

TEACHER GUIDE

Beet and Carrot Salad with Mint

GRADE: **4**LESSON: **6**SEASON: **Winter**FOCUS: **Social Studies**

Students will learn that root vegetables can be stored for use out of season—and learn about other ways that food can be preserved—while making a beet and carrot salad.

OBJECTIVES

- Learn some of the characteristics of root vegetables.
- Learn that preserved food was an important innovation for civilization.
- Independently follow a recipe.

TIMING



Wash Hands (5 minutes)



Introduce the Lesson (10 minutes)



Prepare Beet and Carrot Salad with Mint (30 minutes)



Eat and Discuss (10 minutes)



Clean Up (5 minutes)



Photo: Mariannanobre.com



Academic Standard: C3 Framework D2.His.2.3-5 Compare life in specific historical time periods to life today.

Charlie Cart Project Standards: Cooking Skills 4.CS.2 Use sharp tools.

Food Systems 4.FS.2 Factors affected by eating foods in and out of season.

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Get Ready

Preparation time will vary.

- Read through the full recipe and lesson plan several days in advance.
- Plan to shop one day ahead.
- Allow 1½ hours to prep for the lesson, including moving desks to make three tables, and preparing produce and other ingredients.
- Make copies of the recipe—two per table for the lesson and one for each student to take home.
- Schedule volunteers/assistants, if needed.



SHOPPING LIST

Note: Shopping list amounts are for a class of 30. The recipe serves 10 (1 table group) and functions as the activity guide for each group.

Use organics whenever possible.

- 6 pounds red beets, with tops if possible
- 3 pounds carrots, with tops if possible
- 1 bunch mint
- 3 large oranges
- 3 large lemons
- 6 tablespoons olive oil
- Kosher salt
- Compostable bamboo boats and forks

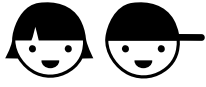
PREPARE IN ADVANCE

- Wash and dry all produce, including beet and carrot greens.
- Set aside 1 whole beet and 1 carrot (with tops if possible) for demonstration.
- Slice tops and bottoms off remaining beets so beets are flat on both ends.
- Slice tops and bottoms off remaining carrots.
- Prepare a small bowl of salt (for teacher use only).
- Cut oranges and lemons in half.

ASSEMBLE TOOLS AND INGREDIENTS FOR EACH TABLE

- 2 pounds beets
- 1 pound carrots (approximately 1 bunch)
- ½ bunch mint (2 or 3 sprigs)
- 1 orange
- 1 lemon
- Kosher salt
- 2 tablespoons olive oil
- 3 or 4 box graters
- 3 or 4 peelers
- 1 citrus reamer
- 1 whisk or fork
- 1 medium mixing bowl, 3 small bowls, and 1 bowl for compost
- 1 large serving spoon
- 1 set of measuring spoons
- 1-cup liquid measuring cup
- Cutting mats, 1 per student
- Bamboo boats and forks, 1 each per student
- 2 copies of recipe

LESSON PLAN



Beet and Carrot Salad with Mint



GUIDING QUESTIONS

Why is it important to be able to store produce for use out of season?

1. WASH HANDS (5 minutes)

Ask students to wash hands. Divide students into three groups and assign each group to a table. Reiterate the safety rules for using the Charlie Cart.



2. INTRODUCE THE LESSON (10 minutes)

Today we are making a colorful grated salad with root vegetables and citrus vinaigrette. [Show beet and carrot.] Why are they called root vegetables? (We eat the root.) The green tops of beets and carrots are edible, too! [Show and name root, root hairs, and leaves.] How do the different parts of the plant support plant growth? (The leaves transform the sun's energy into food through photosynthesis. The roots bring water and nutrients from the soil to the rest of the plant.)

Root vegetables are in season in summer and fall, but can be stored for many months if kept in a cool, dry place. For our ancestors, this was an important discovery!

They could harvest the vegetables in the summer, and store food for winter. They also preserved food by pickling and drying (and, more recently, canning). These methods, developed in ancient civilizations, are still used today. Can you think of some pickled, dried, or canned foods you eat at home?

It may be hard to imagine, but those pickles you eat with your hamburgers were a vitally important innovation. Preserved foods were portable—they allowed explorers to travel the world, enabling the exchange of knowledge and culture (and war, too) that has shaped human history.

To make the salad, we will peel and grate the beets and carrots. Work in pairs and pay attention at all times. The grater is a sharp tool and can cut you just like a knife. Also be careful not to touch your clothes—the beet juice can stain.

3. MAKE BEET AND CARROT SALAD WITH MINT (30 minutes)

Ask students to read the recipe aloud. Assign tasks to prepare the dish as follows.

PREPARE THE PRODUCE

- To peel carrots, hold the carrot down on the cutting mat. Hold the peeler firmly by the handle and work in a downward motion away from your body.
- To peel beets, place the flat side of the beet on the cutting mat. Peel from the top down, slowly and carefully. Rotate to ensure the whole beet is peeled. Show students how the beets stain your hands and remind them not to touch their clothes.
- Remind students how to use the grater safely, working in pairs. One student grates while the other is the “eyes” of the project to ensure safety.
- Use the large holes on the grater. When there is just about an inch left of the beet, STOP grating. Never touch the blades of the grater.
- Distribute beet greens and carrot greens. Ask students to taste a small piece of each one, and say which they like best.
- Assign tasks to peel and grate carrots and beets. Place grated produce in medium mixing bowl. Discard peels and remaining leaves into compost.
- Pull mint leaves from the stems. Reserve the smallest, whole leaves for garnish.
- Tear remaining leaves into small pieces, twice the size of a ladybug—about 3 or 4 pieces per leaf.
- Add torn mint to the grated vegetables.

MAKE VINAIGRETTE

- Review how to use the citrus reamer. Juice the orange and lemon.
- Measure 4 tablespoons orange juice into a small bowl. Ask students how much this is in cups. Ask them to use the tools on the table to find out. Measure 3 tablespoons lemon juice into the bowl, and remove seeds.

- Add ¼ teaspoon salt to the juice and mix well.
- Three students work together to finish the vinaigrette. The first student holds the bowl. The second measures 1 tablespoon olive oil and slowly pours it into the juice, and the third whisks the olive oil continuously as it is added to the bowl. Whisk until combined.
- Taste the vinaigrette. As a table, decide if it needs adjustment. Add a splash more orange or lemon juice or a tiny pinch of salt, as needed.
- Pour the vinaigrette over the salad and mix until thoroughly combined. Ask students to say what it means to “thoroughly combine.”
- Time permitting, let the salad rest for 5 minutes before serving. This will allow the citrus to be absorbed into the produce for a stronger flavor.

4. EAT AND DISCUSS (10 minutes)

Clean up and set tables to eat. Serve salad in bamboo boats, garnished with a whole mint leaf. Ask students to **wait patiently** until everyone is served.

DISCUSSION QUESTIONS

What are some ways food can be preserved?

Why was preserved food an important innovation?

Imagine you are among the first settlers in the northern United States. In the spring and summer, you harvest wheat, fruit, and a variety of produce.

How will you ensure you are prepared with plenty of food for winter? Give examples with specific types of produce.

5. CLEAN UP (5 minutes)

RECIPE

Beet and Carrot Salad with Mint

SEASON: **Winter**MAKES: ABOUT **3** CUPS

INGREDIENTS

Note: Use organics whenever possible.

Salad

2 pounds red beets

1 pound carrots (about 1 bunch)

2 or 3 sprigs mint

Vinaigrette

1 orange, cut in half

1 lemon, cut in half

½ teaspoon kosher salt

2 tablespoons olive oil

PREPARATION

For the salad:

1. Wash the beets and carrots thoroughly and then dry them.
2. Slice the ends off the beets and carrots, and peel. To peel the beets, place the flat side down on the cutting mat and work from the top downward, rotating the beet as you go to make sure you peel completely. Discard ends and peels to compost.
3. Grate beets and carrots using the large holes on a box grater. Start by grating the flat side of the beet. Mix grated beets and carrots together in a medium bowl.
4. Pull mint leaves from the stems, and tear or chop them into small pieces (3 or 4 pieces per leaf), reserving 1 whole leaf for garnish. Add 2 to 3 tablespoons of the torn mint to the grated vegetables. Discard stems to compost.

For the vinaigrette:

1. Juice the orange and remove any seeds. Measure 4 tablespoons orange juice and place it in a small bowl. In a separate bowl, juice the lemon and remove any seeds. Measure 2 tablespoons lemon juice and add it to the orange juice. Add the salt and stir to combine.
2. Slowly pour the olive oil into the juice mixture, whisking constantly, until well combined. Taste and adjust the flavors, adding more orange, lemon, or salt, as desired.
3. Pour vinaigrette over salad and mix until thoroughly combined. Allow salad to rest 5 to 10 minutes before serving. Stir once, taste and adjust for salt, and garnish with the reserved mint leaf.