



First Grades

Broccoli: The Nutrient Filled Vegetable

First Grade Lesson Preparation:

The objectives of this lesson are:

- * Students will be able to understand some nutritional values of the “broccoli plant” and other plants.
- * Students will be able to identify plant parts and edible plants and their edible parts.
- * Students will understand the structure and function of roots, stems and leaves.
- * Students learn that plants have organs.
- * Students will gain an understanding of the structure, characteristics and basic needs of organisms.
- * Students will be able to reconstruct a “broccoli plant”.
- * Students will understand the importance of plants for animals and humans.
- * Vocabulary development. (nutrients, roots, stem, leaves, flowers or blossom)
- * Students will be able to make a “plant mobile”.

California Standards for Science: First Grade

1. Investigation & Experimentation:

Observation
Comparing
Describing.
Draw Conclusions
Communicate Results
Listening

2. Life Science:

Plants and animals meet their needs in different ways.

* roots associated with the intake of water and soil nutrients and green leaves for making food.

* plants and animals need nutrients to survive.

Materials for lesson:

diagram of plant parts for overhead
broccoli carrots potato lettuce



(you can use just about any fresh vegetable available, broccoli must be one of the vegetables “**of course**”. Each edible part should be represented)

Materials for mobile:

yarn plant worksheet

Materials to reconstruct plant:

plant worksheet glue scissors construction paper

Teaching The Lesson:

Tap Prior Knowledge:

1. Ask students:
Have you ever eaten a **flower**?
 a root?
 a leaf?
 a seed?
 a stem?
 a stalk?
Entertain answers to each question.
2. Ask students “**how do you think plants & animals grow healthy?**”

Lesson Presentation:

1. Bring in real plants (if possible). If there is broccoli in your school’s garden, take students on a tour.
2. Introduce plant by pointing to all organs parts

Share with students:

Tell students that animals and plants have organs. These organs help plants and animals get nutrients over their bodies. Nutrients help plant & animals grow strong and healthy. Animals use the organs of their “Digestive System” and plants use their organs called Roots, Stem, Leaf, and Flowers to get nutrients. Most of our nutrients come from plants. Plants are living things that make their own food. Most living things depend on plants. They give us food and shelter. Broccoli is an edible plant that provides us with many nutrients. Broccoli is rich in vitamins, minerals and proteins that help prevent cancer. Vitamins, minerals and proteins are three of the six nutrients.

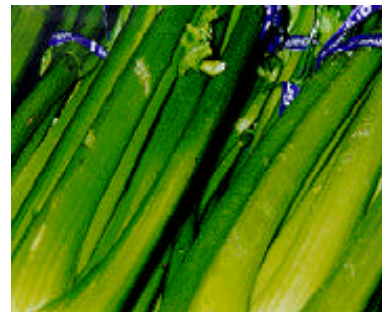
4. Explain the organs of a plant

Roots- absorbs water and mineral from the soil. When you are eating carrots, sweet potatoes, turnips, or beets, you are eating roots. Roots like carrots get big because the plant ends up taking in more food than it can use, and so it stores the extra food in its roots. Then these roots get bigger and bigger until we pull them up and eat them!



What other roots do you eat?
Can you eat a broccoli root?

Stem- carries water and food from roots to all the parts of a plant. The stems and stalks of a plant support its leaves, flowers, and fruits. When we eat the crispy celery stalk and the stem of the asparagus plant, we are eating the stem of a plant.



What other stems do you eat?
Can you eat a broccoli stem?

Flowers- grows fruit and seeds for new plants. Eating broccoli or cauliflower means that you are eating flowers? The white head of the cauliflower is made up of little white flowers. We can eat them raw in salads or cooked in various dishes. I like them best when they are still raw because they are extremely crunchy and have more vitamins & minerals. Cooking most vegetables takes the nutrients out. The little green buds of the broccoli plant are also delicious to eat either raw or cooked. "Eating broccoli four to five times a week is just right for our bodies. It's truly a superfood!"



What other flowers do you eat?
Can you eat a broccoli flower?

Leaf- makes food with help from sun. Lettuce, parsley, and basil are usually eaten raw in a salad. Cabbage and spinach are usually cooked before eating. Raw spinach is used in salads also. Some leaf plants like spinach have loose leaves.



What other leaves do you eat?
Can you eat a broccoli leaf?

5. Broccoli is a plant that you can eat its flower, stem and leaf. It is filled with lots of vitamins, mineral and proteins our bodies need to grow and stay healthy.
6. Review: Point to a plant organ and have students tell part and function.
7. Have students try one of the activities, (mobile or reconstruct plant.)
8. **By all means have a broccoli treat for the kids !!!**
Broccoli & dip sounds good. You can also add broccoli's cousin cauliflower. Tiny orange baby carrots would brighten the treat.

Teacher Worksheet

Make a transparency for the overhead while teaching the lesson.

