

# Harvest of the Month



## STUDENT WORKBOOK

Name \_\_\_\_\_

6th  
GRADE

BROCCOLI  
TASTY  
DELICIOUS  
CRUNCHY  
JUICY  
CARROTS  
BERRIES  
SQUASH  
APPLES  
ORANGES





# Harvest of the Month

## STUDENT WORKBOOK

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# Apples



# 6th Grade



A ½ cup serving of apples is about the size of half of your fist.

## Healthy and Smart Goals

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

## Nutrition Facts

1 servings per container	
<b>Serving size</b>	<b>1/2 cups (55g)</b>
<b>Amount Per Serving</b>	
<b>Calories</b>	<b>28</b>
<small>% Daily Values*</small>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 1mg	<b>0%</b>
<b>Total Carbohydrate</b> 8g	<b>3%</b>
Dietary Fiber 1g	<b>4%</b>
Total Sugars 6g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 0g	<b>0%</b>
Vitamin D 0mcg	<b>0%</b>
Calcium 0mg	<b>0%</b>
Iron 0mg	<b>0%</b>
Potassium 0mg	<b>0%</b>
Vitamin A 108mcg	<b>0%</b>
Vitamin C 3.6mg	<b>4%</b>

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



## Harvest It

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

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

Fruits and vegetables also contain nutrients that you wouldn't necessarily know by looking at them. Nutrition Facts labels give information about what is inside the food you are eating. Take a look at the Nutrition Facts for apples above. Under where it says Nutrition Facts, you'll see the serving size and how many calories apples have. Vitamins and minerals are towards the bottom. Apples contain Vitamin C and dietary fiber which have many health benefits. Vitamin C helps repair and maintain bones and teeth and heal wounds. Dietary fiber makes you feel full faster which helps you control your weight. These are just some of the benefits of apples.

Your health depends on you making healthy food choices. In your lesson today, you will choose apples and other fruits and vegetables of different colors to make some healthy meals and snacks.



## Move it

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

In this activity you will be part of a relay team collecting different colored strips of paper. On each strip, there will be a fruit or vegetable that has that color. Your team must collect exactly one fruit or vegetable of each color. You will use those choices as ingredients in the next activity.

**Directions** Once you've collected all of your fruits and vegetables, write them down.

Color	Your Team's Fruit or Vegetable Selections
Red	
Orange	
Yellow	
Green	
Blue/Purple/Black	
White	



## Link it

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

### Red Apple Recipe Ingredients

Ingredients	Color	Requirements
Apples	Red	Red Apples
		A fruit or vegetable you collected of <u>a color other than red</u>
		Another fruit or vegetable you collected of <u>a color other than red</u>

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

### Red Apple Recipe Description

Give your recipe a name.	Think of a name for your recipe that you would find exciting.
What are the ingredients?	Describe the ingredients' colors, shapes, and tastes.
Why should you eat it?	Use some of the health benefits from the Harvest It reading.
When should you eat it?	At what time of day and what meals should it be eaten?
Where should you eat it?	At school, home, a family or team event?
Who should you eat it with?	Friends, family, classmates?
Invite others to try it.	What would you say to get someone excited about your recipe?



### Try it

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

### Green Apple Recipe Ingredients

Ingredients	Color	Requirements
Apples	Green	Green Apples
		A fruit or vegetable you collected of <u>a color other than green</u>
		Another fruit or vegetable you collected of <u>a color other than green</u>

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

### Green Apple Recipe Description

Give your recipe a name.	Think of a name for your recipe that you would find exciting.
What are the ingredients?	Describe the ingredients' colors, shapes, and tastes.
Why should you eat it?	Use some of the health benefits from the Harvest It reading.
When should you eat it?	At what time of day and what meals should it be eaten?
Where should you eat it?	At school, home, a family or team event?
Who should you eat it with?	Friends, family, classmates?
Invite others to try it.	What would you say to get someone excited about your recipe?



### Digest it

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

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





A ½ cup serving of winter squash is about the size of half of your fist.

## Nutrition Facts

1 servings per container

Serving size 1/2 cups (103g)

Amount Per Serving

**Calories** **57**

% Daily Values\*

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 4mg 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%

Vitamin A 81mcg 8%

Vitamin C 17.1mg 20%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

### Healthy and Smart Goals

1. Identify the health benefits of eating winter squash.
2. Solve unit rate problems.
3. Set goals for eating vegetables and being physically active.
4. Taste winter squash.



### Harvest It

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

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

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

Winter squash contains vitamins, minerals and other important nutrients. Take a look at the Nutrition Facts label to find out some benefits of eating winter squash.

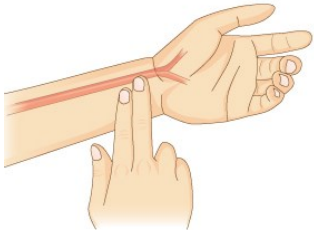




## Move it

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

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



Your resting heart rate is your heart rate when you are **not** physically active.

Your resting pulse is \_\_\_\_\_

Your pulse **after** physical activity is \_\_\_\_\_



## Link it

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

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

Enter the number of beats you recorded above for your resting pulse.

$$\frac{\square \text{ of beats}}{10 \text{ seconds}}$$

In order to convert the 10 second \_\_\_\_\_ resting pulse you took into a unit rate, you will need find out how many beats you would have in one minute. Use 60 seconds for your computation, since there are 60 seconds in a minute, and you want to keep the unit the same as what you are working with. Ten times 6 is 60. So multiply by 6.

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

Now write your answer as a unit rate with beats over 1 minute. This is your heart rate.

$$\frac{\square \text{ beats}}{60 \text{ seconds}} = \frac{\square \text{ beats}}{1 \text{ minute}}$$

You can find a unit rate that has to do with eating winter squash, too. Look at this problem.

MyPlate recommends that girls 9-13 years of age have 2 cups of vegetables a day. Alicia eats 14 cups of winter squash and other vegetables a week. What is her daily unit rate of eating vegetables?

There are seven days in a week so you will need to divide Alicia's weekly rate by seven.

$$\frac{14 \text{ cups}}{7 \text{ days}} \div \frac{7}{7} = \frac{2 \text{ cups}}{1 \text{ day}}$$

Is Alicia eating the recommended daily amount of winter squash and other vegetables?



### Try it

**Directions** Find your heart rate after physical activity. Enter your pulse after physical activity.

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

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

MyPlate recommends that boys aged 9-13 years old eat  $2\frac{1}{2}$  cups of vegetables per day. Devon eats 17.5 cups of winter squash and other vegetables in a week. What is Devon's daily rate for eating vegetables? Is Devon eating enough of them?

$$\frac{\square \text{ cups}}{7 \text{ days}} \div \frac{7}{7} = \frac{\square \text{ cups}}{1 \text{ day}}$$

There are many winter squash to choose from. Try some the next time you visit a market or when it is presented to you at home or school. Winter squash are also fun to grow in a school garden.



### Digest it

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

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



# Broccoli



# 6th Grade



A 1/2 cup serving of broccoli is about the size of half of your fist.

## Nutrition Facts

1 servings per container	
<b>Serving size</b>	<b>1/2 cup (78g)</b>
<b>Amount Per Serving</b>	
<b>Calories</b>	<b>27</b>
<b>% Daily Values*</b>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	0%
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 32mg	<b>1%</b>
<b>Total Carbohydrate</b> 6g	<b>2%</b>
Dietary Fiber 3g	11%
Total Sugars 1g	
Includes 0g Added Sugars	0%
<b>Protein</b> 2g	<b>4%</b>
Vitamin D 0mcg	0%
Calcium 39mg	4%
Iron 0.54mg	4%
Potassium 0mg	0%
Vitamin A	25%
Vitamin C	80%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

### Healthy and Smart Goals

1. Identify information and nutrition facts about broccoli.
2. Describe the differences between a fruits and vegetable.
3. Discover why it is important to eat fruits and veggies.
4. Write a paragraph persuading your classmates to eat fruits and veggies.



Harvest It

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

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

Broccoli provides many nutrients:

- Vitamin A
- Fiber
- Calcium
- Iron

Find these nutrients in the Nutrition Facts label for broccoli. What percent of the Daily Value does 1/2 cup of broccoli provide for each of these nutrients? What percent Daily Value of Vitamin A would you get in one cup of broccoli?

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



### Move it

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

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

cherries (F or V)

celery (F or V)

onion (F or V)

orange (F or V)

tomato (F or V)



broccoli (F or V)

apricot (F or V)

avocado (F or V)

carrot (F or V)

pumpkin (F or V)



How do you know if something is a fruit? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



### Link it

#### Fruit and Vegetable Facts!

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

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

- Fiber
- Vitamins
- Minerals

**The nutrients in fruits and vegetables:**

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

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Try it

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

A good paragraph will:

- Introduce the main idea
- Stay focused on the topic
- Make an effective argument
- Use proper grammar and punctuation

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



## Digest it

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

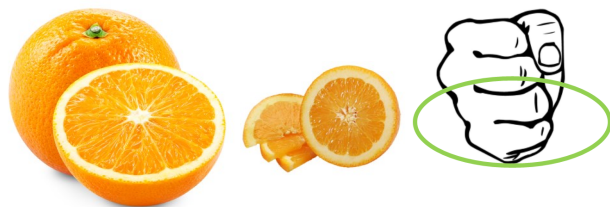
- Share your paragraph about why it is important to eat broccoli and other vegetables and fruits.
- Taste broccoli!
- Make a plan for eating broccoli in the future. Share your plan with your classmates.



# Oranges



# 6th Grade



A ½ cup serving of orange is about the size of half of your fist.

## Nutrition Facts

1 servings per container	
<b>Serving size</b>	<b>1/2 cup (90g)</b>
<b>Amount Per Serving</b>	
<b>Calories</b>	<b>42</b>
<small>% Daily Values*</small>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 0mg	<b>0%</b>
<b>Total Carbohydrate</b> 4g	<b>1%</b>
Dietary Fiber 2g	<b>7%</b>
Total Sugars 8g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 1g	<b>2%</b>
Vitamin D 0mcg	0%
Calcium 52mg	4%
Iron 0.18mg	0%
Potassium 235mg	4%
Vitamin A	4%
Vitamin C	80%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

### Healthy and Smart Goals

1. Identify information and nutrition facts about oranges.
2. Recognize hydrating foods and beverages.
3. Discover how advertisers try to gain the attention of consumers.
4. Create your own advertisement to encourage fellow classmates to “Rethink Your Drink.”



### Harvest It

Oranges are the Harvest of the Month! Oranges are delicious and packed full of nutrients. You can eat oranges on their own, in recipes such as fruit salad, or as orange juice. Orange juice is a healthy choice in moderation, for example a small 6 or 8 ounce glass full, as opposed to a 24 ounce bottle. While orange juice has naturally occurring sugar, it had the nutrients from an orange. Orange juice with pulp is better as it provides some fiber.

Some facts about oranges:

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

Oranges also provide a lot of nutrients, such as:

- Vitamin C, which boosts the immune system to help fight illnesses.
- Fiber helps you feel full and regulate blood sugar levels.
- B-vitamins helps the body build healthy blood cells and proteins and release energy.
- Potassium helps nerves and muscles communicate and function together.

### Think Before You Drink

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



# Move it

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

### Healthy Sources of Hydration

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

Some examples include:

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

### Less Healthy Sources of Hydration

There is excessive *added sugar* in many drinks, and these are not a good choice for hydration. Some examples include:

- Soda
- Sports drinks
- Energy drinks
- Some juices.

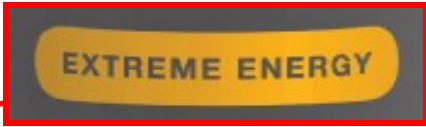
Beverages with *caffeine* are also not a good choice for hydration, such as:

- Coffee
- Soda
- Tea

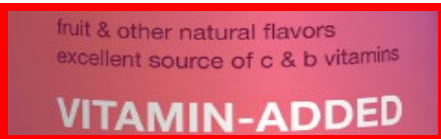


# Link it

**Directions:** Examine the front labels and the nutrition labels of these beverages. What do the front labels focus on? Do the nutrition labels show these drinks to be as healthy as they are advertised?



This drink gives you so much energy! It must be so healthy!



This one has fruit and natural flavors, and vitamins! Must be a good choice!

Nutrition Facts	
2 servings per container	
Serving size	8 fl oz
Amount Per Serving	
<b>Calories</b>	<b>120</b>
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Sodium 70mg	3%
Total Carbohydrate 30g	11%
Dietary Fiber 0g	0%
Total Sugars 30g	
Includes 30g Added Sugars	60%
Protein 0g	0%

There are 2 servings per container.

Each serving is 120 calories.  $120 \times 2 = 240$  calories in one can!

30 grams of added sugar in one serving!  
 $30 \times 2 = 60$  grams!

There are 2.5 servings per container.

Each serving has 13 grams of sugar.  
 $13 \times 2.5 = 32.5$  grams!

It says it contains fruit, but it has *less than 1% juice*. The calories in this drink come from added sugar.

Nutrition Facts	
2.5 servings per container	
Serving size	8 fl oz
Amount Per Serving	
<b>Calories</b>	<b>50</b>
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Sodium 0mg	0%
Total Carbohydrate 13g	5%
Dietary Fiber 0g	0%
Total Sugars 13g	
Includes 13g Added Sugars	26%
Protein 0g	0%
Contains 1% juice.	



## Try it

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

- 1) Your bottle has two sides. One side has the Nutrition Facts label and the ingredients list. Start on this side first. Refer to the Move It section for examples of healthy ingredients. Recall that healthy drinks have nutrients, such as water, vitamins and minerals, and do not have added sugar. Refer to the Nutrition Facts label on the Harvest It page for inspiration.
- 2) On the second side, put the name of your new drink, and advertise the health benefits of its ingredients. Use the information from the Harvest It and Move It sections as part of your health messages.

INGREDIENTS:

<b>Nutrition Facts</b>	
Serving size	
Amount Per Serving	
<b>Calories</b>	
	% Daily Value*
<b>Total Fat</b> g	%
Saturated Fat g	%
<i>Trans</i> Fat g	
<b>Cholesterol</b> mg	%
<b>Sodium</b> mg	%
<b>Total Carbohydrate</b> g	%
Dietary Fiber g	%
Total Sugars g	
Includes 0g Added Sugars	%
<b>Protein</b> g	%
Vitamin D mcg	%
Calcium mg	%
Iron mg	%
Potassium mg	%
Vitamin A	%
Vitamin C	%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



Place a health benefit of your drink here.

Place the name of your drink here.

Place another health benefit here.



## Digest it

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

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





# Carrots



# 6th Grade



A ½ cup serving of carrots is about the size of half of your fist.

## Healthy and Smart Goals

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

## Nutrition Facts

1 servings per container	
<b>Serving size</b>	<b>1/2 cup (61g)</b>
<b>Amount Per Serving</b>	
<b>Calories</b>	<b>25</b>
<small>% Daily Values*</small>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
<i>Trans</i> Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 45mg	<b>2%</b>
<b>Total Carbohydrate</b> 6g	<b>2%</b>
Dietary Fiber 2g	<b>7%</b>
Total Sugars 3g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 0g	<b>0%</b>
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.18mg	0%
Potassium 235mg	4%
Vitamin A	200%
Vitamin C	6%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



## Harvest It

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

Some facts about carrots:

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

### Locally Grown Carrots

Carrots, other vegetables, and fruits grown at nearby farms are called "locally grown." They are fresher and riper, and often more flavorful than produce that is grown far away. In this lesson you will be able to compare the distances locally grown carrots travel with carrots that are grown at greater distances. Vegetables are very healthy for you whether they come from near or far. You should be eating 2-2.5 cups of vegetables a day. Analyze the Nutrition Facts Label. What nutrients important nutrients are in carrots? How much can you get in a serving?



## Move it

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



Locally grown fruits and vegetables are those that come from nearby farms. Compare the distance that locally grown carrots travel from Fresno to Los Angeles with those that come from other locations.



## Link it

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

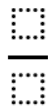
In the Move It activity, you used 1 second of physical activity to represent 100 miles of travel. The distance between Fresno and Los Angeles is about 200 miles and you did jumping jacks for 2 seconds. The distance from Orlando to Los Angeles is about 2,500 miles and you jogged for 25 seconds. This can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

$$200 \quad \text{to} \quad 2,500$$

$$200 \div 100 \quad \text{to} \quad 2,500 \div 100$$

\_\_\_ to \_\_\_ Divide each size by 100.

\_\_\_ : \_\_\_ Show the ratio using a colon.



Show the ratio as a fraction.



## Try it

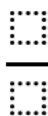
**Directions** Write the ratio of the distances to Los Angeles from Fresno and Quito. Write the ratio with "to" and ":"

$$200 \quad \text{to} \quad 4,500$$

$$200 \div 100 \quad \text{to} \quad 4,500 \div 100$$

\_\_\_ to \_\_\_

\_\_\_ : \_\_\_



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

$$\begin{array}{ccc}
 200 & \text{to} & 6,500 \\
 200 \div 100 & \text{to} & 6,500 \div 100 \\
 \underline{\quad} & \text{to} & \underline{\quad} \\
 \underline{\quad} & : & \underline{\quad} \\
 & \frac{\square}{\square} & 
 \end{array}$$



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

Cities in Carrot Growing Counties

	Salinas	Holtville
San Francisco	100 miles	600 miles
San Diego	400 miles	100 miles



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

$$\begin{array}{ccc}
 \text{Salinas} & 100 & \text{to} & \underline{\quad} & \text{Holtville} \\
 & 1 & \text{to} & \underline{\quad} & \\
 \text{Salinas} & 1 & : & \underline{\quad} & \text{Holtville} \\
 & & & \frac{\square}{\square} & 
 \end{array}$$

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

$$\begin{array}{ccc}
 \underline{\quad} & \text{to} & \underline{\quad} \\
 \text{Salinas} & \underline{\quad} & : & \underline{\quad} & \text{Holtville} \\
 & & & \frac{\square}{\square} & 
 \end{array}$$

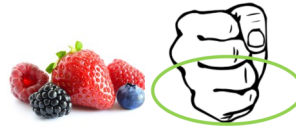


**Digest it**

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

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





A ½ cup serving of berries is about the size of half of your fist.

## Healthy and Smart Goals

1. Identify the health benefits of eating berries.
2. Say why California is so ideal for growing crops.
3. Multiply with percentages.
4. Taste berries and make a plan for eating them.

## Nutrition Facts

1 servings per container  
Serving size 1/2 cup (72g)

Amount Per Serving  
**Calories 31**

% Daily Values\*

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%
<b>Protein 1g</b>	<b>2%</b>
Vitamin D 0mcg	0%
Calcium 26mg	2%
Iron 0.54mg	4%
Potassium 188mg	4%
Vitamin A	4%
Vitamin C	25%
Vitamin K	20%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



## Harvest It

A handful of berries make a great snack. They also make an excellent smoothie. Try combining frozen berries, bananas, orange juice, and low-fat milk in a blender for a healthy and delicious treat. How many berries do you know about? You may have heard of blueberries, blackberries, and raspberries. But have you heard of boysenberries, loganberries and marionberries?

Here are some “berry” important words in Spanish:

- *frambuesa* (raspberry)
- *mora* (blackberry)
- *arándano* (blueberry)



Berries are very healthy for you. Take a look at the Nutrition Facts label. Blackberries contain 20% of the Daily Value of Vitamin K. Your body makes proteins with the help of Vitamin K to make healthy bones. It also makes proteins so that when you bleed, you don’t bleed too much.

### Why are so many fruits and vegetables grown in California?

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

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

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



### Move it

In the sections that follow, you will use percentages to find out about the amount of berries and other fruits grown in California.

Here in the Move It section, your teacher will demonstrate how to use percent to find the answers to the math problems on flash cards. Then you'll get into groups of different sizes to illustrate different percentages of blueberries.

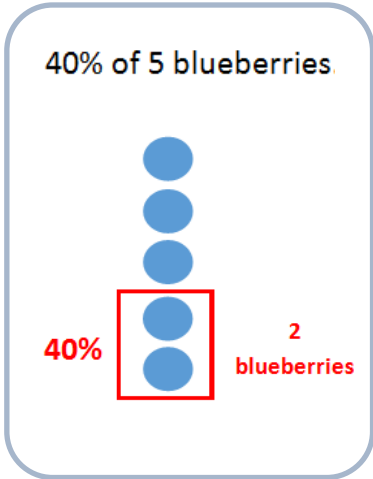
$$\begin{array}{c} 40\% \\ \times 5 \end{array}$$

$$40\% = \frac{40}{100}$$

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

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

$$200 \div 100 = 2 \text{ blueberries}$$



### Link it

California is one of the biggest producers of blueberries in the United States. While it does not grow the most blueberries, because of its excellent growing conditions, in 2014 it grew the most per acre.

In 2014 California grew the most blueberries per acre of any state in the US:  
**10,700 pounds of blueberries per acre.**

An acre is about the size of a regulation size soccer field.

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

<p><b>10%</b> California grew about 10% of the nation's blueberries.</p>	<p><b>500,000 tons</b> The US grew about 500,000 tons of</p>	<p><b>10% x 500,000 =</b></p>	<p>The number of tons of blueberries California grew.</p>
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$$10\% = \frac{10}{100}$$

$$\frac{10}{100} \times 500,000 =$$

$$\frac{10}{100} \times \frac{500,000}{1} = \frac{5,000,000}{100}$$

When you are multiplying by 10 just add a zero on the right.

Since a ton is 2,000 pounds, that means California grew about 100,000,000 pounds of blueberries that year!

**50,000 x 2000 = 100,000,000**

$$\frac{5,000,000}{100} = 5,000,000 \div 100 = 50,000 \text{ tons of blueberries}$$

When you are dividing by 100 just move the decimal point two places to the left.

**Directions** California produced more than 30% of the approximately 150,000 boxes of oranges grown in the US in 2015. Find out about how many boxes of oranges were from California

$$30\% = \frac{30}{100}$$

$$\frac{30}{100} \times 150,000 =$$

$$\frac{\quad}{100} \times \frac{\quad}{1} = \frac{\quad}{100}$$

$$\frac{\quad}{100} =$$

$$\div 100 =$$

Boxes of oranges



**Try it**

**Directions** California planted more than 75% of the approximately 80,000 acres of carrots in the US in 2015. Find out about how many acres California planted.

$$80\% = \frac{80}{100}$$

$$\frac{\quad}{100} \times \quad =$$

$$\frac{\quad}{100} \times \frac{\quad}{1} = \frac{\quad}{100}$$

$$\frac{\quad}{100} =$$

$$\div 100 =$$

acres of carrots planted



**Digest it**

The actual figures are closer to 88%! Can you find 88% of 76,000 acres planted in the US?

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

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







The California Department of Public Health, with support from the Alameda County Office of Education, and 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.CaChampionsForChange.net](http://www.CaChampionsForChange.net).