book About Roots and Stems

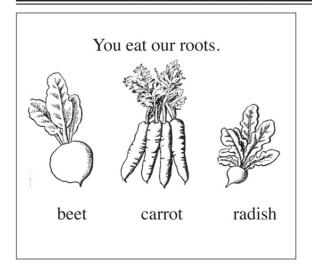
PLANT PARTS DIAGRAM

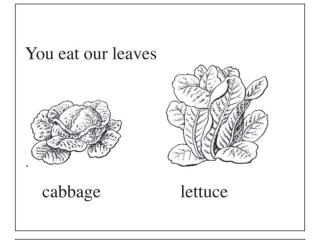


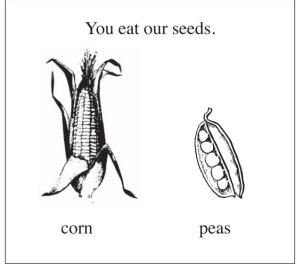


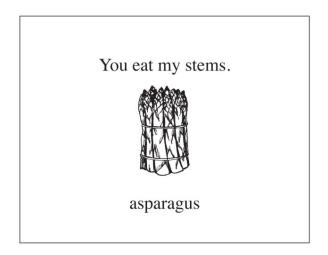


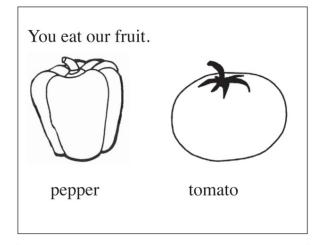
Plant Parts We Eat

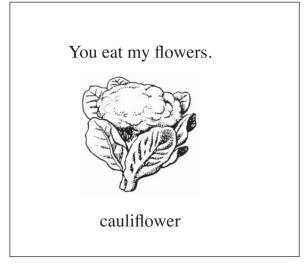












Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.

Flowers



Cauliflower



Broccoli



Artichoke

Stems



Rhubarb



Asparagus



Celery

Leaves



Cabbage



Lettus



Spinach

Roots



Carrots



Radishes



Potatoes



Sweet Potatoes

Seeds



Corn



Beans



Peas



Popcorn

Fruits



Tomatoes



Peppers



Cucumbers



Pumpkins

Plant Parts Quiz

1. Why do you think people call some foods they eat vegetables when they are really fruits?

- a. They are really flowers
- b. They are green
- c. They come from the plant
- d. Vegetables are the part under the ground

2. Why are tomatoes really a fruit, but most people call them vegetables?

- a. Because the seeds are so tiny
- b. Because they are not crunchy
- c. Because they have seeds on the inside surrounded by fleshy outer covering
- d. Because they do not grow on trees and fruits grow on trees

3. How can someone decide if a plant is a vegetable or a fruit?

- a. They can look for the seeds. If the seeds are inside an outer covering it is a fruit.
- b. They can look at the color. Fruits will be brightly colored.
- c. They can look at where it is located on the plant.
- d. They can tell by the size of the plant part.

4. Which statement is an OPINION?

- a. Fruits have a fleshy covering over the seed or seeds.
- b. Fruits are better to eat than vegetables.
- c. Fruits are developed from a flower.
- d. Fruits are often called vegetables.

Parts of Plants Song (Tune: Muffin Man)

Oh, do you know the parts of plants, The parts of plants, the parts of plants? Do you know the parts of plants That make them grow and grow?

The roots, they hold the plant in place,
The plant in place, the plant in place.
The roots they hold the plant in place
Soak up food and water, too.

The stem moves water up the plant, Up the plant, up the plant. The stem moves water up the plant Brings water to the leaves.

The leaves soak up the rays of sun, The rays of sun, the rays of sun. And help the plant make food.

The flower grows into a fruit,
Into a fruit, into a fruit.
The flower grows into a fruit, Which holds the tiny seeds.

Now you know the parts of plants, The parts of plants, the parts of plants, Now you know the parts of plants, That make them grow and grow.