

Plant Parts We Eat

Objectives

The student will be able to classify plant foods as fruit, vegetable, tuber or root.

The students will be able to identify the different parts of plants we eat: stem, leaves, roots, seeds.

Grade Level

1-3

4-6

TEKS:

S- 1.6B; 2.6C; 3.10A

S- 4.1A, 4.2B,C,D; 4.3A,B; 5.6C

TAKS:

GRADE

OBJECTIVES

Reading 3, 4, 5, 6

1

Science 5

2, 3, 4

Math 3, 4, 5, 6

1

Assessment Summary:

Materials: Teacher or student provided fruits, vegetables, nuts, etc.

"Parts of Plants We Eat" Booklet

"Plant Parts You Eat" matching activity

"Puzzle Pieces"

Texas Department of Agriculture website - Project TEACH

www.agr.state.tx.us/picktexas/kc/kids_corner.htm

Assessment: "Plant Parts Review"

Teacher Assessment as appropriate for grade level.

Additional Texas Department of Agriculture - "Project TEACH"

Resources: www.agr.state.tx.us/picktexas/kc/kids_corner.htm

Background Information

Plant Parts We Eat

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. Here are ways you can decide if a plant is a vegetable or a fruit or a tuber or a root:

-----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 rice, wheat and oats.

This can be very confusing, but if we study the parts of the plants it soon can become more clear.



Plant Parts We Eat

Lesson Plan

1. Introduce new vocabulary:

fruits
vegetables
roots
tubers
seeds

2. Put on the chalkboard or overhead the simple definitions of fruits, vegetables, roots and tubers. (Use definitions from background information)
3. 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.
4. Ask students to bring to school a fruit or vegetable. (It could be their favorite, or you could ask them to bring what they think might be a fruit that could “stump” the rest of the class.)
5. Ask the students to examine each fruit or vegetable that has been brought to class. (You might have to “fake” some of your favorites if you suspect that “vegetables” won’t be brought to school. (Or you could have some pictures available).
6. Once again go over the definition of a fruit. Examine the foods brought in. Determine where the seed might be.
7. Cut the foods in half. Examine for seeds. If there are no seeds what part of the plant did this food come from?
8. Determine how many foods brought to school were fruits.

Determine how many foods brought to school were vegetables (leafy or immature flowers).

Determine how many foods brought to school were roots or tubers.
9. Discuss other parts of the plant we eat—seeds. Brainstorm a list of foods we eat that are the seeds of plants.
10. As appropriate for grade level have students complete the activities “Parts of Plants We Eat” Booklet, matching activity, and/or Puzzle Pieces.
11. Use the Plant Parts Review as one method of assessment.

Plant Parts Review

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 OPI N I O N?
 - 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.

NAME _____

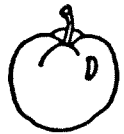
PUZZLE PIECES

Cut along solid lines. Then cut along — — — lines.

CORN



TOMATO



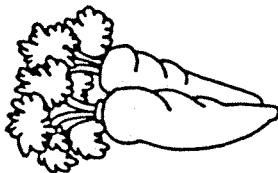
SEEDS



FRUIT



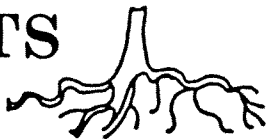
CARROTS



ASPARAGUS



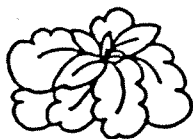
ROOTS



STEM



SPINACH



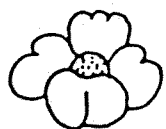
CAULIFLOWER



LEAVES



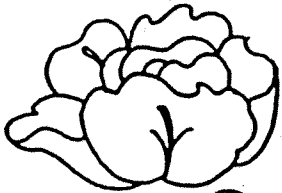
FLOWER



NAME _____

PLANT PARTS YOU EAT

Draw a line from the food to the plant part.



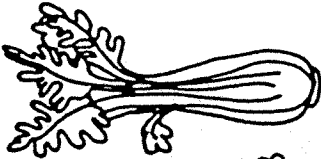
LETTUCE

ROOTS



POTATOES

STEM



CELERY

LEAVES



BROCCOLI

FLOWER



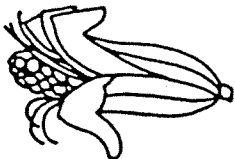
CHERRIES

SEEDS



PEAS

FRUIT



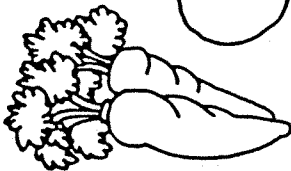
CORN

ROOTS



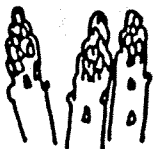
TOMATO

STEM



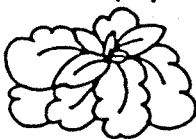
CARROTS

LEAVES



ASPARAGUS

FLOWER



SPINACH

SEEDS



CAULIFLOWER

FRUIT

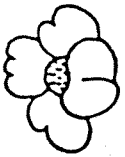
PARTS OF PLANTS WE EAT

Name _____





Stems



Flowers

Seeds



Leaves



Roots



Fruits



Plant Parts Review

Answer Key

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