

# Cantaloupe

**GRADE**  
**K-1**

**Month: September**

**Time Required: 30 minutes**

**Alternative Tastings: Honeydew, Watermelon**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to apply the concept of “inside” and “outside.”
- Students will be able to identify “inside” (seeds, fruit) and “outside” (skin) parts of a melon.

## Materials

- Whole cantaloupe (and another melon if offering two kinds for a taste test)
- Knife
- Cutting board
- Napkins or paper plates
- Inside/Outside worksheets
- Masking tape

## Preparation

- Wash the outside of the whole melon(s) under cool running water. Scrub with vegetable brush.

## Recommended Books

“The Cantaloupe Cat” by Jan Yager

“The Antelope Who Loved Cantaloupe” by Celeste Marie Halata

“The Antelope Who Ate Cantaloupe Instead of French Fries and Hay” by Julie Crichton

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#).  
Crosscutting Concept:  
Patterns

First grade - [1-LS1-1](#)  
LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking”  
Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Plant structures and like inside/outside

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lessons.*

As this is your first lesson of the year, introduce yourself to the class and to Pick A Better Snack. Share with students, *When I come to your classroom every month, we're going to have fun trying foods together and learn about each other.*

As students prepare to transition to your PABS lesson, tape a large circle on the floor, using masking tape. Have students stand on the tape, around the circle.

### 2. Engage Activity: 10 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

#### “Inside” and “Outside” Activity

As the instructor, begin by standing inside the circle while the students stand on the circle. Tell the students: *I am inside the circle.* Step outside the circle, telling them, *Now I'm on the outside.* Have students practice, *When I say outside you'll jump to the outside of the circle and when I say inside, you'll jump inside the circle. Ready?* Practice with your students. *For this activity, any time I say the word “inside” or “outside” you're going to jump inside or outside the circle.* Check for understanding.

*Our school has an **inside** and an **outside**.*

- *Think of something you like to do **inside** your classroom.* Pause to allow students to jump inside the circle. Repeat your question and allow students time to think of their response. Now, when I say the magic word “Melon” you're going to act out your answer. Pause. *Melon.* Acknowledge what several students are acting out. Have students freeze by saying *Everybody FREEZE!*
- *Think of something you like to play **outside** at recess.* Pause to allow students to jump outside the circle. Repeat your question and allow students time to think of their response. Now, when I say the magic word “Melon” you're going to act out your answer. Pause. *Melon.* Acknowledge what several students are acting out. Have students freeze by saying *Everybody FREEZE!*
- *Think of something you can do **inside** the cafeteria.* Pause to allow students to jump inside the circle. Repeat your question and allow students time to think of their response. Now, when I say the magic word “Melon” you're going to act out your answer. Pause. *Melon.* Acknowledge what several students are acting out. Have students freeze by saying *Everybody FREEZE!*
- *Think of something you could do **outside** in the school garden.* Pause to allow students to jump outside the circle. Repeat your question and allow students time to think of their response. Now, when I say the magic word “Melon” you're going to act out your answer. Pause. *Melon.* Acknowledge what several students are acting out. Have students freeze by saying *Everybody FREEZE!*

*Our snack today has an **inside** and an **outside**. We will be tasting a melon (show students a whole melon).*

- *This melon has rough, bumpy skin on the **outside**.* Pause to allow students to jump outside the circle.
- *Melons have lots of little seeds on the **inside**.* Pause to allow students to jump inside the circle.
- *Melons have a hard shell that protects them from damage. It's on the **outside**.* Pause to allow students to jump outside the circle.
- *The part of the melon that we eat is the sweet, juicy flesh **inside**.* Pause to allow students to jump inside the circle.

## Explore

### 3. Experiential Learning: 8 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Have students return to their desks (opportunity for 3 deep breaths).

Show students a whole cantaloupe. *We're going to taste this fruit called cantaloupe. What's this fruit called?* (choral response - "Cantaloupe"). *Cantaloupe is a type of melon, just like watermelon. Melons have a pattern – their insides are different than their outsides.* Demonstrate cutting open the melon (using doc-camera), showing students the skin, seeds, and edible inside. Ask the teacher to share facilitation and pass out the melon worksheets as you prepare the samples.

**Inside/Outside Worksheet** - pass out inside/outside worksheets. Ask students to draw and color the outside of a cantaloupe in the "Outside" box and draw and color the inside of a cantaloupe on the "Inside" box.

### 4. Tasting Activity: 3 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

Before you pass out any samples, be sure to share your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). As students receive their samples, ask them to use their senses while they wait.

As students receive their samples, talk the class through using their senses to explore the melon - a practice that you'll encourage every month during PABS lesson time.

#### Melon Taste Test Option:

1. Offer classrooms 2 types of melon to sample (ex: cantaloupe, honeydew, watermelon).
2. Use all 5 senses to compare and contrast the melons.
3. Discuss flavors, textures, colors, seed shapes, etc, as a class.

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

Introduce the tradition of voting with your thumb. As students taste the cantaloupe, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion".*

## Reflect (cont'd)

### Choral Response:

*I'm going to ask a question and you're going to quietly think to yourself. When I say the magic word, "melon," you can say your answer aloud. Let's practice...*

- *What month is it? (September)*
- *Whose class am I in?*
- *What food did we try today? (cantaloupe)*
- *What's on the outside of the cantaloupe? (skin)*
- *What's on the inside of the cantaloupe? (seeds and fruit)*

### Asking Discussion:

*Raise your hand if you're excited to go home and tell your family about tasting cantaloupe.*

- Ask a student with a raised hand: *if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy cantaloupe?*

\*Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

# Inside/Outside Worksheet

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

**Inside**

**Outside**

## Additional Materials

### Physical Activity

Sports Galore from [“Get Movin’ Activity Breaks”](#) (Variation: Have students call out sports or activities they did over the summer and mimic them.)

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Cantaloupe and Melons

- Look for a melon that is heavy for its size without cuts or bruises on the surface. The stem should give to gentle pressure.
- Always wash the whole fruit under running water before preparing and eating. Always use clean knives and cutting surfaces (Adults should do the cutting). Store cut sections in the refrigerator.
- Cantaloupe and honeydew have a hollow cavity that is filled with seeds that are scooped out before cutting.
- Watermelons contain small black seeds throughout the flesh or come in a seedless variety.
- Cantaloupes range in size from 1-10 pounds.

### Facts About Cantaloupe

- Melons grow on the surface of the ground on a trailing vine. They grow in Iowa.
- Flowers on a melon vine need to be pollinated (visited) by bees to make melons.
- Cantaloupes are also known as muskmelons and rockmelons.
- Watermelon is the most common melon consumed in the United States by weight, then cantaloupe and honeydew.
- China produces the most cantaloupes in the world; United States is the 5th largest producer with over half grown in California.

### Health Connection

- Cantaloupe is an excellent source of Vitamin C to help you ward off germs and keep you healthy. Put up your defense shield (cross your arms in front of your chest).
- Cantaloupe is an excellent source of Vitamin A (one of highest among fruits), which is important for your eyesight. Put on your super goggles (use your fingers to make goggles over your eyes).
- Cantaloupe is high in fiber, which is good for digestion and helps you feel full longer (rub your tummy for good digestion).
- Honeydew and watermelon are also good sources of Vitamin C.

### References and Resources

[http://www.fns.usda.gov/sites/default/files/growit\\_book5.pdf](http://www.fns.usda.gov/sites/default/files/growit_book5.pdf)

<https://fruitsandveggies.org/fruits-and-veggies/cantaloupe/>

<https://www.watermelon.org/>

<http://www.extension.iastate.edu/foodsavings/content/produce-basics>

<https://snaped.fns.usda.gov/seasonal-produce-guide/cantaloupe>

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# Jicama

**GRADE**  
**K-1**

**Month: October**

**Time Required: 30 minutes**

**Alternative Tastings: White Potato, Sweet Potato, Carrot**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to explain the function of roots.
- Students will be able to define and apply the concept of responsibility.

## Materials

- Napkins or paper plates
- Jicama, cut-up and prepared to serve
- Tajín seasoning (optional)
- Music selection

## Preparation

- Prepare jicama samples: peel and slice jicama into chips or sticks.
  - Option: Offer raw jicama and a limey-Tajín-flavored jicama.
    - 2 cups peeled and sliced jicama, cut into small-medium sticks
    - Juice from 2-3 limes
    - Tajín sprinkled on to taste (½ teaspoon)
- Put ingredients into a large plastic bag or plastic container before lesson to enhance flavors.

## Recommended Books

“Tops & Bottoms” by Janet Stevens

“Oliver’s Vegetables” by Vivian French

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#).  
LS1.C: Plants need water and light to live and grow.

First grade - [1-LS1-1](#).  
LS1A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Roots

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day’s lesson.*

### 2. Engage Activity: 8 minutes

*The “Engage Activity” section has two purposes: 1) to activate students’ prior knowledge and 2) to engage every student.*

Gather students in a large circle. *Today we’ll be talking about jicama, a vegetable that grows underground. Like all living things, there are certain things jicama needs to grow. Humans have things that we need to grow strong and healthy, too. Share a personal example of something you need.*

#### Jicama Hop:

- *Now think to yourselves, what is something you need at school or at home? Brushing your teeth, playing with friends, eating food, drinking water might be some examples.*
- *Think to yourself quietly.* Have students close their eyes, put their fingers to their temples, and think real hard.
- Then, pass a whole jicama around the circle while you play music. Stop the music randomly. Whomever has the jicama will share their survival need aloud. As students share, ask them *why* this need is important to them.
- Physical Activity: After a student shares, the class will celebrate them with a “firework clap”. All students crouch down, then together you slowly reach for the sky, making a firework noise. When you reach the top, everyone will jump and clap their hands together, making a “shhhhhh” noise.
- Repeat several times.

## Explore

### 3. Experiential Learning: 8 minutes

*This is a time for students to familiarize themselves with what you’ll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Have students sit at their desks (opportunity for 3 deep breaths).

*We’re going to taste a vegetable called jicama. Jicama is a **root**.* Note new vocabulary word: root. Define, write out, and have the class repeat the word “root.” Show a [picture of jicama growing underground](#). *A root is a plant part that grows underground and helps jicama with two things it needs to survive:*

1. *Roots get food and water for the plant. The root is like a straw (pretend to suck up water through a straw).*
2. *Roots hold the plant in the ground. Roots grow deep into the soil to keep the plant from blowing away (have students stand very still pretending to be roots).*

*We’re going to watch a short video that shows us how a root vegetable grows many roots before it comes out of the ground.*

Potato root video: [https://www.youtube.com/watch?v=YbTFCh\\_XdYI](https://www.youtube.com/watch?v=YbTFCh_XdYI). (1 minute video - can speed up the video under “settings”, then click “Playback Speed”)



## Explore (cont'd)

Explain to students, *we're going to use our senses to explore the jicama today before we taste it. We're going to take a really long time to eat it because we're going to explore everything we can about the jicama using our 5 senses.* Lead students through 5 senses exploration.

**Touch:** Students can close their eyes and feel the jicama with their fingers. What does it feel like?

**See:** Have students carefully examine the jicama. What details do they see?

**Smell:** Have students bring the jicama to their noses and inhale. Ask them to describe the smell.

**Hear:** Using their fingers, have students snap the jicama in half. Everyone should be very quiet to listen for any sounds.

### 4. Tasting Activity: 3 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

Be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). Ask students to use their senses while they wait until the entire class is ready to taste the jicama together.

Students are invited to taste the jicama. Option: Offer 2 versions of jicama to sample (ex: lime and Tajín). Use all 5 senses to compare and contrast the samples. Discuss flavors, textures, colors, etc, as a class.

## Reflect

### 5. Voting Activity: 3 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the jicama, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 6 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion."*

#### Reflection questions:

- *Will someone share what they liked or loved about the jicama?* Select a couple students to share.
- *Will someone share what they would change about the jicama?* Select a couple students to share.
- *Where does a root grow?* (underground)
- *Show me two ways roots help jicama survive:*
  1. getting food and water (pretending to use straw)
  2. holding the plant in place (standing very still)
- *Raise your hand if you're excited to go home and tell your family about tasting jicama.*
- *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy jicama?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

## Additional Materials

### Physical Activity - Plant Parts Song (sung to the tune of “Head Shoulders Knees and Toes”)

Roots (touch toes), stems (stand up straight), leaves (put arms out) and flowers (cup hands around face)

Leaves and flowers.

Roots, stems, leaves and flowers

Leaves and flowers....

Grow to fruits then drop their seeds

Roots, stems, leaves and flowers

Leaves and flowers.

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Jicama

- Jicama needs warm temperatures for nine months to grow.
- Jicama is available from November to May and can be purchased in Mexican markets and most large supermarkets.
- Choose firm, unblemished jicama. Store whole jicama in a dry, cool place for two weeks. Place raw, cut jicama in a plastic bag in the refrigerator for up to one week. Refrigerate cooked jicama and use within a few days.

### Facts About Jicama

- Root vegetables grow underground. Many root vegetables can grow through the winter (in some climates).
- Jicama is grown in Central America and Mexico (show on a map).
- Jicama can grow up to 50 pounds, but supermarkets usually sell the 3-to-5 pound size. Jicama is sold individually, whereas potatoes are often sold in sacks.
- The jicama skin should be removed before eating as the skin can be toxic. The leaves and seeds also contain mild toxins.
- When cooked, jicama retains its crisp, water chestnut-like texture.

### Health Connection

- Excellent source of Vitamin C, to heal our wounds and keeps us healthy (reinforce by crossing arms in an “X” for our defense shield)
- Good source of fiber, to keep us full longer and help with digestion (reinforce by rubbing stomach)

### References and Resources

<https://fruitsandveggies.org/stories/top-10-ways-to-enjoy-jicama/>

<http://aggie-horticulture.tamu.edu/archives/parsons/vegetables/jicama.html>

<https://livewellutah.org/2017/10/18/give-jicama-a-try/>

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STATE OF IOWA  
DEPARTMENT OF

**Health**  
AND  
**Human**  
SERVICES

# Cranberries

**GRADE**  
**K-1**

**Month: November**

**Time Required: 30 minutes**

**Alternative Tastings: Grapes**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to demonstrate their feelings using facial expressions.
- Students will be able to compare and contrast different forms of cranberries.

## Materials

- Cranberries taste test reflection sheet, printed
- Napkins or paper plates
- Small cups for juice
- 100% Cranberry Juice
- Fresh cranberries
- Dried cranberries
- Optional book: "How are you Peeling"

## Preparation

- Print and cut half sheets: Cranberries taste test reflection sheet.

## Recommended Books

"Gabe's Grocery List" by Heidi Shelton Jenck

"Fox and Rabbit's Cranberry Surprise" by Laurel Heger

"A Visit to The Supermarket" by B.A. Hoena

"Time for Cranberries" by Lisl H. Detlefsen

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#)  
Science & Engineering Practices: Sharing observations

First grade - [1-LS3-1](#).  
Science & Engineering Practices: Make observations

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- "Asking" Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Making and sharing observations

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

### 2. Engage Activity: 10 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

Gather students in a large circle. Tell students, *we all have feelings - sometimes we feel the same, and sometimes we feel different than the friends around us. Turn and talk to a friend - ask them, “how are you feeling today?”* and then they will ask you. Give students time to talk, and then ask a couple of students to share aloud. *Thank you for sharing how you're feeling today.*

*One way we show our feelings is by observing, or noticing, our face. Let's practice with some acting.*

- *What face do you make when it's time for lunch? Freeze!* Observe and share student's facial expressions. *“I see faces that feel...”* (hungry, excited)
- *What face do you make when you're sleeping? Freeze! I see faces that feel...* (peaceful, calm, tired)
- *What face do you make when you see your good friend?* (cheerful, friendly)
- *What face would you make if you were lost?* (confused, scared, tense)
- *What face would you make if there's nothing to do?* (bored, impatient, frustrated)

*We can show how we feel about tasting different foods by observing our faces, too. For example, when I get to eat my favorite food (share), I make this face (share). Now show me...*

- *What face do you make you taste your favorite food? Freeze!* Observe and share student's facial expressions. *“I see faces that feel...”* (happy, energized)
- *What face do you make when you're asked to try a brand new food, like we do in Pick a Better Snack?* (nervous, brave, curious)
- *What face do you make when you eat something sweet?* (smiles)
- *What face do you make when you eat something sour?* (silly, puckered)

*It's important to understand and explore our feelings about food!*

Optional Book:

“How are You Peeling? Foods with Moods”- [https://www.youtube.com/watch?v=lqX\\_TljZC4](https://www.youtube.com/watch?v=lqX_TljZC4)

## Explore

### 3. Experiential Learning: 3 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Have students sit where they will eat (opportunity for 3 deep breaths).

*Today, we are going to taste a fruit called a cranberry. We are going to try it in three different forms: fresh, dried, and juiced. All three kinds of cranberry taste very different. We are going to observe our feelings when we try these three types of cranberries, and use taste words to describe them.*

*Before we try our cranberries, let's review the five common taste words. On the board write: sweet, sour, salty, bitter, and spicy.*

Review these taste words:

*Salty is like movie popcorn.*

*Sweet is like watermelon.*

*Sour is like lemons.*

*Bitter is like really dark chocolate.*

*Spicy is like hot sauce.*

### 4. Tasting Activity: 8 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

With students or the teacher's help, pass out cranberry taste test reflection worksheets, napkins, and the cranberry samples (fresh, dried, and small cups of cranberry juice). Remind students that the class will taste the cranberries together, so don't try anything yet.

Be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). Ask students to use their senses while they wait until the entire class is ready to taste the cranberries together.

*You all have your fresh, dried and juiced cranberries in front of you, as well as the taste test worksheet. We're going to try each of these one at a time, pausing to fill out our worksheet.*

- 1. Taste fresh.** Have students taste the fresh cranberries and record their observations, tastes and emotions on the worksheet. Remind them of taste words they can use.
- 2. Taste dried.** Have students taste the dried cranberries and record their observations, tastes and emotions on the worksheet. Remind them of taste words they can use.
- 3. Taste juice.** Have students taste the cranberry juice and record their observations, tastes and emotions on the worksheet. Remind them of taste words they can use.

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the cranberries, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

## Reflect (cont'd)

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion."*

*Thank you for trying cranberries in three ways! If you liked the raw cranberry best, give yourself a hug. If you liked dried cranberries the best, rub your tummy. If you liked cranberry juice the best, pat your head.*

Ask students to share out with the class or with a neighbor what feelings they observed when they tried their favorite type of cranberry.

*Raise your hand if you're excited to go home and tell your family about tasting cranberries.*

- Ask a student with a raised hand: *if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy cranberries?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.



# Cranberries

Fresh



Dried



Juice



Taste Word:

Taste Word:

Taste Word:

Feeling Word:

Feeling Word:

Feeling Word:

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# Cranberries

Fresh



Dried



Juice



Taste Word:

Taste Word:

Taste Word:

Feeling Word:

Feeling Word:

Feeling Word:

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## Additional Materials

### Physical Activity

“Supermarket Shopping” from “[Get Movin’ Activity Breaks](#)” (Read the story and perform each underlined word for 5-10 seconds or until the next underlined word.)

More ideas for physical activity are available at <https://hhs.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Cranberries

- The cranberry is a Native American wetland fruit which grows on trailing vines like a strawberry.
- The American Cranberry is a low-growing, vining woody perennial (grows back each year). During harvest, water is used to float the fruit for easier collection. These cranberries are usually used for juice and sauce. The dry harvested fruit are combed from the vines and are used as the fresh fruit.
- Most production occurs in Wisconsin, Massachusetts, New Jersey, Oregon, Washington, Canada and Chile.
- Fresh cranberries should be firm, plump and dark red.
- The plant flowers in May-June, and the fruit is ripe in late September to early October.
- Cranberries freeze well. Rinse before using, not before freezing. They will last about one year in the freezer or three to four weeks stored in the refrigerator.

### Facts About Cranberries

- Cranberry juice is the most popular way cranberries are consumed, but during the holidays, cranberries are often used in stuffing, dressing, relish and cranberry sauce.
- Grapes are also a fruit that grows on vines; dried grapes are called raisins. In French, raisin means “grape”.
- Raisins vary based on the type of grape used and are found in different sizes and colors including green, black, blue, purple and yellow.

### Health Connection

- Vitamin C - to help heal cuts and keep the gums and skin healthy (reinforce with crossing arms for a defense shield)
- Fiber - to keep us full longer and to help with digestion (reinforce by rubbing stomach)
- Potassium - to keep normal blood pressure (reinforce by squeezing hands to show heart beating). The heart is a muscle that needs a workout. To make it stronger, be active in a way that gets you huffing and puffing.
- Sugar is added to many fruits, like cranberries, before drying. Dried fruits can be bad on teeth because sugar clings to the teeth, causing acids to build up. Make sure to brush and floss on a daily basis to remove plaque and acids that build up on your teeth.

### References and Resources

<http://www.choosemyplate.gov/fruit> (See: What counts as a cup of fruit? Children ages 6-8 years need 1 to 1 ½ cup of fruit per day.)

<https://www.cranberryinstitute.org/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/cranberries>

[Fresh Cranberries – Habelman Cranberry Family Farm](#)

This institution is an equal opportunity provider.  
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# Broccoli/Cauliflower

**GRADE**  
**K-1**

**Month: December**

**Time Required: 30 minutes**

**Alternative Tastings: Artichoke**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to recall the names of 6 plant parts.
- Students will be able to classify broccoli and cauliflower as flowers.

## Materials

- Picture of flowering broccoli and cauliflower (or: prepare a live, flowering broccoli in a jar with water- see instructions within lesson)
- Whole, raw broccoli and cauliflower (1-2 heads of each for demonstration)
- Cooler
- Electric skillet
- Plastic tote (to transport electric skillet)
- Spatula
- Power strip (with long cord)
- Water bottle with water
- Rags
- Food storage containers
- Tasting materials (plates, napkins, etc.)
- Broccoli and/or cauliflower for cooking
- Olive oil
- Salt and pepper
- Preferred spices (ex: garlic, cumin, chili powder, etc.)

## Preparation

- Wash broccoli and/or cauliflower and chop into small “trees.”
- Portion broccoli and/or cauliflower into food storage bags (one per lesson).
- Add olive oil and spices to the bag; shake well.

## Recommended Books

“Monsters Don’t Eat Broccoli” by Barbara Jean Hicks  
 “Gregory the Terrible Eater” by Mitchell Sharmatt  
 “The Boy Who Loved Broccoli” by Sarah A. Creighton  
 “Oliver’s Vegetables” by Vivian French

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#).  
 Crosscutting Concept: Patterns

First grade - [1-LS1-1](#)  
 LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Parts of a plant (1<sup>st</sup>) and patterns (K)

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

If you're planning on cooking your broccoli or cauliflower in an electric skillet or air fryer, you may want to start preheating your cooking instruments as soon as you arrive in the class. Alert students and teachers to the hot skillet or air fryer. If using a skillet, heat a couple tablespoons of olive oil over medium heat, leaving uncovered.

### 2. Engage Activity: 8 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

If you're cooking today, show your students your container of chopped up broccoli or cauliflower. Before you add the broccoli to the preheated electric skillet or air fryer, ask students to listen very carefully for the “sizzle” noises. Add the broccoli or cauliflower. If using a skillet, leave uncovered, stir occasionally and cook for 10 minutes or until tender over medium or heat.

Think-pair-share: Gather students in a large circle. *I'd like to know something that is special about you.* As an example, share something that makes you special.

- *Think to yourself quietly.* Have students close their eyes, put their fingers to their temples, and think real hard.
- Ensure all students have a partner. Then, have students turn to a partner and share their special quality.
- After a couple minutes, bring the class back together and select students to share out. If you use “pick a stick,” this is a good way to randomly select students to share.
- As students share their special quality, have them put on an imaginary crown.

**\*\*Alternate activity:** pass an object around the circle, indicating that a student is invited to share with the rest of the class when they are holding the object. Play music while students pass the object. Then stop the music and whoever has the object will share.

## Explore

### 3. Experiential Learning: 10 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Have students sit (opportunity for 3 deep breaths).

*Today we're going to try broccoli and cauliflower. Broccoli and cauliflower are very special plant parts. They are flowers! Some people even call them the "crowns" (put on imaginary crowns again). We eat broccoli and cauliflower before the flowers bloom, when they are tender and sweeter. Here is what broccoli and cauliflower look like when the flowers bloom.*

- Show image of flowering broccoli and cauliflower.
- OR- Pass around a flowering head of broccoli. To make the broccoli crown flower, place the stem in a jar of water for about a week, prior to your lessons. The broccoli will turn yellow as the flowers develop (and a word of caution, a certain smell may develop, as well!)

*We're going to explore the parts of the cauliflower and broccoli before we eat it. We're going to find 3 plant parts on these vegetables.* Split students into four smaller groups and give each group either one head of broccoli or one head of cauliflower. Ask students to explore the broccoli and cauliflower using their senses. As a group, they will find and name 3 parts of the broccoli or cauliflower plant that they can see (stem, leaves, flowers). Classroom teacher should work with two small groups as PABS educator works with the others.

- *Option: split the class into two small groups (rather than four) and the classroom teacher can work with one group.*

Once each group has come up with their three parts, compare the words as a class (stems, leaves, and flowers). Write the plant parts on the white board. Did some of the groups come up with similar words? Discuss the differences and similarities between broccoli and cauliflower: colors, shapes, smells, similar plant parts (stem, leaves, flowers).

#### Physical Activity: Plant Parts Dance

*Great! We found 3 plant parts on our broccoli and cauliflower. We're going to do a dance to remember these parts, and name 3 more. We can observe 6 plant parts!* Lead students in dance, repeating the pattern a few times and increasing the speed.

- Roots (touch toes)
- Stems (stand up tall)
- Leaves (put hands out at hips)
- Flowers (frame face with hands)
- Fruits (make a circle with arms overhead)
- Seeds (sprinkle fingers from overhead down toward the ground)
- **\*\*Repeat 2 times**
- *Now that's six parts* (students say: "six parts" and hold up 6 fingers). *Six plant parts that plants and people need. "Oh yeah."*

Link to Banana Slug String Band Song, "Roots, Stems Leaves,"

<https://www.youtube.com/watch?v=ogW8Z7IZLNw>

### 4. Tasting Activity: 3 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

As students receive their samples, ask them to use their senses while they wait.

## Explore (cont'd)

There are several ways to try broccoli and/or cauliflower:

Raw: Cut into small “trees” and serve with a dip.

Air fryer: Before lesson - chop cauliflower and/or broccoli into smaller pieces. During lesson - toss in an air fryer with olive oil and spice options (ex: garlic, pepper, paprika). You can also use an oven or fry in a skillet.

Electric Skillet: Before lesson - chop cauliflower and/or broccoli into smaller pieces. During lesson - heat 2 tablespoons olive oil over medium heat, leaving uncovered. Add your broccoli or cauliflower to the hot skillet and season with optional spices (ex: salt, garlic, pepper, paprika).

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the cauliflower and/or broccoli, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the “Asking Discussion”.*

#### Choral Response:

*I'm going to ask a question and you're going to quietly think to yourself. When I say the magic word, “crown,” you can say your answer aloud. Let's practice...*

- *What month is it? (December)*
- *Whose class am I in?*
- *What food(s) did we try today? (broccoli and/or cauliflower)*
- *How many plant parts are there? (six)*
- *Which plant part is broccoli and cauliflower (flowers)*

#### Asking Discussion:

- *Raise your hand if you're excited to go home and tell your family about tasting broccoli and/or cauliflower.*
  - *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.







## Additional Materials

### Physical Activity

“Frozen Vocabulary” (page 17) from “Get Movin’ Activity Breaks” (Variation: Replace vocabulary words with a fruit or vegetable name. Call on a student to tell the class if the word you called out is a fruit or vegetable.)

More ideas for physical activity are available at <https://hhs.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Broccoli and Cauliflower

- Broccoli is one of the few vegetables that is available year round.
- California is the top producer of broccoli in the United States, growing 90% of the broccoli eaten in the U.S.
- Broccoli is a cool season crop, which means it is not affected by frost when planted in cooler weather.
- Choose broccoli with tight florets that are dark green, purplish or bluish green. Stalks should be very firm.
- Choose cauliflower with compact creamy white buds and bright green leaves. Avoid brown spots or loose sections that are spread out.
- Cauliflower and broccoli are both high in Vitamin C.

### Facts About Broccoli and Cauliflower

- The part of the broccoli that we eat is a group of buds that are almost ready to flower.
- Broccoli is known as the “Crown Jewel of Nutrition” because it is low in calories, rich in vitamins, and high in fiber.

### Health Connection

- Vitamin A - eye health (Reinforce with super goggles.)
- Vitamin C - healthy skin, strong immune system, and for healing wounds (Reinforce with Vitamin C defense shield: cross arms to make an X.)
- Fiber - helps with digestion and makes us feel full longer (Reinforce by rubbing stomach.)

### References and Resources

[http://www.vermontharvestofthemonth.org/uploads/2/8/9/6/28966099/10\\_broccoli-cauliflower\\_lesson.pdf](http://www.vermontharvestofthemonth.org/uploads/2/8/9/6/28966099/10_broccoli-cauliflower_lesson.pdf)

<http://www.fns.usda.gov/tn/discover-myplate-emergent-reader-mini-books>

<http://blogs.extension.iastate.edu/foodsavings/2015/10/19/how-to-cut-cauliflower/>

<https://spendsmart.extension.iastate.edu/produce-item/broccoli-2/>

<https://spendsmart.extension.iastate.edu/produce-item/cauliflower-2/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/broccoli>

This institution is an equal opportunity provider.

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# Mango

**GRADE**  
**K-1**

**Month:** January

**Time Required:** 30 minutes

**Alternative Tastings:** Papaya

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to identify mango as a tropical fruit.
- Students will be able to describe tropical weather.

## Materials

- |  |   |
|--|---|
| <input type="checkbox"/> Inflatable basic beach ball           | <input type="checkbox"/> Whole mango  |
| <input type="checkbox"/> Paper plates and/or cutting boards    | <input type="checkbox"/> 1-2 mangoes per 25 students (or thaw frozen mango) |
| <input type="checkbox"/> Disposable or reusable plastic knives | <input type="checkbox"/> ½ bunch of cilantro per 25 students                |
| <input type="checkbox"/> Forks                                 | <input type="checkbox"/> ½ bunch of green onion per 25 students             |
| <input type="checkbox"/> Knife                                 | <input type="checkbox"/> ½ fresh lime per 25 students                       |
| <input type="checkbox"/> Cutting board                         | <input type="checkbox"/> ½ bag tortilla chips per 25 students               |
| <input type="checkbox"/> Hand sanitizer                        |   |
| <input type="checkbox"/> Scissors                              |   |

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-ESS3-1](#).  
ESS3.A Natural resources

Grade 1 - [1-LS1-2](#). LS1.B:  
Growth and development of plants

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Plant habitats

## Preparation

- Determine which beach ball activity you will lead, and prepare the beach ball for the physical activity.
- Cut the mango into 1 inch cubes (or big enough for a student to cut into 2 or more pieces).
- Wash the cilantro, green onion and lime. De-stem cilantro and remove green onion roots. Consider using scissors to quickly cut individual student portions from the bunch during your lesson.

## Recommended Books

“Marti and the Mango” by Daniel Moreton

“Handa’s Surprise” by Eileen Browne



## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

### 2. Engage Activity: 8 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

Gather students in a large circle, standing. Tell students, *Today we're going to try a fruit that grows where it is very warm; this fruit likes hot weather. But first, I want to know, what kind of weather do you like? Close your eyes and think in your head. If you like hot weather, put your hands on your head. If you like cold weather, give yourself a hug. If you like a little of both, rub your tummy.* Give students time to think and make a decision. Remind students to make the decision for themselves, keeping their eyes closed.

*When I say the magic word “mango,” you're going to open your eyes and look around. Mango!* Describe the class's preferences based on their chosen actions. Randomly select a few students to share why they like hot weather, cold weather or both (pick-a-stick works well here).

Introduce the term tropical. Explain, *In Iowa, the weather changes all year - hot weather in the summer, cold weather in the winter, and mild weather in the spring and fall. In some parts of the world, the weather is more consistent. It can be very cold all year in some places and very hot all year in other places. “Tropical” is a word used to describe places that are very warm and wet all year. Let's say that word together, “tropical.” Tropical places are warm and wet* (repeat together; option to write words on the board to read together). *Today, we're going to taste a type of tropical fruit that grows in tropical places because tropical places have what it needs to survive. Show a side-by-side photo of Iowa winter weather and tropical weather. Discuss similarities and differences in what they see (e.g., sunshine, water, sand, snow, ice, trees).*

*But first, let's play a game.*

#### Physical Activity:

Gather students in a large circle. Bring the beach ball!

- **Option 1:** Write several vocabulary words on the beach ball (warm, wet, tropical, mango, fruit). Instruct students to gently pass the beach ball. If their hand is on a vocabulary word when they catch it, they can read the word aloud.
- **Option 2:** Write the word mango on the board and spell it together as a class. Instruct students to gently pass the beach ball. Spell mango as a class, one letter per toss (m-a-n-g-o), or have the catcher say the next letter when they catch it. Try to speed it up without dropping the ball!

## Explore

### 3. Experiential Learning: 10 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Seat students at their desks (opportunity for 3 deep breaths).

#### Making Mango Salsa

While holding up a fresh mango say, *For our tasting today, we're going to try a tropical fruit called mango. Mango grows in tropical places because they need wet, warm weather to survive. We can eat the sweet orange inside of the mango after we cut off the skin and remove the pit* (demonstrate if preparing tasting from fresh, whole mango or explain that this has already been done). *You're going to be a chef today and prepare your own mango salsa using mango and some additional ingredients.*

Before passing out materials, be sure to review the following safety:

- Always cut down.
- Always place your knife down on the table when you're not using it.
- Use pinching fingers or the bear claw to protect your fingers.

Pass out hand sanitizer, then paper plates to each student. Paper plates can serve as both their cutting board and their plate, if you're not using reusable cutting boards. *Before* passing out knives, pass out pieces of the mango and demonstrate how to properly cut it up. *Then* pass out knives. (Passing out plates and fruit first means no idle hands holding knives while waiting for fruit).

Continue passing out ingredients (green onion and cilantro), demonstrating how to cut.

Tell students, *Raise your hand when your ingredients are all chopped up, and I will come add one squirt of lime juice to your salsa. Lime is another tropical fruit! Serve with 2 tortilla chips.*

### 4. Tasting Activity: 3 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

Explain to students that *we're going to taste a bite of mango first*. Be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). Ask students to use their senses while they wait until the entire class is ready to taste the mango together.

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the mango salsa, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion."*

## Reflect (cont'd)

### Reflection Questions:

- Can someone raise their hand and tell us what they liked or loved about their mango salsa?
- Can someone raise their hand and tell us what they would change about their mango salsa?
- Do you think it would be easy to grow mangoes in Iowa? Why or why not?

### Asking Discussion:

*Raise your hand if you're excited to go home and tell your family about tasting mango.*

- Ask a student with a raised hand: *if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy mango?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

## Additional Materials

### Physical Activity

“A Snowy Day” from “Get Movin’ Activity Breaks” or “Dr. Jean’s Banana Dance”

[http://www.youtube.com/watch?v=MFmr\\_TZLpS0](http://www.youtube.com/watch?v=MFmr_TZLpS0)

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Mango

- Mango gets softer as it ripens. Judge its ripeness by feel, not color. Mangoes ripen at room temperature. Put them in a paper bag at room temperature to speed up the ripening process. Once ripe, mangoes can be stored up to five days in the refrigerator.
- Mangoes are 2-4 inches in length and are very colorful. The immature fruit has green skin that gradually turns yellow, orange, red, purple or a combination of these colors. The mango flesh is orange-yellow, juicy and sweet when ripe. Mangoes have a flat, “hairy” or fibrous seed. This impacts how you cut the mango with a knife.
- Tropical fruits – bananas, mango, kiwi, papaya, pineapple, pomegranate, and passion fruit – are cultivated mostly in countries with warm climates.
- The first mango was grown in India 5,000 years ago. Other major producers are Mexico, Pakistan, China, Indonesia, Brazil and Philippines. Mangoes grow on trees. Some trees grow as tall as 100 feet! The mango tree grows best in sub-tropical and tropical environments.
- The main producer of mangoes in the United States is Florida.

### Facts About Mangos

- The mango is called the “king of fruit” in India where there are 1,000 commercial varieties.
- In India, a basket of mangoes is considered a gesture of friendship. The paisley pattern developed in India represents the mango shape.
- Mango is the most popular fruit in the world. Its taste resembles a mix of oranges, peaches and pineapples.
- The fruit of the mango tree matures in three to five months after flowering. The fruit weighs 1/4 pound to 3 pounds (show photos of mango tree).

### Health Connection

- Mangoes are rich in Vitamin C, which helps our bodies fight infection and heal wounds. (Reinforce with a defense shield; cross your arms in front of your body to ward off germs).
- Mangoes are rich in Vitamin A, which is important for healthy eyesight (Use your fingers to put on your super goggles). Mangoes contain more vitamin A than most fruits.
- Mangoes are also a good source of fiber. Fiber helps with digestion and helps us feel full longer. (Reinforce by rubbing stomach).

### References and Resources

<https://www.mango.org/how-to-cut-a-mango/>

[https://www.hort.purdue.edu/newcrop/morton/papaya\\_ars.html](https://www.hort.purdue.edu/newcrop/morton/papaya_ars.html)

<http://thaifood.about.com/od/thairecipesstepbystep/ss/howtocutapapaya.htm>

<https://snaped.fns.usda.gov/seasonal-produce-guide/mangos>

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# Bell Pepper

**GRADE**  
**K-1**

**Month: February**

**Time Required: 30 minutes**

**Alternative Tastings: Tomato, Cucumber**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to categorize fruits and vegetables by their color.
- Students will be able to practice the concept of “Eating a Rainbow.”

## Materials

- Several sheets of construction paper: red, orange, yellow, green, purple
- Prepared rainbow outline - on flipchart or another large sheet of paper (example included)
- Printed and cut fruit and vegetable cards
- Tools to attach cards to the rainbow (ex: tape, Velcro depending on rainbow design)
- Bell pepper outline for necklaces
- Several colors of bell peppers (enough for each student to sample each color)
- Knife
- Cutting board
- If students prepare peppers: paper plates or cutting boards and disposable or reusable plastic knives
- Hand sanitizer
- Dip (ex: homemade dip, hummus, etc.)

## Preparation

- Prepare rainbow outline to be reused from class to class or make one rainbow for each classroom using flipchart paper.
- Prepare fruit and vegetable cards: print and cut a colorful array of fruit and vegetable images to be used for the classroom rainbow; consider laminating these and adding Velcro if they will be reused.

## Recommended Books

“Chile Pepper Pete” by Dawn Boone

“Chicks and Salsa” by Aaron Reynolds

“A Very Purple Pepper: Colors to Know So You Can Grow” by Peggy Sissel-Phelan

“Eat Lots of Colors!” by Helen Marstiller

“Growing Colors (Avenues)” by Bruce McMillan

“Green is a Chile Pepper” by Roseanne Thong

“It’s Me, Serrano the Pepper!” by Dina Attlias Nahmani

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#).  
Patterns

First Grade - [1-LS1-1](#).  
LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Patterns in vegetable colors (K) & plant parts (1<sup>st</sup>)

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

### 2. Engage Activity: 6 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

*Today, we're going to learn about and practice eating a rainbow of colors. But first, I want to know, what is your favorite color? Think in your head (can put fingers up to temples and close eyes) and when I say the magic word, “pepper,” I want you to say your favorite color out loud. Ready? Pepper.* Students say their favorite color out loud.

#### Physical Activity

Holding several sheets of construction paper, flip through the colors.

- **Round 1:** When a student sees their favorite, instruct them to do a physical activity (ex: make up a dance move, do a number of jumping jacks, etc. See [page 52 of Get Movin'](#) or [pages 27-28 of Brain Breaks](#) for ideas). Flip through each color a couple of times, speeding up as you progress.
- **Round 2:** Tell students, *I have another question for you. Think about which of these colors is your favorite to eat - green, red, yellow, orange and purple. When I hold up your color, do a star jump to show us that it's your favorite color of food to eat.* Flip through each color a couple of times, speeding up as you progress.

*Excellent! Thank you for sharing your favorite colors with all of us.*

## Explore

### 3. Experiential Learning: 10 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Seat students together at the carpet (opportunity for 3 deep breaths).

#### Make a Classroom Rainbow

Show the rainbow outline prepared on flipchart paper. Explain, *Today, we'll be tasting a vegetable called a pepper. Peppers grow in a rainbow of colors (stick images of a red, green, yellow, orange and purple peppers to the large classroom rainbow). Colorful fruits and vegetables contain different types of vitamins, mineral and other nutrients. When we eat a rainbow of colors, our body takes in a rainbow of nutrients.*

Put printed images of fruits and vegetables into the center of the carpet and instruct students. *We're going to build our classroom rainbow using these colorful fruits and vegetables. When it's your turn, please pick-up a fruit or vegetable from the pile, observe its color, and stick it to our rainbow in the line matching its color. When you're done you'll transition back to your desk.* When students are seated, ask, *“What patterns do you notice on our chart?”*

\*Consider using this transition as an opportunity to wash hands or share hand sanitizer with students.

## Explore (cont'd)

### Eating a Rainbow Together

While holding up a fresh bell pepper say, *For our tasting today, we're going to taste a rainbow of peppers* (serve 3 different colors of bell peppers). *We can eat all sides of the pepper after we remove the seeds and the stem* (point out the parts of the plant and how the pepper is connected to the plant; demonstrate removing the seeds and stem if preparing tasting from fresh whole pepper, or explain that this has already been done). *You're going to be a chef today and prepare your own pepper strips that we'll taste with a dip* (ex: homemade dressing or hummus).

Before passing out materials, be sure to review the following safety:

- Always cut down.
- Always place your knife down on the table when you're not using it.
- Use pinching fingers or the bear claw to protect your fingers.

Pass out hand sanitizer, then paper plates to each student. Paper plates can serve as both their cutting board and their plate, if you're not using reusable cutting boards. *Before* passing out knives, pass out pieces of the pepper and demonstrate how to properly cut it up. *Then* pass out knives. (Passing out plates and peppers first means no idle hands holding knives while waiting for peppers).

*Raise your hand when your peppers are all chopped up, and I will come around to give you some dip.*

### **4. Tasting Activity: 3 minutes**

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum").*

Explain to students that *we're going to taste different colors of peppers one at a time and compare their flavors*. Be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). Ask students to use their senses while they wait until the entire class is ready to taste the peppers together.

**Tasting Ideas:** Depending on how much time you will have for hands-on food prep during a lesson, consider chopping food ahead of time or portioning pieces of fruits and vegetables for students to chop during the lesson.

- Decorate a large cracker with a rainbow of fruits and vegetables, on hummus/cream cheese.
- Make rainbow wraps, using half a tortilla and a variety of fresh fruits and vegetables. See USDA's "[Summer Food, Summer Moves](#)" [recipe for a hummus wrap](#) for ideas.
- Consider adapting the recipe from [FoodCorps' Rainbow Grain Salad Lesson](#) to fit your lesson.
- Pepper strips in three different colors with or without a dip.

## Reflect

### **5. Voting Activity: 2 minutes**

*This is a time for students to give their opinion on what they tried!*

As students taste the different peppers, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.



## Reflect (cont'd)

### 6. Reflection: 7 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion."*

Make a rainbow pepper necklace.

Print and cut out 3-4 pepper images for each student (coloring template attached). Students will color the peppers and attach them to a length of string using tape. Work with the teacher to make a necklace for each student. Or, if the class will keep their classroom rainbow, attach the peppers to that.

#### Reflection Questions:

- *Did anyone eat their favorite color today?*
- *Out of the 3 colors we tasted, what was your favorite color of pepper?*
- *Did the three colors of peppers taste the same? Different? Explain.*
- *Can someone raise their hand and tell us what they liked or loved about the pepper?*
- *Can someone raise their hand and tell us what they would change about their pepper tasting?*

#### Asking Discussion:

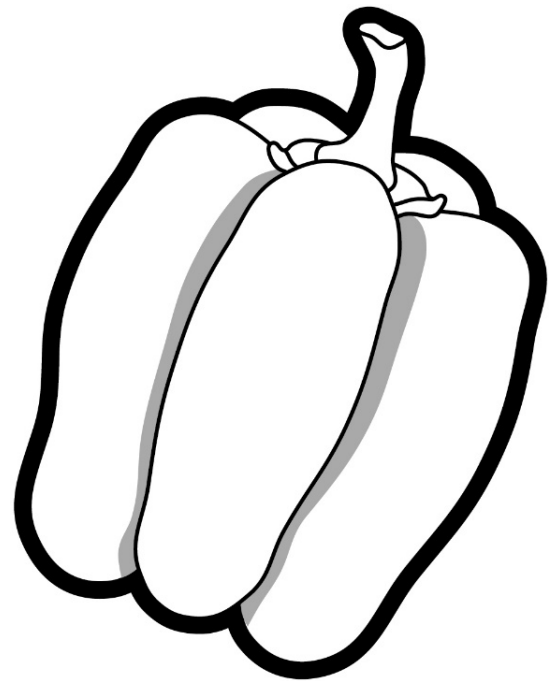
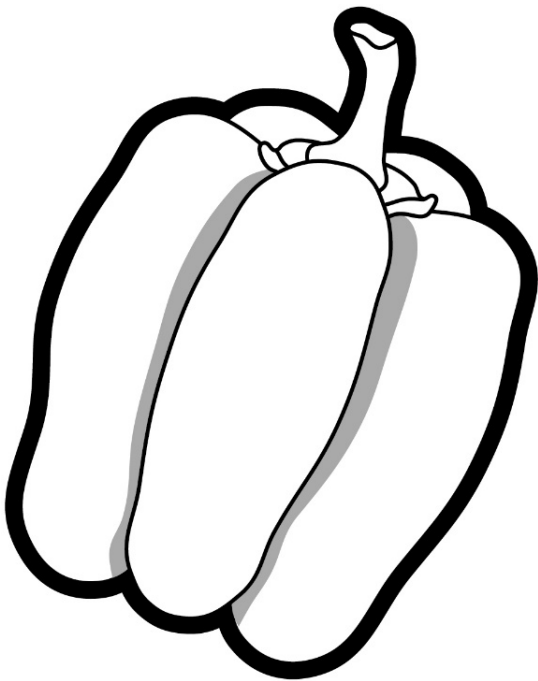
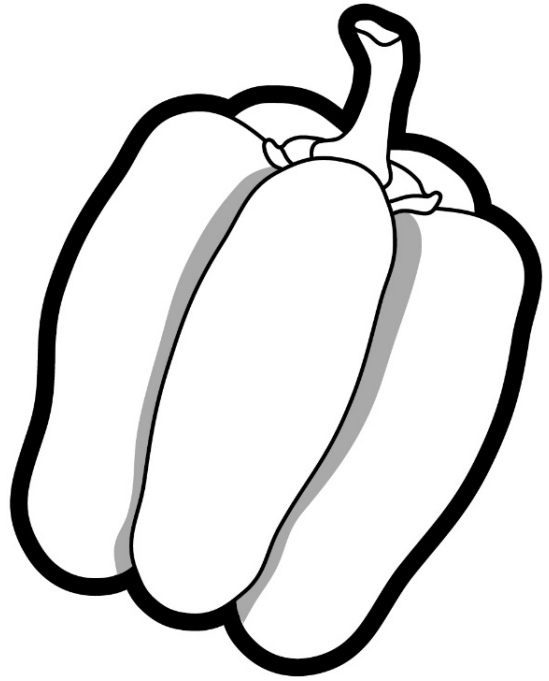
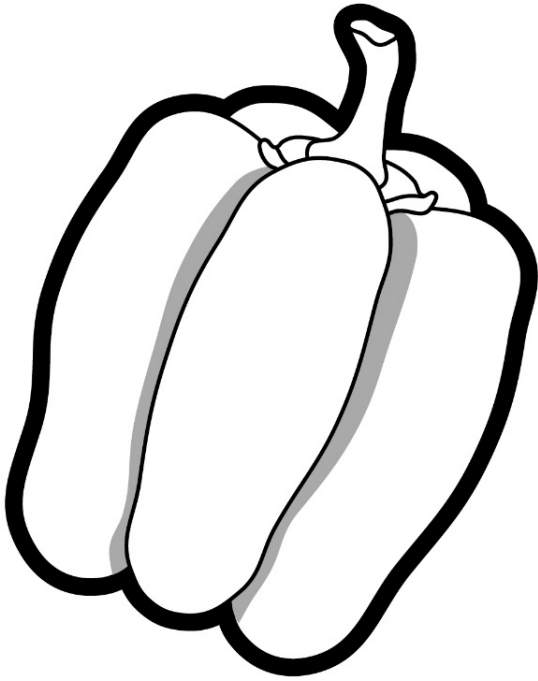
*Raise your hand if you're excited to go home and tell your family about tasting peppers.*

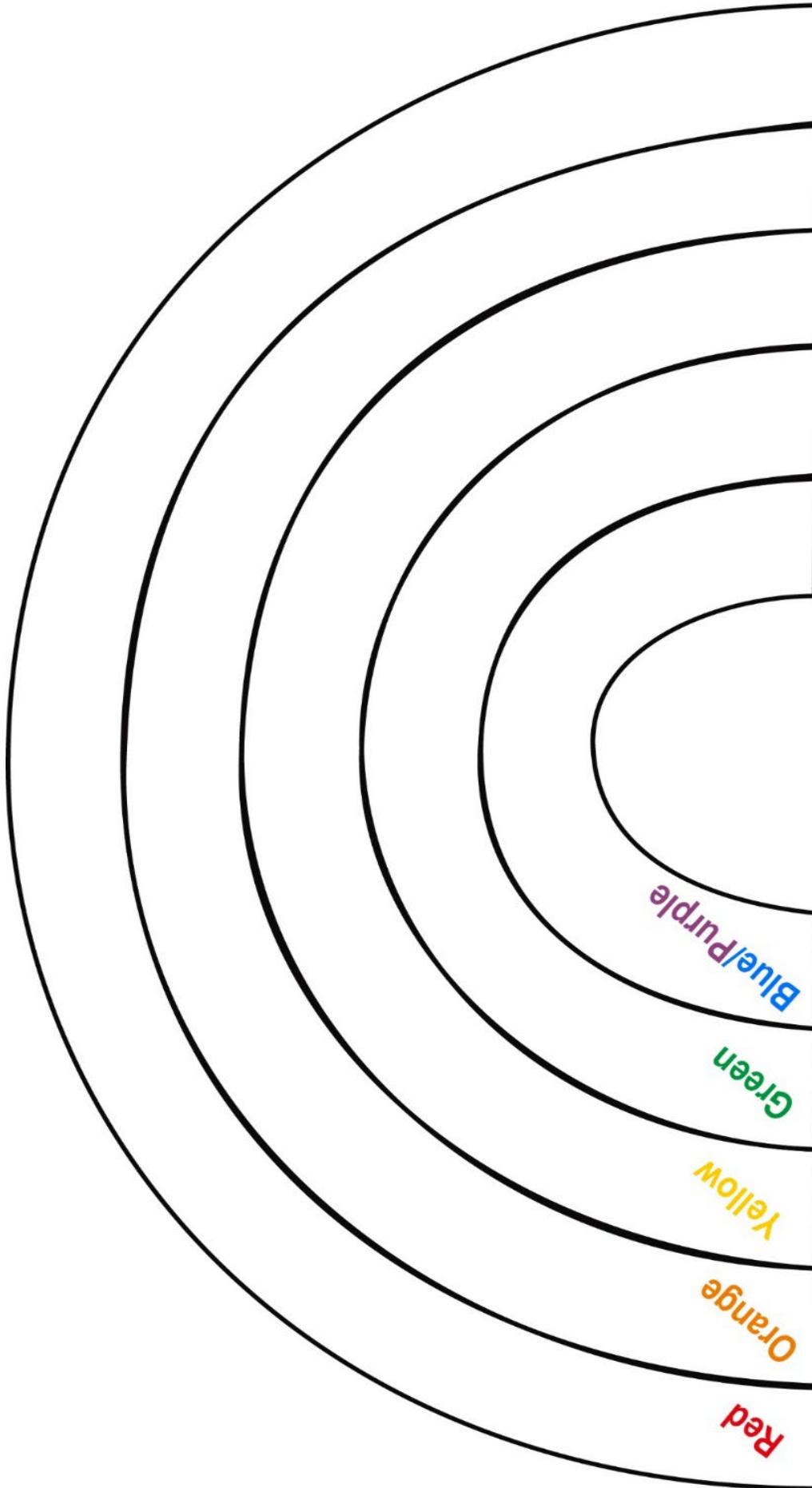
- *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*
- *You might also ask additional questions like, where could you buy peppers?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.









**Make on flipchart paper or a reusable  
felt version on poster board.**

## Additional Materials

### Physical Activity

“Fruit and Veggie Yoga” in “Brain Breaks” ([page 24](#)) or the “Chile Pepper Pete” book (act out the sports for each pepper on the back page.)

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Peppers

- Peppers can grow in Iowa.
- The variety and stage of ripeness determine the flavor and color of the pepper.
- As bell peppers age, they become sweeter and milder. Most peppers are harvested when they are green (immature). Most but not all green peppers will turn yellow to red over time. A red pepper is a mature green pepper.
- Select a pepper that has firm skin and is heavy for its size. The stem should be fresh and green.
- Take out the seeds before eating.

### Facts About Peppers

- Peppers originated in Central and South America.
- California and Florida grow 80% of the bell peppers in the United States.
- Christopher Columbus discovered peppers in the West Indies and thought they were spices. He brought them back to Europe.
- Peppers have two broad categories: (1) hot or chili peppers, and (2) sweet or bell peppers.

### Health Connection

- Peppers are high in Vitamin C, which helps fight off germs and heal cuts and wounds (Reinforce with defense shield by crossing arms).
- Peppers are a good source of Vitamin A. (Reinforce healthy eyes with super goggles).

### References and Resources

<https://spendsmart.extension.iastate.edu/produce-item/peppers/>

<https://www.fns.usda.gov/tn/discover-myplate-emergent-reader-mini-books>

<https://fruitsandveggies.org/fruits-and-veggies/bell-peppers/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/bell-peppers>

This institution is an equal opportunity provider.  
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# Oranges/Clementines

**GRADE**  
**K-1**

**Month:** March

**Time Required:** 30 minutes

**Alternative Tastings:** Grapefruit, Blood Orange, Lemon/Lime

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to identify vitamin C as contained in oranges.
- Students will be able to describe how oranges grow on trees.

## Materials

- Oranges or clementines
- Napkins

## Preparation

- If serving oranges, wash and pre-cut into quarters (or cut during the lesson if time permits) and store in food storage container or bag. May serve a whole clementine if preferred.

## Recommended Books

“An Orange in January” by Dianna Hutts Aston  
 “Orange, Pear, Apple Bear” by Emily Gravett  
 “The Very Hungry Caterpillar” by Eric Carle  
 “Oranges (What’s for Lunch)” by Claire Llewellyn  
 “Oranges on Golden Mountain” by Elizabeth Partridge

## Standards Connection

This lesson supports the following Iowa Core standards.

**Health Education**  
[Standards 1, 2, 3, 4, 5, 7, 8](#)

**Science**  
 Kindergarten - [K-LS1-1](#).  
 LS1.C: What animals (including humans) need to survive

First grade - [1-LS1-1](#).  
 LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: What people need to survive (K) and plant parts (1<sup>st</sup>)

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day’s lesson.*

### 2. Engage Activity: 6 minutes

*The “Engage Activity” section has two purposes: 1) to activate students’ prior knowledge and 2) to engage every student.*

Gather students in a large circle. *Today, we’re going to learn about and taste a fruit that helps fight off sickness. But first I want to know, who takes care of you when you are sick? It might be grandparents, aunts/uncles, neighbors, parents, siblings, friends, doctors, nurses. Think of someone in your head, and stand up when I call that person...* One by one, share examples. Ask several students to share examples of how they are taken care of by the community member(s) they acknowledge as they stand and sit. After you have run through the list, ask “*did we miss anyone?*” to see if students have any additions.

*Thank you all for sharing. Isn’t it nice to know we have friends and family who help take care of us!*

## Explore

### 3. Experiential Learning: 10 minutes

*This is a time for students to familiarize themselves with what you’ll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Seat students (opportunity for 3 deep breaths).

*Just like our friends and family members help take care of us when we’re sick, so do fruits like oranges. Oranges contain vitamin C. Note vocabulary word: vitamin C. Define, write out, and repeat “vitamin C.” Vitamins, like vitamin C, help our bodies fight off sickness and keep us feeling healthy. Oranges contain what vitamin? (choral response: vitamin C)*

*Oranges grow on trees. Think of another fruit that grows on a tree. Say it on the count of three, 1-2-3 (choral response- all students answer). Listen for answers, and affirm, Yes, fruits like apples, pears, lemons and limes also contain seeds and grow on trees. We’re going to watch a short video that shows us oranges growing on trees in Florida.*

Share and narrate [pieces of this video](#) that shows oranges growing on trees (no audio required).

- Note oranges growing on trees in clusters.
- Note oranges attached by the stem to the tree.
- Note orange peel around the fruit: at 3:06, an orange is harvested and cut, showing the peel and segments of the orange on the inside.

#### Physical Activity

*Let’s all stand up and practice balancing like a tall orange tree.* Lead students through ‘tree pose,’ taking deep breaths and balancing on one leg at a time. Grow strong branches up into the air and blow in the wind, and get heavy with oranges. Switch legs. Play “[Yogi Says](#)” in “[Brain Breaks](#)” (page 22) for several minutes.

With teacher or student helpers, pass orange sections or clementines. Explain to students, *we’re going to use our senses to explore the fruit today before we taste it. We’re going to take a really long time to eat it because we’re going to observe everything we can about the oranges using our 5 senses.* Lead students through 5 senses observation.

## Explore (cont'd)

**Touch:** Students can close their eyes and feel the orange with their fingers. What does it feel like? How does the peel feel different from the inside?

**See:** Have students carefully examine the orange, the outside and the inside. What details do they see? Are there any seeds? Can they see where the orange was once attached to the tree?

**Smell:** Have students bring the orange to their noses and inhale. Ask them to describe the smell.

**Hear:** Using their fingers, have students break the orange into smaller segments. Everyone should be very quiet to listen for any sounds.

### 4. Tasting Activity: 3 minutes

*The “Tasting Activity” section is when students get to try the fruit or vegetable. Don’t forget to review your food tasting norms (for example, “don’t yuck my yum”).*

Be sure to review your brave tasting rules (for example, don’t yuck my yum, we all try together, etc.)

Invite the students to taste the orange.

## Reflect

### 5. Voting Activity: 3 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the orange, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 6 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they’ve learned or tried in your lesson. This is an excellent place for students to practice the “Asking Discussion.”*

#### Reflection questions:

- *Will someone share what they liked or loved about the orange?* Select a couple students to share.
- *Will someone share what they would change about the orange?* Select a couple students to share.
- Using choral response:
  - *Where do oranges grow?* (on trees)
  - *What vitamin is inside oranges that keeps us healthy?* (vitamin C)
- *Raise your hand if you’re excited to go home and tell your family about tasting oranges.*
- *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy oranges?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.



## Additional Materials

### Physical Activity

Map Activity: Look at a map of the U.S. and identify the main citrus producing states: Florida, California, Arizona and Texas. Count how many states away from Iowa each state is and perform that many repetitions of each exercise (e.g., Florida is six states away from Iowa, so do six jumping jacks). Exercise ideas include toe touches, jump in place, march and touch opposite knee to elbow, and squats. Repeat with different exercises for each state.

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Citrus Fruits

- Citrus grows in a tropical or subtropical environment. Citrus is an important industry in Florida, California, Arizona and Texas. In the U.S., Florida produces the most oranges and grapefruit. California produces the most lemons and tangerines.
- The complete citrus fruits list is a long one and includes oranges, lemons, limes, mandarins, clementines, tangerines, grapefruits, kumquats, minneola tangelos, pomelos, oroblanco, and ugli.
- Unlike many fruits, citrus does not ripen after it has been picked from the tree.
- The United States ranks third in citrus production worldwide.
- Orange trees are the most common fruit tree in the world.
- Navels and Valencia are the most popular oranges in California. They have a thicker skin and less juice than the ones grown in Florida due to drier conditions and cooler nights.
- Clementines are tiny versions of regular oranges. Mandarin oranges are sweeter and are often canned. If they are canned in syrup they have added sugar.

### Facts About Citrus Fruits

- About 90% of Florida's citrus fruit is produced into orange and grapefruit juice (Visual suggestion: Have a bag of 10 oranges and take one out to show percentage that is used for juice).
- Limes were used in 1493 by Christopher Columbus to prevent scurvy (a disease from not eating enough Vitamin C).
- Orange is the 3rd most popular flavor worldwide after chocolate and vanilla.
- Orange trees are very fragrant in full bloom because the leaf, flower and fruit all grow at the same time (show photo of orange trees).

### Health Connection

- Citrus foods are high in Vitamin C. Vitamin C helps our bodies fight off infections and heal wounds. (Put up your defense shield to fight off the germs.)
- Citrus foods are a good source of folate which is needed to grow and develop. (Stand up tall to show you are growing and point to your head to show you are getting smart!)
- Citrus is a good source of fiber to help in digestion and to help us feel full longer. (Rub your tummies to show fiber is good for you!)

### References and Resources

<https://www.floridacitrus.org/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/oranges>

This institution is an equal opportunity provider.  
This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP. It was developed by the Iowa Department of Public Health in partnership with the Iowa Department of Human Services. August 2021





# Asparagus

**GRADE**  
**K-1**

**Month: April**

**Time Required: 30 minutes**

**Alternative Tastings: Celery, Rhubarb**

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to define and give examples of “local.”
- Students will be able to compare local fruits and vegetables.

## Materials

- |   |  |
|---|--|
| <input type="checkbox"/> 2-3 printed copies of Food Miles Activity Cards (attached: need 1 per student) | <input type="checkbox"/> Water bottle with water                         |
| <input type="checkbox"/> Picture of asparagus stalk and plant   | <input type="checkbox"/> Rags  |
| <input type="checkbox"/> Cooler   | <input type="checkbox"/> Food storage bags                               |
| <input type="checkbox"/> Electric skillet   | <input type="checkbox"/> Tasting supplies (plates, napkins, etc.)        |
| <input type="checkbox"/> Plastic tote (to transport electric skillet)                                   | <input type="checkbox"/> Asparagus for cooking (depending on class size) |
| <input type="checkbox"/> Spatula  | <input type="checkbox"/> Olive oil                                       |
| <input type="checkbox"/> Power strip (with long cord)   | <input type="checkbox"/> Salt  |
|   | <input type="checkbox"/> Pepper  |

## Preparation

- Food preparation:
  - Wash asparagus and cut or snap off the bottom of each stalk
  - Portion asparagus into food storage bags (one per lesson)
  - Add olive oil and salt and pepper to the bag
- Print and cut (perhaps laminate) 2-3 copies of attached Food Miles Activity cards

## Standards Connection

This lesson supports the following Iowa Core standards.

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-ESS3-1](#). ESS3.A Natural resources

First grade - [1-LS1-1](#)  
LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Relationships of plants needs and the places they live (K) & plant parts (1<sup>st</sup>)

## Recommended Books

“Up, Down, and Around” by Katherine Ayres

“The Garden Surprise” by Zoe Hall

“Inch by Inch: The Garden Song” by David Mallett

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

\*You may want to preheat your electric skillet for the cooking activity and alert students to the hot skillet. Preheat to medium, depending on the skillet.

### 2. Engage Activity: 6 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

Gather students in a large circle. *In our town of (\*community name\*), there are lots of places nearby that we visit by car, by bus, by bike, by walking.* Educator can share a personal example of a place they like to visit and how they get there.

Think-Pair-Share: *What are some places you like to visit in your neighborhood or town? Do you go to your local library, park, gas station, school, splash pad, etc.?*

- *Think to yourself quietly.* Have students close their eyes, put their fingers to their temples, and think real hard.
- Then, have students turn to a partner and share their favorite local places.
- After a couple minutes, bring the class back together and select students to share out. The educator can get students' attention with a special word (perhaps “asparagus” or a clap back). If you use “pick-a-stick,” this is a good way to randomly select students to share.
- Ask students how they get to their favorite places as they share aloud.

Thank students for sharing, and introduce a new vocabulary word: **local**. Write “local” on the board and repeat together. *All of your favorite places are called “local” because they're close to where you live. For example, the park next to your house would be called your “local park.”* Site places that students mentioned, and explain how they are local.

*We can also eat **local food**, meaning food that grows in gardens or farms close to where we live.*

## Explore

### 3. Experiential Learning: 12 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

*Our tasting today is a vegetable called asparagus. Asparagus can be **local**, because it can grow here in Iowa. Iowa's soil, water, temperatures and sunlight are just right for asparagus to grow, and it is often harvested in the spring.* Show a picture of an asparagus plant. *Asparagus is a stem that moves nutrients from the roots throughout the rest of the plant.* If raw asparagus is available, encourage children to look closely at the bottom of the asparagus spear so they can see the little holes that carry water and nutrients to the plant.

Show the bag of prepared asparagus stems and explain how you'll be cooking them. Before you add the asparagus to the preheated electric skillet, ask students to listen very carefully for the “sizzle” noises. Add the asparagus to the skillet. Leave uncovered. Stir occasionally. Cook for 8 minutes or until tender.

## Explore (cont'd)

**Physical activity:** While the asparagus is cooking, gather students in a large circle for a food matching game.

- Pass out food cards to all students (you will only use the front of the cards for this activity: the image of a fruit or vegetable and the words “Local to Iowa” or “Not Local to Iowa.”)
- With music playing, students will move around the room to find different partners based on the prompts below. When the music stops, partners will discuss their cards with one another. Option: vary how students move around the room to increase physical activity, such as walk, hop, high-knees.
- Round 1: Find a friend who has the same card as you.
- Round 2: Look at your card. Is your card labeled “local to Iowa” or “not local to Iowa”? Find a friend who has a card with the same label.
- Round 3: Find a friend who has a fruit or vegetable of the same color as yours.

Play music each round to find new partners. Repeat until desired time.

### 4. Tasting Activity: 3 minutes

*The “Tasting Activity” section is when students get to try the fruit or vegetable. Don’t forget to review your food tasting norms (for example, “don’t yuck my yum”).*

Before you pass out any samples, be sure to review your brave tasting rules (for example, don’t yuck my yum, we all try together, etc.). As students receive their samples, ask them to use their senses while they wait. Invite students to taste asparagus.

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the asparagus, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they’ve learned or tried in your lesson. This is an excellent place for students to practice the “Asking Discussion.”*




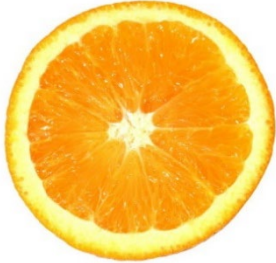


Reflection questions:

- What is something you remember about asparagus?
- *Will someone share what they liked or loved about the asparagus?* Select a couple students to share.
- *Will someone share what they would change about the asparagus?* Select a couple students to share.
- *Name a fruit or vegetable that is local to us because it grows in Iowa.*
- *Name a fruit or vegetable this is not local to us because it cannot grow in Iowa.*
- *Asparagus is what part of a plant? (stem)*
- *Raise your hand if you’re excited to go home and tell your family about tasting asparagus.*
- *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy asparagus?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

# Food Miles Activity Cards

Instructions for Grades K-1: For Grades K-1, only use the front of the cards for this activity.

<p><b><u>Asparagus</u></b></p>  <p><b>Local to Iowa</b></p>	<p>Asparagus grows <b><u>number of</u></b> miles away from <u>name of PABS</u> <u>school community</u> at <u>name of farm or town.</u></p>	<p><b><u>Banana</u></b></p>  <p><b>Not Local to Iowa</b></p>	<p>Bananas grow <b>3,000 miles</b> away from <u>name of PABS</u> <u>school community</u> in Costa Rica.</p>
<p><b><u>Apple</u></b></p>  <p><b>Local to Iowa</b></p>	<p>Apples grow _____ <b>miles</b> away from <u>name of PABS</u> <u>school community</u> at <u>name of farm or town.</u></p>	<p><b><u>Orange</u></b></p>  <p><b>Not Local to Iowa</b></p>	<p>Oranges grow <b>1,000 miles</b> away from <u>name of PABS</u> <u>school community</u> in Florida.</p>
<p><b><u>Cabbage</u></b></p>  <p><b>Local to Iowa</b></p>	<p>Cabbage grows _____ <b>miles</b> away from <u>name of PABS</u> <u>school community</u> at <u>name of farm or town.</u></p>	<p><b><u>Pineapple</u></b></p>  <p><b>Not Local to Iowa</b></p>	<p>Pineapples grow <b>4,000 miles</b> away from <u>name of PABS</u> <u>school community</u> in Hawaii.</p>

**Broccoli**



Broccoli grows \_\_\_\_\_ miles away from name of PABS school community at name of farm or town.

**Local to Iowa**

**Watermelon**



Watermelon grows \_\_\_\_\_ miles away from name of PABS school community at name of farm or town.

**Local to Iowa**

**Carrot**



Carrots grow \_\_\_\_\_ miles away from name of PABS school community at name of farm or town.

**Local to Iowa**

**Lemon**



Lemons grow **1,500 miles** away from name of PABS school community in Arizona.

**Not Local to Iowa**

**Beet**



Beets grow \_\_\_\_\_ miles away from name of PABS school community at name of farm or town.

**Local to Iowa**

**Green Bean**



Green beans grow \_\_\_\_\_ miles away from name of PABS school community at name of farm or town.

**Local to Iowa**







## Additional Materials

### Physical Activity

[“Exercise Your Name”](#) (page 12) in [“Brain Breaks”](#) (consider spelling “local” or “asparagus”)

More ideas for physical activity are available at <https://hhs.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Asparagus

- Asparagus grows in Iowa in the spring.
- Asparagus is a perennial plant (meaning it grows back year after year) member of the lily family.
- The plant can grow for 15 years and can be harvested after three years.
- After two to three months of harvesting, the plant looks like a fern and then goes to a dormant stage.

### Facts About Asparagus

- Asparagus is believed to have originated in Greece 2,500 years ago.
- The name asparagus is from a Greek word meaning short or sprout.
- A spear can grow 10 inches in 24 hours (demonstrate with a ruler).
- There are green, white and purple varieties. The green variety is the most popular.

### Health Connection

- Good source of Vitamin C, to keep students healthy and to heal cuts and scrapes (cross arms to reinforce the super defense shield)
- Good source of Vitamin A, to help our eyes, especially our night vision (reinforce with super goggles on the eyes)

### References and Resources

<https://spendsmart.extension.iastate.edu/produce-item/asparagus/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/asparagus>

<http://www.iowaagriculture.gov/AgDiversification/pdf/asparagusbrochure3.pdf>

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# Strawberry

**GRADE**  
**K-1**

**Month:** May

**Time Required:** 30 minutes

**Alternative Tastings:** Blueberry, Raspberry, Blackberry

## Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

## Lesson Objectives

- Students will be able to describe the process of ripening.
- Students will be able to identify seeds on the outside of strawberries.

## Materials

- Image of labeled PABS tastings (attached)
- Fresh strawberries, 1 per student
- Napkins
- Hand sanitizer

## Preparation

- Wash the strawberries before the lesson.
- Print large cards or sheets of paper showing labeled PABS tastings, or use electronic version.

## Recommended Books

“The Little Mouse, the Red Ripe Strawberry, and the Big Hungry Bear” by Don Wood

“Gabe’s Grocery List” by Heidi Shelton Jenck

“From Seed to Plant” by Gail Gibbons

“Spring is for Strawberries” by Katherine Pryor

## Standards Connection

### Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

### Science

Kindergarten - [K-LS1-1](#). Patterns

First grade - [1-LS1-1](#).  
LS1.A: Structure and function

## Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science connection: Observing plant patterns (K) & plant parts (1<sup>st</sup>)

## Engage

### 1. Introduction: 2 minutes

*The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.*

### 2. Engage Activity: 8 minutes

*The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.*

Seat students in a half-circle (so they can see the board). *This year in Pick A Better Snack, we've learned about and tasted many fruits and vegetables. You've been brave tasters and practiced trying foods, like...* (Using images and labels on cards or by doc-camera, review the names of all 7-8 PABS tastings so far as a class).

*Physical Activity:* *Let's do an activity to see how our taste buds have grown and changed this year. I'm going to say a sentence, and when you agree, you will show us by doing a double thumbs-up jump, then freeze (use any physical activity of choice). If you do not agree, do not jump. For example, jump if you agree - I am your class' Pick A Better Snack teacher (students jump). Great! OK, jump if you agree....*

- *I tried a new food this year.*
- *I liked a food that I didn't like before.*
- *I learned something new about how fruits and veggies grow.*
- *I had fun cooking and tasting foods with my friends.*
- *My favorite vegetables were....(point to and read names of vegetables on doc-camera)*
  - *Jicama*
  - *Broccoli/Cauliflower*
  - *Peppers*
  - *Asparagus*
- *My favorite fruits were....(point to and read names of fruits on doc-camera)*
  - *Cantaloupe*
  - *Cranberries*
  - *Mango*
  - *Oranges/Clementines*
- *I am a brave taster.*

*Thank you for sharing! You and your taste buds have grown and changed this year in (kindergarten or first grade). Today we are going to taste a fruit that grows and changes before we eat it.*

## Explore

### 3. Experiential Learning: 10 minutes

*This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.*

Seat students (opportunity for 3 deep breaths). *When food is growing and changing, it is **ripening**.* Repeat, write, and define new vocab word: **ripe**. *We can use our senses to observe food becoming ripe - it changes color, it feels softer, and it tastes and smells sweeter. For our tasting today, we're going to try a fruit called a strawberry. Let's watch a video of a strawberry growing ([link to 15 second time lapse video](#)).* Pause the video to point out parts of the strawberry plant. *How did the strawberry change in the video? Did it get bigger or smaller? How did the color of the strawberry change? Watch again, narrating as the strawberries become more **ripe**.* Explain that fruits often change colors to show us when they are ready to eat. Option: ask students to give a thumbs-up when students think the strawberry is ripe and ready to eat.

With teacher or student helpers, pass out strawberries to all students. Explain to students, *we're going to use our 5 senses to observe the fruit today before we taste it.* Lead students through 5 senses observation.

**Touch:** Students can close their eyes and feel the strawberry with their fingers. What does it feel like? Bumpy, smooth, hard or soft? How does the bottom feel different from the top?

**See:** Have students carefully examine the strawberry, looking very closely at the outside and the inside. Can they see where the strawberry was once attached to the plant? What details do they see?

- Observe the seeds! *Strawberry seeds grow on the outside of the fruit. Most other fruits grow their seeds on the inside. Can you count how many seeds are on the outside of the strawberry?*

**Smell:** Have students bring the strawberry to their noses and inhale. Ask them to describe the smell.

### 4. Tasting Activity: 3 minutes

*The "Tasting Activity" section is when students get to try the fruit or vegetable. Don't forget to review your food tasting norms (for example, "don't yuck my yum", we all try together, etc.).*

Demonstrate how students can hold the green top of the strawberry like a handle, and prepare to take a bite!

**Taste/Hear:** Everyone should be very quiet to listen for any sounds. Students are invited to taste the strawberry.

## Reflect

### 5. Voting Activity: 2 minutes

*This is a time for students to give their opinion on what they tried!*

As students taste the strawberry, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

## Reflect (cont'd)

### 6. Reflection: 5 minutes

*Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they've learned or tried in your lesson. This is an excellent place for students to practice the "Asking Discussion."*

#### Choral Response:

*I'm going to ask a question and you're going to quietly think to yourself. When I say the magic word, "strawberry," you can say your answer aloud. Let's practice...*

- What month is it? (May)*
- Whose class am I in?*
- What food did we try today? (Strawberries)*
- Foods grow and change from unripe to... (Ripe)*
- Do strawberries grow seeds on the inside or the outside? (Outside)*

#### Asking Discussion:

*Raise your hand if you're excited to go home and tell your family about tasting strawberries.*

- Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*
- You might also ask additional questions like, where could you buy strawberries?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

# Pick A Better Snack Vegetables

**JICAMA**



**BROCCOLI/  
CAULIFLOWER**



**PEPPERS**



**ASPARAGUS**





# Pick A Better Snack Fruits

**CRANBERRIES**



**MANGO**



**CANTALOUPE**



**ORANGE/  
CLEMENTINE**



## Additional Materials

### Physical Activity

[“Spring into Spring”](#) from [“Get Movin’ Activity Breaks”](#) (page 68)

More ideas for physical activity are available at <https://hhs.iowa.gov/inn/play-your-way/brain-breaks>.

### What You Need to Know About Strawberries

- Strawberries are a fruit; often the first fruit to ripen in the spring.
- Strawberries grow in Iowa.
- Strawberries are a small, low growing perennial (meaning it comes back each year) with “runners” that take root to make new plants.
- After the strawberry plant flowers, bees pollinate the flower to make the fruit. It usually takes 30 days for the flower to develop the fruit, which starts white, then turns red.
- ½ cup of sliced strawberries = 4 large strawberries

### Facts About Strawberries

- The seeds - about 200 - are on the outside of this fruit.
- Strawberry is the most popular berry in the United States.
- California grows 83% of the strawberries in the United States.

### Health Connection

- High in Vitamin C, to fight off germs and heal cuts and wounds (reinforce with defense shield by crossing arms)
- Good source of fiber, to help you with digestion and to help you feel full longer.

### References and Resources

<https://spendsmart.extension.iastate.edu/produce-item/berries-strawberries-blueberries-raspberries/>

<https://snaped.fns.usda.gov/seasonal-produce-guide/strawberries>

[http://www.californiastrawberries.com/health\\_and\\_nutrition/whats\\_in\\_a\\_strawberry](http://www.californiastrawberries.com/health_and_nutrition/whats_in_a_strawberry)

<http://www.iowaagriculture.gov/AgDiversification/pdf/FINAL3281IowaFVmagnet.pdf>

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