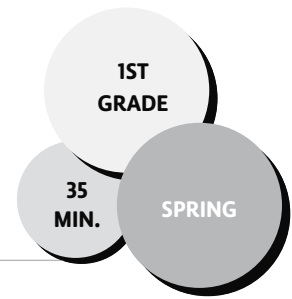


# Tops and Bottoms Popsicles

**THEME:** PREPARING NOURISHING FOOD



## ESSENTIAL QUESTION

*How can we create a nourishing snack using lots of fruits and vegetables?*

## LEARNING OBJECTIVES

- ✓ Students will be able to identify the different parts of a plant.
- ✓ Students will be able to prepare a nourishing snack.

### CONCEPTS

fruit   herbs   leaves   roots

### ENGAGING THE CLASSROOM TEACHER

- Arrange a time and/or day that you'll return to have your popsicle tasting with the class.
- During Action Step 4, suggest the teacher help students who need extra support picking herbs off the stem.
- During Action Step 5, suggest that the teacher support students in writing their names on their popsicle sticks and working on preparing the ingredients, and then support them in filling out their worksheet.

## LESSON DESCRIPTION

In this lesson, students make Tops and Bottoms popsicles, which include a fruit, root, and leaf part

of plants. This lesson is designed to be taught in conjunction with fall lessons, Plant Part Scavenger Hunt and Planting a Tops and Bottoms Bed.

## MATERIALS

- Access to a freezer
- Blender
- Extension cord
- Popsicle ingredients (see recipes below)
- Whole-food example of each ingredient, if possible

### For each student:

- Popsicle stick
- Small paper cup

### For each group of 4–6 students:

- Bowl of herbs on stem or greens
- Bowl for finished product
- Markers
- Masking tape
- Tops and Bottoms Popsicle Recipe Sheet (p. 199; optional)
- Materials for cleanup

## PREPARATION

- › Check in with school staff to find a place where you can freeze popsicles.
- › Schedule a time with the classroom teacher for you to return, at least three hours after the activity (once popsicles have fully frozen), to taste the popsicles with the class.
- › Boil beets, if using, until you can easily poke a fork through them.
- › Portion your herbs or greens into bowls for each group of students.

- › Set up a station with your blender and other ingredients close to a power outlet where all students can see you.

## TOPS AND BOTTOMS POPSICLES

**Yield:** 25 servings, ¼ cup

### Orange Carrot Mint

4 cups orange juice  
2 cups carrot juice  
½ cup mint leaves (packed)

### Strawberry Beet Basil

4½ cups fresh or frozen strawberries  
1½ cups red beets (cooked, cooled,  
and cut into pieces)  
2¼ cups apple juice  
¾ cup basil leaves (packed)

**Note:** Increase the “tops” with 1 cup of spinach or kale!

- In a blender, add greens and liquid ingredients first, and blend until greens are just small flecks. Then add the rest of the ingredients and blend until smooth.
- Pour into popsicle molds or cups with popsicle sticks, and freeze for at least three hours or until solid.

## ACTION STEPS

**1. Engage:** Gather students in a circle and ask, *What are your favorite flavors of popsicles?* When students respond with types of fruit, say, *Did you know that strawberry, orange, and grape are all the fruit part of plants? Today we’re going to make our own popsicles that include even more parts of the plant. The tops and the bottoms!* Ask students to recall the story *Tops and Bottoms* and other activities they’ve done on this topic. Remind students that the tops of the plant are the leaves, and the bottoms are the roots. **(5 min.)**

**2. Identifying Plant Parts:** Show students the

whole-food ingredients for your popsicles and ask, *Is this a top, bottom, or fruit?* As students answer, arrange the produce so it’s categorized by plant part. Continue with each ingredient. **(5 min.)**

### 3. Hand-Washing Break (5 min.)

**4. Preparing Herbs:** Model for students how to pick herbs off the stem, or tear greens into smaller pieces, and then pass out herbs or greens and bowls to groups. If you’re using two different recipes, each group will have a different herb or green. Circulate through the room, ensuring each student is getting an opportunity to contribute. **(5 min.)**

**5. Making the Popsicles:** Direct students’ attention to where you’ve set up the blender. As you add each ingredient to the blender, ask, *What part of the plant is this ingredient?* Have a student volunteer pass out popsicle sticks and cups, and have students write their name on one end of their stick with a marker. If there is extra time, or students finish early, you might also have students decorate their cups or color the *Tops and Bottoms* Popsicle Recipe Sheet. Once you’ve blended the ingredients, walk around the room, pouring the popsicle mixture into each students’ cup. If you’ve made two recipes, ask students which they think they’ll prefer. **(5 min.)**

**6. Tasting:** Return the popsicles to the class at the time you’ve arranged with the teacher. **(5 min.)**

## REFLECTION

Have students discuss the following questions in small groups, then share with the class: **(5 min.)**

### **Social and emotional learning**

- *How did you help make our popsicles today?*

### **Check for understanding**

- *What parts of the plant can you taste in our popsicles?*
- *What words would you use to describe the flavors of our popsicles?*
- *How will having three different parts of the plant in our popsicles help our bodies?*
- *What other ideas do you have for ingredients to put in Tops and Bottoms popsicles?*

## **ACADEMIC CONNECTIONS**

English Language Arts Common Core State Standards

### **CCSS.ELA-LITERACY.RL.1.2**

Retell stories, including key details, and demonstrate understanding of their central message or lesson.

## **ADAPTATIONS**

**Garden Setting:** Harvest from your Tops and Bottoms bed for your popsicle ingredients.

**Song:** Sing “Roots, Stems, Leaves” by the Banana Slug String Band.

**Cooking Variation:** Make a Tops and Bottoms salad. Have students discuss the plant part of each food they are putting in their salad and what dressing ingredients make sense to bring out the flavors in their plant part salad. Encourage students to think about the parts of plants they eat during their meals and snacks.

**Sharing:** Work with your students to prepare a presentation for another class. Then make a double batch of popsicles, and invite your students to arrange a time to deliver the popsicles to another class. At that time, you can read *Tops and Bottoms* to the other class, and your students can act it out.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Tops and Bottoms Popsicles

Our fruit is: \_\_\_\_\_

Our tops ingredient is: \_\_\_\_\_



Our bottoms ingredient is: \_\_\_\_\_

## STRAWBERRY BEET BASIL

- 4 1/2 cups fresh or frozen strawberries
- 1 1/2 cup red beets (cooked, cooled, and cut into pieces)
- 2 1/4 cups apple juice
- 3/4 cup basil leaves (packed)

In a blender, add greens and liquid ingredients first and blend until greens are just small flecks. Then add the rest of ingredients and blend until smooth.

Pour into popsicle molds or cups with popsicle sticks and freeze for at least three hours or until solid.