LESSON 1

A Date with MyPlate

Concept

Eating a variety of foods from all of the food groups in MyPlate is important for good health. This lesson takes a closer look at the nutritional quality of foods within each food group by introducing the concept of GO, SLOW, WHOA, This concept can be used to help children make healthier food choices from each of the MyPlate food groups.

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Youth Understanding MyPlate

Background

GO foods are the healthiest and can be consumed almost anytime (10). GO foods can be consumed frequently because they are the most nutrient dense, have fewer calories and may have more fiber than SLOW and WHOA foods (10). GO foods are usually whole foods that are closer to their natural state (8). This means that GO foods are also the lowest in fat and added sugar (8) because these components are often added during processing. Sugar and solid fats added during processing increase the calorie content of foods, but don't add any vitamins or minerals. Solid fats usually contain saturated and trans fats (11). Saturated and trans fats can increase the level of "bad" cholesterol in the body, and trans fats also lower "good cholesterol" (12). This can lead to an increased risk for heart disease (13).

GO foods in the grains category are mostly whole grains. Foods that are 100% whole grains are GO foods because they are a source of fiber, and they provide important nutrients such as vitamins E, thiamin, riboflavin, niacin, folate, magnesium, and iron. Some grains are processed, or "refined," in a way that removes the bran and germ, as well as a lot of the vitamins, minerals, and fiber naturally found in whole grains. While refined grains are enriched with B vitamins (thiamin, niacin, riboflavin) and iron to replace what is lost in processing, and fortified with folic acid, the fiber lost during processing usually is not replaced in enriched grains. Because

enriched grains are not as healthy as whole grains, and often contain added sugars and fats, they are not considered GO foods (8).

GO

GO foods in the Vegetables group are fresh, frozen, or canned vegetables without fat added during preparation. In contrast, vegetables to which butter, margarine, sauces or oil have been added are considered SLOW foods.

Whole fruits, 100% fruit juice, or fruits that are processed without added sugar are considered GO foods. Fruits and vegetables are excellent sources of fiber, as well as vitamins and minerals like folate, potassium, and vitamins C and A (14). All of these are important for good health.

Low-fat and fat-free milk and dairy products are GO foods because they are lower in saturated fat and cholesterol than reduced fat or whole milk and dairy products.

In the Protein Foods group, lean meats, nuts, and beans that have been prepared without added fats are considered GO foods.

SLOW

Slow foods are more processed than GO foods. They have added sugar, are higher in fat, and are less nutrient dense than GO foods (10). SLOW foods should be consumed less often than GO foods.

WHOA

WHOA foods are even higher in fat and added sugar than the other two categories (10). They are the least nutrient dense (10). These foods should only be eaten once in a while, or on special occasions (10). Eating too many WHOA foods can contribute to the consumption of excess calories and may lead to weight gain.

NUTRIENT RICH FOODS INDEX

The Nutrient Rich Foods index is a tool used to determine how nutrient dense a food is by producing continuous scores based on the amounts of nutrients to encourage and limit per 100 calories. Nutrients to encourage include protein, fiber, vitamins A, C, and E, calcium, iron, magnesium, and potassium. Nutrients to limit include saturated fat, added sugar, and sodium. Recently, researchers compared the Nutrient Rich Food Index with GO, SLOW, WHOA foods classifications. Foods characterized as "GO" had more healthful Nutrient Rich Food Index scores. Similar classifications were found among over 1,000 foods in the USDA database. While this differs from the factors considered by GO, SLOW, WHOA, similar scores by both systems indicate that they are valid methods of identifying nutritious foods (15).

SUMMARY

GO, SLOW, WHOA is a useful tool for characterizing foods and allows children to clearly know the best choices to make from each food group. A healthy meal or snack can easily be made by emphasizing GO foods and decreasing WHOA foods. With this easy to understand tool, children can feel empowered to make healthy food choices.

FOOD GROUP	GO	SLOW	WHOA
GRAINS	• 100% whole grains: breads, bagels, crackers, cereals, pasta Brown rice • Corn tortillas • Air-popped popcorn	• Animal crackers: Baked chips Instant oatmeal Low-fat: cookies, crackers, granola, muffins • Refined grains: white bread, bagels, pasta • Tortilla chips • Pancakes and waffles	• Biscuits • Croissants • High-fat, high-sugar dessert items • High-sugar, refined grain cereals Buttered popcorn Potato chips
VEGETABLES	• Fresh vegetables • Frozen vegetables • Canned vegetables • 100% vegetable juice	• Baked French fries • Stir-fry vegetables • Vegetables with added fat	• Fried vegetables
FRUITS	• Fresh fruit • Frozen fruit – no sugar added • Dried fruit – no sugar added • Canned fruit in water 100% fruit juice • 100% fruit leather, juice bars, or smoothies	• Canned fruit in light syrup • Dried fruit with added sugar • Fruit juice bars with added sugar Sherbet • Sorbet • Smoothies with added sugar	Canned fruits in heavy syrup Fruit roll ups
DAIRY	• Low-fat milk • Skim milk • Yogurt – nonfat, no sugar added • Lowfat cheese	• Reduced-fat milk • Reduced-fat cheeses • Low-fat processed cheese or cheese sauce • Flavored low-fat milk Low-fat ice cream • Low-fat frozen yogurt Low-fat pudding Yogurt – nonfat with added sugar	• Cheese sauce • Cheesecake • Whole milk cheeses • Flavored reduced-fat or whole milk • Frozen yogurt • Gelato • Ice cream • Milk shakes • Pudding • Whole milk yogurt
PROTEIN FOODS	• Black, pinto, or red beans • Fat-free refried beans • Lean cuts of beef • Extra lean ground beef • Egg or egg substitutes • Fish or shellfish: baked, broiled, grilled • Hummus • Low-fat lunchmeats • Nut butters • Nuts • Black-eyed peas • Lentils • Chickpeas • Lean pork • Skinless poultry: baked, broiled, grilled • Tofu • Tuna canned in water • Veggie burger	• Baked or refried beans • Lean ground beef • Breaded fish and shellfish • Fried eggs (oil) • Falafel • Fish sticks • Low-fat hotdogs • Lunch meat • Nut butters with added sugar • Breaded poultry • Poultry with skin • Pork • Tuna in oil • Turkey sausage • Chicken sausage	• Beef • Beef jerky • Bologna • Fried eggs • Fried fish or shellfish • Hotdogs • Pepperoni • Fried poultry • Sausage

OTHER	• Butter flakes • Mustard • Cooking spray • Water • Spices and herbs • Unsweetened, decaffeinated tea	• Artificial sweeteners • Vegetable oils • Fat-free or low-faT: gravy, mayonnaise, salad dressing, sour cream • Jams and jellies • Ketchup • Olives • Unsweetened tea	• Brown sugar • Candies • Chocolate • Sugar-sweetened beverages: coffee, energy drinks, fruit-flavored drinks, soda, sports drinks, sweet tea • Diet soda • Gelatin sweetened with sugar • Gravy • Mayonnaise • Molasses • MSG • Butter • Lard • Margarine • Salt and salt seasonings Sour cream • Sugar Syrup

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4th Grade Lesson

LEARNING OBJECTIVES:

The students will:

- classify foods into "GO," "SLOW," and "WHOA" categories.
- list characteristics of "GO" foods.
- explain why they should eat fewer "WHOA" foods.

BEHAVIORAL OBJECTIVE:

The students will:

- increase their consumption of "GO" foods.
- decrease their consumption of "WHOA" foods.

FLORIDA STANDARDS:

PHYSICAL ACTIVITY

DA.4.C.1.2. The student will learn and produce short movement sequences, assisted by the teacher, using observation, imitation, and musical cues.

- Physical activity section of lesson requires students to follow choreography and perform along with music.

LEARNING ACTIVITY

LA.4.5.2.1. The student will listen to information presented orally and show an understanding of key points.

- Students will be asked to answer questions about GO, SLOW, and WHOA foods out loud and on their bingo board, after a discussion with the educator.

Learning Activity: GO, SLOW, WHOA, BINGO!

MATERIALS:

- GO, SLOW, WHOA BINGO boards (one per student), provided. (The first two bingo boards are boards that will win after 15 clues. These boards will need to be distributed to two students in the class regardless of class size.
- Red, yellow, and green markers
- MyPlate poster
- GO, SLOW, WHOA stoplight photo and example photos, provided
- Whole grain poster, provided
- BINGO game example poster, provided
- Demonstration markers, provided
- Sticky tack

PRIOR TO ACTIVITY

Print BINGO boards for the class (double sided with GO, SLOW, WHOA chart) in color if funds allow. Hang the MyPlate poster at the front of the room. Print out in color and laminate GO, SLOW, WHOA example photos, stoplight photo, whole grain posters, and the BINGO game poster and demonstration markers. Place sticky tack on demonstration markers and bingo board. Print the Whole Grain Poster. Cut out the bran and the germ use stick tack to piece the whole grain together. This will be used in the whole grain discussion. Use sticky tack to put stoplight poster on chalkboard.

ACTIVITY INTRODUCTION

Who can remember all of the food groups that are a part of MyPlate? Wait for students to say Grains, Vegetables, Fruits, Protein Foods, and Dairy Groups. Point to the MyPlate poster as you review the groups. *Great job! Eating foods from each of the five MyPlate food groups every day is a great way to meet your nutrient needs. But did you know that not all of the foods in each of the food groups are equal? One way to think about the types of foods in each of the five food groups is to think of the words GO, SLOW, and WHOA, and the colors of a stoplight – green, yellow and red.* (Point to the stoplight photo as you go through each color). Get the children to chime in with you as you say the colors of a stoplight. *Green is for GO foods. GO foods can be eaten almost any time. They are lowest in fat and added sugar and usually have more nutrients and/or fiber compared to foods that fall in the SLOW and WHOA categories. GO foods also tend to be in their natural state and have not undergone as much processing to add fat and sugar. For example, an apple, which is from the fruit group, is a GO food.* (Use sticky tack to attach apple picture to chalkboard by the green stoplight) *It's in its natural form and provides your body with fiber and other nutrients, but no added sugar or fat. Clap your hands once if you like to eat apples.*

SLOW foods, represented by the color yellow, should be eaten less often. They are more processed and may have a higher added sugar or fat content than GO foods, so they are not as healthy for you. Can anyone explain what it means to process a food? Allow the children to raise their hands and answer. Make sure to discuss that food processing is changing the food from one form to another and often involves adding more fat and sugar. *So while an apple is a GO food, sweetened applesauce* (Use sticky tack to attach the applesauce picture to the board by the yellow stoplight) *is a processed food made by mashing up apples and adding some sugar to them. This makes sweetened applesauce a SLOW food. Applesauce counts as a fruit, and it contains nutrients needed for good health, but because sugar was added to it, it's not as good a choice as a fresh apple. That is why sweetened applesauce is considered a SLOW food.*

WHOA foods should only be eaten once in awhile or on special occasions. They are usually more processed and have the highest amount of added sugar and/or fat compared to GO and SLOW foods. These foods are represented by the color red. Why do you think WHOA foods are represented by the color red? As a reminder that we should stop ourselves from eating these foods most of the time. Can anyone think of a food made with apples that has a lot of sugar and butter in it? (If students are struggling with an answer, say: I'll

give you a hint. It is packed into a crust.) ***Yes, that's right, apple pie! Other answers might include apple crisp, apple dumpling, apple fritter.*** (Use sticky tack to attach the apple pie picture to the chalkboard by the red stoplight) ***I know I love to eat apple pie on Thanksgiving. Who else likes apple pie?*** Allow students to answer. ***Apple pie may taste good, but when you are thinking about what to eat you may want to say "WHOA" because apple pie is made by coating the apples in sugar and butter and putting them into a flaky, buttery crust. This means the pie has a lot of added sugar and fat, which is why it is a WHOA food. Eating too many whoa foods is not good for your body.***

Now that we have an idea of how one food can change from GO to WHOA, let's consider how different choices you make in one meal can be GO, SLOW, or WHOA. First, I think we should talk about how grains are processed. This is what a whole grain looks like. (Hold up complete Velcro whole grain) ***They have not had the bran and germ removed by milling. Whole grains are crushed, or milled, to make flour, which we then use to make different foods. This flour can then be refined. When this happens, a lot of the fiber, vitamins, and minerals are taken with the bran*** (remove bran piece from poster) ***and germ*** (remove germ piece from poster).

That's why it is always better to choose whole grains, and why they are GO foods. Refined grains only have the endosperm (hold up endosperm from poster), s***o they are missing the fiber, vitamins, and minerals that are taken away with the bran and germ. Sometimes, part of the vitamins and minerals are added back, but fiber is not. That means "refined grains" are not as good of a choice as whole grains. That is why refined grains are usually considered SLOW foods, and if they have a lot of sugar and/or fat added to them, they might even be considered WHOA foods.*** (Use sticky tack to post the whole grain poster to the chalkboard).

Now that you know what makes grains GO, I think we should focus on the most important meal of the day, breakfast! Let's see how breakfast choices can be GO, SLOW, or WHOA. A GO food that I like to eat for breakfast is full of whole grains, which give my body fiber and other nutrients, and I like to pour skim milk on top. Who thinks they know what I'm thinking of?

Students should say whole grain cereal (Use sticky tack to attach the whole grain cereal picture to the chalkboard by the green stoplight). ***That's right! I try to eat whole grain cereal for breakfast all the time, but sometimes I like something that's a little more of a treat. The food I'm thinking of is warm and is covered with lots of little squares. They take more time to make, so I usually eat these on the weekends. Who thinks they know what I'm talking about? Students should say waffles*** (hold up picture). ***Correct! Waffles are usually made with refined grains.*** (Use sticky tack to attach the waffle picture to the board next to the yellow light.) ***Waffles, pancakes, and a lot of cereals are breakfast choices that are often made from refined instead of whole grains, which make them SLOW foods. Some foods made with refined grains are WHOA foods. These usually have sugar or fat added to them. Can anyone think of a breakfast food that would be a WHOA food?*** Possible answers could be sweetened cereals, biscuits, or toaster pastries. ***Those are a lot of great answers!*** (Use sticky tack to attach WHOA breakfast foods picture to the chalkboard by the red light.) ***Breakfast foods like sweetened cereals, biscuits, and toaster pastries have added sugar and fat and are made with refined grains. That is why they are WHOA foods. They may taste good to you, but you should save them for special occasions.***

If you think you understand what makes foods GO, SLOW, WHOA, give me a "thumbs up"? If you're not sure, give me a "thumbs down". Wait for students to give you thumbs

up or down. If some students give you a thumbs down, ask them what they are not sure about and try giving them another example such as low-fat milk (GO), flavored low fat milk (SLOW, has added sugar), and whole milk (WHOA, has a high fat content).

(Pause at the blanks and encourage the students or call on individual students to answer the questions.) So, remember, GO foods are… (green). *You can eat GO foods (almost any time). SLOW foods are…* (yellow). *You should eat them…*(less often), *and WHOA foods are…* (red).*WHOA foods should be limited to…*(once in awhile or special occasions).

We're going to play a game to help you think about which foods are considered GO, SLOW, and WHOA and why they fall into one of these categories. Raise your hand if you like to play BINGO? Fantastic! Our BINGO game is a little different from the way you may have played it before, but it will be lots of fun.

ACTIVITY DIRECTIONS:

1. Distribute one BINGO card to each student. ***While I'm handing out BINGO cards, I need every student to get out a green, yellow, and red crayon or colored pencil.***
2. ***I will read a clue about GO, SLOW or WHOA foods. You will need to think about the clue and decide if it describes a GO, SLOW or WHOA food. Sometimes I'll give you extra information to help you think through the answer. I will call on someone to give their answer. Everyone will have a turn to give an answer. Once we have decided on the correct answer, I will tell you the number of the clue and you will find the number on your BINGO card. If the answer to the clue I read was GO, you will circle the number with your green marker. If the answer was SLOW, circle the number with the yellow marker, and if the answer was WHOA, circle the number with your red marker.***
3. (Pause at the blanks to encourage students to answer or call on individual students toanswer the questions.) ***So, if a clue was "skim milk" you would say_____*** (GO). ***If this was clue number 1, you would circle number one on your board with the color*** _____(green).
4. ***To win the BINGO game, you must have five spaces of any color in a row. The row can be diagonal, in one row, or in one column. Demonstrate an example on the BINGO game example poster by posting a marker on to the laminated BINGO game poster with sticky tack.***
5. ***Does anyone have any questions about how to play the game?*** Answer any questions that are asked.
6. Read each BINGO clue in the order listed. Tell the students the clue number to circle after they answer it correctly. The correct answers are listed next to each clue. The activity will end when one (two) student(s) win, which will occur after you complete the 15th clue.

BINGO CLUES

1. You should eat these foods often because they usually contain the most nutrients and/or fiber. They are usually unprocessed and close to their natural state. GO

2. You should eat these foods rarely, or only on special occasions. They have the most added fat and sugar. WHOA

The rest of the clues I will call out are examples of either a GO, SLOW or WHOA food.

3. Fresh, canned, or frozen vegetables GO
    a. Remind students that all three of these choices are excellent sources of fiber and vitamins and minerals like folate, potassium, and vitamins C and A.
4. Stir-fried vegetables SLOW
5. Fresh fruits GO
6. Fried chicken WHOA
    a. Remind students that fried chicken has a high fat content compared to grilled or baked chicken without the skin, which are GO foods.
7. 100% whole grains GO
    a. Remind students that 100% whole grains are a good source of fiber and other nutrients like B vitamins and iron.
8. Refined grains SLOW
9. Low fat and fat-free milk GO
10. Canned fruit in light syrup SLOW
    a. Remind students that "light" syrup means that only some sugar is added.
11. Peanut butter without added sugar GO
12. Flavored low-fat milk SLOW
    a. Remind students that low-fat milk is a GO food, but there is sugar added to the flavoring to make the milk sweet.
13. Sausage and pepperoni WHOA
    a. Remind students that sausage and pepperoni have a high fat content
14. Steamed broccoli GO
15. Chips WHOA

M	Y	P	L	A	T	E
23	1	17	2	14	6	33
18	13	22	31	12	24	32
30	5	16	28	3	29	15
20	4	21	9	10	25	34
19	11	35	8	27	7	26

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
Fruits	-Fresh, frozen -Fruit canned in juice -100% -100% fruit smoothies	-Fruit juice -Dried fruit -Canned fruit in light syrup -Fruit juice bars and smoothies with added sugar	-Canned fruits in heavy syrup -Fruit roll ups
Protein Foods	-Beans -Baked or grilled lean meat -Peanut butter -Eggs -Tofu	-Baked or refried beans -Breaded fish and meats -Turkey or chicken sausage -Lean ground beef	-Beef -Fried fish or meats -Pepperoni
Dairy	-Skim or 1% milk -Nonfat yogurt -Low-fat cheese	-2% milk -Flavored skim or 1% milk -Low-fat ice cream and pudding	-Whole milk -Cheese sauce -Ice cream -Pudding

M	Y	P	L	A	T	E
22	12	1	17	28	3	27
7	18	11	9	26	23	14
21	8	32	16	5	30	15
33	20	31	2	34	13	29
4	35	19	10	25	24	6

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
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M	Y	P	L	A	T	E
6	17	23	12	26	15	20
7	2	24	27	10	19	14
8	31	4	16	13	28	21
3	25	34	18	30	5	33
32	11	35	9	22	29	1

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Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
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M	Y	P	L	A	T	E
10	1	18	4	27	35	24
6	8	23	30	9	13	20
16	14	11	28	3	7	22
17	26	2	31	19	12	21
34	25	33	5	15	29	32

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M	Y	P	L	A	T	E
6	17	20	25	27	8	22
7	9	12	26	13	19	1
4	30	28	10	24	3	5
11	2	29	15	35	14	31
33	23	32	18	21	34	16

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Dairy	-Skim or 1% milk -Nonfat yogurt -Low-fat cheese	-2% milk -Flavored skim or 1% milk -Low-fat ice cream and pudding	-Whole milk -Cheese sauce -Ice cream -Pudding

M	Y	P	L	A	T	E
1	23	26	29	8	33	35
2	31	21	9	4	28	16
11	20	3	6	30	5	15
12	10	25	13	27	14	17
32	24	19	34	7	22	18

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Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
Fruits	-Fresh, frozen -Fruit canned in juice -100% -100% fruit smoothies	-Fruit juice -Dried fruit -Canned fruit in light syrup -Fruit juice bars and smoothies with added sugar	-Canned fruits in heavy syrup -Fruit roll ups
Protein Foods	-Beans -Baked or grilled lean meat -Peanut butter -Eggs -Tofu	-Baked or refried beans -Breaded fish and meats -Turkey or chicken sausage -Lean ground beef	-Beef -Fried fish or meats -Pepperoni
Dairy	-Skim or 1% milk -Nonfat yogurt -Low-fat cheese	-2% milk -Flavored skim or 1% milk -Low-fat ice cream and pudding	-Whole milk -Cheese sauce -Ice cream -Pudding

M	Y	P	L	A	T	E
13	9	26	22	7	3	10
4	11	31	5	1	8	30
18	17	19	27	20	2	12
15	28	16	32	35	34	14
33	6	25	29	23	24	21

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
Fruits	-Fresh, frozen -Fruit canned in juice -100% -100% fruit smoothies	-Fruit juice -Dried fruit -Canned fruit in light syrup -Fruit juice bars and smoothies with added sugar	-Canned fruits in heavy syrup -Fruit roll ups
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Dairy	-Skim or 1% milk -Nonfat yogurt -Low-fat cheese	-2% milk -Flavored skim or 1% milk -Low-fat ice cream and pudding	-Whole milk -Cheese sauce -Ice cream -Pudding

M	Y	P	L	A	T	E
6	17	20	25	29	8	22
7	9	12	28	13	19	1
4	26	3	10	24	30	5
11	2	35	15	32	14	31
27	23	33	18	21	34	16

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
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M	Y	P	L	A	T	E
13	22	11	24	28	14	4
17	7	10	29	9	3	20
1	26	18	31	23	21	16
6	32	2	27	19	12	8
33	25	35	5	15	30	34

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
16	17	23	12	30	4	24
7	9	18	26	5	19	20
8	27	33	13	11	15	2
14	25	28	3	31	10	34
32	1	29	21	22	35	6

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
1	9	27	24	19	18	6
8	11	26	3	13	33	29
5	2	7	28	12	17	20
15	32	25	30	35	4	23
34	10	16	31	14	22	21

	GO	SLOW	WHOA
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M	Y	P	L	A	T	E
1	9	26	24	19	18	6
8	11	32	3	13	27	33
5	2	7	31	12	17	20
15	30	25	29	28	4	23
34	10	16	35	14	22	21

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M	Y	P	L	A	T	E
6	17	20	25	27	8	22
7	9	12	26	13	19	1
4	30	28	10	24	3	5
11	2	29	15	35	14	31
33	23	32	18	21	34	16

	GO	SLOW	WHOA
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M	Y	P	L	A	T	E
13	22	11	24	27	14	4
17	7	10	30	9	3	20
1	26	18	28	23	21	16
6	35	2	31	19	12	8
33	25	32	5	15	29	34

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
16	17	23	12	30	4	24
7	9	18	26	5	19	20
8	27	15	13	11	33	2
14	25	28	3	31	10	34
32	1	29	21	22	35	6

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
1	9	29	24	19	18	6
8	11	27	3	13	30	34
5	2	7	31	12	17	20
15	26	25	35	32	4	23
28	10	16	33	14	22	21

	GO	SLOW	WHOA
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M	Y	P	L	A	T	E
6	17	20	25	27	8	22
7	9	12	29	13	19	1
4	26	3	23	24	32	5
11	18	30	15	34	14	35
31	10	28	2	21	33	16

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
10	1	18	4	27	35	24
6	8	23	30	9	13	20
16	14	11	28	3	7	22
17	26	2	31	19	12	21
34	25	33	5	15	29	32

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
3	1	8	4	29	31	6
15	21	23	26	9	19	16
20	5	11	33	10	18	22
25	35	2	27	13	12	7
34	17	28	14	24	30	32

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
Vegetables	-Fresh, frozen, or canned vegetables -100% vegetable juice	-Stir-fry vegetables -Vegetables with butter	-Fried vegetables
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M	Y	P	L	A	T	E
13	9	26	22	7	3	10
4	11	32	5	1	8	31
18	17	19	27	20	2	12
15	28	16	30	35	34	14
33	6	25	29	23	24	21

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
13	9	26	22	7	3	10
4	11	32	5	1	8	28
18	17	19	27	20	2	12
15	31	16	35	29	34	14
33	6	25	30	23	24	21

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Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
6	17	23	12	26	15	20
7	2	24	27	10	19	14
8	31	4	16	13	28	21
3	25	34	18	30	5	33
32	11	35	9	22	29	1

	GO	SLOW	WHOA
Grains	-100% whole grain breads, cereals, and pastas -Brown rice -Corn tortillas	-Baked chips -Refined grains -Low-fat cookies and crackers -Pancakes	-Biscuits -Croissants -Sweetened, refined-grain cereals -Buttered popcorn -Chips
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M	Y	P	L	A	T	E
10	1	18	4	27	35	24
6	8	23	30	9	13	20
16	14	11	28	3	7	22
17	26	2	31	19	12	21
34	25	33	5	15	29	32

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M	Y	P	L	A	T	E
1	9	27	24	19	18	6
8	11	26	3	13	33	29
5	2	7	28	12	17	20
15	32	25	30	35	4	23
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M	Y	P	L	A	T	E
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8	11	26	3	13	33	29
5	2	7	28	12	17	20
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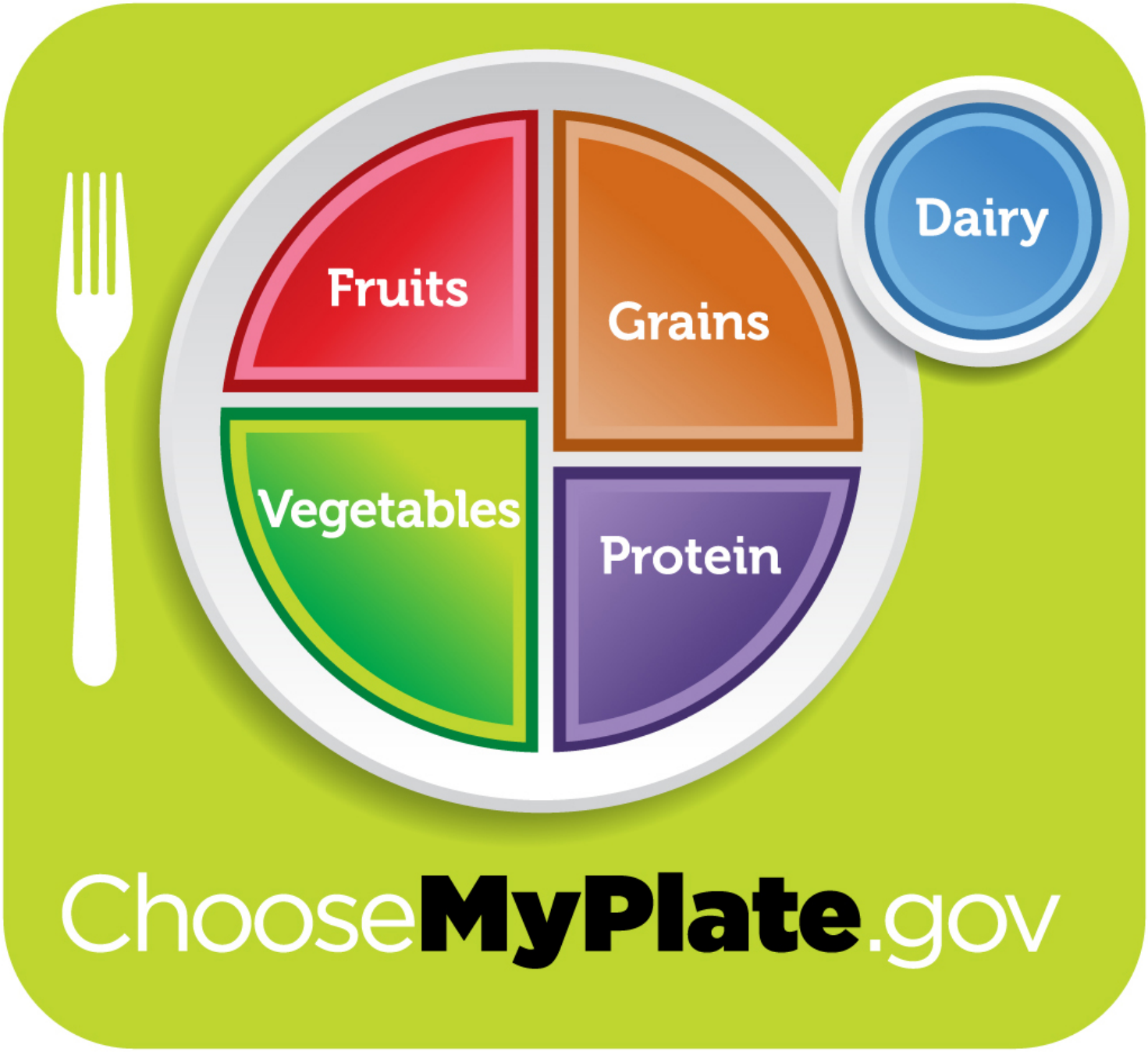
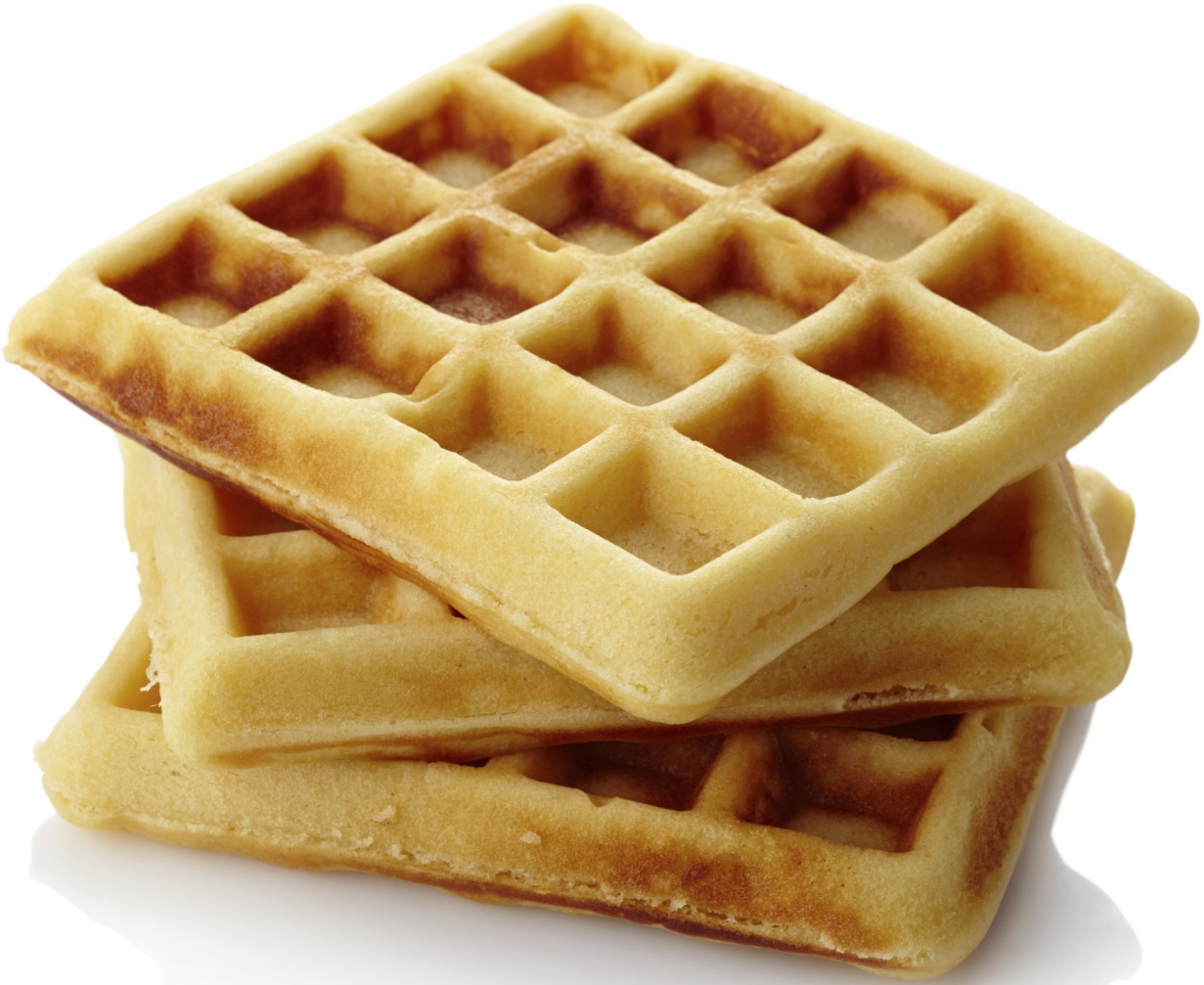
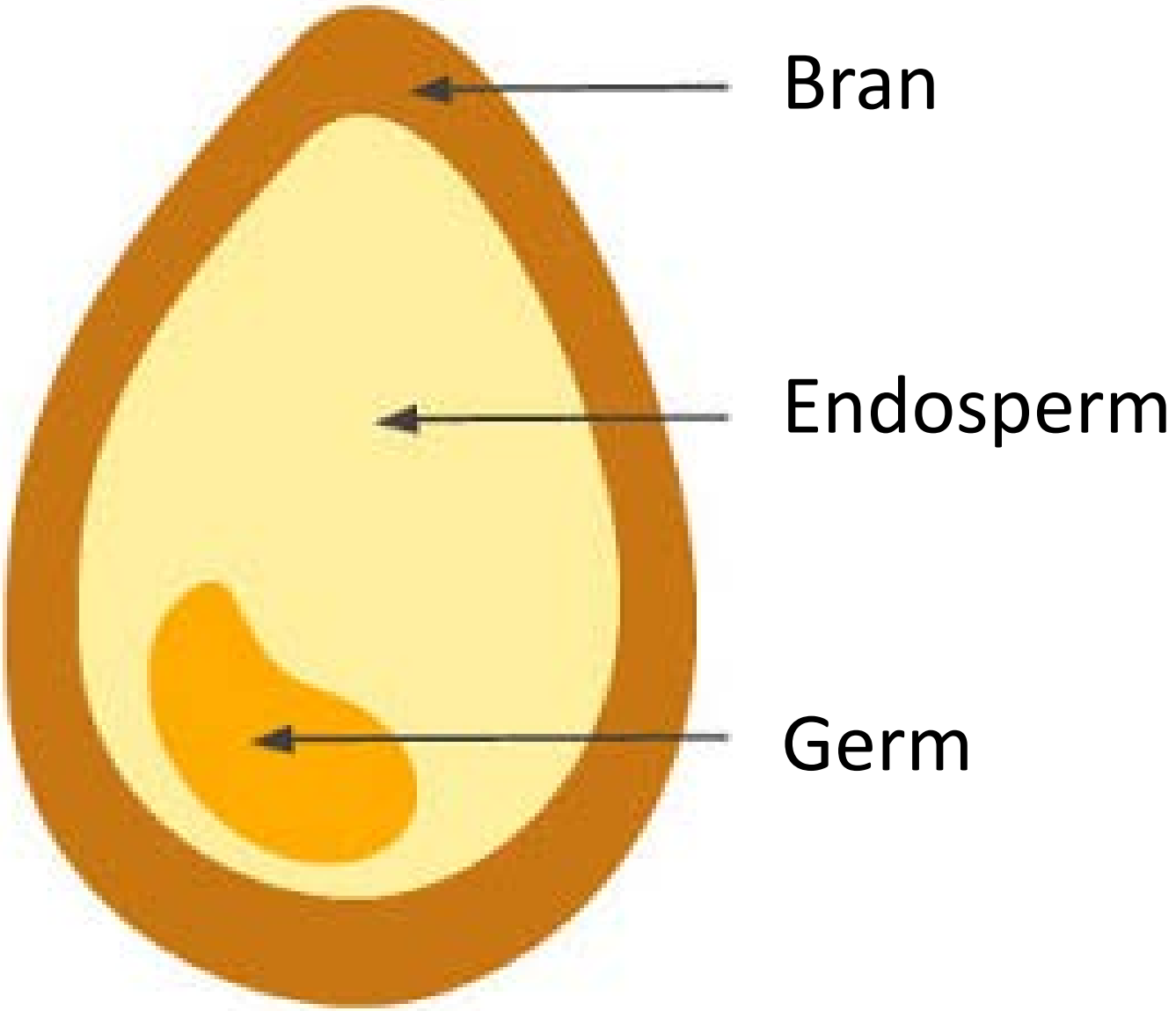

Fruits
Grains
Dairy
Vegetables
Protein
ChooseMyPlate.gov

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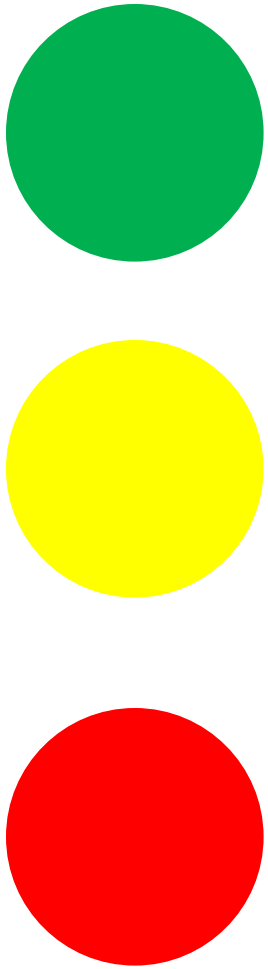
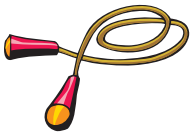


M	Y	P	L	A	T	E
6	17	23	12	26	15	20
7	1	13	27	10	3	14
8	31	4	16	18	28	21
25	19	34	2	30	5	33
32	11	35	9	22	29	24



Physical Activity: Dance with GO, SLOW, WHOA

PRIOR TO ACTIVITY

Make sure that the instructional video and song are ready to play on the classroom's computer or TV.

ACTIVITY DIRECTIONS:

Show the DVD to the students to help them learn the dance.

Now that we know all about GO, SLOW, WHOA, we are going to do a dance that will help to remind you of what we learned today! Start video.

It's lunchtime! (0:12)	*Start dance.*
Pack It Up (x2) (0:13)	*Bring right arm up and down while stepping out to side x2 Repeat on other side x2* *Running man x5 Big jump*
GO, SLOW, WHOA (x1) (0:36)	*(GO) Fist pump above head* *(SLOW) Circle arms in front of your body.* *(WHOA) Put arms in front of body with palms facing outwards.* *(These are foods you should know) Point to head.*
The food's you eat every day, (0:42) these are called GO. *They'll help you get stronger from your head to your toes.* *These foods are healthy so let's make a plan.* *Carrots, grapes, and beans fresh or in a can.* *Pretzel's pears and oranges are just so cool.* *GO foods you can eat them after school.*	*Move arms towards mouth like you're eating. Fist pump above head.* *Flex muscles, point to head, bend down to toes. Sit and slide back.* *Sit cross legged. Pretend to take notes on your palm. Stand up and jump.* *Walk around yourself in a circle. (4 steps) Fist pump above head.*

Pack It Up (x2)	*Repeat above*
What about your SLOW foods? (1:24) They fall in the middle. *Pasta, juice get the pancakes all on the griddle.* *These are foods you can eat, but not every day.* *They'll help you stay fit and on your way.*	*Circle arms in front of your body.* *Bring arms down and point down to middle of your body while turning to face left.* *Bend knees while circling arms parallel to body like wheels.* *Straighten knees to face sideways.* *Thumbs up while stepping out to front. Shake finger. Reach up to sky and pull arms down to flex muscles. Circle arms and reach to sky again.*
Now you got your WHOA foods (1:36) you don't eat a lot. *Like candy, chips, and even soda pop.* *These are all foods* *that you'll need to know when you need to say WHOA.*	*Put arms in front of body with palms facing outwards. Cross arms in front of body 2x.* *Burpee x2* *Spin and put arms in front of body with palms facing outwards.*

LESSON 2

The Goods on Grains

Concept

Foods from the Grains group should make up a large proportion of the diet. Although whole grains provide most of the nutritional benefits, most children do not get the recommended amounts. This lesson will introduce children to the Grains group with a focus on whole grains and fiber. Children will be encouraged to consume more whole grains as part of a healthy diet.

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Youth Understanding MyPlate

Background

INTRODUCTION

Breakfast is known as the most important meal of the day. This phrase has been validated by years of research investigating the benefits of eating breakfast, which include its role in cognition and school performance, weight management, and nutritional status. Research suggests that the health benefits of eating breakfast on a regular basis accrue over time such that the earlier in life one starts consuming breakfast the greater the benefits (1). Based on data from the 1999–2006 National Health and Nutrition Examination Survey (NHANES), 20% of children and

31.5% of adolescents skip breakfast (2). Since breakfast consumption declines in adolescence (3), it is important to encourage children to begin eating breakfast at an early age. This lesson is designed to teach children the benefits of eating breakfast and provide them with ideas for nutritious meals with the ultimate goal of increasing the frequency of consuming a healthy breakfast.

COGNITION AND SCHOOL PERFORMANCE

Although the data are conflicting, most studies have linked breakfast consumption with improved cognition (4). A review of 19 studies identified 11 that showed a positive effect of breakfast on behavior in the classroom (5). Additionally, 21 out of 22 studies showed a positive effect of habitual breakfast consumption on academic performance (5). The exact mechanism for this improvement has not been identified. Researchers have proposed that breakfast is important because it provides the brain with glucose needed for brain activity and the synthesis of neurotransmitters (6, 7). Following an overnight fast, breakfast provides the brain with nutrients to support these functions, which may be why breakfast positively affects cognition. Younger children are affected to a greater extent by the metabolic stress induced by fasting. Consequently, children who skip breakfast may be at a disadvantage with regard to cognitive performance (8).

Mahoney et al. (8) analyzed the effects of different types of breakfast on cognition by investigating the impact of three breakfast regimens (i.e., ready-to-eat cereal with skim milk, instant oatmeal with skim milk, and no breakfast) on visual perception and memory in 30 children ages 6 to 11. Each participant served as his/her own control, consuming each of the different breakfasts once a week for three weeks. Children who consumed breakfast had improved visual perception and spatial memory compared to those who skipped breakfast. The type of breakfast consumed also had an effect, as children performed better on short term memory and auditory tasks after oatmeal consumption compared to consumption of ready-to-eat cereal. Oatmeal had an even more positive effect in younger children (six to eight years) than older children. These data support the positive effect of breakfast on cognition and also suggest that the type of breakfast is important.

Wesnes et al. (9) examined the impact of breakfast (i.e., ready-to-eat cereal, glucose drink, or no breakfast) on three measures of cognition (i.e., attention, working memory, and episodic secondary memory) in 29 children between the ages of 9 and 16. Although cognition declined throughout the morning in all groups, compared to the glucose drink or no breakfast, consumption of ready-to-eat cereals reduced this decline by half. Cereal eaters also stayed alert longer, had better memory recall, and had improved mood compared to the other two groups. A study by Cooper, Bandelow, and Nevill (10) also found that adolescents who ate breakfast had better cognitive function and higher self-reported energy and fullness than the students who did not eat breakfast.

Some studies have linked breakfast consumption with higher test scores. Liu et al. (11) found that children who ate breakfast regularly had higher scores on full IQ and verbal IQ tests, even after controlling for gender, socioeconomic status, and parental education and occupation. Similarly, Gajre et al. (12) compared test scores between regular breakfast eaters and nonbreakfast eaters among school children in India. They found that youth who ate breakfast scored significantly higher than those who did not eat breakfast on a memory recall test and on a Letter Cancellation test that requires hand-eye coordination, speed, and sustained attentionconcentration for five minutes. Breakfast eaters also had significantly higher average scores in science and English, and their overall average score for the year for math, science and English was significantly higher as well.

The School Breakfast Program, established permanently in 1975, is a national program that provides cash subsidies to schools to provide their students with a breakfast that meets the latest Dietary Guidelines for Americans (13). Public and nonprofit private schools can participate in the program beginning with Kindergarten through grade 12. Public or nonprofit private licensed daycare centers and residential child care institutions also can participate in

the program. The United States Department of Agriculture (USDA) provides subsidies to state education agencies, which then distribute the money to the schools. Any student at a participating school may purchase breakfast through the program; however, the price for meals varies according to family income. Children from families with incomes at or below 130 percent of the federal poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced price meals, and children from families over 185 percent of the poverty level pay full price for their meals. Schools are reimbursed for each meal they serve. In 2012, 12.9 million children participated in the School Breakfast Program with 10.1 million of those receiving free or reduced-priced meals (13).

WEIGHT MANAGEMENT

While the prevalence of obesity in 2 to 5 year old children has decreased in recent years

(14), the prevalence of obesity in children ages 6 to 11 has increased from 7% in 1980 to 18% in 2010 (15). This increase highlights the need for effective strategies designed to improve nutritional status and promote a healthy body weight for this age group. Research suggests that simply eating breakfast may result in a lower body mass index (BMI) and promote a healthier weight (1). Furthermore, skipping breakfast is a risk factor for childhood overweight and is associated with an increase in adipose tissue (16). Therefore, eating breakfast every day is an important strategy for weight management. Breakfast may control weight by preventing overeating at the next meal and providing energy for physical activity. In fact, 78% of participants in the National Weight Control Registry, which is an ongoing study of individuals who have lost at least 30 pounds and kept it off for over a year, were found to eat breakfast regularly (17).

During adolescence, the frequency of breakfast consumption begins to decline (3). Adolescents are more independent and make more decisions about eating, which often means skipping breakfast (18). Timlin et al. (3) used surveys to assess the breakfast habits of adolescents ages 13 to 16 for five years as a part of Project EAT (Eating Among Teens). Adolescents who never or only occasionally ate breakfast had significantly higher BMIs than those who ate breakfast daily. The results of this study highlight the importance of teaching children the value of breakfast and how to make breakfast a lifelong practice so they can continue to reap the benefits, such as weight management.

The type of food chosen for breakfast plays a role in weight management. Barton et al. (19) used food records to track the breakfast habits of 9 to 10 year old girls for ten years. The researchers examined ready-to-eat cereal consumption, consumption of non-cereal foods, and breakfast skipping. Girls who consumed cereal for breakfast had significantly lower BMIs than girls who either did not eat cereal or skipped breakfast. The authors concluded that skipping breakfast may not be the only cause of increased BMIs, but that the type of foods consumed may also affect BMI. This study suggests that the nutritional quality of ready-to-eat cereals may positively affect BMI.

Ethnic and gender differences may impact whether or not breakfast is included as a daily routine. Affenito et al. (20) reported that approximately 19% of the Caucasian females and 24% of the African American females surveyed skipped breakfast by age 19. In addition, girls tended to skip breakfast more often than boys (4). Another study examined the association between breakfast consumption and physical activity and adiposity in Latina and African American girls (21). They found that the more frequent breakfast eaters had 30% more moderate to vigorous physical activity and a lower percent body fat than the less frequent breakfast eaters. Educational programs focusing on breakfast and targeting these groups are needed.

NUTRITIONAL QUALITY

Breakfast provides approximately 275 to 669 calories for the average child or adolescent each day (4). Children who skip this meal often do not make up these calories later in the day, which could impact their consumption of different nutrients. They also are less likely to be physically active. Breakfast eaters have a greater percentage of their daily caloric intake from carbohydrates and a lower percentage from fat (4). If nutrient dense foods are chosen, breakfast can provide children with many of their needed vitamins and minerals. In fact, breakfast is important for meeting the recommended intake of many vitamins and minerals. Nicklas et al. (22) reported that children in the Bogalusa Heart Study did not meet requirements of many vitamins and minerals if they skipped breakfast, whereas children who consumed breakfast had higher intakes of vitamins and minerals. Breakfast skippers also did not meet the Recommended Dietary Allowances for vitamin D, vitamin A, vitamin B6, calcium, or phosphorus. Breakfast also is important with regard to iron intake. Children who did not consume breakfast were twice as likely to have inadequate iron intake compared to breakfast eaters (22). Iron is required for oxygen transport and is needed to prevent

anemia. Adequate vitamin and mineral intake during childhood is important to support growth and development. Promoting breakfast consumption during this critical period is an excellent method for helping children to meet their needs.

Breakfast also is a great way to increase fiber intake. Children who consume breakfast have been shown to have higher fiber intakes compared to those who skip breakfast (4). Specifically, cereal is a great way to increase fiber intake (19), and a good choice is unsweetened cereal that contains whole-grain. In the study described above by Barton et al. (19), girls who consumed cereal for breakfast had higher intakes of fiber and calcium and lower intakes of fat and cholesterol than those who either did not consume cereal for breakfast or were breakfast skippers. When paired with milk, breakfast cereal provides children with important nutrients needed for growth and health (19).

Children who eat breakfast tend to increase their intake of healthy foods and decrease their intake of less healthy choices. Rampersaud et al. (4) reported that children who consumed breakfast had lower intakes of soft drinks and a higher intake of fruits and vegetables throughout the day. Breakfast eaters were also more likely to drink more milk, which can lead to higher intakes of calcium and vitamin D (3). Skipping breakfast also can cause children to make less healthy snack choices (23).

SUMMARY

Eating breakfast is important for a healthy mind and body. Children who consume a balanced breakfast may have better cognitive function. Eating breakfast also may help with weight management and reduce the risk for obesity later in life. Consuming breakfast can play an important role in providing nutrients that children need for growth and development. The School Breakfast Program helps provide a healthy breakfast to millions of children who might otherwise not have access. Teaching children the importance of breakfast and encouraging them to eat it on a daily basis may provide them with health benefits for life.

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4th Grade Lesson

LEARNING OBJECTIVES

The students will:

- state why eating breakfast is important.
- list ideas for a healthy breakfast.

BEHAVIORAL OBJECTIVE

The students will

- the students will eat a healthy breakfast more often.

FLORIDA STANDARDS

LEARNING ACTIVITY

LAFS.4.RF.4.4: The student will read with sufficient accuracy and fluency to support comprehension.

- Read on-level text with purpose and understanding.

MAFS.4.MD.1.2: The student will use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.

MAFS.4.NBT.2.4: The student will fluently add and subtract multi-digit whole numbers using the standard algorithm.

PHYSICAL ACTIVITY

PE.4.M.1.1: The student will apply movement concepts to the performance of locomotor skills in a variety of movement settings.

PE.4.R.6.1: The student will recognize physical activity as a positive opportunity for social and group interaction.

Learning Activity: "The Power of Breakfast"

Interactive Reading Worksheet

MATERIALS

- "The Power of Breakfast" worksheet, provided
- Pencils (one per student)
- MyPlate poster
- Sticky tack or magnet to hang poster
- 5 Post-it notes, size 4 in. x 6 in. If Post-it notes are not available, could use 5 blank sheets of paper and provide tape or magnets for the students to stick paper to board.

PRIOR TO ACTIVITY

a. Make enough copies of the worksheet for each student in the class in color, if funds allow.

b. Write one food group on the top of each Post-it note (or sheet of paper): Grains; Protein; Dairy; Fruits; Vegetables.

c. Hang the MyPlate poster at the front of the room.

ACTIVITY INTRODUCTION

Today we are going to talk about starting your day with breakfast. How many of you ate breakfast this morning? Give children a chance to raise their hands. *What did you eat?* Call on students that raised their hands. *Can anyone tell me why it's important to eat breakfast?* Call on several children to give answers. Answers include: helps you do better at school, helps you get all of your nutrients, helps you not overeat at the next meal. *Very good. Our bodies go many hours overnight without eating. Just like a car needs gas to run, our bodies need food to run. It is important that we feed our bodies in the morning so we have energy to get through the day. What two words make up the word "breakfast"?* Call on a student to answer. *Yes, "break" and "fast". Breakfast means breaking the fast. Does anyone know what it means to fast?* Call on a student to answer. *Fasting is a period of time without eating. When we sleep, we are not eating, so we are fasting. Eating breakfast is a chance to break the fast and fill our bodies with nutrients. While it is important to eat breakfast, some foods are better choices than others. A good breakfast would include a food made from whole grains, a lean protein food, a lowfat or fat-free dairy food, and either a fruit or vegetable. Use the MyPlate poster to review the 5 food groups. You may not be able to get all of the MyPlate food groups in your breakfast, but you should try to eat as many as you can.*

Let's do a quick review of the food groups, focusing on foods from each group that you would want to eat for breakfast. You are going to be divided into 5 groups. Divide the students into 5 groups. Distribute one Post-it note to each group. I am going to give each group a Post-it note with a food group written on the top. You will have two minutes to write down foods in that group that you could eat for breakfast. Time the students for two minutes. *Can I have a volunteer from the Grains Group come to the front of the class and read their list?* When the student is done reading the list, instruct him/her to stick their Post-it note on the board.

If there are foods on the list such as a doughnut, muffin, sugary cereal, or another food that is not made from whole grains, explain how it would be best to choose an option that has less sugar or that is made with a whole grain. Also, state that these foods are okay to have sometimes in small portions, but that it is best to choose a healthier option most of the time.

WHOLE GRAINS	REFINED GRAINS
amaranth	cornbread*
brown rice	corn flakes
buckwheat	corn tortillas*
bulgur (cracked wheat)	couscous*
millet	crackers*
muesli	flour tortillas*
oatmeal	grits
popcorn	macaroni*
rolled oats	noodles*
quinoa	pasta*
sorghum	pita bread*
triticale	pretzels
whole grain barley	white bread
whole grain cornmeal	white sandwich buns and rolls
whole rye	white rice
whole wheat bread	
whole wheat cereal flakes	*Most of these products are made from refined grains, but some are made from whole grains or a mixture of whole and refined grains. If you're not sure, check the ingredient list: the words "whole grain" or "whole wheat" mean the product is made with whole grains.
whole wheat crackers	
whole wheat macaroni or pasta	
whole wheat pita bread	
whole wheat sandwich buns and rolls	
whole wheat tortillas wild rice	Some grain products contain significant amounts of bran. Bran provides fiber, which is important for health; however, products with added bran or bran alone (e.g., oat bran) are not necessarily whole grain products.

Can I have a volunteer from the Protein Foods Group come up and read their list? When the student is done reading the list, instruct him/her to stick their Post-it note on the board.

Examples of protein foods include:

- Eggs – poached, soft cooked, hard-boiled
- Nuts and seeds
- Peanut butter or other nut butters
- Lean or low-fat turkey, roast beef, and ham from the deli
- Tofu or tempeh
- Smoked salmon
- Beans, prepared without added fat

When possible, avoid high fat protein foods, such as bacon, sausage, bologna, or salami. If student says one of these foods, suggest that a leaner meat would be a better option.

Can I have a volunteer from the Dairy Group come up and read their list? When the student is done reading the list, instruct him/her to stick their Post-it note on the board.

Examples of dairy foods include:

- Yogurt
- Milk
- Calcium-fortified
- Soymilk
- Cottage cheese
- Cheese

*Choose low-fat/fat-free dairy over reduced-fat/whole milk when possible

Good job. Now, when selecting Dairy Group foods it's best to choose those that are fat-_____ or low-_____. Allow the class to answer out loud.

Can I have a volunteer from the Fruits Group come up and read their list? When the student is done reading the list, instruct him/her to stick their Post-it note on the board.

Examples of fruits include:

- Various fresh fruit o 100% fruit juice
- Various dried fruit: raisins; cranberries; apricots; cherries; pineapple; blueberries

Can I have a volunteer from the Vegetables Group come up and read their list? When the student is done reading the list, instruct him/her to stick their Post-it note on the board.

Examples of vegetables include:

- Tomatoes, carrots, broccoli, spinach, kale, mushrooms, onion, peppers (can be added to omelets, scrambled eggs or even breakfast sandwiches, wraps or tortillas) Potatoes

If you don't like typical breakfast foods, try experimenting with other foods for breakfast, such as: leftovers from dinner; a quesadilla made with a whole wheat tortilla and low-fat cheese; a breakfast burrito with eggs, beans, cheese; a sandwich made with lean ham or turkey; or even a pizza made with low-fat cheese and topped with vegetables. Now, let's do an activity that will help you understand why breakfast is so important.

ACTIVITY INSTRUCTIONS

1. Distribute one worksheet to each student.
2. Select one student to read the first passage. ***OK, class, who can tell me the number of food groups in Nathan's breakfast?*** Call on a student to give the answer. The correct answer is 4. Call on other students to tell you the group to which each food belongs and count the number of groups so it is evident to everyone that 4 food groups are represented. ***Nathan ate scrambled eggs. Eggs are in the Protein Foods Group. He also ate whole wheat toast, which is a whole grain food that belongs in the Grains Group. The banana is from the Fruits Group, and the low-fat milk is from the Dairy Group.***
3. Select another student to read passage 2. ***Who can tell me how many more minutes Taylor slept than Nathan?*** Call on a student to give the answer. The correct answer is 15 minutes.
4. Select another student to read passage 3. ***Who can tell me the solution to this problem?*** Call on a student to give the answer. The answer is 210 (42 times 5 is 210).
5. Select another student to read passage 4. ***How many minutes has Taylor been awake without eating?*** Call on a student to give the answer. The answer is 240. ***Since Taylor woke up at 7:05 and it was 11:05 when she looked at the clock, 4 hours had passed. There are 60 minutes in one hour, and 4 times 60 is 240.***
6. Select another student to read passage 5. ***How many seconds faster did Nathan run today?*** Call on a student to give the answer. The answer is 2. ***Yes, he ran 2 seconds faster today.***
7. Select another student to read passage 6. ***How many inches did Taylor jump today?*** Call on a student to give the answer. The answer is 12. ***Taylor jumped only 12 inches today, since there are 12 inches in 1 foot.***
8. Select another student to read passage 7. How many more minutes does Taylor need to wait for lunch? Call on a student to give the answer. The answer is 20.
9. Because lunch is at noon and it was only 11:40, Taylor needs to wait 20 more minutes for lunch.
10. Select another student to read passage 8. ***How many ounces of whole grains did Nathan eat by the end of the day?*** Call on a student to give the answer. The answer is 3. ***Nathan ate 6 ounces of grains, and half of them were whole grains. So, 6 divided by 2 is 3.***
11. Select another student to read passage 9. ***How many more ounces of grains did Taylor need to eat to meet her MyPlate recommendations for the day?*** Call on a student to give the answer. The answer is 1. ***According to MyPlate, Taylor should eat 5 ounces of grains a day. She only ate 4 ounces, so 5 minus 4 is 1.***

12. In order to solve the question at the bottom of the page, give students about 30 to 60 seconds to put the letters that correspond to the numbers in the blanks. *Now that you have answered every question, we can figure out the answer to the question at the bottom of the page. Look for the numbers underneath the blanks in the box and write the letter that corresponds with each number in the blank. When you figure out the answer, raise your hand.* Call on a student to give the answer. The correct answer is Breakfast. *Yes, breakfast is the reason Nathan and Taylor had such different days; Nathan ate breakfast, while Taylor did not.*

SUMMARY

Now that we have read the story, I want you all to think of one reason it is important to eat breakfast. I will give you about 15 to 30 seconds to think of one reason. Then, I want you to turn to your neighbor and tell each other what reason you came up with. Give students about 30 seconds to talk with each other. Then, call on several groups to share their answer with the class. *Which group wants to tell the class a reason it is important to eat breakfast?* After several groups have shared, reinforce the reasons why breakfast is important:

Breakfast is often called the most important meal of the day. It can help you focus in school and maybe even help you earn better grades. It can provide you with energy for physical activity, sports, and playing with your friends. It is a good chance to eat foods from all of the MyPlate food groups. Eating a healthy breakfast can help to keep your body healthy and active.

Now, with your same partner, discuss what a healthy breakfast would include. Give students about 30 seconds to talk and come up with an answer. Then, call on several groups to share their answer with the class. *Which group wants to share what they know about what a healthy breakfast would include?*

For a good breakfast, try to include as many food groups from MyPlate as you can: whole grain, lean protein, low-fat or fat-free dairy, and either a fruit or vegetable.

Now we're going to play a game called The BIG Freeze!

The Power of Breakfast

1. *BUZZ. BUZZ. BUZZ.* Nathan quickly jumped up at the sound of his alarm to get ready for school. His stomach was rumbling, and he wanted to have time to eat breakfast before heading out to the bus stop. For breakfast, he ate scrambled eggs, whole wheat toast, a banana, and a glass of low-fat milk. *How many food groups were in his breakfast?*

_____ = K

2. Nathan woke up at 6:50 AM, but his sister Taylor decided to keep sleeping until 7:05 AM. Soon, Taylor could hear her mom calling her name because the bus was on its way! Taylor quickly got out of bed, got dressed, grabbed her backpack and ran out the door. *How many more minutes did Taylor sleep than Nathan?*

_____ = F

3. When Nathan and Taylor got to school, their teacher gave them a math quiz. Nathan finished quickly, but Taylor had trouble focusing on the quiz and did not do very well. Taylor was stuck on this question...*Can you help her out?*

42
X 5

_____ = A

4. All morning, Nathan had lots of energy in class, but Taylor felt tired and grouchy. She looked at the clock, and it was 11:05 AM. Taylor still hadn't eaten anything that morning. *How many minutes has Taylor been awake without eating?*

_____ = R

5. At recess, Nathan beat his friends in a race when he ran a sprint in 10 seconds. He usually runs it in 12 seconds. *How many seconds faster did Nathan run today?*

_____ = S

6. Taylor did not have energy at recess today. She and her friends usually compete to see who can jump the farthest. She usually can jump 2 feet, but today she only jumped 1 foot. *How many inches did she jump today?*

_____ = E

7. Taylor was very hungry after recess, and she was so excited that it was almost lunchtime. She looked at the clock. It was 11:40 AM. *If lunch is at noon, how many more minutes does Taylor need to wait for lunch?*

_____ = B

8. By the end of the day, Nathan had eaten 6 ounces of grains. Half of the grains he ate were whole grains. *How many ounces of whole grains did Nathan eat?*

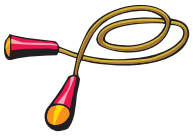
_____ = T

9. Unlike Nathan, Taylor had only eaten 4 ounces of grains. MyPlate says she needs 5 ounces a day. *How many more ounces of grains did Taylor need to eat?*

_____ = A

What was the reason Nathan and Taylor had such different days?

___	___	___	___	___	___	___	___	___
20	240	12	1	4	15	210	2	3



Physical Activity: "The BIG (Breakfast is Great) Freeze"

PRIOR TO ACTIVITY

- Make copies of the chant and cut each page in half. Each student will get one half-page.
- Place the chairs at the front of the room. If chairs are not available, put two pieces of paper on the floor to mark where the two students should stand when they "freeze".

ACTIVITY INSTRUCTIONS

1. Distribute the chant to each student.
2. *Please write your favorite healthy breakfast meal/item below the chant on the paper I just gave to you.* Give them 30 seconds to 1 minute to do so. *Let's all read the chant together as a class to practice.* Practice with the class:

   "Breakfast, the first meal of the day, it gives you the fuel and energy to play. A healthy start will keep you feelin' real cool, it may even help you focus in school. If you want your day to start off great, what would you put on your breakfast plate?"

3. Now everyone please stand in a circle around the room. If space is limited, could divide the class into two smaller circles. When I say go, you will call out the chant as you hop in a clockwise direction performing the action I tell you. First we will start with hopping. Students will say the chant as they move in a clockwise direction performing the following moves during each round:

   Round 1 – hop
   Round 2 – skip
   Round 3 – sideways shuffle
   Round 4 – hop on one leg
   Round 5 – hop on the other leg
   Round 6 – lunge
   Round 7 – high knees
   Round 8 – butt kicks
   Round 9 – hop with hand on head
   Round 10 – gallop

4. *I am going to yell "FREEZE!", and when I do, the two students closest to the chairs at the front of the room will sit in the chairs and call out their healthy breakfast meal/item. Then, we will do the whole thing again.* Tell the students the new move before each round starts (you may have to demonstrate if students are unsure of the move), going through as many rounds as time permits. While the students are saying the chant and moving around the room, yell

MATERIALS

- The BIG Freeze chant, provided
- 2 chairs
- Pencils

FREEZE!" at various time intervals. The students should freeze and stop chanting, and the students closest to the chairs (or paper on the floor) at the front of the room will sit in the chairs and call out their healthy breakfast meal/item. If students name a food that would not be a healthy breakfast choice (e.g. doughnut, sugary cereal, an item that is not whole grain, full-fat dairy, etc.), ask the class to suggest an item that might be a healthier choice.

After the students seated in the chairs have read their breakfast food(s), call out the next movement and tell the students to resume the chant. Repeat for 6–8 minutes. Stop the activity when you are out of time, even if you haven't had a chance to do all of the activities listed above. If students complete all rounds and there is still more time, repeat, starting from round 1.

EVALUATION QUESTIONS:

1. Skipping breakfast
   a. **may affect my performance in school**
   b. is something I should do when I'm not hungry in the morning
   c. helps me "break the fast"
   d. is unavoidable when I don't have a lot of time in the morning
2. Which of the following is the healthiest breakfast choice?
   a. Pancakes with syrup and whole milk
   b. Toaster pastry with banana and orange juice
   c. **Whole grain cereal with banana and skim milk**
   d. Plain bagel with cream cheese

The BIG (Breakfast Is Great) Freeze Breakfast Chant

Breakfast, the first meal of the day,
it gives you the fuel and energy to play.
A healthy start will keep you feelin' real cool,
it may even help you focus in school.
If you want your day to start off great,
what would you put on your breakfast plate?

The BIG (Breakfast Is Great) Freeze Breakfast Chant

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LESSON 3

Fun with Fruits and Vegetables

Concept

Most children do not consume the recommended amounts of fruits and vegetables. To get the optimal health benefits from fruits and vegetables, it is important to consume a variety of foods from these two food groups. This lesson focuses on teaching children about the importance of eating a variety of fruits and vegetables and their health benefits in a way that is fun and engaging.

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yum
Youth Understanding MyPlate

Background

Only 4% of children ages 6–11 were classified as obese in 1971–1974 compared to 17.7% of children in 2011–2012 (1). Childhood obesity has become a huge problem and has attracted a lot of attention.

Obese children are more likely to have high blood pressure and high cholesterol, which puts them at risk for heart disease. They also are at increased risk for insulin resistance and type 2 diabetes, breathing problems, such as sleep apnea or asthma, joint problems, fatty liver disease, heartburn, and low self-esteem. Obese children are very likely to become obese adults and continue to have health problems (2).

There are many factors that have contributed to the rise in childhood obesity. Children are consuming too many high sugar beverages and less healthy foods and are not getting enough physical activity (3). Sugar-sweetened beverages and foods that are high in sugar, fat and/or salt such as cookies, cakes, candies, chips and similar foods often are consumed as snacks.

Childhood obesity is an extremely complicated issue, and finding a solution must be approached from many different angles. One strategy that may be effective is encouraging children to replace unhealthy snacks with healthy ones.

In the United States, it is common to follow a pattern of three main meals with snacks in between. Main meals tend to be more structured, while a snack is any food or drink that is not consumed as part of a meal (4). The number of children who snack has increased over the years. Piernas and Popkin (5) found that 74% of children were "snackers" in 1977–78, compared to 98% of children in 2003–2006. During that same time, the number and size of the snacks also increased (5). Roblin (6) reported that children consumed more calories from snacks than from their breakfast or lunch meal, with 27% of their daily intake coming from snacks. Most of the foods consumed as snacks were from the "other foods" category, meaning that they did not fit into one of the food groups in Canada's food guide. This category includes foods that are high in fats, oils, sugars, and salt (6). The 2010 Dietary Guidelines suggest that foods high in these components be limited (7), and a good place to start is during snack time.

Currently, the effect of snacking on weight is not clear. A review by Larson and Story (8) revealed that most studies did not detect a relationship between snacking and weight status, or reported that children who consumed snacks were less likely to be obese. Increased eating frequency (meals and snacks) also was associated with improved BMI, body weight, and waist circumference in healthy weight children; however, eating frequency was directly associated with a higher BMI and waist-to-height ratio in centrally obese children. Increased eating frequency also was associated with improved diet quality in healthy weight and obese children (8). Data from the 2009–2010 National Health and Nutrition Examination Survey showed that children between the ages of 2–19 consumed a large amount of calories and sugar during snack occasions, but also significant amounts of calcium, magnesium, vitamin C, vitamin D, vitamin E, potassium, protein, vitamin A, folate, iron, and zinc (8). Patel and others (9) reported that children who consumed an after school snack of raisins or grapes consumed fewer calories and ate less throughout the day compared to children who had a snack of either potato chips or cookies. This suggests that serving children a snack of either raisins or grapes may help them control their appetite, as well as provide an extra serving of fruit.

Increased fruit and vegetable intake has been shown to be protective against childhood obesity (6); however, according to data from the Third National Health and Nutrition

Examination Survey (NHANES III), 74% of 6 to 11 year olds were not consuming enough fruits, and 83.8% were not consuming enough vegetables (10). Children with central obesity also typically consumed fewer dairy, grains, fruits and vegetables compared to healthy weight children (11).

Replacing snack foods high in fats, oils, sugars and salt with healthy snacks that include fruits, vegetables, whole grains, low-fat dairy, and lean protein foods will improve the nutritional quality of children's diets. Snacks can be an opportunity for children to meet the nutrition requirements that they may not be meeting with just three meals per day (12). Examples of healthy choices from each food group include:

SUMMARY

Choosing healthy snacks can help children manage their weight, contribute to overall health and energy needs, and satisfy hunger between meals (13). In addition, snacking can help prevent overeating at mealtimes because it lessens the feeling of extreme hunger before a main meal (4). This lesson focuses on empowering children to choose healthy snacks. They will learn about healthy options from each of the five food groups and brainstorm ideas for healthy

snacks. Empowering children to make healthy snack choices may help them develop good eating habits that extend into adulthood.

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4th Grade Lesson

LEARNING OBJECTIVES

The students will:

- recognize the reasons to choose healthy snacks instead of unhealthy snacks. give examples of healthy snacks.

BEHAVIORAL OBJECTIVES

The students will:

- choose healthy snacks.

FLORIDA STANDARDS

HEALTH EDUCATION

HE.4.B.5.4 Choose a healthy option when making decisions for yourself and/or others. Again, the students are asked to come up with healthy snack options.

READING/LANGUAGE ARTS

LACC.4.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly. This lesson satisfies this requirement because the students will be engaged in discussions with the instructor and the class, as well as within their groups for the learning activity and one-on-one while performing the physical activity.

LACC.4.W.3.8 Recall relevant information from experiences. This lesson asks the students to recall information about MyPlate.

Learning Activity: Master Chef Snacks

MATERIALS

- Sticky notes
- Master Chef Snack food cards, provided
- Master Chef Snack directions, provided
- Master Chef Snack Worksheet, provided

PRIOR TO ACTIVITY

Print enough of the snack food cards and directions to ensure a set of materials for each group of 3 students. Cut the cards and directions into individual pieces. To make a set of cards, include all of the snack food cards and one of the seven sets of directions. On each of the snack cards, highlight the nutrient that the students need to identify for their groups' challenge. You may want to laminate the cards so that they can be used repeatedly without falling apart. Clip each set of cards together or put each set in a plastic bag so they are ready to distribute to each group. Also print enough of the snack worksheets for each student to have their own.

ACTIVITY INTRODUCTION

Today we are going to talk about healthy snacks! Who likes to have a snack after school?

Great! Now, I want everyone to start thinking about why you should choose healthy snacks." Call on a few students to share why they should have a healthy snack. If time allows, distribute sticky notes or invite the students to write their reasons on the board, and read through some of them together. *Those are great reasons!*

Reasons to make healthy snack choices include the following:

Healthy snacks

1. *provide me with vitamins and minerals.*
2. *keep me full until my next meal.*
3. *help me meet the MyPlate recommendations.*

If a student mentions one of the reasons listed above, be sure to repeat it for the class and elaborate if necessary, and write it down on the board. If any of these reasons are not mentioned, state them for the class, and then write them down on the board. *Healthy snacks can keep you full until your next meal, help you meet the MyPlate recommendations, and provide vitamins and minerals you need for good health. So now that we know why you should choose healthy snacks, you're going to have a chance to create healthy snack ideas, but first, let's talk about a smart way to make sure you are eating healthy snacks. Choosing foods from the MyPlate food groups, especially GO foods, is a great place to start. Who can tell me what GO foods are?* Let students raise their hand to answer the question. *That's right. GO foods are best because they have no added fat or sugar. Stand up if you can name one of the MyPlate food groups."* Call on students who are standing to name one of the food groups until all of the food groups have been named. Each time a food group is named, make the statement listed below that corresponds with that food group.

Grains Group: *"Yes, and remember, it's best to choose whole grain foods from the Grains Group. This will help you meet the goal of making half of your grains whole."*

Protein Foods group: *"Yes! Lean Protein Foods will help keep your muscles strong". Dairy group: "Yes! Remember to choose low-fat or non-fat dairy foods to get plenty of calcium to keep your bones strong."*

Vegetables group: *"Yes! Vegetables can provide you with many vitamins and even some minerals".*

Fruits group: *"Yes! Fruits are delicious and naturally sweet. Choosing fresh fruits or canned or frozen fruits without added sugar is a healthy way to satisfy your sweet tooth".*

Great job, class! Choosing a healthy snack that includes foods from different food groups will help you meet the MyPlate recommendations and provide vitamins and minerals that your body needs. Now, it's time to put your chef's thinking hat on and create your own snack ideas."

Today you are Master Chefs in charge of creating a healthy snack that you think would taste good. You are going to work as a team to come up with a snack that meets a certain requirement. Each group has a slightly different requirement. In addition to the instruction sheet, each team is going to get a set of cards with a picture of a food and the nutrition information for that food. The cards represent the foods that are available for you to use to create your snack. On your instruction sheet, there will be a requirement for a specific nutrient, such as fat, protein, calcium. That nutrient will be highlighted on your snack food cards. The goal is to use the information on the food cards to make a healthy snack that meets the requirements listed on your instruction sheet. You also will need to think of a creative name for your snack. So I'm going to do an example, this card says *"Protein is important to keep your muscles strong. Challenge: create a snack that contains at least 15 grams (g) of protein, choose foods from at least two different food groups, and develop a creative name for your snack. So I would look at my cards to see how much protein is in each food. One cup of fat-free milk has 8 grams of protein in it,* (as you say the ingredients write them on the board with the protein content next to it) *and 2 tablespoons of peanut butter has 8 grams of protein in it, and a banana has 1 gram of protein in it. Add up the numbers and write down the total on the board. So that makes 17 grams of protein for my snack, and it includes foods from three different food groups. I am going to put everything into a blender to make a peanut butter and banana smoothie, and I am going to call it a Peanut Nanner.* Draw a quick picture of a glass and straw on the board. *Does everyone understand? Thumbs up if you understand, thumbs down if you don't.* If only one or two students give a thumbs down, go to the student(s) individually and go through the example again, showing them where to find protein on the nutrition facts label. If the majority of the class gives a thumbs down, have everyone find the milk and look at the nutrition facts label for protein, then do the same with the peanut butter and the banana, and write the amounts on the board after looking at each ingredient. If the students still do not understand, you may need to point out which ingredient the students should be looking at for each group.

ACTIVITY INSTRUCTIONS

Split the class into groups of three and distribute a set of Master Chef Snack Food Cards and directions to each group. It's okay if more than one group gets the same instructions. Also pass out a Master Chef Snack Worksheet to each student. When everyone is finished, you will have a chance to share your healthy snack idea, so be creative!

Give the students 5 minutes to come up with their ideas. Walk around the room to keep the students on task and answer their questions or clarify what needs to be done if they are unsure. Give them a 1 minute warning after 4 minutes have passed. When time is up,

call each group of students to the front of the room, one group at a time, to share their directions with the class– including the statement about the nutrient, their healthy snack idea, and the ingredients.

If you hear snack ideas that you think sound really good, write them on a pad of sheet of paper and try them at home some time.

SUMMARY

"Great job! Those sound like some really awesome snacks! So, why should we make healthy snack choices?" At the very least, you are looking for the following answers:

Healthy snacks:

provide me with vitamins and minerals.

keep me full until my next meal.

help me meet the MyPlate recommendations.

"When selecting healthy snacks, remember to select foods from all of the MyPlate food groups, especially GO foods. Remember to select Grains group foods that are made from _____ (pause and encourage the class to answer out loud; whole) grains, Dairy group foods that are _____ or_____ (low-fat or fat free), and Protein Foods that are _____(lean). The best types of fruits to choose for healthy snacks are _____ (fresh) and canned or frozen without added _____ (sugar). Finally, vegetables can provide you with many _____ (vitamins) and even some _____(minerals)."

Name_____ **Date**_____

Master Chef: Snacks Worksheet

Name of my snack:	
Nutrient Requirement:	
Ingredients:	Amount in each ingredient:
Total:	
Picture:	

Other snacks I would like to try...

Name of snack	Ingredients

GROUP 1:

Fiber is important to keep your digestive system healthy. Fiber can reduce the risk of getting heart disease and diabetes.

Challenge:

- Create a snack that contains at least 10 grams (g) of fiber.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 2:

Eating too much fat can cause weight gain and increase the chance of getting heart disease.

Challenge:

- Create a snack that contains less than 5 grams (g) of fat.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 3:

Eating too much sugar can cause cavities and weight gain.

Challenge:

- Create a snack that contains less than 5 grams (g) of sugar.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 4:

Iron is an important mineral that helps your blood carry oxygen.

Challenge:

- Create a snack that contains at least 15% of the daily value for iron.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 5:

Eating too much salt can lead to high blood pressure. High blood pressure can damage your heart and other parts of your body.

Challenge:

- Create a snack that contains less than 200 milligrams (mg) of sodium.
- Coose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 6:

Vitamin C is important to keep your immune system strong and keep you healthy.

Challenge:

- Create a snack that contains at least 50% of the daily value for vitamin C.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack.

GROUP 7:

Calcium is important to build strong bones and teeth.

Challenge:

- Create a snack that contains at least 35% of the daily value for calcium.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack

GROUP 8:

Protein is important to keep your muscles strong!

Challenge:

- Create a snack that contains at least 15 grams (g) of protein.
- Choose foods from at least two different food groups.
- Develop a creative name for your snack

WHOLE WHEAT BREAD

Nutrition Facts

Serving Size 1 slice (28g)
Servings Per Container

Amount Per Serving

Calories 70	Calories from Fat 10
	% Daily Value*
Total Fat 1g	**2%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 130mg	**5%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 2g	**8%**
Sugars 2g	
Protein 4g	
Vitamin A 0% • Vitamin C 0%	
Calcium 2% • Iron 4%	

DRY, UNSWEETENED, WHOLE GRAIN CEREAL

Nutrition Facts

Serving Size 1 cup (52g)
Servings Per Container

Amount Per Serving

Calories 150	Calories from Fat 10
	% Daily Value*
Total Fat 1g	**2%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 85mg	**4%**
Total Carbohydrate 30g	**10%**
Dietary Fiber 10g	**40%**
Sugars 6g	
Protein 14g	
Vitamin A 2% • Vitamin C 0%	
Calcium 8% • Iron 15%	

WHOLE WHEAT CRACKERS

Nutrition Facts

Serving Size 6 crackers (25g)
Servings Per Container

Amount Per Serving

Calories 100	Calories from Fat 25
	% Daily Value*
Total Fat 2.5g	**4%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 135mg	**6%**
Total Carbohydrate 18g	**6%**
Dietary Fiber 3g	**12%**
Sugars 0g	
Protein 3g	
Vitamin A 0% • Vitamin C 0%	
Calcium 0% • Iron 6%	

CUCUMBERS, RAW

Nutrition Facts

Serving Size 1 cup (63g)
Servings Per Container

Amount Per Serving

Calories 15	Calories from Fat 0
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 0g	**0%**
Dietary Fiber 0g	**0%**
Sugars 0g	
Protein 0g	
Vitamin A 0% • Vitamin C 6%	
Calcium 0% • Iron 0%	

DRY, UNSWEETENED, WHOLE GRAIN CEREAL

WHOLE WHEAT BREAD

CUCUMBERS, RAW

WHOLE WHEAT CRACKERS

CHERRY TOMATOES, RAW

Nutrition Facts

Serving Size 1 cup (149g)
Servings Per Container

Amount Per Serving	
Calories 25	Calories from Fat 5
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 5mg	**0%**
Total Carbohydrate 6g	**2%**
Dietary Fiber 2g	**8%**
Sugars 4g	
Protein 1g	
Vitamin A 25% •	Vitamin C 35%
Calcium 2% •	Iron 2%

RAISINS

Nutrition Facts

Serving Size 1/4 cup (41g)
Servings Per Container

Amount Per Serving	
Calories 120	Calories from Fat 0
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 33g	**11%**
Dietary Fiber 2g	**8%**
Sugars 24g	
Protein 1g	
Vitamin A 0% •	Vitamin C 2%
Calcium 2% •	Iron 4%

BABY CARROTS, RAW

Nutrition Facts

Serving Size 2/3 cup (86g)

Amount Per Serving	
Calories 35	Calories from Fat 0
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 60mg	**2%**
Total Carbohydrate 7g	**2%**
Dietary Fiber 2g	**8%**
Sugars 5g	
Protein less than 1g	
Vitamin A 60% •	Vitamin C 2%
Calcium 2% •	Iron 0%

BANANA

Nutrition Facts

Serving Size 1 medium banana (118g)
Servings Per Container

Amount Per Serving	
Calories 110	Calories from Fat 5
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 27g	**9%**
Dietary Fiber 3g	**12%**
Sugars 14g	
Protein 1g	
Vitamin A 2% •	Vitamin C 15%
Calcium 0% •	Iron 2%

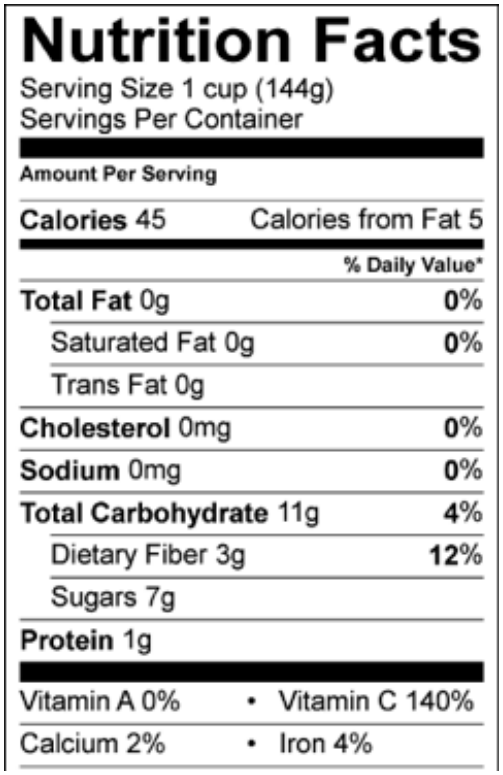
RAISINS

CHERRY TOMATOES, RAW

BANANA

BABY CARROTS, RAW

STRAWBERRIES



Nutrition Facts

Serving Size 1 cup (144g)
Servings Per Container

Amount Per Serving

Calories 45	Calories from Fat 5
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 11g	**4%**
Dietary Fiber 3g	**12%**
Sugars 7g	
Protein 1g	

Vitamin A 0% •	Vitamin C 140%
Calcium 2% •	Iron 4%

FAT-FREE MILK

Nutrition Facts

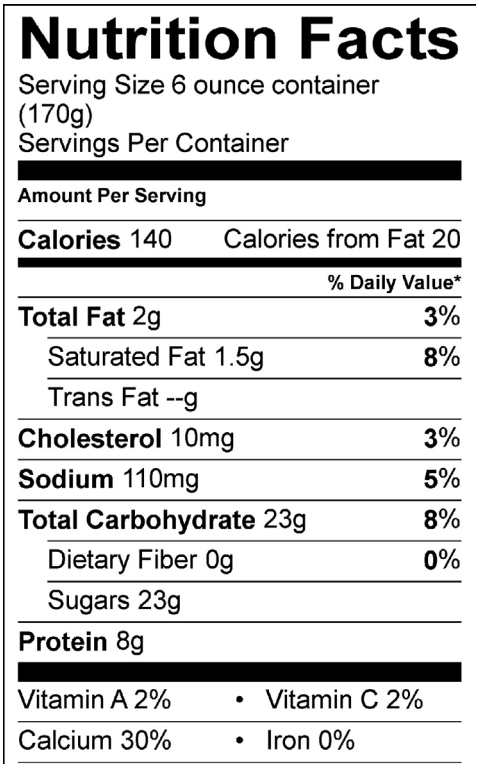
Serving Size 1 cup (245g)
Servings Per Container

Amount Per Serving

Calories 80	Calories from Fat 0
	% Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 5mg	**2%**
Sodium 105mg	**4%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 0g	**0%**
Sugars 12g	
Protein 8g	

Vitamin A 10% •	Vitamin C 0%
Calcium 30% •	Iron 0%

LOW-FAT VANILLA YOGURT



Nutrition Facts

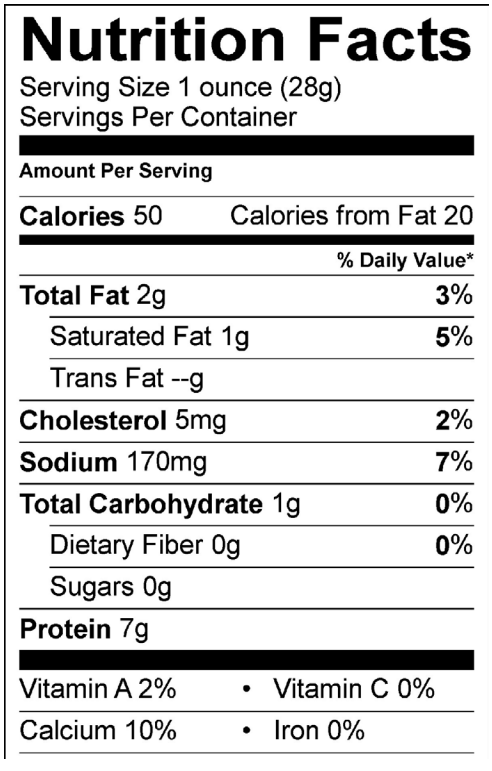
Serving Size 6 ounce container (170g)
Servings Per Container

Amount Per Serving

Calories 140	Calories from Fat 20
	% Daily Value*
Total Fat 2g	**3%**
Saturated Fat 1.5g	**8%**
Trans Fat --g	
Cholesterol 10mg	**3%**
Sodium 110mg	**5%**
Total Carbohydrate 23g	**8%**
Dietary Fiber 0g	**0%**
Sugars 23g	
Protein 8g	

Vitamin A 2% •	Vitamin C 2%
Calcium 30% •	Iron 0%

LOW-FAT CHEDDAR CHEESE



Nutrition Facts

Serving Size 1 ounce (28g)
Servings Per Container

Amount Per Serving

Calories 50	Calories from Fat 20
	% Daily Value*
Total Fat 2g	**3%**
Saturated Fat 1g	**5%**
Trans Fat --g	
Cholesterol 5mg	**2%**
Sodium 170mg	**7%**
Total Carbohydrate 1g	**0%**
Dietary Fiber 0g	**0%**
Sugars 0g	
Protein 7g	

Vitamin A 2% •	Vitamin C 0%
Calcium 10% •	Iron 0%

FAT-FREE MILK

STRAWBERRIES

LOW-FAT CHEDDAR CHEESE

LOW-FAT VANILLA YOGURT

PEANUT BUTTER

Nutrition Facts

Serving Size 2 taplespoons (32g)
Servings Per Container

Amount Per Serving

Calories 190	Calories from Fat 140
	% Daily Value*
Total Fat 16g	**25%**
Saturated Fat 3g	**15%**
Trans Fat --g	
Cholesterol 0mg	**0%**
Sodium 150mg	**6%**
Total Carbohydrate 8g	**3%**
Dietary Fiber 2g	**8%**
Sugars 2g	
Protein 7g	
Vitamin A 0% • Vitamin C 0%	
Calcium 2% • Iron 4%	

HUMMUS

Nutrition Facts

Serving Size 2 tablespoons (30g)
Servings Per Container

Amount Per Serving

Calories 50	Calories from Fat 25
	% Daily Value*
Total Fat 3g	**5%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 115mg	**5%**
Total Carbohydrate 4g	**1%**
Dietary Fiber 2g	**8%**
Sugars --g	
Protein 2g	
Vitamin A 0% • Vitamin C 0%	
Calcium 2% • Iron 4%	

SLICED TURKEY

Nutrition Facts

Serving Size 3 slices (135g)
Servings Per Container

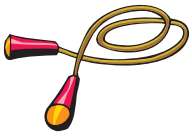
Amount Per Serving

Calories 140	Calories from Fat 15
	% Daily Value*
Total Fat 1.5g	**2%**
Saturated Fat 0g	**0%**
Trans Fat --g	
Cholesterol 60mg	**20%**
Sodium 1410mg	**59%**
Total Carbohydrate 6g	**2%**
Dietary Fiber 0g	**0%**
Sugars 0g	
Protein 27g	
Vitamin A 0% • Vitamin C 0%	
Calcium 0% • Iron 6%	

HUMMUS

PEANUT BUTTER

SLICED TURKEY



Physical Activity: Find a Friend

PRIOR TO ACTIVITY

Print one worksheet per student

ACTIVITY INTRODUCTION

Now, we're going to get up and move around and review some of the things we learned today! Distribute one worksheet to each student. Make sure they have a pencil.

ACTIVITY DIRECTIONS

1. *The worksheet I gave you has fifteen different activities that you need to complete. For example, you need to find a classmate who will do 15 jumping jacks with you. After you find someone and do the jumping jacks, have them sign their name in the space next to the instructions that tell you to do the jumping jacks. You do not have to do these in any particular order. Each challenge should be done with a different classmate. The object of the activity is to get as many of these challenges done before I call time up. After I call time, we will see which students completed the most challenges.*
2. *When I say "go", I want you to get out of your seats and find a classmate with whom you can complete one of these challenges. As soon as you are done with the first challenge, find your next partner. Remember, you want to try to complete as many challenges as possible before I call time and to do each one with a different classmate.*
3. *You will have 10 minutes to complete as many challenges as possible.*
4. *Any questions? GO!*

After 5 minutes, tell the students they have 5 more minutes, and give them a 2-minute warning. At the end, tell the students to return to their seats. *Okay, who completed all 15 challenges?*
Fourteen? Thirteen? Twelve? Eleven? Ten? … Great job everyone!
Remember, the next time you need a snack to keep you full until your next meal, choose a healthy snack!

MATERIALS

- Find a Friend worksheet, provided
- Pencil for each student

Name_____ **Date**_____

Have a Healthy Snack Attack

Physical Activity

Find a classmate...	Classmate's Name:
To do 15 jumping jacks	
Whose favorite snack is from the Fruits Group	

What is their favorite snack?

To balance on one leg for 15 seconds	
Who can name a reason to eat a healthy snack.	

To hop on one foot 20 times	
Who ate a healthy snack within the last week.	

What did they eat?

To do 10 lunges on each leg	
Who can name a snack from the Grains Group.	

Name_____ **Date**_____

To jump as high as you can 10 times.	
Whose favorite snack is from the Protein Foods Group.	

What is their favorite snack?

to bend over and touch their toes for 15 seconds	
Who has tried a snack from the Dairy Group	

What snack did they try?

To do 10 arm circles forward and 10 arm circles backward.	
Who can name a different reason to eat a healthy snack.	

to march in place for 20 seconds	

The USDA and the University of Florida IFAS Extension are equal opportunity providers and employers. The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact 1-866-762-2237. TTY/TTD/FRS dial 711. This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP.

LESSON 4

Delicious Dairy

Concept

Foods from the Dairy group provide children with important nutrients such as calcium, which is needed for strong bones and teeth. This lesson introduces children to the foods in the Dairy group and teaches them how much they need and why dairy foods are important for their bodies.

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yum
Youth Understanding MyPlate

Background

Added sugars are sugars and sweeteners added during food processing or preparation to make food taste better. These sweeteners can appear as different names in the ingredients list of the nutrition label of packaged foods. Ingredients that are included the category of added sugars include: syrups (corn syrup, corn syrup solids, high fructose corn syrup, malt syrup, and maple syrup), sucrose, fructose, lactose, maltose, dextrose, nectars (peach nectar, pear nectar, etc.), honey, molasses, and several others (1). Some foods contain naturally occurring sugars; however, the majority of Americans consume mostly added sugars. In fact, 16% of a child's total caloric intake comes from added sugars (2). It's important to limit the amount of added sugars consumed because too many can have adverse effects. This lesson serves to inform students about sugar with an emphasis on limiting the amount of added sugars in one's diet.

Although milk, plain yogurt, fruits and 100% fruit juices contain sugar, the sugar in these foods is naturally occurring. The tricky thing for consumers is that the sugar content listed on the Nutrition Facts panel of food labels currently does not distinguish between naturally occurring and added sugars, which could make healthy food choices like milk, fruit and 100% fruit choice appear to be less healthy. However, one way for consumers to spot foods that have no added sugars is to look at the ingredients list. Foods that contain only naturally occurring sugars will not list sugar or any of the names used for "added sugar" listed above on the ingredients list.

The total amount of sugar in a product is listed on the Nutrition Facts label; however, this currently includes both naturally occurring sugar and added sugars. To determine if this sugar is naturally occurring or if it was added during preparation or processing, read the ingredients list. If a sweetener was added to the product, it will be included in the ingredients list. If a product contains 12

grams of sugar, but there is no sugar listed on the ingredients list, it means there are 12 grams of naturally occurring sugar. (Most people can't visualize sugar in grams, so converting grams of sugar to teaspoons is helpful. There are approximately 4 grams in 1 teaspoon; therefore, a product containing 12 grams of sugar will have about 3 teaspoons of sugar.) It's important to note that foods may contain naturally occurring sugars as well as added sugars. In this instance, it is impossible to distinguish how much of each is present in the product. Fortunately, the passage of new labeling laws will make it easier to discern the amount of added sugars contained within a food in the near future.

Children currently have access to all sorts of beverages, with the majority containing high amounts of added sugars. In fact, about 60% of children and youth consume sugar-sweetened beverages on a given day (3). Sodas, sports drinks, sweetened juice drinks, and flavored milk are only a few of the multiple types of sugary drinks that are on the market. Soda and fruit drinks alone contribute to the 40% of empty calories in a child's diet (4), which is why the 2010 Dietary Guidelines for Americans recommends cutting back on drinks with added sugars, limiting or eliminating regular sodas, energy drinks, sports drinks, and fruit drinks, and replacing them with water, fat-free milk, 100% fruit juice, or unsweetened tea or coffee (5). Many sodas contain phosphorous which can have adverse effects on bone density (6, 7). An increase in phosphorous (without an increase in calcium) can lead to a decrease in bone density over time.

When it comes to choosing a beverage, there are many choices. Although it's best to stray away from drinks containing sugar, sometimes it's necessary to choose them. Milk, which is naturally composed of the sugar lactose, contains many nutrients with important health benefits. For example, in addition to protein and some B vitamins, milk provides vitamin D and calcium. Calcium is important for the development of strong teeth in children, and calcium and vitamin D are important for children's bone health.

Other healthy beverage options are 100% fruit juice and 100% vegetable juice. When choosing juice, it's necessary to read the container carefully and with caution. Only those labeled "100% fruit juice" or "100% vegetable juice" are free of added sugars.

Although fruit and vegetable juices and milk are better options than sodas and other sweetened beverages, they should not be consumed in excess. To help quench thirst and meet fluid needs the rest of the day, the best choice is plain water. Water is the most important nutrient for the body and contains no added sugars.

Candy, chocolate, and other sweet snacks are easily accessible to children of all ages. About 40% of the added sugars consumed by children come from beverages (2). This means that the additional 60% of added sugars comes from the foods they eat. Grocery store aisles, checkout counters, and vending machines are full of sugary snacks from which to choose. A king size candy bar can have upwards of 54 grams

of sugar in it, but minimal levels of vitamins and minerals. In contrast, foods like fruit (i.e., fresh, frozen without sugar, canned in water or natural juice, 100% fruit juice) and certain dairy products (i.e., plain milk, plain yogurt) contain natural sugars, as well as vitamins and nutrients essential for good health.

It's important to teach children the negative effects of too much added sugar. Drinks and foods that are high in added sugar often are a source of "empty calories". This means that the products primarily provide calories and have little to no nutritional value. An increased consumption of empty calories can eventually lead to weight gain and additional adverse effects. Children who consume large amounts of sugar, from all sources, are also at risk for getting dental caries, or cavities (8). Cavities occur in 42% of children ages 2–11 (9). Decreasing the amount of added sugars that children take in may reduce the amount of cavities formed, as well as reduce the chance of unnecessary weight gain.

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4th Grade Lesson

LEARNING OBJECTIVES

The students will state that:

- identify reasons to limit added sugars from beverages/food.
- distinguish between natural and added sugars.
- identify how much sugar is in a given product.

BEHAVIORAL OBJECTIVE

The students will:

- choose foods and drinks lower in added sugars.

FLORIDA STANDARDS

READING/LANGUAGE ARTS

ELACC.4.SL.1.1c. The student will pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

LACC.4.SL.1.3 The student will identify the reasons and evidence a speaker provides to support particular points.

HE.4.C.1.4 The student will describe ways to prevent common childhood injuries and health problems

Learning Activity: Sugar Seeker

MATERIALS

- "True" sign, template provided
- "False" sign, template provided
- Sticky tack
- 25 Popsicle sticks
- 10 Statement cards, provided
- 15 Nutrition labels with ingredients list, provided o Drink/candy/snack wrapper for the following:
- Green citrus soda
- Cola
- Milk
- Fruit punch
- Sports drink
- Water (plain)
- Chocolate chip cookie
- Brownie
- Almonds (plain)
- Chocolate caramel peanut nougat bar
- Candy coated chewy fruit candy
- Popsicle
- Ice cream
- Pudding
- Yogurt tube
- Nutrition Label poster, provided
- Added sugar list, provided
- Plastic bag with 40 g (10 tsp) sugar (optional)
- 200 plastic cubes (1 cm x 1 cm)
- 15 clear, plastic cups (5 oz)
- Can You Spot the Sugar Worksheet, provided

PRIOR TO ACTIVITY

Print enough True and False signs for each student in the class. Glue one True and One.

ACTIVITY INTRODUCTION

False sign together with a Popsicle stick in between to create "True/False" signs. Print one more set of True and False signs. Using sticky tack, post one true and one false sign on the wall or board at the front of the room. Place sticky tack on the back of each statement. Enlarge Nutrition Label poster so visible to all students. Highlight the row with total sugars.

DISCUSSION:

*Raise your hand if you can tell me what these three products have in common. S*how the class three items that contain a lot of sugar, such as a candy bar, regular soda, and a sports drink. Allow the students to answer. *Right! It's sugar. Today we are going to talk about the sugar in our food by playing a game, but you need to listen carefully because there will be questions later. I'm going to read 10 statements about sugar.* (Distribute one "True/False" sign to each student prior to reading the statements). *Listen carefully and decide if the statement is TRUE or FALSE. When I say "True or False," hold your sign so the side with your answer is facing towards me* (demonstrate). *If you understand the directions, hold up your signs. If any students don't understand make sure to repeat the directions. Instruct the students to hold up their signs to display whether they think it is true or false statement.* Discuss the appropriate answer and then place the statement in the correct column on the board/wall at the front of the classroom.

STATEMENTS:

1. The term "added sugar" means that sweeteners or sugar were added to the food when it was made. (True)

   Sometimes companies add sugar to sweeten their products or sometimes we add sugar to foods when we make them at home, like dessert and, sweet tea. What are some foods that you know have sugar added to them? That's right, candy, cakes and cookies. Sometimes sugar or other sweeteners are added to foods that we don't think of as being sweet like certain types of crackers.

2. Fresh fruit, plain yogurt, and milk have naturally occurring sugar. (True)

   This means that the sugar is already in the food/drink. It was not added during processing. Foods like plain milk, plain yogurt, 100% fruit juice and fresh fruit have naturally occurring sugar. What makes these foods and drinks different is that they offer many nutrients that are good for us, while most processed foods and sugar–sweetened drinks don't have these healthy benefits. Be careful though, flavored milk can have added sugars.

3. Although fruit naturally has sugar in it, eating fruit can help you get many nutrients that your growing body needs. (True)

All fruits contain a form of sugar called fructose. This sugar is found naturally in fresh fruit. No sugar is "added" to the fruit unless it is changed into another food like sweetened applesauce or apple pie.

4. Many drinks including regular soda, sports drinks, and fruit drinks contain very little sugar. (False)

   Many of these drinks actually have lots of sugar. Take regular soda for example. The average can of soda has 40 grams of sugar in it (hold up plastic bag with sugar in it). If you drink 1 can of regular soda a day for an entire month, you would have consumed 2.5 pounds of sugar, and if you did that for an entire year, it would it would add up to 35 pounds of sugar!

5. Consuming excessive amounts of sugary beverages can cause cavities and can also cause poor health. (True)

   The bacteria, or bugs, in your teeth convert the sugar you eat to acid. That acid breaks down the enamel on your teeth and causes cavities. So if you drink lots of sugary drinks the bacteria in your mouth will make more acid. Also, consuming a lot of sugar can lead to other negative health effects.

6. It is best to limit the amount of added sugar that we eat or drink. (True)

   Too much sugar can cause cavities and no one wants cavities!

7. Water contains added sugar. (False)

   Plain water has no sugar added to it. However, if the water is flavored, it may contain added sugar.

8. You can find out how much total sugar is present in a food by looking at the nutrition label on the product. (True)

   The nutrition label on products tells you how much total sugar is in a product. (HOLD UP THE NUTRITION LABEL AND POINT TO THE HIGHLIGHED ROW LABELED "SUGARS"). The only problem is that the sugar on a label does not tell you if the sugar comes from added sugars or naturally occurring sugars.

9. You can look for the word "sugar" on the ingredients list to see if the product contains added sugars. (True)

   This is true. (HOLD UP THE NUTRITION LABEL POSTER WITH THE INGREDIENTS LIST AND SHOW THE STUDENTS WHAT IT LOOKS LIKE). However, it's important to realize that sugar can appear as many names such as syrup, corn syrup, fructose, sucrose, honey, and nectars. HOLD UP THE LIST OF COMMON ADDED SUGARS THEN HANG IT ON THE WALL. There are many other names for added sugars. Try to select snacks and beverages that don't contain these ingredients.

10. There are 6 grams of sugar in 1 teaspoon. (False)

    Actually there are 4 grams of sugar in 1 teaspoon. So if a slice of cake has 24 grams of sugar, how many teaspoons of sugar are there? 6 teaspoons

I hope you have learned some new things about sugar in foods and beverages. Now, let's look at the sugar content of different foods.

ACTIVITY DIRECTIONS

1. Instruct the students to pair up with the person next to them.
2. Distribute one "Spot the Sugar" worksheet to each student; distribute one Nutrition Facts label as well as an ingredients list for that product to each pair of students; distribute 1 plastic cup and 15 cubes per team
3. *For this activity, you will be given a Nutrition Facts label, as well as the ingredients list for a food. You and your partner will have to decide if your product has added sugar in it, by looking at the ingredients list. If there is added sugar, you will need to determine the amount of Total sugar that is in your product. To do this, you will need to convert grams into teaspoons. Remember, 1 teaspoon of sugar has 4 grams in it. Place 1 cube per teaspoon of sugar into the clear plastic cups. Each cube will represent 1 teaspoon of sugar. This helps to visualize how much added sugar is in each product. Once you have filled your cup with the appropriate amount of cubes, fill in the spaces in the chart on the worksheet for your product. The amount of sugar is listed in grams, so the students will need to convert that amount into teaspoons by dividing the number of grams of total sugars by 4.* Review this division with the students before they begin. Use the sample nutrition label to show the students where to find the information they need to complete their task. (Note: Not all of the numbers will divide evenly, so tell the students to round up to the nearest teaspoon). They will only do this calculation for foods with added sugar. These foods will have the name(s) of added sugars highlighted in the ingredients section.
4. Give the students a few minutes to complete the task. Once they are finished, tell the students to stand at their desks and share their answers with the rest of the class. Make sure their answers are correct. Using the template provided on a smart board, whiteboard, or poster, fill in the answers that the students have given in the appropriate row. If an incorrect answer is given, work through the problem with the rest of the class. Instruct the students to copy these answers into the table on their own worksheet.
5. Ask the students to discuss what they found surprising about this experiment.

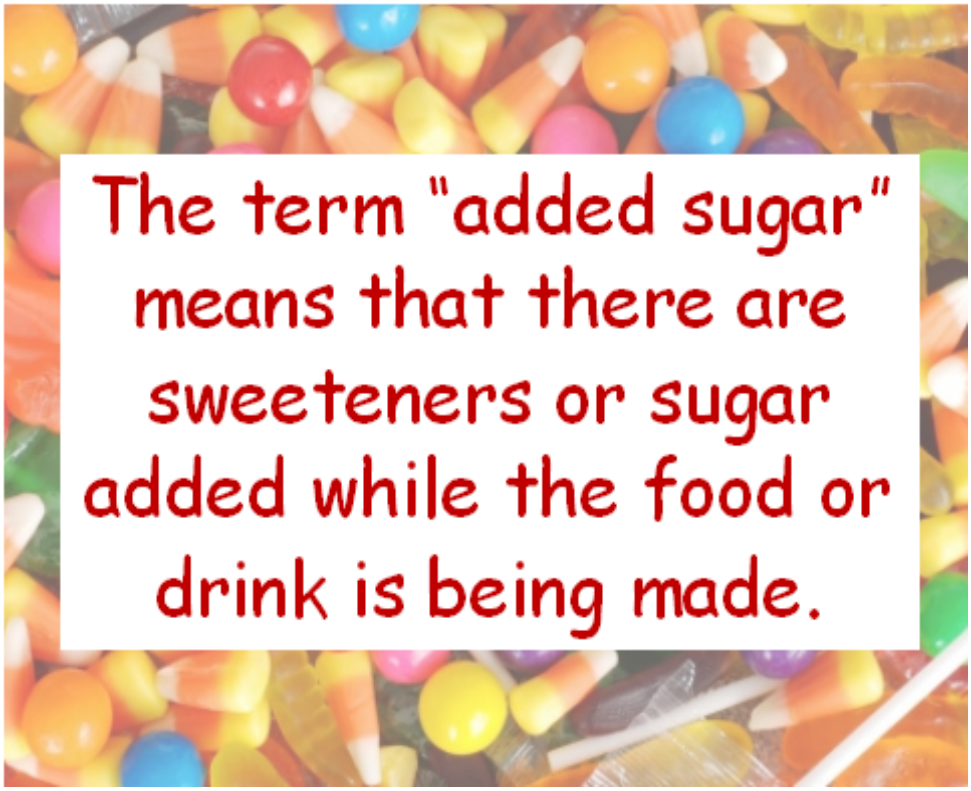
SUMMARY

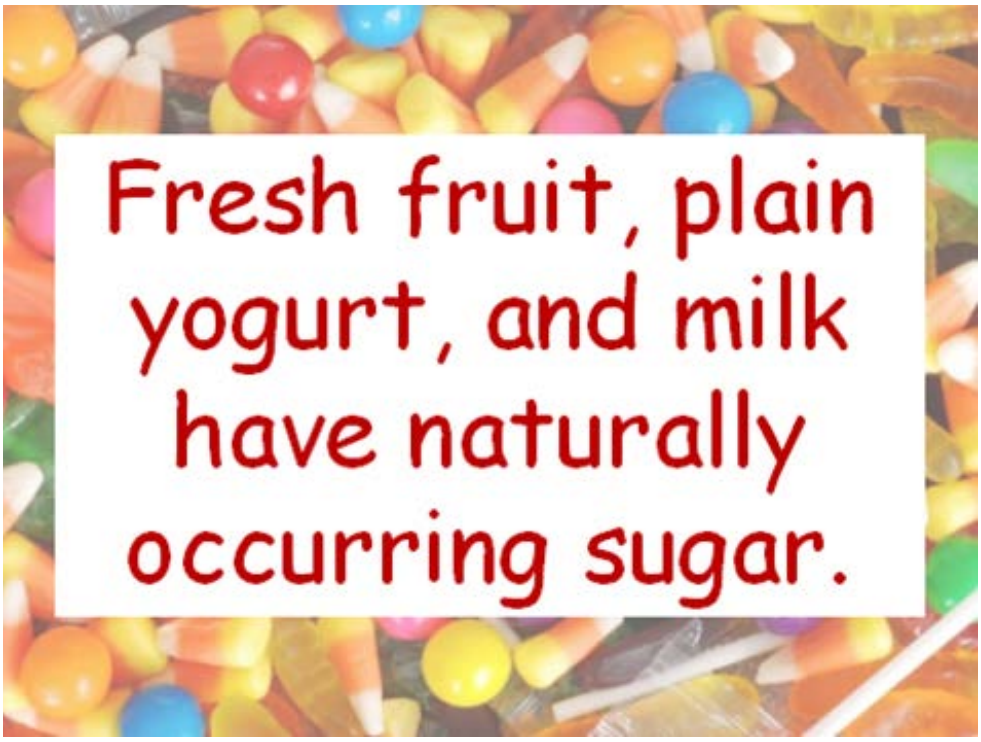
It can be shocking to know just how much added sugar is in the foods we eat and the drinks we drink. It's important to recognize when products have lots of sugar added to them and to try and not consume too many of these. When you're craving something sweet, it's best to reach for fresh fruit like grapes, strawberries, and bananas. These fruits can give you vitamins and nutrients! When choosing drinks, water, milk, and 100% juice are the best options because these do not contain added sugar.

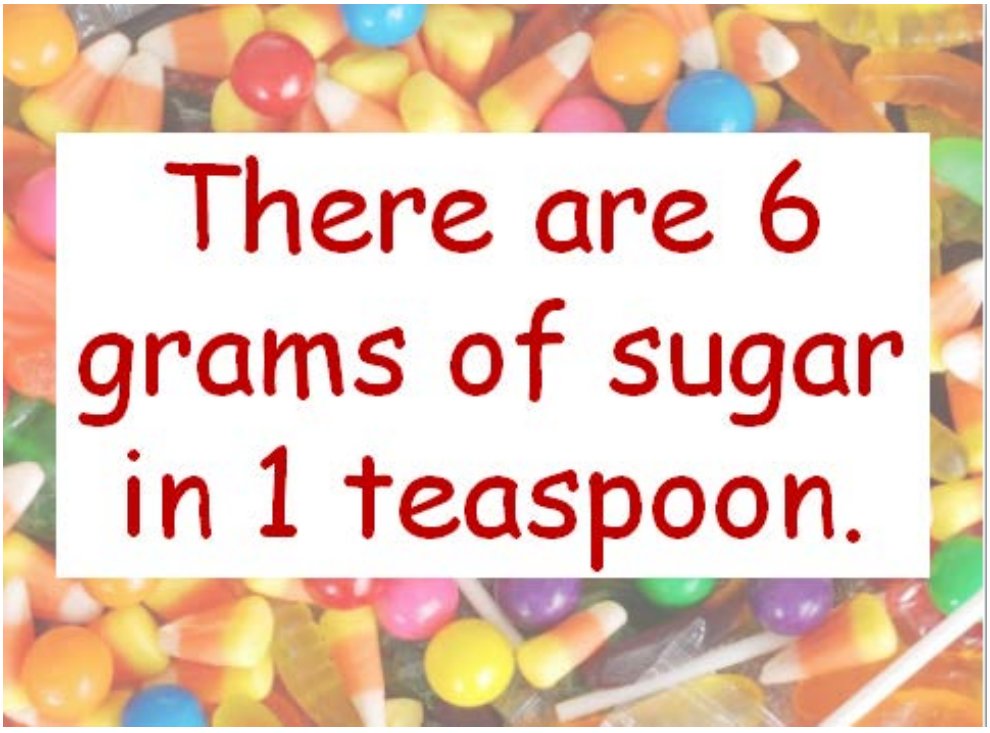

TRUE

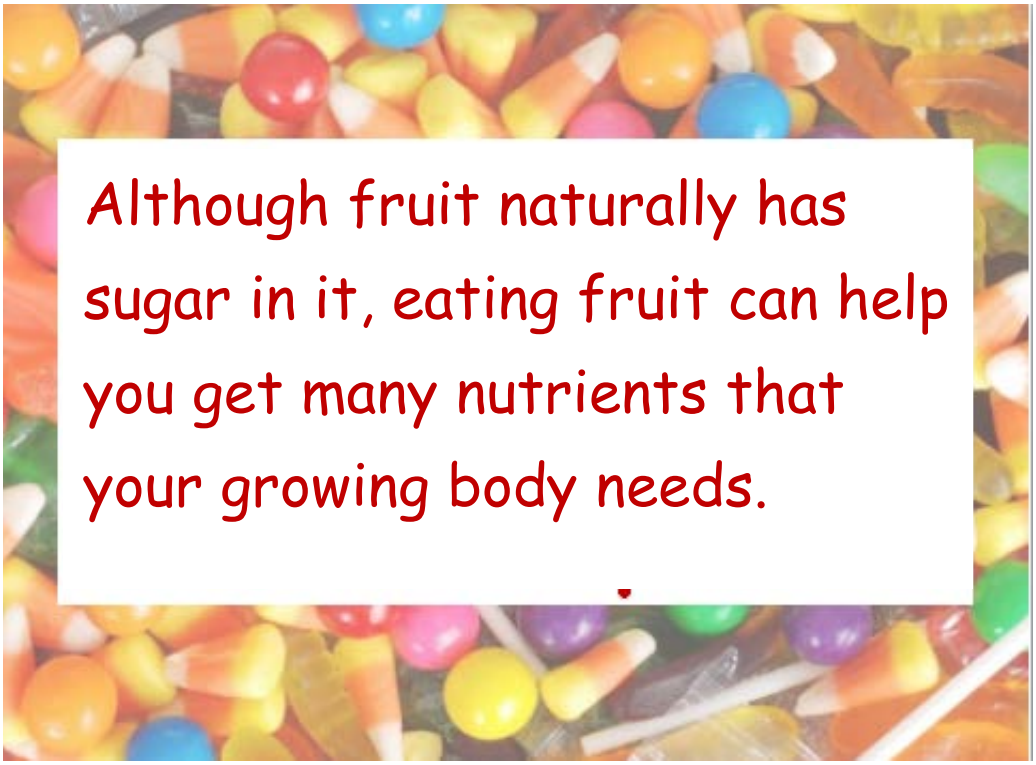

FALSE

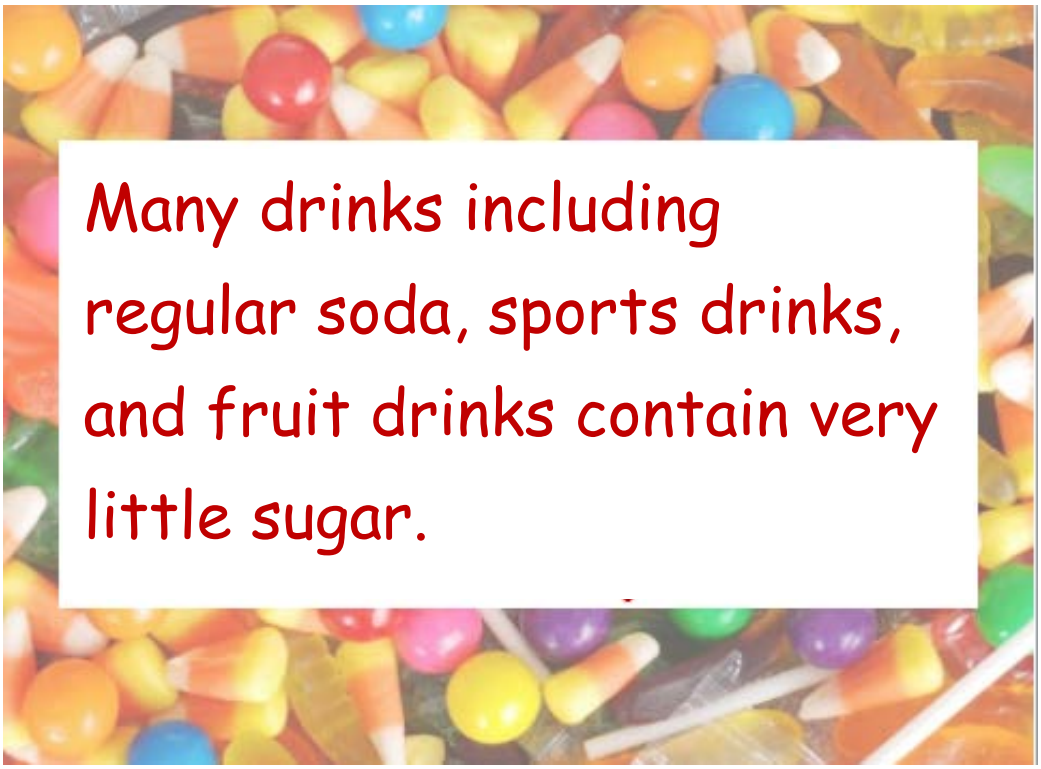

Water contains added sugar.

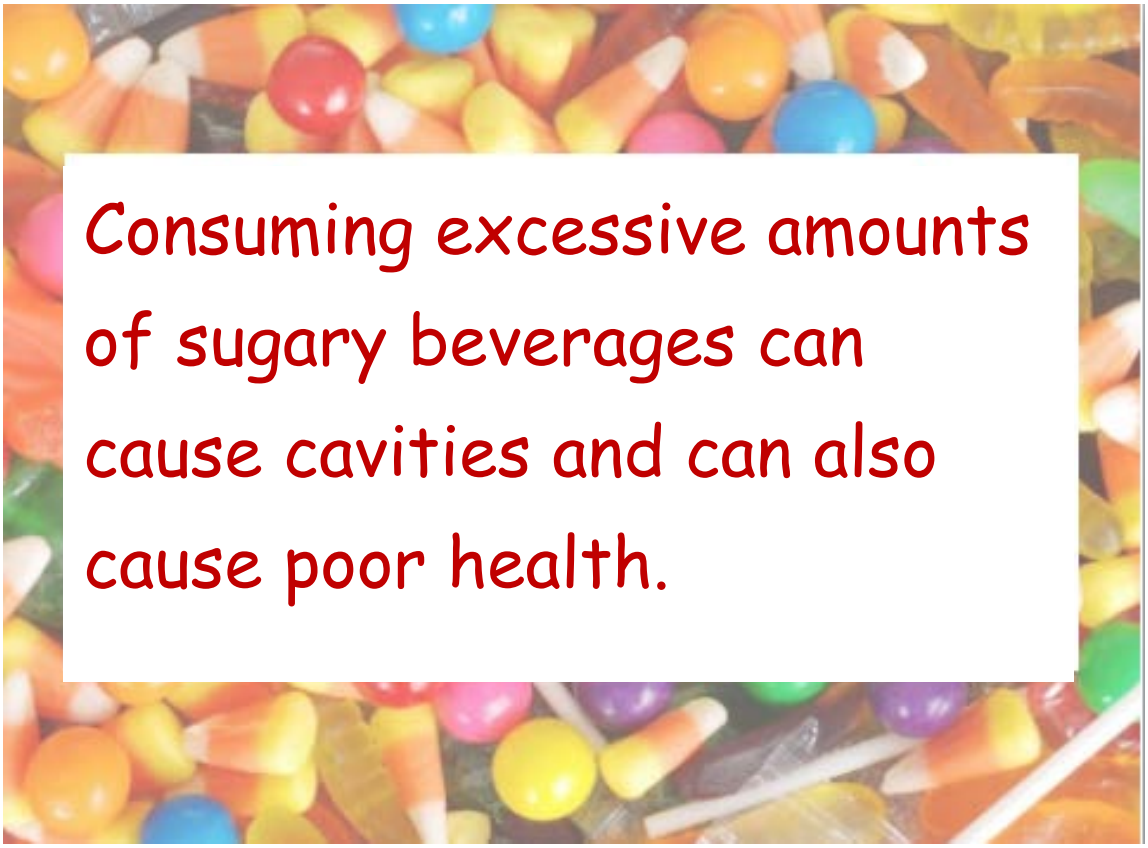

The term "added sugar" means that there are sweeteners or sugar added while the food or drink is being made.

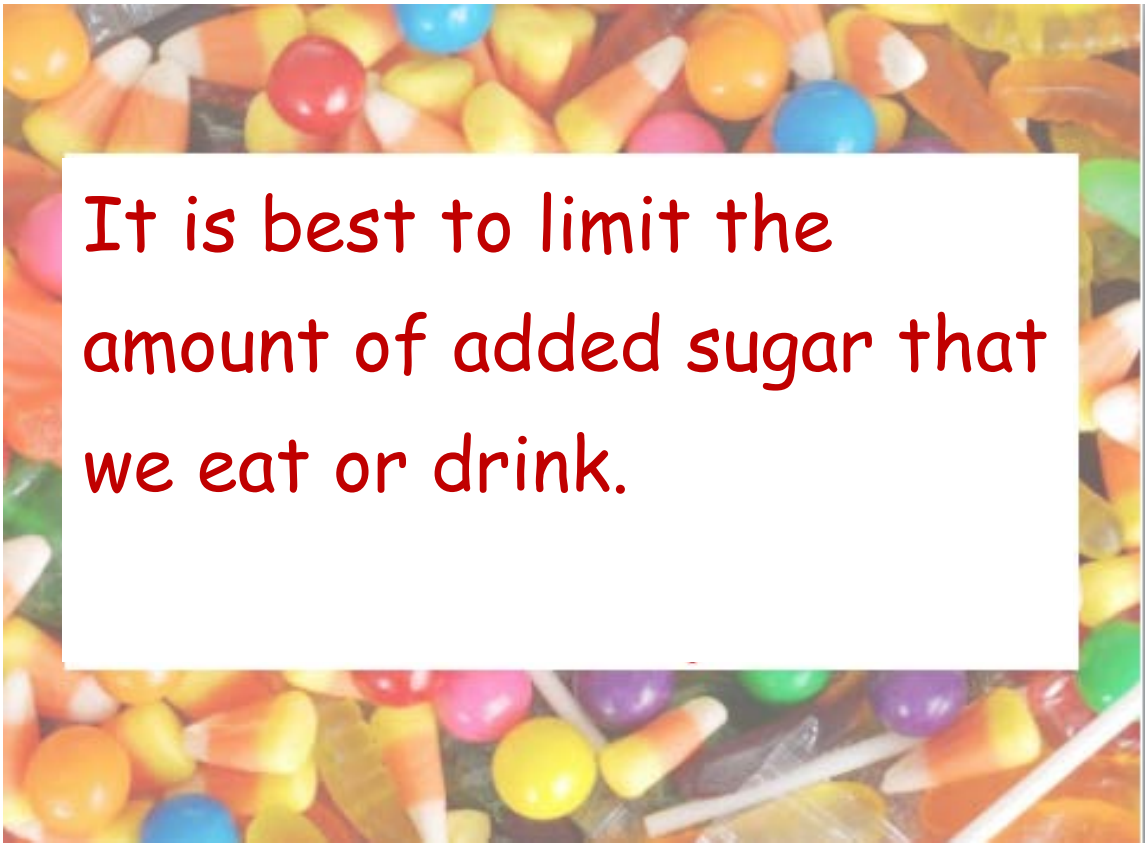

Fresh fruit, plain yogurt, and milk have naturally occurring sugar.

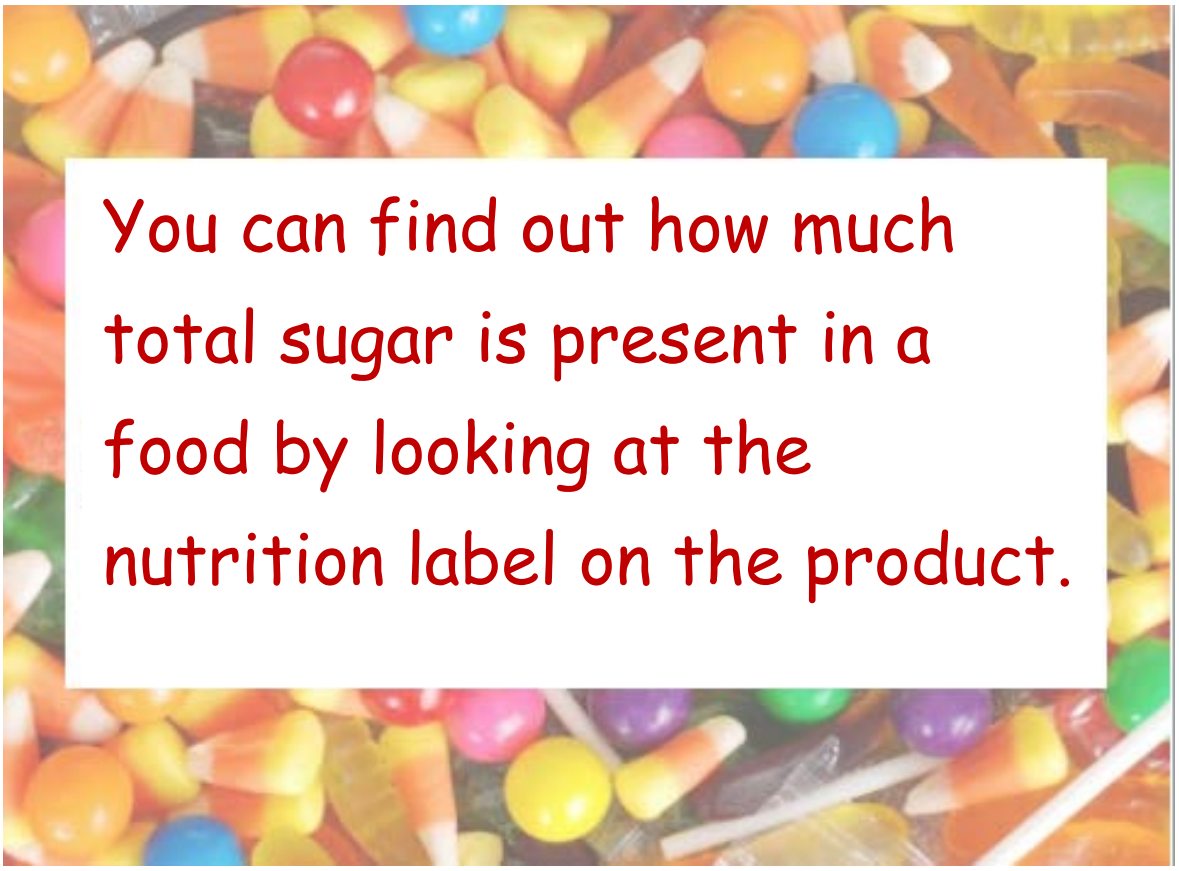

There are 6 grams of sugar in 1 teaspoon.

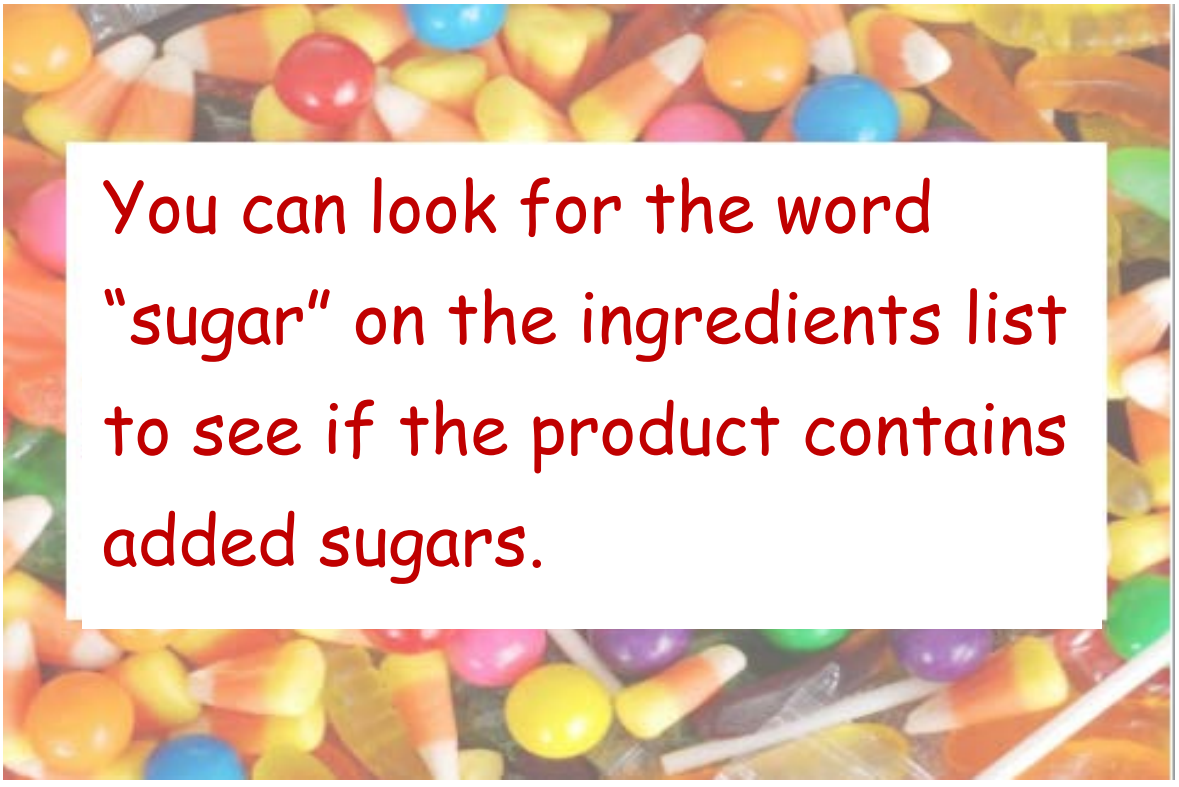

Although fruit naturally has sugar in it, eating fruit can help you get many nutrients that your growing body needs.


Many drinks including regular soda, sports drinks, and fruit drinks contain very little sugar.


Consuming excessive amounts of sugary beverages can cause cavities and can also cause poor health.


It is best to limit the amount of added sugar that we eat or drink.


You can find out how much total sugar is present in a food by looking at the nutrition label on the product.


You can look for the word "sugar" on the ingredients list to see if the product contains added sugars.

Can You Spot the Sugar?

Directions: Using the Nutrition Facts label and ingredients list that was given to you, determine if the product has natural or added sugars. If the product contains some added sugars, convert the amount of sugar into teaspoons (round up to the nearest whole number). Write your answers in the table. Complete the information for the rest of the foods when your classmates give their report.

Note: Sugar is listed on an Nutrition Facts label in grams. Remember from the lesson that there are 4 grams in 1 teaspoon of sugar. Look at the example below if you need help converting grams to teaspoons.

Ex. 37 grams of sugar = ____teaspoons x 4 grams of sugar per teaspoon

37 grams ÷ 4 grams of sugar per teaspoon = 9.25 = 10 teaspoons

Use the space below to answer the questions based on your product's label.

1. What is the name of your product? _____
2. Is the sugar in your product naturally occurring sugar or added sugar? _____
3. If it is added sugar, how many teaspoons of sugar are in your product? _____

	Is there added sugar? Yes or No	Teaspoons of sugar
Green Citrus Soda		
Cola		
Milk		
Fruit Punch		
Sports Drink		
Water		
Chocolate Chip Cookie		
Brownie		
Almonds (plain)		
Chocolate Caramel Peanut Nougat Bar		
Candy Coated Chewy Fruit Candy		
Popsicle		
Ice Cream		
Pudding		
Yogurt Tube		

Can You Spot the Sugar?

Directions: Using the Nutrition Facts label and ingredients list that was given to you, determine if the product has natural or added sugars. If the product contains some added sugars, convert the amount of sugar into teaspoons (round up to the nearest whole number). Write your answers in the table. Complete the information for the rest of the foods when your classmates give their report.

Note: Sugar is listed on an Nutrition Facts label in grams. Remember from the lesson that there are 4 grams in 1 teaspoon of sugar. Look at the example below if you need help converting grams to teaspoons.

Ex. 37 grams of sugar = ____teaspoons x 4 grams of sugar per teaspoon

37 grams ÷ 4 grams of sugar per teaspoon = 9.25 = 10 teaspoons

Use the space below to answer the questions based on your product's label.

1. What is the name of your product? _____
2. Is the sugar in your product naturally occurring sugar or added sugar? _____
3. If it is added sugar, how many teaspoons of sugar are in your product? _____

	Is there added sugar? Yes or No	Teaspoons of sugar
Green Citrus Soda		
Cola		
Milk		
Fruit Punch		
Sports Drink		
Water		
Chocolate Chip Cookie		
Brownie		
Almonds (plain)		
Chocolate Caramel Peanut Nougat Bar		
Candy Coated Chewy Fruit Candy		
Popsicle		
Ice Cream		
Pudding		
Yogurt Tube		

Can You Spot the Sugar?

Directions: Using the Nutrition Facts label and ingredients list that was given to you, determine if the product has natural or added sugars. If the product contains some added sugars, convert the amount of sugar into teaspoons (round up to the nearest whole number). Write your answers in the table. Complete the information for the rest of the foods when your classmates give their report.

Note: Sugar is listed on an Nutrition Facts label in grams. Remember from the lesson that there are 4 grams in 1 teaspoon of sugar. Look at the example below if you need help converting grams to teaspoons.

Ex. 37 grams of sugar = ____teaspoons x 4 grams of sugar per teaspoon

37 grams ÷ 4 grams of sugar per teaspoon = 9.25 = 10 teaspoons

Use the space below to answer the questions based on your product's label.

1. What is the name of your product? _____
2. Is the sugar in your product naturally occurring sugar or added sugar? _____
3. If it is added sugar, how many teaspoons of sugar are in your product? _____

	Is there added sugar? Yes or No	Teaspoons of sugar
Green Citrus Soda	Yes	46 ÷ 4 = 11.5 ~ **12**
Cola	Yes	39 ÷ 4 = 9.75 ~ **10**
Milk	No	**0**
Fruit Punch	Yes	26 ÷ 4 = 6.5 ~ **7**
Sports Drink	Yes	21 ÷ 4 = 5.25 ~ **6**
Water	No	**0**
Chocolate Chip Cookie	Yes	10 ÷ 4 = 2.5 ~ **3**
Brownie	Yes	12 ÷ 4 = **3**
Almonds (plain)	No	**0**
Chocolate Caramel Peanut Nougat Bar	Yes	29 ÷ 4 = 7.25 ~ **8**
Candy Coated Chewy Fruit Candy	Yes	47 ÷ 4 = 11.75 ~ **12**
Popsicle	Yes	8 ÷ 4 = **2**
Ice Cream	Yes	34 ÷ 4 = 8.5 ~ **9**
Pudding	Yes	34 ÷ 4 = 8.5 ~ **9**
Yogurt Tube	Yes	9 ÷ 4 = 2.25 ~ **3**

Can You Spot the Sugar?

Directions: Using the Nutrition Facts label and ingredients list that was given to you, determine if the product has natural or added sugars. If the product contains some added sugars, convert the amount of sugar into teaspoons (round up to the nearest whole number). Write your answers in the table. Complete the information for the rest of the foods when your classmates give their report.

Note: Sugar is listed on an Nutrition Facts label in grams. Remember from the lesson that there are 4 grams in 1 teaspoon of sugar. Look at the example below if you need help converting grams to teaspoons.

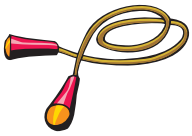
Ex. 37 grams of sugar = ____teaspoons x 4 grams of sugar per teaspoon

37 grams ÷ 4 grams of sugar per teaspoon = 9.25 = 10 teaspoons

Use the space below to answer the questions based on your product's label.

1. What is the name of your product? _____
2. Is the sugar in your product naturally occurring sugar or added sugar? _____
3. If it is added sugar, how many teaspoons of sugar are in your product? _____

	Is there added sugar? Yes or No	Teaspoons of sugar
Green Citrus Soda	Yes	46 ÷ 4 = 11.5 ~ **12**
Cola	Yes	39 ÷ 4 = 9.75 ~ **10**
Milk	No	**0**
Fruit Punch	Yes	26 ÷ 4 = 6.5 ~ **7**
Sports Drink	Yes	21 ÷ 4 = 5.25 ~ **6**
Water	No	**0**
Chocolate Chip Cookie	Yes	10 ÷ 4 = 2.5 ~ **3**
Brownie	Yes	12 ÷ 4 = **3**
Almonds (plain)	No	**0**
Chocolate Caramel Peanut Nougat Bar	Yes	29 ÷ 4 = 7.25 ~ **8**
Candy Coated Chewy Fruit Candy	Yes	47 ÷ 4 = 11.75 ~ **12**
Popsicle	Yes	8 ÷ 4 = **2**
Ice Cream	Yes	34 ÷ 4 = 8.5 ~ **9**
Pudding	Yes	34 ÷ 4 = 8.5 ~ **9**
Yogurt Tube	Yes	9 ÷ 4 = 2.25 ~ **3**



Physical Activity: Sugar Rush

PRIOR TO ACTIVITY

Create the "Dairy Food" and "Other Food" jug receptacles.

ACTIVITY DIRECTIONS

1. *For our next activity, I'm going to read statements about sugar that are either true or false, but this time, you're going to do some fun activities to tell me which statements you think are true and which you think are false.* Instruct students to stand about shoulder width apart so they have enough room to complete each of the activities.
2. *I am going to name two activities. You will do one activity if you think the statement I read is true and another activity if you think it is false. For example, I'll say, "Water has added sugar". Then I'll say "If the answer is true, stay standing, and if the answer is false, sit down." The answer is false so you should sit down.*
3. Begin by reviewing each of the activities they will perform for true and false statements. Then read one of the statements to the class. The students should perform the correct activity (answers are in parentheses). If the students do not perform the correct activity, review the statement using the discussion points included.
4. *Give me thumbs up if you understand and thumbs down if you do not understand.* Review the directions if any students give thumbs down.

TRUE/FALSE STATEMENTS:

1. Plain milk contains more added sugar than regular soda. (False)

ACTIVITY:

True= Make 5 big arm circles.

False= Jump up and down 5 times.

Discussion: Plain milk and cola both contain sugar, but if you remember from the activity we just did, plain milk does not contain added sugar. It only contains naturally occurring sugar.

2. Fresh fruits are a better snack choice, even though they contain natural sugar, because they are also packed with vitamins and minerals. (True)

ACTIVITY:

True= Do 10 high knees.

False= Do 10 push-ups.

Discussion: Fruits have naturally occurring sugar, but they also have vitamins and minerals that kids need for good health.

3. Sugar is listed in teaspoons on the Nutrition Facts panel. (False)

ACTIVITY:

True= Run in place for 15 seconds.

MATERIALS

- True/False statements worksheet, included

False= Dance for 15 seconds.

Discussion: Remember, sugar is listed as grams. You converted the number of grams to teaspoons during your activity by dividing by 4.

4. Plain milk has naturally occurring sugar. (True)

ACTIVITY:

True= Do 20 butt kicks.

False= Do 20 lunges.

Discussion: Milk has a naturally occurring sugar called lactose in it. It can have added sugars if you flavor it, but plain milk only has naturally occurring sugar.

5. If a product has added sugar, it will have the sugar listed in the ingredients list. (True)

ACTIVITY:

True= Balance on one foot for 25 seconds.

False= Stretch your arms up in the sky as high as you can for 25 seconds.

Discussion: Although it might not say "sugar" directly, if sugar was added, it will have the name of the sweetener on the ingredients list. For example, it may say "syrup" or "molasses."

6. A Popsicle is a better choice than ice cream. (True)

ACTIVITY:

True= Do 25 toe touches.

False= Do 25 jumping jacks.

Discussion: Recall from the lesson that popsicles have less sugar than ice cream.

7. Consuming too much sugar helps make your teeth strong. (False)

ACTIVITY:

True= Swim for 20 seconds.

False= Row a boat for 20 seconds.

Discussion: Consuming too much sugar can cause cavities which weaken your teeth.

8. Fresh fruits have added sugar. (False)

ACTIVITY:

True= Punch 15 times.

False= Jump rope 15 times.

Discussion: If the fruit is fresh it has only naturally occurring sugar and thus, no added sugar.

9. Added sugars and naturally occurring sugars mean the same thing. (False)

ACTIVITY:

True= Hop side to side 10 times.

False= Hop front to back 10 times.

Discussion: Added sugars and naturally occurring sugars are actually different. Naturally occurring sugar is sugar that is present in a food in its natural state. Added sugars are the sugars that are added to product while they're being made or prepared. Foods and drinks with naturally occurring sugars typically have other vitamins and nutrients and should be consumed more than those with added sugars.

10. Added sugars should be limited. (True)

ACTIVITY:

True= Do 5 side lunges.

False= Do 5 sit ups.

Discussion: It's best to limit the amount of added sugars if possible. Added sugars can cause cavities. Try replacing sugary foods or drinking drinks with those that are low in added sugar.

QUESTIONS FOR EVALUATION

1. Consuming too much added sugar can cause
   - **a. cavities**
   - b. bad eyesight
   - c. hair loss
   - d. dry skin
2. How many teaspoons of added sugar are in the following product?
   - **a. 16**
   - b. 0
   - c. 4
   - d. 5

Nutrition Facts

Serving Size 1

Amount Per Serving

Calories 130

	% Daily Values*
Total Fat 2g	**3%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 18g	**6%**
Dietary Fiber 0g	**0%**
Sugars 16g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

COMMON ADDED SUGARS:

Corn Syrup

Dextrose

Fructose

High-fructose Corn Syrup

Honey

Molasses

Nectars

Sucrose

Sugar

Green Citrus Soda

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving

Calories 170

	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 45mg	**2%**
Total Carbohydrate 46g	**15%**
Dietary Fiber 0g	**0%**
Sugars 46g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: carbonated water, high fructose corn syrup, concentrated orange juice, other natural flavors.

Cola

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving

Calories 140

	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 45mg	**2%**
Total Carbohydrate 39g	**13%**
Dietary Fiber 0g	**0%**
Sugars 39g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: carbonated water, high fructose corn syrup, caramel color, phosphoric acide, natural flavors

Milk

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving	
Calories 125	
	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 8mg	**3%**
Potassium 573mg	**16%**
Sodium 155mg	**6%**
Total Carbohydrate 18g	**6%**
Dietary Fiber 0g	**0%**
Sugars 18g	
Protein 12g	**24%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: fat-free milk, vitamin D

Fruit Punch

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving	
Calories 105	
	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 150mg	**6%**
Total Carbohydrate 27g	**9%**
Dietary Fiber 0g	**0%**
Sugars 26g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: water, high fructose corn syrup, concentrated juices, fruit purees, ascorbic acid, sucralose

Sports Drink

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving	
Calories 80	
	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Potassium 45mg	**1%**
Sodium 160mg	**7%**
Total Carbohydrate 21g	**7%**
Dietary Fiber 0g	**0%**
Sugars 21g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: water, sugar, dextrose, citric acid, natural flavor, salt, sodium citrate

Water

Nutrition Facts

Serving Size 12 oz
Serving Per Container 1

Amount Per Serving	
Calories 0	
	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 0g	**0%**
Dietary Fiber 0g	**0%**
Sugars 0g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: spring water

Chocolate Chip Cookie

Nutrition Facts

Serving Size 1 Cookie (26g)

Amount Per Serving

Calories 110	Calories from Fat 45
	% Daily Values*
Total Fat 5g	**8%**
Saturated Fat 3g	**15%**
Trans Fat 0g	
Cholesterol 10mg	**3%**
Sodium 120mg	**5%**
Total Carbohydrate 17g	**6%**
Dietary Fiber 1g	**4%**
Sugars 10g	
Protein 1g	**2%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: flour, butter, sugar, brown sugar, chocolate chips, eggs, baking soda, salt, vanilla extract

Brownie

Nutrition Facts

Serving Size 1 Brownie (28g)

Amount Per Serving

Calories 114	Calories from Fat 40
	% Daily Values*
Total Fat 5g	**8%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 5mg	**2%**
Sodium 88mg	**4%**
Total Carbohydrate 18g	**6%**
Dietary Fiber 0g	**0%**
Sugars 12g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: flour, sugar, cocoa powder, eggs, oil, water, baking powder, baking soda

Almonds

Nutrition Facts

Serving Size 23 Almonds (28g)

Amount Per Serving

Calories 162	Calories from Fat 117
	% Daily Values*
Total Fat 14g	**22%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 6g	**2%**
Dietary Fiber 3g	**12%**
Sugars 1g	
Protein 6g	**12%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: plain, unsalted almonds

Chocolate Caramel Peanut Nougat Bar

Nutrition Facts

Serving Size 1 Candy Bar (57g)

Amount Per Serving

Calories 271	Calories from Fat 112
	% Daily Values*
Total Fat 14g	**22%**
Saturated Fat 5g	**25%**
Trans Fat 0g	
Cholesterol 7mg	**2%**
Sodium 140mg	**6%**
Total Carbohydrate 35g	**12%**
Dietary Fiber 1g	**4%**
Sugars 29g	
Protein 4g	**8%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: sugar, cocoa butter, chocolate, skim milk, artificial flavor, peanuts, corn syrup

Candy Coated Chewy Fruit Candy

Nutrition Facts

Serving Size 1 Bag (62g)

Amount Per Serving

Calories 251	Calories from Fat 24
	% Daily Values*
Total Fat 3g	**5%**
Saturated Fat 3g	**15%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 9mg	**0%**
Total Carbohydrate 56g	**19%**
Dietary Fiber 0g	**0%**
Sugars 47g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: sugar, corn syrup, palm kernel oil, apple juice concentrate, citric acid, natural and artificial flavors

Popsicle

Nutrition Facts

Serving Size 1 Popsicle (53g)

Amount Per Serving

Calories 45

	% Daily Values*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 11g	**4%**
Dietary Fiber 0g	**0%**
Sugars 8g	
Protein 0g	**0%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: water, high fructose corn syrup , corn syrup, sugar, fruit juice, natural flavor

Ice Cream

Nutrition Facts

Serving Size 1 Cup

Amount Per Serving

Calories 286	Calories from Fat 126
	% Daily Values*
Total Fat 14g	**22%**
Saturated Fat 9g	**45%**
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 4g	
Cholesterol 44mg	**15%**
Potassium 328mg	**9%**
Sodium 100mg	**4%**
Total Carbohydrate 38g	**13%**
Dietary Fiber 1g	**4%**
Sugars 34g	
Protein 5g	**10%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: heavy cream, whole milk, sugar, vanilla extract

Pudding

Nutrition Facts

Serving Size 1 Cup

Amount Per Serving

Calories 340	Calories from Fat 81
	% Daily Values*
Total Fat 9g	**14%**
Saturated Fat 6g	**30%**
Trans Fat 1g	
Polyunsaturated Fat 2g	
Cholesterol 26mg	**9%**
Potassium 426mg	**12%**
Sodium 280mg	**12%**
Total Carbohydrate 56g	**19%**
Dietary Fiber 2g	**8%**
Sugars 34g	
Protein 9g	**18%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: whole milk, sugar, cocoa powder, chocolate chips, egg, corn starch

Yogurt Tube

Nutrition Facts

Serving Size 1 Yogurt Tube

Amount Per Serving

Calories 60	Calories from Fat 5
	% Daily Values*
Total Fat 0.5g	**1%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 4mg	**1%**
Potassium 90mg	**3%**
Sodium 30mg	**1%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 0g	**0%**
Sugars 9g	
Protein 2g	**4%**

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: low fat milk, sugar, modified corn starch, gelatin, natural flavor

LESSON 5

Experimenting with Exercise

Concept

Although most children consume enough protein on a daily basis, many have never learned what foods provide protein and where those foods come from. This lesson teaches children about the sources of protein foods and why protein foods are an important part of the diet.

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yum
Youth Understanding MyPlate

Background

INTRODUCTION

Childhood obesity is a severe problem in the United States. According to the Centers for Disease Control and Prevention (CDC), more than one third of children and adolescents today are overweight or obese (1). Obese children are also likely to remain obese as adults, which puts them at risk for health problems including heart disease, stroke, and several types of cancer (2).

Practicing a healthy lifestyle can reduce children's risk for many of these health problems. An important component of a healthy lifestyle is engaging in regular physical activity. This lesson will discuss the benefits of physical activity, the risks of sedentary behaviors like extended screen time, and screen time and physical activity recommendations for children.

SCREEN TIME

Sedentary pastimes, which include various media or screen time pursuits (e.g., watching TV and movies; texting or gaming using a cell phone, computer, video and/or handheld gaming device, etc.) have been identified as key factors contributing to childhood obesity. The American Academy of Pediatrics (AAP) recognizes the importance of decreasing screen time and recommends that children limit their total media time with entertainment media to no more than two hours of quality programming per day (3). In addition, the US Department of Agriculture (USDA) recommends that children get at least 60 minutes of physical activity on most or all days of the week (4).

The rationale for limiting excessive media viewing, even when it is educational in nature, is that screen time has the potential to lead to weight gain when it replaces time that would have been spent in more physically active pursuits. Laurson et al. (5) found that seven to 12 year old children who did not meet the USDA physical activity recommendations or exceeded the AAP screen time recommendations were three to four times more likely to be overweight compared to children who met both recommendations. Approximately 35 to 40% of the children who did not meet either of the recommendations were overweight compared to only 10% of boys and 20% of girls who met both recommendations.

Excessive screen time also has been linked with several issues unrelated to weight, including poor school performance (6), exposure to content inappropriate for age, and social issues, such as bullying (7). An easy way to decrease screen time is to replace it with different activities, such as participating in organized sports and outdoor activities like walking, biking, swimming and playing active games with friends and family. This, in turn, may improve children's health by helping to increase their physical activity.

DEFINING PHYSICAL ACTIVITY

Physical activity is broadly defined as movement of the body that requires a substantial increase in energy expenditure (4, 8). Examples of physical activity that increase heart rate include dancing, swimming, biking, and running. In contrast, low intensity activities in which there is movement that is not accompanied by an increase in heart rate do not count towards meeting physical activity recommendations. An example of a low intensity activity is walking casually (4). In order to gauge the intensity of an activity, an intensity scale can be used where 0 is sitting and 10 is very intense exercise. Moderate intensity activities should fall between 5 and 6, while vigorous activities should fall between 7 and 8.

When participating in vigorous activities, a child's heart will beat much faster than when the child is at rest (9). One way to estimate the intensity of an activity is the ability to talk while performing the physical activity. For example, while participating in moderate activity, one should be able to talk, but not sing. However, when participating in vigorous activity, one should only be able to say a few words before stopping to catch his or her breath (4). For health benefits, physical activity should be moderate or vigorous in intensity and increase heart rate. Examples of moderate and vigorous activities are listed in Table 1.

Adapted from ChooseMyPlate.gov (4)

HEALTH BENEFITS

Being physically active provides mental and physical health benefits. The majority of these benefits become most apparent in adulthood, because this is the time in which many health problems surface (8). However, risk factors and symptoms for chronic disease may begin as early as childhood, especially in obese children. In a recent cross-sectional analysis of US children between the ages of one and 17, it was found that many inflammatory markers related to obesity in adults such as C-reactive protein, which is measured in the blood, were strongly and positively associated with increasing weight status in children (10). This is a concern because chronic inflammation is detrimental to health, and when it develops early, it can cause

increasing damage to the cardiovascular system. This damage could then lead to severe heart problems, such as greater risk of heart attack. Physical activity can prevent damage by keeping the heart muscle strong. Moreover, since physical activity can encourage weight loss, it takes unnecessary strain off the heart. Physical activity also can lower blood pressure, reduce LDL, or "bad", cholesterol levels, and increase the level of HDL, the "good cholesterol". All of these factors have protective effects against heart disease (11).

Participating in physical activity provides many mental health benefits. Physical activity can reduce stress and feelings of depression while improving alertness and concentration (4, 12). Being active improves self-esteem, self-efficacy, and mood and promotes the feeling of overall wellness (4, 8). Physical activity is important to cognitive functioning and is related to academic achievement (8). Trudeau et al. (13) reviewed studies to examine the effect of physical activity and school sports on academic performance. Some of these studies suggested that taking 60 minutes from the academic curriculum for physical activity would not negatively affect academic performance. Other studies indicated that physical activity could increase school performance and cognition.

The health benefits of being physically active are plentiful. Physical activity increases fitness, muscle strength, endurance, flexibility, and posture. It builds and maintains bones, muscles, and joints (4). Physical activity is especially important in childhood for increasing bone mass because this is the perfect time to optimize bone density. Optimal bone density can decrease the risk for osteoporosis later in life (8).

Physical activity also is important for the development of the nervous, circulatory, and respiratory systems of the body (8). It can help with the development of a wide range of motor skills, which are defined as the skills needed to make purposeful movements necessary to perform a task (8). Motor skills include skills such as brushing teeth, walking, writing, lifting, carrying, and playing games and sports (8). Physical activity also is important for maintaining a healthy blood pressure (4) and is associated with a reduced risk for premature death and diseases such as heart disease, hypertension, type 2 diabetes, colon cancer and osteoporosis, which are linked with overweight and obesity (4, 8, 14).

Excess abdominal fatness, overweight, and low levels of physical activity are all associated with increased health risks (15). Physical activity can improve body weight and reduce fatness, abdominal adiposity, and health risks (4).

RECOMMENDATIONS

It is recommended that children and adolescents (ages 6 to 17) participate in at least 60 minutes of physical activity on all or most days of the week to maintain a healthy body weight (4, 8). This amount of activity does not have to be done all at once; rather, since children and adolescents are often active in short bursts of time, the bursts can be accumulated throughout the day to meet the physical activity needs (4). While all 60 minutes of activity do not need to happen at once, as many as half of the accumulated minutes of physical activity should be in bouts of at least 15 minutes for optimal health benefits (8).

Most activity should be at moderate and vigorous intensity levels (4); however, not all activities are created equal;. While aerobic activity is important for weight maintenance and heart health, it is important that children also include muscle-strengthening activities, like climbing, at least 3 days a week and bone-strengthening activities, like jumping, at least 3 days a week (4). These activities can be included in the daily requirement of 60 minutes. Rest periods should be included between these active periods, because brief periods of rest are important for normal growth and development in children (8). Although some extended periods of inactivity may be necessary for activities such as homework, the accumulation of long periods of inactivity of two hours or more are generally discouraged (8). Children should therefore be encouraged to take breaks and do a short burst of activity when sitting for long periods of time.

Supplementing Physical Activity

Although physical activity is very important for maintaining health, it is only one part of a

healthy lifestyle. For best results, physical activity should be coupled with a healthy diet, such as the one recommended by MyPlate. Because children grow at a rapid rate, they need the right nutrition to keep their bodies healthy while they are growing. Protein foods, which are represented by the color purple on MyPlate, play many different roles in the body, but they are best known for building healthy muscles (16). Healthy, strong muscles can help a child stay active and more successful when participating in physical activities like the ones mentioned above.

SUMMARY

Physical activity provides mental and physical health benefits for children. By reducing time spent in front of a screen, children should find it easy to incorporate physical activity into their lives. It is important to combine daily physical activity with a healthy diet that includes a variety of lean protein foods in order to support children's growing bodies.

This also can help children learn healthy habits that they can take with them into adulthood.

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FLORIDA STANDARDS

LEARNING ACTIVITY

LACC.4.W.3.7: The student will conduct short research projects that build knowledge through investigation of different aspects of a topic.

SC.4.N.1.1: The student will raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

HE.4.C.1.1: The student will identify the relationship between healthy behaviors and personal health.

PHYSICAL ACTIVITY

PE.4.L.3.1 Identify a moderate physical activity

PE.4.L.3.2 Identify a vigorous physical activity

PE.4.L.3.5 The student will implement at least one lifestyle behavior to increase physical activity.

4th Grade Lesson

LEARNING OBJECTIVES:

The students will:

- recognize the recommendations for screen time and physical activity.
- describe the difference between sedentary, moderate, and vigorous activity.

BEHAVIORAL OBJECTIVE

The students will:

- reduce their screen time to less than two hours per day.
- increase their physical activity to 60 minutes per day Questions to Test

EVALUATION QUESTIONS

1. It is recommended that children participate in at least _____ of physical activity and less than _____ of screen time every day.

   a. 1 hour; 2 hours

   b. 2 hours; 1 hour

   c. 1 ½ hours, 1 ½ hours

   d. 30 minutes; 30 minutes

2. Sedentary activity is one that involves:

   a. a lot of walking.

   b. a lot of sitting.

   c. a lot of running.

   d. a lot of dancing.

Learning Activity: What Makes Your Heart Beat?

PRIOR TO ACTIVITY

LessonEnlarge graph template to 24" X 36" if funds allow. If not, project the graph template onto a screen or dry erase board. If neither is available, draw a large graph on the board for the purpose of comparing results. Make enough copies of the lab notebook for each student in the class.

This lesson will require the instructor to take the pulse of one of the students. The following youtube video may be of assistance:

https://www.youtube.com/watch?v=Wda4MeCSYyE

ACTIVITY INTRODUCTION

Today we're going to investigate the effect of different kinds of activities on your body. Raise your hand if you like to watch TV? What are your favorite shows? Allow a few students to name their favorite shows. Who likes to play video games, computer games, or games on a tablet or phone? All of these examples are what is called "SCREEN TIME", because you spend your time in front of a…. Pause so students say, SCREEN. *Can anyone think of a problem associated with spending too much screen time?* Call on one or more students who have raised their hand. S*creen time can interfere with how much time you spend with your friends or family; it can affect your grades at school; and if you spend too much time in front of a screen it means you are not outside getting exercise! It is so important to limit screen time that doctors recommend no more than two hours of screen time per day. How many minutes is that? Yes, that's right, no more than 120 minutes.*

So why do we need to be physically active anyway? Some reasons are: Exercise, or physical activity, can increase your chance of living longer by helping to reduce your risk for developing certain diseases. It can help you sleep better at night, stay at a healthy weight, and help fight depression. Since it is so good for you, doctors recommend that you get at least 60 minutes of physical activity per day.

Physical activity also can help you build strong muscles, which can help you perform daily activities. But not all physical activities are created equal. Today, you will investigate exactly how different kinds of activities can affect a very important muscle: the heart.

ACTIVITY DIRECTIONS

For this activity, you will go through the lab notebook together as a class.

1. Start by instructing the students to write their name on the cover page of their lab notebook.
2. Ask the students to read along as you read the background information out loud, including the definitions at the bottom of page 1. Alternatively, if time permits, call on three students and ask each of them to read one of the definitions on the bottom on page 1.
3. *Today we are going to do an experiment that evaluates the effect of three different levels of physical activity on heart rate. But before we begin you need to make a prediction about which type of activity, sedentary, moderate, or vigorous, will change your resting heart rate the most.*

MATERIALS

- Timer or clock with a second hand
- Lab notebook, template provided
- Graph Template, provided Markers for plotting data on the graph
- Simple timers can be purchased at most superstores for about $5.00. Using the timer function on a mobile device is another option.
- Lab notebooks should be printed double sided, 2-sheets per page (select "print as notebook".) If printed in color, each notebook costs about $2.00. If printed in black and white, each notebook costs about $0.50.
- Printing the poster-sized graph (24"X 36") costs $3.00–$5.00. An alternative option is to draw a simple graph on the board or project the graph on a screen or dry erase board using a projector.
- A large marker costs $0.50–$1.00

4. *Please write your prediction, or hypothesis, on the line provided on page 2 of your lab notebook.*
5. *Next, we must test your hypothesis. Who would like to volunteer to have their heart rate measured*? Pick a volunteer. *First, we will test how sedentary activity affects our heart rates. When I start my timer, I want everyone to remain seated, and pretend to be doing a sedentary activity. You can pretend to watch TV or be playing your favorite video game. Ready? Begin!* Let the timer run for 30 seconds. When timer goes off, Go to the volunteer's desk and find their pulse. Count the number of beats you feel in 15 seconds (remember to use your timer), and share your finding with the class. Instruct the class to record the measurement in the results section of their lab notebook.
6. *Let's see what happens when we do an activity that is considered to be moderate. I need everyone to jog slowly in place. Remember, while doing a moderate activity, you should be able to talk, but not sing. Ready? Begin!* Let the timer run for 30 seconds. When timer goes off, ask the same volunteer to come up to get their pulse taken. Measure their pulse for 15 seconds, and then share with the class. Multiply by 4 to get BPM.
7. *Finally, we will test the effects of vigorous activity. For this part, I want everyone to run in place as fast as you can, bringing your knees to your chest. Remember, you should barely be able to talk while doing a vigorous activity! Ready? Begin!* Let the timer run for 30 seconds. Encourage students to run faster and bring their knees higher to make sure their heart rate increases. When the timer goes off, ask the same volunteer to come up to get their pulse taken. Measure their pulse for 15 seconds, and share your finding with the class. Multiply by 4 to get BPM.
8. *In order to visualize our results, I'm going to plot them on this graph. I'm going to line up each activity with the number of beats per minute we recorded. Plot the results on the graph, and connect the data points. What can we see from the graph? As the intensity of the activity rose, so did heart rate.* **Note for instructor:** It is possible that the graph will not show a distinct upward trend. This can be explained by human error. For example, the volunteer did not do the activity intensely enough, the instructor did not read the pulse correctly, the calculations could have been wrong. You may also mention to the class that most experiments are conducted with more than one person, since some people respond differently to exercise. This could also affect the results.
9. Review the conclusions and discussion questions together. Read each question aloud. If time permits, let the students record their answers in their notebook.
    a. Was your hypothesis correct? Yes or no.
    b. What happened when the intensity of the activity increased? Heart rate increased with increasing intensity.

c. List examples of activities that are sedentary: Watching TV, playing on the computer, doing homework. These types of activities are all similar to the sitting down portion of the experiment.

d. Some of these activities, like doing homework, are important. Others are not necessary. Why do you think it is important to limit some of these types of activities? We won't be working our heart, which can lead to increased risk for many problems, including obesity, heart disease, high blood pressure, or even diabetes.

e. List examples of activities that are similar to moderate or vigorous physical activity. Walking quickly or light jogging, biking, washing the car, and dancing are moderate physical activities. Running, playing basketball, and swimming laps are vigorous physical activities.

f. Why do you think it is important to increase these types of activities? Think of the other muscles in your body. What happens when you do a lot of pushups? Your arm and chest muscle will grow and become strong! The heart is also a muscle, and if it works harder, it can grow stronger. This has many health benefits.

g. Doctors recommend that you limit your screen time to less than _2_ hours per day.

h. What are your favorite physical activities? Each student will put something different.

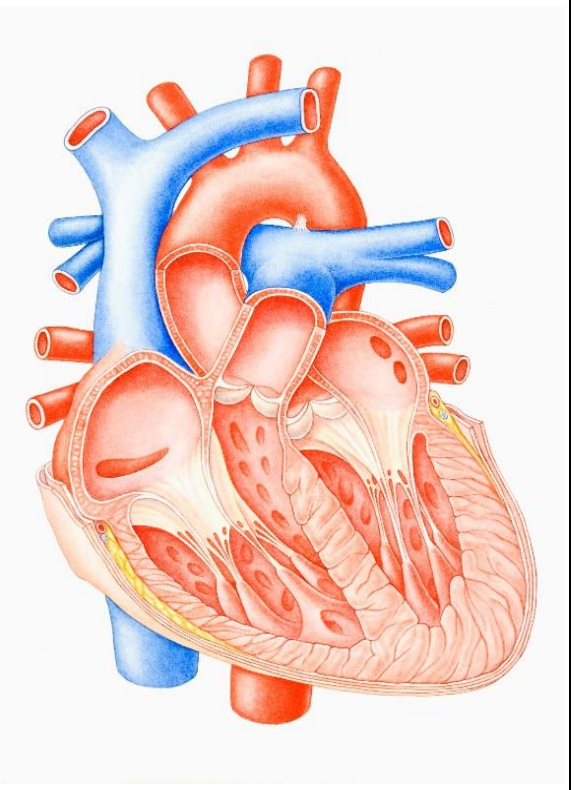
i. How many minutes per day should you do physical activities? At least 60 minutes per day.

If time allows, continue on to stretching activity.

Lab Notebook

Name:_____

Background



The human heart is one of the most important muscles in the body. It pumps blood to your cells with every beat. The blood carries oxygen and nutrients that your cells need to survive.

An easy way to measure how fast your heart is beating is to take your pulse. You can do this by lightly pressing two fingers on the side of your neck. You'll know you found the pulse when you feel a light beat under the skin.

This experiment will test how three types of activities affect heart rate. We will test the effect of:

Sedentary activity: an activity that involves a lot of sitting and little effort.

Moderate activity: an activity that needs some effort, but you can still talk while doing it.

Vigorous activity: an activity that is very intense! You can barely speak while doing it.

Question

Which type of activity, **sedentary**, **moderate**, or **vigorous**, will increase heart rate the most?

Hypothesis (my prediction)

_____activity will increase heart rate the most.

Procedures

1. Your teacher will measure the heart rate of a classmate after performing different activities. Everyone in the class will do the activities, but the results of the experiment will be based on one subject.

2. Pretend to watch TV for 30 seconds. When time is up, your teacher will count the number of heart beats felt in 15 seconds. Record the number of heart beats counted in 15 seconds in the results section. To convert this value to beats per minute, multiply by 4.

3. Next, jog slowly in place for 30 seconds. When time is up, your teacher will count the number of heart beats felt in 15 seconds. Record this number in the results section. Multiply by 4 to get the beats per minute.

4. Finally, run in place while bringing your knees to your chest for 30 seconds. When time is up, your teacher will count the number of heart beats felt in 15 seconds. Record this number in the results section. Multiply by 4 to get the beats per minute.

Results

1. **Sitting down**

   Pulse after the activity:_____beats in 15 seconds

   _____beats per minute

2. **Jog in place**

   Pulse after the exercise:_____beats in 15 seconds

   _____beats per minute

3. **Run in place, bringing knees to your chest**

   Pulse after the exercise:_____beats in 15 seconds

   _____beats per minute

Conclusions:

Was your hypothesis correct? _____

What happened to the heart rate when the level of intensity of each activity increased?

_____

_____

_____

_____

Discussion

List examples of activities that are sedentary.

_____

_____

_____

_____

Some of these of activities, like doing homework, are important. Others are not necessary. Why do you think it is important to limit some of these types of activities?

_____

_____

_____

_____

Discussion

List examples of activities that are similar to moderate or vigorous physical activity.

_____

_____

_____

_____

Why do you think it is important to increase these types of activities?

_____

_____

_____

_____

What is recommended?

Doctors recommend that you limit your screen time to less than _____hours per day.

Instead, be active!

What are your favorite physical activities?

_____

_____

_____

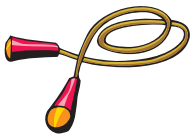
How many minutes per day should you do physical activities?

_____

Remember, your heart is a muscle and the more you work it out the stronger it will become!

Draw your favorite physical activity below!

The USDA and the University of Florida IFAS Extension are equal opportunity providers and employers. The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact 1-866-762-2237. TTY/TTD/FRS dial 711. This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP.



Physical Activity: Cool Down

ACTIVITY DIRECTIONS

Great job everyone! Since everyone participated in the physical activities today, we should all stretch? It's important to stretch after you work your muscles so they don't cramp up later.

Do the following stretches, holding each one for about 8

1. *For the back: Stretch arms up and lean to the left. Repeat and lean to the right.*
2. *For the legs: Stretch arms up, and slowly bend and reach for the toes. Hold, and slowly come back up. Repeat.*
3. *For each leg: Pull left knee up, and try to hold it up to your chest while balancing on one foot. Hold, then release. Repeat with right leg.*
4. *For the arms: Bend left arm and reach over your head, trying to touch your back. Gently push above elbow to intensify stretch. Hold, then release. Repeat with the right arm..*

Beats per Minute

	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
SEDENTARY																
MODERATE																
VIGOROUS																

Snack: Black Bean and Corn Salad with Baked Tortillas Chips

SERVINGS: 8

SERVING SIZE: ½ cup black bean and corn salad and 8 baked tortilla chips

INGREDIENTS

- 1–15.5 ounce can black beans
- 1–15.25 ounce can whole kernel fiesta corn (or sweet corn)
- 1–8 ounce jar mild salsa
- 1 tablespoon chopped cilantro
- 64 baked tortilla chips

EQUIPMENT

- Cutting board
- Chef's knife (or other suitable sharp knife)
- Can opener
- Colander
- 2, 2 cup plastic containers with lids
- 1 ½ quart-mixing bowl
- Large spoon for mixing
- Tablespoon measuring spoon
- 7" paper plates for serving

DIRECTIONS

1. In advance, thoroughly wash the cilantro. Shake off the excess water and pat dry with a paper towel. Chop enough cilantro to yield 1 tablespoon.
2. Open the can of black beans. Drain and rinse beans in the colander. Store in the refrigerator in a sealed plastic

(continued on next page)

NUTRITIONAL ANALYSIS PER SERVING

Nutrition Facts

Serving Size 1/2 cups (1g)
Serving Per Container 8

Amount Per Serving	
Calories 145	Calories from Fat 20
	% Daily Values*
Total Fat 1.4g	**2%**
Saturated Fat 0.3g	**2%**
Trans Fat 0g	
Polyunsaturated Fat 0.3g	
Monounsaturated Fat 0.1g	
Cholesterol 0mg	**0%**
Potassium 260mg	**7%**
Sodium 368mg	**15%**
Total Carbohydrate 27g	**9%**
Dietary Fiber 7g	**28%**
Sugars 2g	
Protein 6g	**12%**
Vitamin A 3% •	Vitamin C 5%
Iron 8% •	Folate 25%

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

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

container. Repeat the same process with the corn.

3. In the classroom, add the beans, corn, salsa and cilantro to the mixing bowl. Stir to mix well.
4. Using a measuring spoon, put 2 tablespoons of the recipe on each plate, along with 2 baked tortilla chips.

COMMONLY ASKED QUESTIONS:

Q: Why is it important for children to eat a variety of foods from the Protein Foods group?

A: Each food from the Protein Foods group provides different amounts of nutrients that your body needs. If you eat the same kind of food all of the time, then your body gets a lot of some nutrients, but may be lacking in others nutrients. Eating a variety of protein foods gives your body lots of different types of nutrients, which keeps you healthy.

Q: Why is it important for children to eat the recommended amounts of protein?

A: Children are growing every day at a fast rate, so their bodies need protein to support healthy development and growth.

Q: What amount of protein foods is recommended for children to eat every day?

A: MyPlate recommends that children between the ages of four and eight consume four ounces of food from the Protein Foods group every day.

Q: Can vegetarians eat enough protein to stay healthy?

A: Vegetarians that eat a variety of beans, peas, nuts, nut butters, seeds and soy products can get plenty of protein in their diets. Vegetarian protein sources may lack certain nutrients and amino acids, so a vegetarian diet with a variety and adequate amounts of protein foods is important to maintain good health.

LESSON 6

Create Your Plate

Concept

Practicing portion control is an important factor in maintaining a healthy weight. Knowing the recommended amounts of foods to eat from each of the MyPlate food groups and planning meals that meet these recommendations are important steps in helping children know what and how much to eat for good health. Developing good eating habits early in life is important, especially because habits developed early in life often carry through into adulthood. This lesson reinforces the recommended amounts of foods to eat from each of the MyPlate food groups. It also provides them with the opportunity to plan meals that meet these recommended amounts.

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yum
Youth Understanding MyPlate

Background

INTRODUCTION

Obesity has almost tripled in children and adolescents during the past 30 years (1). According to the Centers for Disease Control and Prevention, an increase in weight can result from an imbalance in calories (2). Some of the immediate health consequences of overweight and obesity in youth include high blood pressure or cholesterol, increased risk for type 2 diabetes, as well as risk for bone and joint problems, sleep apnea, and poor self-esteem (3). Overweight or obese children are more likely to be overweight in adulthood and therefore are at greater risk for issues related to overweight and obesity such as heart disease, type 2 diabetes, stroke, cancer, and osteoarthritis (3).

This increase in childhood overweight/obesity may be due in part to changes in our perception of what constitutes a "normal" portion size (4). Over the past 20 years, portions have doubled or tripled in American restaurants (4). Portions have become so distorted that it is difficult for one to even recognize what a normal portion looks like. For example, twenty years ago, an average bagel was 3 inches in diameter and contained about 140 calories (5). In comparison, the average size of a bagel sold in stores and restaurants today is 6 inches in diameter, provides about 350 calories, and counts as about half of the daily grain intake for most Americans (5).

RECOMMENDED AMOUNTS

The United States Department of Agriculture's MyPlate provides guidance on the recommended amounts of foods to consume from each food group for boys and girls of different ages.

The following table lists the recommended amount of food from each of the MyPlate food groups that children ages 9–13 should consume every day (7):

	BOYS	GIRLS
GRAINS	6 ounces	5 ounces
VEGETABLES	2 ½ cups	2 cups
FRUITS	1 ½ cups	1 ½ cups
DAIRY	3 cups	3 cups
PROTEIN FOODS	5 ounces	5 ounces

SUMMARY

The increase in portion sizes over the last 30 years may be one of the factors that has played a role in the overweight/obesity epidemic in the United States. Knowing the recommended amounts of foods to consume from each food group and limiting intake to the amount of food needed to meet, but not exceed these recommendations, may help children manage their weight and reduce their risk for overweight/obesity-related health problems. Knowing how much they need and planning ways to meet their needs through the meals and snacks they consume may help youth choose more appropriate portions, which could help them meet their nutritional needs while maintaining a healthy body weight.

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2. Centers for Disease Control. What Causes Overweight and Obesity? Available at: http://www.cdc.gov/obesity/adult/causes/index.html. Accessed May 26, 2014.
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6. National Center for Chronic Disease Prevention and Health Promotion; Division of Nutrition and Physical Activity. Do Increased Portion Sizes Affect How Much We Eat? *Research to Practice Series.* Available at: http://www.cdc.gov/nccdphp/dnpa/nutrition/pdf/portion_size_research.pdf. Accessed May 26, 2014.
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FLORIDA STANDARDS

HEALTH EDUCATION

NGSSS: Health Education (2008 HE.4.B.3.3- Itemize healthy options to health-related issues or problems. The students will distribute foods from each of the various food groups into daily meals and snacks. Selecting the amount of food from each food group that equals the daily-recommended amount will help students recognize the amount and types of foods they need every day.

NGSSS: Physical Education (2013) o PE.4.L.4.7- Understand appropriate portion size. The concept of the lesson is to teach children about portion control. This lesson focuses on the reinforcement of the MyPlate recommendations for the amounts and types of foods to eat and how to plan meals and snacks that meet these recommendations.

NGSSS: Physical Education (2008) o PE.4.L.1.1- Participate in moderate to vigorous physical activity (MVPA) on a daily basis. The physical activity portion of this lesson has the children participate in moderate physical activity.

PE.4.L.2.13- Understand appropriate portion size. The concept of the lesson is to teach children about portion control. This lesson focuses on the reinforcement of the MyPlate recommended amounts and how children can portion them out through the day.

NGSSS: Speech & Auditory Skills/Training (2013) o SA.PK12. MD.4.1- Listen to, retrieve, and

4th Grade Lesson

LEARNING OBJECTIVES

The students will:

- list the recommended amounts of food they should eat from each of the MyPlate food groups.
- separate their recommended amounts of each MyPlate food group into meals and snacks using a provided food list.

BEHAVIORAL OBJECTIVE

The students will:

- select amounts of food for their daily meals and snacks that are consistent with their MyPlate recommendations.

imitate speech and spoken language . During the physical activity of this lesson, the children are required to act out various action verbs while listening to a story.

NGSSS: Unique Skills (2013) o US.PK12.CM.2.8- Participate effectively in large and small group conversations • During this lesson, the students will communicate with the whole class. They will be asked to share their ideas as well as give examples of their work.

US.PK12.IF.3.1a- Complete routines and tasks according to instructions and expectations.During the lesson the students will be given instructions and will then be given time to complete the activities and tasks.

Learning Activity: Knowing Your Needs

MATERIALS

- How Much Do I Need worksheet, provided (2 versions, one for girls and one for boys)
- MyPlate poster
- Four food grain equivalent pictures

PRIOR TO ACTIVITY

Make enough copies (double sided) of the "How Much Do I Need" worksheet for each student. There are two versions of the "How Much Do I Need" worksheet, one for boys and one for girls. Make enough copies based on the number of girls and boys in your class. Hang the MyPlate poster at the front of the classroom. Print the food grain equivalent pictures on 8.5" x 11" paper.

ACTIVITY INTRODUCTION

Today we will learn about the amount of foods you should eat from each of the MyPlate food groups every day and how you can make a menu that includes the right amount of food from each group to help you grow and stay healthy. Having this skill will help you practice eating the correct amounts of foods at meals and snacks. Eating the recommended amounts of foods from each food group is important for good health.

ACTIVITY DIRECTIONS

1. *As a class, let's try to remember the five food groups according to MyPlate.* Allow students to call out answers and point to the food groups on the MyPlate poster. *Great job! The five food groups are the Grains, Vegetables, Fruits, Dairy, and Protein Foods groups. MyPlate also recommends certain amounts of each food group that you should eat every day to meet your nutritional needs. Let's review those now.*
2. Distribute one copy of the How Much Do I Need? worksheet to each student being sure to give the correct version of the worksheet to girls and boys. *Let's start by reviewing the recommended amounts of foods to eat from each food group. Look at the side of the worksheet that says, "How much do I need?" Look at the table. Who can tell me how much boys need every day from the Grains group? Call on a boy. How about girls? Call on a girl. Correct, boys need six ounces per day and girls need five ounces from the Grains Group. How much do boys need from the Vegetables group?* Allow one boy to answer. *Yes, that's correct. The amounts are slightly different for boys and girls, so who can tell me how much girls your age need?* Allow one girl to answer. *Wonderful, boys need two and a half cups and girls need two cups every day. For the rest of the food groups everyone requires the same amount. According to your chart, what is the recommended amount of fruits?* Allow one student to answer. *Great! Boys and girls need 1½ cups of fruits every day. Just like fruits, all of you need the same amount of Dairy Group foods. Can someone please tell the class the recommended intake for Dairy Group foods?* Allow student to answer. *Exactly! MyPlate recommends that we consume three cups of Dairy Group foods every day. The last group is the Protein Foods Group. What is the recommended amount to eat from the Protein Foods group?* Allow student to answer. *Very good! You need five ounces of Protein Foods every day.*
3. *Look for the MyPlate picture at the bottom of your worksheet. MyPlate shows how the foods should be distributed on your plate. For example, how much of your plate should be filled with fruits and vegetables?* Call on a student to give the answer.

The answer is: "half". *Grains, especially whole grains, should fill a little more than a quarter of your plate, and Protein Foods, especially lean sources of protein, should cover less than one quarter of your plate. And don't forget your spot for Dairy group foods. Remember, MyPlate recommends 3 servings of Dairy group foods, especially low-fat and fat-free dairy foods, every day.*

4. *MyPlate can help us picture how to distribute the food on our plate at meals, but we still need to think how to make sure that we get the right amount of food from each of the food groups throughout the day For example, girls need five ounces of grains every day. Let's say we have a girl who ate a 6 inch bagel at breakfast,* show a picture of bagel to the students and post in front of classroom, a sandwich with 2 slices of bread at lunch, show a picture of sandwich to students and post in front of classroom, 3 cups of popcorn for a snack, show picture of popcorn to students and post in front of classroom, and one cup of brown rice at dinner, show picture of brown rice to students and post in front of classroom.

5. *As we can see on the pictures, the bagel is equal to 4 ounces of grain, the bread from the sandwich equals 2 ounces of grain, the popcorn equals 1 ounce and the brown rice equals 2 ounces, point to pictures you have posted. How many ounces of Grain group foods has she eaten in one day?* Allow one student to answer. *Perfect! She has eaten 9.How many does she need?* Call on another student. *That's right, she needs 5 ounces. Did she eat more or less than she needs?* Allow class to respond. *Right again! She ate 4 ounces more than what she needed. What changes could she make to get the right amount of Grains Group foods if she wanted to have at least one serving of grains at each meal?* Show the students an example of how to achieve this. For example, eat half of the bagel, a sandwich made with 1 slice of bread, 3 cups of popcorn and ½ cup of brown rice. If time permits, entertain examples suggested by the students. Write their ideas on the board. Accept all ideas that equal 5 ounces. Make the point that there are lots of ways to achieve this, and that what is important is that they choose amounts that add up to the total they need every day without going over that amount.

6. *If this concept makes sense, please give me a thumbs up, if not, a thumbs down.* Allow students to put their thumbs up or down, and take a glance around the room. *It's okay if this isn't completely clear. Our next activity should help you get a better understanding of how to ensure that you eat the total amount of food from each food group each day to equal the recommended amounts.*

7. If possible, show the backside of the worksheet on the Smartboard. *On the backside of your worksheet you will see a table. The table has 5 columns. There is a column for the Grains group, the Vegetable group, the Fruit group, the Dairy group, and the Proteins foods food group. You will use this table to plan your meals and snacks for the day. Your job is to select the right amount of foods from each food group to meet your daily needs. For example, boys and girls need 1½ cups of fruits a day. I see lots of fruits that I like, but I need to make sure that I don't choose more than I need, so I decide to circle the following choices,* circle the choices on the Smartboard as you say them out loud; if no board is available, circle the choices on your own worksheet in front of the class: ½ cup sliced bananas, ¼ cup blueberries, ½ cup 100% fruit juice, and ¼ cup chopped pineapple. *These four food items equal 1½ cups, which is the recommended amount of fruit for each day.*

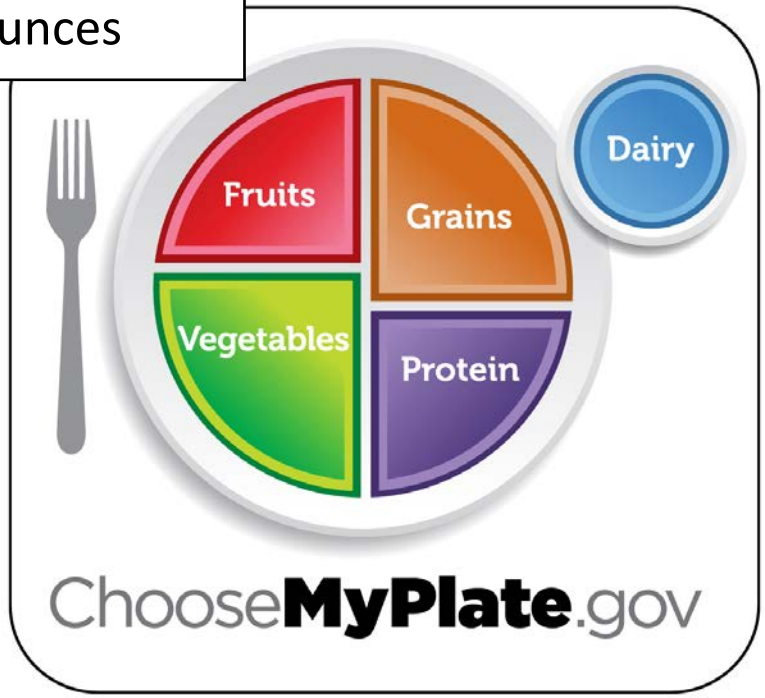
You will need to do this for each food group. When you are finished, ask a partner to check your work. If you need my help, please raise your hand.

8. *Now that you have figured out examples of the types and amounts of food that meet your daily needs, you need to think about how you will space these foods throughout the day. Which foods would you like to eat for breakfast? lunch? dinner? and snack? Look for the small boxes next to each of the foods you selected. Look at each of your choices and decide when you want to eat them. Write the letter B in the box if you want it for breakfast, L for lunch, D for dinner, or S for snack. So, from our previous example, I would put the letter L in the box that says ½ cup bananas, as well as in the box that says ¼ cup of blueberries because I would like to eat those fruits at lunch. I would then put a B in the box that says ½ cup 100% fruit juice because I want to drink that with my breakfast. Finally, I would put the letter S in the box that says ¼ cup chopped pineapple because I think that would make a good snack.* Add the letters to the boxes on the Smartboard as you are giving the directions to the class. Do this for each food group. *When you are finished, you will have a menu for the entire day that meets all of your MyPlate recommendations without eating more than you need. It means that you have selected the right amount of foods from each of the five MyPlate food groups. Remember, you don't have to eat every food group at every meal or snack, just make sure that you eat the right amount of food from each of the food groups every day. Does anyone have any questions?* Allow students to ask questions if they are confused. *Wonderful, let's begin! Give the students 5 minutes to finish or until everyone seems done before continuing.*
9. If time allows. *Would anyone like to share their work?* Let a few students share the foods they circled and how they chose to distribute them for meals and snacks.
10. *We have reviewed the recommended amounts of food to eat from each food group and learned how we can plan our meals to make sure that we eat the right amount of food from each of the food groups every day*.

Name:_____

How much do I need?

	Boys	Girls
Grains	6 ounces	5 ounces
Vegetables	2½ cups	2 cups
Fruit	1½ cups	1½ cups
Dairy	3 cups	3 cups
Protein Foods	5 ounces	5 ounces



Circle enough foods from each list below to meet the daily recommended amounts for each of the MyPlate food groups given at the bottom of the column.

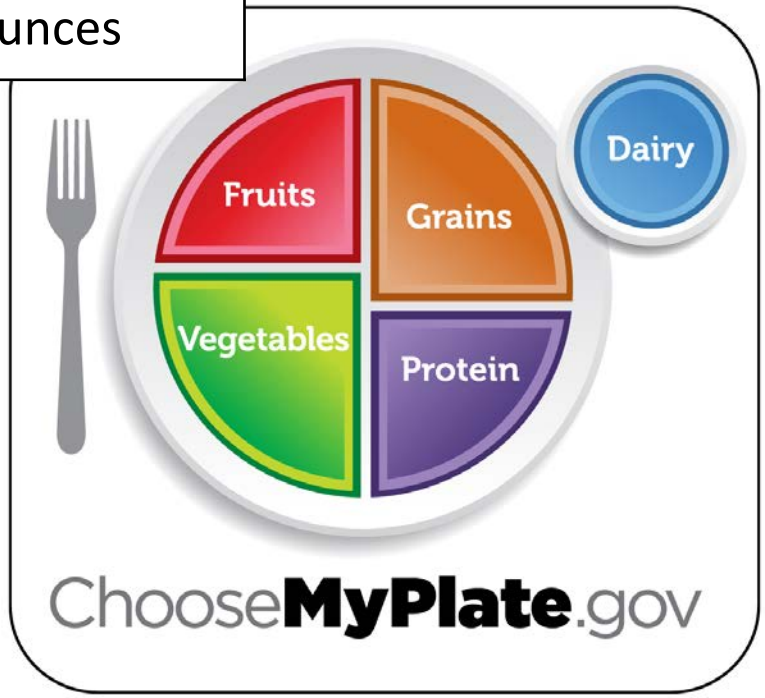
Boys

Grains	Vegetables	Fruit	Dairy	Protein Foods
1 ounce whole wheat pasta	1 cup chopped broccoli	½ cup sliced bananas	1 cup low fat milk	2 ounces chicken breast
2 ounces whole wheat bread	½ cups cooked spinach	¼ cup blueberries	½ cup low fat yogurt	½ ounce almonds
1 ounce popcorn	1 cups vegetable juice	½ cup chopped apples	¼ cup shredded cheese	1 ounce black beans
2 ounces pancakes	1 cup sweet potato squares	½ cup chopped kiwi	1 cup calcium fortified soy milk	2 ounces salmon
1 ounce biscuit	½ cup cooked corn	¼ cup raspberries	½ cup low fat cottage cheese	½ ounce peanut butter
2 ounces tortillas	½ cup green beans	½ cup 100% fruit juice	¼ cup low fat ice cream	1 ounce eggs
1 ounce brown rice	1 cup chopped tomatoes	¼ cup chopped pineapple	1 cup low fat pudding	2 ounces tofu
6 ounces	**2½ cups**	**1½ cups**	**3 cups**	**5 ounces**

Name:_____

How much do I need?

	Boys	Girls
Grains	6 ounces	5 ounces
Vegetables	2½ cups	2 cups
Fruit	1½ cups	1½ cups
Dairy	3 cups	3 cups
Protein Foods	5 ounces	5 ounces



Circle enough foods from each list below to meet the daily recommended amounts for each of the MyPlate food groups given at the bottom of the column.

Girls

Grains	Vegetables	Fruit	Dairy	Protein Foods
1 ounce whole wheat pasta	1 cup chopped broccoli	½ cup sliced bananas	1 cup low fat milk	2 ounces chicken breast
2 ounces whole wheat bread	½ cups cooked spinach	¼ cup blueberries	½ cup low fat yogurt	½ ounce almonds
1 ounce popcorn	1 cups vegetable juice	½ cup chopped apples	¼ cup shredded cheese	1 ounce black beans
2 ounces pancakes	1 cup sweet potato squares	½ cup chopped kiwi	1 cup calcium fortified soy milk	2 ounces salmon
1 ounce biscuit	½ cup cooked corn	¼ cup raspberries	½ cup low fat cottage cheese	½ ounce peanut butter
2 ounces tortillas	½ cup green beans	½ cup 100% fruit juice	¼ cup low fat ice cream	1 ounce eggs
1 ounce brown rice	1 cup chopped tomatoes	¼ cup chopped pineapple	1 cup low fat pudding	2 ounces tofu
5 ounces	**2 cups**	**1½ cups**	**3 cups**	**5 ounces**

6-inch bagel

=

4 ounces of grains

2 slices of bread

=

2 ounces of grains

3 cups of popcorn

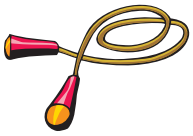
=

1 ounce of grains

1 cup of brown rice

=

2 ounces of grains



Physical Activity: Action Amounts

PRIOR TO ACTIVITY

Read and become familiar with the story below, paying special attention to the bolded words.

ACTIVITY INTRODUCTION

Now that we have reviewed the recommended amounts of foods to eat from each of the MyPlate food groups and planned a menu that meets the recommended intakes of foods from each group, I think it's time to get up and move around. For this activity, I am going to read a story about two fourth graders named Sally and Johnny. As I read the story, every time you hear an action verb and hear me pause, you will need to act it out. For example, if you hear me say that Sally skipped to school, you will need to skip in place until you hear me read the next action verb. Remember that all of the actions need to be done in place.

ACTIVITY DIRECTIONS

1. Read the following story aloud to the class.
2. When you come across a bolded word, be sure to emphasize it by saying it loudly and pausing after to ensure the students are acting out the correct verb.
3. Be sure to read slowly and clearly, so the students hear each word.
4. Make sure each student continues to act out each word until the next is stated.

Sally wakes up for her favorite day of the week, Monday. As she gets out of bed, Sally does her daily morning stretches. She **reaches to the sky and touches her toes**, then rolls out her wrists and ankles. After stretching, Sally continues with her morning routine. Sally wants to wear her favorite blue shirt today. Unfortunately she can't find it, so she **reaches high** to look in her closet and **squats down low** to look in the drawers. When she finally finds her blue shirt, she **wiggles her body** to get it over her head and throws on a pair of jeans.

Sally **skips** downstairs for breakfast. She wants toast with peanut butter and banana. She knows that she needs to eat a certain amount of food from each of the MyPlate food groups every day. For breakfast she has one slice of whole wheat bread, which counts as an ounce of grains, so she is on her way to the five ounces that is recommended for her every day. The peanut butter that Sally wants is on a very high shelf, so she must **reach and stretch** on her tippy toes to get it. Once she reaches the peanut butter, Sally spreads a tablespoon of peanut butter, which counts as one ounce of a Protein food. She knows that protein foods can make her muscles strong, so Sally pretends to be a body builder and ***flexes her arm muscles***. Sally then slices ½ cup of a banana to put on her toast, knowing that she needs 1½ cups of fruit every day.

Uh-oh, Sally sees the bus passing by her house. She **runs** out the door and chases the bus down the street. When she finally catches up, she is out of breath and grateful that she gets to sit the rest of the way to school. Sally sits next to her best friend Johnny. Johnny is in another class that is learning about MyPlate. He has

MATERIALS

- None

a quiz today so Sally helps Johnny study. While quizzing Johnny, Sally got a little confused, because he needs 6 ounces of grains every day and 2½ cups of vegetables, while she needs 5 ounces of grains and 2 cups of vegetables. She remembers this was a trick question on her quiz last week, because MyPlate recommends different amounts of foods from these two food groups for boys and girls. Just as the bus was about to pull into school, the kindergarteners sitting behind Sally and Johnny started **kicking** the back of their seat. They decided to not say anything because they were almost at school and it wouldn't last very long.

After a few morning lessons, it's time for a mid-morning snack. Sally packed low-fat blueberry yogurt and a small apple for her snack. Between her yogurt and apple, Sally has added one cup of dairy and one cup of fruit to her day. Sally sees rain through the window and is glad she is wearing her rain boots; she is looking forward to **hopping** in the puddles after school. It's now Sally's favorite time of the day, lunchtime. Sally sits with Johnny, so she can see how his quiz went. To practice what he has learned about MyPlate, Johnny analyzes Sally's lunch. Johnny noted that her ham and cheese sandwich on whole wheat bread has two ounces of grains, two ounces of protein, and enough cheese to count as one cup of dairy. She also has ½ cup of chopped carrots for some vegetables. Both Johnny and Sally needed more dairy with their lunch so Johnny **marches** up to the lunch line and buys them each one cup of low-fat milk, adding another cup of dairy to each of their lunches. After lunch, Johnny informs his friend that Sally has met her recommended amount of 3 cups of dairy per day.

After PE, it's time to go home. Sally does some homework and then she spends time **jumping rope** with her friends. For dinner tonight, Sally serves herself two ounces of salmon to get some protein, some brown rice, a biscuit, half a cup of chopped asparagus and chopped lettuce. Tonight, Sally can't decide where she wants to sit, so **she walks around in circles** until she finds the perfect spot. She knew that if Johnny was over for dinner, he would tell her that her dinner consisted of two ounces of protein foods and that she has met her goal of five for the day. He would also say that her rice and biscuit add up to two ounces of grains and her asparagus and lettuce count as 1½ cups of vegetables. Sally knows that she has met all of her recommended amounts of each food group and smiles.

After dinner, Sally helps wash the dishes then she packs her lunch for the next day, **reaching high and low** around the kitchen to find healthy choices she likes to eat. When she finishes packing her lunch, Sally **plays a game of Wii tennis** with her brother. After the game is finished, Sally and her brother **sit down** to catch their breath.

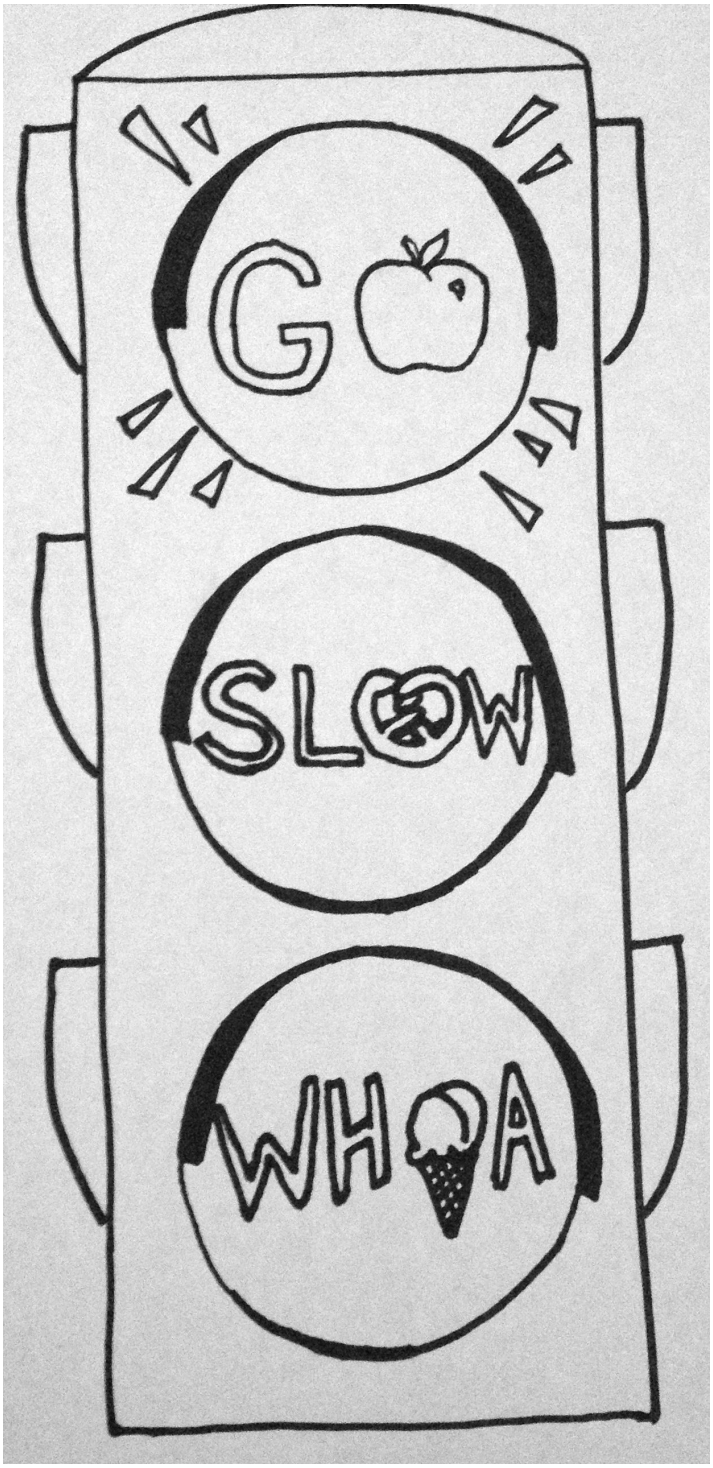
EVALUATION STRATEGY

1. According to MyPlate, I need _____ cups of fruit per day
   a. 1
   b. 1½
   c. 2
   d. 2½
2. If I had one ounce of protein at lunch and two at dinner, how much more would I need to meet the MyPlate recommended amount?
   a. 0 ounces
   b. 1 ounce
   c. 2 ounces
   d. 3 ounces

MATCH PACKETS
GRADE 4

Youth Understanding MyPlate

Name _____



The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact 1-866-762-2237. TTY/TTD/FRS dial 711. This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP.

Name _____

Why I Like To GO!

By: Sam the Stoplight

Read the paragraph below and list Sam's opinions and the facts he uses to support them.

GO foods are the best kinds of foods. They have lots of nutrients that make my body healthy and help me grow big and strong. I like to eat GO foods at every meal of the day - whole grain cereal for breakfast; apples at lunch; and baked chicken for dinner! GO foods make all of my meals delicious.

My favorite thing about GO foods is that they have lots of nutrients, but they are not usually processed. This means that they don't have a lot of sugar or fat added to them like SLOW and WHOA foods. I don't like WHOA foods at all. They may taste good, but not as good as GO foods, and they're not as healthy either!

When my parents ask what I want to pack for lunch, I always remind them that I want the healthiest foods. My parents love to GO too, so they pack a peanut butter sandwich on whole grain bread for my lunch. When I eat school lunch, I always make sure to eat the delicious vegetables and whole grain breads.

What is Sam's OPINION about GO foods?

_____

_____

What three FACTS does Sam use to support his OPINION?

_____

_____

_____

_____

_____

Name _____

GO with Fractions

It is best when GO foods take up most of your plate. Draw a picture that represents each of the fractions below. If the fraction is bigger or equal to ½, circle the fraction and write a GO food on the line next to the fraction.

$\frac{3}{8}$ _____ $\frac{1}{8}$ _____

$\frac{2}{9}$ _____ $\frac{1}{2}$ _____

$\frac{4}{7}$ _____ $\frac{5}{11}$ _____

$\frac{3}{4}$ _____ $\frac{4}{6}$ _____

$\frac{5}{8}$ _____ $\frac{2}{3}$ _____

$\frac{1}{4}$ _____ $\frac{8}{12}$ _____

Name _____

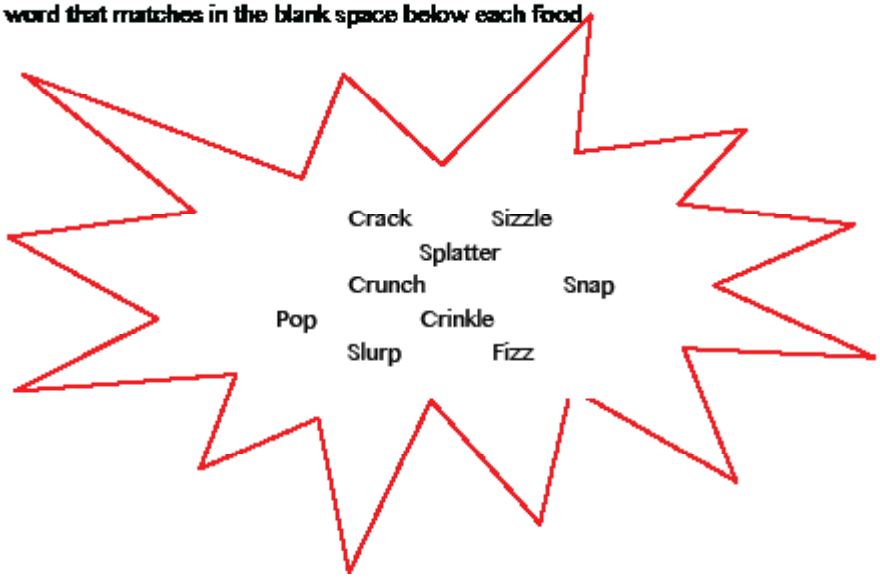
GO for Persuasion!

Everyone should eat GO foods, but some people need a little push! Write a persuasive paragraph convincing your friend to eat your favorite GO food. It could be an apple, whole grain bread, or any other GO food you like to eat! Try to use at least two sensory adjectives. Sensory adjectives relate to the five senses. Examples include sweet (taste), rough (touch), and loud (sound).

Name _____

KAPOW!

Onomatopoeia means words that sound like the object or action to which they refer. The words listed in the shape below are onomatopoeias because they are a noise one of the GO, SLOW, or WHOA foods listed below would make. Write the word that matches in the blank space below each food.



◆ GO ◆	◆ SLOW ◆	◆ WHOA ◆
Eggs	Veggie stir fry	Bag of chips
Carrots	Flavored milk	Popcorn
Applesauce		Soda
Green beans		

Name _____

Math at Lunchtime

1. Tommy wants to make sure he has GO foods in his lunch today. He packs $^{2}/_{3}$ cup of broccoli, $^{1}/_{2}$ cup of brown rice, $^{1}/_{4}$ cup of strawberries, and $^{1}/_{3}$ cup of banana. How many cups of GO foods did Tommy pack? (Express your answer in decimals.)

   _____

2. Katherine wants to buy an orange and low-fat milk to add to her packed lunch. The orange costs $0.52 and the milk costs $0.65. If she pays with $2.00, how much change will she get back?

   _____

3. Lebron is getting his lunch from the school cafeteria, but he wants to make sure to get as many GO foods as he can. Four entrees are offered, but only three are packed with lots of GO foods. What percentage of the foods can Lebron choose from? (Express your answer as a percent.)

   _____

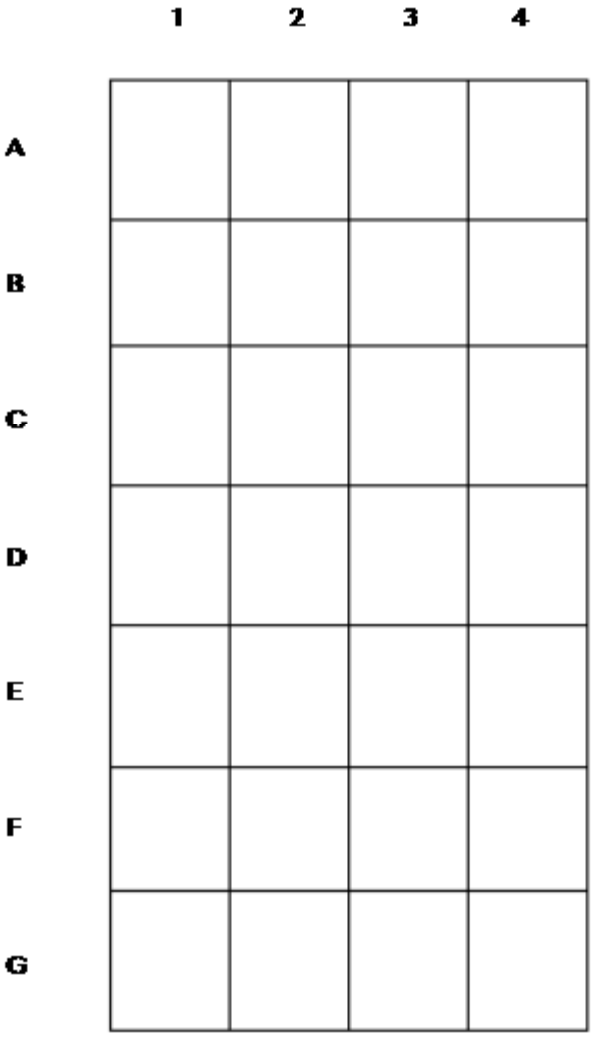
4. Lunchtime is thirty minutes long. It takes Peter six minutes to get through the lunch line and then fifteen minutes to finish all of his lunch. How many minutes does Peter have left to talk with Tommy, Katherine, and Lebron?

   _____

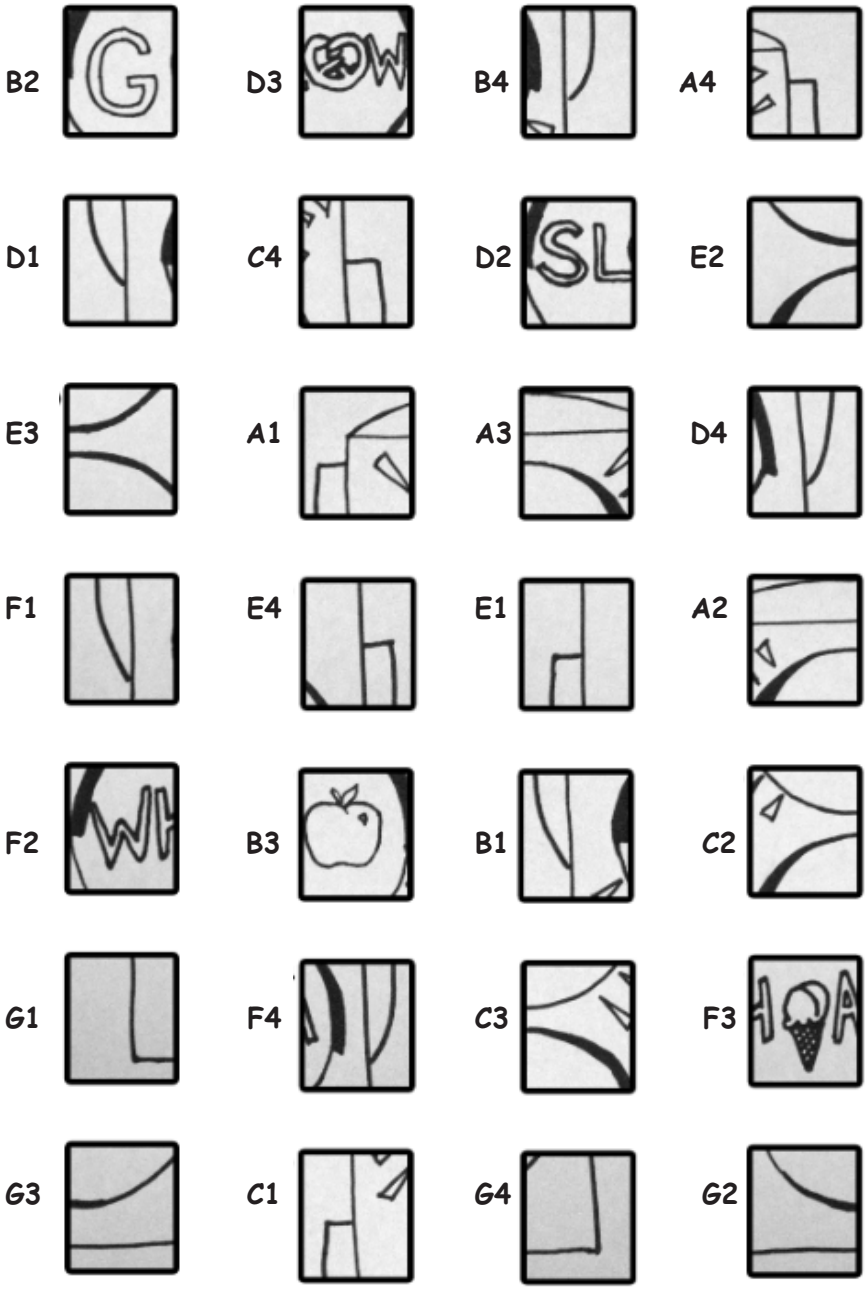
Name _____

Graph That Picture!

Copy the images on the next page into the corresponding space below to figure out the GO, SLOW, WHOA picture!



Name _____



UF IFAS Extension UNIVERSITY of FLORIDA

grow • shop • cook • eat Family Nutrition Program

Name _____

G3 C1 G4 G2

GO, SLOW, WHOA Word Search

R E W O L F I L U A C P F Y F

E G S A B T V C M S E L S R S

F T Z N W A D A E P A P K R F

I A W A I V K K P V S L B E R

N E H N O A A E O K I U G B I

E M A A F C R R D M A N P W E

D N J B N O E G T C A L L A D

G A O A N D X A E R H U E R F

R E P I M M F S O L T I N T O

A L T I S N E G G S O Q P S O

I K L W O M M Y I E C H Y S D

N K R N I L O C C O R B W G S

S G R E E N B E A N S Y O Q F

Y H U A T I M I C E C R E A M

P G K U N G S T I U C S I B K

The USDA and the University of Florida IFAS Extension are equal opportunity providers and employers.
The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact 1-866-762-2237. TTY/TTD/FRS dial 711. This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP.

Name _____

GO (circle in green): Broccoli, Eggs, Lean Meat, Strawberry, Banana, Nonfat Milk, Whole Grains, Kale, Orange, Cauliflower, Green Beans

SLOW (circle in yellow): Baked Chips, Flavored Milk, Refined Grains, Pancakes

WHOA (circle in red): Ice Cream, Cake, Fried Foods, Pepperoni

GO with Gino

Fill in the blanks below with the appropriate part of speech or food (GO, SLOW, or WHOA) to complete Gino's story.

Gino woke up one morning to his _____ *(adjective)* alarm clock. He is so _____ *(adjective)* to go to school, because today is his birthday! He is running a bit late, so he has to hurry and eat his breakfast. He decides to eat _____ *(GO food)* and _____ *(SLOW food)*. His mom stops him to ask what he wants in his lunch today. He knows he wants to eat a healthy lunch so that he has a lot of energy to _____ *(verb)* _____ *(adverb)* during recess. Gino tells his mom that he would like to have some _____ *(adjective)* _____ *(GO food)* and a few _____ *(GO food)*. Now that he has everything he needs to stay full and focused at school, he _____ *(verb)* to catch his _____ *(noun)* to school. Gino learns so much at school, and has a _____

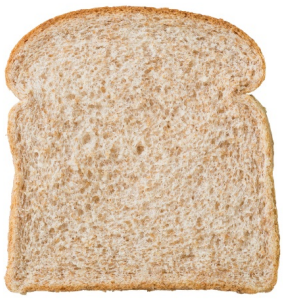
Name _____

(adjective) time with his friends. He thinks that this may be the _____ *(adjective)* birthday ever! When he gets home, his mom lets him have _____ *(adjective)* _____ - *(WHOA food)* for dessert. After all, this is a special occasion!

Name _____

Lines of Symmetry

Are any of these foods symmetrical? If so, draw the line(s) of symmetry.

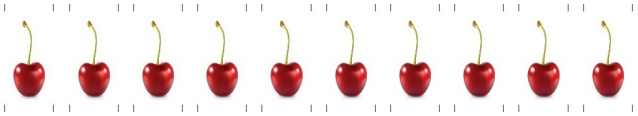


Name _____

_____

Converting Fractions to Decimals

1. Jennifer had 10 cherries, but she only ate 8 of them.



What fraction did she eat? ___

Convert that fraction to a decimal: _____

2. Julian made an egg sandwich for breakfast, but decided to share half with his brother.

What fraction of the egg sandwich did Adam eat? ___

Convert that fraction to a decimal: _____

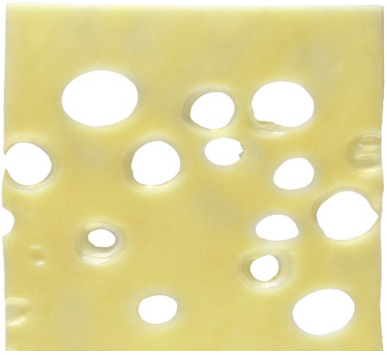
3. Isabelle poured an 8 ounce glass of low-fat milk to have with her breakfast, but only drank 6 ounces.

What fraction of the milk did Isabelle drink? ___

Convert that fraction to a decimal: _____

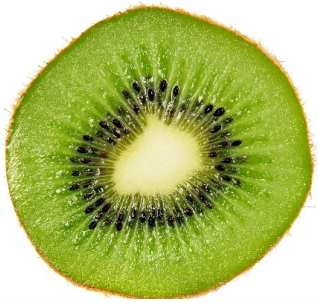
Name _____

Measure the length of the widest part of each of the following breakfast food items to the nearest centimeter. Then convert the length to inches (1 cm = 2.54 inches).



Centimeters: _____

Inches: _____



Centimeters: _____

Inches: _____

Centimeters: _____

Inches: _____

Name _____

Centimeters: _____

Inches: _____

Centimeters: _____

Inches: _____

Centimeters: _____

Inches: _____

Name _____

Read each of the statements below. If it is a fact, circle the word "fact". If it is an opinion, circle the word "opinion".

1. Apples contain fiber and vitamin C.	**Fact or Opinion**
2. Jocelyn says that watermelon is the most delicious fruit.	**Fact or Opinion**
3. Deshawn drinks a glass of low-fat milk every morning.	**Fact or Opinion**
4. Everyone should eat an orange every day.	**Fact or Opinion**
5. There are five MyPlate food groups.	**Fact or Opinion**
6. The best food group is the Dairy group.	**Fact or Opinion**
7. Cooking breakfast is fun.	**Fact or Opinion**
8. The best filling for an omelet is spinach and cheese.	**Fact or Opinion**
9. Cantaloupe is a fruit.	**Fact or Opinion**
10. Bananas are yellow.	**Fact or Opinion**
11. The best way to cook eggs is to boil them.	**Fact or Opinion**
12. Broccoli is a vegetable.	**Fact or Opinion**
13. Roasted potatoes taste better than baked potatoes.	**Fact or Opinion**
14. Chantrelle eats breakfast after she gets dressed every morning.	**Fact or Opinion**
15. Eggs are in the Protein Foods Group.	**Fact or Opinion**

Name _____

Conversions

1. The Clark family drank 1 liter plus 250 milliliters of low-fat milk at breakfast. If there were 3 liters of milk before breakfast, how much milk is left?

_____ ml

2. One cup of cooked oatmeal weighs 234 grams. What is this weight in kilograms?

_____ kg

3. If Andres eats $\frac{1}{2}$ cup of cooked oatmeal, how many kilograms of oatmeal did he eat? (Remember, one cup of cooked oatmeal weighs 234 grams.)

_____ kg

4. An average zucchini is 15.24 centimeters. What is this length in meters?

_____ m

5. What is the length of an average zucchini in millimeters? (Remember, an average zucchini is 15.24 centimeters.)

_____ mm

6. One large egg weighs around 50 grams. One medium tomato weighs around 123 grams. If Sierra eats one egg with $\frac{1}{3}$ of a tomato, how many milligrams did she eat?

_____ mg

Name _____

Persuasive Article

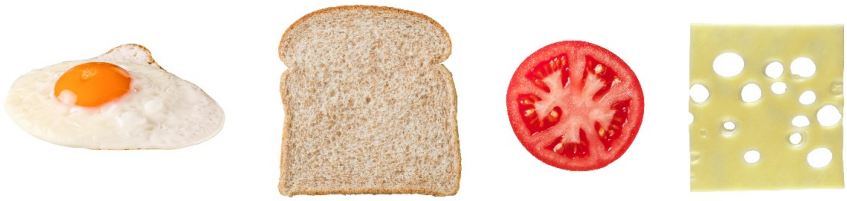
Ethan does not think it is important to eat breakfast. What you would tell Ethan to convince him to eat breakfast every day? Include at least 3 reasons why eating breakfast is important.

Name _____

How Many Food Groups?

1. How many food groups are in this breakfast? _____

2. How many food groups are in this breakfast? _____



3. How many food groups are in this breakfast? _____

4. What is the sum of your answers from #1, #2, and #3? _____

5. Multiply your answer from #1 by your answer from #2: _____

6. Divide your answer from #5 by your answer from #3: _____

Name _____

Apples Are the Best Snack!

If you ask me, apples are the best snack in the entire world. They are sweet, yet tart and delicious! Apples make the perfect snack with peanut butter, yogurt, or a cheese stick! In addition to tasting great, fresh apples are fat-free, high in fiber, and a good source of vitamin C.

Did you know that apples are grown in all 50 states and in 98 countries including China, Turkey, Italy, Poland and India? There are more than 7,500 different types of apples grown throughout the world, so I am sure there is a variety for everyone. Also, since different types of apples are ready to pick at different times of the year, apples are a delicious snack you can enjoy year round!

1. What is the author's purpose in writing this passage?

   _____

   _____

2. Identify three opinions stated by the author.

   _____

   _____

   _____

3. Identify three facts that the author used to support his/her opinion about apples.

   _____

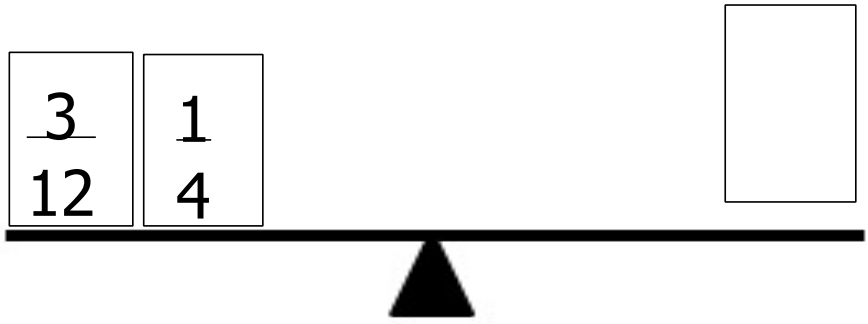
   _____

   _____

Name _____

Make the scales balance by filling in the correct fraction. The answers will tell you a recipe to make a delicious snack!

a.



CUP OF WHOLE GRAIN CEREAL

b.

CUP OF MIXED BERRIES

c.

CUP OF LOW-FAT YOGURT

What would you name this snack? _____

_____

Name _____

Recipe Multiplication!

This Saturday is your tenth birthday and you are having a big party. You have invited the whole class to come to your house and celebrate. There will be 20 people attending, and you want to serve everyone your favorite snacks. The recipes for your favorite snacks are shown below. Each recipe serves only one person, so you have to multiply each ingredient by 20 to have enough for everyone.

Snack: Hummus dip with pita and baby carrots

Serves: 1		**Serves: 20**
Ingredients:		Ingredients:
2 tablespoons of hummus	**X 20**	_____ tablespoons of hummus
½ whole wheat pita	**X 20**	_____ whole, whole wheat pitas
1 cup of baby carrots	**X 20**	_____ cups of baby carrots

Snack: Homemade trail mix

Serves: 1		**Serves: 20**
Ingredients:		Ingredients:
½ cup dry, unsweetened, whole grain cereal	**X 20**	_____ cups dry, unsweetened, whole grain cereal
¼ cup raisins	**X 20**	_____ cups raisins
23 almonds	**X 20**	_____ almonds

Snack: Low-fat cheddar cheese and whole wheat crackers

Serves: 1		**Serves: 20**
Ingredients:		Ingredients:
1 ounce of low-fat cheddar cheese	**X 20**	_____ ounces of low-fat cheddar cheese
6 crackers	**X 20**	_____ crackers

Name _____

Boring to Soaring!

Turn these boring sentences about healthy snacks into soaring sentences by adding adjectives, similes and metaphors!

Boring sentence:

I like trail mix with almonds, whole grain cereal and raisins.

Soaring sentence:

_____

_____

Boring sentence:

Baby carrots with hummus taste good.

Soaring sentence:

_____

_____

Boring sentence:

I ate low-fat cheddar cheese with whole grain crackers.

Soaring sentence:

_____

_____

Boring sentence:

Low-fat yogurt with blueberries is a good snack.

Soaring sentence:

_____

_____

Name _____

Practicing Punctuation

Read the following paragraph, and then add correct punctuation marks and capitalized letters:

there are so many reasons to choose healthy snacks healthy snacks help keep me full until my next meal provide me with vitamins and minerals and help me meet the MyPlate recommendations healthy snacks can include foods from all of the food groups my favorite snack foods from the grains group are whole wheat crackers and unsweetened whole grain cereal i choose lean protein foods like sliced turkey or beans to keep my muscles strong fruits are my favorite food group because they are so delicious and naturally sweet i eat fresh canned or frozen fruit with no added sugar i like to eat dairy foods like low-fat yogurt or non-fat milk these foods are high in calcium to help keep my bones strong vegetables are full of vitamins and some minerals to keep me healthy next time you are feeling hungry try to choose GO foods for a healthy snack

Name _____

Your friend, Tony, has asked you to proofread his homework. Find any mistakes that he has made. Use the proofreading marks below. Then rewrite the paragraph correctly on the lines below.

 Insert a period

 Insert a comma

 Insert quotation marks

 Capitalize a letter

 Check spelling

 Delete

Every day when i get home from school i am starving! The first thing i want too do is find a healthy snack. Yesterday i ated my favorit snack whole grain crackers with low fat cheese and an apple. My mom said Tony that snack looks so delicious! Then i said it is delicious! After i ate my snack i worked on my homework until it was time for dinner.

_____

_____

_____

_____

_____

Name _____

The Healthy Snack Shack!

The principal at your school has opened a healthy snack shack for after school. The menu with prices is shown below:

Snack Item	Price
Whole wheat crackers	$ 0.51
Dry, unsweetened, whole grain cereal	$ 0.32
Apple	$ 1.13
Banana	$ 0.44
Baby carrots	$ 0.39
Sugar snap peas	$ 1.22
Low-fat cheese stick	$ 0.41
Low-fat vanilla yogurt	$ 0.77
Peanut butter	$ 0.37
Sliced turkey	$ 1.02

Calculate the prices for the healthy snacks shown below:

Apple and peanut butter

Apple $\_\_.\_\_$

Peanut butter $\_\_.\_\_$

$\_\_.\_\_$

Low-fat vanilla yogurt with a dry, unsweetened, whole grain cereal

Yogurt $\_\_.\_\_$

Cereal $\_\_.\_\_$

$\_\_.\_\_$

Whole wheat crackers with sliced

Crackers $\_\_.\_\_$

Sliced turkey $\_\_.\_\_$

$\_\_.\_\_$

Baby carrots and hummus turkey

$\_\_.\_\_$

Baby carrots

Hummus $\_\_.\_\_$

$\_\_.\_\_$

Name _____

Vegetables are a great choice for a healthy snack, but what if the vegetables on your plate came to life one day? Write a story about vegetables coming to life and going on an adventure.

_____

_____

_____

_____

_____

_____

Name _____

Name _____

Fractions

Mr. Brown is trying to convert the teaspoons of sugar from decimals to fractions. Can you help him? (Remember to reduce the fractions)

1. .25 $\frac{\square}{\square}$

2. .10 $\frac{\square}{\square}$

3. .80 $\frac{\square}{\square}$

4. .75 $\frac{\square}{\square}$

5. .50 $\frac{\square}{\square}$

6. .20 $\frac{\square}{\square}$

7. .36 $\frac{\square}{\square}$

8. .60 $\frac{\square}{\square}$

Name _____

Rounding

Sometimes, while trying to convert the amounts of sugar from grams to teaspoons, you'll end up with some decimals. Using the chart below, practice rounding numbers to the nearest whole number, the tenths place, and the hundredths place.

	Nearest Whole Number	Tenths Place	Hundredths Place
12.25			
3.0249			
9.64			
29.998			
4.743			
18.954			
14.556			
20.00009			
7.8031			
10.35824			

Name _____

Angles

Using the pictures and the angles drawn below, circle the correct name for the angle shown.

1.

Angle Measure: 130°

Type of Angle:

A. Acute

B. Right

C. Obtuse

2.

Angle Measure: 90°

Type of Angle:

A. Acute

B. Right

C. Obtuse

3.

Angle Measure: 50°

Type of Angle:

A. Acute

B. Right

C. Obtuse

4.

Angle Measure: 100°

Type of Angle:

A. Acute

B. Right

C. Obtuse

Name _____

Word Problems

Product	Amount of Added Sugar
Milk	0 g
Soda	46 g
Cookie	10 g
Flavored Yogurt	9 g
Sports Drink	26 g
Chocolate Bar	30 g

1. Trevor ate 2 cookies, drank ½ glass of milk, and then ate 1/3 of a chocolate bar. How much added sugar did he consume?

_____

_____

2. Tiffany cut her cookie into 5 pieces and her chocolate bar into 6 pieces. She is trying to decide which combination of foods and drink would give her the least amount of added sugar and her two choices are: 3 pieces of the cookie, 3 pieces of the chocolate bar, and ½ of a soda –or 1 piece of the cookie, 5 pieces of the chocolate bar, and ½ of a sports drink. Can you help her decide?

_____

_____

3. Jessica wants to limit her added sugar intake to 32 grams a day. She already had flavored yogurt and 1/3 of a chocolate bar. She just got out of an hour long softball practice and really wants a sports drink. How much sports drink can she have without going over 32 grams of added sugar?

_____

_____

4. Austin went to the dentist today and found out he had 2 cavities. His dentist asked him to write down some of the foods he ate yesterday so the dentist could determine how much added sugar he had. Help the dentist calculate the amount of added sugar Austin consumed: 3 1/5 cookies, 1 1/3 serving of flavored yogurt, 1 chocolate bar, 1/2 of a soda in the morning and then an additional 2 sodas in the afternoon.

_____

_____

Name _____

Letter

Write a letter to a friend discussing added sugar. Explain what is meant by added sugars and how to determine if a product contains added sugars.

Dear_____,

Sincerely,

_____

Name _____

Cause and Effect

List the cause and effect for each of the following statements.

Chris drank a lot of sweetened drinks while he was on vacation, and now he has cavity.

Cause: _____

Effect: _____

Robyn got a stomach ache after she ate a dozen chocolate chip cookies.

Cause: _____

Effect: _____

Maria tried to convert the amount of sugar listed on the Nutrition Facts label of a food from grams to teaspoons. He accidentally used 6 grams of sugar per teaspoon instead of 4, so he came up with the wrong answer.

Cause: _____

Effect: _____

Now it's your turn! Come up with 3 cause and effect statements relating to added sugars in the space below.

1. _____
_____
_____

2. _____
_____
_____

3. _____
_____

Name _____

Verb Tenses

Re-write the sentences using the different verb tenses.

1.

Future: Jimmy will learn about added sugars in class tomorrow:

Present:

_____

_____

Past:

_____

_____

2.

Future:

_____

_____

Present: Jimmy is eating an apple as a snack.

Past:

_____

_____

3.

Future:

_____

_____

Present:

_____

_____

Past: After Jimmy learned about added sugars, he chose milk instead of soda.

Name _____

Context Clues

1. Sugar-sweetened beverage consumption is very **prevalent** in the United States. In fact, more than half of children drink sugar-sweetened beverages.

In this sentence, the word prevalent means:

A. common

B. high in sugar

C. rare

D. healthy

2. When choosing a fruit juice to drink, it's important to use **caution**. You should choose a drink that is 100% fruit juice because this means that the juice has no added sugars.

In this sentence, the word caution means:

A. buy as many as you can

B. dangerous

C. use attention

D. add sugar to them

3. Milk, plain yogurt, and fruit all contain naturally occurring sugars. These foods are **nutritious** because they have vitamins and minerals that help our bodies grow and also help keep us healthy.

In this sentence, the word nutritious means:

A. lacking nutrients

B. bad for our health

C. made from several types of nuts

D. healthy for the body

Name _____

4. Consuming too much added sugar can cause poor health. Consuming too much sugar may also cause cavities. Cavities are formed when sugar sticks to teeth and bacteria on your teeth **convert** the sugar to acid, leaving the tooth coating very weak.

In this sentence, the word convert means:

A. change or turn

B. eliminate

C. cause nothing to happen

D. continue

5. By looking on a Nutrition Facts label, as well as the ingredients list, you will be able to tell if there is added sugar in a product. Sometimes a product can have both natural and added sugars. The Nutrition Facts label will tell us how much TOTAL sugar is in a product but it doesn't **distinguish** between added or natural sugars.

In this sentence, the word distinguish means:

A. raise

B. tell apart

C. lower

D. combines

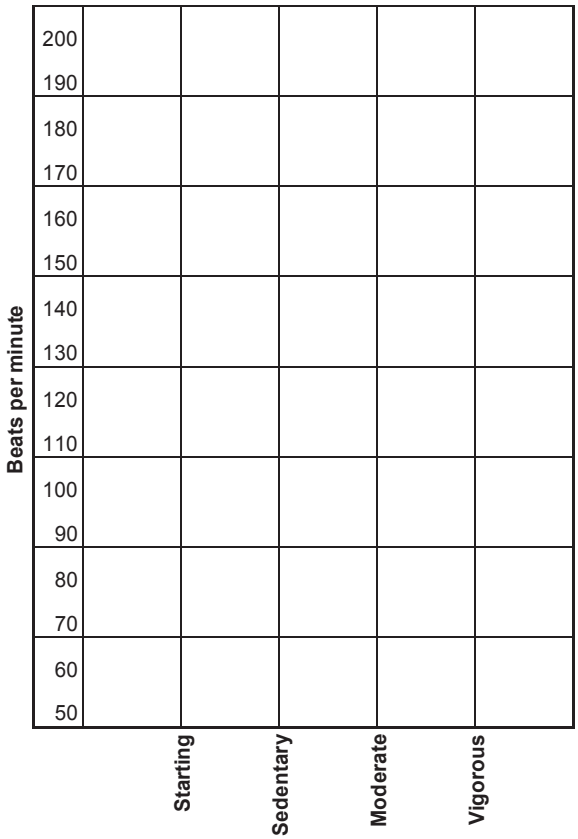
Name _____

Plot the Beats!

Alex wanted to test his heart rate during different activities. Plot the following heart rate measurements on the graph making sure the units are correct. Remember that there are 60 seconds in a minute. All of the answers need to be plotted in beats per minute (bpm).

1. Starting Heart Rate: 16 beats in 15 seconds.
2. Sedentary Heart Rate: 11 beats in 10 seconds.
3. Moderate Heart Rate: 8 beats in 12 seconds.
4. Vigorous Heart Rate: 48 beats in 20 seconds

Starting Heart Rate:	_____bpm
Sedentary Heart Rate:	_____bpm
Moderate Heart Rate:	_____bpm
Vigorous Heart Rate:	_____bpm

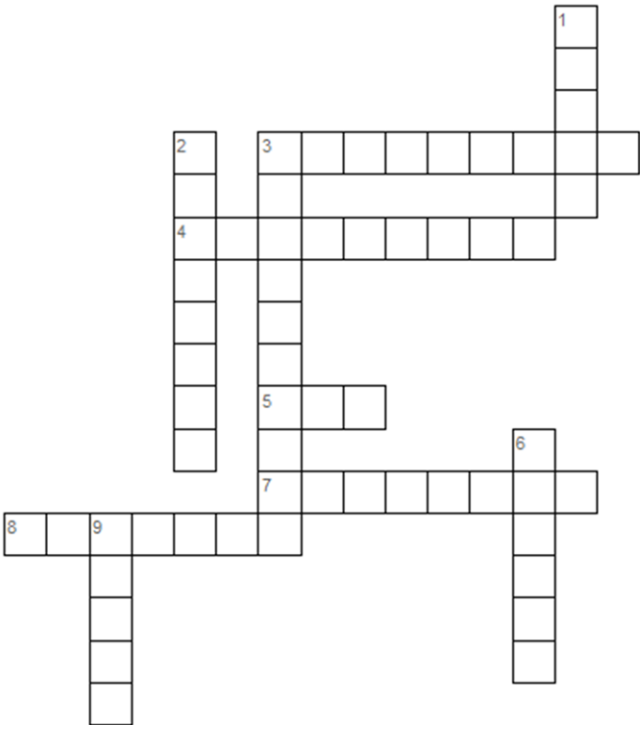


1. Which activity raised Alex's heart rate the most?
   _____
2. List some examples of the type of activity you named in question #1
   _____
   _____
   _____
   _____
3. Doctors recommend that we spend at least _____per day doing physical activity.

Name _____

Crossword

Complete the crossword below using the clues provided. The word-bank includes all the possible answers. But be careful! Not every answer in the word-bank may be used.



WORD BANK

Strong	Bicep
Sedentary	Vigorous
Moderate	Sixty
Huge	One
Screen Time	Two
Junk food	Disease
Running	Gardening
Heart	Fifty

Across:

3. This type of activity involves a lot of sitting
4. This is an example of a moderate activity
5. Doctors recommend that we spend no more than_____hour (s) in front of a screen
7. While doing this type of activity, you should be able to talk, but not sing
8. Regular physical activity can reduce your risk for _____

Down:

1. This is one of the most important muscles in the body
2. When doing this type of activity, you would have a very hard time talking
3. Too much_____can negatively affect your grades in school
6. When we exercise, our muscles can grow _____
9. How many minutes of physical activity should we get each day?

Name _____

Simile and Metaphor Search

Read the short story below and find the similes and metaphors used in the text. Write them in the space provided at the bottom of the page.

Simile: A figure of speech that compares two unlike things. It usually uses the words "like" and "as". For example: She is sweet like candy.

Metaphor: A figure of speech that also compares two unlike things. It usually does NOT the words "like" and "as". For example: Her long hair is an ocean of waves.

Sam and Taylor were the best of friends, like two peas in a pod. They liked all the same foods, all the same TV shows, and even had matching skateboards! However, they had different hobbies: Sam spent a lot of time playing video games after school, while Tyler liked to play soccer after school. This made Tyler as strong as an ox! One day, Tyler invited Sam to play soccer with him after school. After playing for 30 minutes, Sam felt his legs turn to jelly. He was simply too tired to go on. Since he had been spending so much time in front of a screen, his muscles grew weak. Tyler then reminded Sam that doctors say we should get at least 60 minutes of physical activity per day. This helps us to maintain good health! From that day on, Sam came to play soccer with his friend after school instead of his usual video game routine. Soon enough, Sam felt like he could run at the speed of light! The two friends were as tight as ever. They were so glad they now had another interest to share.

Simile 1 _____

Simile 2 _____

Metaphor 1 _____

Metaphor 2 _____

Name _____

Were the recommendations fulfilled?

Doctors recommend we spend no more than 2 hours in front of a screen, and at least 60 minutes doing physical activities. Figure out who fulfilled their daily recommendations.

1. On Monday, Lebron wanted to watch a 3 hour movie. He only watched $\frac{1}{2}$ of the movie.

How much time did Tim spend in front of a screen? _____

2. On Tuesday, Laura planned to play a 2 hour soccer game. However, she only played $\frac{2}{5}$ of the game. *Hint* Try converting the hours to minutes first!

How much time did Laura spend doing physical activity? _____

3. On Wednesday, Sam wanted to play a 20 minute video game. He was having so much fun, that he played the game 3 times.

How much time did Sam spend in front of a screen? _____

4. On Thursday, Cho wanted to practice her dance routine, which takes $\frac{1}{4}$ of an hour to complete. To get it down perfectly, she practiced the routine 5 times.

How much time did Michelle spend doing physical activity? _____

5. On Friday, Joey wanted to watch cartoons after school. Each cartoon show is a half-hour long. Joey watched 5 shows.

How much time did Joey spend in front of a screen? _____

List the names of the kids who met the recommendations for physical activity in a day.

_____

List the names of the kids who had two hours or less of screen time.

_____

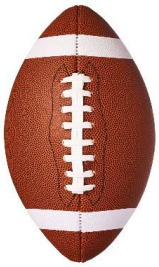
Name _____

Are they symmetrical?

There are lots of ways to get your daily physical activity as suggested by the pictures below. From the point of view shown in the pictures, are any of the objects symmetrical? If so, draw the lines of symmetry.

Symmetrical? _____

Symmetrical? _____



Symmetrical? _____

Symmetrical? _____

Symmetrical? _____

Symmetrical? _____

Name _____

What a day!

Do you normally fulfill your daily recommendations for physical activity? Recall a day during which you participated in several different physical activities Write a paragraph describing the day and the types of activities you did. Use at least 5 adjectives and 3 adverbs to describe the activities that you write about.

Name _____

Conversion Confusion

Jackson gets confused when he exercises. Help him understand how much he accomplished by converting the units.

1. Jackson ran a distance of **3 kilometers**	Jackson ran a distance of_____**meters**
2. Jackson jumped a distance of **1.5 meters**	Jackson jumped a distance of_____**cm**
3. Jackson lifted **4000 grams**	Jackson lifted_____**kilograms**
4. Jackson pushed **10 kilograms**	Jackson pushed_____**grams**
5. Jackson squatted **160 ounces**	Jackson squatted_____**pounds**
6. Jackson washed the car for **3 hours**	Jackson washed the car for_____**minutes**
7. Jackson swam for **45 minutes**	Jackson swam for_____**seconds**
8. Jackson was tired, and drank **1.8 liters** of water	Jackson was tired, and drank_____**milliliters** of water.

Name _____

Body Angles (alternative to above worksheet)

Yoga has many benefits: not only does it strengthen muscles, but it also increases flexibility!
Yoga is also a great way to practice your geometry.

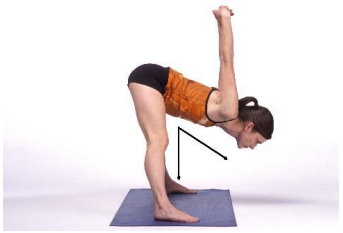
A

B

C

D

E

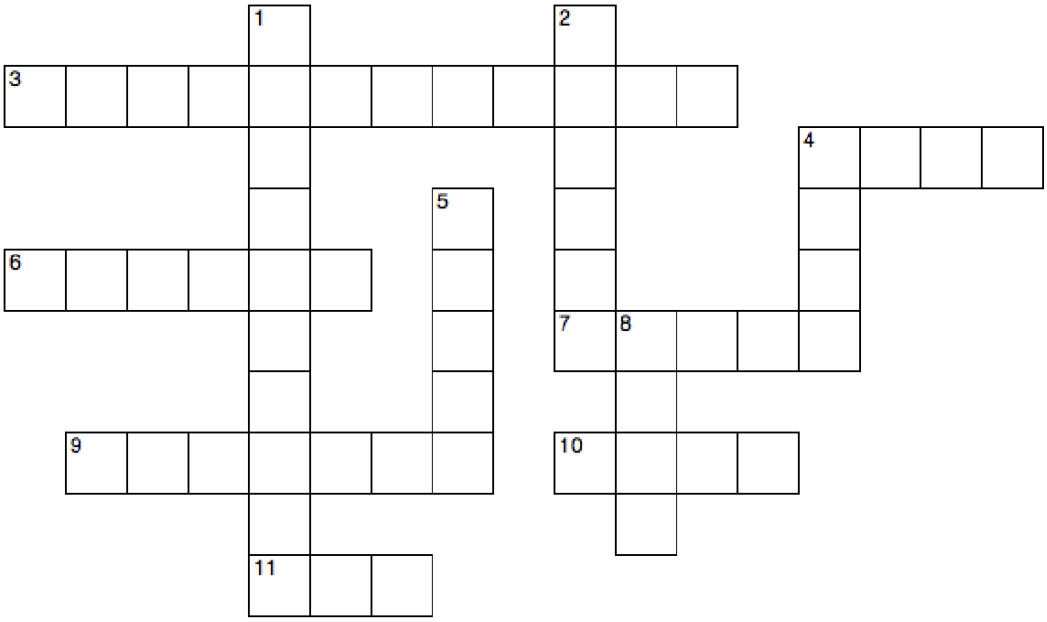


F

1. Which girl(s) is forming a right angle with her body? _____
2. Which girl(s) is forming an obtuse angle with her body?_____
3. Which girl(s) is forming an acute angle with her body? _____
4. Which girl(s) is making a perpendicular shape with her body? _____

Name _____

Create Your Plate Crossword

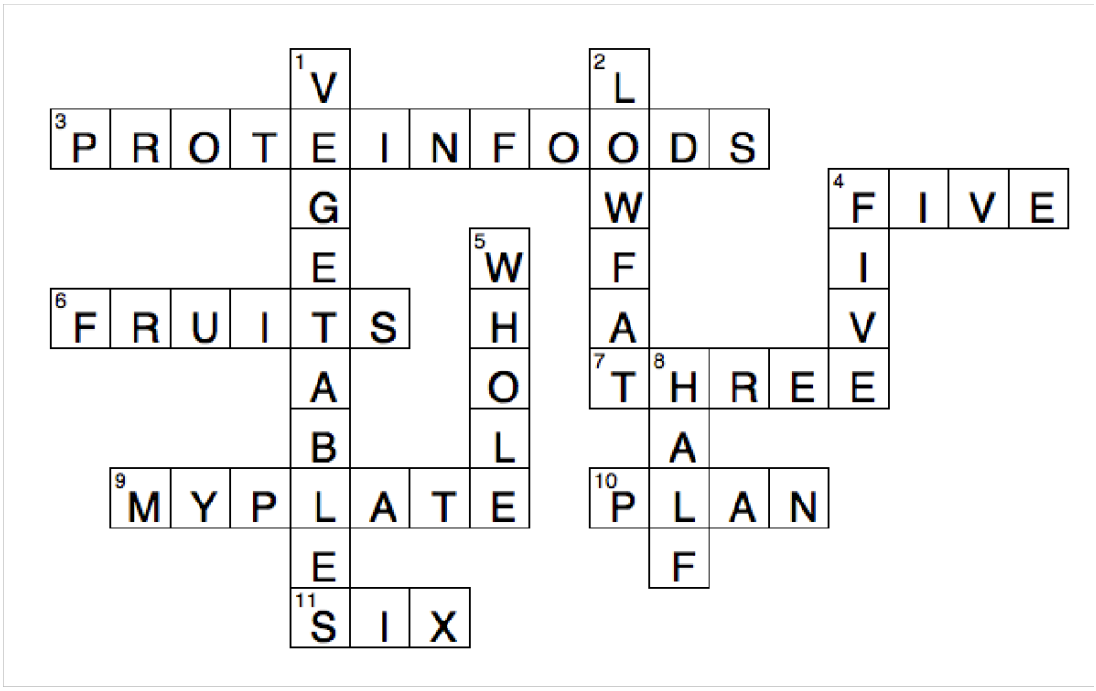


ACROSS
3 The recommended amount for this food group is five ounces per day.
4 Girls need _____ ounces of grains per day.
6 The recommended amount for this food group is one and a half cups per day.
7 The recommended amount for the Dairy group is _____ cups per day.
9 This diagram provides me with the recommended amounts of foods I should be eating each day.
10 In order to meet all of my recommended amounts, I should _____ how much to eat from each food group throughout the day.
11 Boys need _____ ounces of grains per day.

DOWN
1 Besides grains, MyPlate recommends a different amount of _____ for boys and girls.
2 When eating dairy, it is important to eat _____ or non-fat choices.
4 There are _____ MyPlate food groups.
5 At least half of my grains each day should be _____ grains.
8 About _____ of my plate should be covered in fruits and vegetables.

Name _____

Solutions



Name _____

Solve the word problems below.

	Boys	Girls
Grains	6 ounces	5 ounces
Vegetables	2½ cups	2 cups
Fruit	1½ cups	1½ cups
Dairy	3 cups	3 cups
Protein Foods	5 ounces	5 ounces

1. At lunch, Toby had 2 ounces of bread. Toby ate 2 ounces of rice at dinner. If Toby didn't eat any other foods from the Grains group during the day, how many more ounces does he need to meet his recommended amount?

2. If Toby and his friend Lilly both ate their recommended amounts of vegetables, what would the difference be, in cups, in the amount of vegetables they ate?

3. If Toby wanted to eat or drink an equal amount of a dairy group food at each meal, he would need to have _ cup(s) at breakfast, lunch, and dinner in order to meet his recommended amount.

4. Oops, Toby went overboard and ate more protein than he needed today. If he ate a total of 8 ounces of protein, by how much did he exceed his recommended amount?

5. If Toby, Lilly, and their friend Juan each ate their recommended amounts of fruit, how many total ounces of fruit did they eat?

6. If Toby ate his entire recommended amount of grains and protein, how many total ounces did he consume of the two combined?

7. Toby sometimes forgets there are _ MyPlate food groups, because the dairy group is off to the side.

8. If Juan and Lilly each eat their recommended amount of grains for the day, and Toby eats half of his recommended amount, how many total ounces of grains did all three friends eat?

Name _____

Why do you think it is important to know how much you need from each of the MyPlate food groups every day? Why is it important to plan ways to meet the recommended amounts?

Name _____

Write a poem about healthy foods and the importance o planning out the recommended amounts using the letters MyPlate for the first letters of each line.

M _

Y _

P _

L _

A _

T _

*E*_

Name _____

Revise the following passage for spelling and grammar mistakes.

MyPlate is a recource that tells me the recommended amount's of foods to eat from each food group. There are five food groups including grains, vegatables, fruits, protien foods, and dairy. The recomended amounts of each food group are the same for boys and girls except for grains and vegetables, for which fourth grade boys have a higher recommended amount than girls. When deciding what to eat each day, it is important to make sure that I meet the reccomended amounts for each food group. i can do this by planning out how much of each food group to eat at meals and snacks. When planning out what I will eat for the day, I should remember that I dont have to eat all of the food groops at every meal and snack. For example, I can choose to eat fruit at breakfast and lunch while I have vegetables for a snack and at Dinner. Choosing healthy options from each food group and getting my recommended amounts each day can help me grow my best and stay helthy.