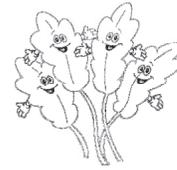




First Grade Fall Lesson



Plant Part Salad

Objective:

Students will learn (1) that they eat different parts of plants when they eat vegetables, and (2) the primary parts of a mature flowering plant and their function.

California State Content Standards:

- 1) Science Standard 2b: Students know both plants and animals need water, animals need food, and plants need light.
- 2) Science Standard 2c: Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.
- 3) Science Standard 2e: Students know roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.

Lesson Outline:

A. Lesson

- a. People eat plants—fruits, vegetables, grains
- b. Draw basic plant
- c. Label the plant parts and the vegetables we will plant
- d. Review what plants need to grow—soil, water, sun

B. Garden Rules

C. Planting Plan

D. Plant

Materials:

Seeds:

Carrots—Thumbelina, Nante or Babette

Radishes—Easter Egg or Cherry Belle

Swiss Chard—Bright Lights

Lettuce—Two varieties, one green and one red leafed

Broccoli--DiCiccio

Sugar Snap or Snow Peas—be sure they are pole variety, not bush, if you plan to have a climbing vine

Transplants (optional):

Edible Flowers—Pansies and/or Violas

Lesson:

****THIS LESSON IS BEST DONE USING A WHITEBOARD OR CHALKBOARD TO DRAW THE PLANT PARTS AS YOU TALK. ALSO USE QUESTIONS TO GET THEM TO GUESS WHICH VEGETABLE THEY EAT IS A ROOT v. LEAF, ETC.**

Today we are planting a special salad garden that will teach about the different parts of plants that we are eating when we eat a salad. Everyone will get to plant one type of seed or plant today. Then, you will get to watch your garden grow for the next few months. In a few months, you will have a special party where you get to harvest all the vegetables from the garden and eat a delicious salad that you grew!

When we eat fruits, vegetables and grains (like wheat in bread, rice, pasta), we eat many different parts of the plant. We will plant vegetables today that represent each of the five major parts of a plant—the roots, stems, leaves, flowers and seeds. Here are the vegetables we are planting (this is when you draw the picture—start by drawing a horizontal line for the ground and draw picture from the roots up or you may use a pre-drawn, labeled drawing):

Root – Carrots and Radishes – roots bring water up from the ground to the plant.

Stem – Swiss Chard – rainbow colored stems – stems support the plant.

Leaf – lettuces and swiss chard – make food for the plant from sunlight using “photosynthesis.”

Flower – Broccoli – the green balls are unopened flower buds. If not eaten, the buds grow into a big bouquet of yellow flowers. If you are doing transplants, pansies and violas are also edible flowers for in the salad—flowers attract pollinators like bees and butterflies to help the plant produce seeds that will grow another plant.

Seed – Peas – individual peas are the seed for the pea plant—you can show them that the peas from the seed package look just like dried out peas they would eat (remind them not to eat seeds because they are dirty) – seeds grow a new plant.

Garden Rules:

- 1. IMPORTANT REMINDER Plants can be poisonous:** Plants and flowers in the school garden are safe for eating because we plant them specially for food and do not use any chemicals or pesticides that would be harmful if eaten.
 - Children must NEVER eat a plant or flower they find growing anywhere at school, home or in their neighborhood unless their parent or another responsible adult says it is ok!!!
 - Many plants are VERY POISONOUS. Plants are tricky because many look alike. You may think it is a plant that is safe to eat, but it may not be.
 - Many people put chemical pesticides on their plants to kill bugs or give plants special food called fertilizer that is safe for the plants, but not safe for people. These chemicals are NOT SAFE for people to eat!!!
- 2. Quiet voices, no running** – do not disturb the creatures in the garden or the students in nearby classrooms. The garden is a classroom just like all the other classrooms at school. All the same rules apply as in your classroom, such as no running, yelling, or climbing.
- 3. Listen to instructions** and plant as you are told or your plants may not grow. If you plant too many seeds or put the seeds in the wrong place, your seeds will not grow.

Planting Plan:

- You will each get to plant one type of seed or plant.
- We will assign each of you the type of seed or plant you get to plant.
- We will tell you where and how to plant your type of seed or plant.
- It doesn't matter what you plant today—the entire class will share the garden harvest.
- HAVE FUN!!!

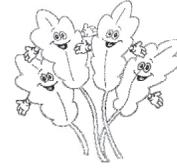
Planting Directions:

For all seeds: Make rows 6 inches apart and $\frac{1}{4}$ inch deep. Have students place seeds 1 inch apart in row. Easiest if you hold seeds and students pinch them from your hand/cup one at a time. Do not let students dig holes for seeds—seeds will be planted too deep and will not grow. Have student pinch dirt closed and gently pat down to cover rows after they place their seeds.

For transplants: Assign 2-3 students to each transplant. Plant transplants one foot apart. Students to take turns digging hole (remind them only as deep as potted transplant), removing transplant from pot (turn upside down and tap, catching plant as it falls out v. pulling out of pot by neck of plant), and placing in hole and patting down dirt around it.



Teacher Information



First Grade Fall Lesson Plant Part Salad

Today your students planted a Plant Part Salad Garden. Students learned that when we eat vegetables, we are eating many different parts of plants. This garden features the many roots, stems, leaves, flowers, and seeds of plants that we eat. Your students planted radishes and carrots (roots), swiss chard (stems), lettuce and chard (leaves), edible flowers and broccoli (flowers), and peas (seeds).

California State Content Standards:

1.) Science

- 2b. Students know both plants and animals need water, animals need food, and plants need light.
 - 2c. Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.
 - 2e. Students know roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.
-

Please visit the garden throughout the season to see how your plants are doing. We recommend bringing your class to the garden weekly to observe which plant parts your students can identify. We will plan a harvest party in several months when the crops are ready.