## Student Learning Objectives:

<table>
<thead>
<tr>
<th>Objective</th>
<th>National Health Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relate food quantity to sizes of recognized common items.</td>
<td>• Core Concepts</td>
</tr>
<tr>
<td>2. Recognize that the quantity of restaurant or packaged foods may not be the same as quantities of food needed to keep the body healthy.</td>
<td>• Core Concepts</td>
</tr>
<tr>
<td>3. Identify strategies people use to consume the appropriate quantity of food to meet their individual nutrient needs.</td>
<td>• Self Management</td>
</tr>
</tbody>
</table>

## Lesson Synopsis

Review the amount of food from each of the food groups that fourth graders should eat. Describe a typical portion size for foods from each food group. Demonstrate amounts of food using common items. Point out the difference between typical portions and the portions in restaurants and packaged foods. Emphasize the importance of selecting nonfat or low-fat options. Explain a simple way to select a healthy balance of foods from the food groups. Practice measuring out portions and filling a plate with a healthy balance of foods. Assign students to keep a food intake log for one week to assess their personal eating habits.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time in Minutes</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the Lesson</td>
<td></td>
<td>Teacher Manual Resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Family Handout: &quot;Can You Help?&quot;</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
<td>Supplied by the Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Three pieces of fruit in three different sizes, such as a small, medium and large apple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Twelve-ounce glass</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>15</td>
<td>Health Education Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poster Set: &quot;MyPlate: Healthy Food Choices,&quot; Michigan Model for Health Clearinghouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher Manual Resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student Worksheet: &quot;Food Group Facts&quot; (from Lesson 1 of this unit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Teacher Key: &quot;Food Group Facts--Part 2&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Slide Master: &quot;Fill Your Plate&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplied by the Teacher</td>
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<tr>
<td></td>
<td></td>
<td>• Pencils or pens</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Slide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Projector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One-cup measuring cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Half-cup measuring cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Box of macaroni and cheese</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Baseball (not a softball)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two 9-volt batteries</td>
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<tr>
<td></td>
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<td>• CD in plastic case</td>
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<tr>
<td></td>
<td></td>
<td>• Small computer mouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deck of cards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tablespoon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ping pong ball</td>
</tr>
<tr>
<td>Application or Skill Practice</td>
<td>20</td>
<td></td>
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<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>Teacher Manual Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teacher Reference: “Setting Up Food Stations” (Alternative #1)</td>
<td></td>
<td></td>
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<tr>
<td>Supplied by the Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Alternatives #1 and #2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pitcher of water</td>
<td></td>
<td></td>
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<tr>
<td>- Pencils or pens</td>
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<tr>
<td>- Paper plates, one per student</td>
<td></td>
<td></td>
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<tr>
<td>- Rulers</td>
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<td></td>
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<tr>
<td>- Crayons or markers</td>
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<td></td>
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<tr>
<td>- Computer with Internet access (Extension Activity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Alternative #1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Fruits and vegetables of various sizes</td>
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</tr>
<tr>
<td>- Vegetables, such as chopped carrots or green beans, four cups</td>
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<td></td>
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<tr>
<td>- Dry beans, four cups</td>
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<td></td>
</tr>
<tr>
<td>- Cooked meat, such as ham, two or three pieces of different sizes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Paper towels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Paper bowls, eighteen to twenty-one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- One-cup measuring cups, six to eight</td>
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<td></td>
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<tr>
<td>- Half-cup measuring cups, three or four</td>
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<td></td>
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<tr>
<td>- Quarter-cup measuring cups, three or four</td>
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<td></td>
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<tr>
<td>- Dry cereal, one box</td>
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<td></td>
</tr>
<tr>
<td>- Eight-ounce paper cups or glasses, six or seven</td>
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<td></td>
</tr>
<tr>
<td>• Alternative #2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Paper bowls, one or two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Paper plate, one or two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Twelve to sixteen-ounce glass</td>
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<td></td>
</tr>
<tr>
<td>- Box of cereal or four cups of dried beans</td>
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<td></td>
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<tr>
<td>- Clay, three or four cups</td>
<td></td>
<td></td>
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<tr>
<td>- One-cup measuring cup</td>
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<td></td>
</tr>
<tr>
<td>- One-half cup measuring cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- One-quarter cup measuring cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tablespoon</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closure</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Manual Resources</td>
<td></td>
</tr>
<tr>
<td>• Student Worksheet: “How Am I Doing?”</td>
<td></td>
</tr>
<tr>
<td>• Family Resource Sheet: “Fourth Grade Food Group Formulas”</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**  45

**Preparation**

Prior to the Lesson:

- **Decide which method you will use for Application or Skill Practice.** Your decision will depend on your preference of teaching strategies and availability of materials.
  - **Alternative #1** involves students in measuring a variety of foods at different stations. This option provides more students with a chance to practice measuring and seeing the various amounts. It involves more materials and the involvement of other adults to help with station activities.
  - **Alternative #2** asks the students to volunteer to estimate amounts of food using clay and some actual food. It is conducted in a large group.
- **Alternatives #1 and #2:**
  - **Request** families or your school’s food service to **provide the food and other materials** required for this lesson.
  - **Duplicate** the family handout, “Can You Help?” to solicit the items you need. Make enough copies for students to take home and for other staff who may want to help.
• Alternative #1:
  – Invite family members or your school’s food service staff to help students during the station activities.
  – Read the teacher reference, “Setting Up Food Stations,” and prepare the station activities. Share the information with the adult station assistants.
  – Decide how you will divide your class into four equal groups.

For Teacher Input:
• Prepare a slide of the slide master, “Fill Your Plate,” if you plan to use it.
• Have the students use their student worksheet, “Food Group Facts,” from Lesson 1 in this unit.
• Display the poster, “Fill Your Plate,” from the poster set, “MyPlate: Healthy Food Choices.”
• Have the “MyPlate: Healthy Food Choices” food group puzzle pieces ready if you want to use them.

For Closure:
• Duplicate the family resource sheet, “Fourth Grade Food Group Formulas,” to send home with each student.
• Duplicate the student worksheet, “How Am I Doing?” for each student.

Time-Saver Tip: Alternative #1 may take longer than one class period.

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**LESSON PROCEDURE**

**Introduction:** Review the amount of food needed daily from each food group.

<table>
<thead>
<tr>
<th>Instructional Steps</th>
<th>Script &amp; Detailed Directions</th>
<th>Extensions &amp; Suggestions</th>
</tr>
</thead>
</table>
| Review the recommended daily amount of food for each food group. | *We learned how much we should eat from each of the food groups. Let’s see how much you remember.*  

Everyone stand up. Hop on one foot if you remember how many cups of vegetables you should eat each day.  

Pause to allow students to respond. Provide the correct answer: boys – 2 1/2 cups; girls – 2 cups  

Reach your arms toward the ceiling if you remember how many cups of fruit you should eat each day.  

Answer: 1 1/2 cups  

Run in place if you remember how many cups from the dairy group you should eat each day.  

Answer: 3 cups  

Touch your toes if you remember how many ounces from the protein foods group you should eat each day.  

Answer: 5 ounces | }
Squat down if you remember how many ounces from the grains group you should eat each day.

Answer: boys — 6 ounces; girls — 5 ounces

Remember these amounts are the average for kids your age. Your exact needs depend on how physically active you are. We’ll talk more about that later.

Ask students to guess the amounts of popular foods.

Now let’s do some guessing about amounts.

Hold up the three pieces of fruit.

Which of these do you think is one cup?

Allow students to guess after each question.

Think about a hamburger you might eat. How many ounces of grains would you be eating?

Hold up a 12-ounce glass.

How many cups of milk would you be drinking if you filled this glass?

Introduce the topic of this lesson.

Today, we will learn how to tell how much food is the right amount to keep us healthy.

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**Teacher Input:** Explain how to estimate the amount to eat and relate the amount to common items.

**Approximately 15 minutes**

<table>
<thead>
<tr>
<th>Instructional Steps</th>
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</thead>
<tbody>
<tr>
<td>Explain the rationale for estimating amounts of food.</td>
<td>Let’s do a quick survey. Hold up the one-cup measuring cup. How many of you eat 2 or 2 1/2 cups of vegetables for dinner? This is one cup. How many of you drink three cups of milk for breakfast? We know how much we should eat every day from each food group. But most people don’t eat 2 or 2 1/2 cups of vegetables or drink three cups of milk all at once. They eat vegetables and drink milk at different times of the day. So, let’s think about each of the food groups and learn how to estimate how much food you are eating.</td>
<td>The new Dietary Guidelines do not emphasize serving sizes, but rather talk about the amount of each food group that should be eaten daily.</td>
</tr>
<tr>
<td>Instruct students to get out their student worksheet, “Food Group Facts,” from Lesson 1 in this unit or redistribute it.</td>
<td>Add to your worksheet as we describe how to estimate the amount of food for each food group.</td>
<td></td>
</tr>
</tbody>
</table>

Page 32  Lesson 2  4—Nutrition/Physical Activity © Copyright 2016 State of Michigan MM
Hold up the one-cup and half-cup measuring cups.

*How many of you carry a measuring cup with you so that you know how much food you are eating?*

*I don’t know anyone who does. So, how can we judge how much to eat?*

Hold up the baseball.

Some people remember the size of these measuring cups and use it to estimate how much they are eating. We also know that a baseball is about the size of one cup. That may be easier for some people to remember.

Since most people don’t eat 2 or 2 1/2 cups of vegetables at one time and we know that’s how much we need each day, you need to estimate how much you eat at different times of the day and add them up. Perhaps you might eat one cup of broccoli for lunch and one cup of lettuce salad for dinner. Then, you might have a half-cup of carrot sticks as a snack. This would equal 2 1/2 cups. If you love broccoli, maybe you’ll eat two cups of broccoli and skip the salad. That would also give you 2 1/2 cups, or your daily amount if you are a boy.

You can think of fruit in the same way. Perhaps you would eat a half-cup of bananas for breakfast and an apple about the size of a baseball for lunch.

Ask students to record or draw on their worksheets the objects to remember as they estimate the amount of food they are eating.

*Lets think about the dairy group. Milk and yogurt can be measured by a measuring cup, but cheese is harder to estimate.*

Hold up two 9-volt batteries.

*This is 1 1/2 ounces of cheese and the equivalent of one cup of food from this group.*

Since you need three cups of food from the dairy group each day, you might have a cup of milk on your cereal for breakfast, a cup of yogurt for a snack, and enough cheese in your macaroni and cheese to equal 1 1/2 ounces.

Remind students to record or draw on their worksheets the objects to remember as they estimate the amount of food they are eating.
**Explain and demonstrate estimating the amounts for the grain group.**

The amount of grains and protein foods you need is measured in ounces. This is a weight and most of us don’t use a scale when we eat. Let’s look at some items that will help us understand what one ounce of grain looks like.

Hold up a CD in its plastic container.

*This is the size of one ounce of bread.*

Hold up the baseball.

*One cup of dry cereal weighs about one ounce and is the size of this baseball.*

Hold up a small computer mouse.

*This is the size of one ounce of cooked rice or pasta or cooked cereal.*

You need six ounces of foods from the grain group each day if you are a boy and five ounces if you are a girl.

Remind students to record or draw on their worksheets the objects to remember as they estimate the amount of food they are eating.

**Explain and demonstrate estimating the amounts for the protein foods group.**

Because protein foods are denser, they weigh more than grain foods. Let’s look at some items that will help us understand how much we are eating from this group.

Hold up a deck of cards.

*This is the size of two or three ounces of meat, poultry or fish.*

Hold up the quarter-cup measuring cup.

*This is one ounce of cooked dry beans. So, a baseball would be about one cup or four ounces of beans.*

Hold up a tablespoon and the ping pong ball.

*One tablespoon of peanut butter equals one ounce. Two tablespoons are about the size of a ping pong ball.*

Remind students to record or draw on their worksheets the objects to remember as they estimate the amount of food they are eating.

Half of the grains eaten should be whole grains. For a list of whole grains, see the teacher reference, “Whole Grains,” from Lesson 1 in this unit.
<table>
<thead>
<tr>
<th>Ask students to guess the amounts of popular foods again</th>
<th>Now let's see if we know the estimated amounts of these foods. Hold up the three pieces of fruit again. <strong>Which of these is about one cup?</strong> Answer: The fruit that is the size of a baseball. <strong>Think about a hamburger you might eat. How many ounces of food from the grain group would you be eating?</strong> Answer: two ounces if it is a regular size hamburger <strong>How many cups would be in this glass of milk?</strong> Hold up the 12-ounce glass. Answer: 1 1/2 cups Hold up the box of macaroni and cheese. Food packages have labels that give you useful information about the food in the package. They also state a &quot;serving size.&quot; Serving sizes can vary. It's always best to look for the amount of food as well as the serving size. Point out the location of this information on the box.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point out the potential for large portions of food served in restaurants and in packaged foods.</td>
<td>When you go to restaurants to eat, you should notice how much food is served in your meal. Often large portions of food are served. Now you know how to estimate how much you should eat. You also need to use your new knowledge when you eat foods that come in packages, such as macaroni and cheese. They are often intended to serve several people. It is important to eat the right amount for you, no more and no less. People who eat too much food gain weight, and that can lead to health problems. People who eat too little food will not get the nutrients and energy they need to grow, learn, and be physically active.</td>
</tr>
<tr>
<td>Explain the importance of selecting fat-free or low-fat dairy and protein foods options.</td>
<td>Another important habit is to reduce the amount of fat in your food. Dairy and many protein foods come from animals, so they contain more fat than foods that come from plants. It is important to choose options that are fat-free or low-fat to keep your heart healthy. You can choose fat-free or low-fat milk, cheese, or yogurt. In general, poultry, fish, eggs, and beans are lower in fat than red meats.</td>
</tr>
</tbody>
</table>
Here is a simple way to choose food from all the food groups so that you eat the right amounts at each meal.

Explain how to fill a plate to get foods in the correct proportions:
- Half the plate should be fruits and vegetables.
- The other half should be three quarters grains.
- The last one quarter of the second half should be low-fat protein foods.
- Add a cup of a low-fat dairy product, such as milk or yogurt, and you have a balanced meal.

There is one more thing to consider: how active you are. If you are very active and spend a lot of time playing sports or running or riding your bike, you will need more food than if you are less active. However, the plate will tell you how much of each food group you should eat.

Application or Skill Practice: Practice measuring amounts and preparing a balanced plate of food.

Approximately 20 minutes

<table>
<thead>
<tr>
<th>Instructional Steps</th>
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</thead>
<tbody>
<tr>
<td>[Alternative #1] Divide the class into four groups.</td>
<td>Divide the class into four equal groups. Have each group move to one of the four stations set up in different parts of the room. Assign a family member or school staff member to assist students at each station.</td>
<td>Invite family members to assist students at each station. Consider modeling food safety by asking students to wash their hands prior to measuring the food. Discuss the importance of washing hands before preparing food or eating it.</td>
</tr>
<tr>
<td>Explain the four station activities.</td>
<td>Explain each station activity. • Select fruits and vegetables that are one cup in size by comparing them to a baseball or measuring one cup. Pour measured vegetables into a bowl and replace them when finished. • Measure one cup of cereal and pour it into a bowl. Replace the cereal when finished. Measure one cup of water to illustrate a serving of milk. Replace the water when finished.</td>
<td>Ask your food service or families to contribute the foods needed for the station activities. Use the family handout, “Can You Help?”</td>
</tr>
</tbody>
</table>
- Select meat that is two or three ounces by comparing it to a deck of cards.
  Measure dry beans into a quarter-cup measuring cup.
  Replace the beans when finished.
- Draw foods on a paper plate to show the proportion of food from each food group that should be eaten at each meal.

Have students keep a food diary for three or four days. Then, ask them to pick the day they think they ate the healthiest. Have them analyze the selected day using "Daily Food Plan" found on the MyPlate website. You might test their ability to analyze a day's food intake by providing a sample daily menu and use the same worksheet to analyze it.

www.ChooseMyPlate.gov

<table>
<thead>
<tr>
<th>Have students rotate to each station.</th>
<th>You will have three minutes at each station. When you hear my signal, move in a clockwise direction to the next station. Every three minutes, signal the students to rotate to the next station.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have students stay at the last station they visited.</td>
<td>Freeze at this station. You have been to all four stations.</td>
</tr>
</tbody>
</table>

[Alternative #2]

Measure imaginary foods to estimate the amount that will be eaten.

Remove the visual cues, such as the measuring cup, deck of cards, and so on. Have them close by. You will use them to measure and see how close the students' estimates are.

We’ve learned how to estimate how much we are eating. Let's test our skills.

**Who thinks they can tell how much cereal to pour into this bowl if a person wanted to eat one cup of cereal?**

Call on a volunteer. Have the volunteer estimate the amount. Then, measure to see how accurate he or she was.

**Who thinks they can form this clay into the size of two or three ounces of chicken?**

Call on a volunteer. Have the volunteer estimate the amount. Then, show the deck of cards to see how accurate he or she was.

**If we imagine the cereal is fruit, who thinks they can tell how much cereal to pour into this bowl if a person wanted to eat one-half cup of sliced strawberries?**

Call on a volunteer. Have the volunteer estimate the amount. Then, measure to see how accurate he or she was.

For measuring, you can use cereal, dry beans, water, and clay to simulate foods of various kinds.
Continue with this process as time allows. You might include:
- Pouring eight ounces of water into a glass to simulate milk.
- Forming clay into the size of 1 1/2 ounces of cheese, equivalent to one cup of milk.
- Forming clay into the size of two or three ounces of hamburger.
- Pouring 1/4 cup of cereal to simulate one ounce of dry beans.
- Pouring 1/2 cup of cereal to simulate one ounce of cooked rice or pasta.
- Forming clay into the size of one tablespoon or one ounce of peanut butter.

Create a plate with the correct proportions of different food groups for a meal.

Distribute paper plates, rulers, pencils, crayons and/or markers to students.

It's time to picture a meal!

Have students:
- Draw a line across their plate, dividing the plate into two equal halves.
- Fill half of the plate with fruits and vegetables.
- Fill most (three quarters) of the other half with grains.
- Fill the remaining quarter of that half with protein foods.
- Draw one cup of milk on the edge or back of the plate to represent the dairy group.

**Closure:** Summarize what has been learned about estimating the amount of food to be eaten.

<table>
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<tr>
<td>Ask students to discuss what they have learned about estimating the amount of food to eat.</td>
<td>Now that you have practiced measuring and preparing a plate for a meal, talk with someone sitting close to you (or your small group) about the most helpful things you have learned. In two minutes, I will call on several of you to share your ideas. Call on several students to tell what helpful things they learned about estimating the amount of food to be eaten.</td>
<td>If you used Alternative #1, have students wash their hands before returning to their seats.</td>
</tr>
<tr>
<td>Distribute the family resource sheet, &quot;Fourth Grade Food Group Formulas.&quot;</td>
<td>Be sure to share this information about food groups and the recommended amounts to eat with your families tonight.</td>
<td></td>
</tr>
<tr>
<td>Distribute the student worksheet, &quot;How Am I Doing?&quot;</td>
<td>Your homework assignment is to keep a food log for one week. Record everything you eat and drink. Keep track of how much you eat or drink of each food group. Turn in your homework in one week.</td>
<td></td>
</tr>
<tr>
<td>Introduce the next lesson.</td>
<td>In our next health lesson, we will find out how advertisers try to get us to buy food.</td>
<td></td>
</tr>
</tbody>
</table>

Once student return their homework, have them write a short paper about their experience with their food log and make a plan to improve their eating habits.
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</tr>
</thead>
<tbody>
<tr>
<td>Amount to Eat Each Day [Done in 4-NPA-1]</td>
<td>Boys: 2 1/2 cups</td>
<td>1 1/2 cups</td>
<td>Boys: 6 ounces</td>
<td>3 cups</td>
<td>5 ounces</td>
</tr>
<tr>
<td></td>
<td>Girls: 2 cups</td>
<td></td>
<td>Girls: 5 ounces</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Favorites [Done in Lesson 4-NPA-1]

<table>
<thead>
<tr>
<th>Estimating the Amount of Food</th>
<th>Size of a baseball = one cup</th>
<th>Size of a CD in a plastic case = one ounce of bread</th>
<th>Size of a baseball = one cup or one ounce of dry cereal</th>
<th>Size of two 9-volt batteries = 1 1/2 ounces, equivalent to one cup, or natural cheese</th>
<th>Size of a deck of cards = two or three ounces of meat, poultry, fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Size of a small computer mouse = 1/2 cup or one ounce of cooked pasta, rice, or cooked cereal</td>
<td></td>
<td></td>
<td>One, 8-ounce measuring cup = one cup of milk or yogurt</td>
<td>Size of a baseball = one cup or four ounces of cooked dry beans</td>
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<tr>
<td></td>
<td>Size of a ping pong ball = two tablespoons or two ounces of peanut butter</td>
<td></td>
<td></td>
<td></td>
<td>One egg = one ounce</td>
</tr>
</tbody>
</table>

Page 40 Lesson 2 4–Nutrition/Physical Activity © Copyright 2016 State of Michigan
Fill Your Plate

Make fruits and vegetables half your plate every meal.
Can You Help?

We are studying how to keep our bodies healthy by eating nutritious foods. We need your help. In order for your child and his or her classmates to be able to measure foods and discover how to estimate how much to eat, we need a supply of various foods and measuring utensils. We will need them on ____________________________ (date). I have checked those I need. Please check the items you are willing to provide and return the sheet to me by ____________________________ (date).

Thanks so much!

______________________________  ______________________________
Teacher’s Name  Parent’s Name

I need the items checked below:  I can provide the items checked below:

______________________________  ______________________________
Box of macaroni and cheese
______________________________  ______________________________
Baseball (not a softball)
______________________________  ______________________________
Two 9-volt batteries
______________________________  ______________________________
CD in plastic case
______________________________  ______________________________
Small computer mouse
______________________________  ______________________________
Deck of cards
______________________________  ______________________________
Tablespoon
______________________________  ______________________________
Ping pong ball
______________________________  ______________________________
Three pieces of fruit in three different sizes, such as a small, medium and large apple
______________________________  ______________________________
Twelve-ounce glass
______________________________  ______________________________
Fruits and vegetables of various sizes
______________________________  ______________________________
Vegetables, such as chopped carrots or green beans, four cups
______________________________  ______________________________
One-cup measuring cups, six to eight
______________________________  ______________________________
One-half cup measuring cups, three or four
______________________________  ______________________________
Paper bowls, twenty-one
______________________________  ______________________________
Dry cereal, one box
______________________________  ______________________________
Pitcher for water
______________________________  ______________________________
Eight-ounce paper cups or glasses, seven
______________________________  ______________________________
Dry beans, four cups
______________________________  ______________________________
Cooked meat, such as ham, two or three pieces of different sizes
______________________________  ______________________________
One-quarter cup measuring cups, three or four
______________________________  ______________________________
Paper towels
______________________________  ______________________________
Paper plates, 40
______________________________  ______________________________
Twelve to sixteen-ounce glass
______________________________  ______________________________
Clay, four cups
Setting Up Food Stations

Station 1: Selecting Fruits and Vegetables

Materials:
- Baseball (not a softball)
- Fruits and vegetables of various sizes
- Vegetables, such as chopped carrots or green beans, four cups
- One-cup measuring cups, three or four
- One-half cup measuring cups, three or four
- Paper bowls, six or seven

Instructions for students:
- Select fruits that are about one cup in size.
- Select vegetables that equal about one cup.
- Measure one cup of chopped vegetables and pour it into a bowl.
- Replace the vegetables when finished.
- Measure 2 1/2 cups of vegetables to see how much should be eaten daily and pour it into a bowl.
- Replace the vegetables when finished.

Station 2: Measuring Grains and Dairy

Materials:
- Dry cereal, one box
- One-cup measuring cups, three or four
- Paper bowls, six or seven
- Pitcher of water
- Eight-ounce paper cups or glasses, six or seven

Instructions for students:
- Measure one cup of cereal and pour it into a bowl.
- Replace the cereal when finished.
- Measure one cup of milk and pour it into a cup or glass. Pretend the water is milk.
- Replace the water when finished.

Station 3: Measuring Protein Foods

Materials:
- Dry beans, four cups
- Cooked meat, such as ham, two or three pieces of different sizes
- One-quarter cup measuring cups, three or four
- Deck of cards
- Paper towels
- Paper bowls, six or seven

Instructions for students:
- Select a piece of meat that is two or three ounces and place in on a paper towel.
- Put the meat back.
- Measure one-quarter cup of dry beans into a bowl. Pretend they are cooked.
- Put the beans back.

Station 4: Fill my plate

Materials:
- Paper plates, one per student
- Rulers, six or seven
- Pencils, six or seven
- Crayons or markers

Instructions for students:
- Draw a line across your plate, dividing the plate into two equal halves.
- Fill half your plate with fruits and vegetables.
- Fill most (three quarters) of the other half with grains.
- Fill the remaining quarter of that half with protein foods.
- What is missing? Draw one cup of milk on the edge or back of the plate to represent the dairy group.
How Am I Doing?

Use this chart to find out if you are eating enough of all the food groups during a week. The number of circles shown for each food group is the number of cups or ounces to be eaten each day.

1. Record what foods you eat for each meal and snack.
2. Fill in the circle for each food's food group. For example, if you eat one cup of cereal for breakfast, write in "cereal" and fill in one circle for grains. If you only eat one-half cup, fill in half of one circle.

<table>
<thead>
<tr>
<th>Vegetables</th>
<th>Fruits</th>
<th>Grains</th>
<th>Dairy</th>
<th>Protein Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Monday</td>
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</tr>
<tr>
<td>Saturday</td>
<td></td>
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</tr>
</tbody>
</table>

At the end of the week, if you have only a few blank circles, keep up the good work. If you have several blank circles, try to eat more foods from the missing food groups.

Adapted from USDA, Center for Nutrition Policy and Promotion, website.
# Fourth Grade Food Group Formulas

## Guidelines for Fourth Graders
This chart shows the food groups and the daily amount an average fourth-grade child (9 years old) needs. The last column gives special tips for making smart choices in each food group.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Amount of Food Your Child Needs</th>
<th>Estimate How Much</th>
<th>Tips</th>
</tr>
</thead>
</table>
| Vegetables | Boys: 2 1/2 cups  
Girls: 2 cups | One-cup measuring cup  
Size of a baseball = one cup | Choose a variety of vegetables of each color: red, orange, green, yellow, white, and blue. The more colors you eat, the more vitamins and minerals you get. This food group helps fight infections, helps cuts and scrapes heal, and prevents strokes and heart disease. |
| Fruits     | Boys and Girls: 1 1/2 cups | One-cup measuring cup  
Size of a baseball = one cup | Choose a variety of fruits of each color: red, orange, green, yellow, and blue. The more colors you eat, the more nutrients you get. This group promotes growth, helps cuts and scrapes heal, and provides fiber. |
| Grains     | Boys: 6 ounces  
Girls: 5 ounces | Size of a CD with the plastic case = one ounce of bread  
Size of a baseball = one cup or one ounce of dry cereal  
Size of a small computer mouse = 1/2 cup or one ounce of cooked pasta, rice or cereal | Half of the grains eaten should be whole grains.  
Read the ingredient list on the food label to be sure. The whole grain should be the first ingredient listed. Most foods will say "whole" or "whole grain" before the ingredient name, such as "whole grain wheat." Some exceptions that are whole grain even though they aren't listed that way are brown rice, oatmeal, popcorn, wild rice, and bulgur.  
Foods from the grain group contain carbohydrates, vitamins and fiber. They give us energy. |
| Dairy      | Boys and Girls: 3 cups | One, 8-ounce measuring cup  
Size of two 9-volt batteries = 1 1/2 ounces, equivalent of one cup, of natural cheese | Choose fat-free or low-fat options in this group.  
This food group provides the calcium needed to make strong bones and teeth, a critical nutrient at this age. |
| Protein Foods | Boys and Girls: 5 ounces | Size of a deck of cards = two or three ounces of meat, poultry, fish  
One egg = one ounce  
1/4 cup = one ounce of cooked dry beans  
Size of a baseball = one cup or four ounces of cooked dry beans  
One tablespoon = one ounce of peanut butter  
Size of a ping pong ball = two tablespoons of peanut butter or two ounces | Choose lean meats and poultry.  
Vary your protein choices by choosing more fish, beans, eggs, nuts, seeds, and tofu.  
This food group builds muscles. |

To find out the recommendations for other members of your family, visit www.ChooseMyPlate.gov.
Fill Your Plate Formula

Here is a simple way to help your child choose food so that he or she eats the right proportion of foods from each food group at each meal.

- Half the plate should be fruits and vegetables.
- The other half should be three quarters grains.
- The last one quarter of the second half should be protein foods.
- Add a cup of low-fat milk or yogurt to represent the dairy group, and you have a balanced meal.

Helpful Resources for Making Smart Food Choices

- "Food, Family, and Fun" is available for purchase or as an online book from Team Nutrition, USDA. It includes tips and recipes for inexpensive foods for each season. Visit http://www.fns.usda.gov/tn/Resources/foodfamilyfun.html.
- FirstGov for Kids at http://www.kids.gov/ has the best websites for kids on a variety of topics, including health.
- Test your food label knowledge at http://www.cfsan.fda.gov/~dms/fquiz1.html.
- Help your child understand advertising at "Don't Buy It," http://pbskids.org/dontbuyit/.
- For more information on what families and schools can do to promote healthy eating habits for children, read Healthy Kids Healthy Weight: Tips for Families With Kids of All Shapes and Sizes. It is available at www.mihealthtools.org/schools.
- To get involved in the Michigan Action for Healthy Kids Coalition, go to www.actionforhealthykids.org and click on state teams. Go to Michigan's homepage to get added to the mailing list.