

# Nutrition Lessons





# Kindergarten Unit Assessment

The health behavior outcome shaped in this unit:

*Students will eat a variety of healthy foods.*

## Materials

large chart paper

## Pretest Procedures

1. Through a class discussion, students identify their favorite foods. First, make a large chart with the following headings: Fruits I like best; Vegetables I like best; Dairy I like best; Grains I like best; Protein I like best. Second, ask students to think about, and share, their favorite foods. List the foods on the chart paper or board.
2. After the favorites have been named, students draw their favorites and display them on the chart.
3. Teach the nutrition unit: MyPlate.

## Posttest Procedures

1. Repeat the process of recording students' favorite foods.
2. Post the original (pretest) chart of favorites and ask students to compare the two charts. Ask students to make statements about the following:
  - a. Did our class add any new favorite foods to the chart?
  - b. How many foods did we add to our favorites?
  - c. Why is it important to add a variety of healthy foods to our diet?

## WHAT COUNTS?

Foods that do not fit into a MyPlate food category are called extras. Extras include cookies, cakes, chips, candy, and soda.

To record combination foods, ask students to identify the two main food groups: cheese pizza (grain and dairy); beef tacos (protein and grain) and PB&J sandwich (protein and grain).



# Kindergarten

# MyPlate

## Lesson 1

*Childhood obesity can be avoided by the early establishment of healthy eating habits and fitness routines (Institute of Medicine, 2012).*

### Objective

Students will be able to identify MyPlate and the five food categories.

### Materials

large blank MyPlate graphic  
food cards

### Procedure

1. Display the MyPlate Graphic and ask the students to describe what they see.
2. Ask why they think different foods are in different colored sections of the plate. Guide them to see that different kinds of foods fit into different categories. One group is fruit, one is vegetables, one is dairy, one is protein, and one is grain. Introduce unknown terms for food groups.
3. Direct the students to notice the differing sizes of the plate dividers. Ask questions such as, is the vegetable portion the same size as the fruit portion of the plate? Why do you think that is? Should we eat more fruits or more vegetables? Continue in this manner for protein, dairy and grains.
4. Presort the food cards into the MyPlate food categories. Give one category of cards to each team of students. Each student has one card. Ask teams to discuss what food group they think they have. Teams share their cards with the other students and announce the food category. Class members give a 'thumbs up or down' in indicate agreement.
5. Ask the groups to physically build MyPlate by standing next to others with the type of card. Students can then move themselves into the MyPlate graphic format.
5. Physical Activity Break: Order Up MyPlate. Students move freely around the classroom. Teacher calls particular food groups to the front of the room to share their food item. Repeat.

# Kindergarten Lesson 1 - MyPlate

## Assessment

The ability of students to successfully name and categorize the food items.

## Common Core Standards Addressed in this Lesson

English Language Arts Standards: Speaking and Listening

SL1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

SL1.a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).

SL1.b. Continue a conversation through multiple exchanges.

National Health Education Standards

1.2 Demonstrate concepts related to health promotion and disease prevention.

## Extension (RL1)

Select and read aloud a book from the suggested reading list to either introduce or reinforce the concepts.

## Physical Activity Break

Order Up MyPlate

## Homework (SL1, SL1.b)

Send home MyPlate information and ask that they discuss the information with their child.

## Try It With A Twist

Bring or ask parents to contribute their child's favorite fruit and vegetable for the class to share. Have a sharing party at snack or lunchtime.

# Kindergarten

## Lesson 2

# Eating MyPlate



*It might be necessary to offer a vegetable as many as 10 times before a child is ready to try it. A good time to offer carrots and other crunchy vegetables is just before meals when a child is hungry. This lesson is best taught soon after lunch (Heim, Stang & Ireland 2009; Royal Children's Hospital, 2012).*

### Objective

Students will develop an awareness of the MyPlate food categories and will begin to examine personal eating habits.

### Materials

MyPlate bulletin board (or enlarged graphic) paper, crayons or markers, scissors, glue or tape

### Procedure

1. Review MyPlate and the food categories from the previous lesson. Remind the students of the five food categories and the need to eat a variety of foods.
2. Ask the students to draw three food items they ate for lunch.
3. Display a large blank copy of the MyPlate graphic. Have the students cut out their food items and tape or glue them onto the graphic. The teacher may write the name of the item on the student's drawing. Ask students to place food items that they are unsure about at the bottom of the chart. Class then discusses and places these items into MyPlate. Students will likely have eaten foods that contain multiple food groups, like pizza. A general rule of thumb for *combination* foods is for students to identify the two main food groups. Students can cut the card in half to place on the MyPlate graphic.
4. Have the students gather around the completed graphic and discuss the findings. What food group has the most foods? The least? Is the class eating foods from each category?
5. Physical Activity Break: Make It Count! Count the number of items per food group and record the number on the board. Students count out the food numbers with the corresponding numbers of movements.

## Kindergarten Lesson 2 - Eating MyPlate

### Assessment

The ability of students to answer questions, engage in discussions, and accurately place their food drawings in the correct category.

### Common Core Standards

#### Addressed in this Lesson

English Language Arts Standards: Speaking and Listening

SL2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

SL3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Math: Counting and Cardinality

K.CC 5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out as many objects.

National Health Education Standards

1.2 Demonstrate concepts related to health promotion and disease prevention.

### Extension (SL2a, SL2b)

Bring, or have parents bring, one fruit or vegetable their child does not eat in their normal diet. Ask the children to taste and describe at least one new fruit or vegetable. Note: This is a great time for children of varying cultures to share traditional foods.

### Physical Activity Break

Make It Count!

### Homework (K.MD3)

Students categorize and count the food their family eats for dinner. As a family, they count the number of items eaten per food category, the student then draws all the items on a blank MyPlate graphic.

### Try It With A Twist

Plan a Family Night or add to an existing parent event. Ask each family to bring a favorite fruit or vegetable dish to share.

# Kindergarten

## Lesson 3

# My Breakfast Plate

*Children who eat breakfast perform better on tests and are able to pay attention better than children who skip breakfast. Eating a bowl of cereal for breakfast can improve both the speed and accuracy of student responses (Wegnes, Pincock, & Scholey, 2012).*

### Objective

Students will keep track of what they eat and begin to examine their own eating habits.

### Materials

chart paper

class chart (bar graph)

Huggles' Breakfast by Joy Cowley  
(or other text outlining what a character in the story ate)

drawing paper

markers or crayons

### Procedure

1. Read *Huggles' Breakfast*, pausing occasionally to discuss the contents of his breakfast.
2. After reading the story, ask the students to recall what Huggles ate for breakfast. Write the list on chart paper as the students recall each item.
3. Ask the student which of the items Huggles ate are healthy and are included in MyPlate. Discuss which food categories are missing from his diet. Remind the students that it is necessary to eat a healthy diet in order to grow up strong, to have energy, and to fight disease.
4. Create a second list of the students' favorite breakfast.
5. Make a bar graph containing the MyPlate food categories. Chart the foods the students listed as their favorites.

# Kindergarten Lesson 3 - My Breakfast Plate

## Assessment

After completing the lesson, ask the students to respond to the following questions:

Are our favorite breakfast foods healthy? Do they help us have a good plate? Do we eat foods from all categories of MyPlate? What can we add to our plate to be more healthy?

## Common Core Standards Addressed in this Lesson

Reading Standards for Literature K-5: Key Ideas and Details

1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2. With prompting, retell familiar stories, including key details.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

Math: Measurement and Data

K.MD 3 Classify objects into given categories; count number of objects in each category and sort the categories by count.

National Health Education Standards

- 1.2 Demonstrate concepts related to health promotion and disease prevention.
- 5.2 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.

## Extension (W7)

Using language experience or interactive writing to compose and illustrate a letter to Huggles informing him of the need to change his diet. Send the letter to Joy Cowley at Sunshine Books.

## Physical Activity Break

When I eat breakfast, I'll try...

## Homework (RL1)

Ask students and parents to identify and read a book together in which a theme of the story centers around food.

## Try It With A Twist

Plan a trip to the local supermarket and ask the manager to show the students where they can find foods from each MyPlate category.

# GRADE 1 Unit Assessment

The health behavior outcome shaped in this unit:

*Students will eat from the five food categories of MyPlate.*

## Materials

MyPlate graphic or paper plate

## WHAT COUNTS?

For this assessment, a serving is defined as the item the student ate: an apple, a piece of bread, a bowl of spaghetti or a cookie. Estimating ounces and serving size equivalents, while important, can be confusing for young children. The objective of this unit is to increase food group variety and balance. Recording items, not portion size, is sufficient for this assessment.

To record combination foods, students count the two main food groups: cheese pizza (grain and dairy); beef tacos (protein and grain) and PB&J sandwich (protein and grain).

## Pretest Procedures

1. Using a MyPlate graphic or a paper plate, students assess the foods commonly eaten for dinner. First, ask students to draw pictures of the foods they ate for dinner the prior evening. Remind them to include beverages and desserts. Second, the teacher calls out a food group (fruits, vegetables, protein, dairy, and grains) and students count the number of food items from that category on their plate. Students hold up the corresponding number of fingers to represent the number of food items eaten in a category. After all the food groups have been counted, students may ask about other food items, called extras. Extras are foods that do not belong in one of the MyPlate food categories. Lastly, students record the number of servings by food category on their plate.
2. Each morning, students record the foods eaten for dinner from the previous day on a new MyPlate graphic or paper plate. A time saving tip is to ask students to record the evening meal as homework.
3. On the fifth, or final day, of tracking, students count and record the total number of food items in each food category: fruits, vegetables, protein, dairy, grains and extras.
4. Teach the nutrition unit: Food Group Balance.

## Posttest Procedures

1. Repeat the process of recording foods students ate for dinner during the prior day. Ideally, students record the same number of days completed during the pretest.
2. Ask students to compare their dinner plate totals from the two weeks: pre versus post. Ask students to make statements about the following:
  - a. Did your fruit and vegetable intake change?
  - b. Did your intake of extras change?
  - c. Ask students to reflect on their food group balance. Did their MyPlate balance improve? Why or why not? Have students write one statement to support their answer.
3. Teacher creates a class summary. A time saving tip is to collect the students' work after the pretest and create a histogram chart: class servings by food category. Record or post the chart on the board. Here, solicit student responses to complete a comparison (posttest) histogram.
  - a. Teacher makes statements about the chart and students show a 'thumbs up' if that statement is correct.
  - b. Ask students to make statements about the chart.



# Grade 1

# Lesson 1

## Review My Plate



*In order to encourage children to try unfamiliar fruits and vegetables, offer new foods along with familiar favorites (United States Department of Agriculture, 2006).*

### Objective

After completing the activities in lesson 1, the students will recall previously learned information about My Plate food categories and will deepen understandings through the use of a categorizing activity and class discussion.

### Materials

hula hoop

MyPlate graphic

food cards

### Procedure

1. Display the MyPlate graphic organizer and review the food categories.
2. Using class discussion, review topics learned in kindergarten.
  - five MyPlate categories
  - foods in each category
3. Physical Activity Break: GO-GO. Students walk around to their classmates and share two favorite foods in each food group. Teacher calls out one food category, then students share. Students move freely around room. Repeat with additional food categories.
4. Place the hula hoop on the floor and label the food categories inside the hoop.
5. Using the food cards, model the identification of the food on the card and the placement of the cards in the proper category inside the hula hoop.
6. Distribute several food cards to each student.
7. Students then take turns placing their food in the proper category.
8. Once all cards have been placed in the hula hoop, review each category with the students.

# First Grade Lesson 1 - Review My Plate



## Assessment

The ability of students to place food cards into the correct food group.

## Common Core Standards Addressed in this Lesson

English Language Arts Standards: Speaking and Listening

SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

SL1.3 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

National Health Education Standards

1.2 Demonstrate concepts related to health promotion and disease prevention.

## Extension (RL1, RL2)

Read aloud books from the suggested list to serve as reinforcement and as additional sources of information.

## Physical Activity Break

GO-GO

## Homework (SL1.1)

Assign students to choose five foods found in their refrigerator or cupboard at home, then draw the food in the correct spot on the MyPlate graphic organizer.

## Try It With A Twist

Play "What Am I?" The game begins with the teacher describing a food.

*I am yellow. I am a fruit that both people and monkeys like to eat. What am I? (a banana).* The first student to guess correctly then takes a turn describing a food for others to guess.

# Grade 1

# Lesson 2

# Food Group Balance

*Most children, 80 to 90 percent, do not meet the MyPlate recommendations for intake of fruits and vegetables (Krebs-Smith et al., 2010).*

## Objective

After participating in this lesson, students will understand the need to eat a balance of foods from the five food groups.

## Materials

paper plates

MyPlate graphic organizer for each student

food cards

## Procedure

1. Display the MyPlate graphic and review the food categories.
2. Select a read aloud from the suggested book list to read to the students.
3. Physical Activity Break: Yoga Try 3. Guide the students to understand the meaning of balance. Ask the students to stand on only one leg. Why is that more difficult than standing on both legs? When someone walks on a high wire, why do they put their arms out to the side? Continue with questions such as these until the students understand the meaning of balance.
4. Discuss the importance of having a balance of foods from all of the food groups. Remind the students that our bodies need a balanced diet to grow strong and to help us have the energy to do the things we want to do.
5. Give each child a paper plate and a copy of the food groups sheet. Have the students cut out the five food groups and glue them to the paper plate using the MyPlate graphic as a guide.
6. Distribute five food cards to each child.
7. Demonstrate the placement of the cards in the proper category using the large MyPlate graphic.
8. Ask students to place their cards in the proper category on *their* plate. Sets should be arranged so that no one will have all of the foods they need to have a balanced plate. As the students begin to notice this, ask them to think about what else they need.
9. Review each plate with the children. What is missing? What will they need to complete a balanced plate?

# Grade 1 Lesson 2 - Food Group Balance

## Assessment

Each child will write, draw or orally explain what is needed to complete a balanced plate.

## Common Core Standards Addressed in this Lesson

Reading: Informational Text

RL.1.1 Ask and answer questions about key details in a text.

RL.1.7 Use the illustrations and details in a text to describe its key ideas.

National Health Education Standards

1.2 Demonstrate concepts related to health promotion and disease prevention.

5.5 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.

## Extension (SL.1.a, SL.1.b, SL.1.c)

Allow students to trade cards with classmates in order to complete their balanced plate. Each child should trade cards with their classmates until they have a complete, balanced set of cards. For example, each student should have cards from each of the five categories. Half of their cards should be fruits and vegetables.

## Physical Activity Break

Yoga Try 3

## Homework

Students and parents can write or draw a balanced meal they have eaten at home.

## Try It With A Twist

Start a Collector's Club. In the club, students can earn, trade, and collect food item cards. The object of the club is to collect every available food card.

# Grade 1

# Lesson 3

# Keeping Track of Balance

*A balanced diet helps your body grow strong, and helps your body heal and fight diseases (U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2010).*

## Objective

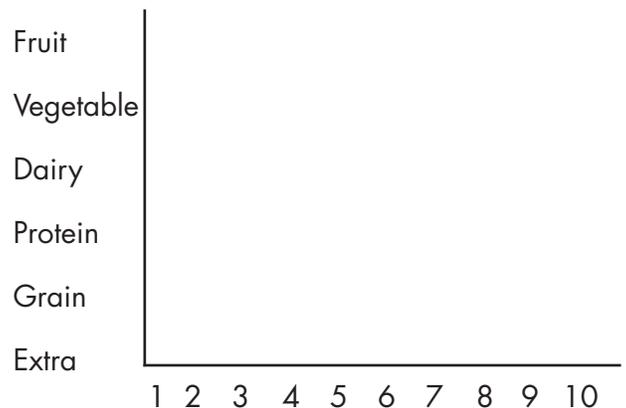
Students will keep track of the foods they have eaten in order to determine if balance has been achieved.

## Material

large chart paper

## Procedure

1. Construct a large chart: Is First Grade Balanced?



2. Ask the students to raise their hand if they ate a fruit for dinner last night, then count the hands.
3. The teacher or a student can fill in the chart with the correct number.
4. Repeat the process for each of the food groups.
5. Once the chart is completed, ask the students to look at the MyPlate graphic and discuss the class findings. Does the chart show a balance? If not, what needs to be added to the class diet to be certain a balanced diet is being eaten.
6. Physical Activity Break: Make It Count! Students count out with movement the numbers recorded in each food category.

# Grade 1 Lesson 3 - Keeping Track of Balance

## Assessment

The ability of students to determine if the class had eaten a balanced plate for dinner last night.

## Common Core Standards Addressed in this Lesson

Math: Measurement and Data

1.MD.3 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in other.

National Health Education Standards

6.2 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor their progress in achieving them.

## Extension (W2)

Ask pairs of students to take the data from the class chart to create a MyPlate graphic that corresponds to the class data. The pairs then write about missing categories or differences. They can then write about or draw in any missing categories.

## Physical Activity Break

Make It Count!

## Try It With A Twist

Chart the cafeteria menu for a week. Write a letter to the food service staff thanking them for balanced meals.

# GRADE 2

## Unit

### Assessment

The health behavior outcome shaped in this unit:

*Students will eat food of a variety of colors.*

#### Materials

MyPlate food tracker

#### WHAT COUNTS?

For this assessment, a serving is defined as the item the student ate: an apple, a bunch of grapes, or carrots on the plate. Estimating ounces and serving size equivalents, while important, can be confusing for young children.

To record combination foods, like fruit salad and spinach salad, students count the two main colors.

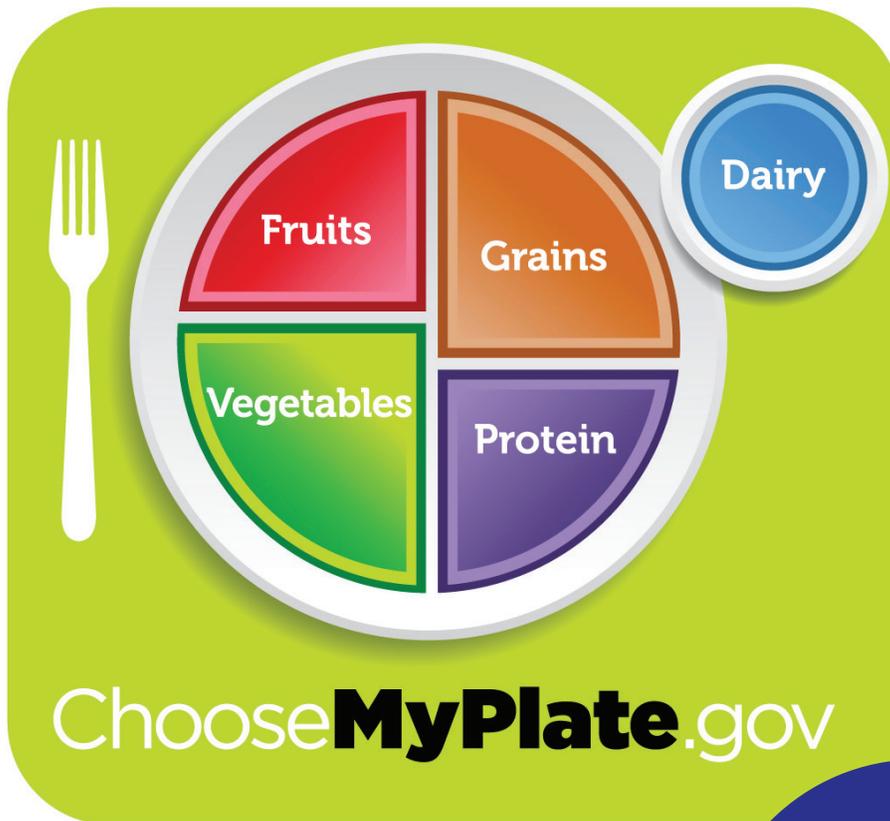
#### Pretest Procedures

1. Using the MyColor tracker, students record the fruits and vegetables eaten during the prior day. First, ask students to write a list of the fruits and vegetables they ate for dinner on the back side of the MyColor tracker. Remind them to include beverages and desserts. Second, ask them to write the corresponding color by the food item. Third, ask students to color in one square, under the correct day of the week, for each fruit or vegetable eaten on the front of the tracker. Color the square the same color as the color of the fruit or vegetable. If no food item was eaten from a particular category, then ask the student to write "none" in the box. Lastly, repeat the process for lunch and breakfast meals.
2. Each morning, students record fruits and vegetables from the previous day on the MyColor tracker. *A time saving tip is to ask students to record the evening meal in their planner as homework.*
3. On the fifth, or final day, of tracking, students count and record the total number of colored squares, a measure of the total fruit and vegetables eaten during the week. Also ask students to count the number of different colors on their tracker.
4. Teach the nutrition unit: Color Balance.

#### Posttest Procedures

1. Repeat the process of recording the fruits and vegetables eaten during the prior day. Ideally, students record the same number of days completed during the pretest.
2. Ask students to compare their food trackers from the two weeks: pre versus post. Ask students to make statements about the following:
  - a. What is the most common color in your diet?
  - b. How many colors did you eat in a week?
  - c. Did you add any new colors to your diet from pre to post?
  - d. Ask students to reflect on their color balance. Did their color balance improve? Why or why not? Have students write one statement to support their answer.
3. Teacher creates a class summary.
  - a. Write the colors (red, orange, yellow, white, green, blue/purple) on the board.
  - b. Allow students to color in their number of servings recorded in the post tracker.
  - c. Ask students to make summary statements about the class colors.





# MyColor Tracker

*Color in one square for every serving.*

								Total
Day 1								
Day 2								
Day 3								
Day 4								
Day 5								

Day 1	
Food Eaten	Color

Day 4	
Food Eaten	Color

Day 2	
Food Eaten	Color

Day 5	
Food Eaten	Color

Day 3	
Food Eaten	Color

# Grade 2

# Lesson 1

# My Colorful Plate



*There are over 30 types of green fruits and vegetables.*

## **Objective**

This lesson asks students to recall previous MyPlate lessons and to explore MyPlate through color. Students will learn about the high vitamin content in dark green, orange, and red vegetables.

## **Materials**

MyPlate graphic organizer  
color newspaper food ads

## **Procedure**

1. Display MyPlate graphic and review the five food categories.
2. Review familiar foods that fit in each group.
3. Discuss the fact that colorful fruits and vegetables, including dark green, orange, and red vegetables, contain the most vitamins.
4. Physical Activity Break: See Spot... Teacher calls out a color. On teacher's "go," students leave their spot, touch an item in the room of that color and return to their spot. Repeat.
5. Distribute the food advertisements and ask students to search for dark green, orange, and red vegetables.
6. Once the students have located the dark green, orange, and red vegetable pictures, compile a written list.
7. Complete the lesson by discussing the vegetables located in the ads and/or by reading aloud a related book from the suggested list.

# Grade 2 Lesson 1 - My Colorful Plate



## Assessment

The ability of the students to locate and name dark green, orange, and red vegetables will serve as assessment.

## Common Core Standards Addressed in this Lesson

English Language Arts: Speaking and Listening

SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

SL2.1a Follow agreed upon rules for discussion (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

SL2.1a Build on others talk in conversations by linking their comments to the remarks of others.

SL2.1a Ask for clarification and further explanation as needed about the topics and texts under discussion.

National Health Education Standards

1.5 Demonstrate concepts related to health.

4.2 Use interpersonal communications skills to enhance health.

## Extension (W2, SL2.2)

Students compose non-fiction text detailing the MyPlate information reviewed and learned in this lesson. The books or reports can be shared with first grade and kindergarten classes.

## Physical Activity Break

See Spot ...

## Homework

Assign students to survey friends and family members to determine their favorite dark green, orange, or red fruit and/or vegetable. Once the survey is complete, students write a paragraph explaining their survey findings.

## Try It With A Twist

Create color facts sheets to post in the cafeteria. Using the published menu and tailor fact sheets to menu items.

# Grade 2

# Lesson 2

## Eating Colors

*According to the United States Department of Agriculture, children need to eat a variety of colorful fruits and vegetables every day. The more colorful fruits and vegetables contain more vitamins (2006).*

### Objective

During this lesson students will identify colorful fruits and vegetables and learn about their nutritional content.

### Materials

rainbow picture

fruit and vegetable food cards

3x3 paper squares

### Procedure

1. Review, discuss, and read about (see suggested reading list) the fact that colorful vegetables and fruits contain more vitamins than less colorful foods.
2. Display the rainbow picture and review the colors (red, orange, yellow, green, blue, indigo, and violet).
3. Discuss fruits and vegetables that fit each color category.
4. Pass the fruit and vegetable food cards among the students, and ask them to sort the foods by color. As students sort cards, they should notice that white (potatoes and bananas) need to be added to their fruit and vegetable rainbow.
5. Give each student a 3x3 inch square of paper for each color. Ask the student to draw and color their favorite fruit or vegetable for each color.
6. Physical Activity Break: Order Up Colors. On command, ask students to order up by color groups.
7. Collect and assemble the squares to form a class rainbow.

## Grade 2 Lesson 2 - Eating Colors

### Assessment

The successful completion of the squares, as well as active engagements in class discussion will serve as assessment tools.

### Common Core Standards Addressed in this Lesson

English Language Arts: Speaking and Listening

- SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups
- SL2.1.a Follow agreed upon rules for discussion (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion)
- SL2.1.b Build on others talk in conversations by linking their comments to the remarks of others.
- SL2.1.c Ask for clarification and further explanation as needed about the topics and texts under discussion.

National Health Education Standards

- 6.2 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor their progress in achieving them.

### Extension (W6)

Students prepare a poster, PowerPoint or other media presentation to promote the consumption of color.

### Physical Activity Break

Order Up Colors

### Homework (W1)

Choose one fruit or vegetable from your team's list and write a paragraph describing the fruit or vegetable in detail. Include three facts and three adjectives.

### Try It With A Twist

As a class, make a fruit salad or salsa. Ask students to independently count the number of colors in the item. Students share guesses. All students take a victory lap.

# Grade 2

# Lesson 3

# Color Competition



*According to the Academy of Nutrition and Dietetics, children need to reduce high-fat snacks and increase fruit and vegetable intake. Fruits and vegetables make great snacks (2012).*

## **Objective**

This lesson challenges students to explore the wide variety of available food.

## **Materials**

large chart paper

## **Procedure**

1. Form five color teams (red/pink, green, blue/purple, yellow/orange, white/other).
2. Ask each team to identify as many foods as possible in their assigned color. Teams share their information by creating a poster, chart, or oral report.
3. As a class construct a bar graph to display data by color.
4. Ask students to orally interpret the data. What color team found the most foods? Which food groups were contained in their color category? Did the group find any unusual foods?

# Grade 2 Lesson 3 - Color Competition

## Assessment

The ability of students to compile a list of at least five fruits and vegetables in their assigned color, and present their findings to the class.

## Common Core Standards Addressed in this Lesson

Math: Measurement and Data

2.MD.10 Draw a picture graph or a bar graph (with single unit scale) to represent a data set with up to four categories. Solve simple put together, take apart, and compare problems using information presented in a bar graph.

English Language Arts: Speaking and Listening

SL 2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

SL 2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

National Health Education Standards

6.2 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor their progress in achieving them.

## Extension (MD.3, MD.4)

Ask teams of students to hypothesize about the favorite food color of their peers. Teams write down their prediction. Survey students, teachers and staff to determine the color of their favorite fruit or vegetable. Make and display a large graph in the cafeteria.

## Physical Activity Break

Make It Count!

## Homework (SL4)

With family assistance, plan and prepare a meal using food from each color of the rainbow.

## Try It With A Twist

Track the food in the cafeteria by color. Challenge color teams to compete to see which team can find the most foods in their color. The winning team can plan a snack using the foods in their color group.

# Grade 3 Unit Assessment

The health behavior outcome shaped in this unit:

*Students will improve food group balance in consumed meals.*

## Materials

MyPlate food tracker

## WHAT COUNTS?

For this assessment, a serving is defined as the item the student ate: an apple, a piece of bread, a bowl of spaghetti, or a cookie. Estimating ounces and serving size equivalents, while important, can be confusing for young children. The objective of this unit is to increase food group variety and balance. Recording items, not portion size, is sufficient for this assessment.

To record combination foods, students count the two main food groups: cheese pizza (grain and dairy); beef tacos (protein and grain) and PB&J sandwich (protein and grain).

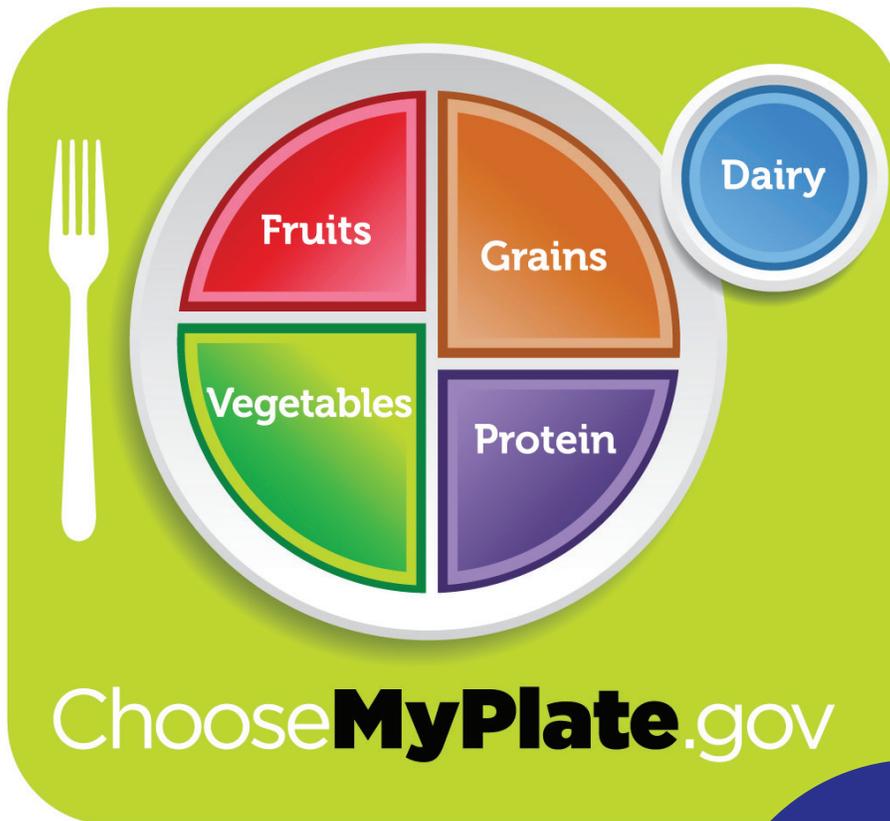
## Pretest Procedures

1. Using the MyPlate food tracker, students record the food eaten for dinner the prior evening. First, ask students to write a list of the foods they ate for dinner on the back side of the MyPlate food tracker. Remind them to include beverages and desserts. Second, ask them to write the corresponding food group beside the food item (fruit, vegetable, dairy, protein or grain). Foods that do not fit into one of these categories are called extras. Lastly, ask students to color (or mark with an X) the corresponding squares on the front of the tracker. Color in one square, under the correct day of the week, if a food item was eaten from that category. If no food item was eaten from a particular category, then ask the student to write "none" in the box.
2. Each morning, students record dinner from the previous day on the MyPlate food tracker. *A time saving tip is to ask students to record the evening meal in their planner as homework.*
3. On the fifth, or final day, of tracking, students count and record the total number of colored-squares per food group.
4. Teach the nutrition unit: Balancing MyPlate.

## Posttest Procedures

1. Repeat the process of recording the food eaten for dinner the previous evening. Ideally, students record the same number of meals completed during the pretest.
2. Ask students to compare their food trackers from the two weeks: pre versus post. Ask students to make written statements about the following:
  - a. Did your fruit intake change from pre to post?
  - b. Did your vegetable intake change from pre to post?
  - c. Did your intake of extras change from pre to post?
  - d. Ask students to reflect on their food group balance. Did their balance improve? Why or why not? Have students write two statements to support their answer.
3. Teacher creates a class summary.
  - a. Average fruit intake prior to and after the lessons.
  - b. Average vegetable intake prior to and after the lessons.
  - c. Average intake of extras prior to and after the lessons.
  - d. Number of students that increased their dietary balance (overall or by food category).





# MyPlate Tracker

**Color in one square for every serving.**

	Day 1	Day 2	Day 3	Day 4	Day 5	Total
Fruits						
Vegetables						
Protein						
Grains						
Dairy						
Extras						

*Extras are foods that do not fit into a MyPlate food category.*

Day 1	
Food Eaten	Food Category

Day 4	
Food Eaten	Food Category

Day 2	
Food Eaten	Food Category

Day 5	
Food Eaten	Food Category

Day 3	
Food Eaten	Food Category

Food Category Key: Fruit, Vegetable, Protein, Grain, Dairy or Extra

# Grade 3

# Lesson 1

# The Foods on MyPlate

*In June 2011, the U.S. Department of Agriculture (USDA) released MyPlate as a replacement for the food pyramid. The new plate icon is sectioned off to show fruits and vegetables as half of the plate.*

## Objective

Students will be able to identify foods from each food group and create a balanced meal.

## Materials

MyPlate handout  
MyPlate bulletin board (or enlarged graphic)

## Vocabulary Words

balance  
food groups  
extra

## Introduction

1. Ask students to list their favorite meal on a piece of paper.
2. Show the enlarged MyPlate graphic organizer and ask the students if their meal follows the MyPlate guidelines.

## Procedure

1. Pass out food cards and ask students to think about which food group their food belongs in.
2. Hold up a food card and say, "I have green beans (for example). What food group do green beans belong to?" A student volunteers an answer; if he or she is correct, he/she holds up their food card and says, I have \_\_\_\_\_. What food group does \_\_\_\_\_ belong to?" Repeat the process until all students have answered and shared their food item.

**Key Point: Extras are foods that do not fit into a MyPlate food category. Extras include sugar-sweetened beverages, cookies, chips, and fruit-flavored snacks.**

3. Physical Activity Break: Make It Count! Teacher calls out different food groups and students with a food card from that category stand up and complete five jumping jacks. Students exchange food cards with a classmate. Teacher repeats activity.
4. Ask students to help build a balanced meal on the MyPlate bulletin board with their food cards. Using MyPlate as a guide, the balanced meal will consist of the following: 1 grain, 1 protein, 1 fruit, 1 vegetable and 1 dairy (See MyPlate Fact Sheet for additional background information).

The teacher models this activity by accepting food card suggestions from students until all parts of the plate are complete.

**Key point: A balanced meal consists of foods from all five MyPlate food groups.**

**Note: Students will be learning about other types of balance through the program: color balance, snack balance, and beverage balance.**

# Grade 3 Lesson 1 - The Foods on MyPlate

5. Now students design their own MyPlate meal on a MyPlate graphic organizer or paper plate.
6. Students draw a balanced meal, fulfilling all the food categories of MyPlate and using the ideas from the sharing game. Ask students about the following aspects of their balanced plates:
  - Half the plate is fruit and vegetables.
  - Drink water or low-fat (1%) milk.
  - Avoid oversized portions.
7. The teacher asks students to write down how they could change their favorite meal (from the introduction) to fulfill the MyPlate requirements.

## Assessment

The ability of students to create a balanced meal on a MyPlate graphic organizer and to write a reflection about how to adapt their favorite meal to make it balanced.

## Common Core Standards Addressed in this Lesson

English Language Arts Standards

- SL3.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
- SL3.1d Explain their ideas and understanding in light of the discussion.
- SL3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

National Health Education Standards

- 1.5 Demonstrate concepts related to health promotion and disease prevention.
- 5.5 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.

## Extension (W3.1)

Students write their opinions about the best food group and give reasons to support their opinion.

## Physical Activity Break

Make it Count!

## Homework (SL3.6)

Students ask two members of the family to identify the food on their plates by food group categories. Students report back to the class.

## Try It With A Twist

As a group, brainstorm food items for various ethnic and special diet MyPlates: Mediterranean, Asian, Spanish, and vegetarian.

# Grade 3

# Lesson 2

# What Influences Food Choices?

*“There is a positive relationship between eating behaviors and access to healthy foods. Studies have found that individuals with access to a greater amount of healthy foods consume more fresh produce and other healthy items. Increasing consumption of the foods and beverages recommended by the Dietary Guidelines will depend heavily upon their availability and affordability” - Institute of Medicine, 2012.*

## Objective

Students will be able to analyze the influence of taste, availability, and social influences on food choices.

## Vocabulary Words

taste  
availability  
social influence

## Introduction

1. Ask pairs of students to brainstorm two food choices from each food category.

## Procedure

1. Ask each pair to share one item from each food category. Responses are recorded on a class chart.
2. Explain that people choose foods based on taste, availability, and social influence. Define taste, availability (home, school, neighborhood, season) and social influences (family members and peers).
3. Ask students to help identify reasons that might influence the food choices written on the chart. For example:
  - My family likes it (social influences).
  - It's crunchy (taste).
  - My mom buys it (availability).
  - It was served at lunch (availability).
4. Partners work together to identify reasons they eat the food on their brainstorming lists.

### **Taste**

*How a food tastes: sweetness, crunch, salty, sour.*

### **Availability**

*The ease and ability to get the food, including price, seasonality, and environment.*

### **Social influences**

*The influence of people and persuasive text.*

5. Discuss patterns in student responses.

**Key points: A variety of factors influence our food choices. Students commonly identify taste, but availability and others can be strong influences as well. The reason one person eats a food may differ from the reasons of another person. In this way, it is a matter of point of view or opinion whether the reason is taste, availability or social influence.**

6. Physical Activity Break: Make It Count! Teacher calls out the name of a food. Students perform one or more movements that corresponds to reasons for eating.
  - Taste = 5 jumping jacks
  - Social influence = jog in place for 10 seconds
  - Availability = 5 toe touches

## Grade 3 Lesson 2 - What influences food choices?

7. Students pick one food on their list and write a statement of opinion about the reason for choosing that food. Students may also pick a healthy food that they would like to eat more of and state ideas for increasing consumption.

### Assessment

The ability of students to identify influences on their food choices and to write an opinion statement.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

- SL3.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
- SL3.1d Explain their ideas and understanding in light of the discussion.
- SL3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.
- W3.1b Provide reasons that support the opinion.

National Health Education Standards

- 2.5. Analyze the influence of family, peers, culture, media and technology on health behaviors.
- 4.5 Use interpersonal communications skills to enhance health.
- 6.5 Demonstrate the ability to set personal goals related to healthy eating.

### Extension (W3.1)

Students write a thank you note to a parent, food service director or another person thanking them for providing a healthy food choice. Instead of writing a thank you note, students may write a request to another person for a healthy option.

Write a goal for one food category. Consider taste, availability and influences of others and list three strategies to help achieve the goal.

### Physical Activity Break

Make it Count!

### Homework (SL3.1)

Students ask family members to identify the reason for a food choice using the terms taste, availability, or social influence.

### Try It With A Twist

Challenge students to try a food that they have not eaten before. The new food trial can be completed at home, in the classroom, or in the cafeteria.

# Grade 3

# Lesson 3

## Balancing MyPlate

*“Americans now consume about one-third of their total calories on foods prepared outside the home.” — FDA Commissioner Margaret Hamburg (2011).*

### Objective

Students will be able to work with a partner and create a balanced meal.

### Materials

MyPlate graphic organizer or chart  
food cards

### Vocabulary Words

balance  
positive peer pressure  
social influence

### Introduction

1. Review lesson 2 and explain that positive peer pressure can be used to help others make healthy balanced food choices. This would be a positive social influence.
2. Organize students into pairs. Explain that pairs will work together to create healthy meals in a fun way.

### Procedure

1. Hold up a card that has green beans on it. Ask students to tell their seatmate a positive statement about the green beans. Ask the other seatmate to make a negative statement about the green beans.
2. Teacher asks “Which statement makes you want to try the green beans?”
3. Explain to students that the MyPlate graphic organizer will serve as a guide for creating a balanced meal.
4. Ask students to stand on one foot or strike a balanced pose. Remind students of the principles of balance.
 

**Key points: Balance is achieved with a center of gravity over a base of support with equal distribution among the pieces. The wider or bigger the base of support, the easier it is to achieve balance. In nutrition, MyPlate is the base of support. Eating a diet of ‘extras’ would be like trying to balance on your big toe.**
5. Pass out food cards. Ask students to stand up when the teacher calls out a section of the MyPlate graphic organizer that corresponds to their food card.
6. Once students have demonstrated the ability to recognize individual foods, insert combination foods: pizza, taco, burrito, spaghetti with meat sauce, or fruit salad. Ask students “Who would stand up if I said ‘pizza’?”
7. Ask students to stand up and read their food card. The other students write down two foods from each category, as they hear them, that they would encourage friends to eat.
8. Ask the students to work with their seatmate to list a meal that includes foods from all five food groups. Students may include one extra. Remind students that eating too many extras can knock you off balance.

## Grade 3 Lesson 3 - Balancing MyPlate

9. **Physical Activity Break: GO-GO.** Pairs go around to their classmates and check each other's meal for balance. If the meal is balanced, the students sign each other's work. Collect five peer signatures.
10. Return to seats and ask students to complete this writing assignment: Write a friendly letter to your parents asking them to help you fix the balanced meal that you created. Explain why a balanced meal is important.

### Assessment

The ability of students to work with a partner to create a balanced meal.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

- SL3.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
- SL3.1d Explain their own ideas and understanding in light of the discussion.
- SL3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.
- W3.1b Provide reasons that support the opinion.

National Health Education Standards

- 1.5 Demonstrate concepts related to health.
- 2.5 Analyze the influence of family, peers, culture, media and technology on health behaviors.
- 4.5 Use interpersonal communications skills to enhance health.
- 6.5 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor their progress in achieving them.
- 7.5 Demonstrate the ability to influence and support others to make healthy eating choices.

### Extension (W3.1, L3.1, L3.2)

Create a 10 Tips to Balanced Eating fact sheet to share with other students. Visit [www.choosemyplate.gov](http://www.choosemyplate.gov) for examples.

### Physical Activity Break

GO-GO

### Homework (SL3.1, SL3.6)

Ask families to set a MyPlate goal for one food category. Encourage students to track goal progression on the MyPlate tracker.

### Try It With A Twist

Use produce from the school garden to create salsas for tasting.

# Grade 4 Unit Assessment

The health behavior outcome shaped in this unit:

*Students will eat a variety of snacks from the MyPlate food group categories.*

## Materials

MySnack tracker

### WHAT COUNTS?

Snacks are all foods and beverages not eaten during breakfast, lunch or dinner.

For this assessment, a serving is defined as the item the student ate: an apple, a package of fruit snacks, a yogurt, or a cookie. Estimating ounces and serving size equivalents, while important, can be confusing for young children. The objective of this unit is to increase the variety of snacks eaten from different MyPlate food categories.

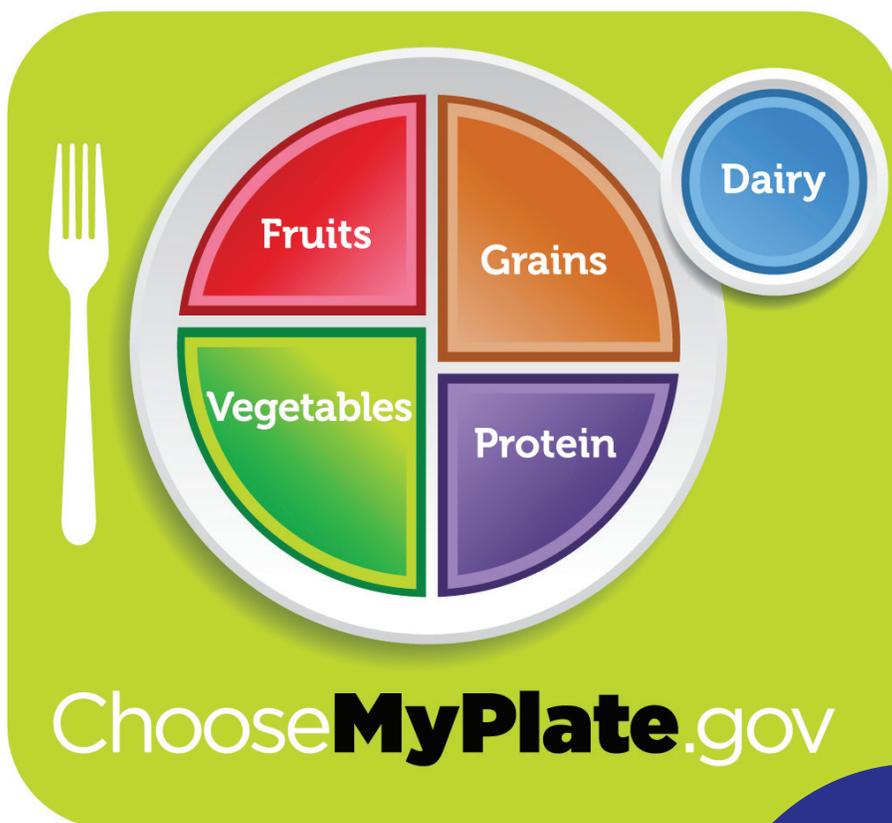
## Pretest Procedures

1. Using the MySnack tracker, students record the snacks eaten during the previous day. First, ask students to write a list of the previous day's snacks on the back side of the MySnack tracker. Remind them to include beverages. Second, ask them to write the corresponding food group beside the food item (fruit, vegetable, dairy, protein or grain). Foods that do not fit into one of these categories are called extras. Lastly, ask students to color (or mark with an X) the corresponding squares on the front of the tracker. Color in one square, under the correct day of the week, if a snack item was eaten from that category. If no snack item was eaten from a particular category, then ask the student to write "none" in the box.
2. Each morning, students record snacks from the previous day on the MySnack Plate food tracker. *A time saving tip is to ask students to record the day's snacks in their planner as homework.*
3. On the fifth, or final day, of tracking, students count and record the total number of colored-squares per food group.
4. Teach the nutrition unit: My Snack Balance.

## Posttest Procedures

1. Repeat the process of recording daily snack intake. Ideally, students record snacks for the same number of days completed during the pretest.
2. Ask students to compare their food trackers from the two weeks: pre versus post. Ask students to make written statements about the following:
  - a. How many days did you eat a snack from at least four of the food groups: pre versus post?
  - b. Did your fruit or vegetable intake change from pre to post?
  - c. Did your intake of extras change from pre to post?
  - d. Ask students to reflect on their snack balance. Did their balance improve? Why or why not? Have students write two statements to support their answer.
3. Teacher creates a class summary.
  - a. Number of days that students ate at least four snacks from a MyPlate food group: pre versus post.
  - b. Food category with the most snacks: pre versus post.
  - c. Food category with the fewest snacks: pre versus post.
  - d. Number of students that improved their snack balance (overall or by food category).





## MySnack Tracker

*Color in one square for every serving.*

	Day 1	Day 2	Day 3	Day 4	Day 5	Total
Fruits						
Vegetables						
Protein						
Grains						
Dairy						
Extras						

*Extras are foods that do not fit into a MyPlate food category.*

Day 1	
Food Eaten	Food Category

Day 4	
Food Eaten	Food Category

Day 2	
Food Eaten	Food Category

Day 5	
Food Eaten	Food Category

Day 3	
Food Eaten	Food Category

Food Category Key: Fruit, Vegetable, Protein, Grain, Dairy or Extra

# Grade 4

# Lesson 1

## 'Sense'ational Snack Choices

*Consumer decision-making is influenced by taste, availability (price, seasonality, and environment) and social influences of people and persuasive text. Choosing healthy, enjoyable foods involves understanding the principles of market availability and consumer purchasing.*

### Objective

Students will be able to explore and describe snacks using concrete words, phrases, and sensory details in the process of choosing snacks.

### Materials

sticky notes  
snack boxes and/or wrappers  
sensory word chart

### Vocabulary Words

sensory  
texture  
appearance

### Introduction:

1. Hold up two packages of snacks and ask students if they enjoy one (or both) of the snacks.
2. Explain that everyone snacks and that we are going to think about how to describe different snacks using sensory words and phrases.

### Procedure

1. Students make two columns on a piece of paper and title the first column, 'give one' and the second column, 'get one.'
2. For 1 minute, students list snacks that they personally eat in the 'give one' column.
3. Physical Activity Break: GO-GO: Students walk around to their classmates and ask for one snack idea to write in their 'get one' column. In turn, they give an idea to their classmate from their 'give one' column (3-5 minutes).
4. Students return to seats. Ask the students to choose their favorite snack and write it on a sticky note. Students come up to the board and put up their sticky note.
5. Teacher and students brainstorm words to describe snacks in sensory terms. Teacher makes a chart on the board to focus on categories of texture (feeling), smell, taste, looks (sight), and sounds. See attached chart.  
**Key point: We taste with all our senses.**
6. Teacher and students review the definition of a simile – comparing two things using like or as.
7. Teacher and students brainstorm similes to describe snacks.  
Examples: The cracker was as salty as the ocean. The ice cream was as cold as the North Pole.
8. Students work with partners to come up with three snack similes.

# Grade 4 Lesson 1 - 'Sense'ational Snack Choices



9. Students write a description of one snack in the form of a riddle and share it with the class. There should be three clues – two in the form of similes. For example:

I am as salty as the ocean.

I am as crunchy as fall leaves.

I am delicious in soup.

What am I? Crackers

## Assessment

The ability of students to write descriptions of snacks using sensory words and phrases in their similes.

## Common Core Standards Addressed in this Lesson

English Language Arts Standards

- L4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- L4.5a. Explain the meaning of simple similes and metaphors.
- L4.5c. Demonstrate understanding of words by relating them to their antonyms and synonyms.
- W4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- W4.3d. Use concrete words and phrases and sensory details to convey experiences and events precisely.

National Health Education Standards

- 2.5. Analyze the influence of family, peers, culture, media, and technology on health behaviors.
- 4.5 Use interpersonal communications skills to enhance health.

## Extension (L4.5c)

Make a list of words from the sensory chart and ask students to work with a partner to find antonyms and synonyms for each word. Students then make analogies using the lists.

Example: smooth: rough :: creamy: crunchy

## Physical Activity Break

GO – GO

## Homework (SL4.3)

Student asks each member of the family to make up a simile about a food they are eating. Students report back to the class.

## Try It With A Twist

Students try new fruits, vegetables, lean proteins, and whole grains. Describe the food item using their five senses.

# Sensory Chart

Name \_\_\_\_\_ Date \_\_\_\_\_

Snack	Taste	Texture	Looks (sight)	Smells	Sounds
Crackers	salty, buttery	crunchy, bumpy	round, disc shaped, brown dotted	none	crunchy



# Grade 4

# Lesson 2

## Snack Packaging and Promotion

*Foods that are marketed to kids by using cartoons, by referencing “play” or “fun” on the packaging, and using unusual colors or flavors tend to be very unhealthy. Research has found that 89% of these products targeting kids are of poor nutritional value with high levels of sugar, fat, and sodium (Elliot, 2007).*

### Objective

Students will evaluate snack packaging and identify stated and inferred consumer messages.

### Materials

empty snack packages  
snack analysis chart

### Vocabulary Words

appeal  
consumer message  
influence  
infer  
claims

### Introduction

1. Show a cracker box (or similar snack package) and discuss the appeal of the packaging. Probe about colors, pictures, product name, text, and product claims.
2. As the class examines the cracker box, fill in the package analysis chart.

### Procedure

1. Pass out a snack package to each pair of students.
2. Student partners fill in the package analysis chart for the snack package the pair has been given.
3. Students trade products with another pair of students until they have completed the chart.
4. Physical Activity Break: Order Up Snacks. Ask students to order up by these categories.
  - Most colorful packaging to least colorful.
  - Size of product name from biggest to smallest.
  - Incentives to buy product, including toys, free items, mail in rebates, and health claims.

**Key points: Snack food packaging is a form of product advertising. Use of colors, pictures, claims, and product names are strategies used to influence a consumer.**

5. All students return to seats. Partners complete the data analysis questions on the back of the chart.
6. Discuss responses to the data analysis questions. Focus on stated and inferred messages.

## Grade 4 Lesson 2 - Snack Packaging and Promotion

### Assessment

The ability of students to analyze snack packaging and identify stated and inferred consumer messages.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

- RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- SL.4.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

National Health Education Standards

- 2.5. Analyze the influence of family, peers, culture, media, and technology on health behaviors.
- 3.5. Ability to access valid information, products and services.

### Extension (RI 4.1)

Students use words from packaging to create a poem (called canned poetry). The poem should begin with a main idea and have phrases to support that main idea all from the packaging.

### Physical Activity Break

Order Up Snacks

### Homework (SL 4.1, SL 4.3)

Students ask family members to describe their dinner foods using adjectives to make the food appealing and give evidence to support their claims. Students record one description.

### Try it with a Twist (RI 4.1)

Students make an advertisement to promote the trial of an unusual cafeteria food choice or a food they wish was offered in the cafeteria. Advertisements need to include main ideas and supporting details to explain their choice.

# Packaging Analysis Chart

Name \_\_\_\_\_ Date \_\_\_\_\_

Product	Colors and pictures	Main message in words	Other

Choose one of the products listed on the front to answer the following questions.

Name \_\_\_\_\_ Date \_\_\_\_\_

1. How do the colors of the packaging attract the buyer to the product?

2. What main positive message does the package give you about the snack?

3. Explain any other messages you think the producer is trying to give the consumer to convince them to buy their product.

# Grade 4

# Lesson 3

## Balancing Snacks with MyPlate

*Snacks are an important strategy for curbing hunger and maintaining energy levels. Healthy snacks spaced throughout the day can even decrease mealtime calorie intake. Consumers are surrounded by snack choices with some choices better than others (Academy of Nutrition and Dietetics, 2012).*

### Objective

Students will make healthy snack choices from the MyPlate food categories.

### Materials

food cards  
empty snack packages  
MyPlate bulletin board or chart

### Vocabulary Words

balance            decrease  
choices            increase

### Introduction

1. Review the concepts of lesson 2 by explaining that snack manufacturers want us to choose their snacks, and they try to influence us with packaging. We need to be aware of advertising influence when we choose our snacks.
2. Ask students to brainstorm some snacks that do not have any or much product packaging.
3. Explain to students that they can use the MyPlate food categories to help them make healthy snack choices. Show the MyPlate graphic organizer and review the parts.

### Procedure

1. Remind students of the importance of balance by asking them to join you in standing on one foot, the other foot, and both feet, while thinking about how snacks affect nutritional balance.

**Key points:** *Balance is achieved with a center of gravity over a base of support with equal distribution among the pieces. The wider or bigger the base of support, the easier it is to achieve balance. In nutrition, MyPlate is the base of support. Eating a diet of 'extras' would be like trying to balance on your big toe.*

2. Pass out food cards. Ask students to stand up when the teacher calls out a category of the MyPlate that corresponds to their snack (food) card.
3. Physical Activity Break: Order Up. With food card in hand, students order up by various categories.
  - Items from the same food categories.
  - Items from three different food categories.
  - Items from four different food categories.
4. Ask students to work with a partner to make a list of snacks for one day that includes a snack from each of the food groups. Students may choose one extra.

**Key points:** *If students eat one snack from each food group, they are more likely to meet their nutritional needs, and have less room for extras. Too many snack extras can knock you off balance.*

5. Students return to seats and write a snack plan for one day. The plan must include one food from each of the MyPlate food categories. Challenge students to include one new snack and a brief statement of how they will get/ask for the new snack.

## Grade 4 Lesson 3 - Balancing Snacks with MyPlate

### Assessment

The ability of students to list snacks from each of the MyPlate food categories.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

SL3.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas, and expressing their own clearly.

SL3.1d Explain their own ideas and understanding in light of the discussion.

W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.

W3.1b Provide reasons that support the opinion.

National Health Education Standards

1.5 Demonstrate concepts related to health promotion and disease prevention.

4.5 Use interpersonal communications skills to enhance health.

5.5 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.

6.5 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor progress.

### Extension (W3.1, L3.1, L3.2)

Choose and analyze one day of snack intake record keeping data. Ask students to write a summary comparing their intake to the MyPlate recommendations.

### Physical Activity Break

Order Up Snacks

### Homework (SL3.1, SL3.6)

Ask families to set a MyPlate goal for one snack food category. Encourage students to track goal progression on the MyPlate tracker.

### Try It With A Twist

Invent a new snack by combining foods to incorporate more food groups into snacks. Example: celery with peanut butter and raisins, or carrots and pretzels.

# Grade 5 Unit Assessment

The health behavior outcome shaped in this unit:

*Students will decrease sugar-sweetened beverage intake.*

## Materials

MyBeverage tracker

### WHAT COUNTS?

For this assessment, a beverage serving is defined as a beverage between 8 and 12 ounces: a juice box, a 12-ounce can, a carton of milk. Estimating ounces and serving size equivalents, while important, can be confusing for young children. The objective of this unit is to decrease sugar-sweetened beverages. Teas, coffees, and sodas are to be recorded as extras. Milk and smoothies are to be recorded as dairy.

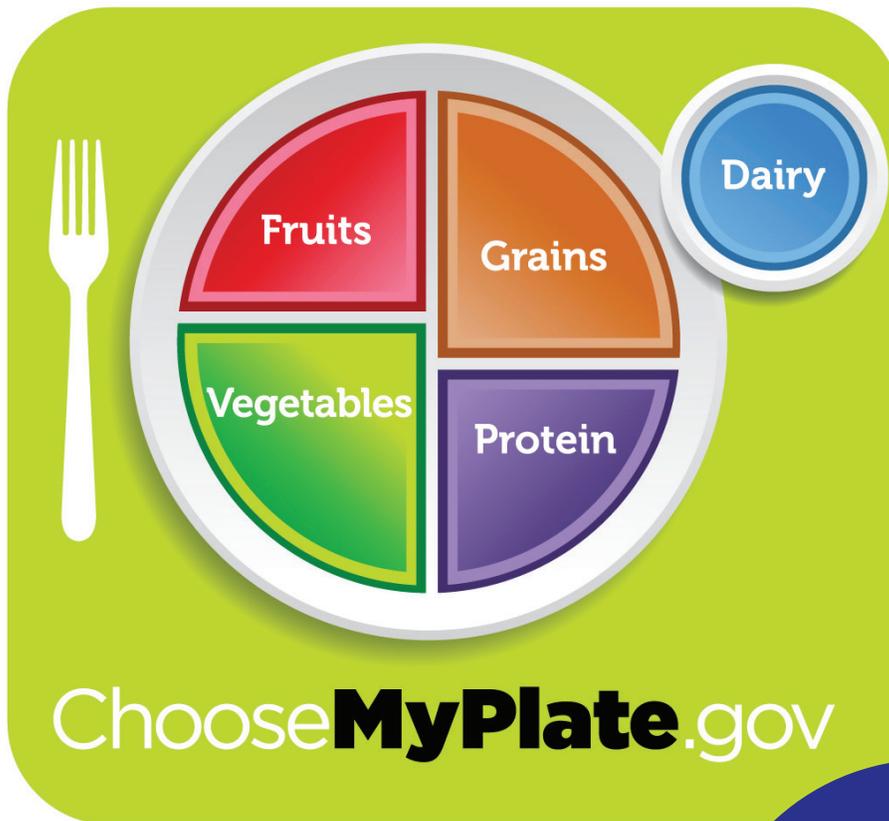
## Pretest Procedures

1. Using the MyBeverage tracker, students record the beverages consumed during the previous day. First, ask students to write a list on the back side of the MyBeverage tracker. Remind them to include beverages consumed during meals, during play, and for snack. Second, ask them to write the corresponding food group beside the beverage (fruit, vegetable, dairy, water). Beverages that do not fit into one of these categories are called extras. Lastly, ask students to record the *number of servings* in the corresponding squares on the front of the tracker. If no beverage was consumed from a particular category, then ask the student to write "none" in the box.
2. Each morning, students record beverages from the previous day on the MyBeverage tracker. A *time saving tip is to ask students to record the day's snacks in their planner as homework.*
3. On the fifth, or final day, of tracking, students count and record the total number of beverages per food group.
4. Teach the nutrition unit: Beverage Balance.

## Posttest Procedures

1. Repeat the process of recording daily beverage intake. Ideally, students record beverages for the same number of days completed during the pretest.
2. Ask students to compare their beverage trackers from the two weeks: pre versus post. Ask students to make written statements about the following:
  - a. Did your water intake change from pre to post?
  - b. Did your dairy intake change from pre to post?
  - c. Did your intake of extras change from pre to post?
  - d. Ask students to reflect on their beverage balance. Did their balance improve? Why or why not? Have students write two statements to support their answer.
3. Teacher creates a class summary.
  - a. Average water intake prior to and after the lessons.
  - b. Average dairy intake prior to and after the lessons.
  - c. Average intake of extras prior to and after the lessons.
  - d. Number of students that increased their beverage balance (overall or by food category).





## MyBeverage Tracker

*Color in one square for every serving.*

	Day 1	Day 2	Day 3	Day 4	Day 5	Total
Fruits						
Vegetables						
Dairy						
Water						
Extras						

*Extras are beverages that do not fit into a MyPlate food category.*

Day 1	
Beverage	Food Category

Day 4	
Beverage	Food Category

Day 2	
Beverage	Food Category

Day 5	
Beverage	Food Category

Day 3	
Beverage	Food Category

Beverage Category Key: Fruit, Vegetable, Dairy, Water or Extra

# Beverage Analysis Chart

Name \_\_\_\_\_ Date \_\_\_\_\_

Beverage Name	Serving Size	Calories	Grams of Sugar	Grams of Fat	Grams of Protein	Milligrams of Sodium	Nutrients



# Grade 5

# Lesson 1

## Beverage Balance

*Parents can erroneously believe that sport and juice-flavored drinks are healthy products. Some of these beverages have as much added sugar as a soda. Sugar-sweetened beverages are the number one source of added sugar in a young person's diet (Harris et al., 2011).*

### Objective

Students will be able to locate information on a beverage label, record information, and analyze the health benefits.

### Materials

empty beverage containers with labels intact  
beverage analysis chart  
paper and pencil  
label reading fact sheet

### Vocabulary Words

calorie                      label reading  
percent daily value      nutrient

### Introduction

1. Explain that a nutrient is a substance that provides energy or building material for the survival and growth of a living organism.
2. Explain how MyPlate is a balanced plan for eating and that beverages can affect a person's nutritional balance.
3. Reading labels and understanding the nutritional value of beverages is the key to making healthy beverage choices.

### Procedure

1. Students make two columns on a piece of paper and title the first column, 'give one' and the second column, 'get one.'
2. For 1 minute, students list up to five beverages that they drink in the 'give one' column.
3. Physical Activity Break: GO-GO. Students walk around to their classmates and ask for one beverage idea to write in their 'get one' column. In turn, they give an idea to their classmate from their 'give one' column (3-5 minutes).
4. Students return to seats. Teacher asks students to review their lists and number the beverages from healthiest to the least healthy.
5. Teacher explains the basics of label reading (see handout).
6. Pass out one beverage container to each student. Use a variety of beverage containers: soda, iced tea, juices, water, milk, energy drinks, and other beverages the students may consume regularly.
7. Pass out the beverage analysis data chart and instruct students to fill out the chart for 5-8 different beverages. Students should share containers with their classmates.
8. Students share or write three observations about their data. The statements could begin "I notice... "

**Key points:** *Information on the nutrition label is per serving. Some beverages can have 2 to 3 servings per container. Look on the ingredient list for 'sugary' words like syrup and words ending with 'ose.'*

# Grade 5 Lesson 1 - Beverage Balance



## Assessment

Students ability to read labels, record data, and reflect on results through discussion and writing.

## Common Core Standards Addressed in this Lesson

English Language Arts Standards

W5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

SL5.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

National Health Education Standards

2.5. Analyze the influence of family, peers, culture, media and technology on health behaviors.

3.5. Ability to access valid information, products and services.

## Extension (W5.9)

Create a 10 Tips to Beverage Balance fact sheet to share with other students. Visit [www.choosemyplate.gov](http://www.choosemyplate.gov) for examples.

## Physical Activity Break

GO-GO

## Homework (SL5.1 W5.1)

Students ask a family member to add a beverage to the information chart. Students should explain how to read the label and then record information on the chart to report back to the class

## Try It With A Twist

Students analyze beverages from the cafeteria using the same beverage analysis chart. Reflect on the nutritional value of the beverages.

# Grade 5

# Lesson 2

# Beverage Choices

*Beverage companies spent \$948 million in 2010 to advertise sugary drinks and energy drinks, an increase of 5% since 2008 (Harris et al., 2011).*

## Objective

Students will be able to examine labels and compare different beverage ingredients to better understand the continuum of nutritional values in beverage choices.

## Materials

empty beverage containers with labels intact  
beverage analysis chart completed during lesson 1  
beverage basics fact sheet

## Vocabulary Words

empty calories  
vitamins  
minerals  
compare

## Introduction

1. Pass out the beverage basics fact sheet handout or similar article discussing various beverages. Students read independently, in partners or as a group highlighting information that is important.

## Procedure

1. Students take out the completed beverage analysis chart from lesson 1.
2. Post data questions for data analysis. Students answer the questions and then discuss in pairs.

## Data Questions

- a. Which beverage had the highest number of calories?
  - b. Which beverage had the highest amount of sugar?
  - c. Which beverage had the fewest number of ingredients?
  - d. Make one other observation about the data that you noticed.
  - e. Which beverage had the most nutritional value?
3. Teacher should look for opportunities in discussions to extend students' answers to the following nutritional concepts:

low-fat

added sugar

empty calories

vitamins (from fruits and vegetables)

minerals (like calcium)

serving size

**Key point: Serving size and portion size are not equal. Serving sizes are suggested amounts of food or beverages, portions are the amount of food or beverage served.**

## Grade 5 Lesson 2 - Beverage Choices

4. **Physical Activity Break: Order Up Beverages.** Students create their own beverage card using information from their beverage analysis chart, or use a beverage container. Ask students to order up by beverage types. Students share one observation about their beverage. See activity break card for other activity variations.
5. Ask students to look at data chart again and explain to a partner the healthiest choice on their chart and the least healthy choice on their chart. Students will then write their findings in a few sentences explaining the healthiest choice and the least healthy choice.

**Key point: Students drink 6 to 8 beverages a day. There are many beverage choices, and not all beverages are equal.**

### Assessment

The ability of students to use data to support their beverage choices in writing.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

- W5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- W5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.
- SL5.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

National Health Education Standards

- 1.5 Demonstrate concepts related to health promotion and disease prevention.
- 4.5 Use interpersonal communications skills to enhance health.
- 5.5 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.

### Extension (W5.1, W5.9)

Students use information about milk from the beverage basic fact sheet and the beverage labels to create posters promoting milk consumption.

### Physical Activity Break

Order Up Beverages

### Homework (SL5.1)

Families set a beverage balance goal for the week. Encourage students to track goal progression on the MyBeverage tracker.

### Try It With A Twist

What's a cup? Teacher displays three drinking glasses with various amounts of liquid in each. Students guess the volume amounts. To learn to estimate beverage amounts, students use a 1-cup measuring cup to drink beverages for one to three days.

## Grade 5 Lesson 2 - Beverage Choices

### Additional Teacher Information

<i>Categories</i>	<i>Possible Beverages</i>
Milk	Fat-free, low-fat (1%), whole
	Flavored: chocolate, strawberry
Water	Fountain, tap, bottled
Flavored Water	
Soda	Regular
	Diet
100% Juice	Orange, apple, grape
Fruit-drinks	
Sweet drinks	Lemonade, sweetened iced tea
Sports drinks	
Hot drinks	Coffee, teas, hot chocolate
Other	Energy drinks, smoothies

#### Facilitation Notes

- Low-fat (1%) and 2% milk have the same nutritional value (Calcium and Vitamin D). The difference is the percentage of fat, and thus calories.
- Flavored milks have added sugar.
- 100% juice is different than a juice drink or fruit – flavored drink. The amount of added sugar is higher in juice drinks.
- Lots of beverages contain ‘empty calories’: calories with low nutritional value.
- All information on the Nutrition Fact label is per serving.
- Calories are reported in kilocalories per serving. If a jug of milk has 2 servings per container, and a student drinks the entire container, multiply the calories and other values by 2.
- Fats contain twice the amount of calories as other macronutrients: proteins & carbohydrates. Certain fats have a higher tendency to block our arteries and raise our blood pressure.
- Sugar is one form of carbohydrate. Milk and 100% fruit juice beverages can have some natural sugars – it is what makes them naturally sweet. This line item on the Nutrition Fact label contains both natural and added sugars.
- Ingredients are listed in order of weight. So the first item on the list represents the largest item in the product.
- Read the ingredient list to determine if sugar has been added to the beverage. There are many different words for sugar. Look for sugar, syrup, sucrose, dextrose or other words that ends in ‘ose.’



# Grade 5

# Lesson 3

## Where Do Beverages Fit in MyPlate?

*Water is vital to all living things. The human body is approximately 60% (adults) to 75% (infants) water. About 83% of our blood is water, which helps digest food, transport waste, and control body temperature. Every day, humans must replace 2.5 quarts of water through drinking liquids and eating foods (Institute of Medicine, 2004).*

### Objective

Students will be able to plan one day of balanced beverage intake.

### Materials

Movement cards

### Vocabulary Words

empty calories  
excess  
moderation

### Introduction

1. Brainstorm the term balance. Write the word balance on chart paper and list students' responses.
2. Ask students to balance on one foot, then the other foot, and then stand strong on both feet to emphasize how nutritional balance and physical balance are related.
3. Teacher explains MyPlate is a balanced plan for eating and beverages can keep a person's nutrition balanced or can bust their balance.

**Key points:** Balance is achieved with a center of gravity over a base of support with equal distribution among the pieces. The wider or bigger the base of support, the easier it is to achieve balance. In nutrition, MyPlate is the base of support. Eating a diet of 'extras' would be like trying to balance on your big toe.

### Procedure

1. Discuss overview facts listed above about water. Explain how vital water is to human health.
2. Teacher reviews MyPlate food categories.
3. Using the beverages listed on beverage charts from previous lessons, ask students to determine in which food category each beverage belongs.

**Key points:** 100% fruit and vegetable juice counts as a fruit or vegetable. Fruit-flavored drinks and sport drinks are extras. Ask students to read the labels for calorie and for added sugar information.

4. Water is the only beverage that is 'free' and not considered an extra serving that can bust your balance. Other beverages need to be counted as part of the daily intake of food groups.
5. Physical Activity Break: Hit The Deck. Ask students specific questions about their beverage chart. The student who answers the question correctly gets to hit the deck (draw a card and lead the class in that movement).
  - Who has a product with zero calories?
  - Who has an extra?
  - Who has a vegetable beverage?
  - Who has a beverage we should drink three times a day?

## Grade 5 Lesson 3 - Where Do Beverages Fit in MyPlate?

6. Students return to seats and create a written plan for one day of beverage consumption. According to the United States Department of Agriculture, young people should drink the following:
- 3 glasses of milk, or eat other dairy like cheese or yogurt.
  - 5 to 8 cups of water.

### Assessment

The ability of students to plan, in writing, a day of balanced beverage intake.

### Common Core Standards Addressed in this Lesson

English Language Arts Standards

W5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

W5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

SL5.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.

National Health Education Standards

- 1.5 Demonstrate concepts related to health promotion and disease prevention.
- 5.5 Demonstrate the ability to use decision-making skills to avoid unhealthy foods and beverages and choose healthy foods and beverages.
- 6.5 Demonstrate the ability to set personal goals related to healthy eating, take steps to achieve these goals and monitor progress.

### Extension (SL5.1, W5.1, W5.9)

Using data from the beverage analysis chart, students estimate beverage intake calories for one day. Students calculate the number of miles (100 calories per mile) needed to walk to burn off their beverage calories.

### Physical Activity Break

Hit The Deck

### Homework (SL5.1)

Challenge families to burn off their dinner beverage calories. To burn 100 calories, individuals need to walk or run 1 mile or engage in moderate activity for 20 minutes. Families discuss and complete exercise challenge.

### Try It With A Twist

In teams, students create a list of at least three ideas to make water a) more appealing and b) more accessible.