

WOW Program Lesson Plan Fruits and Vegetables

Program Duration: 10-15 minutes

Recommended Grade

Grades K-5, but all ages could participate

Materials Needed:

- Phots of fruit: tomatoes, strawberries, watermelon, pineapple, whole apple, half apple, oranges, kiwi, grapes, whole pepper, half pepper, corn.

-Photos of Vegetables: sweet potato, lettuce, spinach, potato, onion, carrots, broccoli, cauliflower.

See photos with answer key at the end of this lesson to print out/cut out. Make sure the answers are either hidden or not included.

- Provided word images to have students match photos with vocabulary: root, seed, grows in the ground, and grows on the tree

Ohio Learning Standards Met

K- Physical and Behavioral Traits of Living Things, 1-Basic Needs of Living Things, 2- Interactions within Habitats, 3- Behavior, Growth, and Changes, 4- Earth's Living History, 5- Interactions within Ecosystems

Learning Objectives

Students will be able to identify fruits and vegetables.
Students will be able to explain why a food is a fruit or vegetable.

Preparation

- Discuss the biological difference between fruits and vegetables.
- Ask students or children where they grow. Do they grow on trees or on the ground? Do they have seeds?
- Have pictures laid out of fruits and vegetables or use the fruits and vegetables available in your house.
- For younger kids still learning how to spell or read, have words laid out for them to match to the food.

Background

Fruits and Vegetables are a large part of the human diet. It is what helps us stay healthy. It is important for us to know what we are consuming and what is similar and different between fruits and vegetables. Fruits have seeds, which are used to create new plants. They usually grow on trees or vines. Some different kinds of fruits are bananas, apples, berries, or melons. Some other not so known fruits are peppers, tomatoes, and corn. On the other hand, vegetables grow on or below the ground like carrots, broccoli, potatoes or lettuce. During this experiment, we will classify various plants as fruits and vegetables using their biological differences.

Activity

1. Before giving the students background that fruits have seeds/found on trees/vines and vegetables are roots/found in the ground, have students separate photos to what they think are fruits and what they think are vegetables. Fruits can be placed on the right and vegetables can be placed on the left.

- 2. Once all photos (or actual fruits/vegetables) have been placed to a respective side, then talk about the biological difference between fruits and vegetables. Fruits have seeds and vegetables do not.
- 3. Now after learning this, have students look at the images and see if they need to change any photos to a different side. Can they see any seeds on the photo itself? What is a seed (seeds do not always look the same beans, peas, corn, peach/avocado pit are considered seeds too!)?
- 4. If needed, have students discuss why they are switching the photo or keeping the photo where it is. Some things to ask in the discussion: does it have seeds? If yes, then place on the fruit side. Where is it found? On a tree/vine, then it is a fruit and must also have seeds.
- 5. For older students, have them match the photos of the fruits/vegetables with vocabulary terms (provided after the fruits/vegetable photos).

Additional Questions

- 1. Can we always see the seeds in out fruit? (think about bananas or seedless fruits)
- 2. How might the seeds look different in each fruit? (discuss bananas, avocados, strawberries. Large vs. small.)
- 3. What fruits have seeds we can eat? (pomegranate, strawberries, raspberries). What fruits have seeds we cannot eat? (avocados, apple, peach, cheeries)
- 4. Why do people mis-categorize fruits as vegetables? (Biological vs. culinary and sweet vs. savory)

Summary

We use raw produce or products created from processed produce, in most of our meals. As consumers, we are somewhat removed from the growing and harvesting process of the foods that we eat. This activity has students think about fruits and vegetables biologically. In this activity, what preconceptions about food and plants caused students to be surprised between the difference of fruits and vegetables?

Extended Exploration

- Have younger children practice writing out the word for each fruit and vegetable.
- Pick a fruit and plant the seeds into a cup with soil and try growing your own fruits!
- How to grow a lemon tree: <u>https://www.youtube.com/watch?v=IEUancOHkO0</u>
- 20 ways to grow your own seeds and plants at home: <u>https://www.youtube.com/watch?v=jARH5kKAAQM</u>
- Another version of this activity for younger children can be found here at <u>https://www.myteachingstation.com/science/plants-animals/understanding-fruits-and-vegetables</u>

Whole apple Fruit





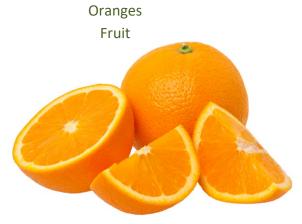


Kiwi Fruit

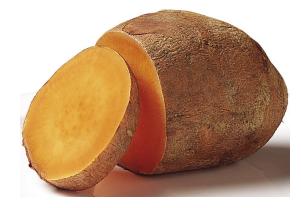




Grapes Fruit



Sweet potato Vegetable





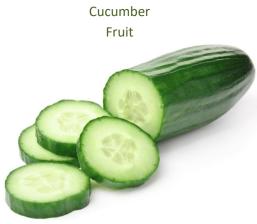




Half peppers Fruit





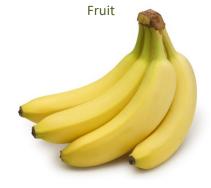






Vegetable

Cauliflower



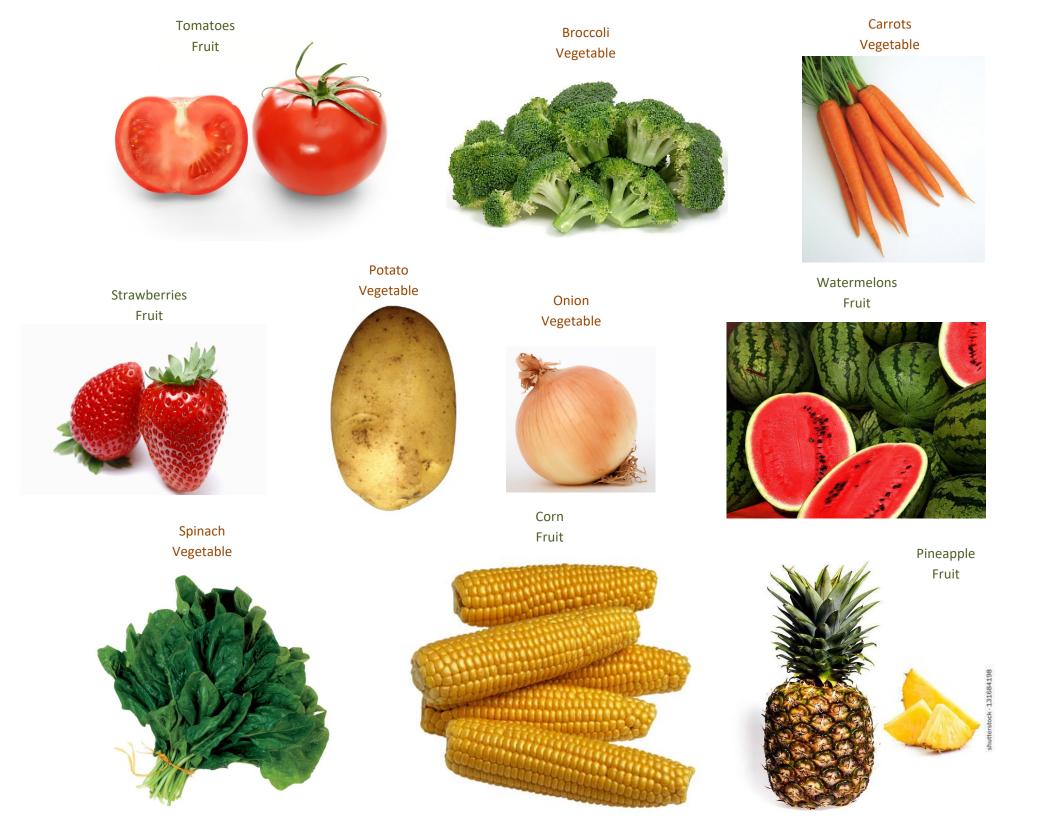
Bananas

Brussel sprouts Vegetable









Seed	Root	Grows on a tree
5		and the second s
Grows from the	Fruit	Vegetable
ground		

Seed	Root	Grows on a tree
		Separ
Grows from the	Fruit	Vegetable
ground		