

Harvest of the Month



STUDENT WORKBOOK

Name _____

5th
GRADE

BROCCOLI
TASTY
DELICIOUS
CRUNCHY
JUICY
CARROTS
BERRIES
SQUASH
APPLES
ORANGES



Harvest of the Month



STUDENT WORKBOOK

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

Healthy and Smart Goals

1. Identify nutrition facts and the health benefits of eating apples.
2. Discover where apples can be found in your community.
3. Multiply fractions to make a snack recipe bigger.
4. Taste apples and make a plan to eat them in recipes.

Nutrition Facts

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

*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

This year we are trying a fruit or vegetable each month. Apples are this month's Harvest of the Month. 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 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. Below where it says Nutrition Facts, you'll see the serving size and how many calories an item has. 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 helps heal wounds. Dietary fiber makes you feel full faster which helps you control your weight. These are just some of the benefits.



Move it

In the Move It activity you will be taking a virtual trip to places in your community where apples can be found. Look for apples at supermarkets, farmers' markets, community gardens, and food banks.

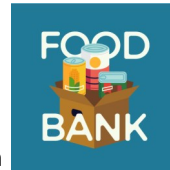
Places in your community where you can find ingredients for an apple recipe.



supermarket



community garden



food bank



farmers' market



Link it

Apples are healthy and make great snacks. Sometimes you need to make more than a recipe calls for. In order to get the exact amount you'll need to know how to multiply fractions.

A peanut butter and apple recipe calls for $\frac{1}{2}$ cup of apple slices. Using fractions you determine that if you make 4 times the recipe you will need 2 cups of apples.

$$\frac{1}{2} \times 4 = \frac{1}{2} \times \frac{4}{1} = \frac{4}{2} = 4 \div 2 = 2 \text{ cup apples}$$

First rewrite 4 as $\frac{4}{1}$. Multiply across. Divide the numerator by the denominator.

How much would you need for 6 times the recipe?

$$\frac{1}{2} \times 6 = \frac{1}{2} \times \frac{\square}{1} = \frac{6}{2} = \square \div 2 = \square \text{ cup apples}$$



Try it

An apple celery recipe calls for $\frac{1}{3}$ cup of diced apples. How many cups of apple will you need if you increase the recipe by 3 times?

$$3 \times \frac{1}{3} = \frac{\square}{1} \times \frac{1}{3} = \frac{\square}{3} = \square \div 3 = \square \text{ cup apples}$$

Increase the recipe 6 times.

$$6 \times \frac{1}{3} = \frac{\square}{1} \times \frac{1}{3} = \frac{\square}{3} = \square \div 3 = \square \text{ cup apples}$$



Directions Increase this healthy party recipe 12 times!

Apple, Celery Recipe

$$\frac{1}{2} \text{ cup apples} \times 12 = \frac{1}{2} \times \frac{\square}{1} = \frac{\square}{2} = \square \div 2 = \square \text{ cup}$$

$$\frac{1}{4} \text{ cup celery} \times 12 = \frac{1}{4} \times \frac{\square}{1} = \frac{\square}{4} = \square \div 4 = \square \text{ cup}$$

Directions Make your own snack recipe. Write your choice of ingredient. Choose $\frac{1}{2}$, $\frac{1}{4}$, or $\frac{1}{8}$ cup quantities for apples and your other ingredient. Multiply by 16. How many cups of each ingredient will you need for your recipe?

Your Apple Recipe

$$\frac{\square}{\square} \text{ cups } \underline{\hspace{2cm}} \times \frac{16}{1} = \frac{16}{1} \times \frac{\square}{\square} = \frac{\square}{\square} = \square \div \square = \square \text{ cup}$$

(your ingredient)

$$\frac{\square}{\square} \text{ cups apples} \times \frac{16}{1} = \frac{\square}{\square} \times \frac{\square}{\square} = \frac{\square}{\square} = \square \div \square = \square \text{ cup}$$



Digest it

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?
- Let's say your recipe calls for $\frac{1}{8}$ cup of apples. If you multiplied the recipe times 24, how many cups of apples would you need?
- It is recommended that you eat $1 \frac{1}{2}$ 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?



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

Healthy and Smart Goals

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



Harvest It

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.

Our 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, called *pepitas* in Spanish? They are a very healthy and delicious snack all year long. At the top of the page you'll find the nutrition facts for winter squash. Towards the bottom of the label, you'll see the amount of vitamins and minerals. Squash contains Vitamin A, Vitamin C and dietary fiber. Can you find the nutrients on the nutrition label? Here are a few more facts about Winter squash:

- The botanical name for winter squashes is *Cucurbita maxima*.
- Winter squash are not grown or picked in the winter. So how do they get their name? They have a hard shell that protects the fruit and seeds until wintertime.
- The word squash comes from the Native Indian 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 was grown!
- A serving size of winter squash is ½ cup. Try that for starters.

Eating fruits and vegetables like winter squash is an important part of keeping your body healthy. We will learn about their health benefits in the Move It activity.



Move it

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

What Fruits and Vegetables Can Do for Your Health

- Supplies your body with necessary nutrients.
- Keep you at a healthy weight.
- Reduce your chances of diseases like obesity, and type 2 diabetes



Link it

You will write a paragraph in the Try It section explaining why people should eat winter squash. But first, you will jot down your ideas for the paragraph here in the Link It section.

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 give 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 winter squash has.

Step 3 Directions Write about why it is important to you that fruits and vegetables help keep you at 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 vegetables in the future. It is recommended that children your age eat 2-2 1/2 cups vegetables every day.



Directions Write a paragraph explaining why winter squash is good for your health. Use your ideas from the Link It section.

Try it

Title: *Winter Squash is Good for Your Health*

Write your introduction.

Give your reason from step 2 with explanations.

Give your second reason from step 3 with explanations.

Give your reason from step 4 with explanations.

Share your plan for eating squash and vegetables.



Digest it

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

- What nutrients does winter squash have?
- Why are winter squash and vegetables good for your health?
- Share your plan for eating winter squash and vegetables.

Try all kinds of squashes, like pumpkin, butternut, and zucchini.



Broccoli



5th Grade



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

Healthy and Smart Goals

1. Identify the benefits and nutrition facts about broccoli.
2. Determine which foods belong in the five MyPlate food groups.
3. Describe a day eating food from each of those groups.
4. Taste broccoli. Make a plan for eating it in the future.

Nutrition Facts

1 servings per container	
Serving size	1/2 cup (78g)
Amount Per Serving	
Calories	27
% Daily Values*	
Total Fat 0g	0%
Saturated Fat 0g	0%
<i>Trans</i> 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 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.



Harvest It

Broccoli is the Harvest of the Month! 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, chopped up 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 vitamin C and other nutrients broccoli contains.

“Vegetables” is a food group in MyPlate. What is MyPlate? It’s a guide for healthy eating. There are five food groups: vegetables, fruits, grains, protein and dairy. Here are examples of 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 milk, low-fat yogurt, low-fat cheese









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. Candy, cookies, chips, soda, and sports drinks aren’t in any of these groups because they are not healthy foods. They contain too much sugar, fat, salt, and refined grains that 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 the healthy foods you collected.



Move it

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 sign. Hurry, but make sure your group has no more than two foods from each 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.

	 ChooseMyPlate.gov	 Fruits ChooseMyPlate.gov	 Vegetables ChooseMyPlate.gov	 Grains ChooseMyPlate.gov	 Protein ChooseMyPlate.gov	 Dairy ChooseMyPlate.gov
Your class' choices						
The foods your team collected						



Link it

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

Rey woke up on Saturday morning excited to go to his friend's birthday party and then 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 some into a big bowl to eat.

What healthy foods could Rey have eaten instead of what he ate? Use the foods that your team and your classmates collected.

Directions Complete the sentence at the end of the paragraph to change what Rey ate for breakfast with healthy foods your team and classmates collected. Write another sentence to make the story more your own.

Rey woke up on Saturday morning excited to go to Rey's friend's birthday party and then play soccer with Rey's cousin. Rey got dressed, and went to the kitchen to have breakfast. Rey's parents had prepared eggs, toast, and fresh fruit. Rey decided to eat...



Try it

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

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

Later, lunch was being served at the birthday party. There was an assortment of healthy and unhealthy food choices to choose from. Rey ate...

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.

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. Before they knew it, the party size bag of chips was gone and they were very thirsty. Rey and Rey's cousin each drank a 24 ounce sport drink.



Digest it

- Taste broccoli.
- What nutrients does broccoli have?
- What are examples of the fruits, vegetables, grains, protein and dairy food groups?
- What snack with broccoli did you describe Rey eating?
- What is your plan for eating snacks with broccoli?



Oranges



5th Grade



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

Healthy and Smart Goals

1. Identify nutrition benefits and facts about oranges.
2. Discover why it is important to pay attention to serving size.
3. Use multiplication to determine how much sugar is in drinks.
4. Taste oranges. Make a plan for eating them.



Harvest It

Nutrition Facts

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

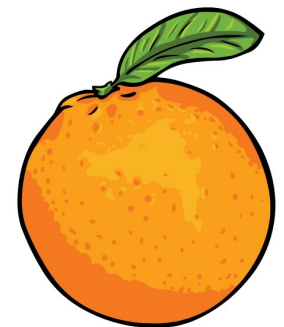
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Oranges are the Harvest of the Month! 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:

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

Some other orange facts:

- The botanical name of an orange is *Citrus sinensis*.
- Navel oranges got their name from the similarity in appearance to a bellybutton, or navel.



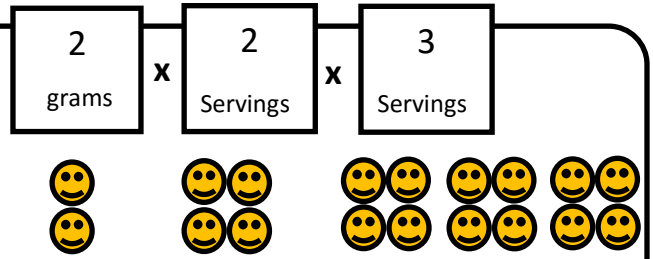
In the lesson today you will be determining how many calories and how much sugar drinks contain. Nutrition Facts labels help us understand what is in our packaged foods or drinks. The first piece of information on a Nutrition Fact label is the servings per container. The serving is supposed to be the amount people consume each time they drink. Often times, though, people drink more than one serving. What that means is that all the quantities on the label are only fractions of what people actually drink. They may be drinking 2 or more times the amount that is listed! That's fine when it comes to vitamins and minerals that you need. But it is *not fine* when it comes to unhealthy amounts of calories in the form of sugar. If a drink has 3 servings and you drink the whole bottle, in order to figure out how many calories and how much sugar you are drinking, you'll need to multiply the information on the label by 3. The amount may surprise you, and help inform your decisions on what to drink.



Move it

When you have more than one serving of a drink, you are multiplying the amount of sugar and calories found on the label that you are actually drinking. Your teacher will lead you in a physical activity that illustrates this.

First, your teacher will show your team a card with a number of grams on it. Your team will form a number of rows equal to the number of grams shown on the card. You'll then multiply the number of students in each row based on the number on the serving cards that your teacher shows next.



Imagine a bottled drink that has 2 grams of sugar per serving and it contains 2 servings. You drink 3 whole bottles. The example above is an illustration of this. How many grams of sugar would you have consumed?



Link it

Nutrition Facts labels provide useful information. But you need to use your multiplication skills to get a better understanding of what you are 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 than the serving size listed on the label then you will need to multiply to figure out what you are really getting.

In order to find out the total number of calories in a container you need to multiply the number of servings times the calories per serving.

Nutrition Facts	
2 servings per container	
Serving size	
Amount Per Serving	
Calories	70

$$\underline{2} \quad \times \quad \underline{70} \quad = \quad \underline{140}$$

servings per container
amount of calories per serving
total calories per container

This drink doesn't have just 70 calories. It has 140!

If you drink the whole bottle you are getting 140 calories.

Directions Find the total number of calories in this soda.



Nutrition Facts	
3 servings per container	
Serving size	12 oz
Amount Per Serving	
Calories	160

$$\underline{\quad} \quad \times \quad \underline{\quad} \quad = \quad \underline{\quad}$$

servings per container
amount of calories per serving
total calories per container

If you drink the whole bottle, how many calories would you consume?

Directions find the total number of grams of added sugar for the whole bottle with the same soda bottle that has 3 servings.

Total Carbohydrate	40 g
Total Sugars	40 g
Includes	40 g Added Sugars

$$\underline{3} \quad \times \quad \text{[Scale with 40]} \quad = \quad \text{[Scale with 120]}$$

servings per container
grams of sugar
total grams of added sugar for the whole bottle



Try it

Directions Find the total number of calories in this sports drink.



Nutrition Facts	
2 servings per container	
Serving size	8 oz
Amount Per Serving	
Calories	120

If you drink the whole bottle, how many calories would you consume?

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

servings per container amount of calories per serving total calories per container

Directions find the total grams of added sugar for the whole bottle.

Total Carbohydrate	30 g
Total Sugars	30 g
Includes 30 g Added Sugars	

$$\underline{\hspace{2cm}} \times \text{grams of sugar} = \text{total grams of added sugar for the whole bottle}$$

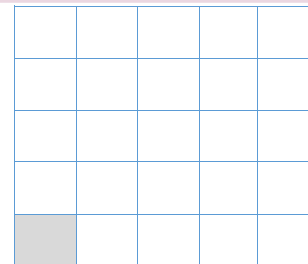
servings per container grams of sugar total grams of added sugar for the whole bottle

Want to see what that many grams of added sugar looks like in sugar cubes? Since there are about 3 grams of sugar in a sugar cube, you can divide the total amount by 3 to get the total amount of sugar cubes. Try it.

total grams of added sugar for the whole bottle

$$\div \text{each sugar cube is about 3 grams} =$$

sugar cubes per bottle



Shade in the number of sugar cubes you found.

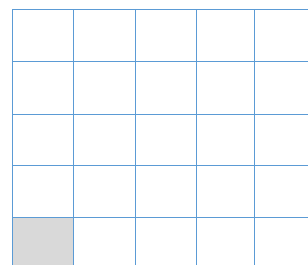


This drink has important vitamins and minerals. But take a look at how much added sugar it contains.

total grams of added sugar for the whole bottle

$$\div \text{each sugar cube is about 3 grams} =$$

sugar cubes per bottle



Shade in the number of sugar cubes you found.



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




Total Carbohydrate	0g
Total Sugars	0 g
Includes	0g Added Sugars

$$\begin{array}{c} \text{---} \\ \text{servings per} \\ \text{container} \end{array} \times \begin{array}{c} \text{grams of} \\ \text{added sugar} \end{array} = \begin{array}{c} \text{total grams of} \\ \text{added sugar for the} \\ \text{whole bottle} \end{array}$$

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

Total Carbohydrate	11g
Total Sugars	8 g
Includes	0g Added Sugars

$$\begin{array}{c} \text{---} \\ \text{servings per} \\ \text{container} \end{array} \times \begin{array}{c} \text{grams} \\ \text{of added sugar} \end{array} = \begin{array}{c} \text{total grams} \\ \text{of added sugar} \end{array}$$




Digest it

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

- Taste oranges.
- 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 use your math skills?
- What are your plans for eating oranges?



Carrots



5th Grade



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

Healthy and Smart Goals

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

Nutrition Facts

1 servings per container	
Serving size	1/2 cup (61g)
Amount Per Serving	
Calories	25
<small>% Daily Values*</small>	
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 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 vegetable dip. 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.

Carrot facts:

- The botanical name for carrots is *Daucus carota*.
- Have you ever had a baby carrot? Did you know that they are not really baby carrots? They are full-grown carrots that have been peeled and cut into smaller pieces. A baby carrot is picked before it gets big.
- Did you know that carrots were originally shades of purple? 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.
- California is the number one producer of carrots in the United States.

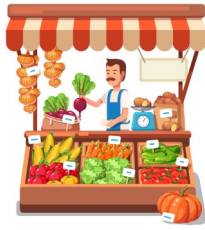


Vegetables are very healthy for you, whether they come from far away or close by. You should be eating 2-2.5 cups of vegetables every day. There are some health benefits to eating locally grown fruits and vegetables, and we are going to explore those in our lesson today. Take a look at the Nutrition Facts label. Carrots have a lot of a certain nutrient that you need to see well and fight off illnesses. Can you find it on the label?



Move it

Carrots are our Harvest of the Month. Carrots are **locally grown** in California and can be found in many places in your community.



Locally grown vegetables travel shorter distances and have some added benefits.

In the lesson today, you will be studying graphs that give you information about locally grown food. In the Move It activity, you will practice making points on a graph. You will be hopping to the right, and forward a certain number of hops as shown in an ordered pair. For example, in the Move It activity (8,4) means eight hops to the right, and four hops forward.



Link it

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 to the right. The second number tells you how far to travel up on the y-axis.

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

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

Truck 1



Time
1=100
minutes

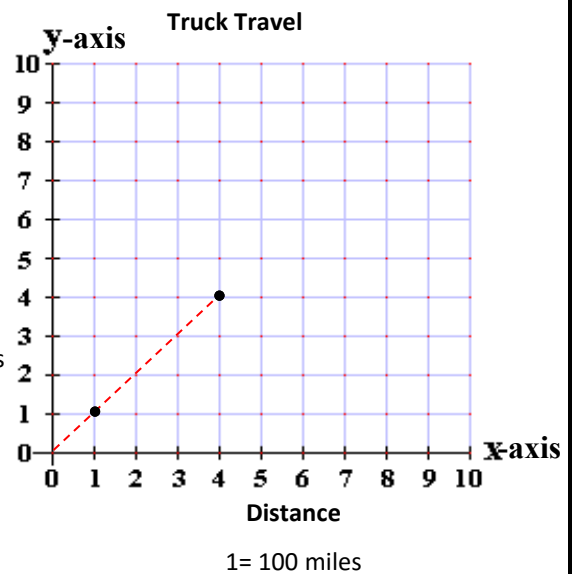
Now plot these coordinates and graph the line to connect the points.

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

Truck 2



1= 100 miles



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



Try it

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.



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

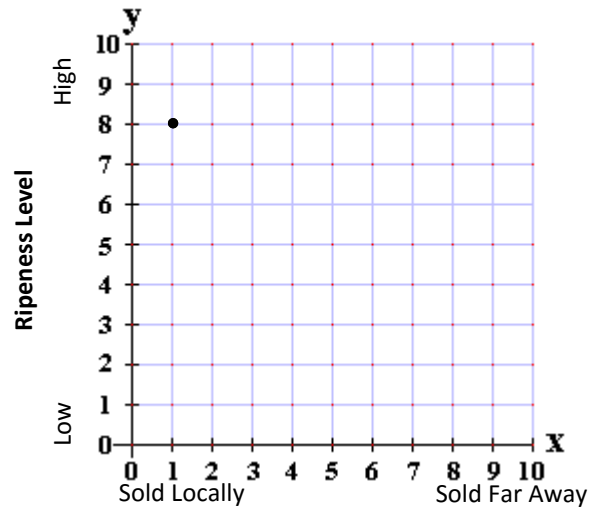
Plot these coordinates

(1,9)

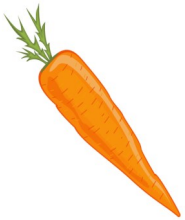
(4,7)

(6,5)

(10,3)



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



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 **nutrition** level.

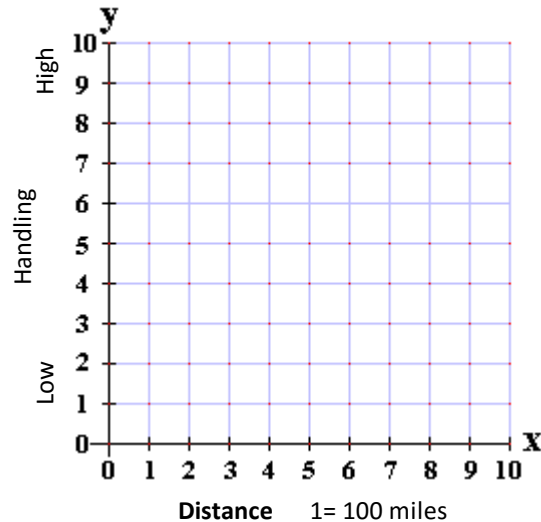
Plot these coordinates

(1,1)

(4,3)

(7,5)

(10,7)



What does the graphed line represent? What does it tell you about what can happen to fruits and vegetables the farther they travel?



Digest it

Enjoy your carrot. Remember that fruits and vegetables are important to eat whether they come from near or far! Eat about 2 1/2 cups a day. Locally grown fruits may be more nutritious, and are often fresher and more ripe.

- What are some reasons that a vegetable grown locally may be fresher than one grown far away?
- What happens to 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 and dinner every day?





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

Healthy and Smart Goals

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

Nutrition Facts

1 servings per container	
Serving size	1/2 cup (72g)
Amount Per Serving	
Calories	31
<small>% Daily Values*</small>	
Total Fat 0g	0%
Saturated Fat 0g	0%
<i>Trans</i> 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 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

Berries are the Harvest of the Month! There are many kinds of berries: strawberries, blueberries, raspberries, and blackberries, boysenberries, tayberries, and loganberries. A handful of berries make a great snack. They are also great in smoothies. Try combining frozen berries, bananas, orange juice, and low-fat or nonfat milk in a blender for a healthy and delicious treat.

Here are a more facts about berries:

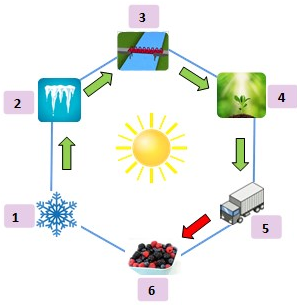
- Blueberries are native to North America.
- The botanical name for blueberry is *Vaccinium cyanococcus*.
- Northeast Native Americans thought blueberries were very special. One end of the fruit forms the shape of a five pointed star and the tribe's elders told how the Great Spirit sent "star berries" 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 azul* (blueberry).

Berries are not only delicious, they are also healthy for you. They contain important nutrients. Some are shown on the Nutrition Fact 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 to keep us from getting sick and help the body repair the cells that make up our bodies.



Move it

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!

Pay close attention to what you do. In the Link It section you and a classmate will retell your experiences and paraphrase what each of you say. Paraphrasing means using different words to describe what a writer or speaker has written or spoken.



Link it

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



Raspberry

Directions Find a partner. Take turns describing what happened at the “Mountain Snow Melting” station. Paraphrase what each other said.

You have just paraphrased what each of you said. Now you are going to learn about paraphrasing something written about the nutrition found in berries and the health benefits of eating berries.

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 certain types of cancers.



Blackberry

Here is an example of the first sentence paraphrased.

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

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.

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



Try it

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

Health Benefits

- *Eating lots of berries and other fruits may reduce risk for heart disease, including heart attack and stroke.*
- *Eating lots of berries and other fruits may protect against certain 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.*
- *Eating foods such as berries and other fruits that are lower in calories per cup, instead of some other higher-calorie foods, may help in lowering the amount of calories you eat.*

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

Blueberry



Nutrients Found in Berries

- Fruits are sources of many essential nutrients that people often don't eat enough of, including potassium, dietary fiber, and vitamin C.
- Potassium may help to maintain healthy blood pressure. Fruit sources of potassium include berries, bananas, prunes and prune juice, dried peaches and 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



- Try berries.
- 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.



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.