

PLANT PARTS

SALAD

GRADE: 2nd
LENGTH: 30 minutes

Essential Question

How can we make a salad using different parts of plants?

Alabama Curriculum Standards

Sci 2.6 Design and construct models to simulate how animals disperse seeds or pollinate plants.

Recipe

Salad Ingredients:

- 1 bunch leaves, such as Romain, red leaf lettuce, spinach, kale
- 2-3 radishes, turnips, or carrots
- 1 kohlrabi
- 10-15 snow or sugar snap peas
- 3-5 sprigs of cilantro, dill, basil or other herbs
- 1 Tbsp. sunflower seeds
- Edible flowers, such as pea flowers, borage, or flowering brassicas

Dressing Ingredients:

- 2 Tbsp. lemon juice
- 4 Tbsp. olive oil
- 2 Tbsp. honey
- 1 tsp. Dijon mustard (optional)
- Salt and pepper, to taste

Directions:

1. Add all dressing ingredients to a small jar, screw lid on tightly, and shake to combine.
2. Tear the leaves into bite-size pieces.
3. Shred radishes, turnips, carrots, kohlrabi, etc. with a grater. Snap peas in half.
4. Combine all vegetables, herbs and sunflower seeds in a large mixing bowl.
5. Pour dressing over salad and toss to combine.
6. Top with edible flowers, serve and enjoy!

Objectives

- To learn how to use basic kitchen tools.
- To work together to follow instructions of a recipe.
- To identify the parts of plants needed for pollination and seed dispersal.

Materials

- Recipe cards
- Jar with lid
- Juicer
- Measuring spoons
- Cutting boards
- Grater
- Large mixing bowl
- Tongs
- Serving plates and forks
- Salad spinner (optional)

Vocabulary

- stem • leaf
- root • flower • fruit
- seed

Preparation

Acquire all lesson materials. Photocopy recipe cards. Set up cooking area inside or outside. Set up a wash station, if harvesting veggies during the lesson. Recruit an extra adult or two for help before, during, and/or after the lesson. Review basic food safety. Watch our YouTube video [Cooking in the Classroom](#). Have students wash their hands with warm soapy water before class begins.

Opening Circle

- Ask students to name the parts of a plant. (*Stem, leaves, roots, flower, fruit, seeds*)
- Go over the function of each plant part. (*See Teacher Background.*)
- Remind students that when we eat vegetables, we are eating one (or more) of these parts.
- Tell students that we will create a salad by using each of the plant parts.
- Ask students:
 - What vegetable leaves are in the garden that we can eat in a salad? (*Lettuce, kale, cabbage*)
 - Roots? (*Carrots, radishes*)
 - Stems? (*Kohlrabi*)
 - Fruit and seeds? (*Peas, strawberries*)
 - Flower? (*Pea flowers, borage, any flowering brassica*)
 - Which part cannot form without pollination? (*Seeds*)
 - Which part protects the seeds? (*Fruit*) Remind students that the fruit of the plant can come in many different forms.
- Explain to students that there will be many steps to preparing our recipe, and everyone may not have the same job, but if we work together, we will be able to enjoy a snack together.

Activity

PART 1: HARVEST AND WASH

- 1 Lead students to the garden to harvest the vegetables for the salad.
- 2 Discuss the part of each plant as you are harvesting. (*See Teacher Background.*)
- 3 Lead students to the washing station to wash their vegetables.
- 4 Collect all the washed vegetables and return to cooking area.

PART 2: PREPARING THE RECIPE

- 5 Pass out recipe cards or direct students' attention to the recipe written on a board. Read through the recipe ingredients and instructions as a class. Ask students a few questions about the recipe to check for understanding.
- 6 Complete the steps of the recipe, calling on students as needed. (*See Teacher Background for an example of how students may participate.*)
- 7 After measuring each ingredient for the dressing, ask students to predict how it will affect the flavor of the dressing. (*Lemon juice will add a sour flavor; honey will add a sweet flavor.*) Ask students to predict how the dressing will taste.

PART 3: TASTING

- 8 Remind students to be respectful and curious when tasting. (*See the Cooking Promise in Chapter 1 for more ideas on how to encourage students to try new foods.*)

- 9 Serve everyone a sample. While waiting for everyone to be served, students can use their senses to experience their sample.
 - Can you identify each vegetable? By color, by shape, etc.
 - How does it smell? Can you smell any one ingredient the most? Are there any ingredients that you don't see or smell?

10 Taste and enjoy!

Closing Circle

Prompt students in a discussion about the following:

- Survey students for their reactions, using a thumbs up to indicate enjoying the salad, a sideways thumb for mixed feelings, and a thumbs down for not liking it.
- Ask students to share their favorite plant part from the salad.
- Ask students what the most difficult part was of making the salad.

Extension

- 1 Have students write their own recipe using different plant parts. Have them illustrate the final product. Collect them to create a class Plant Parts Cookbook!
- 2 Have students compare and contrast the different ingredients for the salad. How were they different? How were they the same? Facilitate by asking questions about how each tasted, looked, or felt, then help students to write sentences. For example:
 - The lemon juice was sour, but the honey was sweet.
 - The radishes were red on the outside and white on the inside.
 - The peas were smooth, but the kale was bumpy.

teacher

BACKGROUND

HARVESTING

For specific information on when and how to harvest and wash each vegetable included in this recipe, see the Appendix.

PLANT PART FUNCTIONS

ROOTS – anchors the plant in the soil; home to beneficial soil organisms; absorbs nutrients and water from the soil.

STEM – holds the plant upright; water and nutrients move from the plant's roots through the stem and on to the leaves.

LEAVES – helps the plant breathe (respiration); helps the plant make its own food through photosynthesis; can absorb water for the plant and is the site of water loss (transpiration).

FLOWER – where pollination occurs and is the site of plant reproduction.

FRUIT – grows from the flower after pollination; holds and protects the seed.

SEED – grows inside the fruit and is the product of plant reproduction; inside the seed is the embryo, which will grow into a new plant.

MAKING THE PLANT PART SALAD

Engaging students:

- If using a salad spinner, have 1-2 students to help load and operate the salad spinner to remove water from lettuce leaves.
- Have several students shred the carrots, kohlrabi, turnips or radishes.
- Have several students help snap the peas in half.
- Have one student tear cilantro and set aside for later.
- Have 1-4 students help prepare the dressing.
- Have every student help mix the dressing by shaking the jar.
Tip: Have students say aloud "One, Two, Three, Pass" to signal when to pass the jar.
- Have 1-2 students add the shredded vegetables and dressing to the bowl.
- Have a couple students help toss the salad.
- Have a couple students help serve.

DISCUSSION IDEAS

For more discussion questions to ask students throughout the lesson or to use as a writing prompt see page 83.

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