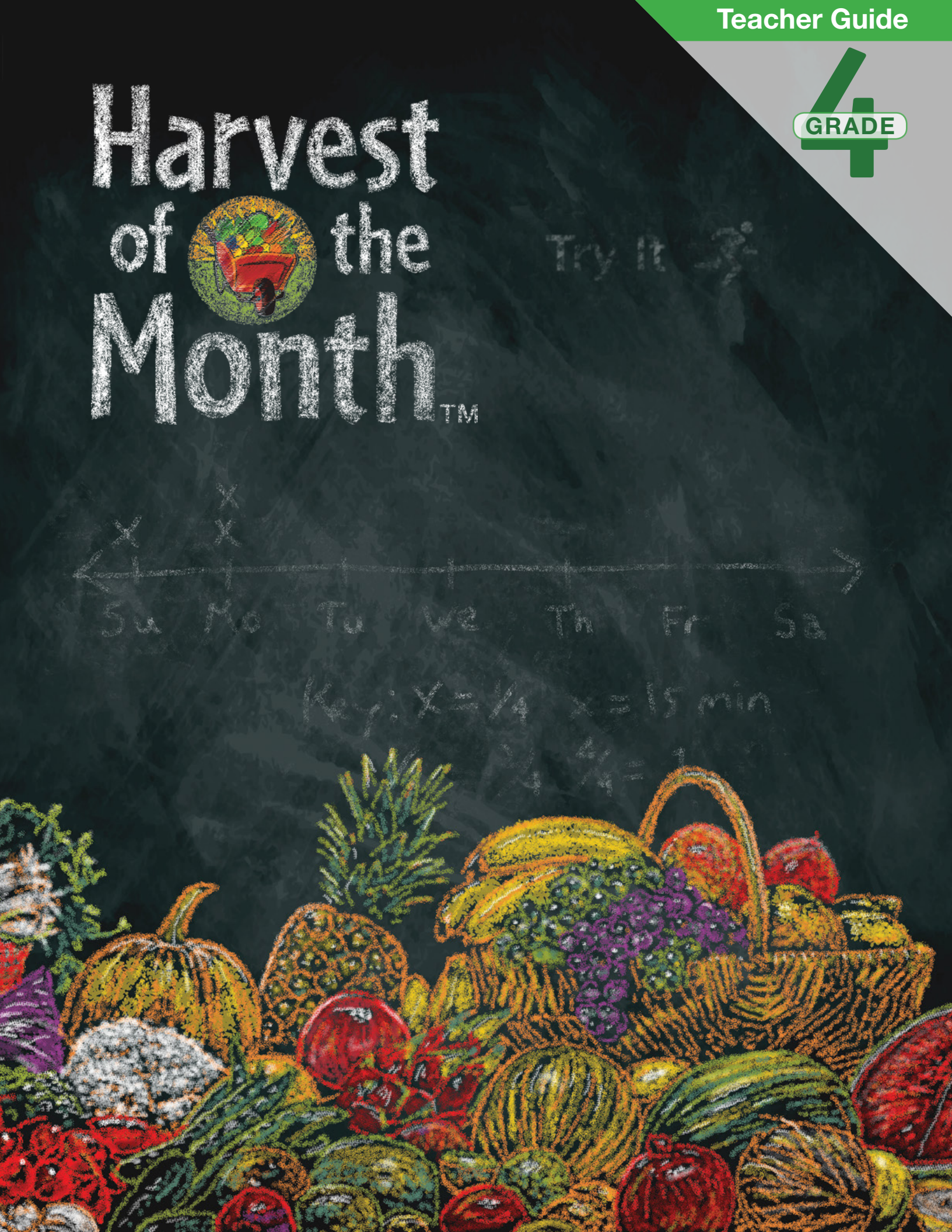
Teacher Guide

GRADE 4

Harvest of the Month™



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 nutrition facts and health benefits of apples.
- Visualize visiting places that have apples while participating in a physical activity.
- Write a story about visiting places that have apples and returning to those places in the future.
- Identify steps for eating more vegetables and fruits, including apples.
- Taste apples.

Goals, Competencies, and Standards

- **Harvest of the Month Goals**
  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 Competencies**
  6.4. Make a plan to choose healthy foods and beverages.
  7.4. Practice how to take personal responsibility for eating healthy foods.
- **Common Core Standard**
  CCSS.ELA-LITERACY.W.4.3
  Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

Materials: Harvest of the Month Workbooks, Educator Newsletter, Family Newsletters (one copy per student), vocabulary visual aid, and apples quartered (one quarter per student). 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	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 reading the new Nutrition Facts label.
2. Read the lesson's Healthy and Smart Goals with the class:

SW

- Discover places where you can find apples.
- Write a story about finding apples in those places.
- Taste apples. Make a plan to eat more apples.

3. Read the introductory passage with your students. Students will consider healthy snacking and identify the nutritional benefits of eating apples.

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 fruits like bananas, oranges, and grapes. Make sure to eat the peel. It's the most nutritious part.

4. Ask students to think of a healthy snack that includes apples and share it with the class.

Apple Nutrition Facts:

SW

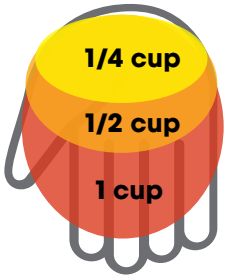
- The botanical name, or scientific plant name, for apples is *Malus domestica.*
- Apples contain carbohydrates, which are the body's main source of energy. There are three kinds of carbohydrates: starch, fiber, and sugar. Sugar is found only in plants. In food, sugar is classified as either naturally occurring or added.
- Naturally occurring sugars (except honey) are usually found in foods along with vitamins and minerals, while added sugars provide calories and very few vitamins and minerals.
- Added sugars are often called empty calories. Apples contain only naturally occurring sugars.
- **Nutrition Facts** labels give information about what is inside the food you are eating. They are not required to be placed on fruits and vegetables like they are on packaged items. We created a label so you know what is inside your apples and to teach you how to read labels on other foods. Look where it says "Nutrition Facts", you'll see the serving size and the number of calories in an item. Vitamin and mineral content is listed beneath the thick black bar. What nutrients can be found in apples?

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.

5. Guide students in interpreting the Nutrition Facts label in their workbook (see Nutrition Facts label resource at the end of this lesson). Explain that every day, they should strive for 100% of the Percent Daily Value (%DV) of nutrients listed in bottom third of the Nutrition Facts label. Say that 5% or less of a nutrient in a product is low, while 20% or more is considered high.



6. Draw their attention to the DV of potassium and fiber. Ask them if a ½ cup serving of apples would be sufficient to supply the recommended DV. Continue the reading:

SW

- Apples can be found in different locations, such as your school cafeteria, community garden, grocery stores, and farmers' markets. In this lesson, you will imagine a visit to these places. You will write a story about your trip and make a plan to eat apples. What are ways you can support your family in visiting these places?

Move It

Activity: Accessing and Choosing Apples in Our Community

Students will follow along with a reading passage about finding apples in their community. They will participate in a physical activity that simulates the adventure.

Teacher will read the story below about places that sell apples and making plans to visit them.

Instructions

1. Inform students that you will be reading a story aloud to them. Explain that as you read the story, they will be listening and responding through movement when they hear prompts. The story is about finding places in their community where they can find apples. They will act out the movements in the story.
2. Say that after the reading, they will be writing a version of the story that emphasizes making a plan to return to places with healthy apples to eat.
3. Discuss the vocabulary on the visual aid to familiarize your students with words they will find in the story.
4. Tell students to give themselves enough room to move in place.
5. Read the following passage to the students and give the prompts for moving, which are in bold type. The locations are underlined.

Eating fruits and vegetables is important to your health. Knowing where they can be found and making a plan to get them are important steps towards eating healthfully. Listen to the story and follow the directions.

Put on a helmet and bicycle ride in place. Up ahead is a community garden. Look, your teacher is standing there next to an apple tree. She/he says, "Hi. Good to see you."

Wave both arms up and down. She/he says, "A community garden is a place where people work together to grow healthy fruits and vegetables. Try this apple. It was grown on an apple tree in this community garden."

Reach up high for apples. Keep reaching and grabbing. Place an apple in your imaginary backpack. She/he says, "Will you come back sometime and help in the garden? When will you visit again?" Imagine you have a notepad or a smartphone for you to write down what you decide.

Use your hands to write or type in a reminder (to come back to the community garden. What does it say?).

Bike again. Is your helmet on? You're heading to the supermarket. There it is. Go into the store. You find a helpful grocer who shows you the apples in the produce section. There are yellow, green, and red apples. Explain that you're on a journey to visit all the places where apples can be found in your neighborhood. "What a fun journey!" the grocer says. "Ask your family to come back here to buy some apples."

Place some apples in your shopping cart. Hold the handle of the cart and speed walk to the checkout line.

Write or type into your giant notepad or smartphone when you plan to come back to the supermarket. What did you write?

"Hey, is there a farmers' market today?" you ask yourself. You check your notepad or smartphone. Yes, but they are closing shortly.

Quick, get your helmet on and bike as quickly and safely as you can. You're in luck; it's open. Find a stand selling apples. Wow, what a variety! They have so many colors and sizes of apples. Free samples! Woo-hoo. Try a few kinds. Choose some to buy.

Reach up and put your apples on the scale. Ask the farmer what days and times the market is open this month. Bag three different colors and sizes of apples. "When will you come back to get apples to eat?" the farmer asks.

Write or type into your giant note pad or smartphone when you plan to return to the farmers' market.

Bike home as quickly as you can. What is your plan to find apples in your school cafeteria? Add that to your plan. Share your experience and your plan with your family.

Link It

Activity: Organizing Ideas for Writing a Story about Getting Apples

Students will recall their journey in the Move It activity. They will place their ideas in a graphic organizer in preparation for writing a story.

Teacher will guide students in developing a story that also acts as a plan for accessing fruits and vegetables in the community.

Directions Fill in the table below. Write about where you went in the Move It activity. Describe the places that had apples. Say what you did there. Share your plan to visit those places again to get apples. Make sure your story has a beginning, middle, and end. Add your personality to the story.

Instructions

1. Tell students they will recall the different places in the community they visited in the Move It activity. Then they will write their version of a story about it. Explain that they will also be including their plan for returning to these places.
2. Guide students in completing the graphic organizer found beneath the Link It section of their workbook and also shown below. Encourage them to add their creativity to personalize the story.

	Where did you go? Where else could you get apples?	What did you do there?	When will you go back to get apples there? How often will you go back?
Beginning	The community garden	**Here is an example:** I biked to the community garden, saw my teacher, tried apples from an apple tree, and made a plan to come back.	Here is an example: I will visit the community garden next week and will return twice a month.
Middle	Supermarket		
End	Farmers' market		

Try It

Activity: Writing a Story about Getting Apples

Students will use the details in the graphic organizer in the Link It section to write about their visit to places in their community and their plan to return to those places.

Teacher will support students in writing their story.

Try It

Directions Write your story. Include the places you visited that had apples and your plan to return to these places in the future. Make sure your story has a beginning, middle, and an end.

Sample title: My Visit to Places that Have Apples and My Plan to Return

Your title: _____

_____

Instructions

1. Tell students to create a story using the ideas they organized in the Link It section.
2. Remind them it is important for their story to have the following features:
   a. A beginning, middle, and end;
   b. A discussion of where they went and what they did there; and
   c. Statements about when and how often they will return to the places that have apples.

Digest It

Activity: Tasting Apples and Reflecting on Learning

Students will taste apples and make connections between their stories and how they will acquire apples in the future.

Teacher will provide an apple tasting and lead a discussion.

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. Ask the students, while they are waiting, to think about if and when they've seen apples in the cafeteria, and if they tried them.

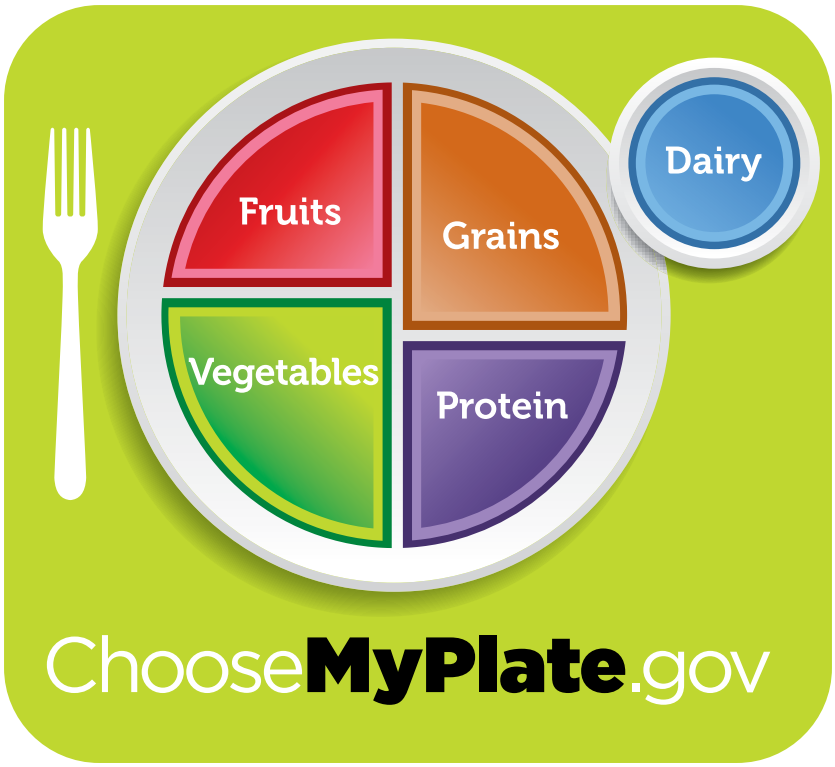
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the apple. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: “The apple is sweet, crisp, 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 a discussion about what they learned, using the prompts below, which students can find in the Digest It section of their workbook.

SW

- Where can apples be found?
- What are three steps you’ll take to eat more apples, fruits and vegetables?
- Share your story with your classmates. Also share your story with your family, so they can support your plans.

9. Encourage students to eat apples from the cafeteria. Ask them to raise their hands if they will try apples in the cafeteria this week and congratulate them.
10. Distribute the Family Newsletter. Discuss a recipe in the newsletter. Ask students to present the newsletter to their family members and to share the recipe.
11. 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

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

Harvest of the Month - Apples

Healthy and Smart Vocabulary

cafeteria: the place in your school where you eat every day and make healthy choices.

community gardens: places where people in a neighborhood grow fruits and vegetables together.

farmers' market: an outdoor food market where farmers sell the fruits and vegetables they grew.

food bank: a place where food is stored and given to people who need it.

grocery store: a store that sells many kinds of food, including fruits and vegetables.

school garden: a place at your school where fruits and vegetables are grown by students.

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 nutrition facts and the health benefits of eating winter squash.
- Express how to take personal responsibility for eating more fruits and vegetables, including winter squash.
- Examine why physical activity is important, explore different types, and find out how much physical activity they should engage in daily.
- Monitor daily physical activity using line plots.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase participation in daily physical activity and improve understanding of why it is important to our health.
- **Health Standard: Nutrition Competency**
  1.3. Identify ways to increase and monitor physical activity.
- **Common Core Standard**
  CCSS.MATH.CONTENT.4.MD.B.4
  Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Solve problems involving addition and subtraction of fractions by using information presented in line plots. Familiarize students with this standard if they have not yet been introduced to it.

Materials: Harvest of the Month Workbooks, 1 bite-size piece of cooked winter squash or approximately 5 pumpkin seeds per student, Educator Newsletter, and Family Newsletters (one copy per student). Educator Newsletters are located at 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 will read a passage that contains nutrition information about winter squash.

Teacher guides 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

- Discover nutrition facts and other information about winter squash.
- Take responsibility for eating more fruits and vegetables, including winter squash.
- Identify four types of physical activity.
- Use a line plot to monitor your physical activity.

3. Read this introductory passage with your students.

SW

- The Harvest of the Month is winter squash. Pumpkin is just one example of winter squash. There are other varieties of squash such as Acorn, Butternut, and Spaghetti. Both the fruit and seeds can be eaten. Have you ever eaten pumpkin seeds, or *pepitas* as they are called in Spanish? They are a healthy and delicious snack all year long. Take a look at the Nutrition Facts label. What percent Daily Value (DV) of fiber, calcium, and potassium does winter squash contain?

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 DV of fiber for winter squash. Ask them what percent DV of fiber does a ½ cup serving of winter squash provide? [18%]
6. Continue the reading. (See next page)

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.

Here are a few more facts about winter squash:

- The botanical name for winter squash is *Cucurbita maxima.*
- Winter squash is not grown or picked in the winter. So how did 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.
- 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!

Eating fruits and vegetables like winter squash is an important part of keeping your body healthy. Physical activity is also very important. Physical activity helps to build and keep the heart, lungs, and muscles strong. Keeping your body fit and healthy also makes it less likely that you will get illnesses like heart disease and type II diabetes. One way to make sure that you are getting enough physical activity is to keep track of your activity. We can do this with a line plot, which you will learn about in the Link It and Try It sections. You should get at least 60 minutes of physical activity every day. We will learn about different types of physical activity in the Move It section.

Move It

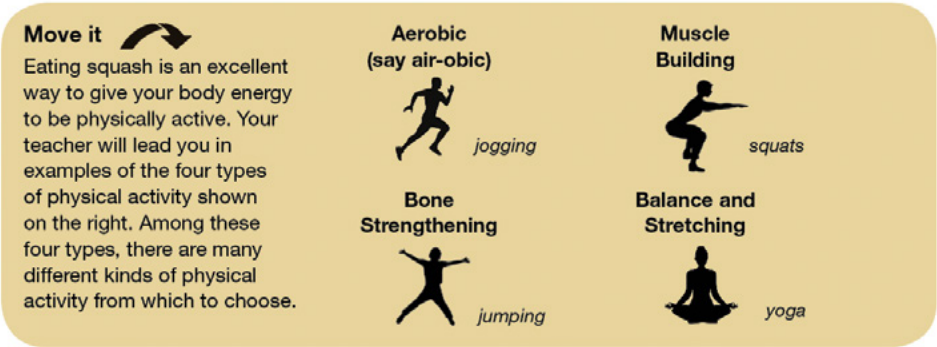
Activity: Learning and Engaging in Four Types of Physical Activity

Students will participate in four types of physical activity and learn about the health benefits of each.

Teacher will lead students in four types of physical activity and a reading of their benefits.

Instructions

1. Explain that they will be learning four types of physical activity. Add that they will be learning why physical activity is important.



2. Tell students to stand up. Say that you will be leading them in different types of physical activity and giving an example of each.
3. Review the script in advance and modify it for ability levels as needed.

   Class, first we are going to learn about aerobic activity. It's a kind of physical activity that makes you breathe harder and makes your heart beat faster. An example of this is jogging. Everyone, jog in place. [After 20–30 seconds signal them to stop.]

   Now, we are going to do a muscle-strengthening activity that will make your muscles stronger. Let's call it the "squash," otherwise known as squats. Everyone squash. [Lead class in 10–15 squats shown below. Instruct students to pretend like they are going to sit in a chair. Keep their backs straight, heads up, and bring their arms forward as they sit into squat position. Slowly straighten up to a standing position and lower arms.]

   Now, we are going to do a bone-strengthening activity. Let's jump in place. [Lead students in 10–15 jumps.]

   The last type of physical activity is balance and stretching. This kind of activity makes you flexible and less likely to get injured. Yoga is one example of a balance and stretching activity. We are going to do the "squash blossom" pose. Stretch both hands up as far as you can go...put your palms together...imagine you are a squash blossom that hasn't opened yet...now stretch your arms out to the side...the flower is opening...hands to the sides of your legs...hands back up again... and repeat.
4. Now, repeat the circuit with the four physical activities, but replace the descriptions of each one with these examples of how physical activity can help you.

   Physical activity can help you:

   - Be with friends or meet new people. [jog]
   - Have stronger muscles and bones. [squats]
   - Stay healthy. [jump]
   - Enjoy yourself and have fun. [yoga "squash blossom" pose, see above]

Link It

Activity: Use a Line Plot to Graph Physical Activity

Students will place X's on a line plot to show the number of quarter-hours they did physical activity.

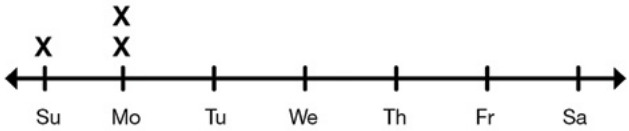
Teacher will show students how to interpret data by creating a line plot.

Link it

You should get 60 minutes of physical activity every day. You can keep track of the time you spend being physically active by using a line plot. The table shows how many quarter hours Ana spent being active each day this week.

Ana's Physical Activity This Week	
Days	**Hours**
Sunday	¼
Monday	½
Tuesday	½
Wednesday	¼
Thursday	¾
Friday	1
Saturday	1

Directions Place an X on the line plot for every quarter-hour she was active each day.



What is the difference between Ana's most active and least active day?

4/4 – ____ = ____

How many minutes is that? _____

Key: X = 1/4 X = 15 minutes 1/2 = 2/4 4/4 = 1

Instructions

1. Familiarize students with standard CCSS.MATH.CONTENT.4.MD.B.4 if they have not yet been introduced to it.
2. Remind students that they should engage in 60 minutes of physical activity every day. It is useful to monitor, or keep track of, the amount of physical activity they are getting.
3. Explain that 15 minutes is one quarter-hour. Direct their attention to the table and the line plot in the Link It section of their workbook. Show them how the quarter-hour for Sunday in the table is represented on the line plot with one X.
4. Tell students to use the key to see how many fourths make up ½. Show them how the hours for Monday are represented on the line plot. Ask them to represent ¾ hours on the line plot for Wednesday. Continue in this manner for the other days.
5. Lead students in answering the question, "What is the difference between Ana's most active and least active days?" [4/4 - 1/4 = 3/4]
6. Ask students if Ana has increased or decreased her physical activity from the beginning to the end of the week and by how many minutes. [Increased from ¼ hour on Sunday to 1 hour on Saturday, for a total increase of ¾ hour or 45 minutes.]

Try It

Activity: Independent Work Creating Line Plots

Students will work independently to complete the math problems involving a data table and a line plot. In the second table, they will record their physical activity for the last two days and then set a goal for the next five days.

Teacher will monitor student progress and ask students to share their answers to the first table and line plot.

Instructions

1. Discuss the instructions in their workbook for the first problem.
2. After giving students enough time to complete the problem, prompt students to share their answers. [The correct response is 4 ¾ hours or 285 minutes.]

Try it

Plot Pat's activity this week on the line plot. Place an X on the line plot for every quarter-hour she was active each day.

Pat's Physical Activity This Week	
Days	**Hours**
Sunday	½
Monday	½
Tuesday	¼
Wednesday	¾
Thursday	1
Friday	¾
Saturday	1

Key: X = 1/4 X = 15 minutes 1/2 = 2/4 4/4 = 1

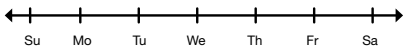
What's the total number of hours Pat was active this week?

Add up the minutes for all the days. _____

3. Explain that in the second problem they will be setting a goal for their activity for the next five days and entering their own information into the table using quarter-hours.
4. Ask students to begin. Monitor their progress.

Your Physical Activity Goal This Week	
Days	**Hours**
Yesterday	
Today	

Monitor your exercise. Enter your physical activity yesterday and today in the table. Then make a goal for the next five days. Enter that information in the table. Then show the information on the line plot.



Key: X = 1/4 X = 15 minutes 1/2 = 2/4 4/4 = 1

Some days we are more active, some days we are less active. 60 minutes a day is 420 minutes a week. How many minutes per week is your goal? _____

Digest It

Activity: Tasting Squash and Reflecting on Physical Activity

Students will taste squash, reflect on their current level of physical activity, and consider monitoring their activity for the next five days.

Teacher will provide a tasting of squash, ask students to reflect on their learning, and encourage them to monitor their physical activity levels.

Instructions

1. Tell students they will be trying some 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. Ask the students, while they are waiting, 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 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. Hand out copies of the Daily Physical Activity Chart blackline master or use the version in the student workbooks. Tell students they will be tracking their physical activity for the next five school days. Discuss how and when your students will track their physical activity on the chart.

9. 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.

Digest It

It's time to eat some squash and digest what you've learned!

- Name an important nutrient in winter squash.
- What are the four types of physical activity?
- Track your physical activity for five days using the chart.

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

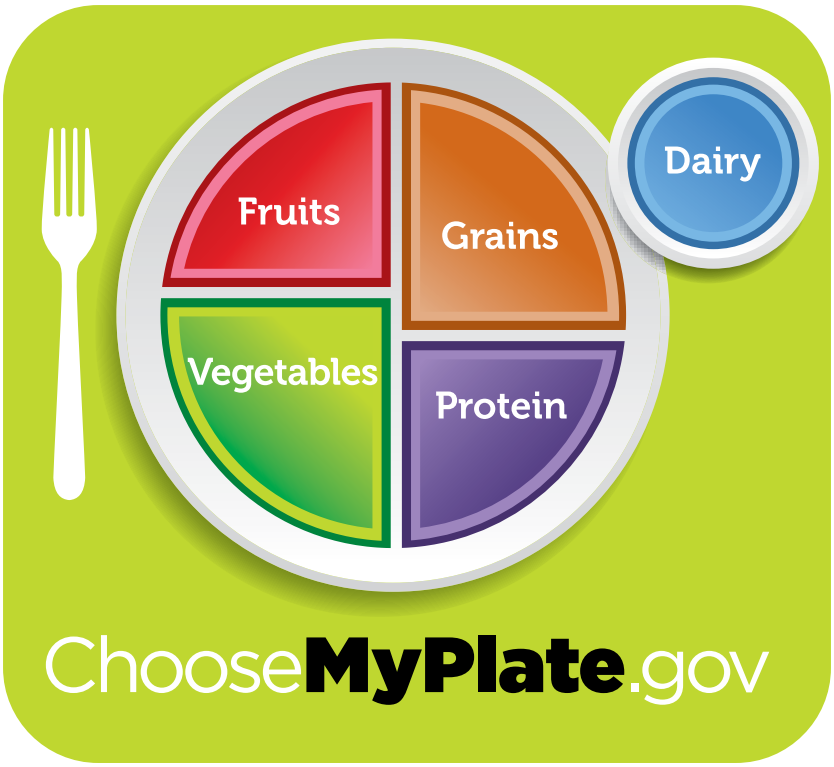
Daily Physical Activity Chart

Directions Use this chart to monitor your physical activity the next five days. Place an X above each day for every 1/4 hour, or 15 minutes, you engage in physical activity. Sixty minutes is the daily recommended amount of physical activity for children your age. That is 7 hours, or 420 minutes per week. **Put a star on the days you eat winter squash.**

Day 1	Day 2	Day 3	Day 4	Day 5

Key: X = 1/4 X = 15 minutes 1/2 = 2/4 4/4 = 1

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

❹ Get enough of 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%

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

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

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

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™

BROCCOLI

Harvest of the Month™

Learning Objectives

- Identify nutrition facts and health benefits of eating broccoli.
- Imagine a healthy snack using broccoli as one of the ingredients.
- Compose three short snack descriptions, using sensory details.
- Taste broccoli.
- Make a plan to eat broccoli.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase participation in daily physical activity and improve understanding of why it is important to our health.
- **Health Standard: Nutrition Competency**
  1g.4. Identify a variety of ways to prepare or include fruits, vegetables, and whole grains in daily meals and snacks.
- **Common Core Standard**
  CCSS.ELA.LITERACY.W.4.3.D
  Use concrete words and phrases and sensory details to convey experiences and events precisely.

Materials: Harvest of the Month Workbooks, one bite-size floret of broccoli per student, Fruit and Vegetable Color Cards (cut out from main sheet), Create a Tasty Snack Description 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	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

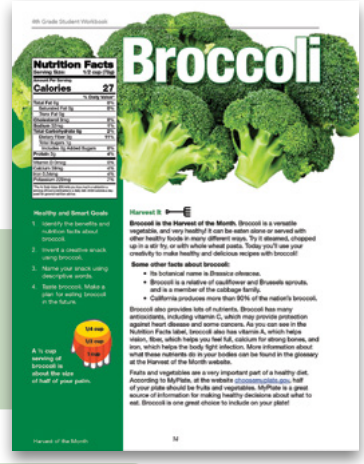
Harvest It

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 the benefits and nutrition facts about broccoli.
- Invent a creative snack using broccoli.
- Name your snack using descriptive words.
- Taste broccoli. Make a plan for eating broccoli in the future.

3. Read the introductory passage with your students:

SW

- The Harvest of the Month is broccoli. Broccoli is a versatile vegetable and it is very healthy! It can be eaten alone or served with other healthy foods in many different ways. Try it steamed, in a stir fry, or with whole wheat pasta. Today you'll use your creativity to make healthy and delicious recipes with broccoli!

Some other facts about broccoli:

- Its botanical name is *Brassica oleracea.*
- Broccoli is a relative of cauliflower and Brussels sprouts, and is a member of the cabbage family.
- California produces more than 90% of the nation's broccoli.

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.

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.

- Broccoli also provides lots of nutrients. Broccoli has many antioxidants, including vitamin C, which may provide protection against heart disease and some cancers. Broccoli also has vitamin A, which helps vision, fiber, which helps you feel full, calcium for strong bones, and iron, which helps the body fight infection. More information about what these nutrients do in your bodies can be found in the glossary at the Harvest of the Month website.
- 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 one great choice to include on your plate!

Move It

Activity: Create a Snack Recipe Containing Broccoli

Students will learn how to write a snack description.

Teacher will place lists of different colored fruits and vegetables in various locations in the classroom, then direct students to choose their ingredient selections for a snack recipe.

Instructions

1. Introduce broccoli as the Harvest of the Month vegetable. Express that you like it, especially when it is in combination with other foods you like.
2. Give a quick overview of the entire lesson: selecting foods to be used in a snack recipe; brainstorming descriptive words; describing the snacks; and sharing the snack descriptions with the class.
3. Place the lists of different colored fruits and vegetables from the Fruit and Vegetable Color Cards in locations throughout the classroom.
4. Tell them that they are going to pretend that they are a chef on a TV show that has to create a dish using one required ingredient and other ingredients of their choosing that they think would go well with it.

5. Read the directions aloud and ask the students to follow along in their workbook:

- **Directions** Select foods for your snack recipe! Imagine you are a celebrity chef asked to develop two snack recipes containing broccoli. You will visit the lists of fruits and vegetables your teacher has placed around the room. Each list contains fruits and vegetables of a different color. Choose at least one of each color and record them in the table below. You will use these choices and some of your favorite other ingredients in your snack recipes.

6. Tell students that they will be visiting the different colored cards and recording their selections in their workbook. They may select fruits and vegetables not on the list as well.
7. Explain that you want all students to visit each station. Consider using a rotation and a signal such as "broccoli."

Link It

Activity: How to Create a Tasty Snack Description

Students will learn how to write a snack description.

Teacher will model how to create a snack description using the "Snack Description" visual aid.

Instructions

1. Read the directions to the class:

- **Directions** Create a delicious sounding snack description. Spice up the sound of your snacks with some exciting words. Select descriptive words from the tastes, feels, and action verbs lists below and enter them where it says, "Use a descriptive word for each ingredient."

Explain that part of their snack menu items will include words that describe how the item tastes, feels (texture), and how it is prepared (action verb).

2. Direct their attention to the lists of words in the Link It section of the workbook. Encourage them to think of additional words and record them on the board or screen.
3. Model how to create a snack description using the "Create a Tasty Snack Description" visual aid, which mirrors the table in the Link It section in the workbook. Using the table titled "Choose Your Ingredients," show them how to record vegetables and a favorite food of theirs that they think will pair well with broccoli.

4. Thinking out loud, select some descriptive words from the taste, feels, and action verb lists. Enter your descriptive words where it says, "Use a descriptive word for each ingredient."
5. Model describing the snack.

SW ◆ Put all the ingredients and descriptions together in a single phrase.

Recipe 1 Choose your ingredients. Use different colored fruits and vegetables.			
Harvest of the Month	Fruit or Vegetable	Fruit or Vegetable	A Favorite Food
Broccoli			
Use a descriptive word for each ingredient.			

6. Ask the class how to improve the name of the snack.

Try It

Activity: Create Snack Descriptions

Students will create a snack description using broccoli and the food items they have chosen.

Teacher will monitor student progress and provide support as they create snack descriptions.

Instructions

1. Tell students it is now their turn to create their own snack description.
2. Tell them that they should follow the procedure you modeled in the Link It section.
3. After a few minutes, stop and check for understanding.
4. Challenge early finishers to compose a second snack with either more ingredients or greater description.
5. Remind them that they will be sharing the description of their snack during the Digest It section.

Digest It

Activity: Tasting Broccoli and Sharing Snack Descriptions

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

Teacher will provide a tasting of broccoli, ask students to share what they have learned, and discuss a recipe in the Family Newsletter.

Instructions

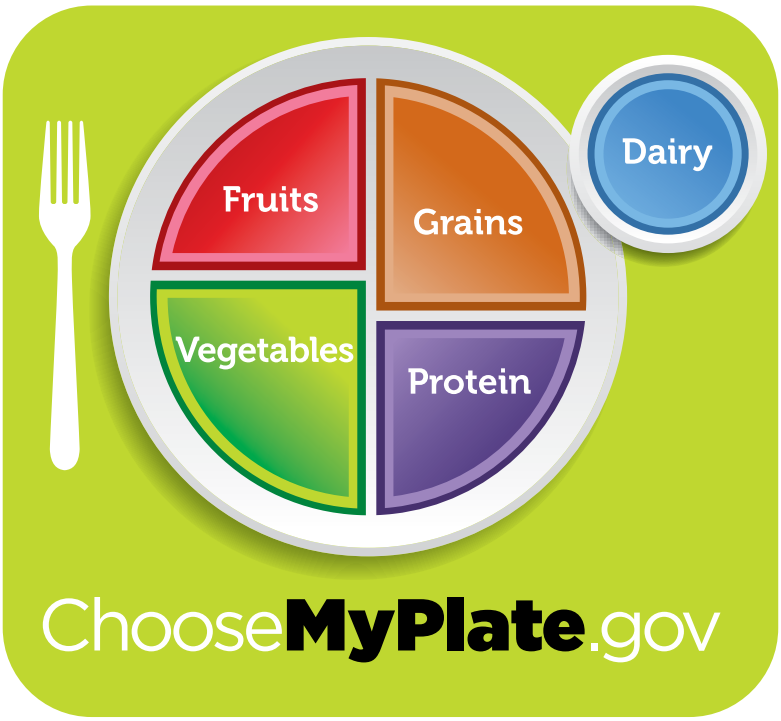
1. Tell students they will be trying some broccoli and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them 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 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 of the nutrients in broccoli?
- Share your snacks' descriptions.
- What are some ways we can use broccoli as an ingredient in recipes?
- What is your plan to be able to try your broccoli snacks?

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

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

❹ Get enough of 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%

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

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

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

Red

Cherries
Cranberries
Radishes
Raspberries
Red apples
Beets
Red bell peppers
Red grapes
Red potatoes
Tomatoes
Strawberries
Watermelon

Orange

Apricots
Butternut squash
Cantaloupe
Carrots
Nectarines
Oranges

Yellow

Chickpeas
Corn
Mangoes
Pineapples
Yellow peppers
Yellow tomatoes

Green

Asparagus
Cabbage
Celery
Cucumber
Soy beans
Green apples
Green beans
Green peppers
Snow peas
Sugar snap peas

Blue/Purple

Blackberries
Blueberries
Eggplant
Plums
Red Cabbage
Figs
Purple grapes
Purple potatoes

Create a Tasty Snack Description

Link it

Directions Create a delicious sounding snack description. Spice up the sound of your snacks with some exciting words. Select descriptive words from the tastes, feels, and action verbs lists, and enter them where it says, “Use a descriptive word for each ingredient.”

Tastes		Feels (texture)		Action Verbs	
Bold	Spicy	Chewy	Flakey	Chopped	Grated
Buttery	Sweet	Creamy	Fluffy	Covered	Melted
Cheesy	Sour	Crispy	Hot	Dipped	Mixed
Delicious	Tasty	Crumbly	Gooey	Dripped	Sliced
Peppery	Zesty	Crunchy	Juicy	Drizzled	Sprinkled
Rich		Fuzzy	Moist	Dusted	Whipped

Step 1

Recipe 1 Choose your ingredients. Use different colored fruits and vegetables.			
Harvest of the Month	Fruit or Vegetable	Fruit or Vegetable	A Favorite Food
Broccoli			

Step 2

Use a descriptive word for each ingredient.			

Step 3

Put all the ingredients and descriptions together in a single phrase.

_____

_____

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.

330224_HOTM.FAM/NewsBroccoli_120320.

Notes

Harvest of the Month™

ORANGES

Harvest of the Month™

Learning Objectives

- Identify the nutrition facts and health benefits of oranges.
- Express how to take personal responsibility for eating more fruits and vegetables, including oranges.
- Use a decision-making process to choose healthy drinks.
- Multiply to find the number of calories different drinks contain.
- Determine how much physical activity is necessary to burn calories.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumers' preference for fruits and vegetables.
- **Health Standard: Nutrition Competency**
  4.5. Describe how to use a decision-making process to select nutritious foods and beverages.
- **Common Core Standard**
  CCSS.MATH.CONTENT.4.NBT.A.2
  Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

Materials: Harvest of the Month Workbooks, 1 orange slice per student, Educator Newsletter, and Family Newsletters (one copy per student). 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	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:

S W

- Learn information and nutrition facts about oranges.
- Discover how to choose healthy drinks.
- Learn how much exercise it takes to burn calories.
- Compare two multi-digit numbers.

3. Read the introductory passage with your students:

S W

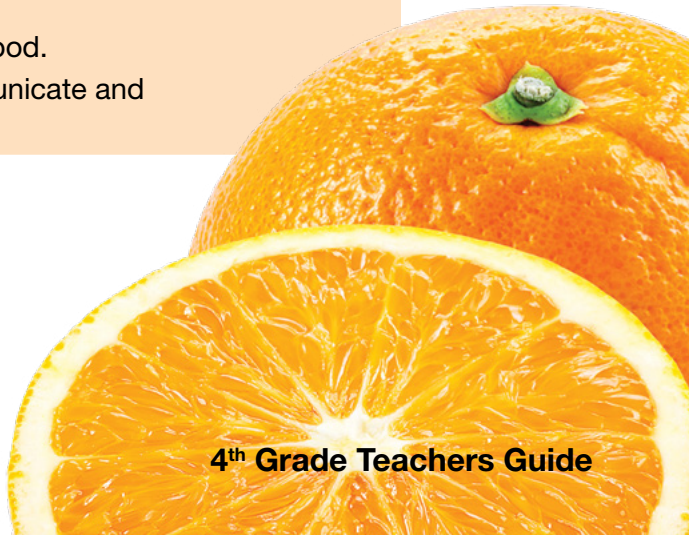
- The Harvest of the Month is oranges. Oranges are delicious and packed full of nutrients. You can eat oranges on their own, in recipes such as fruit salad, or drink them as orange juice. Orange juice is a healthy choice because it contains all the nutrients in the orange. Orange juice with pulp is better, since it contains fiber. Oranges are very hydrating. They are 87% water!

4. Pause the reading here. 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 Daily Value (DV) of potassium for oranges. Ask them if a ½ cup serving of oranges would be sufficient to supply the recommended DV. Continue the reading:

Some benefits of the nutrients found in oranges:

S W

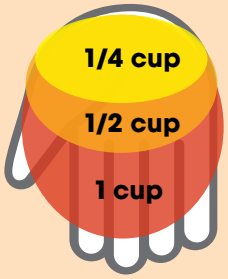
- Vitamin C boosts the immune system to help fight illness.
- Fiber helps you feel full.
- B-vitamins help you use the energy in your food.
- Potassium helps nerves and muscles communicate and function together.



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 oranges are the two primary orange varieties grown in California.

It is important to pay attention to the calorie content in beverages and food. Drinks (other than water) and snacks throughout the day can pack in a lot of extra calories. 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 cancers and type II diabetes. Healthy drink choices in addition to water include a small amount of 100% juice, and low-fat (1%) or nonfat milk. Orange juice and milk contain important nutrients. Avoid drinks with added sugar.

Move It

Activity: Burning Calories Through Different Kinds of Activity

Students will engage in different kinds of physical activity and learn how many calories they burn.

Teacher will direct students to participate in different types of physical activity and say how many calories each activity burns.

Instructions

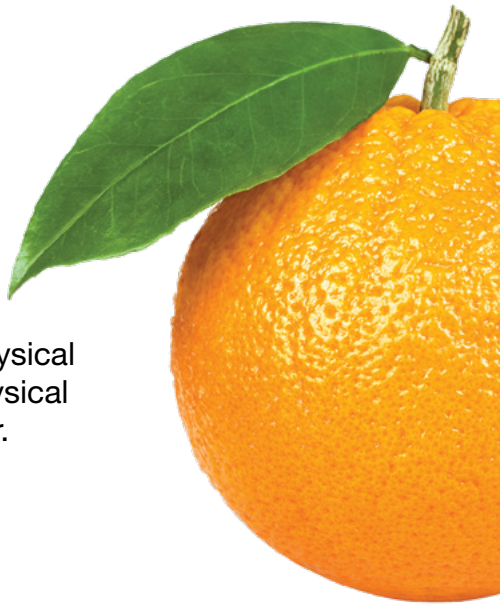
1. Tell students that they will be doing different kinds of physical activity and learning how many calories each activity can burn. Ask them to read the passage in their workbooks:

   - The amount of calories we use depends on the type and duration of physical activity, our age, and whether we are male or female. In the Move It activity, your teacher will lead you in different kinds of physical activities and will tell you how many calories each activity can burn.

2. Lead the class in the following moderate physical activities for 20–30 seconds each. Tell students the name of the physical activity and how many calories it can burn in one half hour: sitting (35 calories), walking (140 calories), and running (280) calories.

Note: *Calories burned vary based on height/weight, age, and intensity level. The amounts in the chart are based on a 154-pound man as per USDA [1].*

Activity	Calories Burned in a Half Hour
Touching your toes	90 calories
Lifting weights (use pretend weights)	110 calories
Moderate walking	140 calories
Dancing (e.g. doing the Twist)	165 calories
Hiking uphill	185 calories



3. Lead the class in pretending to do the following vigorous physical activities for 20-30 seconds each. Tell students what the physical activity is and how many calories it can burn in one half hour.

Activity	Calories Burned in a Half Hour
Basketball or soccer	220 calories
Swimming laps	255 calories
Bicycling quickly	280 calories
Moderate running	280 calories

4. Ask students to return to their seats. Ask students how they felt when doing the different activities.

Link It

Activity: Comparing Two Numbers and Drawing Conclusions

Students will compare multi-digit numbers to determine if the calories consumed in drinks and foods can be expended in a half hour.

Teacher will explain how to compare the hundreds, tens, and ones place of two numbers to determine if the calories contained in certain drinks and foods can be burned in half an hour.

Instructions

1. Explain that not all drinks have the same number of calories. Review the activity directions:

SW

- **Directions** Compare the amount of calories in foods and drinks with how long it will take to burn those calories while sitting, walking and running.

Tell students that they are going to learn roughly how many calories different drinks contain and then determine if a half hour of physical activity would burn all of the calories.

2. Introduce or review place value through the hundreds place.
3. Introduce or review how to compare two multi-digit numbers. Show them how to determine the place farthest to the left for two numbers. Say that if one number has a digit in a place farther to the left, it is the greater number, e.g. 20 < 200.
4. If two numbers have a digit in the same place farthest to the left, they must compare the digits to see which is greater, e.g. 100< 200.
5. Say that if two numbers have a digit in the same place farthest to the left, and those digits are identical, they must compare the digits to the right to see which is greater, e.g. 200 < 250.
6. Direct students to the example in the Link It section of their workbook:

SW

- An orange has 60 calories. What activities would burn off the calories from an orange in a ½ hour? Circle either <, >, or = to show your answer.

[60 > 35 sitting; 60 < 140 walking; 60 < 280 running]

7. Say the following:

   An orange has 60 calories. In adults, sitting for a half hour burns 35 calories, walking burns 140 calories, and running burns 280 calories. We are going to determine whether these three activities would burn all the calories in an orange.
8. Discuss the example in their workbook. Show them how to circle either less than, more than, or equal to, to indicate their answer.
9. Guide students in completing the comparisons with the sports drink.

SW

- A sports drink has 150 calories. What activities would burn the calories from sports drink in a ½ hour? Circle either <, >, or = to show your answer.

[150 > 35 sitting; 150 > 140 walking; 150 < 280 running]

10. Lead students in answering the challenge questions from their workbook:

SW

- About how long would it take to burn the calories from the orange while sitting? [About 1 hour].
- About how long would it take to burn the calories from the sports drink while walking? [A little over 1 hour].
- About how long would it take to burn the calories from the sports drink while running? [About ½ hour].

Try It

Activity: Comparing Calories Consumed with Calories Burned

Students will compare multi-digit numbers to determine if the calories in drinks can be expended in a half hour. They will also make decisions based on their comparisons.

Teacher will guide students in analyzing information about calories in drinks and physical activity.

Instructions

1. Read the directions to the Try It section aloud with the students:

SW

- **Directions** Compare the amount of calories in drinks with how long it will take to burn those calories.

2. Monitor their progress as they complete the first three problems and the questions that follow.
3. Discuss the answers to these questions from their workbook:

SW

- Two small drink pouches have 200 calories. Which activities will burn more calories in a ½ hour than the amount of calories in the soda? Circle either <, >, or = to show your answer.

  200 <=>35 sitting; 200 <=> 140; walking 200 <=> 280 running.

  [200 > 35 sitting; 200 > 140 walking; 200 > 280 running]

- A large soda contains 250 calories. Which activities will burn more calories in a ½ hour than the number of calories in the soda? Circle either <, >, or = to show your answer.

  250 < = > 35 sitting; 250 < = > 140 walking; 250 < = > 280 running

  [250 > 35 sitting; 250 > 140 walking; 250 < 280 running]

- A large juice drink (which contains very little juice and a lot of added sugar) contains 300 calories. Which activities will burn more calories in a ½ hour than the number of calories the juice drink? Circle either <, >, or = to show your answer.

4. Discuss the prompt from their workbook:

SW

- You learned that if we eat and drink many more calories than we burn, we can gain more weight than is healthy for us. Looking back at your answers in the Link It and Try It sections, what decisions will you make about your drink choices and physical activity?

5. Ask them to write their decisions in the workbook. Consider having them write more on the topic on a separate sheet of paper.

Digest It

Activity: Tasting Oranges and Reflecting

Students will taste oranges and reflect upon what they learned about sugar, calories, drinks, and physical activity.

Teacher will provide a tasting of oranges and lead a discussion about using a decision-making process to choose healthy drinks.

Instructions

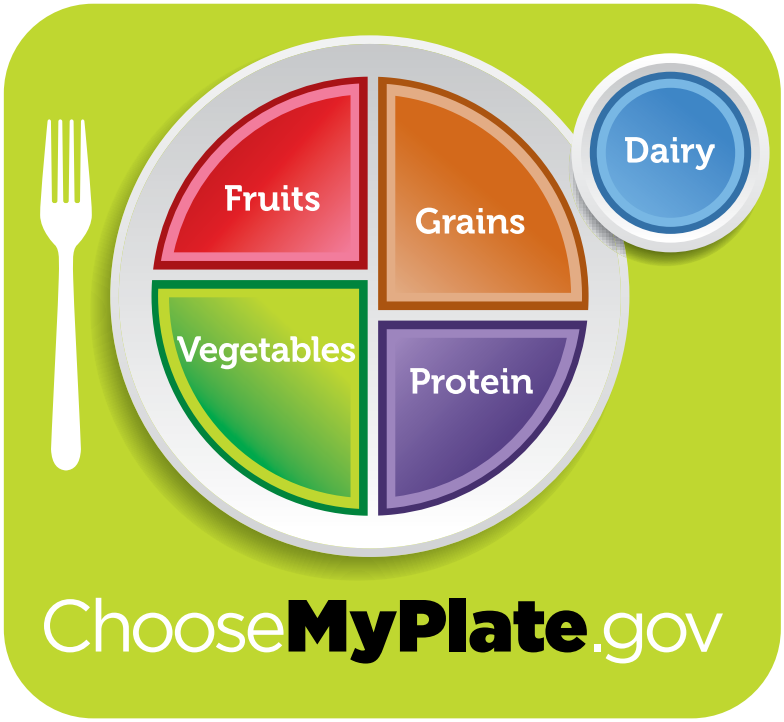
1. Tell students they will be trying oranges and reflecting on their learning.
2. Have students wash their hands.
   Per the Centers for Disease Control and Prevention[1]:
   a. Wet hands with clean, running water (warm or cold), turn off the tap, and apply soap.
   b. Lather hands by rubbing them together 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 students 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 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 did you learn about physical activity, sugar, and calories?
- Will you choose your drinks any differently now?
- What will you consider when you choose drinks 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:

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

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 the nutrition facts and health benefits of carrots.
- Discover places in the community where students can find locally grown fruits and vegetables, including carrots.
- Write an opinion piece on the benefits of locally grown and locally sourced fruits and vegetables.
- Taste a carrot and share their writing.

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**

  2.4. Identify examples of a food item associated with a neighborhood, city, state, or country.
- **Common Core Standard**

  CCSS.ELA.-LITERACY W.4.1

  Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

Materials: Harvest of the Month Workbooks, 2-3 baby-cut carrots per student, Sample Classroom Layout, class set of Locally Grown cards, Writing an Opinion Piece visual aid, Educator Newsletter, and Family Newsletter (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	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:
   - Identify nutrition facts and health benefits of carrots.
   - Discover where locally grown foods can be found.
   - Write about why we should visit these places.
   - Taste carrots and make a plan for eating them in the future.
3. Read the introductory passage with your students:

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 create 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.

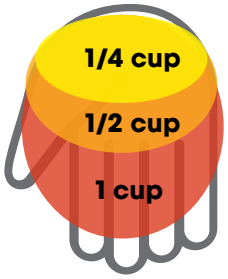
Carrot facts:

- The botanical name for carrots is *Daucus carota.*
- Have you ever had a baby-cut carrot? Did you know that they are not really baby carrots? They are full-grown carrots that have been peeled and cut into smaller pieces. A baby carrot is picked before it gets big.
- Did you know that carrots were originally shades of purple, not orange? It's true. Carrots come in a variety of colors: white, yellow, orange, red, purple, and black. You might find some exciting colors at a local farmers' market. Our farmers grow a lot of carrots.
- California is the number one producer of carrots in the United States.
- Vegetables are very healthy for you, whether they come from far away or nearby. You should be eating 2–2.5 cup of vegetables every day. There are some health benefits of eating locally grown fruits and vegetables and we are going to explore those in our lesson today. Take a look at the Nutrition Facts label to learn more about carrots.

Nutrition Facts	
Serving Size:	1/2 cup (61g)
Amount Per Serving	
Calories	**25**
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 45mg	2%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	7%
Total Sugars 3g	
Includes 0g Added Sugars	0%
Protein 0g	0%
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.18mg	0%
Potassium 195mg	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.

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that every day they should strive for 100% of the Percent Daily Value (DV) of nutrients listed on the bottom third of the Nutrition Facts label plus fiber. Say that 5% or less of a nutrient in a product is low, while 20% or more is considered high.



5. Draw their attention to the DV of fiber. Ask them if a ½ cup serving of carrots would be sufficient to supply the recommended daily DV. [Students should be eating 2-2½ cups of Fruits and Vegetables everyday].

Move It

Activity: Learning About Places with Locally Grown Produce

Students will learn about the benefits of local food suppliers. They will use the information they collect to write an opinion piece about places with locally grown produce in the Link It and Try It sections.

Teacher will lead students through the four stations where they will collect the information.

Please note: Consider conducting this activity outside.

Instructions

1. Prepare the activity by making Farmers' Market, Food Bank, Grocery Store, and School Cafeteria stations. Put the cards for each of those places at their respective stations.
2. Read the directions to the class:

- **Directions** Visit each provider of locally grown food station in your classroom. Listen closely for reasons why they are great places to visit. Write down two reasons for each place you visit. You will need the ideas for the Link It and Try It sections.

Explain that locally grown food is food that is grown close by. Say that they will use their experience in the activity to write an opinion piece about the benefits of locally grown food and the places they are sold.

3. Divide the class into four groups and position each of them each at a station. Ask each student to pick up a card. Have one or more students read the prompt on the card to the group out loud. Tell them to pretend they are workers at that location when they are the readers and customers when they are listeners.
4. Rotate the groups to the next station after they have finished reading each card. Pick new students to read the card they find there. Continue in this manner until all groups have read the card at each station.
5. Ask students to return to their seats and to complete the table by writing two reasons to visit each of the places with locally grown fruit.

Link It

Activity: Practice Writing an Opinion Piece About Buying Locally

Students will recall their experiences from the Move It activity and document them in the graphic organizer in their workbooks. They will develop a point of view regarding the benefits of local food and the places where it can be found.

Teacher will guide students in developing and placing ideas in a graphic organizer (see the Writing an Opinion Piece visual aid following the lesson). The teacher will model writing a short opinion piece that supports a point of view with reasons from the brainstorm.

Instructions

1. Tell students that they will be writing an opinion piece about the benefits of locally grown food and the places they are sold and distributed. Ask them to read the directions in their workbooks:

SW

- **Directions** Complete the paragraph about why places with locally grown fruits and vegetables are great places to visit. Use a second reason supporting the point of view that farmers' markets are great places to visit.

2. Ask students to share some of the ideas about locally grown food outlets that they documented in their workbook during the Move It activity.
3. Use the Writing an Opinion Piece visual aid to capture the reasons they shared for visiting farmers' markets.
4. Read the paragraph that has been started on the visual aid:

SW

- Places with locally grown food are great to visit. An example of a place with locally grown food is a farmers' market.

5. Demonstrate how to continue writing the paragraph using the reasons you wrote in the table.
6. Ask students to continue the paragraph that has been started in the Link It section of their workbook by giving a second reason for why farmers' markets are a great place to visit. [Flavorful, ripe, and less expensive.]

Try It

Activity: Writing an Opinion Piece About Buying Locally

Students will write an opinion piece using reasons written in the graphic organizer in the manner modeled in the Link It section.

Teacher will monitor and support student progress in writing the opinion piece.

Instructions

1. Review the directions for the activity:

- **Directions** Continue the writing you began in the Link It section. Write about a grocery store, school cafeteria, or food bank. Give at least two examples of why these are great places to get locally grown food. Use ideas from the Move It section and your own ideas.

Tell students that they are going to write their own opinion piece. They should vary the facts and reasons they choose so it is different than the class example they just completed. They will be sharing their writing during the Digest It section.

2. Ask them to complete the paragraph in the Try It section. Share a student example of an opinion and a fact or an experience that supports it.
3. Monitor their progress.

Digest It

Activity: Tasting Carrots and Reflecting

Students will taste carrots, share opinions, and reflect on their learning.

Teacher will provide a carrot tasting and lead a discussion about locally grown food.

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.

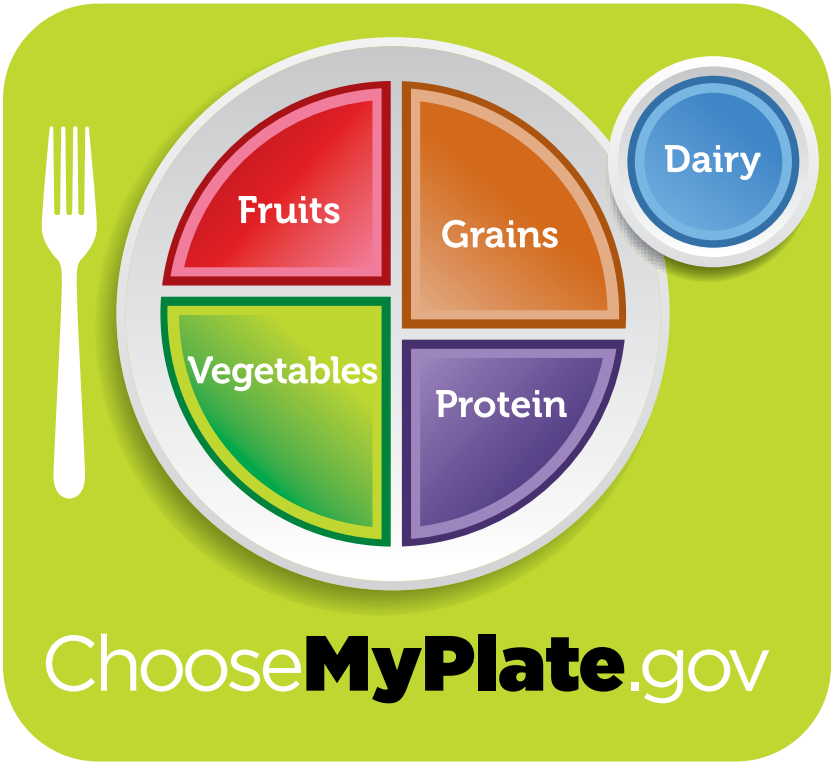
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. Ask the students, while they are waiting, to think about if and when they've seen carrots in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting the carrots. 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 cold, crunchy, 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 nutrition facts about carrots?
- Where can locally grown foods be found?
- Share your writing about locally grown food.
- Taste carrots. Make a plan for eating them.

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

❹ Get enough of 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%

❻ **Quick Guide to % DV**

*** 5% or less is low**

*** 20% or more is high**

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

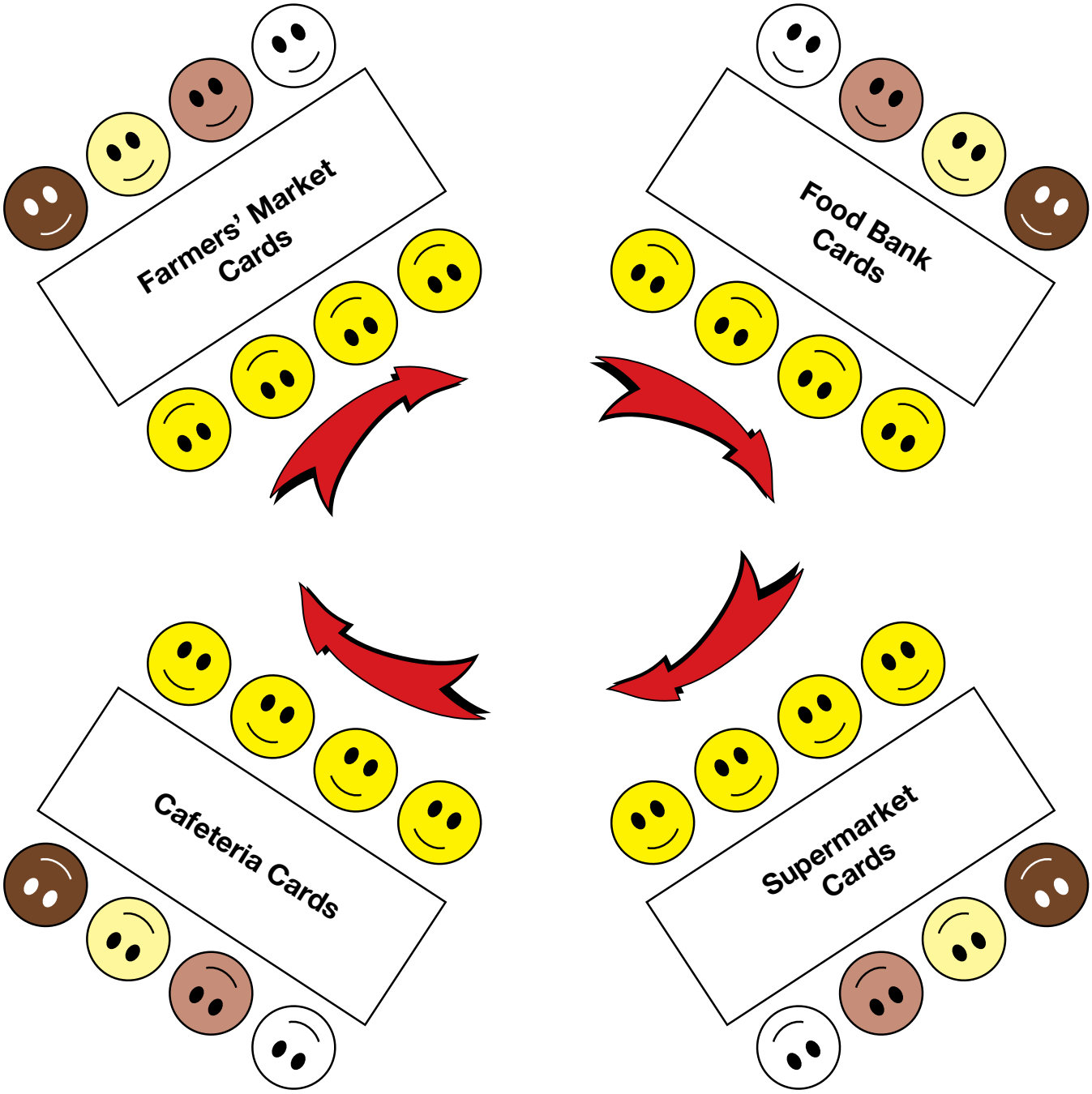
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

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

Buyers Rotate. Sellers Stay.



Locally Grown Cards

Farmers' Market

Supermarket

School Cafeteria

Food Bank

Welcome to the Supermarket!

Most of our fruits and vegetables are grown far away and are picked before they are ripe so they don't spoil before they get here. We get large deliveries from our trucks each week. But our locally grown fruits and vegetables were picked ripe and may be sweeter and have more flavor. Our locally grown carrots are ripe, sweet, and flavorful.

Welcome to the Farmer's Market!

We let our fruit ripen on the tree or vine and sell them to you nearby so our fruits are ripe and flavorful. The fruits and vegetables you find here are often better quality and cheaper than in the grocery store. It feels good to meet the people who grow the food you eat.

Welcome to the Food Bank!

We don't keep money here. A food bank collects food to give people who need it. When generous people donate fruits and vegetables from their local farms and gardens, other people get more fresh, local things to eat. If you have some to donate, please visit the food bank. The locally grown carrots here are fresh and nutritious.

Welcome to the School Cafeteria!

When we get locally grown fruits and vegetables it's a real treat. Sometimes we get them from a farm or directly from the school garden. Having locally grown vegetables in the cafeteria also gives you seasonal choices. Our locally grown carrots are delicious. Try some.

Writing an Opinion Piece:
Benefits for Visiting Places with Local Food

Try it

It is important to organize your ideas before you begin writing. You have just learned about different places that have locally grown fruits and vegetables. The sellers shared reasons why those places are great to visit. You will be explaining why those places are great to visit using their reasons and ideas of your own.

Directions Choose a location from the Link It activity and use your notes to write a paragraph.

Point of View	
Place	
Reason 1	
Reason 2	

Places with locally grown food are great to visit. An example of a place with locally grown food is:

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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Notes

Harvest of the Month™

BERRIES

Harvest of the Month™

Learning Objectives

- Identify the nutrition facts and health benefits of berries.
- Engage in a physical activity that highlights the four largest growing regions of berries in California.
- Use addition with decimals to find out which regions grow the most blueberries.
- Taste berries, discuss snacks with berries, and make home connections.

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.4. List examples of foods that are grown in California and in different regions of the United States.
- **Common Core Standards**

  CCSS.MATH.CONTENT.5.NBT.B.7

  Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

  SOCIAL STUDIES 4.1

  Use maps, charts, and pictures to describe how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation.

Materials: Harvest of the Month Workbooks, at least 3 blueberries per student to taste, Blueberry Growing Region cards, 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 nutrition facts and health benefits of berries.
- Know where berries are grown in California.
- Use addition with decimals to find out which regions grow the most blueberries.
- Taste berries and make a plan for eating them in the future.

3. Read the introductory passage with your students.

- The Harvest of the Month is berries. There are many kinds of berries. There are strawberries, blueberries, raspberries, and blackberries. There are also boysenberries, tayberries, and loganberries. A handful of berries make a great snack. They are also great in smoothies. With your family's permission, try combining frozen berries, bananas, low fat (1%) milk and 100% orange juice in a blender for a healthy and delicious treat.

Here are more facts about berries:

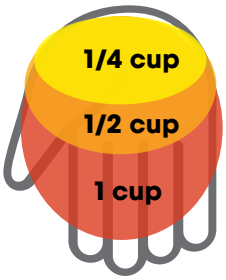
SW

- The botanical name for blueberry is *Vaccinium cyanococcus.*
- Blueberries are native to North America.
- Northeast Native Americans thought blueberries were very special. One end of the fruit forms the shape of a five-pointed star. The tribe's elders told how the Great Spirit sent "star berries" to satisfy children's hunger during a famine.
- Colonists learned from Native Americans how to gather blueberries, dry them under the sun, and store them for the winter.
- Here are some words for berries in Spanish: *zarzamora* (blackberry), *frambuesa* (raspberry), and *arándano* (blueberry).
- Berries are not only delicious, they are also healthy for you. They contain vitamin K which helps stop cuts and scrapes from bleeding too much and starts the healing process. They also contain fiber, which helps you feel full, keeps normal blood sugar levels, and prevents constipation. Take a look at the Nutrition Facts label. For which other nutrients do blueberries have high percentages?

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. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that throughout the day, they should strive for 100% of the Daily Value (DV) of nutrients listed on the bottom third of the Nutrition Facts label.



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

SW

- California is a great place to grow produce because there is water, rich soil, and a sunny, warm climate. California grows more than 99 percent of the nation's total of the following crops: almonds, artichokes, figs, grapes, raisins, peaches, persimmons, dried plums, and walnuts. California ranks number one in the nation in the overall amount of money made from growing fruits and vegetables. In 2014, the value of California's blueberry crops ranked number one in the country, meaning it grows the highest percentage of blueberries sold in the US.

Move It

Activity: Blueberry Growing Regions in California

Students will learn about the regions and counties in California where blueberries are grown by playing a "musical chairs" type of game.

Teacher will explain instructions and monitor student progress.

Instructions

1. Review the Move It passage with the class:

SW

- There are many kinds of berries grown in California, such as blueberries, raspberries, and blackberries. They are grown in many counties in the state. Every city in the state is part of a county. California has 58 counties. In the Move It game, bounce around the state to where most of the blueberries are grown.

2. Tell the students that they will be playing a game. The object of the game is to find an open seat before all the seats are taken like the game "Musical Chairs." In this game, there is not any music. Instead, one student will name one of three growing regions listed on the bottom of their card. Then the reader, and everyone whose card says they are from that growing region, will try to find an open seat. Whoever cannot find an empty seat will read their card out loud and the game will continue.
3. Set up the game by cutting out all of the game cards from the sheet and giving every student a game card. Ask students to read the underlined sentence that contains the name of the growing region on their card, so they know what region they are from. For example, a card that says "I am in the Sacramento Valley Region in Glenn County" means they are from the Sacramento Valley Region. There are 4 Regions (San Joaquin Valley, Central Coast, Sacramento Valley, and South Coast Region) and 7-8 cards per region. To confirm they know their growing region, you might say, "Who is from the San Joaquin Region? Who is from the Sacramento Valley Region?" etc. Select one student to stand up. Place that student's chair to the side and say it is unavailable for sitting during the game. Now there is one less chair than there are students participating, which is necessary for the game to work.
4. Explain that the player standing will read their card, and that when they get to the part that says "Pick one" they will have to pick one of the three regions listed to say out loud. Explain that when that happens, everyone who is from that region must get out of their seat and find an open chair. The person left standing will read their card and the game will continue.

Link It

Activity: Practice Adding Acres with Decimal Points

Students will observe and practice the addition of decimals using berry acreage totals.

Teacher will model adding decimals using berry acreage totals in the South Coast region.

Instructions

1. Read the following text:

SW

- In the Move It game, you heard about the different counties that grow blueberries. Now you will find out how many acres are grown in each of the four largest growing regions. An acre is an area of land slightly smaller than a football field. A growing region is a place made up of neighboring counties that share similar rain, temperature, and soil conditions.

2. Then read:

- First, your teacher will show you how to add decimals to get a sum of the acres of blueberries in a growing region. The most important part of adding decimals is lining up the decimal places top to bottom in a straight line. If you forget to do that, your answer will be incorrect. Line up those blueberry decimals!

3. Point out that the acreage information from the South Coast Region has been placed in the addition frame. Emphasize the importance of lining up the decimals as the amounts are added.

South Coast Region Acres of Blueberries (Total acres for 2014)

- Santa Barbara 1,306.49
- Ventura 531.00
- San Diego 68.50

4. Add the amounts. [1,905.99] Check for understanding. Ensure that all students have the same answer. Provide additional support where needed.
5. Read the next set of directions:

Directions When we are working with many addends (the numbers we are adding), it is important to work carefully to avoid making mistakes.

- For this problem, we'll do the problem in two steps. First, we'll add the top three numbers and find their sum, and then we will do the same with the bottom three numbers to find their sum.
- Finally, we'll add the two sums together to find the final total of all the acres together.

6. Model the second problem using the acreage information from the Central Coast region. The first three amounts have already been put into the addition frame, model how to add them together. Then model placing the next three numbers into the addition frame with place value aligned. Find the sum.

   Subtotal 1) 271.55

   Subtotal 2) 39.841

7. Model inserting the sums from the first two problems where indicated, then adding them to find the total. Check for understanding. Ensure all students have the same answer. Provide additional support where needed.

   Total 3) 311.36

Try It

Activity: Adding Acres with Decimals Points

Students will add the of acres of blueberries grown in 2 growing regions.

Teacher will monitor student progress.

Instructions

1. Direct students to add the acreage totals for the Sacramento Valley Region. Remind them to align the decimal point. [Total 153.75]
2. Check for understanding.
3. Tell students to add the acreage totals for the San Joaquin Valley Region by splitting the problem into two parts, like the Central Coast example, and then sum the two subtotals to find the total. 4,255 + 437.81 = 4,692.81
4. Assess student understanding. Ask students to compare the totals of the four regions they have studied.

   [South Coast 1,905.99; Central Coast 311.36; Sacramento Valley153.75; San Joaquin Valley 4,692.81]

Digest It

Activity: Taste Berries and Compare Blueberry Production

Students will taste berries and compare their acreage totals and reflect on their learning.

Teacher will provide tasting of berries and guide a discussion that includes talking about why some regions grow more blueberries.

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.

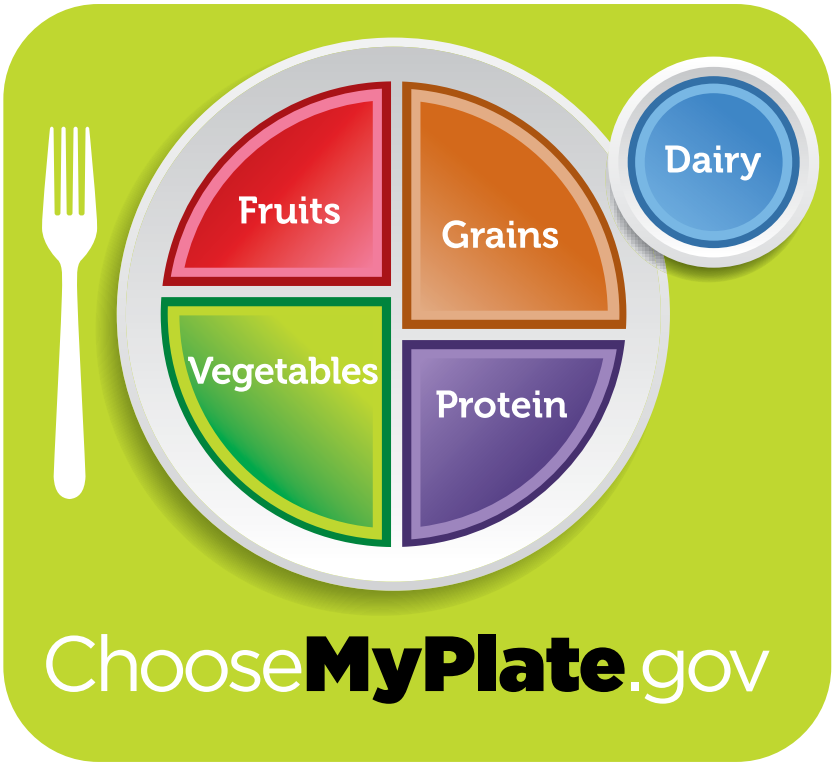
3. Tell students to wait until everyone has their tasting and you give them the go-ahead to eat.
4. While they are waiting, ask the students to think about if and when they've seen berries in the cafeteria, and if they tried them.
5. Tell them to eat on a count of three.
6. Encourage students to try 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 squishy, juicy, and purple."
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the berries. I know they are healthy for me. They're not my favorite at the moment. I will give them 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 ways you can eat berries as snacks?
- Where are berries grown in California?
- How many acres of berries are grown in the San Joaquin Valley region?
- Taste some berries.
- What is your plan for eating berries 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:

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

Blueberry Region Growing Cards

I am in the San Joaquin Valley Region in San Joaquin County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Stanislaus County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Merced County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Madera County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Fresno County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Kings County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Tulare County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the San Joaquin Valley Region in Kern County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, Central Coast, South Coast

I am in the Sacramento Valley Region in Glenn County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Yuba County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Yolo County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Sacramento County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Colusa County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Butte County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Solano County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Sacramento Valley Region in Tehama County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, South Coast

I am in the Central Coast Region in Sonoma County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in Santa Cruz County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in Monterey County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in San Luis Obispo County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in Santa Clara County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in Napa County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the Central Coast Region in Marin County,
Another region where many blueberries are grown is the:
Pick one: Sacramento Valley, San Joaquin, South Coast

I am in the South Coast Region in Santa Barbara County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in Ventura County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in Los Angeles County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in Orange County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in San Diego County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in Los Angeles County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

I am in the South Coast Region in Orange County,
Another region where many blueberries are grown is the:
Pick one: Central Coast, San Joaquin, Sacramento Valley

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.

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CalFresh HEALTHY LIVING

CDPH California Department of PublicHealth

Central Coast Region Acres of Blueberries

Santa Cruz 158.85

San Luis Obispo 87.9

San Benito 25.7

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