



HARVEST LESSONS

THIS MONTH'S THEME:
MIXED GREENS

Lesson Plan



HARVEST LESSONS ARE A FUN WAY FOR K-4 CLASSROOMS TO EXPLORE, TASTE AND LEARN ABOUT EATING MORE FRUITS AND VEGETABLES EVERY DAY.

ACTIVITY SUMMARY

ACTIVITY	GRADE LEVEL	CURRICULUM CONNECTION	TIME
#1: Observe & Draw Salad Greens	all	Health: nutrition Science: classification Math: measurement	15 min.
#2: Discuss Local History of Greens	all	Science: geography Literacy: listening comprehension	10 min.
#3: Make a Plastic Bottle Greenhouse	3-4	Science: structure of organisms	10 min.
#4: Plant Microgreens	all	Science: life cycles	15 min.
#5: Taste Test: Mixed Greens	all	Science: nutrition Math: measurement, graphing/tallying responses	15 min.
#6: Taste Test: Salad Dressing	all	Math: measurement, graphing/tallying responses	20 min.
#7: Marketing Campaign	3-4	Literacy: speaking, listening	20 min.
#8: Mapping Salad	3-4	Science: geography	20 min.



INTRODUCTION

ALL GRADES

Focus on the following questions:

What are the different kinds of leafy greens we eat? (lettuce, spinach, arugula). Why are salad greens healthy? (low in calories, low in fat, high in protein, fiber, iron, calcium). Are all salads the same? (most salads are served chilled or at room temperature. Salads can be categorized as appetizers, side dish, main course, dessert). What is a list of possible salad components? (leafy greens, cuke, pepper, tomato, carrot, celery, radish, mushroom, olive, hard boiled egg, beans, cheese, meat, seafood, croutons, pasta, potato, fruit, nuts, gelatin, whipped cream, etc.)

For background and nutrition information on lettuce, spinach and arugula, refer to Vermont Harvest of the Month educator materials, which can be found at www.vermontharvestofthemonth.org.

ACTIVITY #1 (10 MINUTES)

ALL GRADES

OBSERVE & DRAW SALAD GREENS

Bring examples of different greens, such as different varieties of lettuce, spinach, and arugula. What part of this plant are we eating? Discuss the parts of a leaf and their roles. Observe what can be seen under the microscope or with magnifying lens. Have students draw and label what they see.

PARTS OF A LEAF:

- **Veins:** Veins transport water, minerals and food energy through the leaf and on to the rest of the plant. They also provide structure and support the leaf.
- **Petiole:** The petiole is the stalk of the leaf, which attaches to the stem of the plant.
- **Lamina:** Lamina is the scientific word for blade of a leaf. This is where food is made through the process of photosynthesis.
- **Epidermis:** Epidermis is the outer protective layer of a leaf. Sometimes the leaf may be waxy because the epidermis secretes a waxy protective cuticle.

KEY QUESTIONS

What color is this? How is it good for you? What part of our body does it help?

We remember from our introductory "Eat the Rainbow lesson" that greens are full of vitamins K and A, and are a good source of calcium. They are good for strong bones and teeth, and also for healing cuts and scrapes. A good rule to remember: the darker the green, the more nutritious it is for our bodies.



ACTIVITY #2 (10 MINUTES)

ALL GRADES

DISCUSSION: GROWING GREENS IN NEW ENGLAND

We can grow many salad greens in the Northeast, but our growing season is quite short. Many greens, such as lettuce, spinach, and arugula, grow best in the cool weather of spring and fall. When it gets hot in the summer, greens may start to taste bitter. If you have a shady spot in your garden, lettuce and other greens will be happier than in full sun. With season extending techniques, such as using greenhouses or cold-frames, or growing microgreens in your window, you can eat greens all year! To support this discussion, share images of lettuce and greens growing on local farms.

ACTIVITY #3 (10 MINUTES)

GRADES 3-4

MAKE A PLASTIC BOTTLE GREENHOUSE

Discuss season extension through the use of greenhouses and cold-frames. Before coming to the classroom, you can prepare one clear 2-liter plastic bottle for each student. Carefully cut the top off the bottle, leaving enough room for soil, then poke small holes in the bottom for drainage.

With children, fill the bottom with soil, add a sprinkling of mixed green seeds, water lightly and cover with the top. Place in a sunny area, on a plate, and water lightly if necessary. If the greenhouse becomes steamy, the top can be opened to let out some moisture.





ACTIVITY #4 (15 MINUTES)

ALL GRADES

PLANT MICROGREENS

For greens in less than a week, try planting microgreens in the classroom window, greenhouse, or under grow lights.

SUPPLIES

First you'll need:

- A shallow pan with drainage (packaged lettuce containers work well for a low cost option)
- Potting/starting soil
- Seeds good for microgreens, such as mesclun seed mixes, beets, radish, arugula, cress, mustard greens, cabbage, chard, kale, bok choy

INSTRUCTIONS

1. Sprinkle seeds evenly so they are close but not touching, on top of a layer of soil. Cover lightly with a sprinkle of soil.
2. Mist, and place in a warm sunny window, in a greenhouse, or under lights.
3. Water daily. Soil should be moist, but not soggy.
4. When plants have sprouted and leaves have unfurled, cut at the soil, and enjoy these nutrient packed leaves.

ACTIVITY #5 (15 MINUTES)

ALL GRADES

TASTE TEST: MIXED GREENS

When we think of salad greens, we often just think of lettuce, but there are a lot of different varieties of greens and other leaves that we eat. Show students examples of common mixed greens, and pass around a leaf for observation and a taste test. Share words to describe flavors. Greens can taste: spicy, watery, salty, bitter, fresh....

Leaves we eat aren't always green. Some leaves we commonly eat like mustard greens and radicchio can be purple. Other leaves have colored veins like beets and some kale varieties.





ACTIVITY #6 (20 MINUTES)

ALL GRADES

TASTE TEST: SALAD DRESSING

There are hundreds of choices for salad dressing at the store, but when we make our own, we can make it healthier, and make it to our own taste using our favorite herbs and spices. After eating, write vocabulary to describe flavors. Make a graph showing how many people liked it and didn't like it.

EASY RANCH DRESSING

Homemade healthy ranch dressing with Greek yogurt, olive oil, spices and no artificial ingredients!

INGREDIENTS

- 1½ cups plain full-fat yogurt or Greek yogurt
- 2 tsp. (or more to taste) dried dill weed
- Sprinkle of salt and pepper to taste
- 2 small garlic cloves
- 1 cup olive oil
- ¼ cup parmesan cheese



DIRECTIONS

1. Put yogurt, garlic and spices in a blender or food processor and blend until smooth.
2. Very slowly, add the oil so that it emulsifies.
3. Add the parmesan cheese and blend until combined.
4. Use immediately, or store up to 1 week in the fridge.

Courtesy of Wellness Mama

SIMPLE MAPLE MUSTARD VINAIGRETTE

INGREDIENTS

- ½ cup apple cider vinegar
- 1 cup olive oil
- 2 Tbsp. maple syrup
- 2 Tbsp. dijon or honey mustard

DIRECTIONS

Combine in a jar with a lid and shake to combine.



ACTIVITY #7 (20 MINUTES)

GRADES 3-4

MARKETING CAMPAIGN

Make enough salad dressing for each student to take home a cup to bring home to their family. Discuss techniques that businesses use to get people to buy foods or toys. Break into small groups, and create an advertisement for your own salad dressing. Students can spend 10 minutes preparing their skits, before sharing with the class.

ACTIVITY #8 (20 MINUTES)

GRADES 3-4

MAPPING SALAD

Read the text on the history of salad, and map the country or region of these salads from around the world. See *the world map on page 8*.

WHAT IS A SALAD?

Roman: The first salads were made by the Romans and called “herba salata.” They often served greens raw, with a little vinegar, oil and salt. The most popular salad green was called “cos” by the Romans. When the leaves were introduced to Europeans, they called it “Roman” which eventually became “Romaine.”

English: Almost 300 years ago, cooks in London could buy a cookbook for making salads. The advice would be to use the freshest leaves straight out of the garden, gently washed and “swung all together” to dry. Then the leaves should be dressed with a mixture of green olive oil, best quality vinegar, and finest sea salt. At that time it was common to find 35 varieties of greens growing in a London kitchen garden.

American: Salads of all kinds were very popular in America in the 1920's. This was the era when molded and more tidy looking salads became common. Over time the casual “tossed” salad regained highest favor, which continues today. Presently, we enjoy almost infinite combinations, ranging from many varieties of greens, to those packed with fruits, veggies, meat and more.

SALADS AROUND THE WORLD:

1. **Caesar Salad:** Even though named after an Ancient Roman, containing romaine lettuce, and a creamy garlic anchovy dressing, Caesar salad is an invention of the U.S. **Locate the United States.**
2. **Caprese Salad:** An Italian Salad with tomatoes, mozzarella cheese, basil and olive oil. **Locate Italy.**

over >



(activity #8, continued)

1. **Greek Salad:** Contains feta, cucumbers, onions, olives and olive oil, and an authentic salad contains no lettuce. **Locate Greece.**
2. **Gado-gado:** An Indonesian vegetable salad served with a peanut sauce dressing. It is eaten as a main dish. **Locate Indonesia.**
3. **Nicoise Salad:** A typical dish in France made with lettuce, native Nicoise olives, anchovies, and dressed with dijon mustard vinaigrette. **Locate France.**
4. **Cole Slaw:** A salad made of cabbage and shredded vegetables, popular in the U.K., and the U.S. **Locate the United Kingdom and the United States.**
5. **Tabouleh:** A common salad in the Middle Eastern Salad made from cracked wheat, lemon, olive oil, herbs and spices including mint, parsley and scallions. **Locate the region of the Middle East, and label one country.**
6. **Waldorf Salad:** A fruit salad containing apples, celery, nuts, grapes and mayonnaise. It was invented in the Waldorf Hotel in New York City. **Locate the city of New York in the U.S.**
7. **Fiambre:** A traditional meat salad of Guatemala served to recognize the Day of the Dead. It can be made with up of 50 ingredients including sausage, cold cuts, chicken, pickled baby corn, olives, onions, beets, cheeses, even Brussels sprouts. **Locate Guatemala.**
8. **Abacha & Ugba:** Also called African Salad, this is a popular salad in Nigeria made from dried shredded cassava and fermented oil bean seeds. **Locate the continent of Africa, and the country of Nigeria.**

CLOSINGS

ACKNOWLEDGEMENTS

For related materials, check out Vermont Harvest of the Month!
www.vermontharvestofthemonth.org

APPENDIX SEE WORKSHEETS THAT FOLLOW

THIS MONTH'S FOOD:

