



FLORIDA RADISH



SPECIAL NEWS

Looking for ways to get excited about radishes? Have students share ways that they might eat radishes at home.

Talk about how radishes can add color and crunch to lots of recipes. Encourage them to share what they have learned about this cool root vegetable with their families!

Look up recipes at the following website by searching “radish” so that the students can see different radish recipes.

FarmToSchoolFL.com

DEAR TEACHER

This month's Harvest of the Month is radishes! The lesson plans, worksheets and activities provided were developed to guide your classroom's understanding of the origins and nutritional benefits of the ravishing radish. We hope you are able to utilize all of the materials, and be sure to encourage your students to try radishes at home.

CLASSROOM RECIPE

RADISH AND CUCUMBER SALAD

YIELDS 24 1-OUNCE SERVINGS

INGREDIENTS:

- 1 Florida Cucumber, thinly sliced
- 2 bunches radishes, thinly sliced (about 16 radishes)
- 1 bunch scallions, chopped
- 3/4 cup sour cream
- 3/4 tsp to 1 tsp salt, or to taste



Image Credit: Natasha's Kitchen

PREPARATION:

1. In a medium salad bowl, combine sliced cucumbers, sliced radishes and chopped green onion.
2. In a small bowl, mix together 3/4 cup sour cream and 3/4 tsp salt or add salt to taste.
3. Stir the sour cream dressing into the salad just before serving.

Florida Farm to School:
FarmToSchoolFL.com

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www.FarmToSchool.org



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MATH

**STANDARDS:** MAFS.4.MD.2.4, MAFS.6.G.1.3**ESTIMATED TIME:** 30 Minutes**OBJECTIVE:** Students will plot points on a coordinate plane.**MATERIALS:**

- Scotch tape
- Coordinate cards (made by teacher)

INTRODUCTION: Background: This lesson is designed for students to think about how farmers use mathematical concepts to strategically plant crops.

Farmers and gardeners carefully plan their crop spacing to ensure the plants have enough space to grow. They often divide their garden or farm into a grid, much like a coordinate plane, so they can determine how far apart to plant each crop. For example, radishes should be planted 1- 2 inches apart in rows. Teacher will review the x and y axes and practice plotting points using data sets with x and y coordinates.

GUIDED ACTIVITY: Teacher will create “coordinate cards” with different x and y coordinates. Using scotch tape, create a large coordinate plane on the classroom floor. Assign each student a card and have them plot themselves on the plane.

INDEPENDENT ACTIVITY: Students will complete the “Plotting Coordinates” worksheet provided.



SOCIAL STUDIES

**STANDARDS:** SS.3.E.1.3, SS.4.E.1.2, SS.5.E.1.2**ESTIMATED TIME:** 35 Minutes

OBJECTIVE: Students will explore the relationship between supply, demand and price using Florida products as an example.

MATERIALS:

- No additional materials required

INTRODUCTION: Teacher will propose the following questions to the class: How many of you like oranges? How many would buy an orange for .50 cents? How many of you like radishes? Who would pay .50 cents for a radish? Who would pay \$10 for one orange? How about \$10 for one radish?

Create a list of factors that influence whether or not people are willing to buy agricultural products - price, personal preference, supply and demand. Teacher will define supply and demand and explain the relationship between supply, demand and pricing. Relay the discussion back to the original questions asked.

Real Life Application: A disease known as citrus greening has recently affected many of Florida's citrus farms. The disease stunts the growth of oranges and causes them to fall off the tree before they are ripe and ready to eat. What do you think happened to the price of oranges this year? Justify your answer.

GUIDED ACTIVITY: The teacher will have students select three items from their desk and secretly mark each item's price on a small piece of paper. The teacher will select one student to share their prices with the class. Ask the rest of the students to think about how they would adjust their prices after seeing their competitor's price. Would they increase or decrease the price of their items?

INDEPENDENT ACTIVITY: Students will complete the “Supply and Demand” worksheet. Review the scenarios on the worksheet as a class. Students will demonstrate what happens to the price in each scenario by standing if the price rises and sitting down if the price falls.



SCIENCE



STANDARDS: SC.4.L.17.4, SC.4.E.6.2

ESTIMATED TIME: 45 Minutes

OBJECTIVE: Students will identify the different layers of soil.

MATERIALS:

- Tape

INTRODUCTION: Background: Radishes are an example of a root vegetable, which use a single central taproot to stabilize the plant as it grows. Some other examples of taproot vegetables are: carrots, beets, parsnips and turnips. Many other edible plants grow fibrous roots, which tend to spread out and branch into several smaller roots to support the plant. Some examples of plants that grow fibrous root systems are grass, onions, lettuce, broccoli and shrubs.

Teacher will describe the different layers of soil - humus, top soil, subsoil, substratum and bedrock. See the PowerPoint for additional information and resources. Explain that most plant roots grow about 6 inches deep into the topsoil, and sometimes deeper into the subsoil. Radishes grow in the topsoil layer, about 2 inches deep.

GUIDED ACTIVITY: Complete the "Who am I?" detective game on the PowerPoint to learn a little more about each layer of soil.

INDEPENDENT ACTIVITY: Students will color, label and describe the function of each layer of soil on the "Soil Layers" worksheet. Using blank paper, have students create an acrostic poem about soil.



LANGUAGE ARTS



STANDARDS: LAFS.4.L.3.4

ESTIMATED TIME: 35 Minutes

OBJECTIVE: Students will identify common roots, prefixes and suffixes.

MATERIALS:

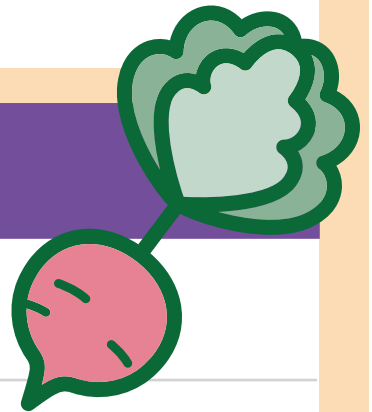
- Prefix and suffix cards

INTRODUCTION: Radishes are a root vegetable and a good source of vitamin C and potassium. While radishes are often eaten fresh, they can also be used for cooking.

Teacher will explain that similar to plants, words also have roots. Teacher will define root, prefix and suffix. Next, talk about the meaning of some grade appropriate roots, suffixes and prefixes - non, over, bi, tri, ion, ness, sub, geo, ous, hydro, photo and tract. Using chart paper, create a list of words (farm, nutrition or biology related) that include these prefixes, suffixes and roots. Some examples are: biennial, subsoil, nutritious, photosynthesis and geography.

GUIDED ACTIVITY: Teacher will create simple root, prefix and suffix cards and distribute to students. Ask students to find a partner to turn their root word into another word. For example, a student with the card "photo" would partner with a student with "synthesis" to make "photosynthesis."

INDEPENDENT ACTIVITY: Students will complete the vocabulary foldable provided to define and provide examples of different prefixes and suffixes. See the worksheet provided.



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For more information or to provide feedback, please visit us online

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TASTE TESTING IN THE CLASS

- While cooking or preparing the radishes, taste test leaders should discuss the health benefits.
- Post pictures and taste test results in classrooms and school newsletters.
- Continue talking with students about benefits of radishes and get them excited for more taste testing opportunities in the future.

TASTE

NUTRITION EDUCATION

- Radishes are a type of root that you can eat!
- Radishes are a good source of vitamin C and contain other important nutrients, such as potassium, magnesium and fiber.
- One cup of sliced radishes has approximately 19 calories.
- There are five common radish varieties grown in the United States. The most well-known variety is the red globe radish. This radish is small, (1-4 inches) and has red and white coloring. It is commonly eaten whole or sliced on salads.

LEARN

SCHOOL GARDEN TIPS & TRICKS

- Radishes are a root vegetable and grow from small seeds.
- Plant radishes all throughout the school year from fall to spring.
- Be sure to thin your radish sprouts to prevent over-crowding the plants. Radishes need at least 2 inches of space to grow.
- You can harvest radishes after 30 days. Grow radishes in classroom container pots for a tasty treat!

GROW

BOOK SUGGESTIONS

“Grandpa’s Garden”
by Stella Fry (Ages 4 and up)

“Grandpa Green”
by Lane Smith (Ages 5 and up)

“Rah Rah Radishes! A Vegetable Chant”
by April Pulley Sayre (Ages 5 and up)

READ