Teacher Guide

Harvest of the Month™

GRADE 6

In loving memory of Kathy Streng, whose vision and passion for farm fresh food is evident in the internationally-recognized program she stewarded, Harvest of the Month. May you benefit from her life's work of enjoying a curiosity of, and expressing an appreciation for, the bounty of food that surrounds you.

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Introduction

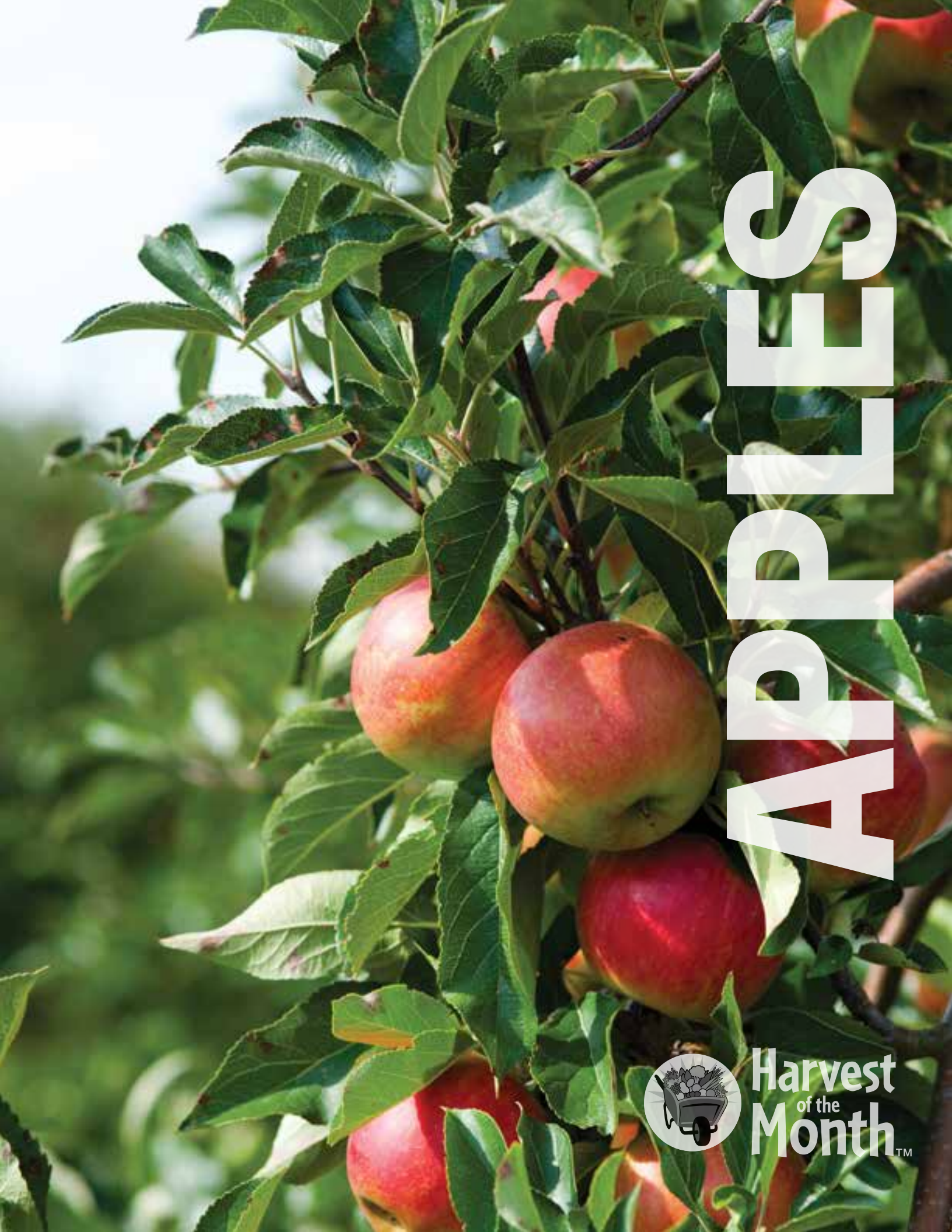
This resource from the California Department of Public Health contains lesson plans and workbook activities that support children and families to increase their:

- Access to fruits and vegetables;
- Participation in physical activity;
- Preferences for fruits and vegetables;
- Consumption of locally grown fruits and vegetables; and
- Familiarity with California-grown fruits and vegetables.

Each lesson has a theme that addresses one of these goals directly while focusing on a California grown fruit or vegetable. The Harvest of the Month produce items are apples, winter squash, broccoli, oranges, carrots, and berries.

The curriculum integrates the Nutrition Competencies from the California Department of Education's Health Standards, as well as the Common Core Language Arts and Math Standards. Each lesson incorporates movement to reinforce the importance of physical activity, to increase student engagement, and to provide a useful context for lesson content.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.



APPLES

Harvest of the Month™

Learning Objectives

- Identify the health benefits of eating fruits and vegetables of various colors.
- Create recipes using apples and other fruits and vegetables of different colors.
- Taste apples and make a plan to eat them.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**

  Increase access to fruits and vegetables through school meal programs, farm-to-school programs, classrooms, school gardens, farmers' markets, grocery stores, community gardens, worksites, and other community-based locations.
- **Health Standard: Nutrition Competency**

  5.6. Identify ways to choose healthy snacks based on current research-based guidelines.
- **Common Core Standards**

  CCSS.ELA-LITERACY.W.6.3. D

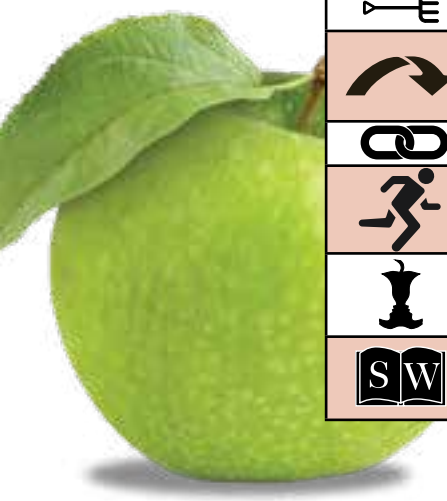
  Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.

  CCSS.ELA-LITERACY.W.6.4

  Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Materials: Harvest of the Month Workbooks, 1 apple slice per student, colored fruit and vegetable sheets (cut into strips), Educator Newsletter, and Family Newsletters *(one copy per student)*. Educator Newsletters are located here: https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

Symbol	Lesson Sections	Topic	Time in Minutes
	Harvest It	Background about the Harvest of the Month	20
	Move It	Physical Activity, Content for Link It	15
	Link It	Guided Practice	15
	Try It	Independent Practice	20
	Digest It	Tasting, Reflection, and Informal Assessment	10
SW	Student Workbook	Text from Student Workbook	n/a



Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage that contains nutrition information about apples.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals aloud with the class:

SW

- Identify the nutrition facts and health benefits of apples.
- Identify the health benefits of different colored fruits and vegetables.
- Write recipes with apples and fruits and vegetables of different colors.
- Taste apples. Make a plan for eating apples.

3. Read the introductory passage with your students:

SW

The Harvest of the Month is apples. Apples make a great snack. You can eat them on their own or serve them with other healthy colorful fruits like bananas, oranges, and grapes. The colors of fruits and vegetables are not only good to look at, but they are also a sign that there are healthy, natural chemicals inside them that are good for your health.

One group of plant colors, or pigments, is the *anthocyanins*. It is a Greek word meaning blue flower. Apples contain *anthocyanins*. Blue and purple fruits and vegetables like blueberries, blackberries, and purple potatoes also contain *anthocyanins*, which studies show reduce damage to cells in the body. Carotenoids are a group of yellow, orange, or red fruit and vegetable pigments. An example is beta-carotene which can be found in oranges, cantaloupes, and carrots. It is important for vision and maintaining healthy bones. Another is lycopene, found in tomatoes, tomato sauce, and tomato juice. Lycopene may help reduce the risk of certain cancers. And finally, lutein, which is found in green leafy vegetables such as spinach and kale, may protect our eyes from light damage.

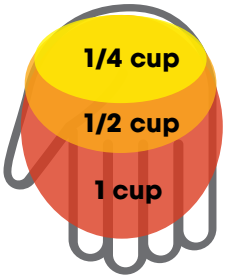
Nutrition Facts

Serving Size:	**1/2 cup (55g)**
Amount Per Serving	
Calories	**28**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 8g	**3%**
Dietary Fiber 1g	**5%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 57mg	2%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Nutrition Facts labels give information about what is inside the food you are eating. Take a look at the Nutrition Facts label for apples. Under “Nutrition Facts," you’ll see the serving size and the associated number of calories. Vitamin and mineral content is listed towards the bottom. Apples contain potassium, vitamin C (not noted on the label), and dietary fiber, all of which have many health benefits. Vitamin C helps repair and maintain bones and teeth and heal wounds. Dietary fiber makes you feel full faster which helps you control your weight. These are just some of the benefits of apples.

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is “low”, while 20% or more is considered “high”. There are nutrients to limit and nutrients to include. See the resource at the end of the section for more information.



5. Draw their attention to the Percent Daily Value (%DV), on the Nutrition Facts label for potassium and fiber. Ask them if a ½ cup serving of apples would be sufficient to supply the recommended DV. [To reach the daily goal, children should eat 2-2½ cups of fruits and vegetables and choose whole grains].

Move It

Activity: Race to Get Locally Grown Fruits and Vegetables

Students will, as part of a game, collect strips with the names of fruits and vegetables they will use for developing recipes in the Link It section.

Teacher will lead the game.

Instructions

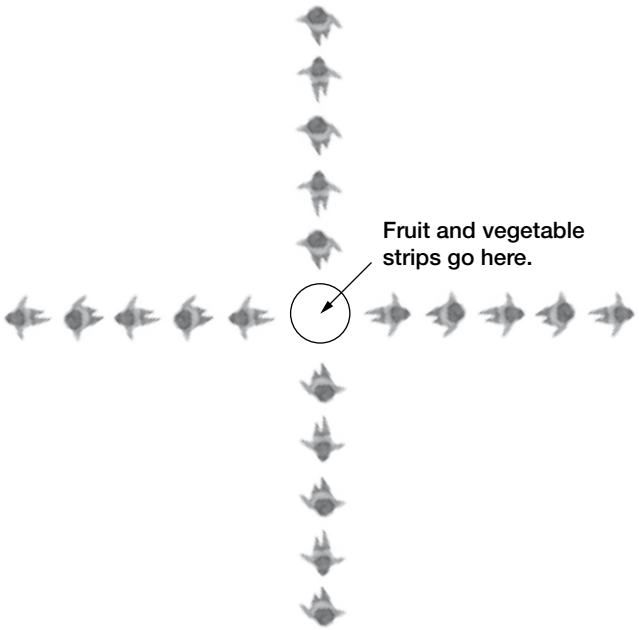
1. Review the text in the workbook:

You should be physically active for at least 60 minutes every day. In the Move It activity you will be physically active, but not for a full 60 minutes. Make sure to be active before and after school, and during recess as well. Movement is an important part of being healthy. You will learn more about physical activity in the next lesson.

2. Tell students they are going to be working together to gather colored strips of paper with the names of different fruits and vegetables on them. They will use those ingredients in recipes that they will create in the Link It section. Say that, as part of a team, they will collect one fruit or vegetable of each color: red, orange, yellow, green, and white. Blue, purple, and black together count as one color.
3. Students can read along in their workbooks:

> SW
> In this activity you will be part of a relay team collecting different colored strips of paper. On each strip, there will be a fruit or vegetable that has that color. Your team must collect exactly one fruit or vegetable of each color. You will use those choices as ingredients in the next activity.
>
> **Directions:** Once you've collected all of your fruits and vegetables, write them in the chart below.

4. Place the colored strips in a bowl, basket, a similar container, or on a mat. Form groups of six students each. If a group is less than six, some students will have to go twice, since they need all six colors. Ask students to form lines radiating around the container. You can increase the level of physical activity by creating greater distances between the groups and the strips.
5. Explain the procedures:
   a. The first member of each group will select one fruit or vegetable and return to their group. Then the next student will go to the container and select a strip.
   b. Each group must select a produce item of each color and not have any duplicate colors. If a group selects two of the same color, they have to put it back and collect a color they are missing.
   c. Each student may take only 3 seconds while standing at the strips to make a selection.
   d. The objective of the game is to collect all six colors of fruits and vegetables in order to make recipes.
6. Increase the level of difficulty and physical activity by calling out different actions, such as hopping, skipping, and walking backward, that they must perform while walking toward and returning from the container.



7. Say that each group must check in with you to verify that they have every color and no duplicates of any one color. Designate one student from each group who will hold onto the strips.
8. Tell the holder of the strips to read and show the strips to their team members. Tell everyone in the group to record the names of the fruits and vegetables in the table in the Move It section of their workbooks.

Link It

Activity: Creating an Apple Recipe and Writing a Description

Students will create a recipe that includes apples and at least one ingredient of each color.

Teacher will model how to create and describe a recipe.

Instructions

1. Ask the students to read the directions in their workbooks:

SW **Directions:** Write an ingredient for an apple recipe list using red apples and at least two ingredients from your list. Your two choices must be colors other than red.

2. Explain that they will be creating a snack recipe containing apples. The recipe must contain red apples and two other fruits or vegetables of different colors from the chart in the Move It Section.
3. Tell them to select their ingredients and record them in the Red Apple Recipe Ingredients table. If time allows, ask students to share their selections.
4. Review the directions for the next activity:

SW **Directions:** Write a snack recipe using your ingredients. Respond to the following questions to write a description of your recipe. Make it sound exciting.

5. Model creating a recipe description. Use the example below or create one of your own.

Give your recipe a name:	I like to call it the Apple Dazzle Salad.
What are the ingredients?	It contains apples, celery, raisins,and oranges.
Why should you eat it?	This apple salad is both healthy and delicious. It contains *anthocyanins* which reduces damage to cells in the body.
When should you eat it?	I recommend eating it at lunch orafter school.
Where should you eat it?	I think you should eat it at school, at home, or at a party.
Who should you eat it with?	With your friends, classmates, or family.
Invite others to try it:	Pack it in your lunch for a tasty lunchtime snack.

6. Ask students to respond to the prompts in the space provided.
7. Tell students to share their recipe description with a neighbor.
8. Call on one or more students to share their recipe description with the class.

Try It

Activity: Writing Recipes and Descriptions

Students will create an ingredient list and recipe descriptions.

Teacher will monitor student progress.

Instructions

1. Ask students to review the directions:

Directions: Create an ingredient list and description for another snack or a salad, sandwich, side dish, or main course. Use two other fruits or vegetables from the ones your team collected. Your two choices must be colors other than green.

2. Ask students to create an ingredients list for a green apple recipe. Tell them to choose at least two other fruits or vegetables of different colors from the strips they collected and write them in the Green Apple Recipe Ingredients table.

3. Then, tell students to read the directions for the next activity:

Directions: Write a recipe using your ingredients. Respond to the following questions to write a description of your recipe. Make it sound exciting.

4. Ask students to complete the recipe description by responding to the prompts in the spaces provided.
5. Monitor student progress.
6. Tell students to share their recipe description with a neighbor.
7. Call on one or more students to share their recipe description with the class.

Digest It

Activity: Tasting Apples and Sharing Recipe Descriptions

Students will try apples and share the recipes they have created.

Teacher will lead the tasting and the sharing of recipes.

Instructions

1. Tell students they will be trying some apples and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen apples in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.

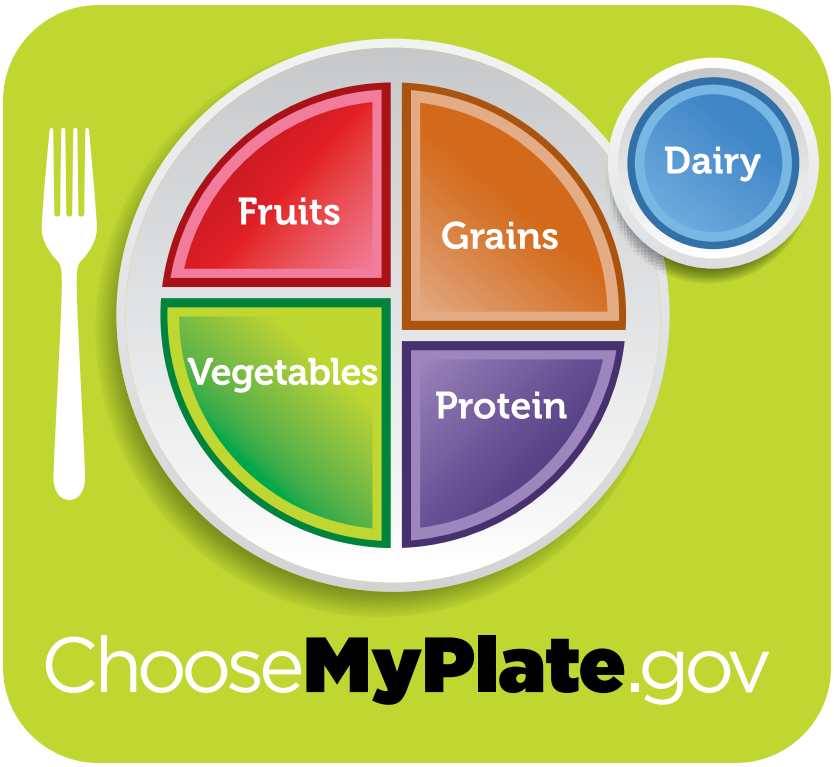
7. Model respectful responses to tasting the apple. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: “The apple is sweet, crunchy, and pale yellow.”
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the apple. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time.”
8. Guide students in a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

SW

- What are some health benefits of eating apples?
- Why is it important to eat fruits and vegetables of a variety of colors?
- Share your green apple recipe.
- Taste apples. Make a plan for eating them in the future.

9. Distribute the Family Newsletter. Discuss a recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
10. Extend student learning by using activities from the Educator Newsletter.

Nutrition Resources and Health Messages



MyPlate

ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.

❶ Start Here →

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

❷ Check Calories

Amount Per Serving
Calories 250 Calories from Fat 110

❸ Limit these Nutrients

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%

❹ Get enough of these Nutrients

Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

❺ Footnote

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Apples

FAMILY NEWSLETTER

The Harvest of the Month featured fruit is apples.

Health and Learning Success Go Hand-in-Hand

Healthy eating can help with your child's success in school. Eating the recommended amount of fruits and vegetables can help kids do better in school. Explore, taste, and learn about eating more fruits and vegetables and being active every day.

Let's Get Physical!

- "Walk to School" Week takes place the first week of October. Join your child's "Walk to School" Week activities.
- If walking to school is not possible, consider other safe places to walk — a park, shopping mall, or around your neighborhood.
- Take a family walk after dinner.

For more physical activity ideas, visit:
https://www.saferoutespartnership.org

Healthy Serving Ideas

- Freeze 100% apple juice in an ice tray or in a paper cup with a popsicle stick.Serve as a snack or dessert.
- Use unsweetened applesauce to make lower fat baked goods. Replace shortening or oils in baking with an equal amount of applesauce plusone-third of the oil called for in the recipe.

For more ideas, visit:
https://cachampionsforchange.cdph.ca.gov/en/Pages/default.aspx

Produce Tips

- Look for apples that are firm and do not have bruises or soft spots.
- Store apples at room temperature for up to one week. Or, refrigerate apples for up to three months. Do not refrigerate apples in closed bags.
- To keep apples from browning, prepare fresh apple dishes just before serving. Or, pour 100% apple juice over fresh apple slices.

Nutrition Facts

Serving Size: 1/2 cup (55g)

Amount Per Serving

Calories 28

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 8g	**3%**
Dietary Fiber 1g	**5%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 57mg	2%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

TUNA APPLE SALAD

Makes 4 servings.
Serving Size: 1 cup
Prep time: 15 minutes

Ingredients:

- 2 (6-ounce) cans water packed tuna, drained
- 2 tablespoons chopped red onion
- 1 medium apple, cored and chopped
- ¼ cup chopped celery
- ¼ cup golden raisins
- 3 tablespoons fat free Italian dressing
- 2 cups salad greens
- 2 medium whole wheat pitas

Preparation

1. In a small bowl, stir tuna, onion, apple, celery, raisins, and two tablespoons of dressing together.
2. In another bowl, toss salad greens with remaining dressing.
3. Cut pitas in half to make 4 pita pockets.
4. Carefully fill pita pockets with equal amounts of tuna and salad greens. Serve immediately.

Nutrition information per serving:
Calories 216, Carbohydrate 27 g, Dietary Fiber 4 g, Protein 25 g, Total Fat 2 g, Saturated Fat 0 g, Trans Fat 0 g, Cholesterol 26 mg, Sodium 544 mg

Adapted from: Everyday Healthy Meals, Network for a Healthy California, 2007.

How Much Do I Need?

- A ½ cup of sliced apples is about one cupped handful. This is about the size of half of a small apple.
- A ½ cup of sliced apples is a source of fiber.
- Fiber helps you feel full, helps keep your blood sugar level normal, and helps to avoid constipation. It is found only in plant foods.
- Fruits and vegetables are an important part of an overall healthy, balanced diet. Go to www.choosemyplate.gov to learn about the other food groups.
- Discuss with your child what your favorite fruits or vegetables are, why you like them, and your favorite ways to eat them.

The amount of fruits and vegetables you need depends on your age, gender, and how active you are every day. Look at the chart below to find out how many cups of fruits and vegetables you and your family need every day.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

*If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

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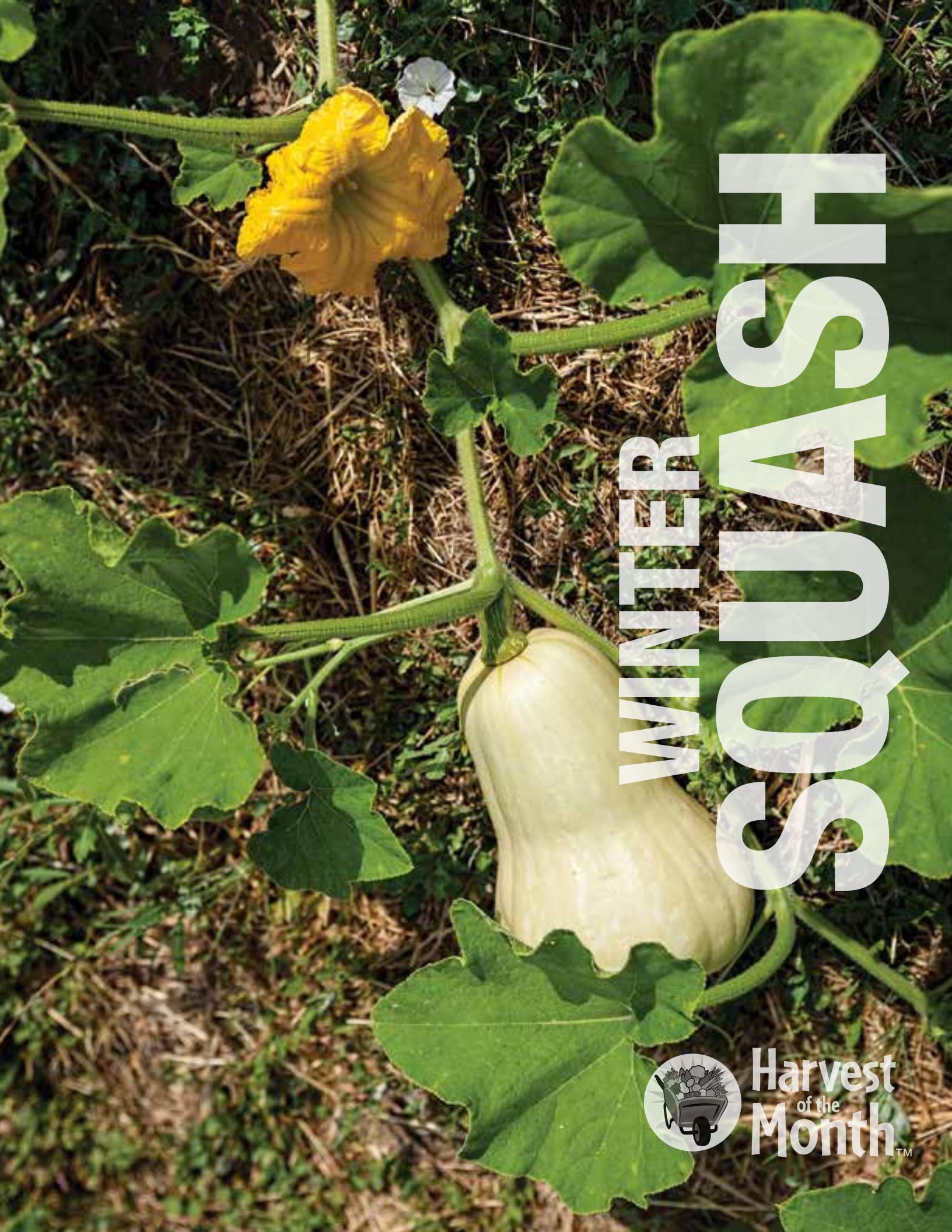
Notes

Harvest of the Month™



WINTER SQUASH

Harvest of the Month™

Learning Objectives

- Identify the health benefits of eating winter squash.
- Determine heart rate while resting and being active.
- Solve unit rate problems that involve eating vegetables and monitoring heart rate.
- Set goals for eating vegetables and being physically active.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**

  Increase students' preference for fruits and vegetables.

  Increase participation in daily physical activity and improve understanding of why it is important to our health.
- **Health Standard: Nutrition Competency**

  1.9N Explain how good health is influenced by healthy eating and being physically active.
- **Common Core Standard**

  CCSS.MATH.CONTENT.6.RP.A.3.B

  Solve unit rate problems including those involving unit pricing and constant speed.

Materials: Harvest of the Month Workbooks, 1 piece of cooked winter squash or 3-5 pumpkin seeds per student, Unit Rate handout, Educator Newsletter, and Family Newsletters *(one copy per student). Support materials are at the end of the lesson.* Educator Newsletters are located here: https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

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	Link It	Guided Practice	15
	Try It	Independent Practice	15
	Digest It	Tasting, Reflection, and Informal Assessment	15
SW	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students Students will read a passage that contains nutrition information about winter squash.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class:
   - Identify the health benefits of eating winter squash.
   - Solve unit rate problems.
   - Set goals for eating vegetables and being physically active.
   - Taste winter squash.
3. Read the introductory passage with your students:

The Harvest of the Month is winter squash. Pumpkin is an example of winter squash. There are other varieties such as Acorn, Butternut, and Spaghetti. The fruit, skin, and seeds can be eaten. Have you ever eaten pumpkins seeds? These are also called *pepitas* in Spanish. You don't have to wait until late October to eat them. They are a very healthy and delicious treat all year long.

Winter squash are not grown or picked in the winter. So how do they get their name? They have a hard shell that protects the fruit and seeds until wintertime. The word squash comes from the Native American word *askutasquash* which means things that may be eaten uncooked. The squash part of the word means "eaten." Pumpkin and other squashes like Acorn and Butternut are native to the Americas. Archaeologists found squash seeds in Mexico used by people 10,000 years ago. Today, California grows more squash than any other state. In 2012, over 300 million pounds of pumpkin and other squash were grown!

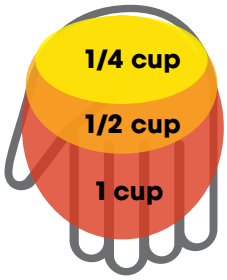
In this lesson, you will be using math skills to find your heart rate and to determine if the recommended intake for fruits and vegetables is being met. Your heart rate, also known as your pulse, is the number of times your heart beats per minute. Eating fruits and vegetables and being physically active every day are important habits that support your well-being. In the Digest It section you will try winter squash and set healthy goals for eating and exercising.

Winter squash contains vitamins, minerals, and other important nutrients. Take a look at the Nutrition Facts label to discover some of the nutrients in winter squash.

Nutrition Facts	
Serving Size:	**1/2 cup (103g)**
Amount Per Serving	
Calories	**57**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 15g	**5%**
Dietary Fiber 5g	**18%**
Total Sugars 0g	
Includes 0g Added Sugars	**0%**
Protein 1g	**2%**
Vitamin D 0mcg	0%
Calcium 65mg	4%
Iron 0.9mg	4%
Potassium 380.7mg	8%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that throughout the week, they should strive for 100% of the Percent Daily Value (%DV) of nutrients listed on the lower third of the Nutrition Facts label. Explain that the %DV is the amount of a nutrient that they should eat each day. DVs are based on a 2,000-calorie diet for adults. Five percent or less of a nutrient is low, while 20% or more is considered high.



5. Draw their attention to the %DV of potassium, calcium and fiber. Ask them if a ½ cup serving of winter squash would be sufficient to supply the recommended daily values and how they would get 100%. [No, a ½ cup serving does not provide the DV of potassium, calcium, or fiber. To meet the requirement, eat a balanced diet of 2½ cups of vegetables a day, 1½ cups of fruit, low-fat dairy, and whole grains.]

Move It

Activity: Taking Your Pulse

Students will learn the importance of exercise and the effect it has on their heart rate.

Teacher will explain the importance of exercise and show students how to find their pulse.

Instructions

1. Ask students to follow along while you read the passage:

SW

Winter squash gives you vital nutrients your body needs. Your heart circulates nutrients through your blood. How often your body does this is called your pulse, or heart rate. What is your pulse when you are resting? Is it any different when you are physically active? Try some vigorous physical activity and find out.

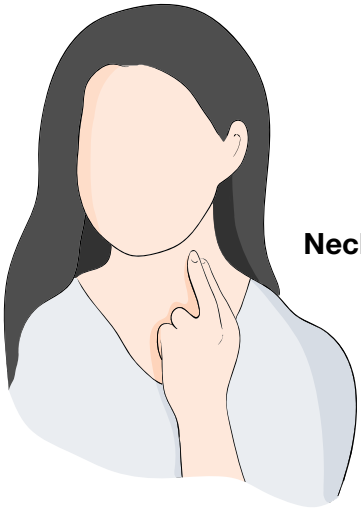
2. Create a chart like the following on the board.

What is physical activity?	What are some examples?	Why is it important?

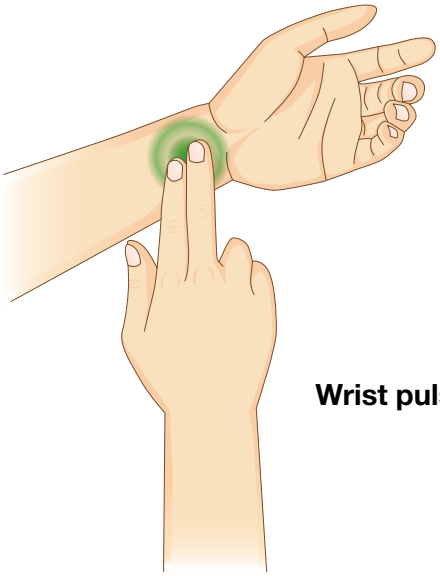
3. Ask students to engage in a Think-Pair-Share activity responding to the prompts:
   - What is exercise?
   - What are some examples?
   - Why is it important?

   First ask students to think about the prompts silently for 30 seconds. Then ask them to tell their thoughts to a classmate. Finally, ask them to share their ideas with the class. Write their ideas on the board.
4. Share these reasons why physical activity is important and add them to the chart:
   - Physical activity strengthens your heart and lungs and the parts of the body they serve. Examples of physical activities that do this include running, jogging and walking at a fast pace.
   - Physical activity reduces your chances for heart disease and heart attacks.
   - Physical activity also helps you maintain a healthy weight.
5. Tell students that when they are physically active, their heart pumps blood through their body at a faster rate to deliver oxygen to their active muscles. Explain that the number of times their heart beats per minute is called their pulse or heart rate.
6. Ask the students to read the directions in their workbook:

SW **Directions** Find your pulse by placing your pointer and middle fingers together on the inside of your opposite wrist. Adjust the position of your fingers until you feel the light pulse. Do this quietly so you and your classmates can concentrate.



Neck pulse



Wrist pulse

7. Model how to find and take a pulse. Place your index and middle fingers together. Press them against the inside of your wrist or along the side of your neck to find your pulse. After 10 seconds, record the number of beats on the board.
8. Direct students to take their own pulse for 10 seconds; keep time for them. Tell them to record the number of beats in the Move It section of their workbook. Explain that they will use that number to help them determine their resting heart rate.
9. Ask students to do the following vigorous physical activities or others of your choosing for 1-2 minutes: jumping jacks, jogging in place, and dancing.
10. Tell them to stop and take their pulse again. Tell them to record the result in their workbook. Ask them what happened to their heart rate when they became physically active.

Link It

Activity: Finding Unit Rate

Students will practice computing a resting heart rate.

Teacher will model computing a resting heart rate and vegetables eaten per day.

Instructions

1. Introduce the idea of unit rate. Use the "Finding Unit Rate" visual aid to guide your instruction.

   From their workbooks:

   A heart rate is an example of a unit rate. A unit rate is a comparison of two units. One of the units must be equal to 1. In the case of your heart rate, the units are beats and minutes. Heart rate looks like this:

$$\frac{\textbf{number of beats}}{\textbf{1 minute}}$$

2. Illustrate how to convert 15 beats per 10 seconds into a unit rate. Multiply your 10-second resting pulse by six. Write your answer as a unit rate with the number of beats over 1 minute. This is the example on the visual aid:

$$\frac{\textbf{15 beats}}{\textbf{10 seconds}} = \frac{\square\ \textbf{beats}}{\textbf{60 seconds}} \qquad \frac{\textbf{15 beats}}{\textbf{10 seconds}} \times \frac{6}{6} = \frac{\textbf{90 beats}}{\textbf{60 seconds}} = \frac{\textbf{90 beats}}{\textbf{1 minute}}$$

3. Direct students to compute their resting heart rate and record it in the Link It section of their workbook. Ask students to share their 10 second rate and their one-minute rate.

4. Demonstrate how unit rate can be used to determine if someone is consuming the recommended amounts of vegetables. Read the passage from the workbook.

> You can find a unit rate that has to do with eating winter squash, too.
>
> SW MyPlate recommends that girls 9-13 years of age eat 2 cups of vegetables each day. Alicia eats 14 cups of winter squash and other vegetables in a week. What is her daily unit rate of eating vegetables?

5. Tell students they will need to know how many days there are in a week and that they will need to divide to solve the problem. Ask them to complete the problem in the Link It section of their workbook.

> SW There are seven days in a week so you will need to divide Alicia's weekly rate by seven and reduce the fraction.

6. Ask them to review the calculations in the Link It section of their workbook. Ask a student to explain their answer or model the following:

$$\frac{\textbf{14 cups of vegetables}}{\textbf{1 week}} \div \frac{\textbf{1 week}}{\textbf{7 days}} = \frac{\textbf{14 cups}}{\textbf{7 days}} = \frac{\textbf{2 cups}}{\textbf{1 day}}$$

7. Ask the class if Alicia is eating the recommended 2 cups of vegetables per day. [Yes]

Try It

Activity: Finding the Unit Rate for Heart Rate and for Vegetable Consumption

Students will find their heart rate and solve health related problems involving unit rate.

Teacher will provide guidance.

Instructions

1. Read the directions in the student workbook aloud:

SW **Directions:** Find your heart rate after physical activity.

$$\frac{\square \text{ beats}}{10 \text{ seconds}} \times \frac{6}{6} = \frac{\square \text{ beats}}{60 \text{ seconds}} \qquad \frac{\square \text{ beats}}{60 \text{ seconds}} = \frac{\square \text{ beats}}{1 \text{ minute}}$$

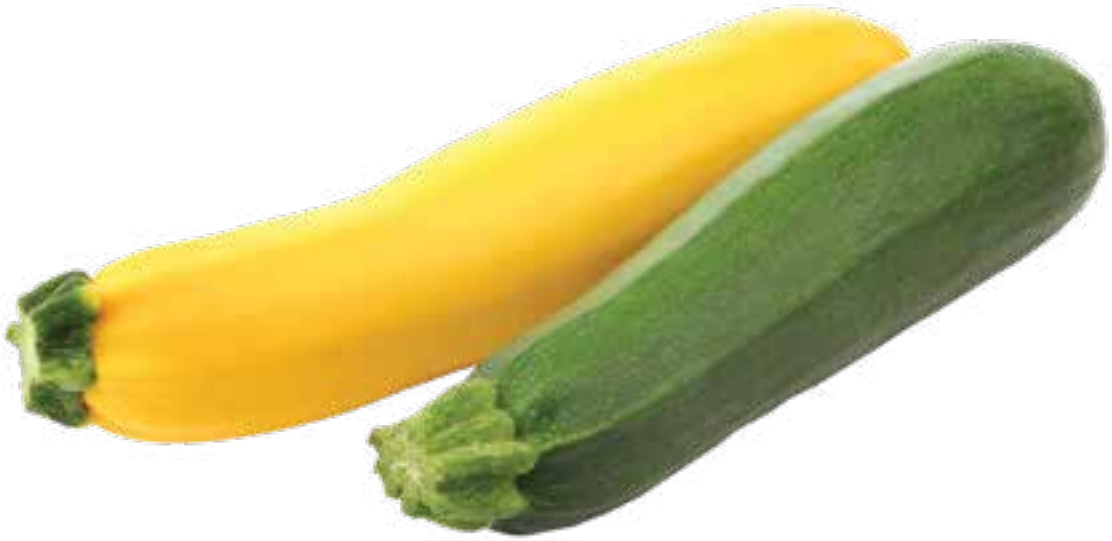
2. Provide guidance as necessary.
3. Read the directions for the next activity:

SW **Directions:** Determine Devon's daily intake of winter squash and other vegetables.

MyPlate recommends that boys 9-13 years of age eat 2 1/2 cups of vegetables each day. Devon eats 17.5 cups of winter squash and other vegetables in a week. What is his daily unit rate of eating vegetables?

4. Provide guidance as necessary.

$$\frac{17.5 \text{ cups of vegetables}}{1 \text{ week}} \div \frac{7}{7} = \frac{2.5 \text{ cups}}{1 \text{ day}}$$



Digest It

Activity: Eating Winter Squash and Reflecting on Learning

Students will eat winter squash and reflect on how much physical activity they engage in and how many cups of vegetables they eat.

Teacher will provide the winter squash tasting and lead a discussion about physical activity and vegetable consumption.

Instructions

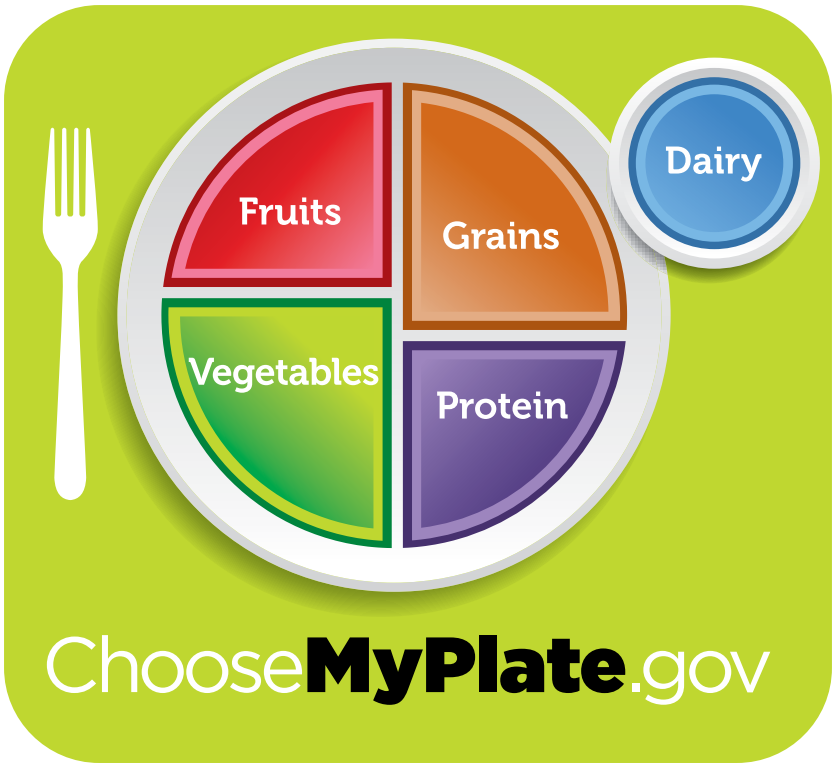
1. Tell students they will be trying winter squash and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen winter squash in the cafeteria, and if they tried it.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the winter squash. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: "The winter squash is sweet, squishy, and bright orange."
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the winter squash. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time."

8. Guide students in a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

- What is a snack you could make with winter squash?
- What is your daily rate of eating vegetables? What is your weekly goal?
- How many minutes per day are you physically active?
- What is your goal for daily physical activity? 60 minutes is recommended.

9. Distribute the Family Newsletter. Discuss the recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
10. Extend learning by using activates from the Educators Newsletter.

Nutrition Resources and Health Messages



MyPlate

ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

❶ Start Here →

❷ Check Calories

❸ Limit these Nutrients

❹ Get enough of these Nutrients

❺ Footnote

❻ Quick Guide to % DV

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving
Calories 250 Calories from Fat 110

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

*** 5% or less is low**

*** 20% or more is high**

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.
4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Unit Rate

A unit rate is a comparison of two measurements shown as a fraction with one of the terms having a value of one.

Speed

$$\frac{\textit{miles}}{\textit{1 hour}} \quad \textbf{55 miles per hour} = \frac{\textit{55 miles}}{\textit{1 hour}}$$

Calculating Heart Rate

$$\frac{\textit{beats}}{\textit{1 minute}} \quad \textbf{72 beats per minute} = \frac{\textit{72 beats}}{\textit{1 minute}}$$

60 seconds = 1 minute

Jayden has a heart rate of 15 beats per 10 seconds.
What is his heart rate in beats per minute?

$$\frac{\textit{15 beats}}{\textit{10 seconds}} = \frac{\square \textit{ beats}}{\textit{60 seconds}}$$

What times 10 equals 60? Or, what is 60 divided by 10?
6

$$\frac{\textit{15 beats}}{\textit{10 seconds}} \times \frac{6}{6} = \frac{\textit{90 beats}}{\textit{60 seconds}} = \frac{\textit{90 beats}}{\textit{1 minute}}$$

Winter Squash

The Harvest of the Month featured fruit is winter squash.

Health and Learning Success Go Hand-in-Hand

Breakfast can give children the nutrients they need to grow healthy. Eating a healthy breakfast also promotes a healthy mind. Encourage your child to eat school breakfast and help put your child on the road to health and learning success.

Produce Tips

- Squash are members of the gourd family. Winter squash have hard shells, inedible skins, and large seeds.
- Choose squash that are firm, heavy for their size, and have dull skins (not shiny). Winter squash should be hard without cracks or soft spots.
- Store uncut winter squash in a dark, cool, dry place. They can keep up to three months.
- Once cut, squash can keep about one week when wrapped and refrigerated.
- Varieties include acorn, banana, butternut, hubbard, kabocha, pumpkin, spaghetti, and turban squash.

For more physical activity ideas, visit:
https://cachampionsforchange.cdph.ca.gov/en/Pages/default.aspx

Healthy Serving Ideas

- Bake, boil, roast, sauté, or microwave winter squash. Use it in stews, soups, salads, dips, breads, and even pies.
- Sample different varieties of winter squash to find out your family's favorite. (See Produce Tips for varieties.)
- Varieties with darker yellow/orange flesh are more nutritious than lighter colors. (Hint: Butternut is more nutritious than spaghetti squash.)

Let's Get Physical!

- Be a role model. Studies show that children who see their parents having fun and being active are more likely to stay active their entire lives.
- Find a local pumpkin farm and take a family walk through the fields.

FAMILY NEWSLETTER

Nutrition Facts

Serving Size: 1/2 cup (103g)

Amount Per Serving

Calories 57

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 15g	**5%**
Dietary Fiber 5g	**18%**
Total Sugars 0g	
Includes 0g Added Sugars	**0%**
Protein 1g	**2%**
Vitamin D 0mcg	0%
Calcium 65mg	4%
Iron 0.9mg	4%
Potassium 380.7mg	8%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

SPICY APPLE-FILLED SQUASH

Makes 4 servings.
1 wedge per serving.
Cook time: 70 minutes

Ingredients:
1 large acorn squash (about 1 pound)
1 cup water
2 teaspoons butter
1 large apple, cored, peeled, chopped
1 tablespoon brown sugar
¼ teaspoon ground cinnamon
⅛ teaspoon ground cloves
⅛ teaspoon nutmeg

1. Preheat oven to 400 F.
2. Cut squash in half and scoop out seeds. Place squash, cut side down, in 13 x 9-inch dish.
3. Add water and bake 35 to 45 minutes or until fork-tender.
4. While squash is baking, cook rest of the ingredients in a saucepan over medium heat for 8 minutes or until apple is crisp-tender.
5. Cut each squash half into two pieces and divide apple mixture equally among squash wedges. Return squash to oven. Bake 10 minutes more. Serve hot.

Nutrition information per serving:
Calories 99, Carbohydrate 21 g, Dietary Fiber 4 g, Protein 1 g, Total Fat 2 g, Saturated Fat 1 g, Trans Fat 0 g, Cholesterol 5 mg, Sodium 18 mg

Adapted from: *Everyday Healthy Meals, Network for a Healthy California,* 2007.

How Much Do I Need?

- A ½ cup of cooked squash is about one cupped handful.
- A ½ cup of winter squash, like butternut, hubbard, and pumpkin, is an excellent source of vitamin A.
- A ½ cup of winter squash, like acorn, butternut, hubbard, and pumpkin, is a good source of fiber and vitamin C.
- A ½ cup of acorn squash provides iron and calcium. spinach and broccoli, some fruits (oranges), dry beans, and liver. Look for whole-grain breads and cereals fortified with folate (folic acid).
- Iron is a mineral that helps move oxygen from the lungs to the rest of the body. It also helps the body fight infections.

The amount of fruits and vegetables you need depends on your age, gender, and physical activity level. It is important to eat a variety of colorful fruits and vegetables every day to get all the nutrients your body needs. Find out how much each person in your family needs.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

*If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

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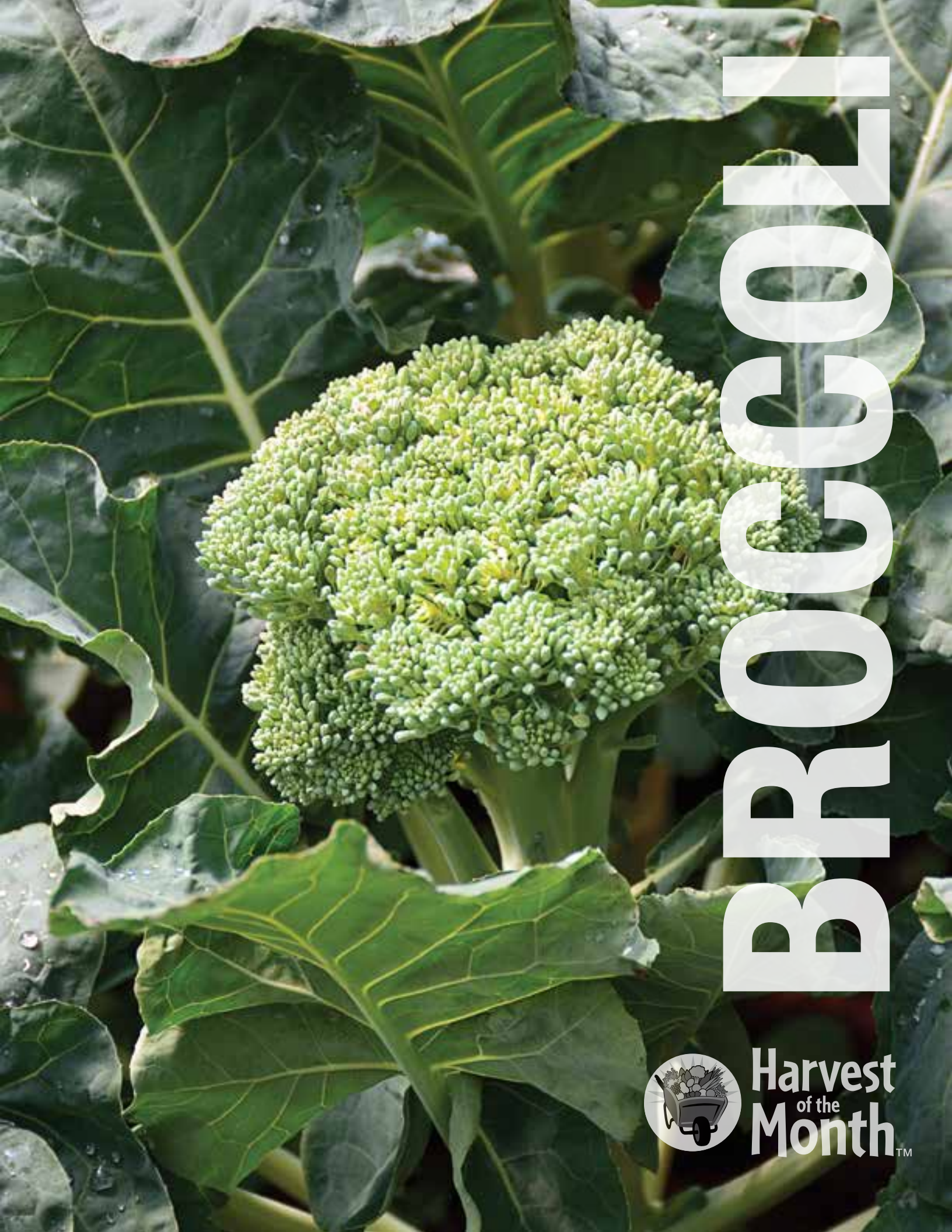
Notes

Harvest of the Month™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Harvest of the Month™

Learning Objectives

- Explore the differences between fruits and vegetables.
- Discover why it is important to eat fruits and vegetables.
- Write a persuasive paragraph and share it with a partner.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase students' preference for fruits and vegetables.
- **Health Standard: Nutrition Competency**
  5.5-6 Use a decision-making process to identify healthy foods for meals and snacks.
- **Common Core Standard**
  CCSS.ELA-LITERACY.W.6.1
  Write arguments to support claims with clear reasons and relevant evidence.

Materials: Harvest of the Month Workbooks, 1 piece of broccoli per student, Think-Pair-Share Graphic Organizer, Educator Newsletter, and Family Newsletters *(one copy per student)*. *Support Materials are at the end of the lesson.* Educator Newsletters are located here: https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

Symbol	Lesson Sections	Topic	Time in Minutes
	Harvest It	Background about the Harvest of the Month	20
	Move It	Physical Activity, Content for Link It	15
	Link It	Guided Practice	15
	Try It	Independent Practice	15
	Digest It	Tasting, Reflection, and Informal Assessment	15
SW	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage that contains nutrition information about broccoli.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class:

SW

- Identify information and nutrition facts about broccoli.
- Describe the differences between fruits and a vegetables.
- Discover why it's important to eat fruits and vegetables.
- Write a paragraph persuading your classmates to eat fruits and vegetables.

3. Read the introductory passage with your students. Students will consider making healthy choices and identify the nutritional benefits of eating broccoli.

SW

The Harvest of the Month is broccoli. Broccoli is a very healthy, versatile vegetable! It can be eaten alone, with a low-fat yogurt dip, or cooked in many different ways. Try it steamed, chopped up in a stir fry, or with pasta. Today you'll use your creativity to make healthy and delicious recipes with broccoli! Some other facts about broccoli:

- The botanical name of broccoli is *Brassica oleracea*.
- Broccoli is a member of the cabbage family.
- Broccoli is a relative to cauliflower.
- California is the largest producer of broccoli in the United States. It produces more than 90% of the nation's broccoli.

Broccoli provides many nutrients:

- Potassium
- Fiber
- Calcium
- Iron

(Continued)

Nutrition Facts	
Serving Size:	**1/2 cup (78g)**
Amount Per Serving	
Calories	**27**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 32mg	**1%**
Total Carbohydrate 6g	**2%**
Dietary Fiber 3g	**11%**
Total Sugars 1g	
Includes 0g Added Sugars	**0%**
Protein 2g	**4%**
Vitamin D 0mcg	0%
Calcium 39mg	4%
Iron 0.54mg	4%
Potassium 229mg	7%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Find these nutrients on the Nutrition Facts label for broccoli. What percent of the Daily Value (%DV) does ½ cup of broccoli provide for each of these nutrients? What percent DV of iron would you get in one cup of broccoli?

It is important to eat healthy foods and avoid foods and beverages that are high in fat and sugar. Fruits and vegetables are a very important part of a healthy diet. According to MyPlate, at the website choosemyplate.gov, half of your plate should be fruits and vegetables. MyPlate is a great source of information for making healthy decisions about what to eat. Broccoli is an excellent vegetable to include on your plate!

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is low, while 20% or more is considered high. Review nutrients to limit [fat, saturated fat, trans fat, cholesterol, sodium, and added sugar.]

5. Draw their attention to the DV on the Nutrition Facts label for calcium and fiber. Ask them if a ½ cup serving of broccoli would be sufficient to supply the DV. [To reach the daily goal, children should eat 2-2 ½ cups of fruits and vegetables and 3 cups of low-fat dairy products.]

Move It

Activity: Is it a Fruit or Veggie?

Students will decide if the named produce is a fruit or vegetable and show their answer with an assigned movement.

Teacher will explain instructions, call out the produce names, and guide a discussion to clarify the difference between fruits and vegetables.

Directions: Your teacher will name a variety of fruits and vegetables. If it is a fruit, you will jump up and down. If it is a vegetable, you will squat down.

After the game is done, review what you have learned. Below, circle whether the produce item is a fruit (F) or vegetable (V).

Instructions

1. Ask the students to review the directions in the Move It section of their workbook. Explain that the class will be expressing their opinion by moving their bodies in particular ways. You will name a food. If they think it is a fruit they will jump up and down, and if they think it is a vegetable they will squat down. If there are any differing views, you will pause for discussion and clarification.
2. Explain that culinary categorization refers to plant parts that are sweet as fruits and those that are savory as vegetables; that is not the scientific definition. Say that scientifically speaking, a fruit is the part of the plant that develops from a flower. It is also the section of the plant that contains the seeds. The other parts of plants that we eat are considered vegetables, including the stems, leaves, roots, and the flower buds. An easy distinction to make is that any plant part we eat that has seeds inside of it is a fruit and everything else is a vegetable.
3. Say that according to the USDA, vegetables are further organized into 5 subgroups based on their nutrient content: dark-green vegetables, starchy vegetables, red and orange vegetables, beans and peas, and other vegetables.
4. Tell students to stand up. Say that for this activity we will use the scientific categorization of the food. Call out the following, and allow time for students to move before answering whether it is a fruit or a vegetable:

   Cherries (fruit), celery (vegetable), onion (vegetable), orange (fruit).
5. Call out the next item, tomato (fruit). Ask the class why a tomato would be classified as a fruit, scientifically speaking. [Seeds].
6. Call out these fruits and veggies: broccoli (vegetable), apricot (fruit), avocado (fruit), carrot (vegetable), and pumpkin (fruit). Solicit suggestions of other fruits and vegetables from the class. Use the scientific distinction between fruits and vegetables discussed above.
7. Instruct students to sit down and complete the Move It section of their workbook to review what they have learned. They will circle whether the produce items listed are fruits or vegetables, and respond to the question “How do you know what you are eating is a fruit or vegetable?” [Fruits have seeds and they develop from the flower of the plant].
8. Explain that when categorizing for nutrition, the nutrient content of the food is used to determine if something is a fruit or a vegetable. That’s why a tomato is sometimes categorized as a fruit (scientific) and sometimes a vegetable (dietary) and an avocado can be a fruit (scientific) or a fat (dietary).

Link It

Activity: Fruit and Vegetable Facts!

Students will learn about the benefits of including many fruits and vegetables in their diet; they will also identify some of their own ideas about why people should eat fruits and vegetables.

Teacher will guide a discussion about the benefits of eating fruits and vegetables and encourage students to brainstorm additional reasons why their classmates should eat lots of fruits and vegetables.

Instructions

1. Tell students they will be learning more about fruits and vegetables. However, first, they will work with a partner to figure out what they already know using a Think-Pair-Share activity.
2. Arrange students into pairs. Pass out the "Think-Pair-Share" graphic organizer. First, they will fill out what they know about fruits and vegetables in the first column titled "What I think…." Then they will take turns sharing ideas with their partner. Each student records the ideas of their partner in the second column, "What my partner thinks…." Then they will decide which two items they want to share with the class and write those items in the third column, "What we will share…."
3. Instruct students to read "Fruit and Vegetable Facts!" in the workbook (as a class or in small groups):

Directions: Read the facts about fruits and vegetables. Then brainstorm other reasons why your classmates should eat broccoli and lots of other vegetables and fruits.

Fruits and Vegetables are an excellent source of nutrients, including:

- Fiber
- Vitamins
- Minerals

The nutrients in fruits and vegetables:

- Support a healthy body and mind
- Boost energy levels
- Promote healthy weight
- Decrease risk of heart disease, some cancers, and type 2 diabetes

4. Guide a discussion about what they read. What new facts did they learn about fruits and vegetables?

5. Read the question in their workbook:

> What are some other reasons your fellow classmates should choose to eat lots of fruits and vegetables?

6. Facilitate student brainstorming and ask students to write their responses in the space provided. Include reasons like "fruit is sweet and tasty," or "lettuce is crunchy and refreshing." Responses don't necessarily need to be science-based.

Try It

Activity: Persuade Me!

Students will use facts that they learned and brainstormed in Link It to write a persuasive paragraph about why their fellow classmates should eat more fruits and vegetables, including broccoli.

Teacher will instruct students to use the reasons they created and facts provided in the workbook to write a persuasive paragraph.

Instructions

1. Read the directions aloud and ask the students to follow along:

> **Directions:** Using the facts provided in the workbook and the ideas you generated, write a paragraph persuading your fellow classmates to eat more fruits and vegetables.

2. Explain to students that they will use the ideas from the Link It section in the workbook to write a paragraph persuading an audience of students to eat more fruits and vegetables. Ask the class to share what matters to them when it comes to eating healthfully and to include their classmates' values in the writing. Tell them:

> **A good paragraph will:**
> - Introduce the main idea
> - Stay focused on the topic
> - Make an effective argument
> - Use proper grammar and punctuation

3. Review with them the sequence provided in the workbook:

> - Introduce the main idea: Your classmates should eat more fruits and vegetables.
> - What are some reasons they should eat more fruits and vegetables, including broccoli?
> - Support your reasons with some facts and examples.
> - Finish your paragraph by restating your main idea.

Digest It

Activity: Broccoli Tasting and Sharing Paragraphs

Students will taste broccoli, share their paragraphs, and reflect on what they have learned.

Teacher will provide the tasting and facilitate students in sharing their persuasive paragraphs.

Instructions

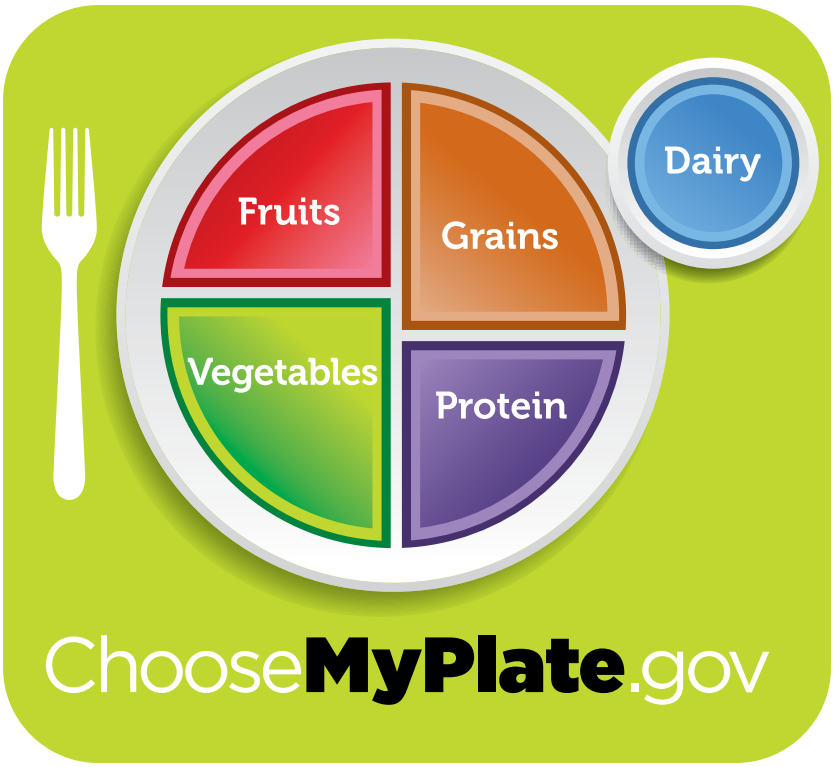
1. Tell students they will be trying some broccoli and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen broccoli in the cafeteria, and if they tried it.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the broccoli. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: "The broccoli is green, crunchy, and bumpy."
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the broccoli. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time."

8. Guide students in a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

- Share your paragraph about why it is important to eat broccoli and other vegetables and fruits.
- Taste broccoli!
- Make a plan for eating broccoli in the future. Share your plan with your classmates.

9. Distribute the Family Newsletter. Discuss the recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
10. Extend student learning by using activities from the Educator Newsletter or by continuing to do research on the benefits of healthy eating at www.choosemyplate.gov.

Nutrition Resources and Health Messages



MyPlate

ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.

❶ Start Here →

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

❷ Check Calories

Amount Per Serving
Calories 250 Calories from Fat 110

❸ Limit these Nutrients

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%

❹ Get enough of these Nutrients

Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

❺ Footnote

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Broccoli

FAMILY NEWSLETTER

The Harvest of the Month featured fruit is broccoli.

Health and Learning Success Go Hand-in-Hand

Children who eat school meals are more likely to eat the recommended amount of fruits and vegetables every day than those who do not. Eating the recommended amount every day can help your child stay healthy and learn better in school. Harvest of the Month helps your family explore, taste, and learn about the importance of eating more fruits and vegetables and being active every day.

Healthy Serving Ideas

- Dice and toss raw broccoli in a salad.
- Pour lemon juice or sprinkle lowfat parmesan cheese over steamed broccoli to add and vary flavor.
- For a healthy snack, chop raw broccoli into pieces and serve with a fat free vegetable dip.
- Add broccoli and other vegetables to soups, pastas, omelets, and casseroles.
- Take your child to the grocery store. Ask your child to help you pick out fruits and vegetables for meals and snacks.
- Pack dried fruit or pre-cut fruits or vegetables in your child's lunch.

Produce Tips

- Look for broccoli with a firm stem and tight, compact florets that are dark green.
- Store broccoli in an open plastic bag in the refrigerator for up to five days.
- Rinse (don't soak) broccoli under cool water just before serving.
- Cook broccoli by steaming, microwaving, or stir-frying. Boiling causes some of the vitamins and minerals to be lost.

Let's Get Physical!

- Get at least 60 minutes of physical activity every day to help keep your heart healthy.
- Start a weekly walking routine with your child, neighbors, and child's friends.
- During TV commercials, have a push-up or sit-up contest with your child.

To track your physical activity, visit: www.choosemyplate.gov

Nutrition Facts

Serving Size: 1/2 cup (78g)

Amount Per Serving

Calories	**27**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 32mg	**1%**
Total Carbohydrate 6g	**2%**
Dietary Fiber 3g	**11%**
Total Sugars 1g	
Includes 0g Added Sugars	**0%**
Protein 2g	**4%**
Vitamin D 0mcg	0%
Calcium 39mg	4%
Iron 0.54mg	4%
Potassium 229mg	7%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

ZESTY ASIAN CHICKEN SALAD

Makes 4 servings. *1 cup per serving.*
Prep time: 20 minutes

Ingredients:

3 boneless, skinless chicken breasts, cooked and chilled
3 green onions, sliced
1½ cups small broccoli florets
2 medium carrots, peeled and cut into strips
1 red bell pepper, cut into strips
2 cups shredded cabbage
½ cup fat free Asian or sesame seed salad dressing
¼ cup 100% orange juice
¼ cup chopped fresh cilantro

1. Cut chicken breasts into small strips. Place in a medium bowl with onions, broccoli, carrots, bell peppers, and cabbage.
2. In a small bowl, stir together dressing and juice. Pour over salad and toss well to coat.
3. Stir in cilantro. Serve chilled or at room temperature.

Nutrition information per serving:
Calories 184, Carbohydrate 13 g, Dietary Fiber 4 g, Protein 22 g, Total Fat 5 g, Saturated Fat 1 g, Trans Fat 0 g, Cholesterol 55 mg, Sodium 456 mg

Adapted from: *Everyday Healthy Meals, Network for a Healthy California,* 2007.

How Much Do I Need?

- A ½ cup of broccoli is about the size of one cupped handful.
- A ½ cup of cooked broccoli is an excellent source of vitamin A, vitamin C, vitamin K, and folate.
- Folate is a water-soluble vitamin that helps make healthy red blood cells in your body. It may also help to protect against heart disease.
- Pregnant women need folate in their diets to help prevent some forms of birth defects.
- Folate comes from leafy vegetables like spinach and broccoli, some fruits (oranges), dry beans, and liver. Look for whole-grain breads and cereals fortified with folate (folic acid).

The amount of fruits and vegetables you need depends on your age, gender, and physical activity level. It is important to eat a variety of colorful fruits and vegetables every day to get all the nutrients your body needs. Find out how much each person in your family needs.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

*If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

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Notes

Harvest of the Month™

Harvest of the Month™
ORANGES

Learning Objectives

- Identify nutrition facts and health benefits of oranges.
- Use a decision-making process to determine whether or not foods and beverages are healthy choices for hydration.
- Analyze the marketing techniques used on beverage labels.
- Design a beverage label for a healthy drink that emphasizes its healthy attributes.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumption of and access to healthy beverages and reduce consumption of unhealthy beverages.
- **Health Standard: Nutrition Competency**
  2.5-6 Describe the influence of advertising and marketing techniques on food and beverage choices.
- **Common Core Standard**
  CCSS.ELA-LITERACY.SL.6.2
  Interpret information presented in diverse media and formats (e.g., visually, quantitatively, and orally) and explain how it contributes to a topic, text, or issue under study.

Materials: Harvest of the Month Workbooks, 1 orange slice per student, Educator Newsletter, and Family Newsletters *(one copy per student)*. *Support Materials are at the end of the lesson.* Educator Newsletters are located here: https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

Symbol	Lesson Sections	Topic	Time in Minutes
	Harvest It	Background about the Harvest of the Month	20
	Move It	Physical Activity, Content for Link It	10
	Link It	Guided Practice	15
	Try It	Independent Practice	20
	Digest It	Tasting, Reflection, and Informal Assessment	15
SW	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage that contains nutrition information about oranges.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class:
   - Identify information and nutrition facts about oranges.
   - Recognize hydrating foods and beverages.
   - Discover how advertisers try to gain the attention of consumers.
   - Create your own advertisement to encourage fellow classmates to "Rethink Your Drink."
3. Read the introductory passage with your students. Students will consider making healthy choices for hydration and learn the nutritional benefits of eating oranges.

> The Harvest of the Month is oranges. Oranges are delicious and packed full of nutrients. You can eat oranges on their own, in recipes such as fruit salad, or drink them as orange juice. Orange juice is a healthy choice in moderation, for example a small 6 ounce glass, as opposed to a 24 ounce bottle. While orange juice has naturally occurring sugar, it also has the nutrients from the orange. Orange juice with pulp is better because it provides some fiber.

Nutrition Facts

Serving Size: 1/2 cup (90g)

Amount Per Serving

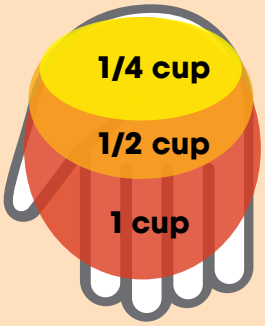
Calories 42

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 11g	**4%**
Dietary Fiber 2g	**9%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 179mg	5%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Some facts about oranges:

- The botanical name of an orange is *Citrus sinensis.*
- Navel oranges got their name from the similarity in appearance to a bellybutton, or "navel."
- Navel and Valencia are the two primary orange varieties grown in California.
- Oranges are very hydrating. They are mostly made up of water.



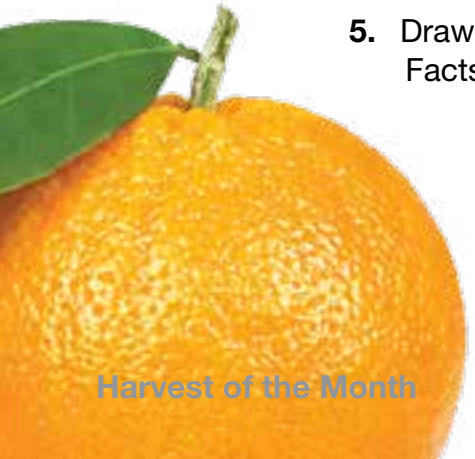
Oranges also provide a lot of nutrients, such as:

- Vitamin C (44 mg per ½ cup), which boosts the immune system to help fight illnesses.
- Fiber, which helps you feel full and helps regulate blood sugar levels.
- Potassium, which helps nerves and muscles communicate and function together.

Think Before You Drink

Pay attention to the calorie content of beverages. Drinking beverages with lots of calories and too much sugar can contribute to health issues, such as weight gain, and a higher risk for some diseases such as: type II diabetes and some cancers. The number one choice for hydration is water. Good choices for hydration other than water are drinks that contain healthy nutrients, such as fiber, vitamins, and minerals and do not contain added sugar.

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is "low," while 20% or more is considered "high." Remind students that fat, cholesterol, sodium, and added sugar are nutrients to limit.
5. Draw their attention to the Percent Daily Value (%DV) on the Nutrition Facts label for fiber. Ask them if a ½ cup serving of oranges would be sufficient to supply the recommended daily value of fiber. [To reach the daily goal, children should eat 2-2½ cups of fruits and vegetables and choose whole grains.]



Move It

Activity: Stop and Go - Learning About Drink Choices

Students will learn about beverages that are healthy choices for hydration.

Teacher will discuss what makes a beverage a health choice and guide students in a game.

Directions: You are going to play a game about hydration. The game is like Red Light/Green Light. If the item called is a healthy choice for hydrating, go forward (Green Light), because it helps your body work well! If it's not a healthy choice to hydrate your body, freeze (red light), because it is not as helpful to your body.

Healthy Sources of Hydration

Drinks and foods that are high in water and low in calories and added sugar are hydrating.

Some examples include:

- Water
- Water flavored with fruits, veggies, and herbs
- Low sugar drinks
- Fruits and vegetables
- Low sodium (low salt) soup
- Nonfat or low-fat milk

SW

Less Healthy Souces of Hydration

There is excessive added sugar in many drinks, and these are not a good choice for hydration.

Some examples include:

- Soda
- Sports drinks
- Energy drinks
- Juice drinks
- Vitamin water

Beverages with caffeine are also not a good choice for hydration, including:

- Coffee
- Soda
- Tea

Instructions

1. Tell students that they are going to play a game using what they know about hydration.
2. Review the directions for the activity with the class.
3. Explain to students that good sources of hydration are drinks and foods that are high in water, low in calories, and low in added sugar. Some examples include water and water flavored with slices of fruits or vegetables and herbs. Whole fruits, including oranges, melons, and berries are hydrating because their water content is high.
4. Tell students that there is added sugar in many popular drinks, including: soda, sports drinks, energy drinks, and even some drinks that also contain juice. These extra calories they contain can contribute to health issues. (Note that the *Dietary Guidelines for Americans* recommend that only 10% of our calories should come from added sugar. The average intake for children ages 9 to 13 is approximately 17%.)
5. Begin the game. If you are playing the game inside, use jumping jacks for green light and for red light simply freeze in place.
6. Use the examples of healthy and less healthy drinks from the workbook. Model movements.
   - Water (go!)
   - Soda (freeze!)
   - Unsweetened carbonated water (go!)
   - Sports drinks (freeze!)
   - A half cup of orange juice (go!)
   - Fruit punch (freeze!)
   - Lemonade (freeze!)
   - Water with a squeeze of lemon (go!)
   - Energy drinks (freeze!)
   - Low-fat 1% and non-fat milk (go!)
   - Oranges (go!)
7. Once they've gained mastery with the specific examples in the book, you may wish to introduce other drinks that are not in the workbook. For example, some other drinks students may be surprised to find have a lot of sugar: fruit punch, lemonade, boba drinks, frozen coffee drinks, and energy drinks.
8. When the game is done, take a minute to debrief about what they learned as they were playing. Ask them to identify the drinks that were healthy and say what makes them healthy: nutrients and no added sugars.

Link It

Activity: Examining Drink Labels

Students will learn how to determine if a drink is as healthy as advertised by reading the Nutrition Facts label for added sugar content.

Teacher will guide students in referencing the Nutrition Facts label to determine if the drink is, in fact, as healthy as other messages on the label suggest.

Directions: Examine the front labels and the Nutrition Facts labels of these beverages. What is the focus of the packaging? Do the Nutrition Facts labels show these drinks to be as healthy as they are advertised?

Instructions

1. Say to students that when companies create labels for their products, they are trying to persuade the consumer (you!) to buy their product. They use images, colors, and ideas to persuade. They make a label that is easy to recognize. They target audiences with whom they think their beverage will resonate. We are going to look at the packaging on beverages to determine what persuasive strategies the marketers are using.
2. Ask students to take a look at the beverage labels in their workbook. Ask them what are the labels trying to get consumers to think? How are they encouraging you to buy the drink?
3. Focus on the big ideas presented in the workbook as you facilitate a discussion about the beverage labels.
4. Instruct students to look at the "Energy Drink." The advertisers are trying to target a particular audience. They achieve this by choosing colors, images, and ideas that appeal to the desired audience, get their attention, and make them want the product. The product is a sleek, black can. The messages on the can encourage you to think:
   - This drink gives you so much energy! It must be so healthy!
   - The information motivates the consumer to want to choose the drink because it gives you energy. But energy equals calories and many people already eat and drink too many calories.
5. Direct students to look at the Nutrition Facts label for the "Energy Drink" to see how much added sugar and calories it contains. Afterwards, ask them to think about whether it really is a healthy choice.

   There are 2 servings per container.
   Each serving is 120 calories.
   120 x 2 = 240 calories in one can!
   30 grams of added sugars in one serving! 30 x 2 = 60 grams!

6. Instruct students to look at the "Vitamin-Added Water." The advertisers are aiming for a particular audience. They achieve this by choosing colors, images, and ideas that appeal to the desired audience, get their attention, and make them want the product:

   This drink has fruit and natural flavors, and vitamins! It must be a good choice!

   The information motivates the consumer to want to choose the drink because it seems healthy. But is it really?

7. Direct students to look at the Nutrition Facts label for the "Vitamin-Added Water" to see what it contains.

   There are 2.5 servings per container.
   Each serving has 13 grams of added sugar.
   13 x 2.5 = 32.5 grams of added sugar in one container!

8. Pass out the "Examining Drink Labels" visual aid. Provide support as students independently examine the "Juice Drink" and "Sports Drink" packaging and Nutrition Facts labels.

Try It

Activity: Rethink Your Drink/Create a Label

Students will create a label for a healthy beverage using the techniques learned in Link It.

Teacher will guide students on how to create a beverage label.

Instructions

1. Tell students that they will be creating a label for a healthy beverage. Be clear that they will be creating their own drink and not using an existing product. Read the directions out loud:

   Directions: You will be creating a label for a healthy drink. Do not use a beverage brand that already exists. Be sure to make up your own new drink.

2. They will name their drink and add healthy messages on the bottle.
3. They can refer to the prior sections to collect information for the ingredients, and health benefits. Model locating this information in the workbook.

Digest It

Activity: Tasting Oranges and Reflection

Students will taste oranges, discuss what they learned about hydration and advertising, and share their labels.

Teacher will provide an orange tasting and facilitate conversations about hydration, advertising, and student ads.

Instructions

1. Tell students they will be trying some oranges and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.

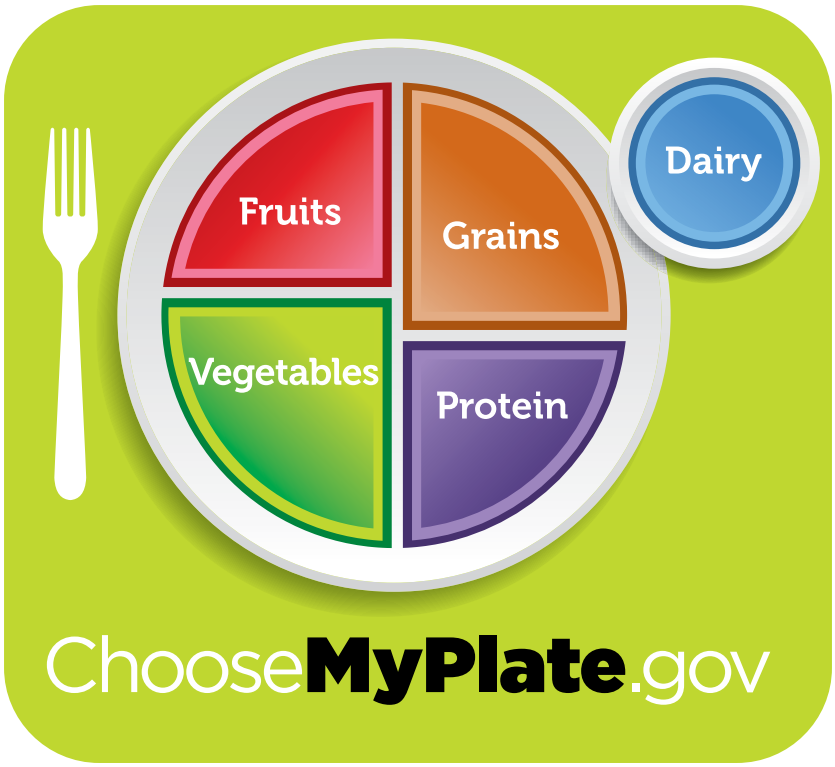
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the student, to think about if and when they've seen oranges in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the orange. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: "The orange is juicy, sweet, and bright orange."
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the orange. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time."
8. Guide a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

SW

- What makes a drink more or less healthy?
- What are some examples of healthy drinks?
- Share the drink you created. What makes it a healthy choice?
- Taste oranges. What is your plan for eating oranges in the future?

9. Choose volunteers to share their drink label. Provide specific and positive feedback. As needed, revisit lessons about colors, images, and messaging.
10. Distribute the Family Newsletter. Discuss the recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
11. Optional - Try infused water! Fill a pitcher with water. Add orange slices. Let the flavor infuse for an hour before serving to the students. Alternately, serve by giving students cups of water into which they can squeeze their orange slice.
12. Extend student learning by using activity from the Educator Newsletter.

Nutrition Resources and Health Messages



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- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

❶ Start Here →

❷ Check Calories

❸ Limit these Nutrients

❹ Get enough of these Nutrients

❺ Footnote

❻ Quick Guide to % DV

*** 5% or less is low**

*** 20% or more is high**

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving
Calories 250 Calories from Fat 110

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.
4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Oranges

The Harvest of the Month featured fruit is oranges.

Health and Learning Success Go Hand-in-Hand

Encourage your child to eat school breakfast. Students who eat school breakfast tend to eat more fruits and vegetables than students who do not. School breakfast programs can increase your child's learning and decrease behavior problems in the classroom. With Harvest of the Month, your family can explore, taste, and learn about how to eat more fruits and vegetables and be active every day.

Produce Tips

- Look for firm oranges that feel heavy for their size with bright, colorful skin.
- Avoid fruit with bruised, wrinkled, or discolored skin.
- Oranges with thin skin tend to be juicier than those with thick skin.
- Oranges can be stored at room temperature or in the refrigerator for up to two weeks.

Healthy Serving Ideas

- Slice oranges for a quick, healthy snack.
- Freeze 100% orange juice in a paper cup with a popsicle stick or spoon.
- Instead of soda, make a fruit spritzer for your child. Mix 100% orange juice and sparkling water.
- Toss peeled orange segments into green salads for a citrus splash.
- Keep healthy recipes and cookbooks in the kitchen. Let your child pick a recipe and then cook it together.

For more ideas, visit:

https://cachampionsforchange.cdph.ca.gov/en/Pages/default.aspx

FAMILY NEWSLETTER

Nutrition Facts

Serving Size: 1/2 cup (90g)

Amount Per Serving

Calories	**42**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 11g	**4%**
Dietary Fiber 2g	**9%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
Protein 0g	**0%**
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 179mg	5%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

BREAKFAST FRUIT CUP

Makes 4 servings. *½ cup per serving.*
Prep time: 5 minutes

Ingredients:

2 oranges, peeled, seeded, and sliced into bite size pieces
1 medium banana, peeled and sliced
1 tablespoon raisins
⅓ cup lowfat vanilla yogurt
½ teaspoon ground cinnamon

1. In a small bowl, combine oranges, bananas, and raisins.
2. Divide fruit equally into 4 bowls.
3. Put a rounded tablespoon of yogurt over fruit in each bowl.
4. Sprinkle with equal amounts of ground cinnamon before serving.

Nutrition information per serving:
Calories 81, Carbohydrate 19 g, Dietary Fiber 2 g, Protein 2 g, Total Fat 0 g, Saturated Fat 0 g, Trans Fat 0 g, Cholesterol 1 mg, Sodium 14 mg

Adapted from: *Everyday Healthy Meals, Network for a Healthy California,* 2007.

Let's Get Physical

- Help your child prepare for the FITNESSGRAM®. Ask your child's teacher how you can help.
- Go for a walk or jog in the morning to jump-start the brain.
- Start slowly — add 10 to 15 minutes of physical activity to your day and gradually work up to 60 minutes.
- Do yoga stretches after your walk or run in the evening.

How Much Do I Need?

- A ½ cup of orange segments is an excellent source of vitamin C.
- Eating oranges also gives you fiber and folate.
- Folate is a B vitamin that helps make healthy red blood cells and lowers a woman's risk of giving birth to a child with certain birth defects.

The amount of fruits and vegetables each person needs to eat every day depends on age, gender, and physical activity level. Look at the chart below to find out the recommended daily amount for each person in your family. Make a list of fruits and vegetables that you can add into your family's everyday meals and snacks. Remember that all forms count toward the daily amount – fresh, frozen, canned, dried, and 100% juice.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

* If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

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CARROTS

Harvest of the Month™

Learning Objectives

- Identify nutrition facts and health benefits of carrots.
- Identify the benefits of locally grown carrots.
- Use ratios to compare the distances locally grown and other carrots travel.
- Taste carrots.
- Make a plan for eating carrots.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumption of locally grown foods by connecting growers to their communities through farmers' markets, food retail stores, schools, and food banks.
- **Health Standard: Nutrition Competency**
  1g.5-6 Explain how food is transported from farm to table, focusing on maintaining nutritional quality.
- **Common Core Standard**
  CCSS.MATH.CONTENT.6.RP.A.3
  Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Materials: Harvest of the Month Workbooks, 1 piece of carrot per student, Move It signs, Educator Newsletter, and Family Newsletters *(one copy per student)*. *Support Materials are at the end of the lesson.* Educator Newsletters are located here: https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

Symbol	Lesson Sections	Topic	Time in Minutes
	Harvest It	Background about the Harvest of the Month	20
	Move It	Physical Activity, Content for Link It	20
	Link It	Guided Practice	10
	Try It	Independent Practice	20
	Digest It	Tasting, Reflection, and Informal Assessment	10
SW	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage that contains nutrition information about carrots.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class.

SW

- Identify what nutrients are in carrots.
- Identify the benefits of eating locally grown carrots.
- Compare distances using ratios.
- Taste carrots and make a plan for eating them.

3. Read the introductory passage with your students:

SW

The Harvest of the Month is carrots. Carrots are a sweet and healthy snack that can be enjoyed anytime. They are great on their own or with a dip. Pick slices of a favorite vegetable to join your carrot snack. Use your imagination to come up with exciting carrot snacks of your own. Carrots can be found in salads, sandwiches, stir fries, soups, and more. Look for carrots at your school cafeteria and ask for carrots at home.

Some facts about carrots:

- Carrots were originally shades of purple not orange.
- Carrots come in a variety of colors: white, yellow, orange, red, purple, and black.
- Carrots of these colors can often be found at a local farmers' market.
- California is the number one producer of carrots in the United States

(Continued)

Nutrition Facts	
Serving Size:	1/2 cup (90g)
Amount Per Serving	
Calories	**42**
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 11g	4%
Dietary Fiber 2g	9%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 0g	0%
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 179mg	5%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Locally Grown Carrots

Carrots, other vegetables, and fruits grown at nearby farms are called "locally grown." They are fresher and riper, and often more flavorful than produce that is grown far away. In this lesson you will be able to compare the distances locally grown carrots travel with carrots that are grown at greater distances. Vegetables are very healthy for you whether they come from near or far. You should be eating 2-2½ cups of vegetables every day. Analyze the Nutrition Facts label. What important nutrients are in carrots? How much can you get in a serving?

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is low, while 20% or more is considered high.
5. Draw their attention to the Percent Daily Value (%DV) of potassium. Ask them if a ½ cup serving of carrots would be sufficient to supply the recommended DV and how they can get 100%. [Eat a diet rich in fruits (bananas, cantaloupe, prunes, and raisins), vegetables (winter squash, potatoes, sweet potatoes, spinach and broccoli) and low-fat dairy (milk, yogurt).]

Move It

Activity: Visualizing the Distance Produce Travels

Students will engage in physical activity while they pretend that they are carrots traveling from various cities to Los Angeles.

Teacher will read a script that guides students in the physical activity. The script also addresses the benefits of locally grown produce and introduces the topic of ratios.

Instructions

1. Ask the students to silently read the passage in their workbooks:

Imagine you are a carrot traveling to Los Angeles, California from different cities in the state, the country, and the world. Your teacher will lead you in stretches and movements that simulatethe distances.

2. **Read the following script:**

   We are going to pretend that we are carrots traveling from different parts of the world. Everyone stand up. Make sure you have enough room around you to do some movement.

   Imagine you and your classmates are carrots grown locally and then packed in a box at a packing plant in Fresno, California. You are fresh, ripe, and in great shape. You are going for a short ride in a truck to Los Angeles, California. That's a distance of about 200 miles. Let's do jumping jacks for 2 seconds to represent your 200-mile ride from Fresno to Los Angeles, California.

   Good job. Now pretend you're a carrot packaged in Orlando, Florida. You are on a freight train headed to Los Angeles, California. It's a 2,500 mile trip. Let's jog in place for 25 seconds to simulate the twenty-five-hundred-mile trip from Florida to Los Angeles.

   Now let's pretend you are a carrot just packed in a box in a packing plant in Quito, Ecuador, South America. You are flying in a jet en route to Los Angeles. The journey will be 4,500 miles. Let's simulate your forty-five-hundred-mile journey by doing arm circles for 45 seconds.

   Are you hanging in there? Now pretend you are carrot traveling 6,500 miles on an ocean freighter from Shanghai, China or jet from Dakar, Senegal. Let's do some lunges for 65 seconds to simulate the sixty-five-hundred-mile journey to from those places to Los Angeles.

   To lunge, stand up straight with your feet shoulder-width apart. Step forward, about two feet, with your right foot. Lower your hips until both knees are bent at a 90-degree angle. Keep your weight on the ball of your left foot. Don't let your right knee go past your toes on your right foot. Return to the standing position. Alternate legs every 5 lunges until you reach 65 seconds.

   Great job. How do you feel? Hopefully you feel good. Physical activity keeps us in good shape. What kind of shape might the carrots be in after traveling from faraway places? To keep fruits and vegetables from spoiling over long journeys, they are often picked before they are ripe. Locally grown fruits and vegetables are fresh, ripe, and delicious.

3. Ask the students how many miles each second of movement represented. [The answer is 100 miles.] Tell them they will be using that information next in the Link It activity.

Link It

Activity: Finding Ratios of Distances from Los Angeles

Students will find the relative distance of cities to Los Angeles by using ratios.

Teacher will support students in finding ratios.

Instructions

1. Ask the students to silently read the directions in their workbooks:

> **Directions:** The relative size of two numbers can be compared using ratios. Use ratios to compare the relative distances of cities to Los Angeles.

2. Read the passage aloud:

> In the Move It activity, you used 1 second of physical activity to represent 100 miles of travel. The distance between Fresno and Los Angeles is about 200 miles and you did jumping jacks for 2 seconds. The distance from Orlando to Los Angeles is about 2,500 miles and you jogged for 25 seconds. This can be shown as a ratio.

   Because both distances have the same end point of Los Angeles, this can be shown as a ratio: 200 to 2,500. Show them how that can be written 200:2,500.

3. Tell them to divide both sides by 100 or simply move the decimal place two places to the left to reduce the ratio to 2:25. Tell them to enter that information in their workbook. Have them also write it as the fraction $\frac{2}{25}$.

Try It

Activity: Finding Ratios of Distances to Cities in California

Students will find the ratio of distances to cities in California.

Teacher will support students in calculating ratios.

Instructions

1. Ask students to complete the ratio problems in the Try It section of their workbook. The first problem asks:

> **Directions:** Write the ratio of the distances to Los Angeles from Fresno and from Quito. Write the ratio with “to” and “:”

Answer: 200 miles to 4,500 miles → 200:4,500 → 2:45 → $\frac{2}{45}$.

2. The second problem asks:

> **Directions:** Write the ratio of the distances from Los Angeles to Fresno and from Los Angeles to either Shanghai or Dakar.

Answer: The distance from Los Angeles to Fresno =200; the distance from Los Angeles to either Shanghai or Dakar = 6,500.

Answer: 200 miles to 6,500 miles → 200:6,500 → 2:65 → $\frac{2}{65}$.

3. For the next two problems:

Directions: The table below shows distances between California cities and counties where carrots are grown. Answer the questions based on the information in the table. The mileage has been rounded to the nearest 100 miles.

4. The third problem asks them to:

Write the ratio of the distances to San Francisco from Salinas and from Holtville.

Answer: The distance to San Francisco from Salinas is 100 miles; the distance to San Francisco from Holtville is 600 miles. The ratio is 100 miles to 600 miles → 100:600 → 1:6 → $\frac{1}{6}$.

5. The fourth problem asks them to:

Write the ratio of the distances to San Diego from Salinas and from Holtville.

Answer: The distance to San Diego from Salinas is 400 miles; the distance to San Diego from Holtville is 100 miles. The ratio is 400 miles to 100 miles → 400:100 → 4:1 → $\frac{4}{1}$.

Digest It

Activity: Trying Carrots and Reflecting

Students will taste carrots and reflect upon their learning.

Teacher will provide a carrot tasting and lead a discussion on what the students have learned.

Instructions

1. Tell students they will be trying some carrots and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.

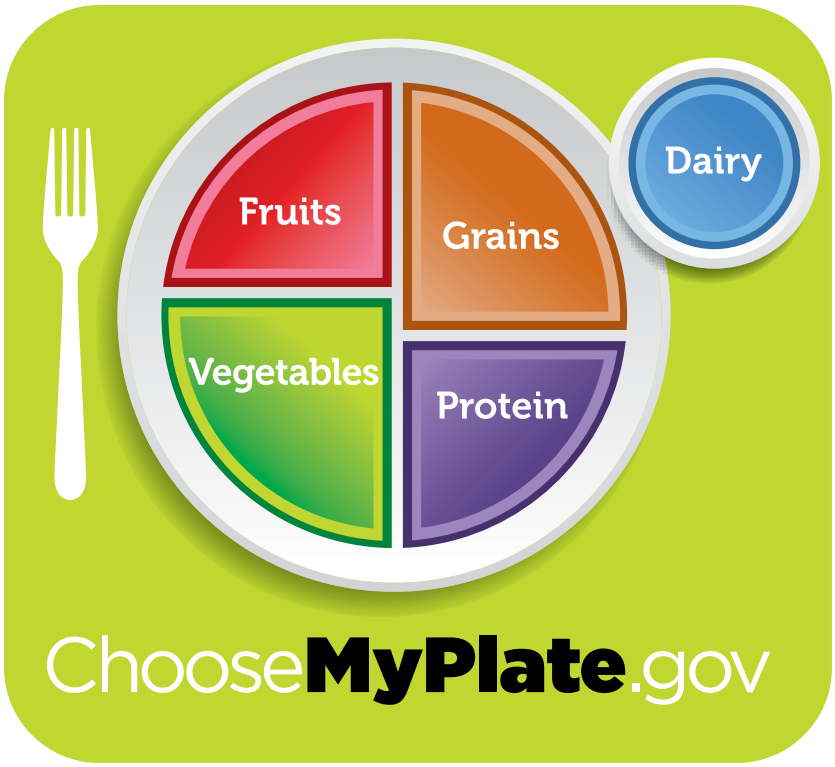
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen carrots in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the carrot. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: "The carrot is crunchy, hard, and shiny."
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the carrot. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time."
8. Guide students in a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

SW

- What are some important nutrients found in carrots?
- What are some benefits of locally grown carrots?
- How do the distances of locally grown carrots and those from far away compare?

9. Distribute the Family Newsletter. Discuss the recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
10. Extend student learning by using activities from the Educator Newsletter.

Nutrition Resources and Health Messages



MyPlate

ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

❶ Start Here →

❷ Check Calories

❸ Limit these Nutrients

❹ Get enough of these Nutrients

❺ Footnote

❻ Quick Guide to % DV

*** 5% or less is low**

*** 20% or more is high**

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving
Calories 250 Calories from Fat 110

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.
4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Carrots

FAMILY NEWSLETTER

The Harvest of the Month featured fruit is carrots.

Health and Learning Success Go Hand-in-Hand

Help your child do better on tests by serving a variety of colorful fruits and vegetables every day. With Harvest of the Month, your family can explore, taste, and learn about eating more fruits and vegetables and being active every day.

Produce Tips

- Carrots are always in season. You can find them fresh, frozen, or canned.
- Look for smooth, firm, and well-shaped carrots with an even color.
- Avoid carrots that feel soft, limp, or wilted. Carrots are always in season. You can find them fresh, frozen, or canned.
- Refrigerate carrots in a plastic bag for up to two weeks.
- If you buy fresh carrots with the green tops, break off the tops before refrigerating. You can add the chopped green tops to soups for extra flavor.
- Look for low-sodium varieties of frozen or canned carrots.

Healthy Serving Ideas

- Carrots can be eaten whole, sliced into sticks, cut into rounds, chopped, shredded, and cooked.
- Add shredded carrots to salads and soups for a crunchy, sweet flavor.
- Have your child think of other ways to include carrots in family meals.
- Ask your child to tell you why eating fruits and vegetables is important.

Let's Get Physical!

- With spring testing, it is important that your child gets outside. Daily physical activity may help improve your child's focus and test performance.
- Take your child on a scavenger hunt at a local park. See how many different types of plants and trees your child can find.

For more ideas, visit: www.bikeleague.org

Nutrition Facts

Serving Size: 1/2 cup (72g)

Amount Per Serving

Calories 31

	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 7g	**3%**
Dietary Fiber 4g	**14%**
Total Sugars 4g	
Includes 0g Added Sugars	**0%**
Protein 1g	**2%**
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.54mg	4%
Potassium 84mg	3%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

SUPREME MASHED POTATOES

Makes 10 servings. *¾ cup per serving.*
Total time: 55 minutes

Ingredients:

6 medium potatoes, peeled and cubed
2 large carrots, peeled and chopped
3 large cloves garlic, finely chopped
½ cup low-sodium chicken broth
1 tablespoon butter

1. Combine potatoes and carrots in large pot. Fill with cold water. Bring to a boil and cook for 5 minutes.
2. Add garlic and reduce heat to simmer until vegetables are tender, about 35 minutes.
3. Drain pot and keep 1 cup of the cooking liquid.
4. Mash potatoes, carrots, and garlic with a hand masher.
5. In a small pan, heat chicken broth and butter over medium heat until butter melts.
6. Slowly stir broth mixture into the mashed potatoes.
7. If necessary, add the reserved cooking liquid until potatoes reach the desired thickness. Serve hot.

Nutrition information per serving:
Calories 104, Carbohydrate 22 g, Dietary Fiber 2 g, Protein 2 g, Total Fat 1 g, Saturated Fat 1 g, Trans Fat 0 g, Cholesterol 3 mg, Sodium 51 mg

Adapted from: *Soulful Recipes: Building Healthy Traditions, Network for a Healthy California,* 2008.

How Much Do I Need?

- A ½ cup of sliced carrots is about the same as one medium carrot or four baby carrots. This is about one cupped handful.
- A ½ cup of carrots (fresh or cooked) provides more than 200% of the recommended Daily Value for vitamin A.
- Vitamin A is important because it helps keep your vision good and your skin healthy. It also helps your body fight infections.
- Frozen, canned, and cooked carrots are just as nutritious as fresh.

The amount of fruits and vegetables that is right for you depends on your age, gender, and physical activity level. Find out how much each person in your family needs. Help your family eat the recommended amount by serving a variety of colorful fruits and vegetables in meals and snacks throughout the day. It will help keep your family healthy.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

* If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

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BERRIES

Harvest of the Month™

Learning Objectives

- Identify the nutrition facts and health benefits of berries.
- Determine the reasons why California grows so many crops.
- Multiply with percentages to find out the amount of berries California grows.
- Taste berries and make a plan for eating them.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Expand familiarity with California grown fruits and vegetables, local farmers, the state's rich agricultural bounty, and how food travels from the farm to our plates.
- **Health Standard: Nutrition Competency**
  1h.5-6. Analyze reasons why an abundance of food crops are grown in California.
- **Common Core Standard**
  CCSS.MATH.CONTENT.6.RP.A.3

  Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Materials: Harvest of the Month Workbooks, 3 or more berries per student, Percentage of Blueberries visual aid, Educator Newsletter, and Family Newsletters *(one copy per student)*. *Support materials are at the end of the lesson.* Educator Newsletters are located at https://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx

Symbol	Lesson Sections	Topic	Time in Minutes
	Harvest It	Background about the Harvest of the Month	20
	Move It	Physical Activity, Content for Link It	20
	Link It	Guided Practice	10
	Try It	Independent Practice	15
	Digest It	Tasting, Reflection, and Informal Assessment	15
SW	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage that contains nutrition information about berries.

Teacher will guide students in reading and interpreting the Nutrition Facts label.

Instructions

1. Familiarize yourself with the Nutrition Resources and Health Messages located at the end of the lesson plan that address the *Dietary Guidelines for Americans* and the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class:

SW

- Identify the health benefits of eating berries.
- Understand why California is so ideal for growing crops.
- Multiply with percentages.
- Taste berries and make a plan for eating them.

3. Read the introductory passage with your students:

SW

The Harvest of the Month is berries. A handful of berries make a great snack. They also make an excellent smoothie. With your family's permission, try combining frozen berries, bananas, orange juice, and low-fat milk in a blender for a healthy and delicious treat. How many berries can you name? You may have heard of blueberries, blackberries, and raspberries. But have you heard of boysenberries, loganberries, and marionberries?

Here are the botanical names for three berries:

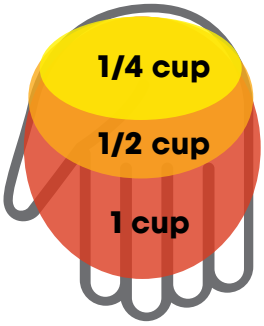
- *Rubusidaeus* (raspberry)
- *Rubusfruticosus* (blackberry)
- *Vaccinium cotymbosum* (blueberry)

Berries are very healthy for you. Take a look at the Nutrition Facts label. Blackberries contain 14% of the Daily Value (DV) of fiber. Blackberries are also a good source of vitamin K. Your body makes proteins with the help of Vitamin K to make healthy bones. It also makes proteins so that when you bleed, you don't bleed too much.

Nutrition Facts	
Serving Size:	**1/2 cup (72g)**
Amount Per Serving	
Calories	**31**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 7g	**3%**
Dietary Fiber 4g	**14%**
Total Sugars 4g	
Includes 0g Added Sugars	**0%**
Protein 1g	**2%**
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.54mg	4%
Potassium 84mg	3%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

4. Pause the reading. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that throughout the day, they should strive for 100% DV of nutrients listed on the lower third of the Nutrition Facts label.



5. Draw their attention to the DV of fiber. Ask them if a ½ cup serving of berries would be sufficient to supply the recommended DV and how they would get 100%. [Eat a diet rich in fruits, vegetables, and whole grains.]
6. Continue with the reading:

Why are so many fruits and vegetables grown in California?

California is a great place to grow berries and other fruits and vegetables because there is water, rich soil, lots of sun, and a warm climate. Take a look at these facts:

- Fresno, California receives 36% more possible sunshine than Seattle, Washington.
- Blue Canyon, California, receives an average of 241.7 inches of snow per year. Snow melt provides our farms with water. Our nation's capital only receives about 20 inches of snow.
- International Falls, Minnesota averages 198 days of below freezing temperatures. Stockton, California averages only 22 days when the temperature dips below freezing, which means many more fruits and vegetables can be grown there.

California grows more than 99% of the nation's total of the following crops: almonds, artichokes, peaches, persimmons, figs, grapes, raisins, dried plums, and walnuts! But what does "percent" really mean? You will learn the answer to that and how to multiply with percent in the Move It activity.

Move It

Activity: Showing a Percent of a Group of Students

Students will get into groups and then rearrange themselves to demonstrate percentages of a whole.

Teacher will first give an overview of multiplying with percentages and then lead the activity using the playing cards provided.

Instructions

1. Tell students to read the information in the Move It box in their workbook:

> In the sections that follow, you will use percentages to discover the amount of berries and other fruits grown in California.
>
> Here in the Move It section, your teacher will demonstrate how to use percents. Then you'll get into groups of different sizes to illustrate different percentages of blueberries.

2. Introduce percentages and how to multiply them. Follow the steps on the full-size copy of the "Percentage of Blueberries" visual aid at the end of the lesson plan.
3. Illustrate multiplying the following:
   - **a)** 100 x 10% =
     100 x 10/100 =
     1000 ÷ 100 = 10
     Say that 10 percent of 100 is 10.
   - **b)** 100 x 20% =
     100 x 20/100 =
     2000 ÷ 100 = 20
     Say that 20 percent of 100 is 20.
   - **c)** Continue in this manner with 60%, 80%, 100% x 100 as needed.
4. Demonstrate multiplying the following:
   - **a)** 5 x 20% =
     5 x 20/100 =
     100 ÷ 100= 1
     Say that 20 percent of 5 is 1.
   - **b)** 5 x 40% =
     5 x 40/100 =
     200 ÷ 100= 2
     Say that 40 percent of 5 is 2.

c) Continue in this manner with 5 x 60%, 80%, 100% as needed.

5. Explain the game.

a) Students will be divided into groups of 5. Any remaining students will be coaches for the first round.

b) You will show the groups a card that shows a percentage. The groups will have to rearrange themselves so that there is a subgroup that represents that percentage of 5. For example, if 40% is shown on the card, then a subgroup of 2 must form because 40% x 5 = 2. They will indicate they are the percentage by being near each other and raising one hand each.

A group of five students stand together.

40%
X
5

You show a percentage card

Two students form a subgroup and raise their hands to represent 40%

c) The coaches will support by helping with the group's math and guiding the arrangement.

d) You will show another percentage card. Students must rearrange themselves to represent that new percentage of 5. For example, if 80% is shown on the card, then a subgroup of 4 must form because 80% x 5 is 4. Say that the students who formed the first subgroup should allow the other group members to participate.

6. Say that the students who formed the first subgroup should allow the other group members to participate.

7. Repeat step 5 for all the percentage cards. Repeat again as needed to build mastery.

8. Divide students into groups of 10. Repeat the activity with percentage of 10 cards. Suggestions for remaining students not in the groups: 1-4 students can act as coaches; for 5 or more, form a group of 5 and coaches; or, advanced students can form a group of another size.

Link It

Activity: Multiplying by Percentages

Students Students will multiply percentages to find the production of berries in California.

Teacher will model the multiplication problems.

Instructions

1. Tell the students to read the facts about blueberries contained in the Link It section of their workbook.

> California is one of the biggest producers of blueberries in the United States. While it does not grow the most blueberries, because of its excellent growing conditions, in 2014 it grew the most per acre.
>
> In 2014, California grew the most blueberries per acre of any state in the U.S: 10,700 pounds of blueberries per acre. An acre is about the size of a regulation size soccer field.

2. Tell the students to read the directions for the Link It section.

> **Directions:** Find out how many pounds of blueberries California grew in 2014. California grew 10% of the nation's blueberries. Multiply 10% times the total number of blueberries grown in the United States that year.

3. Explain that the total number of tons of blueberries grown in California in 2014 can be found by multiplying the percent grown in California by the total amount grown in the United States. [500,000 x 10% = 50,000 tons]
4. Describe the steps to solving the problem as shown in the workbook.
5. Tell them the tips for multiplying by 10 and dividing by 100.
6. Tell the students to read the directions for the next problem about raspberries.

> **Directions** If a county produced more than 30% of the approximately 150,000 boxes of raspberries grown in the state, how many boxes did they produce? [45,000]

7. Ask students to provide the answers to each of the steps in the problem aloud. [30/100 x 150,000/1 = 4,500,000/100]

   4,500,000/100 = 4,500,000 ÷ 100 = 45,000

Try It

Activity: Multiplying with Percents to Find a Part of a Whole

Students will find the total acres of blackberries grown in California using percents and multiplication.

Teacher will monitor student progress.

Instructions

1. Tell students to read the directions in the Try It section and solve the problem that follows.

   SW **Directions:** If one county planted 75% of the 80,000 acres of blackberries grown in the state, how many acres did they plant?

2. Monitor student progress.
3. Discuss the problem. [Answer: 60,000]

Digest It

Activity: Tasting Berries and Reflection

Students will taste berries and reflect on what they have learned about berries and California grown crops.

Teacher will provide berries to taste and guide a discussion about California crops and berries.

Instructions

1. Tell students they will be trying some berries and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together with the soap. Be sure to lather the backs of hands, between the fingers, and under nails.
   c. Scrub hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
   d. Rinse hands well under clean, running water.
   e. Dry hands using a clean towel or air dry them.
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen berries in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.

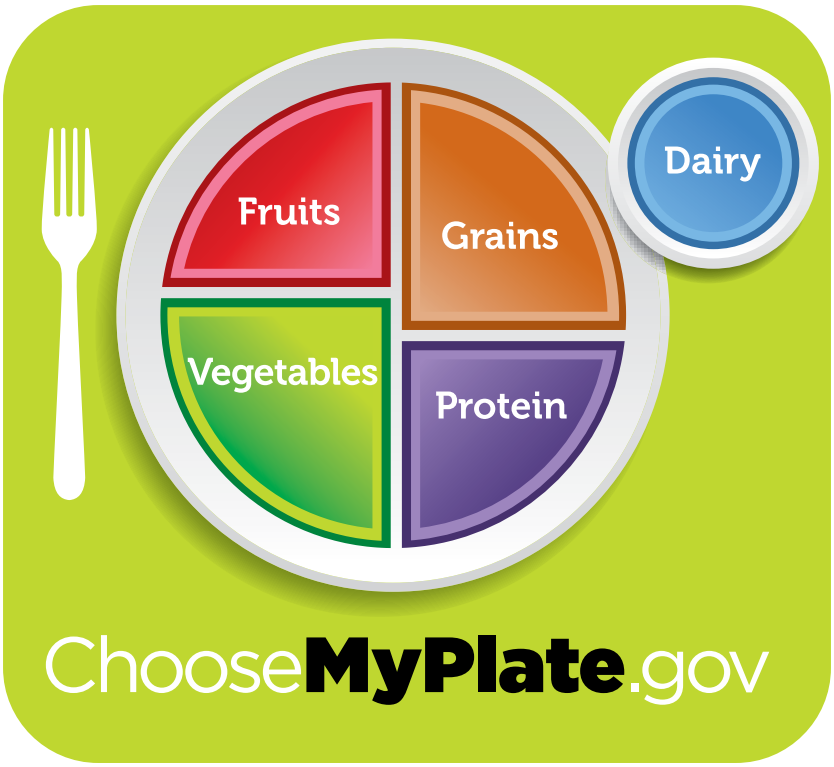
7. Model respectful responses to tasting the berries. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: “The berries are juicy, sweet, and purple.”
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the berries. I know it is healthy for me. It's not my favorite at the moment. I will give it another chance next time.”
8. Guide a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

SW

- Name a nutrient in blackberries and what it does for your body.
- What conditions make California such a favorable place to grow berries?
- What is 80% of 1,000?
- Taste berries! When will you have berries next? Make a plan.

9. Distribute the Family Newsletter. Discuss the recipe in the newsletter. Ask students to present the newsletter to their family members and share the recipe.
10. Extend student learning by using activities from the Educator Newsletter.

Nutrition Resources and Health Messages



MyPlate

ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- Make half your plate fruits and vegetables.
  - Focus on whole fruits.
  - Vary your veggies.
- Make half of your grains whole grains.
- Move to low-fat (1%) and fat-free milk or yogurt.
- Vary your protein routine.
- Drink and eat less sodium, less saturated fat, and less added sugar.

See the website for more information on fruit and vegetable consumption and physical activity. [2]

Nutrition Facts Label

The Nutrition Facts label has been revised and the updated version is used in the workbook. The following excerpts from the Food and Drug Administration (FDA) website3 describe the components of the label:

1. Pay attention to the serving size, especially how many servings there are in the food package. Then ask yourself, "How many servings am I consuming?" (e.g., ½ serving, 1 serving, or more).
2. The number of servings you consume determines the number of calories you actually eat.

   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.

❶ Start Here →

Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container 2

❷ Check Calories

Amount Per Serving
Calories 250 Calories from Fat 110

❸ Limit these Nutrients

	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium 20%	
Iron	4%

❹ Get enough of these Nutrients

❺ Footnote

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

4. You can use the Nutrition Facts label not only to help limit those nutrients you want to cut back on, but also to increase those nutrients you need to consume in greater amounts.
5. % DVs are based on a 2,000-calorie diet.
6. 5% DV or less is low and 20% DV or more is high.

References

1. Wash Your Hands. (2016, April 11). Retrieved September 28, 2016, from http://www.cdc.gov/features/handwashing/
2. Choose MyPlate. (n.d.). Retrieved October 06, 2016, from https://www.choosemyplate.gov/
3. Nutrition Facts Label Retrieved May 20, 2016 https://www.fda.gov

Percentages of Blueberries

A percentage is a rate that shows how much there is of something for every hundred. Imagine 100 blueberries. Let's say we want to find 10 percent of 100 blueberries.

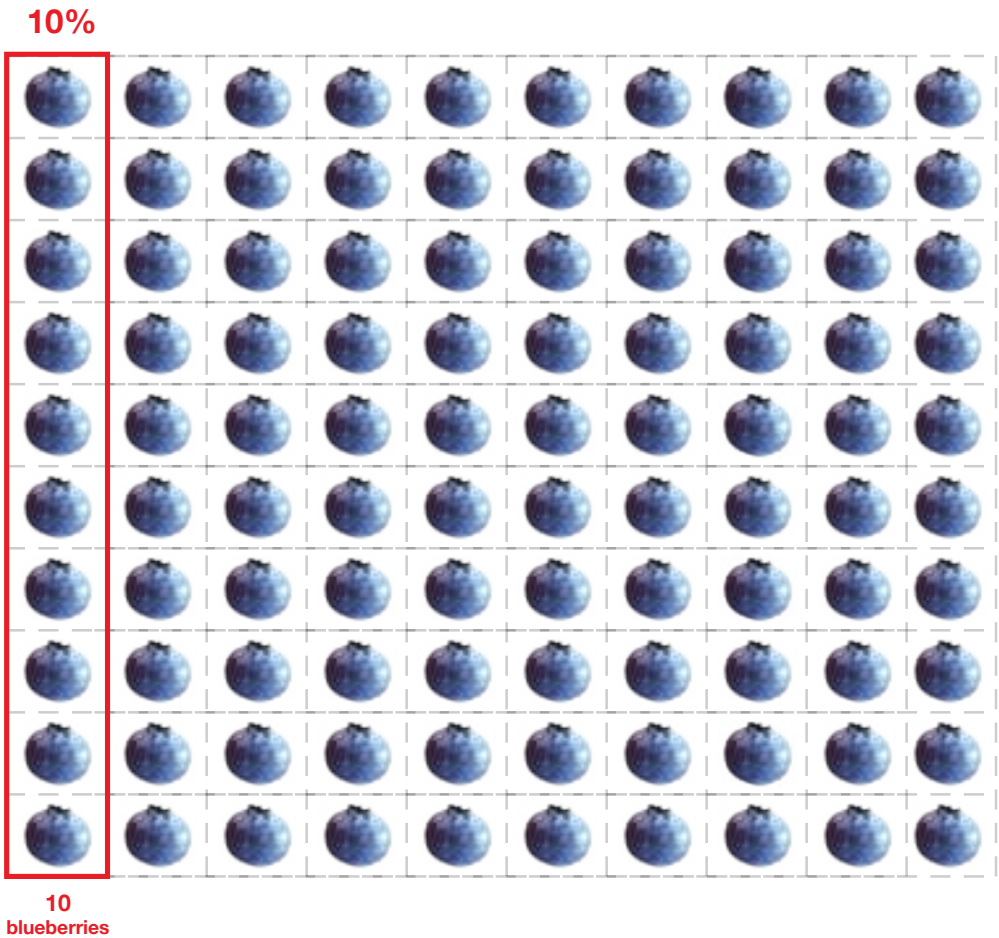
10 percent, also written as 10%, can be written as the ratio $\frac{10}{100}$

We can multiply with the ratio to find out ten percent of 100 hundred blueberries.

$$\frac{10}{100} \times 100 \text{ blueberries}$$

$$\frac{10}{100} \times \frac{100 \text{ blueberries}}{} = \frac{1{,}000}{100}$$

1,000 ÷ 100 = 10 blueberries



10% of 100 blueberries is 10, since a percentage is a ratio that means parts per 100.

Percentages of Blueberries Continued...

The same multiplication can be used with quantities other than 100. Here is how to find 10% of 10 blueberries.

10% of 10 is the same as

$$\frac{10}{100} \times 10 \text{ blueberries}$$

$$\frac{10}{100} \times \frac{10 \text{ blueberries}}{1} = \frac{100}{100}$$

100 ÷ 100 = 1 blueberry

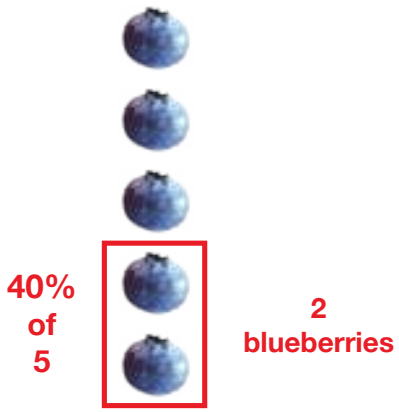
Now find 40% of 5 blueberries.

40% of 5 is the same as

$$\frac{40}{100} \times 5 \text{ blueberries}$$

$$\frac{40}{100} \times \frac{5 \text{ blueberries}}{1} = \frac{200}{100}$$

200 ÷ 100 = 2 blueberries



Notice that 40% of 5 is greater than 10% of 10.
What percent of 10 is equal to 40% of 5?

Berries

FAMILY NEWSLETTER

The Harvest of the Month featured fruit is berries.

Health and Learning Success Go Hand-in-Hand

Getting children to try new foods can be hard. It is normal to offer a new food many times before kids are willing to try it. Be a good role model and eat fruits and vegetables in front of your children. Use Harvest of the Month tips and recipes to encourage trying new foods and to find new family favorites.

Produce Tips

- Choose fresh blueberries that are plump and have a solid, dark blue color. Refrigerate for up to two weeks.
- Choose fresh raspberries that are bright and evenly colored. Refrigerate for up to three days.
- Select fresh blackberries that are dry and shiny, without any green or red colors. Refrigerate for up to three days.
- Wash berries just before serving.
- Shop for fresh berries in season to get the best value.

For more physical activity ideas, visit:
https://www.saferoutespartnership.org

Healthy Serving Ideas

- Add berries to your cereal for added fiber and flavor.
- Mash berries to make your own jam.
- Top pancakes with fresh blueberries or blackberries.
- Stir your favorite berries into lowfat yogurt for a tasty snack.
- Toss raspberries into a spinach salad.
- Keep a bag of mixed berries in the freezer for smoothies.

For more ideas, visit:
https://cachampionsforchange.cdph.ca.gov/en/Pages/default.aspx

Let's Get Physical!

Biking is a great way to be active and healthy. It also helps the environment by lowering air pollution and traffic.

- **At home:** Ride your bike for errands.
- **At work:** Invite coworkers to ride bikes during Bike-to-Work in May.

Nutrition Facts

Serving Size: 1/2 cup (72g)

Amount Per Serving

Calories	**31**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 7g	**3%**
Dietary Fiber 4g	**14%**
Total Sugars 4g	
Includes 0g Added Sugars	**0%**
Protein 1g	**2%**
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.54mg	4%
Potassium 84mg	3%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day used for general nutrition advice.

Harvest of the Month™

HONEY GINGERED FRUIT SALAD

Makes 6 servings. *1 cup per serving.*
Prep time: 30 minutes

Ingredients:

1 large mango, peeled and cubed
1 cup fresh blueberries
1 small banana, peeled and sliced
1 cup strawberries, sliced
1 cup seedless green grapes
1 cup nectarines, sliced
1 cup kiwifruit, peeled and sliced

Honey Ginger Sauce:

⅓ cup 100% orange juice
2 tablespoons lemon juice
1 tablespoon honey*
⅛ teaspoon ground nutmeg
⅛ teaspoon ground ginger

1. In a large bowl, combine fruit.
2. In a small bowl, mix all sauce ingredients until well blended.
3. Pour honey ginger sauce over fruit and toss together.
4. Refrigerate for at least 20 minutes. Serve chilled.

*Do not give honey to children under the age of one.

Nutrition information per serving:
Calories 124, Carbohydrate 32 g, Dietary Fiber 4 g, Protein 2 g, Total Fat 1 g, Saturated Fat 0 g, Trans Fat 0 g, Cholesterol 0 mg, Sodium 4 mg

Adapted from: *Soulful Recipes: Building Healthy Traditions, Network for a Healthy California,* 2009.

Recipe courtesy of BOND of Color.

- **With the family:** Ride to a park after dinner to play a game of tag.

For more ideas, visit: www.bikeleague.org

How Much Do I Need?

- A ½ cup of berries is about one cupped handful.
- A ½ cup of most berries (blueberries, strawberries, blackberries, raspberries) is a good source of vitamin C and fiber.
- Berries are rich in phytochemicals, which come from plants and may help you stay healthy.

The amount of fruits and vegetables you need depends on your age, gender, and physical activity level. All forms of fruits and vegetables count toward your daily needs – fresh, frozen, canned, dried, and 100% juice! Look at the chart below to find out how much your family needs

How Much Do I Need?

In California, blackberries, blueberries, and raspberries are in peak season in late spring and summer. Frozen berries are available year round. Visit a local farmers' market to ask about the berry season in your area.

Try these other rich sources of phytochemicals: beets, cherries, plums, red or purple cabbage, red or purple grapes, and whole grains.

Recommended Daily Amount of Fruits and Vegetables*

	Kids, Ages 5-12	Teens and Adults, Ages 13 and up
Males	2½ - 5 cups per day	4½ - 6½ cups per day
Females	2½ - 5 cups per day	3½ - 5 cups per day

* If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.

The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program – USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CalFreshHealthyLiving.org.

330223_HOTM.FAM/NewsBerries_120320.

CalFresh HEALTHY LIVING

CDPH California Department of PublicHealth

40%

×5

40

40% = 100

40% of 5 Blueberries

40/100 × 5 blueberries

40/100 × blueberries = 200/100

1

200 ÷ 100 = 2 blueberries

40% 2 blueberries

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