

# Be Thankful For Plants

**Summary:** Students will discover how important plants are to life on our planet, some different categories of plants, and that pizza comes from plants.

## Objectives:

The students will:

- Identify two things that plants provide for us.
- Become familiar with three general categories of plants.
- Explain how most of the ingredients in a pizza come from plants.

## Materials:

### Activity #1:

- pictures (in Appendix) or examples of plants/foods that fit into the categories of fruits, vegetables, and grains.

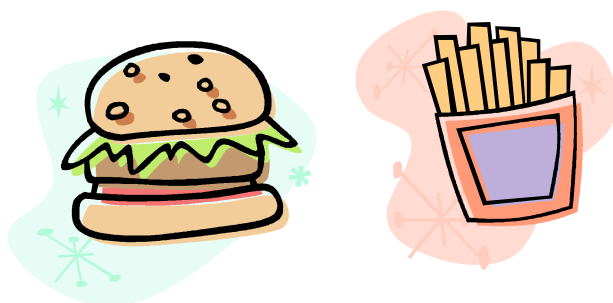
### Activity #2:

- pictures or examples of pizza ingredients
- paper plate for each student, construction paper, crayons, glue

## Background:

Plants make all life on our planet possible. They provide the oxygen that humans and animals breathe and they provide the food we eat. Nutrition is something that all people should be concerned about and we can get many of the nutrients that we need from plants. We get starch from cereals, bananas, and potatoes, and table sugar from the roots of sugar beets, the stems of sugarcane, and many common fruits. We get oils from peanuts, other nuts, olives, soybeans, and avocados. We get much-needed protein from beans, peas, and whole-grain cereals, and vitamins and minerals from a large variety of fruits and vegetables.

Those who can afford it often get their protein in the form of meat, milk, cheese, and eggs. However, these products would never exist if it were not for plants since the animals that produce these things (cows and chickens) are nourished by plants! If you think about it, a meal consisting of a hamburger and french fries is greatly connected to plant materials. The meat comes from cattle that eat plants, the potatoes are fried in soybean, corn, or sunflower oil, and the bun is a wheat product. The ketchup is made from tomatoes, herbs, and corn syrup, and the garnishes like onions, pickles, and relish all come from plants!



**Grade Level:** K-6

**Topic:** Plants

**PA Environment & Ecology Standards Addressed:**

Agriculture and Society:

4.4.4.B: Identify the role of the sciences in Pennsylvania agriculture.

- Identify common plants found on Pennsylvania farms.

4.4.4.C: Know that food and fiber originate from plants and animals.

- Identify agricultural products that are local and regional.

**Teaching Methods:**

- Lecture/Discussion
- Categorization

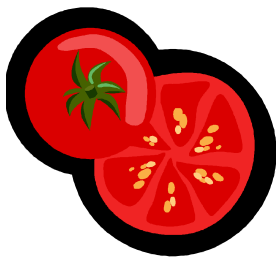
**Multiple Intelligences Utilized:**

- Naturalistic
- Interpersonal
- Intrapersonal
- Logical/Mathematical
- Verbal/Linguistic

## Activity #1:

### Categorize Those Plants!

- For general purposes, plants can be broken down into three general categories as they are grown on a farm and consumed: fruits, vegetables, and grains. Explain the difference between them and give examples of each.
- Show pictures or real examples of foods from each category. Ask the students to name the food and choose which category it would fall under. Why did they choose that answer? What kinds of foods can this product make? Do both people and animals eat this food?
- Can you find creative ways to combine any of these foods to make healthy, delicious treats?



## Activity #2:

### Pizza Comes From A Plant

- Ask students where pizza comes from. After they say "The pizza place," or "the freezer," ask them what types of foods make up a pizza? What are their favorite toppings? Where do these foods come from? Do they come from animals or plants?
- Show pictures or real examples of several pizza ingredients. Discuss the origin of each. How does each connect to plants?
- Make "pizza plants." Give each student a paper plate to decorate with his or her favorite pizza toppings using crayons or cut out toppings. Make a green stem and leaves with construction paper and glue to plate to make it look like a plant. This will help the students to remember that if it weren't for plants we wouldn't have pizza!

### Fun Facts!

- Americans eat approximately 100 acres of pizza each day, or 350 slices per second!
- Each man, woman, and child in America eats an average of 46 slices, or 23 pounds, of pizza a year!



## Evaluation:

### Rubric: Be Thankful For Plants

|    |   |   |   |  |
|----|---|---|---|--|
| 3  | 2 | 1 | 0 | The student can identify two things that plants provide for us.                |
| 3  | 2 | 1 | 0 | The student can name three general categories of plants.                       |
| 3  | 2 | 1 | 0 | The student can name at least one example from each plant category.            |
| 3  | 2 | 1 | 0 | The student can explain how most of the ingredients of pizza come from plants. |
| 12 | 8 | 4 | 0 | <b>Total Score:</b> /12  |

## Resources:

American Forest Foundation. (2003). Project Learning Tree: Environmental Education PreK-8 Activity Guide. American Forest Foundation: Washington, D. C.

Hughes, M. S., & Hughes, T. (1998). Buried treasure: Roots & tubers. Lerner Publications Company: Minneapolis.

Rahn, J. E. (1974). Grocery store botany. Atheneum: NY.

Sturges, P. (1999). The little red hen (makes a pizza). Dutton Children's Books: NY.

