Teacher Guide

GRADE 5

Harvest of the Month™



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

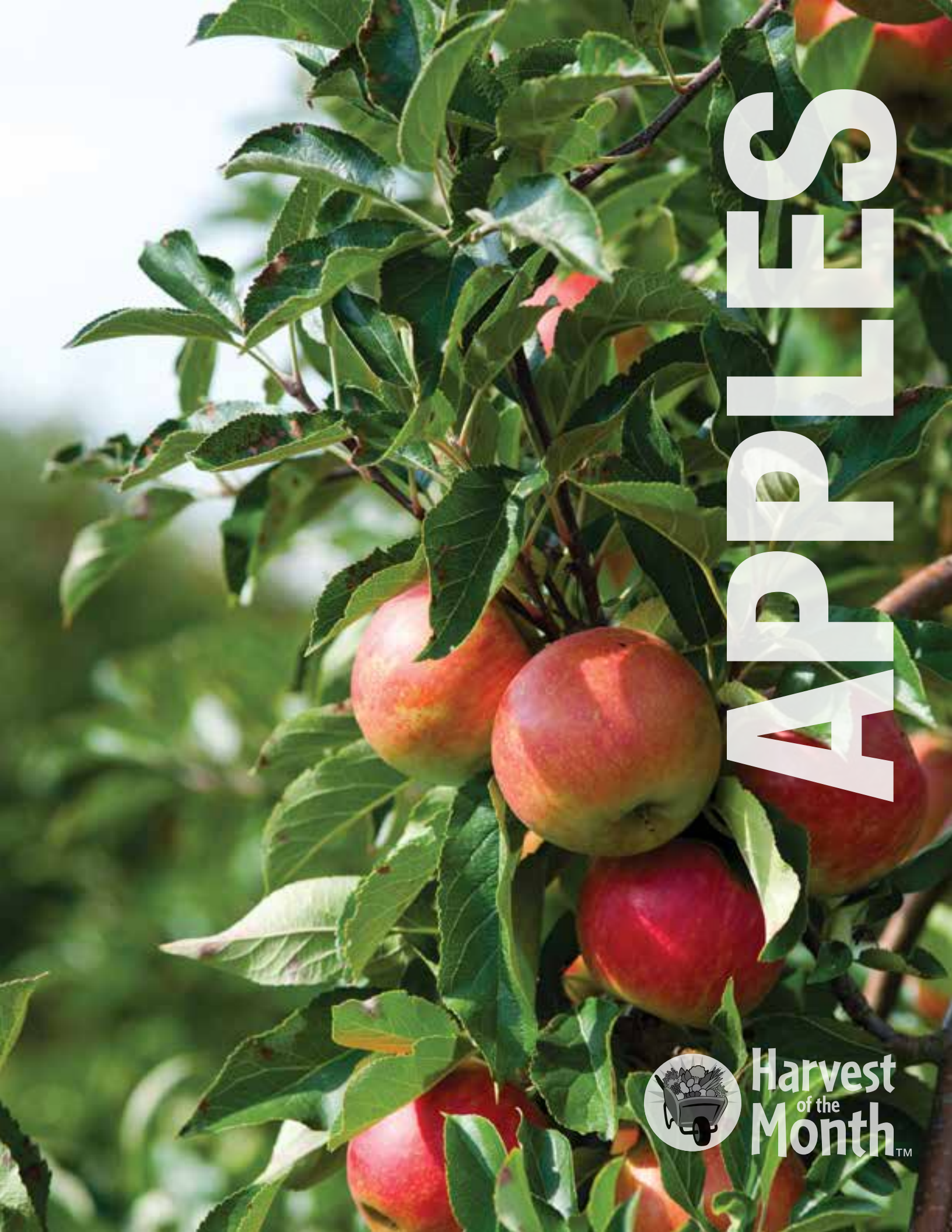
This resource from the California Department of Public Health contains lesson plans and workbook activities that support children and families to increase their:

- 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.

CalFresh HEALTHY LIVING | CDPH California Department of PublicHealth


APPLES
Harvest of the Month™

Learning Objectives

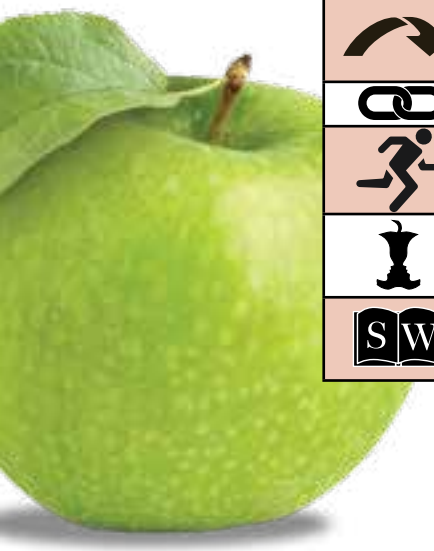
- Identify the nutrition facts and the health benefits of apples.
- Discover where apples can be found in our community.
- Multiply fractions and whole numbers to increase the quantity of a snack recipe.
- Set a goal to make and to eat healthy snacks that include apples.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase access to fruits and vegetables through school meal programs, farm-to-school programs, classrooms, school gardens, farmers' markets, grocery stores, community gardens, worksites, and other community-based locations.
- **Health Standard: Nutrition Competency**
  5.5. Use a decision-making process to identify healthy foods for meals and snacks.
- **Common Core Standard**
  CCSS.MATH.CONTENT.5.NF.B.4
  Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

Materials: Harvest of the Month Workbooks, apples quartered (one quarter per student), Nutrition and Health Messages sheet, Healthy and Smart Vocabulary 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	20
	Digest It	Tasting, Reflection, and Informal Assessment	10
SW	Student Workbook	Text from Student Workbook	n/a



Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

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

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

Instructions

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



- Identify the Nutrition Facts and the health benefits of eating apples.
- Discover where apples can be found in your community.
- Multiply fractions to make a snack recipe bigger.
- Taste apples and make a plan to eat them.

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

- The Harvest of the Month is apples. The botanical name, or scientific plant name, for apples is *Malus domestica.*
- 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. Think of some healthy ingredients you could add to apples to make a great recipe, for example: apples with celery, peanut butter, and raisins.

Apple Nutrition Facts:

- 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

Nutrition Facts
Serving Size: 1/2 cup (55g)

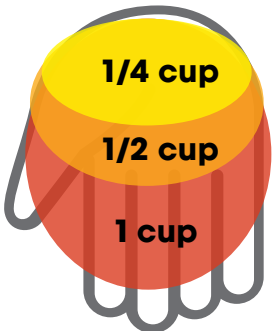
Amount Per Serving
Calories 28

	% 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.

number of calories in an item. Vitamin and mineral content is listed beneath the thick black bar at the bottom of the label. Apples contain potassium and dietary fiber, which have many health benefits. Potassium controls the activity of the heart and muscles. Dietary fiber makes you feel full faster, which can help you control your weight. These are just some of the benefits.

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is low, while 20% or more is considered high.



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

Move It

Activity: Imagine Getting Apples Combined with Movement

Students will get a 5-minute workout while imagining they are visiting places to get apples.

Teacher will lead the physical activity and read a passage about places where apples can be found.

Instructions

1. Explain that apples can be found in many locations. Tell students that they will be doing some stretches in the classroom having to do with each of those places. Ask them to stand up and give themselves enough room to do some stretches.
2. Tell students they will be visiting the community garden first and collecting apples from apple trees. Model the following stretch and say:
   a. Stand with feet shoulder-width apart.
   b. Reach up with both hands as far as you can go. Grasp for apples and pull them off the branches.
   c. Touch your toes. Put apples in your basket.

   Lead them in the stretch a few times at normal speed and then increase the speed slightly.

3. Tell students that now they will be visiting the supermarket and adding apples to their cart. Model the following stretch and say:
   a. Hold the handle of the shopping cart—fists at chest height.
   b. Jog in place.
   c. Reach to the right and left. Grab apples and put them in the cart.
   d. Stop grabbing apples. Keep jogging.
   e. Run in place.
   f. Then reach to the right and left again. Grabbing apples and putting them in the cart.

   Lead them in the movement a few times, gradually extending the length of time running.
4. Tell them that they will now fill their bags with apples at the farmers' market. Model the following stretch and say:
   a. Pretend there are bags of apples on the ground next to your feet. Squat and grab the bags of apples. Stand up. Lift them onto the scale. Come back down into a squatting position. Repeat.
   b. To squat, stand with feet hip-width apart. Tighten your stomach muscles. Then sit back like you're sitting on an imaginary chair. Finally return to a standing position.
5. Tell students that now they will visit the food bank where they will get some crisp, sweet apples. Model the following movement, and say:
   a. Pretend there is a bin of apples in front of you. You see some nice apples in the back of the box. Bend at the waist, lean forward, and reach for the apples. Straighten up and put them in the bag you are holding. Repeat.

   Lead students in this movement doing four squats, pausing, and then doing four more squats.
6. Ask the class the names of the places they visited. Invite them to share additional places where they may find apples. Suggest these places: school cafeteria and school gardens.



Link It

Activity: Guided Practice Multiplying Fractions in a Recipe

Students will observe and practice how to multiply a proper fraction and a whole number.

Teacher will guide students in multiplication of a proper fraction and a whole number.

Instructions

1. Review vocabulary as needed. Use the Healthy and Smart Vocabulary visual aid located at the end of this lesson.
2. Tell students that before they go shopping for apples, they should know how much they need. Explain that if they had a snack recipe with apples, the quantities may be written in fractions. Say they would need to multiply the fractions if they wanted to make enough of the snack for a lot of people or for multiple days.
3. Draw their attention to the example problem in the Link It section of the workbook.

SW A peanut butter and apple recipe calls for ½ cup of apple slices. Using fractions you determine that if you make 4 times the recipe, you will need 2 cups of apples.

4. Model ½ x 4 = ½ x 4/1 = 4/2 = 2.
5. Guide students in completing ½ x 6. Model ½ x 6 = ½ x 6/1 = 6/2 =3.

Try It

Activity: Independent Practice Multiplying Fractions

Students will practice multiplying fractions and whole numbers independently.

Teacher will check for understanding and provide guidance.

SW An apple and celery salad recipe calls for ⅓ cup of diced apples. How many cups of apples will you need if you increase the recipe by 3 times? By 6 times?

Instructions

1. Instruct students to complete the set of problems involving multiplying by ⅓.
2. Check for understanding. Model solving 3 x ⅓, for 1 cup of apples, and 6 x ⅓, for 2 cups of apples.

SW **Directions** Increase this healthy party recipe 12 times!

Apple, Celery Recipe

Instructions

1. Tell students to complete the Apple, Celery recipe multiplying ⅓ and ¼ by 12.
2. Check for understanding. Model solving ⅓ x 12, for 4 cups of apples, and ¼ x 12, for 3 cups of celery.



Directions Make your own snack recipe. Write your choice of ingredient. Choose ½, ¼, or ⅛ cup quantities for apples and your other ingredient. How many cups of each ingredient will you need for 16 batches of your recipe?

Your Apple Recipe

1. Ask students to brainstorm some other ingredients for an apple snack recipe and to place one new ingredient in the blank found in the "Your Apple Recipe." Tell them to select either ½, ¼, or ⅛ quantity and to multiply by 16.
2. Call on students to share their work.
3. Illustrate converting an improper fraction into a mixed number if your students are ready for this skill and if time permits.
4. Use quartered pieces of apple as an opportunity to model this fraction concept. For example, show ¾ of an apple and a second ¾ of an apple to represent ¾ x 2. Then rearrange the quarters to show ⁶⁄₄ first, and then 1 ²⁄₄, and finally 1 ½ apples.

Digest It



Activity: Tasting Apples and Reflecting on Learning

Students will reflect upon their learning and taste apples.

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

Instructions

1. Tell students they will be trying some apples and reflecting on their learning.

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

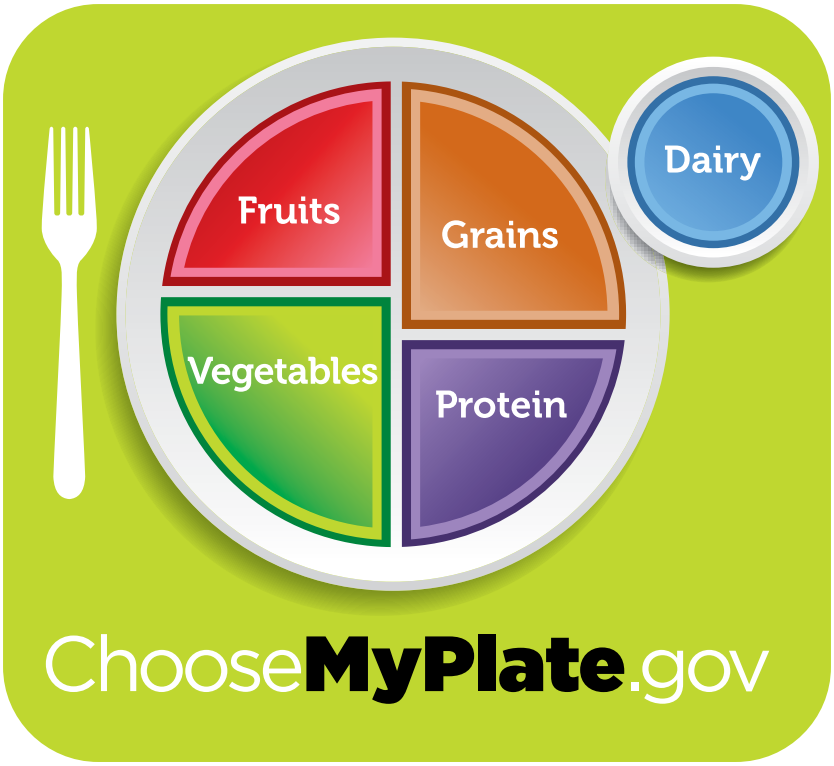
You created a healthy and delicious snack recipe. Now it's time to taste some apples and reflect on what you have learned.

- What are some healthy nutrients in apples and why are they good for your health?
- Where are some places you can find apples in your community? Share your story with your classmates. Also share your story with your family, so they can support your plans.
- Let's say your recipe calls for ⅛ cup of apples. If you multiplied the recipe times 24, how many cups of apples would you need?
- It is recommended that you eat 1½ cups of fruit each day. What is your plan to eat your recommended daily amount of fruit? Will you eat fruits and vegetables from the cafeteria each day?
- What is your plan to make snacks with apples?

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. Ask students to share more recipe ideas. Encourage the students to share their recipes with their parents and let them know the places where apples can be found.
11. Optional: Indicate your interest in having a healthy class party using their recipes.
12. 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.

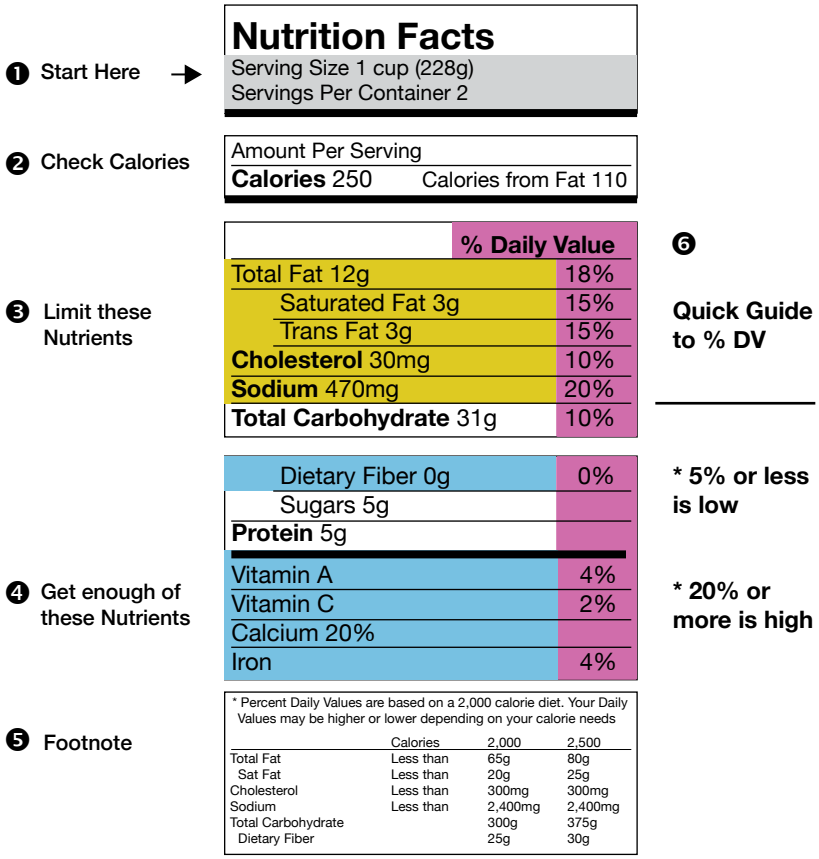
   General Guide to Calories (per serving of food)

   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.



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

The number on the **top** of a fraction is called the **numerator**. The number on the **bottom** is the **denominator**.

$$\frac{\textit{numerator}}{\textit{denominator}}$$

In a **proper fraction**, the numerator (top) is *less than* the denominator (bottom)

$$\frac{2}{4}$$

In an **improper fraction** the numerator (top) is *greater than* the denominator (bottom)

$$\frac{4}{2}$$

A **mixed fraction** has a whole number and a proper fraction together

$$1\frac{2}{4}$$



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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WINTER
SQUASH
Harvest of the Month™

Learning Objectives

- Identify the nutrition facts and health benefits of winter squash.
- Using reasons and details, write a paragraph describing the health benefits of eating winter squash and other vegetables.
- Make a personal goal for eating winter squash.
- Taste winter squash.

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**
  5-6.1f Explain how good health is influenced by healthy eating and being physically active.
- **Common Core Standard**
  CCSS.ELA-LITERACY.W.5.1
  Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

Materials: Harvest of the Month Workbooks, approximately 2 tablespoons of cooked squash or pumpkin seeds per student, What Winter Squash and Vegetables Can Do for Your Health visual aid, Healthy and Smart Vocabulary visual aid, Winter Squash Movement Prompt signs, 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
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	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 containing nutrition information about winter squash.

Teacher will guide students in reading nutrition facts and other interesting facts about winter squash.

Instructions



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

SW

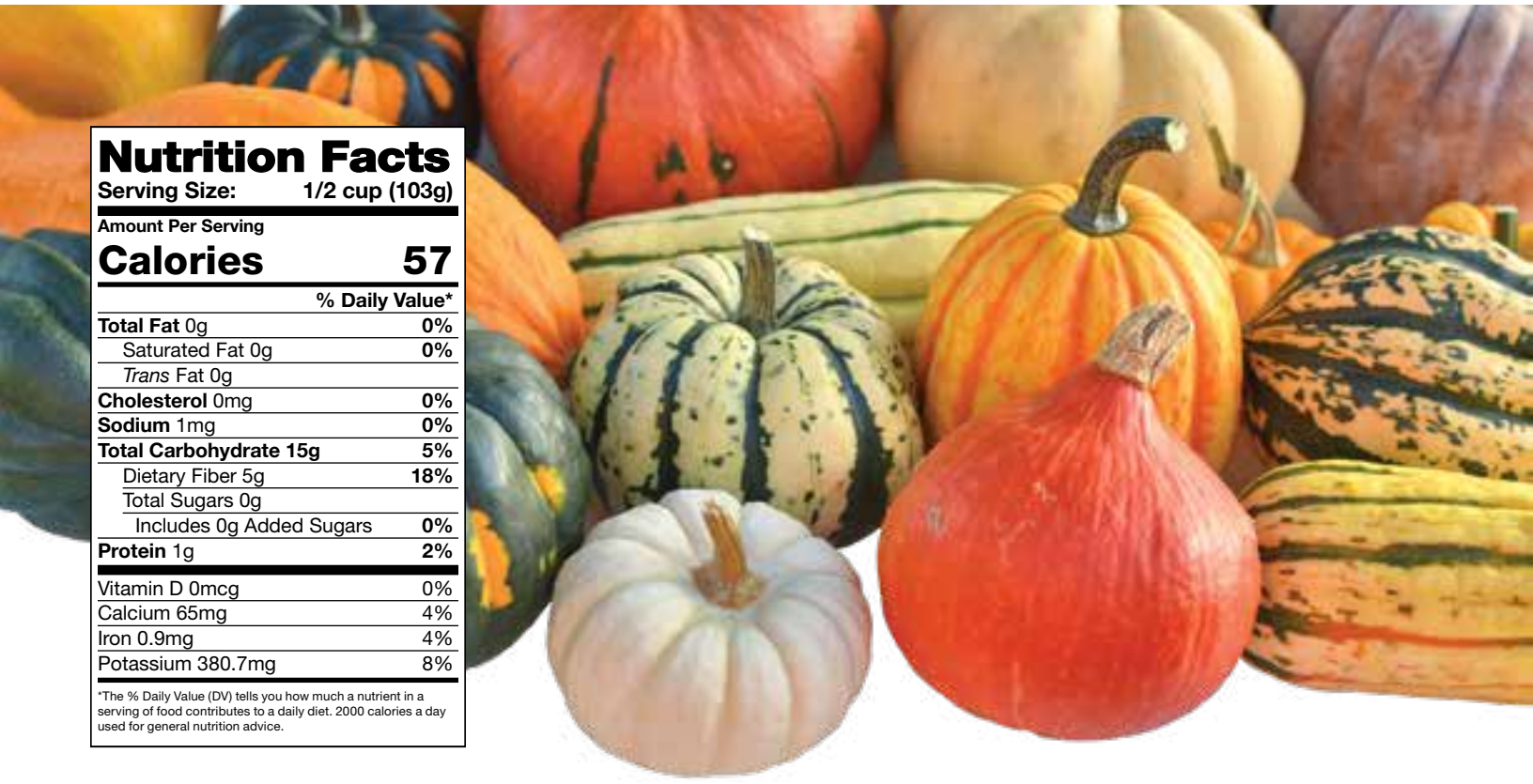
- Identify the health benefits of eating fruits and vegetables.
- Write a paragraph describing those benefits.
- Taste winter squash.
- Make a plan for eating more fruits and vegetables.

3. Read the introductory passage with your students:

SW

The Harvest of the Month is winter squash. Pumpkin is an 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. At the top of the page you'll find the Nutrition Facts label for winter squash. Toward the bottom of the label, you'll see the amounts of vitamins and minerals. Squash contains vitamin A, vitamin C, calcium, iron, potassium and more. Can you find some of these nutrients on the Nutrition Facts label?

4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Five percent or less of a nutrient is low, while 20% or more is considered high.
5. Draw their attention to the Percent Daily Value (%DV) of fiber for winter squash. Ask them if a ½ cup serving of winter squash would be sufficient to supply the recommended daily value. [Eating whole grains and 2 - 2 ½ cups of fruits and vegetables per day can help them reach their goal.]



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.

6. Continue reading the passage:

Here are a few more facts about winter squash:



- The botanical name for winter squash is *Cucurbita maxima.*
- Winter squash are 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. We will learn about different types of physical activity in our Move It activity.

Move It

Activities: Learning About the Benefits of Winter Squash through Movement

Students will engage in calisthenics with the benefits of eating winter squash serving as prompts.

Teacher will lead students in enjoying the physical activity.

In the Move It squash activity, you will learn why fruits and vegetables are good for your health.

What Fruits and Vegetables Can Do for Your Health

- Supply your body with necessary nutrients.
- Help you maintain a healthy weight.
- May reduce your chances of some cancers and type 2 diabetes.

Instructions

1. Designate three students who will share the role of leading the class in movement. Hand them each a Winter Squash Movement Prompt handout, keeping prompt #1 (the heart) for yourself.
2. Tell the class that they will be hearing about some of the benefits of eating winter squash. Tell them that they will be writing these in the next two sections of their workbook. Explain that the three leaders will take turns reading about those benefits and leading them in calisthenics.
3. Model reading prompt #1 and leading the first movement:

   Vitamin A, vitamin C, and dietary fiber all support healthy blood functioning. Let's get our blood flowing with twenty jumping jacks.
4. Tell your first student leader to read about the benefits of the nutrients found in winter squash. Ask them to read prompt #2:

   Vitamin C and potassium are important for your muscles. Flex your biceps. Now touch your head, shoulders, knees, and toes five times.

   Vitamin A is important for your eyesight and for cell growth throughout your body. Let's take a look around.
5. Tell your second student leader to read about how vegetables help us keep a healthy weight. Have them read prompt #3:

   Vegetables like winter squash help us keep a healthy weight; so does physical activity. Drop down into a squat. Now you have just eaten some healthy winter squash. Jump up. Repeat that four more times. Squat. Jump. 3 more...
6. Tell your third student leader to read prompt #4 about how winter squash and other vegetables can help prevent diseases like obesity and type 2 diabetes:

   Winter squash and other vegetables, along with physical activity, can help keep us healthy. Think about the winter squash you like to eat while jogging in place for 30 seconds.

Link It

Activity: Brainstorm Why Physical Activity Is Important

Students will generate ideas in a graphic organizer for writing a paragraph on the importance of eating winter squash and other vegetables. They will record the ideas in the Link It section of their workbook.

Teacher will guide students in completing the graphic organizer.

- **Step 1** You will start your paragraph by introducing the topic: "What Winter Squash Can Do for Your Health."

  Directions Write your ideas for introducing the topic.
- **Step 2** In the next part of the paragraph, you will write about the first reason why winter squash is important to your health: "It supplies your body with necessary nutrients."

  Directions Write about the important nutrients in winter squash.
- **Step 3 Directions** Write about why it is important to you that fruits and vegetables can help you maintain a healthy weight.
- **Step 4 Directions** Write about why it is important to you that fruits and vegetables reduce your chances of getting certain diseases.
- **Step 5 Directions** Say what your plan is to eat winter squash and other vegetables in the future. It is recommended that children your age eat 2-2½ cups vegetables every day.

Instructions

1. Tell students that they will be using the reasons for eating winter squash that were identified in the Move It activity to write about why winter squash is good for them.
2. Say that in the Link It section they will generate examples and details that they later will use in writing their paragraph in the Try It section.
3. Explain that their writing will have four components:
   a. Introducing the topic
   b. Stating their reasons
   c. Providing examples, facts, and details that support the reasons
   d. Writing a conclusion that includes a plan for eating winter squash
4. Model developing an introduction. For example, "Why should we eat fruits and vegetables? Winter squash and other vegetables are good for our health. I am going to share three reasons that explain why." Ask students to put their ideas for their introduction in the space for Step 1 in their workbook.

5. In Steps 2-4, students will give examples and details that support their reasons. Lead students in a Think-Pair-Share exercise to help them generate ideas for these three steps. Review the health benefits of fruits and vegetables. These are from the Centers for Disease Control[1] and are listed in the Move It section of the workbook.

What Fruits and Vegetables Can Do for Your Health

- Supply your body with necessary nutrients.
- Help you maintain a healthy weight.
- May reduce your chances of some cancers and type 2 diabetes.

6. In step 5, students are asked to share a plan to eat winter squash and other vegetables. Let them know that children their age should be eating 2-2½ cups of vegetables every day. Model making a plan to eat winter squash and other vegetables. For example, "Men and women should eat 2½-3 cups of vegetables every day. I plan on eating at least 1½ cups of vegetables for lunch and 1 cup at dinner each day; and I plan to eat winter squash at least once a week." Tell students to put their plan for eating vegetables and winter squash in the space provided for step 5 in the Link It section of their workbook.

Try It

Activity: Writing a Paragraph About Why Winter Squash is Good for Your Health

Students will use their brainstorm from the Link It section to write a paragraph about why winter squash is good for their health.

Teacher will model writing, including the use of transition words, and provide support.

Directions Write a paragraph explaining why winter squash is good for your health. Use your ideas from the Link It section. Consult the list of transition words for help if you need it.

Instructions

1. Explain to students that they will be writing a paragraph using the ideas they developed in the Link It section.
2. Introduce the transition words listed in the Transition Words vocabulary visual aid at the back of the lesson plan. Show them how they can connect reasons, examples, and conclusions using these words. Write two sentences joined with a transition word. "Winter squash may reduce your chance of getting certain diseases. For instance, eating winter squash and other vegetables reduces the risks of some cancers."

3. Tell them to form their paragraph using the ideas they generated in the Link It section. Let them know that the steps in the Link It section correspond with the prompts in the left-hand margin in the Try It section, with the intention of helping them put their ideas in the correct sequence.
4. Optional: Have students expand their writing by including additional information from the Nutrients and Health Benefits webpage at choosemyplate.gov and the “Reasons to Eat Winter Squash” section of the Educator Newsletter.

Digest It

Activity: Taste Squash and Digest Ideas

Students will taste a piece of winter squash and share what they have learned about squash and other vegetables.

Teacher will lead the tasting and discussion about how squash and vegetables are good for our health.

Note: The fruit of winter squash is generally prepared cooked. If you intend to cook the squash, consider cutting the squash into bite-sized cubes for easy serving. Serving pumpkin seeds is an easy alternative when cooking is impractical.

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. While they are waiting, ask the students to think about if and when they've seen winter squash in the cafeteria, and if they tried it.
5. Tell them to eat on a count of three.
6. Encourage students to try at least one bite.
7. Model respectful responses to tasting 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. Guide students in a discussion about what they learned using the prompts below, which students can find in the Digest It section of their workbook.

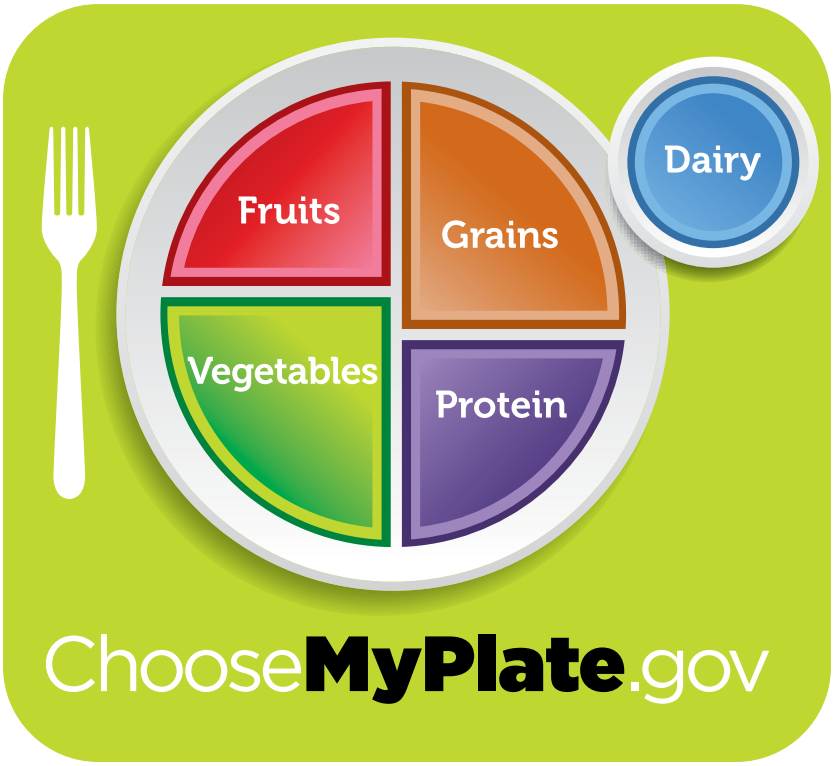


- What nutrients does winter squash contain?
- Why do you think winter squash and other vegetables are good for your health?
- Share your plan for eating winter squash and vegetables.

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 the 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.

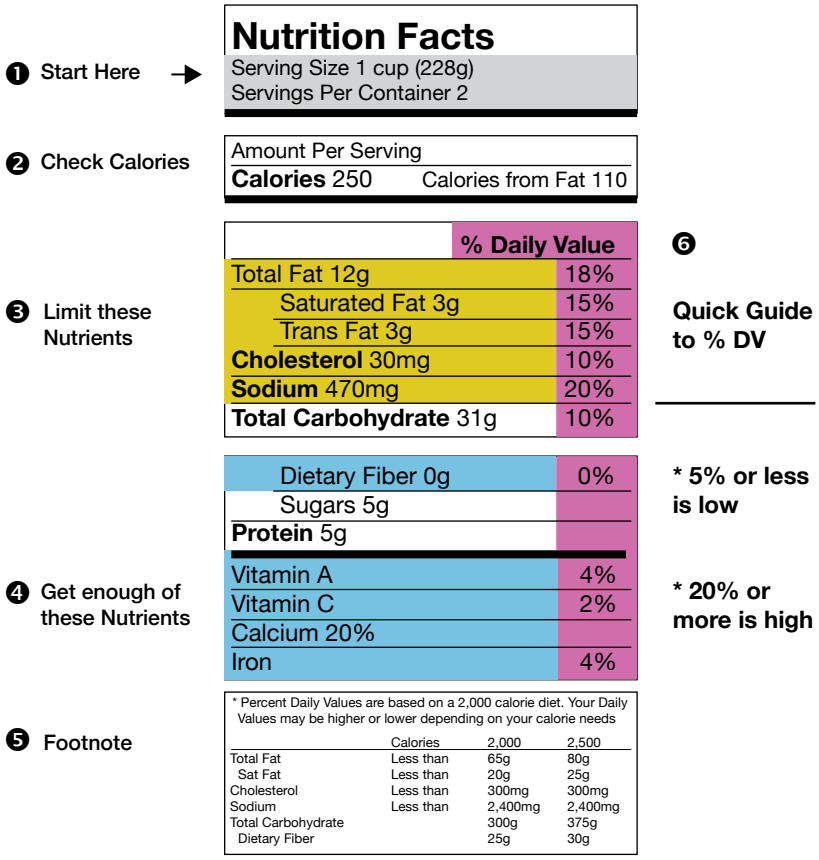
   General Guide to Calories (per serving of food)

   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.



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

What Winter Squash and Vegetables Can Do for Your Health

- Supply your body with necessary nutrients.
- Help you maintain a healthy weight.
- Reduce your chances of diseases like obesity and type 2 diabetes.

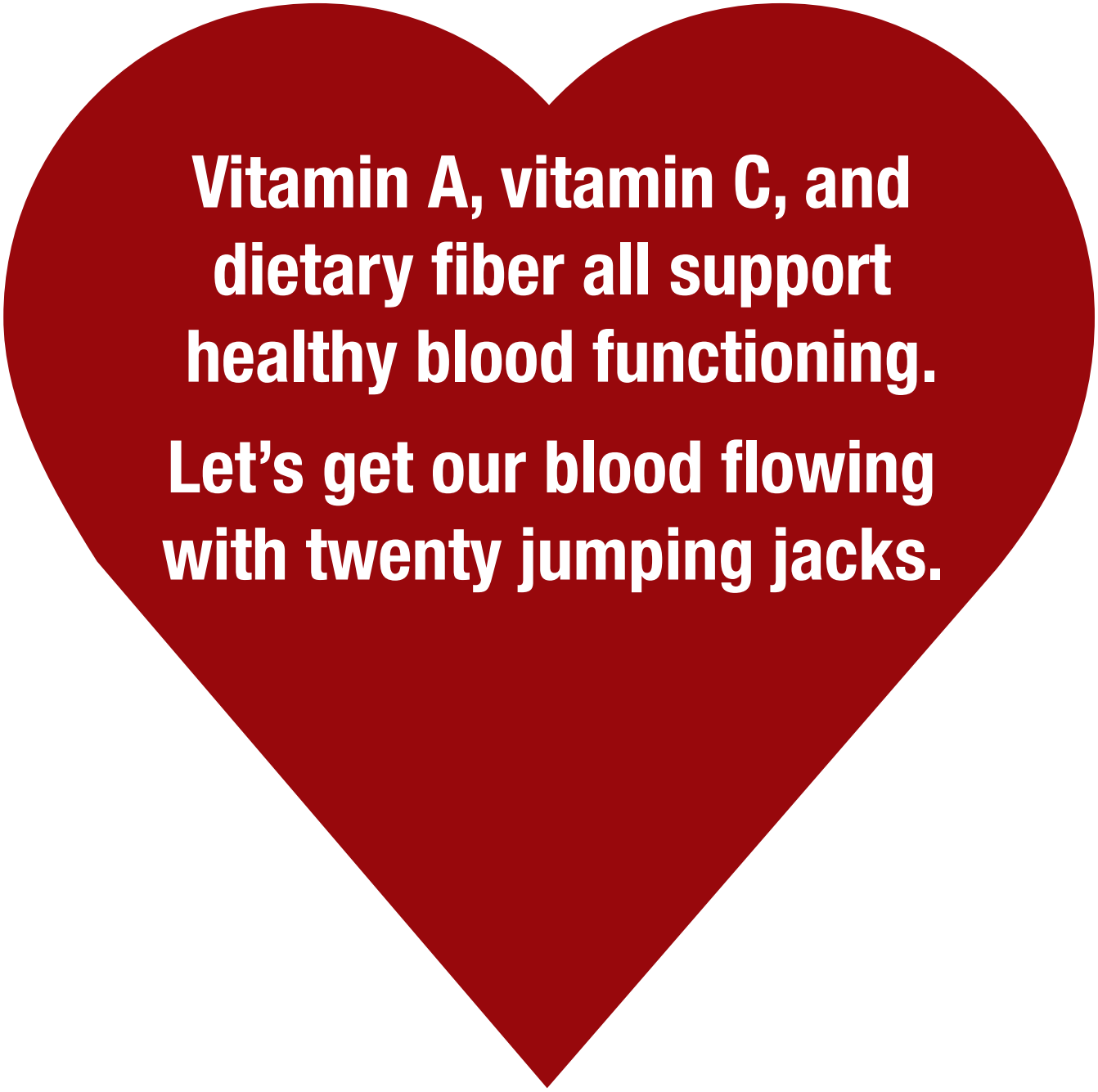


Try It 

Transition Words

Transition words connect sentences and ideas together. You can use these words to connect your reasons, examples, and conclusion.

Getting Started	Adding On	Wrapping Up
for example	too, also	in summary
for instance	second, third	to sum up
first	in fact	finally
	furthermore	


Vitamin A, vitamin C, and dietary fiber all support healthy blood functioning.
Let's get our blood flowing with twenty jumping jacks.

Vitamin C and potassium are important for your muscles. Flex your biceps.

Now touch your
HEAD,
SHOULDERS,
KNEES, and
TOES five times.

Vitamin A is important for your eyesight and for cell growth throughout your body.

Let's take a **look** around.

Vegetables like winter squash help us maintain a healthy weight.

Pretend you have just eaten some unhealthy food. Drop down into a squat. Repeat four more times.



Now you have just eaten some healthy winter squash. Jump up. Okay, now repeat that four more times. Squat. Jump. 3 more...



Winter squash and other vegetables, along with physical activity, can help keep us healthy.



Think about the winter squash you like to eat while jogging in place for 30 seconds.

Winter Squash Movement Prompt Number 4



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

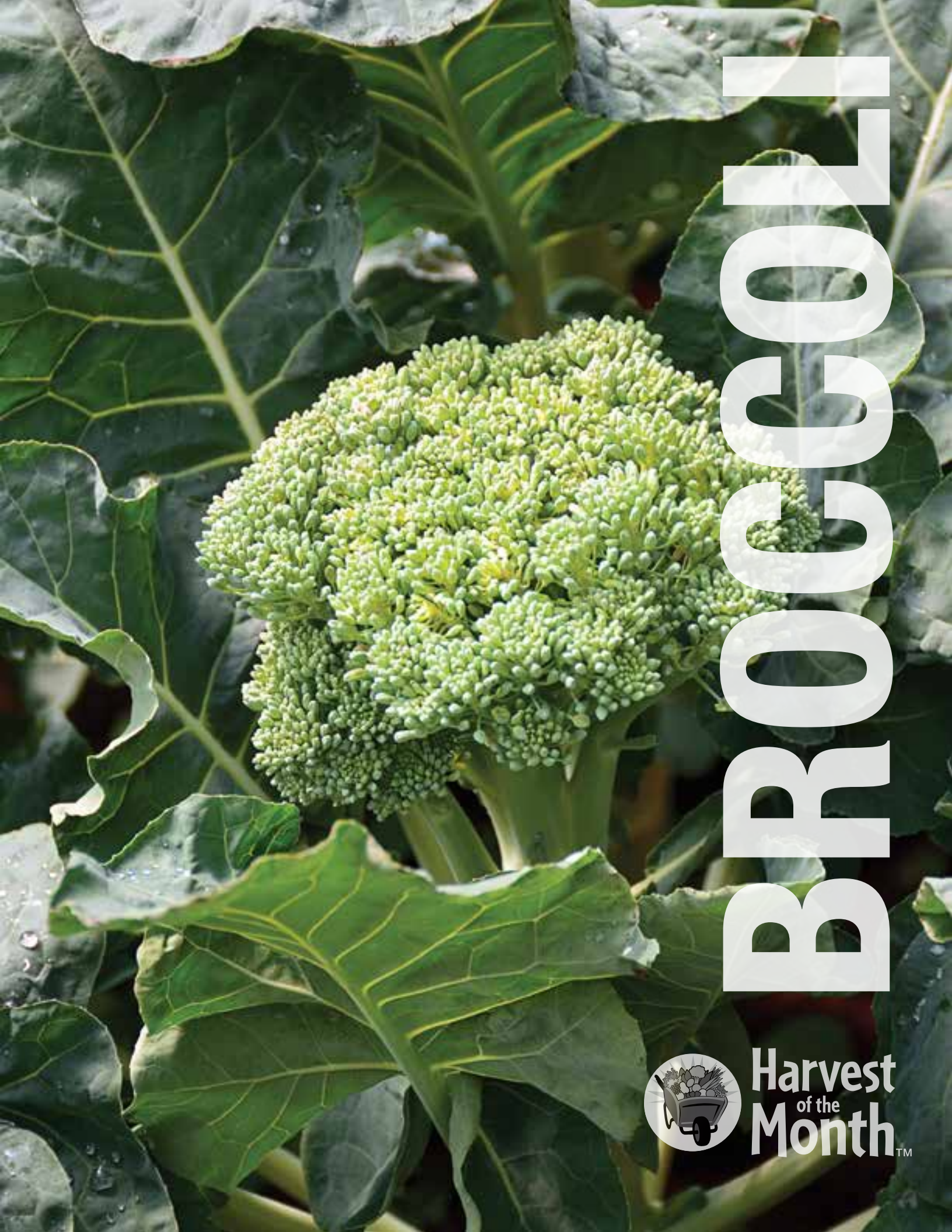
*If you are active, eat the higher number of cups per day. Visit www.choosemyplate.gov to learn more.



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


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Harvest of the Month™

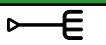
Learning Objectives

- Identify the nutrition facts and health benefits of broccoli.
- Determine which foods belong in the five MyPlate food groups.
- Distinguish between healthy and unhealthy food choices.
- Describe how a person can eat healthfully throughout the day.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumers' preference for fruits and vegetables.
- **Health Standard: Nutrition Competencies**
  5.5-6 Use a decision-making process to identify healthy foods for meals and snacks.
- **Common Core Standard**
  CCSS.ELA-LITERACY.W.5.3
  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, 1 bite-size floret of broccoli per student, MyPlate Relay Game mat (make 5 copies), MyPlate food group signs with removable strips (cut strips in advance), MyPlate Relay Game 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
	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 for broccoli.
- Determine which foods belong in the five MyPlate food groups.
- Describe a day eating food from each of those groups.
- Taste broccoli. Make a plan for eating broccoli in the future.

3. Read the first six sentences of the introductory passage with your students.

SW

The Harvest of the Month is broccoli. Broccoli is a healthy vegetable and very versatile! 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. Broccoli contains important nutrients like vitamin C. Read the Nutrition Facts label to see how much potassium and other nutrients broccoli contains.

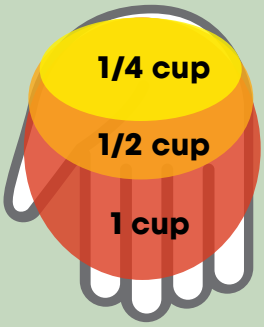
4. Guide students in interpreting the Nutrition Facts label in their workbook. Explain that they should strive to include a variety of nutrients from the food they eat. Use the Nutrition Facts label reference at the end of the lesson to show students the nutrients to limit. Then show students the nutrients for which students should strive to meet 100% of the Daily Value (DV).
5. Draw their attention to the DV of calcium for broccoli. Ask them if a ½ cup serving of broccoli would be sufficient to supply the recommended DV. [To meet the DV, include dairy products like milk and yogurt in your diet.]



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.

6. Continue the reading:



"Vegetables" is a food group in MyPlate. What is MyPlate? It's a guide for healthy eating that has five food groups: vegetables, fruits, grains, protein, and dairy.

Here are examples from each group.

- Vegetables: broccoli, winter squash, carrots
- Fruits: apples, oranges, berries
- Grains: brown rice, whole wheat bread, oatmeal
- Protein: chicken, fish, black beans
- Dairy: low-fat (1%) milk, low-fat yogurt, low-fat cheese

In the MyPlate icon, the size of each shape on the plate lets you know about how much of each group you should be eating daily. In this lesson, you will learn about the kinds of foods that belong in the five food groups. Make healthy choices in each group. Candy and soda contain too much added sugar and refined grains lack the nutrients found in whole grains. In the Move It activity your team will select foods from each of the five food groups. In the Link It and Try It activities, you will read a story about someone who is eating food that is unhealthy. Then you will rewrite the story using healthy foods.

Move It

Activity: Choosing Foods from the Five Food Groups

Students will work in teams to collect names of foods belonging to the five MyPlate groups.

Teacher will review the instructions to the game and supervise the play.

Directions You and your team will collect slips of paper with the names of foods belonging to the five food groups. Your team needs to collect two foods from each food group. Hurry, but make sure your group has no more than two foods from each food group. Place the slips of paper in the correct part of your MyPlate mat. Your teacher will let you know when to enter your team's and the class' choices in the chart below.

Instructions

1. Explain to students that they will be playing a relay game to learn which foods belong in each of the five MyPlate food groups. MyPlate is an icon that can serve as a guide for healthy eating. See the Nutrition Resources and Health Messages for more information.
2. Select five students. Give each of them one of the five MyPlate food group signs. Position them in different locations. Assign the remaining students to them to form teams.
3. Explain the game:
   a. The object of the game is to collect two foods from each of the food groups.
   b. One team member at a time will go to another food group sign, collect one strip of paper that has the name of a food on it, bring it back to their team and put it on their team's mat.
4. Have a student model collecting a food strip, returning to their team, and placing it on their mat. Begin the game. End the game when each team has two foods from each food group on their mat.
5. Have students return to their desks. Ask a student to share one of their team's fruit selections out loud. Record it in the chart on the MyPlate Relay Game visual aid. Instruct students to do the same on the similar chart in their workbook. Call on other teams to share their answers for the remaining food groups and include them in the chart.
6. Tell students to record the foods their teams collected in the chart in their workbook. Explain that they will use those foods in a story they will be writing.



Link It

Activity: Read and Analyze a Story About Unhealthy Eating; Rewrite It

Students will read the beginning of a story about a character who makes unhealthy breakfast choices and then consider what foods he could have eaten instead.

Teacher will guide students in reading the story, discussing it, and rewriting the story.

Read the story about Rey's breakfast. Pay attention to the food Rey is eating. Answer the question that follows the paragraph.

Instructions

1. Tell students that you will be reading a story aloud. Ask them to think about the food choices the character is making as they listen to the story.
2. Read the story aloud:

SW Rey woke up on Saturday morning excited to go to his friend's birthday party and then to play soccer with his cousin. Rey got dressed and went to the kitchen to have breakfast. Rey's parents had prepared eggs, toast, and fresh fruit. Rey decided that some sugary cereal sounded better and poured himself a big bowl to eat.

3. Ask the class what Rey ate for breakfast and whether it was a healthy choice [Sugary cereal; No.] Then, ask them what items Rey was offered for breakfast and in which food groups they belonged. [Eggs-Protein; Toast-Grains; Fresh Fruit-Fruits]
4. Explain that they will be rewriting a sentence in the paragraph about what Rey ate for breakfast to include some items from the five food groups they collected during the Move It activity. Tell them that first, they will come up with some ideas for the sentence.

SW What healthy foods could Rey have eaten instead? Use the foods that your team and your classmates collected.



5. Lead the class in a Think-Pair-Share activity. The prompt is, "What healthy foods could Rey have eaten instead?" Have them think silently for 30 seconds about the prompt. Then, tell them to share their ideas with a neighbor. Next, have the class share possible answers. Finally, ask students to place their ideas in the white box next to the prompt.
6. Read aloud the instructions for the next part of this activity:

SW **Directions** Complete the sentence at the end of the paragraph to change what Rey ate for breakfast using the healthy foods your team and classmates collected. Add another sentence about healthy food choices to make the story your own.

7. Construct a sentence using their answers. Write on the board: "Rey decided to eat…" For example, "Rey decided to eat oatmeal with raisins, almonds, and a glass of nonfat milk."
8. Tell the class to complete the sentence at the end of the paragraph changing what Rey ate for breakfast using healthy foods. Encourage them to write an additional sentence to personalize the story.

Try It



Activity: Rewrite the Story

Students will rewrite the parts of the story that pertain to what Rey ate for lunch and snack.

Teacher will monitor student progress rewriting the story.

Instructions

1. Tell students they will rewrite a story about Rey's lunch. Read the first set of directions in the Try It section aloud with the class and answer any questions.

SW **Directions** Read the story about Rey's lunch. Complete the sentence at the end of the paragraph to change what Rey ate for lunch. Use the healthy foods your class collected. Include broccoli. Write another sentence to make the story your own.

2. Allow time for students to read the passage and to rewrite the story. Monitor progress. If time permits, ask students to share their stories.

SW Later, lunch was being served at the birthday party. There was an assortment of healthy and unhealthy food choices. Rey ate cookies and cake, and washed it down with a soda.

3. Read the second set of directions in the Try It section aloud with the class and answer any questions.



Directions Read the story about Rey's snack. Rewrite the paragraph to show Rey and Rey's cousin making healthy choices. Include broccoli. Use foods that your team and your classmates collected. Add more sentences to make the story your own.

4. Allow time for students to read the passage and to rewrite the story. Monitor progress. If time permits, ask students to share their stories. Discuss and support healthy snack ideas.



After the party, Rey went over to his cousin's house. They planned on playing soccer but decided to watch TV instead. They got some chips from the kitchen and snacked on them while they watched TV. Before they knew it, the party-sized bag of chips was gone and they were very thirsty. Rey and Rey's cousin each drank a 24 ounce sports drink.



Digest It

Activity: Broccoli Tasting, Reflection, and Informal Assessment

Students will taste broccoli, review nutrition facts about broccoli, and share their writing.

Teacher will hand out the tasting and guide a discussion.

Instructions

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

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

SW
- Which nutrients does broccoli contain?

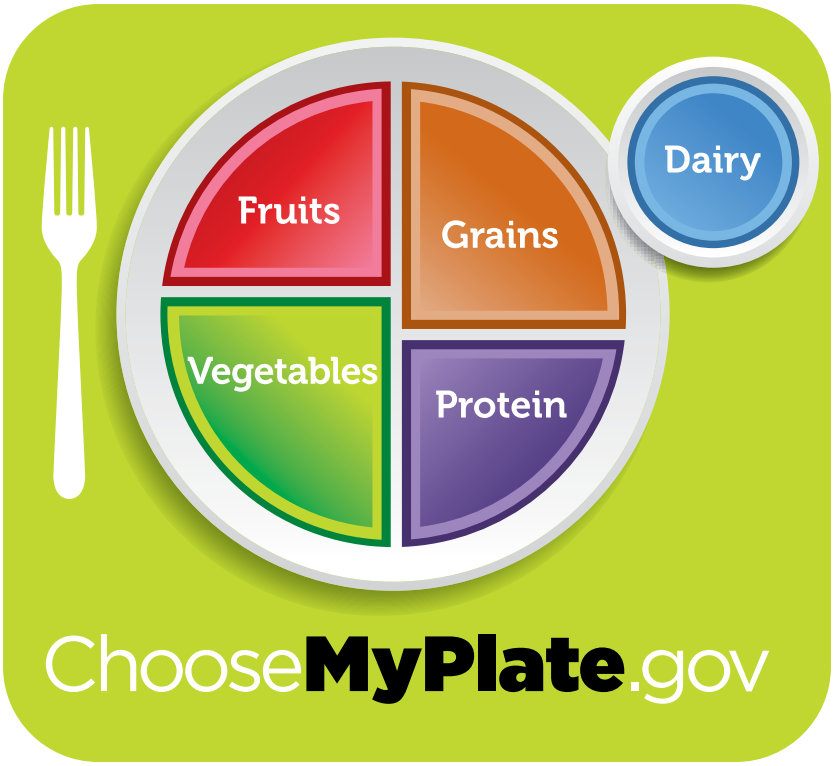
Refer to the Nutrition Facts label and passage at the beginning of the workbook to find answers such as vitamin A and C, calcium, iron, and fiber.

SW
- Name examples from the fruits, vegetables, grains, protein, and dairy food groups?
- What snack containing broccoli did you describe Rey eating?
- What is your plan for eating snacks with broccoli?

9. Encourage students to eat broccoli from the cafeteria. Ask them to raise their hands if they will eat broccoli 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 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:

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.

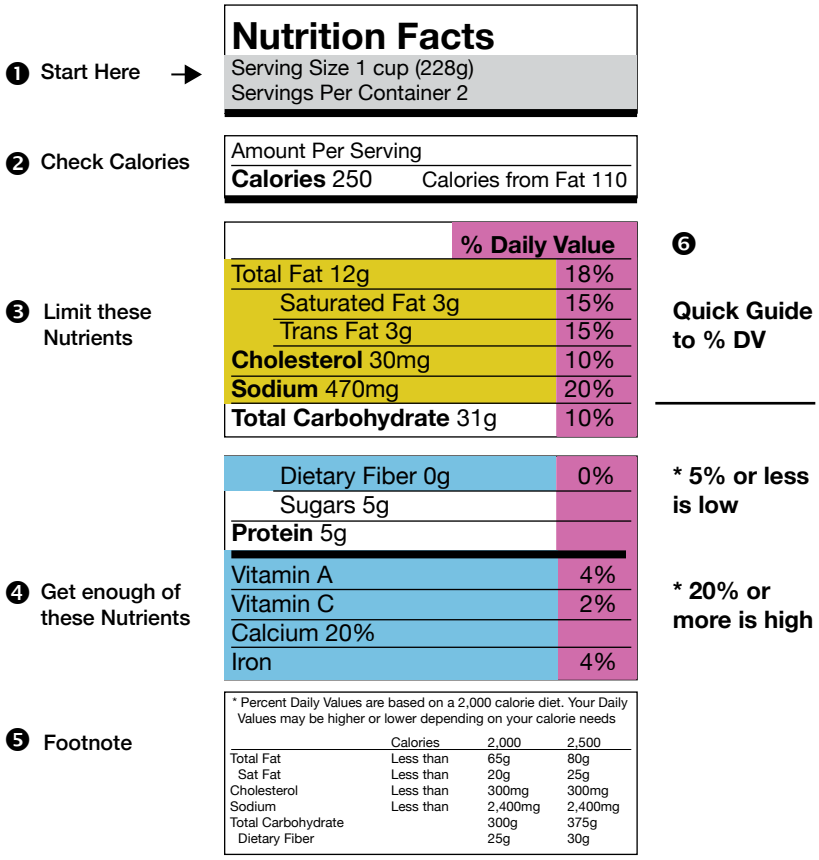
   General Guide to Calories (per serving of food)

   40 Calories is low

   100 Calories is moderate

   400 Calories or more is high

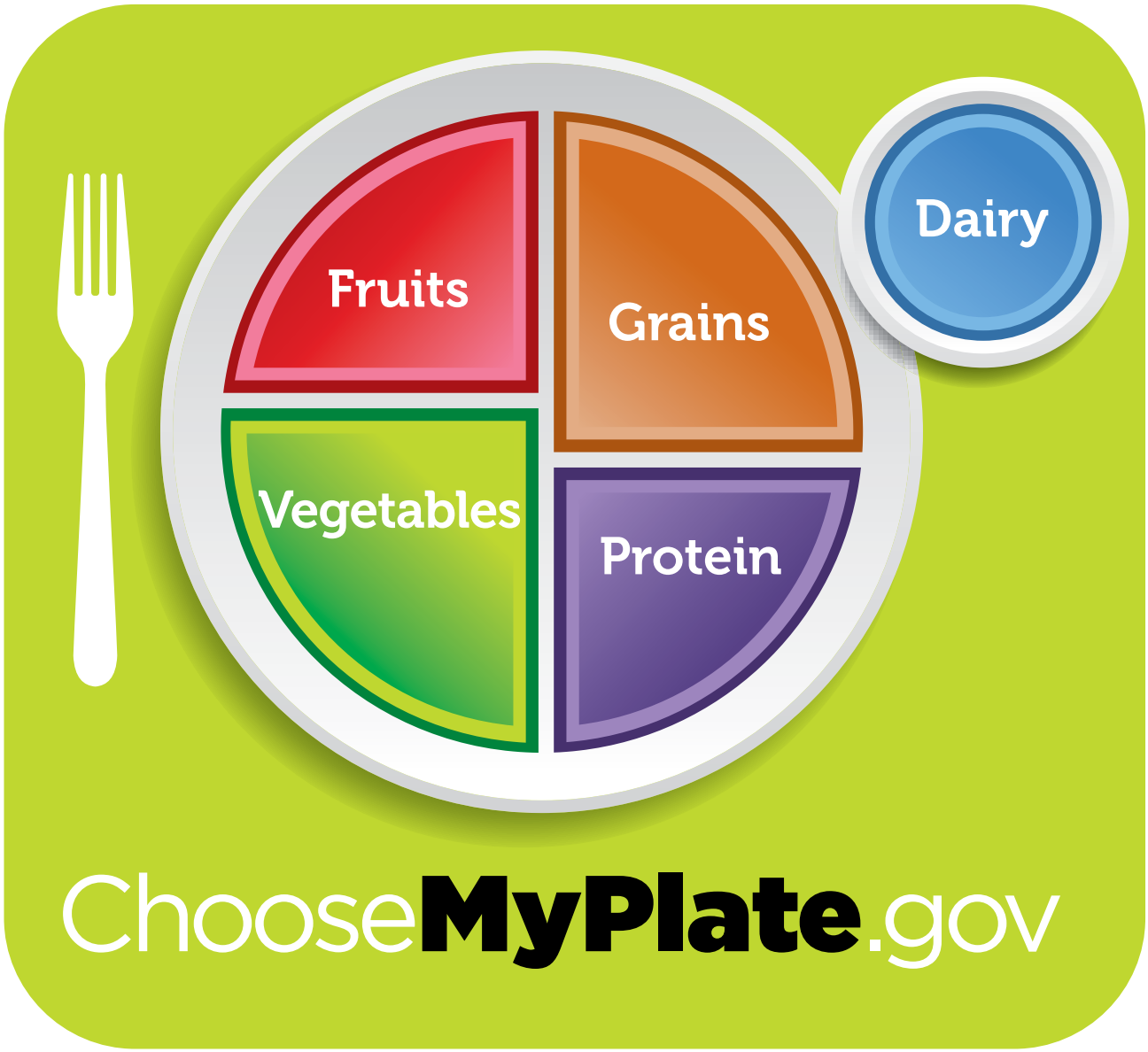
   Eating too many calories per day is linked to overweight and obesity.
3. Health experts recommend that you keep your intake of saturated fat, trans fat, and cholesterol as low as possible as part of a nutritionally balanced diet.



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


Fruits
Grains
Dairy
Vegetables
Protein
ChooseMyPlate.gov

Vegetables



ChooseMyPlate.gov

Asparagus

Cabbage

Cauliflower

Peppers

Tomatoes

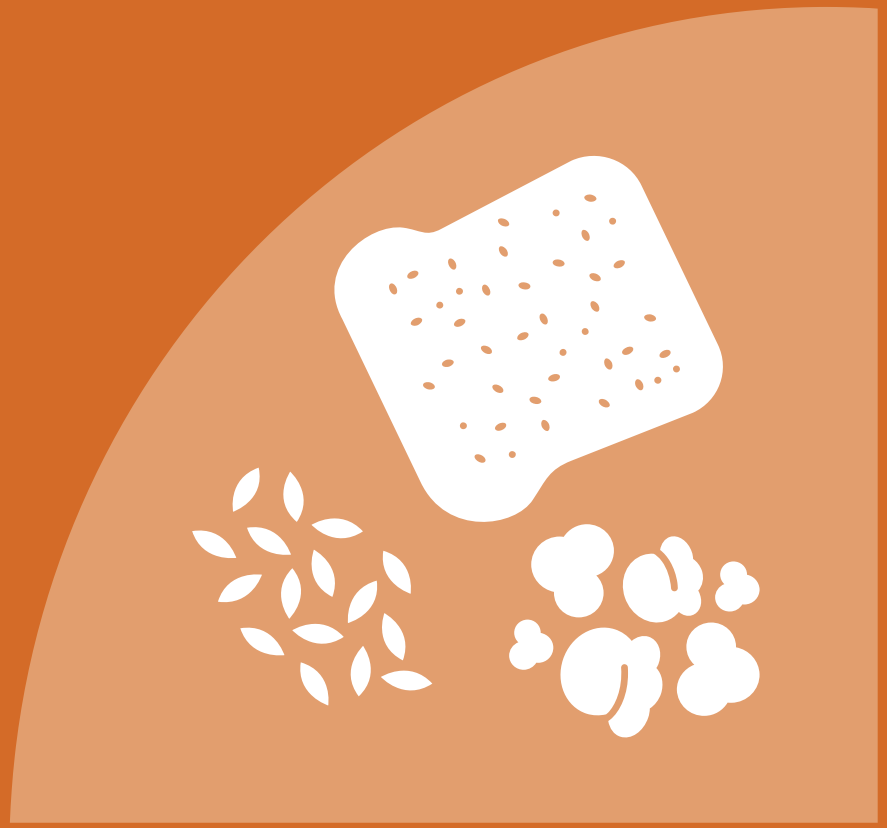
Cucumber

Carrots

Broccoli

Winter squash

Grains



ChooseMyPlate.gov

- Brown Rice
- Oatmeal
- Whole Cornmeal
- Whole corn Tortillas
- Whole wheat Bread
- Whole wheat Pasta
- Whole grain Cereal
- Whole grain Bagels
- Popcorn

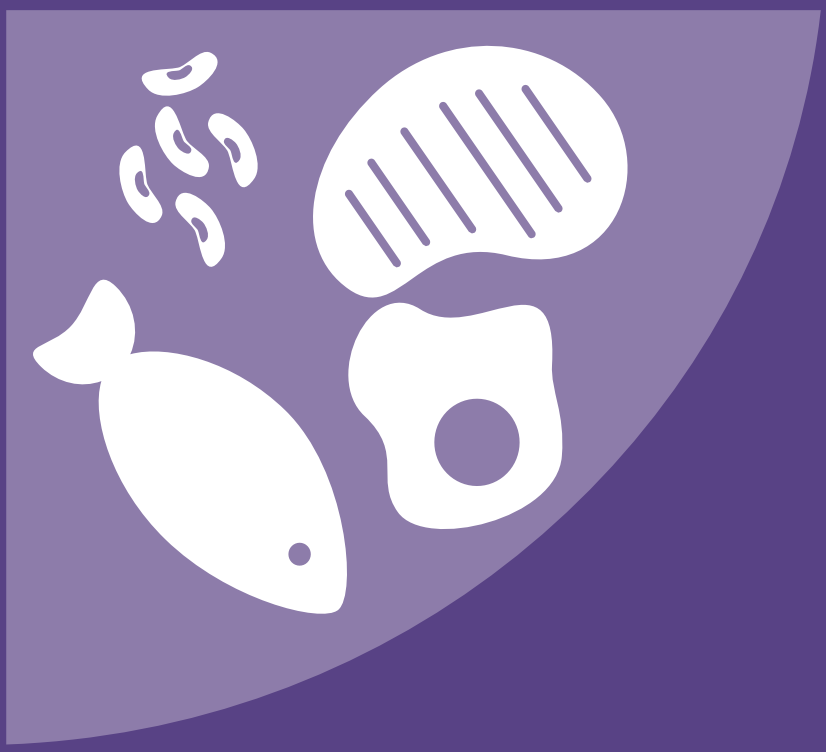
Fruits



ChooseMyPlate.gov

- Apples
- Oranges
- Strawberries
- Bananas
- Pineapple
- Grapes
- Peaches
- Watermelon
- Dried Fruits like raisins

Protein



ChooseMyPlate.gov

- Chicken
- Beef
- Turkey
- Pork
- Fish
- Black Beans
- Pinto Beans
- Pumpkin Seeds
- Almonds

Dairy

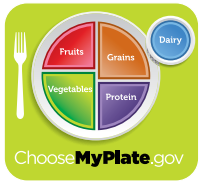
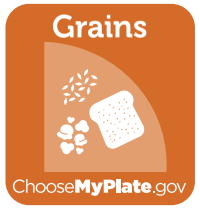


ChooseMyPlate.gov

- Soymilk
- Low-fat or Non-fat Milk
- Low-fat or Non-fat Yogurt
- Low-fat Swiss Cheese
- Low-fat Cheddar Cheese
- Low-fat Cottage Cheese
- Low-fat Ricotta Cheese
- Low-fat Pudding
- Low-fat Frozen Yogurt

MyPlate Relay Game

Write the names of the foods your team and your classmates collected in the correct food groups.

					
Your class' choices					
The foods your team collected					



Broccoli

FAMILY NEWSLETTER

The Harvest of the Month featured fruit is broccoli.

Health and Learning Success Go Hand-in-Hand

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

Healthy Serving Ideas

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

Produce Tips

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

Let's Get Physical!

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

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

Nutrition Facts

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

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

Harvest of the Month™



ZESTY ASIAN CHICKEN SALAD

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

Ingredients:

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

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

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

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

How Much Do I Need?

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

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

Recommended Daily Amount of Fruits and Vegetables*

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

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



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

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Harvest of the Month™
ORANGES

Learning Objectives

- Identify the nutrition facts and health benefits of oranges.
- Realize the significance of the servings per container on a Nutrition Facts label.
- Use multiplication to determine the amount of sugar and calories in more than one serving.
- Taste oranges and make a plan for eating them.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumption of and access to healthy beverages and reduce consumption of unhealthy beverages.
- **Health Standards: Nutrition Competencies**
  5.5-6 Use a decision-making process to identify healthy foods for meals and snacks.

  3.5-6. Interpret information provided on food labels.
- **Common Core Standard**
  CCSS.MATH.CONTENT.5.NBT.B.5

  Fluently multiply multi-digit whole numbers using the standard algorithm.

Materials: Harvest of the Month Workbooks, Nutrition Resources and Health Messages, multiplication game gram and serving cards (cut), 1 slice of orange per student, vocabulary 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	10
	Link It	Guided Practice	15
	Try It	Independent Practice	20
	Digest It	Tasting, Reflection, and Informal Assessment	15
	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage containing 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:

SW

- Identify nutrition facts about oranges.
- Discover why it is important to pay attention to serving sizes.
- Use multiplication to determine how much sugar is in drinks.
- Taste oranges. Make a plan for eating them.

3. Read the first half of the introductory passage with your students:

SW

The Harvest of the Month is oranges. Oranges are delicious. You can eat oranges on their own, in recipes such as fruit salad, or drink them as orange juice. Oranges provide nutrients with health benefits.

Some benefits of the nutrients found in oranges:

- 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.

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. Review the areas of the food label, including the nutrients to limit and those to emphasize. Five percent or less of a nutrient is low, while 20% or more is considered high.

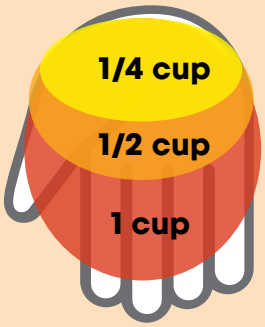


Nutrition Facts	
Serving Size:	**1/2 cup (90g)**
Amount Per Serving	
Calories	**42**
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 11g	**4%**
Dietary Fiber 2g	**9%**
Total Sugars 6g	
Includes 0g Added Sugars	**0%**
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.

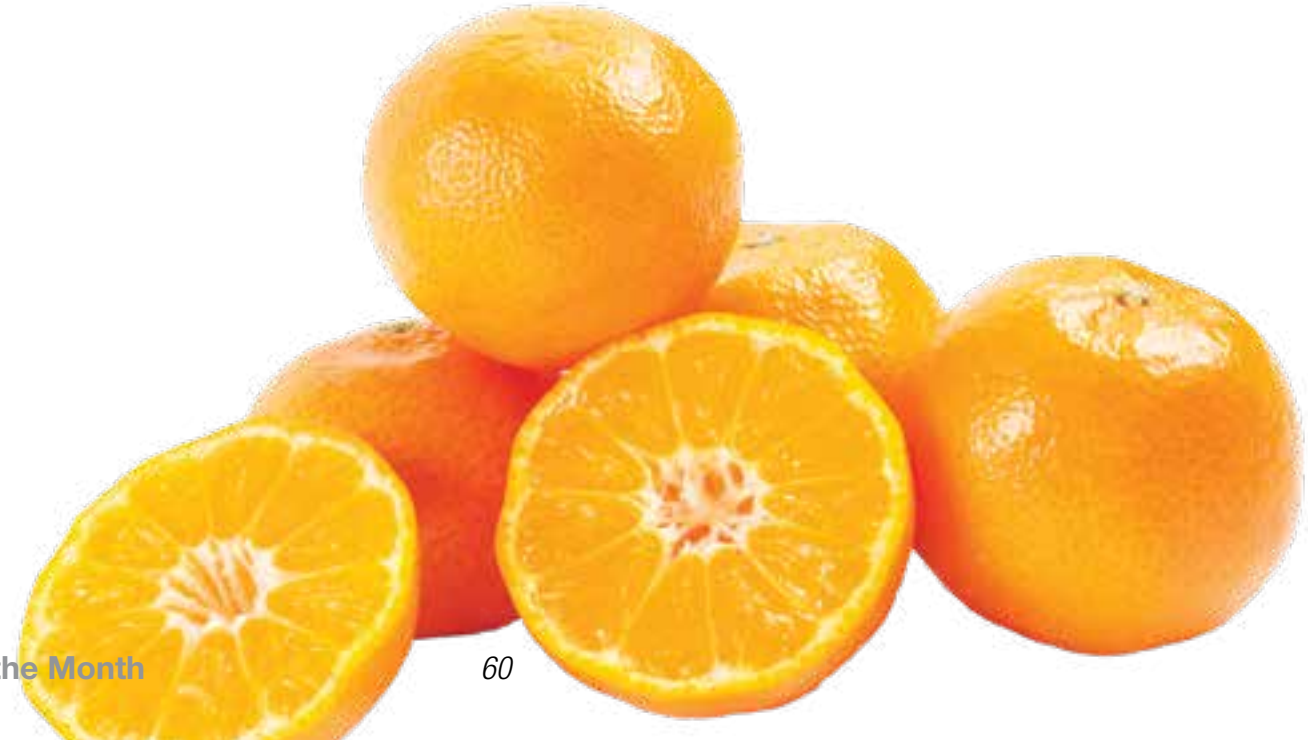
5. Draw their attention to the percent Daily Value (%DV) on the Nutrition Facts label for potassium. Ask the students if a ½ cup serving of oranges would be sufficient to supply the recommended Daily Value (DV) of potassium. [That's why eating a variety of foods is important. Other foods high in potassium include: bananas, cantaloupe, raisins, dates, pinto beans and kidney beans.]
6. Continue reading the passage:

Some other 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."

SW In the lesson today, you will be determining how many calories and how much added sugar drinks contain. Nutrition Facts labels help us understand what is in our packaged foods and drinks. The first piece of information on a Nutrition Fact label is the servings per container. The serving size reflects the amount people typically consume. Often times, though, people drink more than one serving. If a drink has 3 servings and you drink the whole bottle, in order to figure out how many calories and how much added sugar you are drinking, you'll need to multiply the information on the label by 3. The amount may surprise you, and may help inform your decisions about what you drink.



Move It

Activity: Serving Size and Gram Multiplication Game

Students will play a two-team game that simulates multiplying grams and servings.

Teacher will explain and lead the game.

Instructions

1. Tell the class they are going to play a multiplication game to get them ready to find the number of calories and grams of sugar contained in various drinks based on the number of serving sizes those drinks contain.
2. Explain the game to your class.
   a. There will be two teams. The object of the game is to be the first to line up to the product of servings and grams of sugar per serving.

1 gram	2 gram
3 gram	4 gram

x1 servings	x2 servings
x3 servings	x4 servings

These are the playing cards before they are cut.

   b. First, I will show a grams card. It will show either 1, 2, 3, or 4 grams. Each team will need to make a line of students standing shoulder to shoulder that contain the same number of students that is on the card. For example, if the card was 3 grams, three students will need to line up side by side for each team. [Ask volunteers to model this step.]

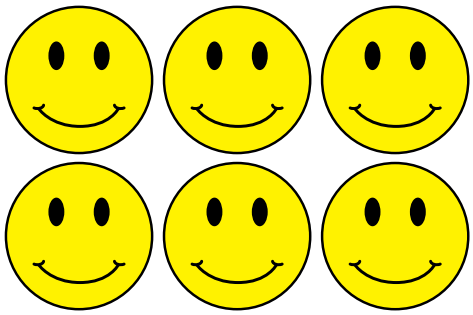


Team 1(3g)

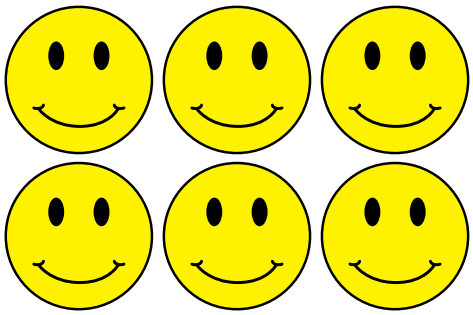


Team 2(3g)

c. Next, I will show a serving card. It will show either 1x, 2x, 3x, or 4x servings. When this card is shown, each team will send team members to line up in rows behind the others, with the number of rows equaling the number shown on the card. For example, in the 3 grams example, if the 2x serving card is shown, each team must send three more students to create a second row (representing 2 times). Once they line up, they call out the product, in this case 6. [Ask volunteers to model this step.]



Team 1 - 2x



Team 2 - 2x

d. Six becomes the new base. Then I will show another serving card. If I show a 1x card, there should be no other students joining in because anything times 1 is that same number. If I show a 2x card, there should be six more students in two columns of three because 6x2 equals 12. [Ask volunteers to model this step. Each team should have 3 lines, 4 students deep.]

e. I will continue to show serving cards after both teams have lined up and called out the product. If I show a number on a serving card that, when multiplied times the number of those already in play, exceeds the number of students on a team, each team must call out the product without moving. For example, 6 students times 4 would be 24, and that is more than the number of students on a team. When that happens, the teams should call out 24. [Ask volunteers to model this step.]

f. Once a correct number is called out by a team and there is no movement, the game resets. Players clear the floor and the teacher begins a new round by starting with the number of grams. [Ask volunteers to model this step.]

3. Divide the class into two teams. Start the game. Suggestions:

a. You may wish to start the first round by choosing the cards deliberately to encourage understanding by starting with smaller numbers. For example, begin with a 1 gram card and then select the serving cards in this sequence: 1x, 2x, and 3x.

b. You may reward a team for winning by allowing a member of that team to pick the cards in the next round.

Link It

Activity: Reading Nutrition Facts Labels

Students will learn to read Nutrition Facts labels and to calculate how much of each nutrient they would ingest if they consumed multiple servings.

Teacher will guide students in reading the Nutrition Facts labels and making calculations.

Instructions

1. Ask the students or a volunteer to read the text in the orange box at the beginning of the student workbook Link It section.

> Nutrition Facts labels provide useful information. But you need to use your math skills to get a better understanding of what you may actually be eating and drinking. The information on the label is based on the serving size listed on the package. If what you eat or drink each time is more or less than the serving size listed on the label, then you will need to figure out what you are really getting.

2. Explain the example. Students must first identify the number of servings per container. In this case it is 2. Then they must find the number of calories. In this case it is 70. Next, they must multiply. The answer is 140.
3. Read the directions for the exercise:

> **Directions** Find the total number of calories in this bottle of soda. If you drink the whole bottle, how many calories would you consume?

4. Tell students to complete the soda problem: 3 servings per container x 160 calories per serving =480 calories per container. Ask them how many calories they would consume if they drank the whole bottle. Tell them that is a lot of calories.
5. The next problem asks students to find the total grams of added sugar in the same bottle of soda.

> **Directions** Find the total number of grams of added sugar for the whole bottle. Use the same soda bottle that has 3 servings.

They must multiply 3 servings per bottle x 40 grams of added sugar per serving to get 120 grams of added sugar per bottle.

Try It

Activity: Calculating Calories and Grams of Sugar Independently

Students will study the Nutrition Facts labels on several drinks and calculate caloric and sugar content.

Teacher will provide guidance and monitor student workbook.

Instructions

1. Ask students to complete the two questions for the sports drink:

Directions Find the total number of calories in this bottle of sports drink. If you drink the whole bottle, how many calories would you consume?

   a. 2 servings per container x 120 calories per serving = 240 total calories per container.

Directions Find the total number of grams of added sugar for the whole bottle.

   b. 2 servings per container x 14 grams of added sugar = 28 total grams of added sugar for the whole bottle.

   c. Check for understanding.

2. Show students how to convert grams of sugar into sugar cubes. They will be answering 2 problems that ask them to do this. Each sugar cube is equal to about 4 grams of sugar. Show them that 12 grams of added sugar divided by 4 grams of sugar per cube = 3 sugar cubes.

3. Tell them to find the number of sugar cubes worth of added sugar in each drink for the two problems below. Discuss their answers.

   a. 28 total grams of added sugar for the whole bottle divided by 4 grams of sugar per cube = 7 sugar cubes per bottle. Check that students shaded 7 boxes.

   b. 32 total grams of added sugar for the whole bottle divided by 4 grams of sugar per cube = 8 sugar cubes per bottle. Check that students shaded 8 boxes.

4. Tell students to solve the next problem.

Directions How many grams of added sugar are in this bottle of water? It has 2 servings per bottle. How many grams of added sugar would you find in 1000 bottles? Why would water be a healthy way to hydrate?

   a. 2 servings per container x 0 grams of added sugar = 0 total grams of added sugar for the whole bottle

   b. Discuss why water would be the healthiest way to satisfy their thirst. [No calories, sugar free, no artificial colors or flavors.]

5. Ask students to solve the final problem.

Directions An orange isn't a drink. But it makes an excellent snack. Oranges contain water plus vitamins and minerals too. See how many grams of added sugar there are in 1.5 servings of oranges.

a. 1.5 servings x 0 grams of added sugar = 0 total grams of added sugar

b. Discuss that while oranges are sweet, the sugar is naturally occurring. There is no added sugar in oranges or other natural, unprocessed fruit.

Digest It



Activity: Tasting Oranges, Reflection, and Informal Assessment

Students will taste oranges and discuss good choices for hydration.

Teacher will provide a tasting of oranges and facilitate a conversation about good choices for hydration.

Instructions

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

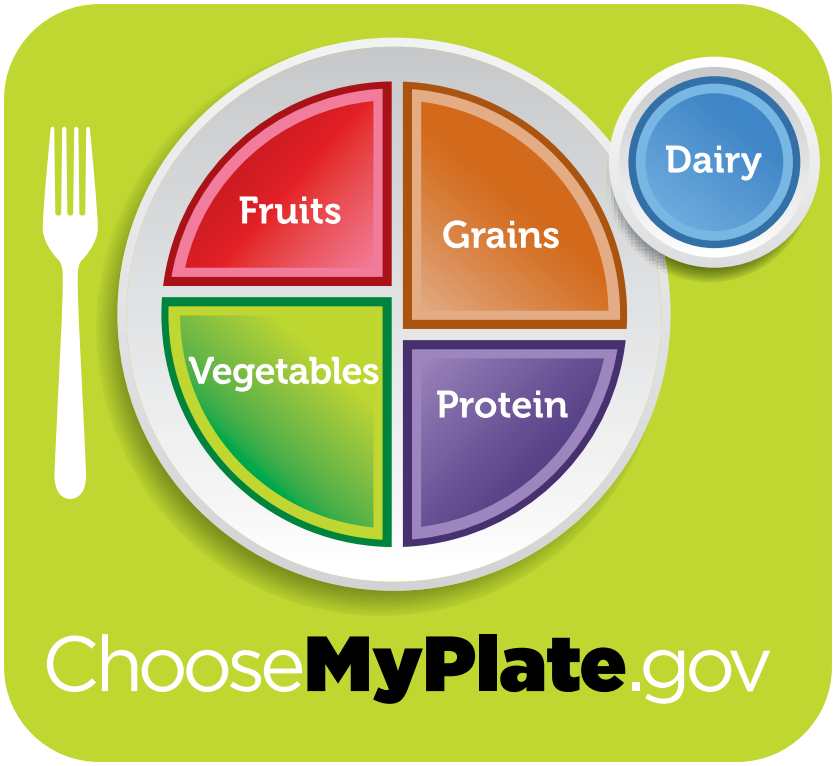
It's time to eat an orange and digest what you've learned!

- Name something that has water, lots of vitamins and minerals, and no added sugar.
- Why is it important to read the Nutrition Facts label and to use your math skills?
- What are your plans for eating oranges?

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. Optional - Try infused water! Fill a pitcher with water. Add orange slices. Let the flavor infuse for an hour before serving to the students. Alternately, serve by giving students cups of water that they can squeeze their orange slice into.
11. Extend student learning by using activities from the Educator Newsletter.



Nutrition Resources and Health Messages



MyPlate

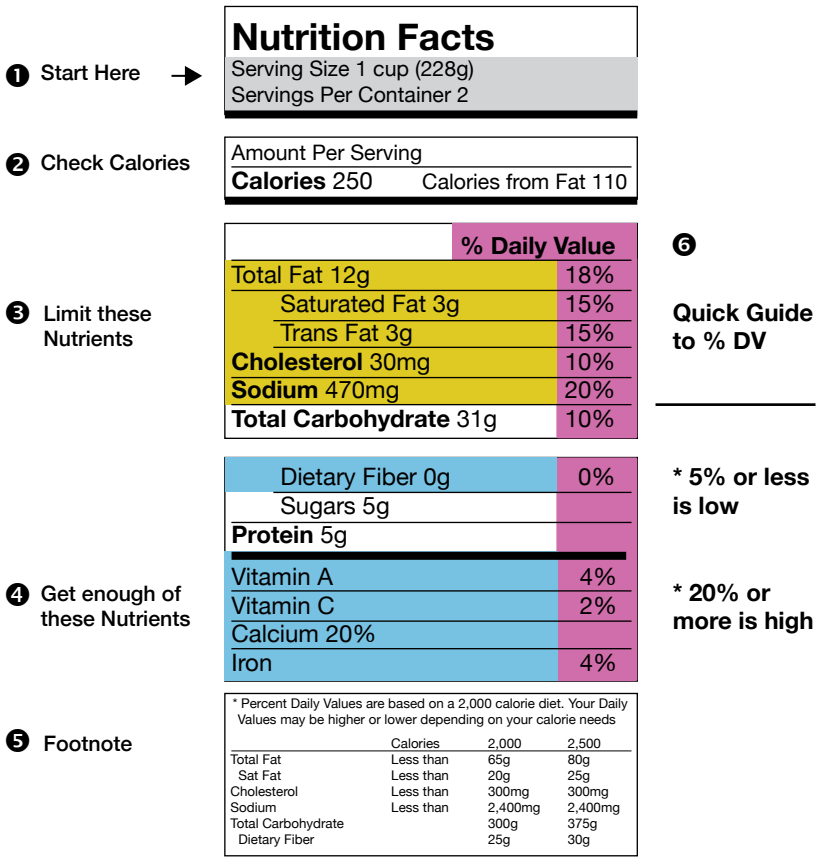
ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- 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:



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

1 gram

2 gram

3 gram

4 gram

x1
servings

x2
servings

x3
servings

x4
servings

Harvest of the Month - Orange

Healthy and Smart Vocabulary

1. **nutrient** (noun): a substance that plants, animals, and people need to live and grow.
2. **Nutrition Facts label** (noun): provides information on the contents and quantity of nutrients in a specific food.
3. **hydrate** (verb): to add water or moisture to (something); to supply (something) with water.
4. **moderation** (noun): average in size or amount; neither too much nor too little.
5. **calories** (noun): a unit of heat used to indicate the amount of energy that foods will produce in the human body.





Oranges

FAMILY NEWSLETTER

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

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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Notes


CARROTS
Harvest of the Month™

Learning Objectives

- Identify the nutrition facts and health benefits of carrots.
- Plot ordered pairs and graph lines using your body.
- Interpret graphs to discover the advantages of locally grown produce.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Increase consumption of locally grown food items by connecting growers to their communities through farmers' markets, food retail stores, schools, and food banks, among others.
- **Health Standard: Nutrition Competencies**
  1g.5-6. Explain how food is transported from farm to table, focusing on maintaining nutritional quality.
- **Common Core standard**
  CCSS.MATH.CONTENT.5.G.A.2

  Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Materials: Harvest of the Month Workbooks, 1 piece of carrot per student, Plot and Ordered Pair visual aid, Hop Plot visual aid, string or yarn (optional, for Move It activity extension), 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	20
	Digest It	Tasting, Reflection, and Informal Assessment	10
	Student Workbook	Text from Student Workbook	n/a

Harvest It

Activity: Setting Goals and Acquiring Nutrition Information

Students will read a passage containing 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 the nutrition facts and health benefits of carrots.
- Plot ordered pairs and graph lines using your body.
- Interpret graphs to discover the advantages of locally grown produce.
- Taste carrots. Make a plan to eat carrots and other veggies.

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 vegetable dip. 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 grows bigger.
- Did you know that carrots were originally shades of purple and 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.

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.

Vegetables are very healthy for you, whether they come from far away or nearby. You should be eating 2-2.5 cups 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. Carrots have a lot of a certain nutrient that you need to see well and fight off certain illnesses (vitamin A). Carrots taste sweet, but this sweetness is all natural because there is not any added sugar.



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 the nutrients listed on the bottom third of the Nutrition Facts label plus fiber.
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 DV and they would get 100%. [Eat 2½ cups of vegetables a day, 1½ cups of fruit, and choose whole grains.]

Move It

Activity: Hop Plot

Students will plot ordered pairs as a group by walking or hopping.

Teacher will explain ordered pairs, how they are plotted, and guide students in moving their bodies to the coordinates. (*See the accompanying visuals.*)

Important Note: This Move It activity is best done in a wide-open space, such as outside or in a multi-purpose room. If an outdoor space is not an option, you may wish to have one student at a time participate and choose coordinates that conform to your classroom space.

See the full-size versions of Hop Plot and Plot an Ordered Pair visual aids at end of lesson.

Instructions

1. Preview the Hop Plot diagram to visualize the physical activity.
2. Tell students that in the Link It and Try It sections they will be using graphs to understand information about locally grown food. Say that in the Move It activity they will learn how graphs work. Ask students to silently read the passage in the Move It section of their workbooks.
3. Use the Plot an Ordered Pair visual aid to describe an ordered pair. Explain that the first number in an ordered pair is the x-coordinate and the second number is the y-coordinate. Say the x-coordinate tells you how far to move along the x-axis and the y-coordinate tells you how far to move along the y-axis.
4. Select five students and line them up side by side. Tell them they will demonstrate the ordered pair (8, 4) as shown on the visual. Direct them to move 8 steps or hops to the right and 4 steps or hops forward.
5. Increase the number of students in the line and give them more ordered pairs to demonstrate.
6. See the bottom of the Hop Plot sheet for extension ideas.

Link It

Activity: Mile-a-Minute Carrots

Students will plot the points on the graph representing time and distance.

Teacher will help students plot points on the graph and interpret the results

Instructions

1. Introduce these ideas:
   - Produce can be grown locally in the same state, in another state, or outside the country.
   - The distance and time it takes for produce to reach its destination may impact its quality.
2. Review the introductory text in their workbook:

Graphs are used to show information. Today you are going to use them to show how fruits and vegetables change as they travel distances. Graphs are made of lines called axes. The x- axis goes from left to right and the y-axis goes up and down. We place points on the graph by using ordered pairs. The first number of an ordered pair tells you how far to travel on the x- axis. The second number tells you how far to travel on the y- axis.

Now describe the parts of the graph found in the Link It section. For example, the x-axis represents distance, and the y-axis represents time. Say that the graph represents the distance and time it takes for produce to travel from the farm to the market.

3. Help students plot the first set of points.

Directions Plot these coordinates, then draw a line to connect the points. The graphed line shows a truck traveling 1 mile per minute.

1. **(1,1) (4,4) (6,6) (8,8) (9,9)**

4. Once all their points are on the graph, have the students draw a line connecting the points.
5. Repeat steps 3 and 4 with the next set of coordinates.

Now plot these coordinates and graph the line to connect the points.

2. **(1,2) (2,4) (3,6) (4,8) (5,10)**

6. Read the final question:

Does the second graph line show a truck traveling faster or slower? How do you know?

Ask students if Truck 2 travels faster or slower than Truck 1. The answer is "slower." Show that in 600 minutes Truck 1 travels 600 miles (6,6), whereas in 600 minutes Truck 2 has only traveled 300 miles (3,6).

Try It

Activity: Traveling Carrots

Students will plot coordinates, graph lines, and interpret graphs.

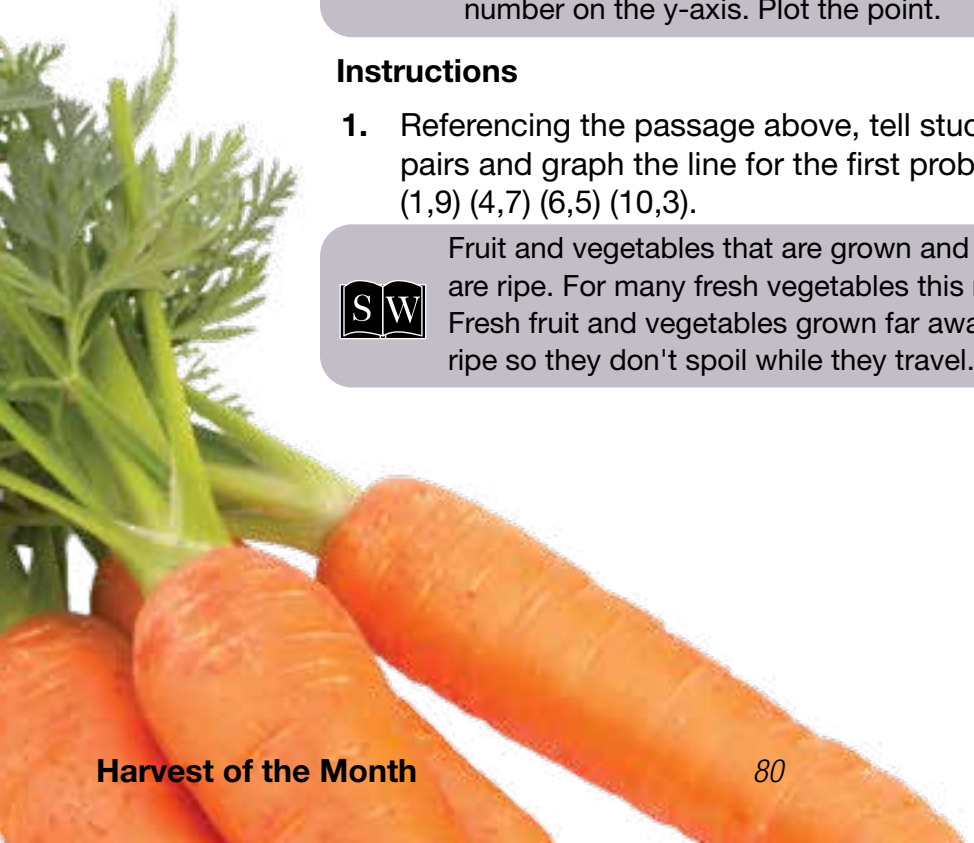
Teacher will guide students in plotting points, graphing lines, and discussing how food quality is impacted by ripeness and handling.

Directions Now it's your turn. Remember the first number is on the x-axis. Start there. Then go up until you are across from the second number on the y-axis. Plot the point.

Instructions

1. Referencing the passage above, tell students to plot the ordered pairs and graph the line for the first problem of the Try It section: (1,9) (4,7) (6,5) (10,3).

Fruit and vegetables that are grown and sold locally are picked when they are ripe. For many fresh vegetables this means they are **more nutritious**. Fresh fruit and vegetables grown far away are often picked before they are ripe so they don't spoil while they travel.



2. Direct students' attention to the directions in the Try It section. Read the text aloud. Ask students to interpret their graph based on the information in the text.
3. Lead a Think-Pair-Share on the writing prompt:

> S W What does the graphed line represent? How might ripeness be affected by where fruits and vegetables are sold?

First ask students to think about the prompt silently. Then ask them to share their thoughts with their neighbor. Next ask them to share their ideas with the class. Finally, ask them to record their ideas in the space provided.

4. Tell students to plot the ordered pairs and graph the line for the second problem of the Try It section: (1,1) (4,3) (7,5) (10,7).
5. Read the passage supporting the second problem aloud:

> S W How fruits and vegetables are **handled** can affect their freshness. Foods grown far away may have more chances to get bruised from a bumpy ride and go through temperature changes that can lower their nutrient levels.

6. Tell students to interpret their graph based on the information in the text. Ask them to respond to the prompt:

> S W What does the graphed line represent? Referencing the passage above, what does it tell you about what can happen to fruits and vegetables the farther they travel?

7. Discuss that produce is handled when it is picked, sorted, cleaned, packaged, and transported. Say that over handling can lead to a loss of quality and, to a lesser extent, nutrients. The farther produce travels, the more likely it will be handled and diminished in quality and nutrient value.



Digest It

Activity: Tasting and Reflection

Students will taste carrots and discuss the benefits of locally grown produce.

Teacher will hand out the tasting and guide the final discussion.

Instructions

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

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

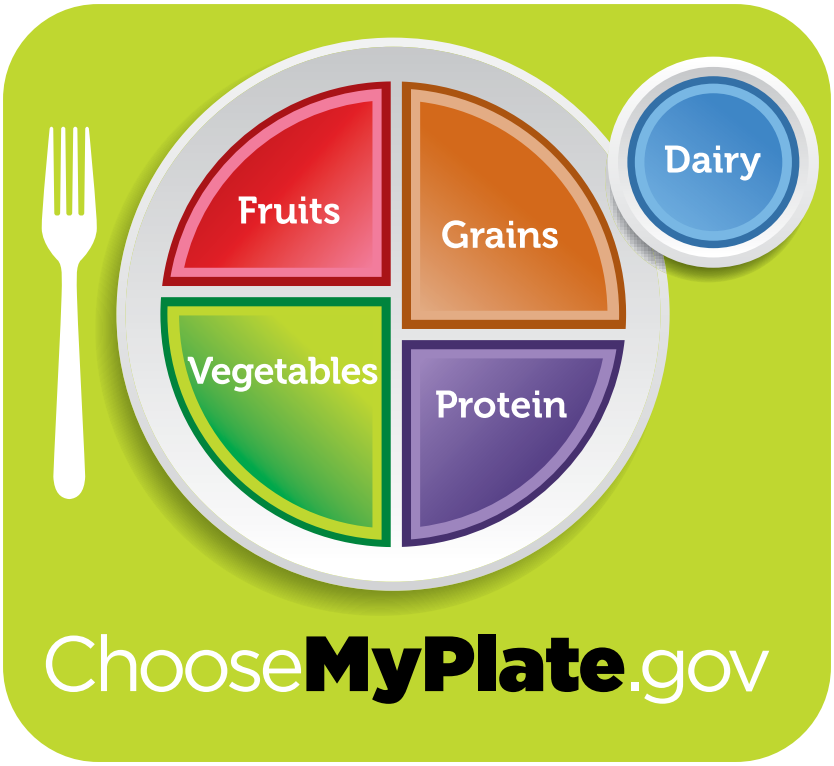
SW

- What are some reasons that a fresh vegetable grown locally may be fresher than one grown far away?
- What happens to fresh fruits and vegetables as they travel?
- Make a plan to eat carrots and other vegetables. When and where will you eat them? How will you ask for them? How will they become part of your snacks, breakfast, lunch or dinner every day?

9. Encourage students to eat carrots from the cafeteria.
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.



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.

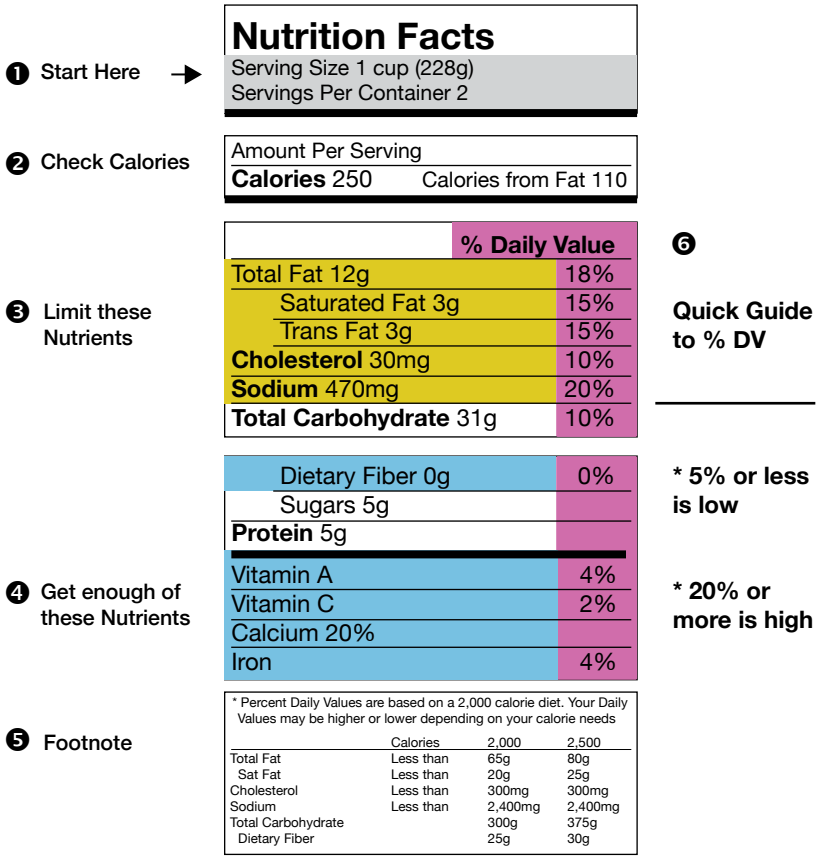
   General Guide to Calories (per serving of food)

   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.



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

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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

Hop Plot Diagram

Goals

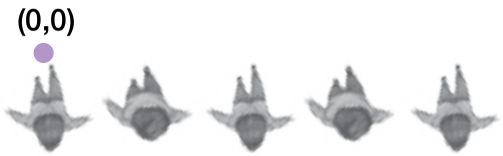
Students will understand that the x-coordinate moves to the right and the y-coordinate moves up by moving their bodies to ordered pairs.

Basic set up

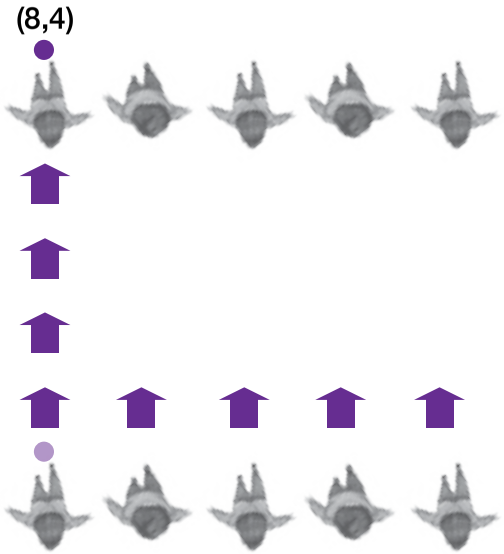
Students begin by lining up side by side. Start with just two students to demonstrate. Explain that the first number in an ordered pair is the x-coordinate and the second number is the y-coordinate. Say that they need to hop to the right for positive number x and forward for a positive number y. Have your models simulate (8,4). Add more students to the line and have them coordinate other ordered pairs.

This is a diagram for graphing the ordered pair (8,4).

1. Students begin by lining up side by side facing out.



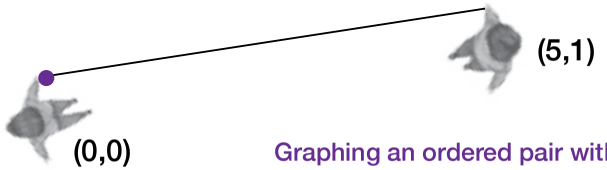
2. Students side-step 8 steps to the right to represent x = 8.



3. Students take 4 steps forward to represent y = 4 and complete the plotting of the ordered pair (8,4).

Extension

You can take the activity a step further by extending a piece of string or yarn in between the origin and an ordered pair or between two ordered pairs to show graphing a line. This will help students understand how a line may be drawn between points on a graph.



Graphing an ordered pair with string or yarn.

Note: As learning advances, update this activity using negative numbers.

Plot an Ordered Pair

an ordered pair

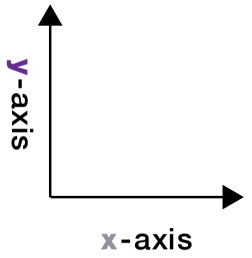
(x,y)

x coordinate, y coordinate

For a positive number:

x → Right

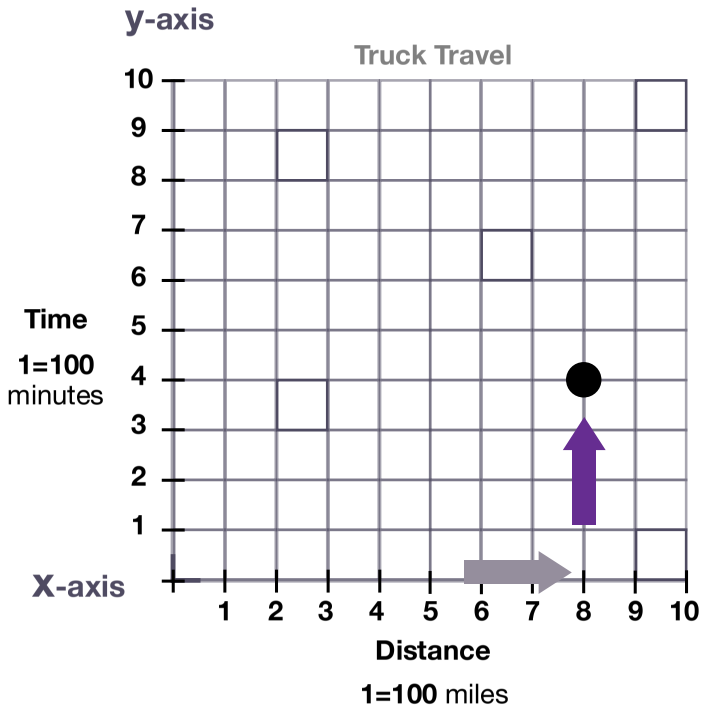
y ↑ Up



(8,4) Here x is 8, and y is 4.

Plot an ordered pair by starting at the origin (0,0). Move right along the x-axis until you reach the value of the x-coordinate. Then travel up until you are across from the value of the y-coordinate.

8 to the Right → 4 Up





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


BERRIES
Harvest of the Month™

Learning Objectives

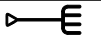
- Identify the nutrition facts and health benefits of berries.
- Articulate the process of berry production and distribution.
- Paraphrase spoken and written descriptions about nutrition and health benefits.
- Taste berries and set goals for eating them.

Goals, Competencies, and Standards

- **Harvest of the Month Goal**
  Expand familiarity with California grown fruits and vegetables, local farmers, the state's rich agricultural bounty, and how food travels from farms to our plates.
- **Health Standard: Nutrition Competencies**
  1h.5-6. Describe the benefits of eating a nutritionally balanced diet consistent with current research-based dietary guidelines.
- **Common Core Standard**
  CCSS.ELA-LITERACY.W.5.8

  Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work and provide a list of sources.

Materials: Harvest of the Month Workbooks, a few berries per student, Berry California Game Diagram and signs, 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
	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:

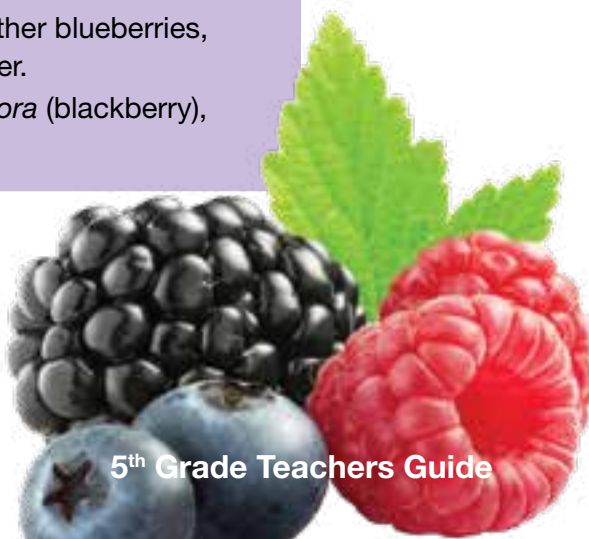
- Engage in a physical activity that shows how berries travel to you.
- Discover what makes berries healthy for you.
- Read and paraphrase paragraphs about berries.
- Taste berries and make a goal for eating them.

3. Read the introductory passage with your students:

The Harvest of the Month is berries. There are many kinds of berries: 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, lowfat (1%) milk and 100% orange juice in a blender for a healthy and delicious treat.

Here are more facts about berries:

- Blueberries are native to North America.
- The botanical name for blueberry is *Vaccinium cyanococcus.*
- 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).



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.

Berries are not only delicious, they are also healthy for you. They contain important nutrients. Some are shown on the Nutrition Facts labels. Take a look at the Nutrition Facts label for blueberries. Which nutrients do they contain? Berries also contain phytonutrients which are not listed on the label. Phytonutrients help keep us from getting sick and help repair the cells that make up our bodies.



4. Guide students in interpreting the Nutrition facts label in their workbook. Explain that throughout the day, they should strive for 100% of the Percent Daily Value (%DV) of nutrients listed in 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 and how they could get 100%. [Eat 2½ cups of vegetables a day, 1½ cups of fruit, and choose whole grains.]

Move It

Activity: Berry California

Students will work together to create exercises simulating why California grows so much produce and how berries get to us.

Teacher will lead students in physical activity.

Directions In this activity you will act out the process of berries forming and traveling to you to be eaten. Your teacher will guide you in creating six groups. Each group will act out a different stage in the process. The stages are 1) Snow landing on mountains, 2) Mountain snow melting, 3) Water flowing to farms, 4) Plants growing up from the soil, 5) Berries traveling to market, and, very importantly… 6) You eating berries!

Instructions

1. Tell students that they are going to participate in an activity that demonstrates why California grows so many berries and how those berries get to us.
2. Use the Berry California Game Diagram and signs to illustrate the steps leading to the consumption of berries.
3. Divide students into six groups. Tell students as a group, you are going to make movements or exercises for each stage of the process.

   See full size signs at the end of the lesson.
4. Hold up the Snowflakes Landing on Mountains card. Model a jumping jack as an example of a movement simulating snowflakes falling on the mountains.
5. Continue through each card in the order of the process, and, as a class, practice the movement or exercise that represents the process written on the sign. The movements for each card are below:
   1. Snowflakes landing on mountains: jumping jacks
   2. Mountain snow melting: bend over and touch your toes
   3. Water flowing to farms: march in place
   4. Plants growing from soil: jump in place
   5. Berries traveling to market: run in place
   6. Home/You eating berries: pretend to eat berries
6. Rotate through all of the cards until the class understands the movement for each one. Go through the process again, doing the motions representing each part of the process. End on “You eating berries.”



Link It

Activity: Guided Practice Underlining and Paraphrasing Informational Text

Students will practice paraphrasing.

Teacher will guide students in paraphrasing.

Instructions

1. Tell the class they will practice paraphrasing by describing to each other what they did in the Move It activity. Paraphrasing means to express a concept or meaning of ideas that are written or spoken using different words, especially to make ideas clearer.
2. Some ways to scaffold the idea of paraphrasing is to use sentence starters, such as:
   a. Based on what you said, my understanding is…
   b. Can you tell me if I'm understanding correctly? I heard…
   c. It seems that you said…
   d. I heard you say…
3. Model explaining what happens at the "Snow Landing on Mountains" station: "During the Snow Landing on Mountains station, we used our bodies to do jumping jacks and to pretend we were snowflakes coming down from the sky. This is the first step in the berry growth cycle."
4. Now tell a student to explain what happened at that same station. Ask the class if the two descriptions had mostly the same idea. Ask them how they were different.
5. Tell them to paraphrase what they just heard in their workbook.

Directions Listen to your teacher and a classmate describe what happened at the "Snow is Landing on Mountains" stage. Paraphrase what they said in the space below.

6. Tell students to find a partner and to take turns describing what happened at the "Mountain Snow Melting" station. Tell them to write what they recalled in their workbook. Ask them to compare their writing. Tell them to check for the same idea and for different words.

Directions Find a partner. Take turns describing what happened at the "Mountain Snow Melting" stage. Paraphrase what each other said.

7. Tell students to look at the passage about the benefits of eating fruits and vegetables as you read it aloud:

Directions Read the following paragraph along with your teacher.

Eating a diet rich in vegetables and fruits as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke. Eating a diet rich in some vegetables and fruits as part of an overall healthy diet may protect against some types of cancers.

8. Read the first sentence again. Say that the sentence could be paraphrased as:

We can lower the chances of getting heart disease by eating lots of fruits and vegetables.

You made some changes to the sentence. Use the Swap, Switch, Keep, Check visual aid to illustrate what you did. The full-page visual is at the end of the lesson.

Explain that:

The sentence was paraphrased by using the Swap, Switch, Keep and Check strategy.

- Swapped "rich" with the phrase "lots of."
- Switched the order of words in the sentence by talking about heart disease first and fruits and vegetables last.
- Kept "heart disease" because it is the name of something.
- Checked to make sure the sentence has the same meaning as the original.

9. Direct them to paraphrase the next sentence out loud with their partner and then to write what they said in their workbook.

Directions Paraphrase the second sentence from the reading passage using the Swap, Switch, Keep and Check strategy.

For quick reference, the second sentence from the passage reads: Eating a diet rich in some vegetables and fruits as part of an overall healthy diet may protect against some types of cancers.



Try It

Activity: Independent Practice Paraphrasing

Students will paraphrase key information in two texts.

Teacher will check for understanding and reteach as necessary.

Instructions

1. Tell students they will read two more passages about the health benefits of fruits and vegetables.

Directions Read the following information about the health benefits of eating berries, then paraphrase the paragraph. Use the Swap, Switch, Keep and Check strategy.

2. Explain that they will paraphrase like they did in the Link It section. This is the next passage:

Health Benefits

- Eating lots of berries and other fruits may reduce risk for heart disease, including heart attack and stroke.
- Eating a variety of fruits may protect against some types of cancers.
- Eating foods containing fiber, such as berries and other fruits, may reduce the risk of heart disease, obesity, and type 2 diabetes.

3. Check for understanding. Ask students to share their writing. Call on students to share their sentences.
4. Direct students to review the directions and paraphrase the following passage which can be found in their workbook:

Directions Read the following information about the nutrients found in berries, then paraphrase the paragraph. Use the Swap, Switch, Keep and Check strategy.

Nutrients Found in Berries

- Fruits are sources of many essential nutrients including potassium, dietary fiber, and vitamin C.
- Potassium helps to maintain healthy blood pressure. Fruit sources of potassium include berries, bananas, prunes, prune juice, dried peaches, dried apricots, cantaloupe, honeydew melon, and orange juice.
- Fiber-containing foods such berries and other fruits help provide a feeling of fullness with fewer calories. Whole or cut-up fruits are sources of dietary fiber; fruit juices contain little or no fiber.
- Vitamin C is important for growth and repair of all body tissues, helps heal cuts and wounds, and keeps teeth and gums healthy.

Digest It

Activity: Tasting Berries and Reflection

Students will taste berries and discuss what they learned about berries.

Teacher will hand out berries and guide the discussion.

Instructions

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



7. Model respectful responses to tasting the berries. Give examples of expressing feelings in a considerate and supportive way, for example:
   a. Ask students to give a silent thumb up, down, or in the middle to indicate their opinion of the tasting.
   b. Describe the flavors, colors, or textures: “The berries are juicy, sweet, and purple.”
   c. Model respectful responses to not liking the tasting: "I appreciate being offered the berries. I know 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.

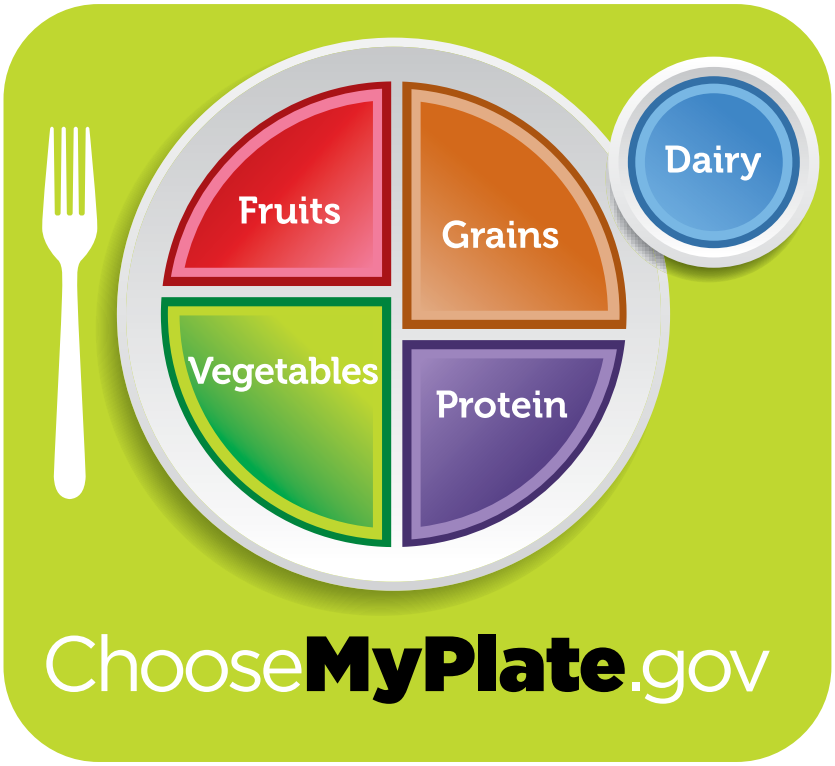
SW

- What are the important nutrients found in berries?
- What are the health benefits of eating berries and other fruits?
- What are some ways you could include berries in snacks?
- Set a goal for eating berries and other fruits. Share your goal with a classmate and your family.

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

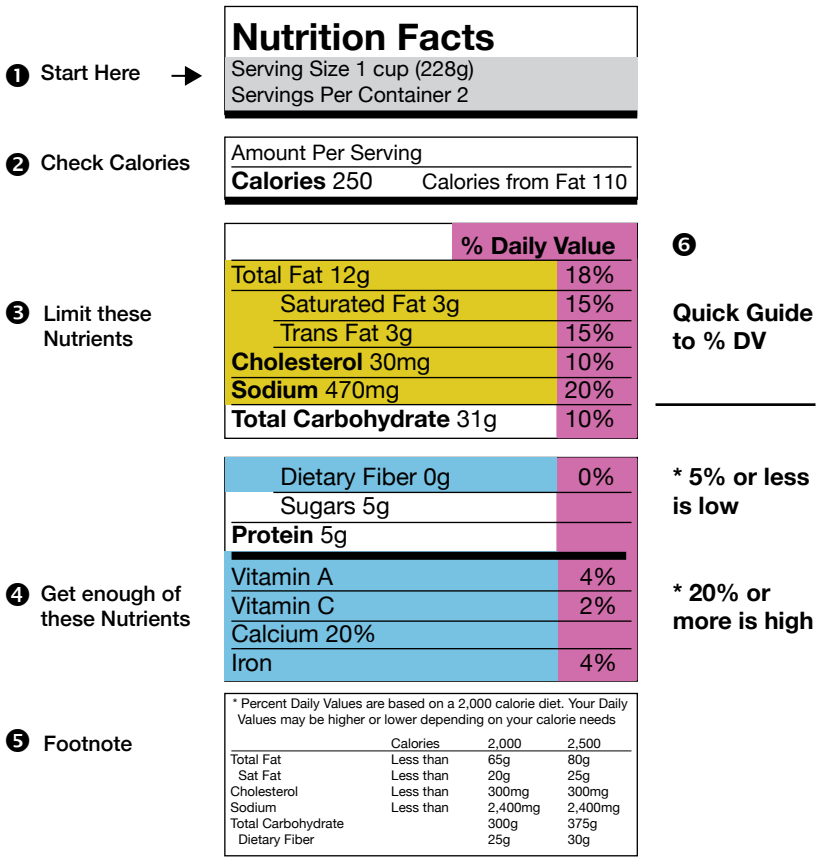
ChooseMyPlate.gov[2] is a resource for nutrition information based on the *Dietary Guidelines for Americans.* MyPlate illustrates the five food groups that are the building blocks of a healthy diet. The following is an excerpt from the ChooseMyPlate.gov website. It is recommended that you and your students:

- 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.
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

Berry California

Game Diagram





Home
You Eating Berries



1
Snow Landing on Mountains



2
Mountain Snow Melting



3
Water Flowing to Farms



4
Plants Growing up from the Soil



5
Berries Traveling to Market

Swap, Switch, Keep and Check

A Strategy for Paraphrasing

Paraphrasing: Using different words to describe something said or written while keeping the same meaning

SWAP: words with synonyms or similar phrases.

SWITCH: the order of words and sentances.

KEEP: dates, amounts, names, and titles.

CHECK: to make sure the meaning stays the same.

Example

Original sentence:

Eating a diet rich in vegetables and fruits as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke.

The sentence paraphrased:

We can lower the chances of getting heart disease by eating lots of fruits and vegetables.



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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Notes



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