Vegetable Twister

Grade Level: 4

Objectives: Students will learn how vegetables are produced.
Students will learn how vegetables help our bodies.
Students will match vegetables to the plant parts they come from.
Students will name vegetables grown in Georgia.

Introduction:

Although definitions of vegetables vary, the definition used by horticulturists is that they are foods that grow on herbaceous plants, or plants that have stems that are softer and less fibrous than the woody stems of trees and shrubs. Vegetables are the bulbs (onions), flower buds (cauliflower), fruits (pumpkins), leaves (cabbage), roots (carrots), seeds (peas), stems (asparagus), or tubers (potatoes) of herbaceous plants. Illinois grows vegetables such as tomatoes, sweet corn, and potatoes.

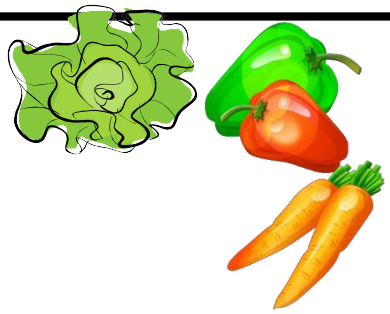
There are four steps in vegetable production: planting, caring for the crop, harvesting, and packing and shipping. Some vegetable growers have small gardens while others have large vegetable farms. A vegetable grower takes care of his crop by preparing the soil, fertilizing the field, cultivating the soil (tilling), and killing harmful weeds and pests. After harvest, the vegetables are shipped to processing plants, sent to markets, or eaten in the home.

Vegetables are a good source of carbohydrates, Vitamin A, Vitamin C, fiber, and potassium. Carbohydrates are the main source of energy for the red blood cells and the central nervous system. Carbohydrates are found in many vegetables, but are high in potatoes, corn, and peas. Vitamin A helps the body fight infections and gives us healthy skin and eyes. High amounts of Vitamin A are found in carrots, squash, and spinach. Vitamin C helps the body fight infections and heal wounds and bones. It can be found in broccoli, spinach, and green peppers. Vegetables are a good source of fiber, which helps the digestive system, and potassium, which regulates blood pressure and helps nutrients pass into cells.

Vitamins such as Vitamin C and A are necessary for the growth of body tissue. If an athlete eats a balanced diet, he/she will intake adequate vitamins. Vitamin deficiencies can impair physical performance, but there is no evidence that taking extra vitamins (more than the daily requirement) will enhance performance. Sometimes vitamin supplements are taken when a person does not eat enough vitamin-rich foods. Large doses of vitamin supplements can be dangerous to the body tissue. They can also be wasted money because some vitamins go right through the body and are not used if there is an excess.

In the following activity, students will be tested on their knowledge of vegetable plant parts through a fun game of twister.

Vegetable Twister



Materials Needed:

Old bed sheets
Soy crayons
Markers
Cardboard
Paper clips/metal fasteners

Activity Outline:

1. Use an old bed sheet (or several sewn together) to create a vegetable twister board. Make a grid on the sheet and let students use soy crayons to draw vegetables. The vegetables should have equal representation from the different plant parts. (bulbs, flower buds, fruits, leaves, roots, seeds, stems, or tubers)
2. Make two spinners out of cardboard and paper clips or metal fasteners. One spinner should be a circle split into four sections: right hand, right foot, left hand, and left foot. The other spinner should be separated into eight sections: bulbs, flower buds, fruits, leaves, roots, seeds, stems, and tubers. (It may be easier to create two vegetable twister boards, each can use four plant parts instead of eight.)
3. Two students can spin the spinners. Only one student moves at a time on the vegetable board. If the two spinners are spun for the first player and the combination is right hand & tuber, the student must place their right hand on a tuber. (such as a potato) The second player is spun for next and also places their hand/foot on the proper vegetable for the plant part that is called. The game continues as the spinners spin for the players in order. Vegetable twister becomes a challenge as it is hard to share vegetables and maneuver. The game continues until one player places their hand•foot in the wrong place or falls down. The last student —planted‖ on the board wins!
4. To relate this to sports/health ask children which muscles started to hurt while their were waiting to move their hands and feet. Discuss the names of those muscles and how they help us move.

Discussion Questions:

1. How are vegetables produced?
2. How do vegetables help our bodies?
3. Name the parts of plants that vegetables come from.
4. Name three vegetables that are grown in Georgia.

Related Activities:

1. Make vegetable soup using different vegetables.
2. Make art projects using vegetables.
3. Make stamps with potatoes.
4. Make celery wagons: Cut celery in 2 sticks and attach four carrot slices for wheels with toothpicks.