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Welcome Educators!

The ReFresh curriculum was developed by the University of Maryland Extension, Food Supplement Nutrition Education Program (FSNE) for implementation in 4th and 5th grade classrooms. This curriculum focuses on encouraging students to consume more fruits, vegetables, and whole grains and being more physically active. Refresh places the focus on increasing exposure to fruits, vegetables, and whole grains through activities, food demonstrations, and tastings.

ReFresh addresses the following key behavioral outcomes:

- Make half your plate fruits and vegetables, at least half your grains whole grains, and switch to fat-free or low-fat milk and milk products.
- Increase physical activity and reduce time spent in sedentary behaviors as part of a healthy lifestyle.
- Maintain appropriate calorie balance during each stage of life – childhood, adolescence, adulthood, pregnancy and breastfeeding, and older age.

While a healthy diet includes eating a variety of foods from all food groups, the fruit, vegetable, and whole grains groups tend to be the most under consumed. Less than 10% of children consume the recommended amount of fruits and vegetables. Similarly, more than 80% of children and adolescents do not meet the recommended intakes for whole grain consumption. The USDA recommends that 50% of total grains should come from whole grains, but the majority of children and adolescents consume fewer than 1 serving daily (Harnack et al, 2003). In contrast, nearly 40% of total calories consumed by children and adolescents are considered to be empty calories, or calories that do not provide substantial nutrition to the diet (Reedy and Krebs-Smith, 2010). Teaching children the importance of consuming nutrient-rich foods is an important way to promote a healthy lifestyle.

The ReFresh curriculum provides an easy-to-use set of lessons that allows educators to provide nutrition and physical activity learning experiences that complement or expand their existing curriculum or programming goals. Each of the eight lesson units recommends a food tasting to enhance the learning experience. Grade level appropriate activities are offered that build on the monthly introductory lesson and classroom experiences are linked to student families at home through a monthly newsletter.

We hope that the ReFresh curriculum can easily meet your goals for nutrition education. Thank you for your dedication to providing children the tools they need to develop into healthy and successful adults.

Sincerely,

Carol Miller and Erin Braunscheidel

References:


Curriculum Introduction

RE Fresh
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ReFresh Team

References:


# Teacher Guidelines for Unit Implementation

## Unit Organization and Lesson Structure

The ReFresh curriculum consists of eight units, one for each month from October through May. Each unit contains an overview with teacher tips, a pre-teaching activity, an introductory lesson with food tasting and associated handouts, materials list, reinforcement lessons, morning announcements, newsletter, and optional activities to reinforce the nutrition education messages.

A pre-teaching lesson is strongly encouraged before beginning the unit in order to introduce the essential question that guides each unit. These questions will build student curiosity. This also encourages students to think about what they already know and will provide opportunities to revise thinking as the unit progresses (Goudvis and Harvey, 2007). Theme words can be introduced to facilitate questioning and discussion.

The introductory lesson in each unit introduces the topic and themes for the month and includes a healthy food demonstration and tasting activity. Teacher talking points are provided to strengthen reading instruction. Reinforcement lessons consist of discussions and activities which expand the unit content. Appropriate math and/or content area objectives are provided. The Nutrition Notebook, a journal prompt, invites students to reflect on and creatively respond to the content from the entire unit.

The monthly Teacher Integrating Chart, found in each unit appendix, provides specific information related to the items listed below:

## Maryland Common Core State Standards

The lessons in the ReFresh curriculum teach and reinforce concepts from multiple content areas. To help you document the skills your students develop through use of this curriculum, lessons have been aligned with Maryland Common Core State Standards (MD CCSS) in English, Language Arts and Mathematics for fourth and fifth grade, as well as Maryland State Curriculum Standards (MSC) for science and social studies. When Maryland Common Core State Standards have not been fully developed, Maryland State Curriculum Standards are used. General overview can also be found on [www.fsnep.com](http://www.fsnep.com).

## Interactive Bulletin Board

Lessons and activities in the ReFresh curriculum support students in answering the essential question(s) of each unit. To help students make the connection between daily instruction and the big picture, it is recommended that each lesson begins by asking the essential question(s). Teachers should create an interactive bulletin board that allows students to record their new learning from each lesson that helps them answer the overarching question(s) and facilitate classroom discussions.
### Vocabulary Development and Instruction

The Common Core Standards for English Language Arts for Vocabulary Acquisition and Use state, “Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4/5 reading and content, choosing flexibly from a range of strategies:

- Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
- Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).
- Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Vocabulary words are a mix of Tier 2 and Tier 3 words (Beck and McKeown, 2002). Tier 2 words are high frequency words found across fields, selected to provide students with the language necessary to discuss themes and topics. Tier 3 words are usually nutrition specific vocabulary, selected to build students’ knowledge base.

One of the theme words is always a root, affix, or multiple meaning word, and can easily be accompanied by a related vocabulary activity. More information can be found at Susan Ebbers’ vocabulary blog (based on her work presented in her book Vocabulary around Morphemes: Suffixes, Prefixes, and Roots for Intermediate Grades): [http://vocablog-plc.blogspot.com/](http://vocablog-plc.blogspot.com/).

### Reading Instruction

Each unit contains multiple opportunities to reinforce and practice reading strategies. Based on models and lessons Stephanie Harvey and Anne Goudvis’ present in the Comprehension Toolkit, reading instruction will focus on the following:

1. Monitor comprehension
2. Activate and connect
3. Ask questions
4. Infer meaning
5. Determine importance
6. Summarize and synthesize

If your school has purchased the Comprehension Toolkit, we encourage you to practice strategies using the read alouds and nonfiction texts.
**Math Instruction**

The monthly tastings provide students with an opportunity to practice and reinforce skills and concepts. There are also additional math lessons within most units that are aligned to the State Curriculum.

**Nutrition Notebooks and Writing Instruction**

The Nutrition Notebook provides students with a personal, take home piece that allows them to document their thinking and learning. The Notebook includes three sections: vocabulary words; monthly writing prompt and a new foods tasting section. We encourage you to have students share their Nutrition Notebooks with their families, and to use these notebooks as a reference throughout the units.

Katie Wood Ray’s work, presented in her book Wondrous Words, provides writing instruction strategies that are embedded within the writing lessons. Students need genre-specific examples from real writers to notice what they do well. The writing prompts begin with a mini-lesson to introduce the genre, real examples, and practice opportunities.

**Morning Announcements**

Each unit is accompanied by a list of topic-relevant morning announcements. The purpose of this list is to provide a bank of morning announcements that can be shared with the entire school, or just your class. Students will also have the opportunity to create their own nutrition messages.

**Newsletters**

The reproducible newsletter provides an opportunity to link the caregiver to what their child is learning. Newsletter communication provides families with ideas and tools to increase access and consumption of healthy food choices. Newsletters in Spanish will be available to print from www.fsnep.com. The following behaviorally-focused messages are emphasized to encourage behavior changes in the home:

- Make half your plate fruits and vegetables.
- Make at least half your grains whole grains.
- Increase physical activity and reduce time spent in sedentary behaviors.
- Maintain appropriate calorie balance during each stage of life.

**Additional Materials (www.FSNEP.com)**

The monthly teacher integrating chart found in each unit appendix often refers to additional materials to support lessons and activities. Please visit www.FSNEP.com and select “ReFresh” to access materials.
Additional Considerations:
The following sections provide additional information and tips to consider when teaching the ReFresh curriculum.

Active Listening Skills:
An interactive read-aloud session is an effective way to engage students and ensure comprehension of topics covered in the reading. For each lesson that involves a reading activity, encourage students to be active listeners. Require them to demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing. Point out that you will stop at strategic points throughout the read-aloud to conduct “think-alouds” for the active listening exercises. Listeners will be asked to share aloud their ideas as they conceptualize the story being read aloud. Discuss each of the skills pertinent to strategic thinking.

Food Allergies:
Some students may have allergies to some of the ingredients found in the recipes. Please check with the classroom teacher and school nurse about potential food allergies for every student. If a student has a severe allergy to any particular item, avoid bringing any of those foods into the classroom. Peanuts are a common allergen. In recipes calling for this ingredient, soy nut or sunflower butter can be used as a substitute. In recipes utilizing dairy products, there are many non-dairy substitutes, such as rice milk or soy yogurt which can be used for those with a milk allergy. The important thing is to know ahead of time so you can plan accordingly. Read all food labels for potential allergies. It is recommended to have parents complete a form that describes any food sensitivities that students may have before beginning the curriculum.
Curriculum Components

Classroom Safe Food Handling Tips:

It is extremely important that food preparation is done with proper hygiene in mind. You will need to have a container of sanitizing wipes on hand to wipe down work surfaces before beginning food preparation. All students should wash their hands thoroughly before beginning tasting activities.

Food tasting supplies to have in the classroom, preferably in a separate bin labeled for ReFresh activities, prior to food tasting activities include:

- Sanitizing wipes
- Disposable tablecloths
- Napkins (not paper towels)
- Disposable gloves for individuals doing food preparation (optional)

Steps to Proper Handwashing:

1. Wet your hands with warm running water and apply soap.
2. Rub your hands together to make a lather and scrub them well. Be sure to scrub the backs of your hands, between your fingers, and under your nails. Bacteria can hide out here too!
3. Continue rubbing hands for at least 20 seconds. Need a timer? Hum “Happy Birthday” from beginning to end twice.
4. Rinse your hands well under running water.
5. Dry your hands using a paper towel.

Note:

- Hand sanitizing gels can be used for quick sanitizing if hands have touched unclean surfaces during food preparation, but preparing food is best preceded with a soap-and-water handwashing.
- Always remember to wash fruits and vegetables before using.
Curriculum Components

Food Tasting Preparation Tips:
• Wash hands and food preparation surfaces, such as tables, prior to preparing food. Have students wash hands before tastings or use sanitizing wipes.
• Clean utensils and cutting boards prior to each use. Wash with soap and water after each use.
• Wash fruits and vegetables under clean, running water before peeling or chopping.
• Use appropriate temperatures for storing perishable food items. Keep ingredients cold until ready to prepare and serve. Chill remaining ingredients or leftovers immediately. Food should be kept cold at 40 degrees F in a cooler or refrigerator.
• Label items after opening with “opened on” and “use by” dates.
• Use disposable gloves when preparing recipes and distributing samples of food for students. Bare hands should not come into contact with ready to eat foods. Do not allow students to use their fingers for serving themselves. Provide appropriate sized utensils for student self service.

Tasting Etiquette:
Many of the tasting activities in this curriculum will contain foods that are new or unfamiliar to your students. Before starting the tasting activities, be sure to review the rules of food tasting. It may be helpful to post these rules within the classroom so that students may be familiar with them. Encourage every student to try a small sample, with the exception of those with food allergies. Explain to students the many reasons why they should not react negatively to a food they are sampling: others have invested time into its preparation, which should not be treated with disrespect; other students might like the dish and they should not try to influence others’ opinions; and they might find that they enjoy the food later in life as their tastes change and develop.
EVERYONE tastes the food (allergy exempt).

Words such as "yuck" and "ugh" are NOT allowed, especially before tasting.

Use your VOCABULARY - use adjectives to describe what you like and don't care for about food tastes and textures.

TASTE FIRST and then decide if you like it or not.

After tasting, YOU CHOOSE if you want to finish eating the remainder on your plate.

TASTES CHANGE so you need to try the food even if you have tried it at some other place and time.
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10
In this unit, *What's So Great About Nutrition*, students will be introduced to the different food groups.

Students will explore all food groups, but primarily focus on the benefits of eating fruits and vegetables. Students will also learn about farmers’ markets and locally grown fresh fruits and vegetables. Students will use the information learned in this unit as a resource throughout the school year.

The school themes incorporated into these lessons include:

- Fall
- Farmers’ Markets
- Maryland Agriculture

The lessons themes include:

- Benefit
- Nutrition
- Locally Grown
Vocabulary Words

**Benefit** - Something that helps your well-being.

**Nutrition** - When your body is fed with food so that it can grow.

**Locally Grown** - Fruits and vegetables or other foods that are grown on a nearby farm.

**Energy** - The power you have to be active and move.

**Nutrients** - Components found in fruits and vegetables that help our bodies grow and be healthy.

"**Sometimes**" **Food** - Foods that we should only eat some of the time because they are often high in calories and low in nutrients.

"**All the Time**" **Food** - Healthy foods that we should eat each and every day.

**Fiber** - A substance in some foods that helps us feel full. Fruits, vegetables and many whole grains have fiber.

**In-Season** - The time of the year when produce is at its best, or peak.

**Produce** - A word to describe fresh fruits and vegetables.

**Circumference** - The perimeter, or outside, of a circle.
Introductory Lesson:
- Food Picture Cards (appendix) -or- magazine pictures of “sometimes” + “all the time” foods.
- MyPlate icon or poster (can be accessed at www.choosemyplate.gov)
- 3 varieties of apples – enough for each student to taste one piece of each apple (Maryland grown preferred).
- Knife or apple corer
- Paper plates
- Crayons- 3 different colors (1 set for each student)
- Apple Tasting Sheet (1 copy for each student)

Reinforcement Lesson #1:
- Why Do I Need to Eat Fruits and Veggies?
  by Johanna Pomeroy-Crockett

Reinforcement Lesson #2:
- Magazine pictures of fruits, vegetables, whole grains, protein and dairy foods
- Large sheets of paper
- Glue
- Scissors
- Handout (1 copy for each student): MyPlate which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf

Reinforcement Lesson #3:
- Pumpkins – 2 or more of varying sizes
- Ball of string for circumference prediction
- Yard stick
- Colored string for circumference measurement
Introductory Lesson: Choosing “All the Time” Foods

Lesson Objectives:

Students will:

# 1. Learn that fruits and vegetables are essential to healthy eating because they provide vitamins, minerals, fiber and other nutrients.

# 2. Learn the difference between a “sometimes” and an “all the time” food.

# 3. Learn that there are many barriers to eating enough fruits and vegetables.

Time Required: 45 minutes

Process:

Introduction: 5 minutes

1. Explain to students that they are going to discuss the importance of nutrition and healthy eating.

2. Explain that it is important to learn good eating habits when we are young so we are strong and healthy now and when we are older.

3. If we eat healthy all of our lives, we will be less likely to not feel well when we are older.

Discussion: 10 minutes

1. What does it mean to be healthy?

2. How would you describe eating healthy?

3. Display MyPlate icon. Introduce food groups and give examples of foods from each group.

4. Explain that healthy eating includes foods from all food groups.

5. What are some foods that you eat that are considered to be healthy?

6. How can you tell if a food is healthy or not?

Key Points:

A healthy person is one who has enough energy for work and for play.

Healthy eating includes foods from all food groups that provide our body with energy and nutrients. Nutrients are things in foods that allow our bodies to grow and function properly. Some examples are vitamins and minerals. We will learn about nutrients in fruits and vegetables this year.

Fruits and vegetables are good sources of fiber which help us feel full and help our bodies regulate digestion.

Sometimes it’s hard to tell if a food is good for us by the way it tastes. Many foods taste good but aren’t so good for our bodies. We are about to learn which foods are healthy and can be eaten “all the time” and which foods are “sometimes” foods.
ACTIVITY

Identifying Healthy Foods: 10 minutes

Process

1. Explain to students that while it’s ok to eat “sometimes” foods as special treats, we should try to eat a variety of “all the time” foods every day.

2. Hold up different food picture cards and have students decide if they are “sometimes” foods or “all the time foods”. Note: You can also pass out cards to each student.

3. Explain that fruits and vegetables provide our bodies with nutrients such as vitamins, minerals and fiber, and it’s important to eat them every day.

4. Ask the students to share their favorite “all the time” foods.

5. Ask students where they can find fruits and vegetables to eat. Explain that you can buy fruits and vegetables all year in a grocery store, but they often taste better when they are in-season. “In-season” is a term to describe food that is being grown locally during a given time of the year. You can find “in-season” fruits and vegetables at a farmers’ market where foods come straight from the farm.

Materials + Prep

Materials:
- Food Picture Cards (appendix) or magazine pictures of “sometimes” and “all the time” foods.
- MyPlate icon or poster

Prep-Work:
- Gather Food Picture Cards (provided) - or - clip magazine pictures as needed.

Teacher Tip:
Provide space on ReFresh bulletin board for student drawings of their favorite “All the Time” food.
Apple Tasting

Time Required: 20 minutes

Directions

1. Explain to students that fruits and vegetables taste the best when they are “in-season.” Explain that apples are harvested in the fall. One place you can get apples is from a farmers’ market, and we will learn about farmers’ markets next week. Today, students will taste 3 different varieties of apples and will vote on their favorite. Remind students about the tasting rules and stress the importance of trying each item.

2. Hand out an “Apple Tasting” sheet to each student (found in unit appendix.) Have students list the 3 different varieties of apples on their sheet.

3. Cut apples into slices.

4. After tasting first apple, ask students to raise their hand if they like that apple.

5. Have one student count the number of students who liked the apple. Write number on the board.

6. If they like the apple, have each student draw an apple under their name on the Apple Tasting Sheet.

7. Repeat for next two apple varieties.

8. When finished tasting, see which apple the class liked the best.

9. Count the number of students who liked each type of apple, and determine the fraction of students for each group.

10. Ask students why they liked each apple. Ask students why they didn’t like each apple.

11. Ask students to discuss other ways they can eat apples as an “all the time” food in meals and snacks with their families.

12. Discuss the health benefits of apples.

Food Supplies:

3 varieties of washed apples- enough for each student to taste one piece of each apple. If possible, select varieties that are grown locally in Maryland (varieties include Fuji, Ginger Gold, Stayman, and Empire).

Other Materials:

• Knife or apple corer
• Paper plates
• Crayons- 3 different colors (1 set for each student)
• Apple Tasting Sheet (1 copy for each student)

Summary of Tasting:

After discussing that fruits and vegetables are “all the time” foods, students will have the opportunity to taste 3 different varieties of apples (an “all the time” food) to decide which apple they like best. Apples are also harvested in the fall, making it an “in-season” fruit. Students will discuss the health benefits of apples.

Teacher Tip:

Link student apple tasting results to integrate fractions and percentages.
Nutrition Notebook: Farmers’ Market Promotional

Lesson Overview:

Students will write a creative written response to a prompt related to the content covered in the “What’s So Great About Nutrition” unit.

Time Required: 20 minutes

Directions:

Read the prompt aloud to your students. After answering any questions, allow them to write a response in their Nutrition Notebooks.

Writing Prompt

Imagine you are going to advertise the local farmers’ market to other students and teachers at school, and you are going to have time during lunch to encourage them to purchase fruits and vegetables at the farmers’ market. Write a commercial for a farmers’ market that could be used at lunchtime. Be sure to include details that describe how and where the produce was grown, and how that affects its taste and freshness, as well as the importance of fruits and vegetables for good health.

Teacher Tip:

Consider visiting www.pbskids.org “create your own ad.”

Lesson Expansion:

Divide students into small groups to share commercials with each other. Have each group select one commercial to demonstrate for the class.
Reinforcement Lesson #1
Why Do I Need to Eat Fruits & Vegetables?

Lesson Overview:
You will find a variety of fruits and vegetables when you shop at the local farmers’ market.

Time Required: 30 minutes

Process:

Introduction: 5 minutes

1. Discuss with students where fruits and vegetables are grown.
   A. They begin on a farm or a garden. The farmer plants the fruit and vegetable seeds into the soil. With the help of sun and rain water, over time the seeds grow into plants that provide the fruits and vegetables we eat.

Discussion: 25 minutes

1. Using the book “Why Do I Need to Eat Fruits and Veggies?”, assign students to be characters. Have them role play the story.

2. Discuss that the farmers’ market is a place where we can get fresh fruits and vegetables that are grown on a farm in our community. Fruits and vegetables found at a farmers’ market are often also grown in-season. When we eat fruits and vegetables that are local and freshly grown, they taste better. Have you ever noticed that you can always buy fruits and vegetables at a grocery store? Often, these fruits and vegetables were grown in another state or country, such as California and have to travel many miles to get to our stores in Maryland. Have you ever tasted a fruit or vegetable during the winter that was hard and tart and didn’t taste as good? When fruits and vegetables are fresh and ripe, they taste better. Fruits especially taste sweeter during the spring, summer and fall.

3. What kinds of fruits and vegetables did they sell at the farmers’ market in the book, “Why Do I Need to Eat Fruits and Veggies?”

4. What are some benefits to eating fruits and vegetables?
Reinforcement Lesson #2
MyPlate Helps Me Choose “All the Time“ Foods

Lesson Overview:

Students will examine the new USDA food guidance tool, MyPlate. By seeing the amounts of fruits, vegetables, grains, protein and dairy foods on MyPlate, they will develop a better understanding of what is meant by “eating healthy.”

Time Required: 30 minutes

Process:

Introduction: 5 minutes

1. Show the students the ChooseMyPlate.gov website and the various features. This can be done using a computer and projector in the classroom or taking the students to a computer room.

2. MyPlate helps you remember the amounts of different types of food in a healthy meal.

3. Review the food groups on MyPlate: fruits, vegetables, grains, protein, and dairy.

Discussion: 15 minutes

1. Divide students into 5 groups.

2. Assign each student group one of the food groups. Students should research the following:
   
   A. Examples of foods found in their assigned food group.

   B. The number of servings to eat every day from their food group.

3. Each group will present to the class examples of foods in their food group and the number of servings to eat each day.

Key Points:

ChooseMyPlate.gov is a useful tool for learning about the food groups and choosing healthy food.

ACTIVITY

Create MyPlate: 10 minutes

Process

Have students work together to create a MyPlate poster by drawing a large circle and pasting magazine pictures to represent the food groups in the appropriate amounts. Display the posters in the classroom or as part of your ReFresh Bulletin Board, and refer to them in future lessons.

Materials:

• Magazine pictures of fruits, vegetables, whole grains, protein and dairy foods

• Large sheets of paper

• Glue

• Scissors

• Handout (1 copy for each student): MyPlate which can be found at the following website:

Prep-Work:

• Clip pictures of fruits, vegetables, whole grains, protein, and dairy foods

Teacher Tip:

Reserve computer lab and/or laptops for this activity.
Reinforcement Lesson #3

Pumpkin Circumference Prediction

Lesson Overview:
Students will discuss a variety of ways pumpkins can be used and the nutrients they contain. They will then use math skills to predict the circumference of each pumpkin.

Time Required: 20 minutes

1. Pumpkins are one example of a vegetable that is in season during the fall, and can be found at many farmers’ markets. Many people decorate pumpkins in October for Fall. Pumpkins are also very tasty to eat. People use baked or canned pumpkin in pumpkin breads, puddings, pancakes, and muffins. You also can eat pumpkin as a vegetable. Pumpkin seeds can be roasted and eaten as a snack.

2. Show the students the different kinds of pumpkins. Pumpkins come in many shapes and sizes. Some are good for cooking and others are good for Fall decorations. Ask the students to identify visual differences among the pumpkins.

3. Pumpkins are a good source of beta carotene (Vitamin A). Explain that Vitamin A is often found in orange vegetables and helps us to see at night.

4. Ask the students about other vegetables that they think would be good for their eyes.

Orange vegetables-carrots, squash that is orange (butternut, acorn), sweet potatoes, cantaloupe.

Materials:
- Pumpkins – 2 or more of varying sizes
- Ball of string for circumference prediction
- Yard stick
- Colored string for circumference measurement

Prep-Work:
- None!
Reinforcement Lesson #3
Pumpkin Circumference Prediction

ACTIVITY

Process

1. Introduce the term “circumference” to the students. Explain to the students that this is the distance around the largest part of the pumpkin. Use the equator on a globe as an example of circumference.

2. Show the students a ball of string or twine. Ask each child to make a prediction as to how much twine or string is needed to go around the circumference of the decorative pumpkin.

3. Have students measure and cut a length of twine or string to represent their circumference prediction.

4. Measure the actual circumference of the pumpkins with a different colored string. Measure the string on a yardstick to get the exact circumference of the pumpkin in inches.

5. Use the colored string (the actual measurement of the circumference) to measure each student’s circumference prediction.

6. Have the students divide into two groups: Those who overestimated the circumference and those who underestimated the circumference. Determine the fraction of students for each group.

Summary of Activity:
Students will estimate and measure pumpkin circumference.
Optional Activity: Farmers’ Market Poster: 30 minutes

Process

1. After completing the written assignment (in Nutrition Notebook), encourage students to make a poster for their commercial.

2. Incorporate the details included in the written assignment into a colorful poster.

3. Hang posters around the classroom or if permitted, throughout the school, including in the cafeteria to advertise the local farmers’ market.

Summary of Activity:
Students will create a poster to support their farmers’ market commercial.

Additional Materials

- Paper
- Crayons or Colored Pencils
OCTOBER

What’s so Great about NUTRITION?

OPTIONAL ACTIVITY

ChooseMyPlate.gov website: 30 minutes

Process

1. Ask each student to visit this website, and create a personal plan:
   http://www.choosemyplate.gov/myplate/index.aspx,

2. Have students view (and if possible print) a Meal Tracking Worksheet,

3. Assign each student to record their food intake for one day. Instruct students to write down every food or drink that they put in their mouth for the entire day and enter the information on the meal tracking worksheet. Remind students to include any snacks, beverages or other items they may have had during the entire day.

4. Have students go through their worksheets and determine the total ounce equivalents or cup servings from each food group they ate during the day. Use The Meal Tracking Worksheet as a guide.

5. Divide students into groups of 4 or 5. Ask them to average their individual intakes to create a new average intake that represents the group.

6. Share with the class.

7. Ask the students how many people met the recommendations for fruit and vegetable intake.

8. For people who did not meet the recommendations, discuss ways to increase fruit and vegetable intake. Where are some places that we can buy fresh fruits and vegetables?

9. Discuss and compare other results on the summary chart.

Summary of Activity:

Students will learn how to use the ChooseMyPlate.gov website.

Additional Materials

Access to a computer
**OPTIMAL ACTIVITY**

Pumpkin Seed Counting: **20 minutes**

**Process**

1. Label different sized pumpkins with a number. Discuss the hypothesis that the number of seeds in a pumpkin relates to its size. Have the students predict the number of seeds in each pumpkin.

2. Divide the students into groups based on the number of pumpkins.

3. Have each student group write on the board their group’s pumpkin number and their seed prediction for that pumpkin.

4. Have each group cover a work area with newspaper. Cut the top off each pumpkin.

5. Have each group scoop out the pumpkin seeds. Have students clean the pumpkin seeds and place on paper towels to dry.

6. Provide each group with one large container and a few small containers.

7. Have each group count the seeds in their pumpkin. Students should count the seeds by placing 10 seeds in each of the small containers. Once a small container is filled the seeds should be placed in the larger containers. One student should be in charge of keeping track of how many small containers of seeds are added to the larger containers. Repeat until all seeds are counted.

8. Have the students multiply the number of containers needed to fill the large cup by ten. This will calculate the number of seeds in the pumpkin.

9. Have someone from each group write on the board the number of their pumpkin and the number of seeds in their pumpkins.

10. Ask the students to write these numbers next to their predictions. Have them do the math to see exactly what the difference was between their prediction and the actual amount.

11. Ask the students which pumpkin had the most seeds and which had the least seeds.

12. Discuss the outcome of the original hypothesis relating seed count to pumpkin size.

**Summary of Activity:**

Students will predict and count the number of seeds in each pumpkin.

**Further Discussion Questions:**

1. Are seeds bigger in big pumpkins when compared to the size of the seeds in small pumpkins?

2. Are there any other differences in seeds of big vs. small pumpkins?

**Additional Materials:**

- Pumpkins - 2 or more of varying sizes
- Old newspapers
- Large sharp knife (teacher only)
- Small clear containers
- Larger containers
Apple Tasting

Directions

Using a different color crayon for each apple, write the name of each apple that you taste in the spaces below. After tasting each apple, draw a picture of an apple under each variety that you liked.

1.

2.

3.
1. Have you ever thought about why you eat food? Not only does it taste good, it also keeps us healthy. Food gives us energy for work and play. And helps us grow and stay strong.

2. Did you know a healthy person is someone who is not sick and has enough energy for work and play. Think about how to choose healthy food so people say, “Wow! You look healthy!”

3. Did you know that apples are at their best in the fall? There are over 2500 different kinds of apples. Many kinds of apples are grown in Maryland. See if you and your family can go to an orchard or a farmers’ market to buy some fresh, yummy Maryland apples.

4. One way to eat more healthy food is to be willing to try new foods, even if you think you aren’t going to like it. When trying a new food, take only a small bite. You might be surprised that you like it!

5. Fall is pumpkin season! Do they sell pumpkins at your farmers’ market? You can buy pumpkins for Halloween. And there are pumpkins that are especially good for cooking.

6. Halloween is almost here. When you make your jack o’ lantern, save the seeds. You can make roasted pumpkin seeds that are really easy to make and are so good to eat.

7. Pumpkin is good for you! It has Vitamin A that helps you see at night. Fruit and vegetables that are bright orange like carrots, squash, and sweet potatoes contain Vitamin A, too.

8. Did you know there is a farmers’ market nearby? You can buy fresh fruits and vegetables there, and get a chance to talk to the farmers who grow your food! Check out the farmers’ market located at _____________ on (date and time).

9. Eating fruits and vegetables everyday can help you stay healthy for the rest of your life!

10. The cafeteria is serving ___________ today! ___________ are not only good for you but also taste great too! Get yours today at lunch!
11. Try eating one new fruit or vegetable every week and tell your friends about your new favorite foods!

12. Look at your milk carton or yogurt container to make sure your milk, yogurt or cheese is low-fat or fat-free.

13. Need a snack? Reach for a piece of fruit instead of chips and candy.

14. Have you had a red fruit or vegetable this week? These foods are good for your heart! Look for them on the lunch line.

15. Did you eat breakfast today? Eating a good breakfast will give you energy for the day and help you do well in school.

16. Did you forget to eat breakfast before coming to school today? Stop by the cafeteria for a healthy morning breakfast.

17. Fruits and vegetables are “all the time” foods – this means you can have them for breakfast, lunch, dinner and snacks!

18. Rethink your drink! When you’re thirsty, choose water!

19. What is the most popular fruit in the United States? Apples! Americans eat on average 120 apples each year.

20. Apples come in many forms. We eat them fresh, we drink apple juice, we have applesauce, or dried apple slices. How do you like to eat your apple each day?
This year, your child will learn about the importance of eating healthy foods and getting enough physical activity. We will focus on the benefits of eating fruits, vegetables, and whole grains. During our first unit, your child tasted several types of apples and practiced math skills using fresh pumpkins. Students also learned that farmers’ markets are a great place to find fresh fruits and vegetables from your local farmers.

Did You Know....

There are over 100 farmers’ markets in Maryland.

Many farmers’ markets now accept vouchers and EBT cards to purchase fresh produce.

Visit this website to find a market near you: http://apps.ams.usda.gov/FarmersMarkets/Default.aspx

There are 13 kinds of apples grown in Maryland. The look, shape, flavors, and textures vary with each type. Trying different varieties of the same fruit or vegetable can help you and your children discover your favorites!

What’s So Great About Fruits and Vegetables?

Fresh fruits and vegetables have lots of vitamins, minerals, and fiber...things your child needs to grow and be healthy!

Eating lots of different colored fruits and vegetables is a great way to provide your child with a variety of vitamins and minerals.

The fruits and vegetables at the farmers’ markets are typically picked that day. That’s why they taste so good.

Take Action!

Try these activities with your child. See how many you can check off this week!

☐ Visit a local farmers’ market this week. Encourage your children (and yourself) to choose one new fruit or vegetable to try.

☐ Involve your children in washing and preparing their fruit and vegetable choices. Children involved in kitchen activities often are willing to try new foods.

☐ Find a book on farmers’ markets at your local library to read to your child.

Maryland Schools Now Include More Locally Grown Fruit and Vegetables Into the School Meal. Visit the Farm to School Website for More Information:

http://www.mda.state.md.us/mdfarmtoschool/index.php

This material was funded by USDA’s Supplemental Nutrition Assistance Program in cooperation with the Maryland Department of Human Resources and the University of Maryland. The University of Maryland Extension will not discriminate against any person because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact the Maryland Department of Human Resources at 1-800-332-6347 or apply online at www.marylandsail.org.
This month, your child participated in an Apple Tasting as part of our class ReFresh activities. Apples are an in-season fruit, harvested during the fall months in Maryland. We tasted three varieties of apples and everyone voted for their favorite. Don’t forget to ask your child which they liked best so you know which kind to buy at the grocery store or farmers’ market.

My favorite apple was: ________________________
In this unit, **Heritage and Ethnic Foods**, students will be introduced to advancements in the food industry that have allowed us access to many new foods that are not found in nature. Students will examine the steps needed to transport crops gathered in the field and how they are developed into the products with which they are familiar in the grocery store. Students will examine differences in food intakes from pilgrims at the first Thanksgiving to those of Americans today. Students will also learn about crops specifically harvested throughout Maryland and how important these crops are to everyone within the state.

The school themes incorporated into these lessons include:

**Thanksgiving**

**Maryland Agriculture**

**Fall**

**Meal Preparation**

The lesson themes include:

**Ethnicity**

**Heritage**

**Transport**
Vocabulary Words

**Transport** - To move from one place to another.

**Ethnicity** - Belonging to a group that has common cultural or national traditions.

**Heritage** - Something that is passed down from one generation to another, such as traditions or customs.

**Calcium** - A mineral that helps you have strong bones and teeth.

**Protein** - A part of all living cells that is important for the growth and repair of tissue.

**Dairy** - Products made from milk that are a good source of calcium.

**Processed Food** - A term used to describe foods that are created through many steps and the combination of many ingredients, usually adding salt, sugar, fat, and artificial ingredients.

**Unprocessed Food** - Food that is in its raw, natural state.

**Originate** - The beginning of something; where it started.

**Commodity** - A crop or animal raised on a farm to produce income.
Introductory Lesson:

- “Pilgrims’ First Thanksgiving” by Ann McGovern
- Handout: Venn Diagram (appendix)
- Handout: MyPlate (to use as a reference) which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
- Ingredients for Tasting Activity
- Medium sized paper or plastic cups (one for each student)
- Plastic spoons
- Hand wipes
- Measuring cups
- Measuring spoons

Reinforcement Lesson #1:

- Food Systems Sequencing Cards (appendix)
- Tape

Reinforcement Lesson #2:

- Handout: Soybean information sheet (appendix)
- Soybeans (1 per student) (An easy option at the grocery store is frozen edamame)
- Handout: MyPlate (to use as a reference) which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
- Maryland Agricultural Education Foundation (MAEF) Map which can be found at the following website: http://maefonline.com/attachments/File/MDCommodityMap.pdf

Nutrition Notebooks:
Introductory Lesson: Thanksgiving Foods

Time Required: **45 minutes**

Process:

**Introduction:** **5 minutes**

Ask students what they consider to be the author’s purpose for writing the book, *Pilgrim’s First Thanksgiving*? Direct them to listen for story details to support their reasoning.

**Discussion:** **15 minutes**

1. Read aloud *Pilgrims’ First Thanksgiving* by Ann McGovern.
2. Ask the students what foods the Pilgrims ate at the first Thanksgiving.
3. List the foods on the board.
4. Ask the students to describe what foods they eat at their own Thanksgiving dinners.
5. List these foods on the board in a separate group.
6. Do you eat any of the foods that the pilgrims ate? Do you eat any foods that the pilgrims did not eat or have access to? Why do you think that is?
7. Revisit the introduction exercise where students were asked to hypothesize the author’s purpose. Discuss their thoughts.

Heritage and Ethnic Foods

Lesson Objectives:

Students will:

1. Learn about foods harvested and eaten by the Pilgrims at the first Thanksgiving.
2. Prepare and taste a pumpkin parfait and discuss the health benefits of pumpkins.

Materials + Prep

Materials:

- Pilgrims’ First Thanksgiving by Ann McGovern
- Handout: Venn Diagram (appendix)
- Handout: MyPlate (to use as a reference) which can be found at the following website:

Prep-Work:

- Make copies of Venn Diagram handout for each student

Teacher Tip:

Engage students in comprehension activity during read aloud (www.fsnep.com).
Key Points

- Students will discuss foods eaten in different time periods and grown in different regions.

- Highlight the differences in living conditions from the Pilgrims' time period and today that may affect food choices.

- Remind students that the Pilgrims had to grow their own food like the farmers we discussed last month at the farmers' market. They did not have grocery stores to purchase food from. The following lesson includes more information on food processing.

ACTIVITY

Venn Diagram: 15 minutes

Process

1. Distribute Venn Diagram handout. This activity can be done together as a class, in small groups, or assigned as homework.

2. Write the names of the foods that were found only at the First Thanksgiving in the First Thanksgiving Circle. Write the names of the foods that are found only today in the Thanksgiving Today Circle.

3. Write foods that can be found in both Thanksgivings in the section where the circles overlap.

4. Have students discuss the similarities and differences of foods found then and today.

5. Using the MyPlate handout, have students place Thanksgiving today foods in the correct food groups.
Pumpkin Parfait

10 Minutes

Process

Arrange ingredients into an assembly line set up. Have students:

1. Select and mix all ingredients together into a medium sized cup

2. As students taste, discuss nutrients found in dairy and pumpkins
   A. Pumpkin: Fiber (digestion), Vitamin A (good eyesight)
   B. Dairy Foods: Protein, Calcium (strong bones)

3. Discuss how this recipe could be incorporated into Thanksgiving Dinner/Dessert.

Tasting Time-saver:

Pre-mix or measure ingredients for entire class. Provide students with pre-measured tasting sample, and discuss each ingredient as you complete steps 2 and 3 of the process.

Ingredients:

(MAKES 1 SAMPLE PORTION)

½ cup low-fat vanilla yogurt
1 tablespoon pumpkin, canned
½ teaspoon pumpkin pie spice

Materials:

- Medium sized paper or plastic cups (one for each student)
- Plastic spoons
- Hand wipes
- Measuring cups
- Measuring spoons

Teacher Tip:

Consider polling the class to see who liked or did not like the tasting. Integrate fractions and percentages with the results.
NOVEMBER

Nutrition Notebook:
The First Thanksgiving and Thanksgiving Today

Lesson Overview:
Students will write a letter in response to a prompt related to the content covered in the “Heritage/Ethnic Foods” unit.

Time Required: **20 minutes**

Writing Prompt

Have the students write a letter to a pilgrim comparing the meals we eat today to the meals the Pilgrims ate. Discuss the similarities and differences between foods, including where foods are obtained and how foods are prepared. Think about differences between living conditions and transportation of colonial times and those of today. Do you think the foods we eat today are more or less healthy than the foods the pilgrims ate?
Reinforcement Lesson #1: Food Systems Sequencing

Lesson Overview:
Students will uncover the many steps it takes to get a food from where it is grown to our plates. They will discuss how the steps from field to table affect the taste and nutrition content of food.

Time Required: 25 minutes

Process:

Introduction: 5 minutes
1. Review the importance of eating fruits and vegetables.
2. Ask the children what are some “all the time” foods that we could not get at the Farmers’ Market?
3. Fruits and vegetables are only one part of a healthy diet. A healthy diet also includes whole grain breads, cereals, low-fat milk, and lean meats and beans. We are not able to get all of these items from farmers’ markets, so we must get them from other sources. A grocery store is a common place that sells these food items.

Discussion: 10 minutes
1. Reference the MyPlate icon to show how other food groups fit into a well-balanced diet.
2. When we learn where our food comes from, it can help us make healthy choices for our family meals.

Key Points
• All foods began on a farm, yet there are often many steps involved in getting our foods from the farm to our plates. A processed food is one that has been through many steps and changes between the farm and your plate.

• Unprocessed foods have been through fewer steps from farm to plate, and they are generally more healthy than processed foods.

• Fruits, vegetables, and eggs are examples of foods that we can get straight from the garden or farm. These are considered unprocessed foods because they have not been changed from their natural state.

• Chips, donuts, and other “sometimes” foods are examples of foods that must be made in a factory and shipped to the grocery store. These are called processed foods. Processed foods are less healthy because they often have added ingredients such as salt, sugars and fats to preserve them or to enhance their flavor. This is because these foods are not eaten fresh.

• As a general rule, unprocessed foods are healthier than processed foods. Explain that imagining the steps a food takes from the farm to plate will help to decide if a food is processed or unprocessed (many steps = processed; few steps = unprocessed or minimally processed).
ACTIVITY

Farm to Plate: 10 minutes

Process

1. Explain that it often takes many steps to get our food from farms to our stomachs. The class will use the example of a box of Corn Pops® to help understand what those steps are.

2. Spread the gathered Food Systems Sequencing Cards from the appendix out on the table. Separate the pictures of Corn Pops® and corn on the cob and tape to the board on the right hand side above one another.

3. Ask the students where they would purchase a box of Corn Pops®.

4. Have a student identify the picture of the grocery store. Tape it to the table to the left of the Corn Pops® box.

5. Ask how the food got to the grocery store.

6. Have a student identify the picture of the tractor trailer. Tape it on the board to the left of the grocery store picture.

7. Ask where the truck picked up the box of Corn Pops®.

8. Have a student identify the picture of the factory. Discuss the purpose of a factory. In this case, the factory made Corn Pops® and put them in a box. Tape the picture to the board to the left side of the tractor trailer picture.

9. Finally, ask what the main ingredient in Corn Pops® is, and where it came from.

10. Have a student identify the picture of a farm as the source of the corn used to make the cereal. Tape it to the board to the left of the picture of the factory.

11. Review the sequence of steps required to make the Corn Pops®. Corn was grown on the farm, it was turned into Corn Pops® in a factory, and it was shipped on a truck to the grocery store where it can be available for us to buy.

12. Point to the picture of corn on the cob.

13. Explain that corn on the cob grows right from the ground. It doesn't need to go to the factory before we buy it. It can go straight to the grocery store or farmers' market for us to buy.

14. Rearrange the picture sequence to show the corn coming from the farm straight to the grocery store.

15. Ask if there are any other places we can get corn on the cob.

16. Allow the students to identify farmers' markets as other places we can get corn on the cob. Remind students that farmers' markets are places where farmers' bring food that they grow on their farms for people to buy.

17. Do you think the Pilgrims ate their corn in the form of corn on the cob or Corn Pops® cereal? Why?

18. Would you guess that Pilgrims ate more processed foods or unprocessed foods? Why?
Reinforcement Lesson #2: Maryland Agriculture

Lesson Overview:
Students will learn about crops grown in Maryland. After analyzing the Maryland agriculture map, students will learn about soybean crops harvested in Maryland and the importance of the soybean in foods eaten today.

Time Required: 35 minutes

Process:

**Introduction:** 5 minutes

1. Start the discussion by showing the students the MAEF map. What is the title of this map?
2. Look at the legend and have students define each picture.
3. Each of these pictures represents a commodity. A commodity is a crop or animal raised on a farm to produce income. The commodities shown in each are the top money producing commodities for that county.

Materials:

- Handout: Soybean information sheet (appendix).
- Soybeans (1 per student). (An easy option at the grocery store is frozen edamame.)
- Handout: MyPlate (to use as a reference) which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
- Maryland Agricultural Education Foundation (MAEF) Map which can be found at the following website: http://maefonline.com/attachments/File/MDCommodityMap.pdf
- Print copies of the MAEF Map (1 for each student)
- Draw a chart on the chalkboard with the column headings: County, Chickens, Corn, Soybeans, Vegetables, Nursery
- List the following counties under the heading, ‘County’: Kent, Queen Anne’s, Talbot, Caroline, Dorchester, Worcester, Wicomico, Somerset
- Make copies of the Soybean information sheet (1 for each student)
Discussion: 15 minutes
(Modified from the ‘Reading the Maryland Agriculture Map - Part 2’ worksheet by MAEF)

1. Distribute a copy of the MAEF map to each student. Locate your county. What are its top 3 commodities?
2. What are other top commodities in your surrounding counties?
3. What kinds of foods do we eat that come from these commodities? Are they processed or unprocessed foods?
4. Which of these commodities are unprocessed foods?
5. Where do these foods belong on MyPlate?
6. Reference the chart on the board.
7. Tell the students: “The counties east of the Chesapeake Bay are called the Eastern Shore. Look at each of the Eastern Shore counties listed on the board. We are going to fill in the following chart by putting a check mark for each commodity that is shown in that county.
8. Use the completed chart on the board to answer the following questions.
   A. How many of the Eastern Shore counties have chickens as a top commodity?
   B. How many of the Eastern Shore counties have corn as a top commodity?
   C. How many of the Eastern Shore counties have soybeans as a top commodity?
   D. Why do you think that counties that raise chickens would also raise corn and soybeans?

Key Points

- Maryland farmers grow many crops that provide food for people and other livestock.
- Many of these foods from corn and soybeans turn into processed foods that we find in the grocery stores.
- Soybeans fit into both the vegetable (beans and peas) and protein (tofu) food groups. Soy can also classify as part of the dairy group when consuming soymilk.
- Some of the crops grown in Maryland are also sold at our local farmers’ markets.
- Previously we talked about the process that corn goes through to get from the farm to the grocery store. Today we will discuss soybeans.
ACTIVITY

Soybeans: 15 minutes

Process

1. Transition the class to the activity by stating that the soybean is a crop grown in Maryland by farmers like those who sell foods at the farmers’ markets. Although we discussed other crops and commodities earlier, for this activity we are going to focus on the soybean.

2. Share/read the Soybean Information Sheet. If there is internet access, include information for your county on soybean production. This information can be obtained at:

3. Lead the students through a collection of facts within the document to explain the purpose of reading the document. Have students do this by note taking, underlining, and/or highlighting key concepts.

4. Address key concepts listed above while reading.

5. Collect supportive reasons on the board as an add-up-the facts chart.

6. Hand out a soybean to each student and ask the students to examine it and see if anyone knows what it is.

7. Refer to the MyPlate icon. Ask the students to discuss which part of the plate soybeans fit into.

8. Ask the students to list other foods they eat at Thanksgiving that are included in these food groups.

9. Can you name any foods that come from processed soybeans?
   
   A. Soy sauce, tofu, ice cream, yogurt, salad dressing, soy nuts

   B. For additional soybean uses or foods, visit:
Summary of Activity:
We can eat a variety of soy products as part of our regular diets. Introduce students to some of the soy products listed below. If appropriate, try them next to the listed alternative!

Additional Materials
Gather one or several of the following food items in a quantity that will serve each child a small sample portion to taste.
- Soy nuts
- Edamame
- Soy milk
- Soynut Butter and whole wheat bread or crackers
- Small plates

OPTIONAL ACTIVITY
Soy Tasting: 15 minutes

Process
1. Provide each child a tasting portion. Consider comparing each food with its common alternative and allow students to taste the differences.
   - A. Soynuts vs. Almonds
   - B. Edamame vs. Peas
   - C. Soy Milk vs Low-fat milk
   - D. Soynut Butter vs. Almond Butter
2. Compare taste and texture between soy products and/or their alternatives.
VENN DIAGRAM

Thanksgiving Today  First Thanksgiving
Soy products come from the soybean, a legume native to northern China. The United States is now the world’s largest producer of soybeans, providing 40% of the world’s production. A 60-pound bushel of soybeans yields about 48 pounds of protein-rich meal and 11 pounds of oil. Maryland produces about 21 million bushels per year.

**Soybean Nutrition**

Soybeans are a powerhouse when it comes to nutrition. They are a source of high quality protein, high in fiber, low in saturated fat and cholesterol free. Soy protein is one of the most complete plant proteins. Since it is not an animal product it is high in protein while being cholesterol free and low in saturated fat. Since soybeans are a good protein source, they are in the Protein Foods Group on MyPlate.

Scientific evidence shows soy protein is linked to reducing the risk of heart disease. The FDA (Food and Drug Administration) found this scientific evidence strong enough for them to approve a health claim for foods containing soybeans. Scientific studies show that 25 grams of soy protein daily in the diet is needed to show a significant cholesterol lowering effect. Because soy protein can be added to a variety of foods, it is possible for consumers to eat foods containing soy protein at all three meals and for snacks.

An example of a health claim about the relationship between diet and the reduced risk of heart disease is: Diets low in saturated fat and cholesterol that include 25 grams of soy protein a day may reduce the risk of heart disease. One serving of soy milk provides 8 grams of soy protein.

**Soybean Uses**

Chicken farmers on the Eastern Shore depend on farmers around the state to grow soybeans that are used as feed for chickens. The protein in the soybeans is important to the growth and health of the chickens. Some chickens are laying hens and they need soy to be good egg layers. Other chickens are broilers and the soy they eat helps them to grow well so they can be used for food.

Soy has many uses and some call the soybean the “magic bean” because it can be used in so many different products. Not only is soy used for human and animal food, there are many industrial uses for this bean.
1. Ask your family to include your favorite fruits or vegetables for dinner! Surprise them with the information you learned in school and encourage them to try new fruits and vegetables too!

2. Popeye was right; spinach not only helps you build strong muscles, but it tastes great too!

3. The cafeteria is serving ______ today! ______ are not only good for you but also taste great too! Get yours today at lunch!

4. Run around today at recess. Play tag or catch with your friends to burn some energy.

5. Did you know, there are over 60 different types of grapes? Some have seeds and others are seedless.

6. Did you know that a raisin is a dried grape?

7. Thirsty? Swap the sugary beverage like soda for either low-fat or fat-free milk! Soda is full of extra calories without nutrients whereas milk is full of calcium that helps our bones grow strong!

8. Make your plate colorful at lunch today. Add the ______ that are being offered to make your lunch even healthier for you!

9. Did you know that the watermelon is part of the cucumber and squash family? This sweet tasting treat goes with any meal or snack.

10. No one likes to be sick. Try foods that are packed with Vitamin C – a nutrient that can help you fight off a cold! Oranges, grapefruit and pineapple are all great sources of vitamin C….did you know a green pepper has vitamin C too?
11. Breakfast is the most important meal of the day! Make sure you eat a nutritious breakfast like a bowl of cereal with low-fat or fat-free milk or a piece of whole wheat toast, peanut butter and banana to keep you focused in school.

12. Carrots are full of Vitamin A, which helps you to see better in the dark!

13. Try eating your favorite yogurt for a snack. Yogurt is full of calcium and protein to help build strong muscles and bones!

14. It’s getting cold outside, but don’t become a couch potato! Ask a grown-up for a family walk. Don’t forget to bundle up!

15. Do you get hungry after school? Eat a snack with protein like cheese or low-fat yogurt. Protein will not only make you feel full, but it also helps you grow!

16. Oatmeal is a good breakfast on a cool November morning. It is easy to make in the microwave. Try adding raisins or chopped apples to make it even more tasty and nutritious.

17. Ask your family if you can help with the grocery shopping. You can practice your math skills and help find the lowest prices for food on the shopping list.

18. What’s for dinner tonight? Think about ways you can help make meals at home. Can you set and clear the table, help measure ingredients, or wash fruits and vegetables?

19. Do you have any idea what the most popular fruit or vegetable is? Ask your classmates and your family members to name their favorite fruit or veggie. Keep track of their answers to find out the winning fruit or veggie!

20. Orange fruits and veggies are good for your eyes. How many orange fruits and veggies can you and your classmates name?
This month, your child learned where our food comes from and how it gets to our plates. We discussed crops specific to the Maryland region and how important these crops are to everyone in our state. We also talked about Thanksgiving traditions and how some of our current traditions may differ from those of the Pilgrims’ at the First Thanksgiving. Finally, your child tasted a pumpkin parfait that you could share at your own Thanksgiving dinner. Try to involve your child in the food preparation process this coming holiday season with some of these tips.

**Cook With Your Child!**

It is important to have them help with food preparation:

- Children are more willing to try new foods they help to prepare.
- Children feel good about doing something “grown up.”
- Your children will enjoy spending quality time with you.
- Children will develop creativity and self-confidence in the kitchen.
- Children think helping in the kitchen is fun!
- Children learn important skills—cooking, following directions, and more!

**Get Them Involved:**

Your children can do a lot to help in the kitchen.

Children can:

- Read the recipe out loud.
- Wash fruits and veggies.
- Tear lettuce for salads and sandwiches.
- Snap green beans and asparagus.
- Measure and add ingredients.
- Mix and stir ingredients.
- Set the table.
- Pour milk and water to drink with the meal.

**Take Action!**

How many of the following ideas can you check off this week?

- Make a meal or snack with your child. Choose a family favorite dish or visit the following website for a new, low-cost, easy, and healthy family recipe.


- Pack your child’s lunch together. Replace sugary treats with healthy foods. Include a handwritten note to your child in their lunchbox. If your child buys lunch, review the menu and encourage your children to select healthy items.

- Choose one other tip from this newsletter and write it here once completed:

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**Cook together. Eat together. Talk together.**

**Make mealtime a Family Time.**

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Your child tasted this Pumpkin Parfait recipe in class this month. Try it at home and see if the other family members enjoy it as well!

To make one serving:

1/2 cup low-fat vanilla yogurt
1 tablespoon pumpkin, canned
1/2 teaspoon pumpkin pie spice

Directions:
Mix all ingredients together in a small bowl or medium sized cup.
Sharing FAMILY Meals

In this unit, Sharing Family Meals, students will learn that creating healthy family meals requires participation from the entire family along with teamwork. Students will discuss how to incorporate fruits and vegetables into their family mealtime and how to organize meals that can occur any place and at any time. Most of all, students will learn that a family meal is a time where they can come together with family and friends and enjoy conversation and good food.

The school themes incorporated into these lessons include:

**Language Arts • Social Studies**  
**Science • Technology • Art**

The lesson themes include:

- **Cooperation**  
- **Incorporate**  
- **Teamwork**  
- **Preparation**
Cooperation - The process of working together to accomplish the same goal.

Incorporate - To include something as part of a whole or group.

Teamwork - The effort of a group of people acting together as a team in the interest of a common goal.

Preparation - Something done to get ready for an event or an activity.

Manners - A way of acting or behaving (hopefully politely).

Perimeter - The line forming the boundary of a closed geometric figure (for example: the edges of the field – add all four sides).

Area - The number of square units a figure covers. For example, inside the edges of the field (L x W).
DECEMBER

Sharing FAMILY Meals

Materials List

Introductory Lesson:

• Handout: Family Meal Planning (appendix)

• Handout: MyPlate (also used in October and November lesson #3) which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf

• Conversation Starters (appendix)

• Ingredients for Tasting Activity

• Large bowl

• Spoons to toss/serve salad

• Small plates and plastic forks

• Handwipes or sanitizer

Reinforcement Lesson #1:

• Handout: Grocery Store Map (appendix)

• Handout: Grocery List (appendix)

• Pencils

Nutrition Notebook:

Materials List:

Groceries:
- Tomatoes
- Carrots
- Milk
- Lettuce
- Oatmeal
Introductory Lesson #1: Family Meal Planning

Time Required: 45 minutes

Process:

Introduction: 5 minutes

Last month we talked about Thanksgiving meals, and you may have shared your Thanksgiving meal with family, special friends or guests. Meals shared with family are an opportunity to eat healthy food and stay involved with each other’s lives. Family meals can be any meal time (breakfast, lunch, and dinner) or any place (home, restaurant, neighborhood park, or home of a relative or friend or someone important to you).

Discussion: 10 minutes

1. Ask students: Who would you like to eat meals with? Give students an opportunity to share the names of their friends and family members.

2. Ask students: When are these friends and family members available to spend time and eat together?

3. Ask students: What kinds of things do you talk about at your family mealtime?

4. Discuss differences in family meals among students in the classroom. Are there different traditions surrounding meal times or any special foods eaten at family meals for any students?

5. Reference the “Pilgrims’ First Thanksgiving” from the November Unit as an example of a holiday family meal but state that any meal eaten together is a family meal.

6. Briefly review the fruit and vegetable groups in MyPlate and reinforce the message to make half your plate fruits and vegetables.

7. Family meals can be quick and simple. A sandwich with an apple, carrots sticks, a glass of milk and a friendly conversation is a simple recipe for a well-balanced family meal.

Lesson Objectives:

Students will:

#1 Learn that family meals provide an opportunity to eat healthy food with others.

#2 Discuss ways each family member can participate in family meals.

#3 Create healthy family meals by incorporating fruits and vegetables into the meal.

Materials + Prep

Materials:

- Handout: Family Meal Planning (appendix)
- Handout: MyPlate (to use as a reference) which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
- Conversation Starters (appendix)

Prep-Work:

- Make copies of Family Meal Planning handout for each student.
- Cut out Conversation Starter cards.
Introductory Lesson #1: Family Meal Planning

Key Points:

- Family meals give us a chance to eat healthy food together and stay involved in each other’s lives.
- Any meal can be a family meal.
- Use family mealtime to talk about each others’ day, goals and dreams.
- Encourage students to talk with their family members about having one or more family meals a week and include family members in the meal planning process.

Summary of Activity:

Students will plan a family meal and choose foods from MyPlate to include in the meal.

ACTIVITY

Family Meal Planning: 15 minutes

Process:

1. Distribute “Family Meal Planning” handout to each student.

2. Ask students to identify days and meals during the week to set aside for a family meal. Ask students to select MyPlate choices that will be included in that meal.

3. Ask students to think of ways each family member can assist during family meals. They can then record their thoughts in the space provided on the handout.

4. If time allows, have students share responses with the class.

5. Instruct students to take their Family Meal Planning handout home to discuss with family members when they can plan a family meal.
Apple Cranberry Salad Toss

15 Minutes

Process

1. Combine lettuce, apples, walnuts (optional), cranberries, and onions in large bowl.
2. Add dressing; toss to coat.
3. As students are tasting, randomly distribute a conversation starter to pairs of students. Have them discuss

Teacher Tip:

Link tasting to integrate fractions and percentages.

Summary of Tasting:

Students will have the opportunity to taste fruits and vegetables mixed together in a salad. Explain that creating a salad for a family meal allows many people to become involved in meal preparation. One person can measure ingredients, one person can wash fruits/vegetables, cut fruits/vegetables, etc.

Ingredients:

(MAKES 25 SAMPLE PORTIONS)

- 2 large heads of lettuce, washed and chopped
- 3 medium apples, washed and sliced
- 3/4 cup walnuts, chopped (optional)
- 1 1/2 cups dried cranberries
- 1/2 cup green onions, washed and sliced
- 1 cup low-fat vinaigrette dressing

You Will Need...

- Large bowl
- Spoons to toss/serve salad
- Plates and forks
- Measuring spoons
- Handwipes or Sanitizer
Nutrition Notebook: Favorite Family Meal

Lesson Overview:

Students will create a written response to a prompt related to the content covered in the “Family Meals” unit.

Time Required: 20 minutes

Directions:

Read the prompt aloud to your students. After answering any questions, allow them time to write a response in their Nutrition Notebooks.

Writing Prompt

Describe your favorite family meal. Include the following in your description: people at the meal, foods you help to prepare, foods you like to eat, where you eat your meals, and topics you discuss at mealtimes. Why is this your favorite meal? How often do you have a meal together with your family?
Reinforcement Lesson #1:
Finding Your Way through the Grocery Store

Lesson Overview:

Students will use the Grocery Store Map handout to learn about making healthy choices when they go grocery shopping.

Time Required: 15 minutes

Process:

1. Have students describe the type of store where their family buys groceries.

2. Using the grocery list provided, ask students to circle foods on the map that they are going to buy from the grocery store.

3. Once complete, connect each circle with a line (this will form a circle around the outside of the grocery store).

4. Explain that this is where we should be doing most of our shopping because this is where most of the healthy foods are located in a typical grocery store.

5. Ask students to revisit their responses to question #1. Is this how their grocery store is organized? If not, where are healthy choices located in their grocery store?

Teacher Tip:

Consider linking to perimeter and area math concepts.
OPTIONAL ACTIVITY

Persuasive Letter Home: 10 minutes

Process:

1. Remind students about the previous discussions about family meals and ways they could help prepare family meals. Remind students about the importance of including fruits and vegetables in their family meals.

2. Direct students to write a short letter home, identifying the following:
   
   A. At least 3 fruits or vegetables they would like to add to the family grocery list and explain why.

   B. At least 3 ways they can help in the grocery store or in the kitchen during mealtime.

3. Invite students to read their responses aloud and take the letters home to share with their families.

Summary of Activity:

Students will write a persuasive letter home incorporating information from the previous lessons.
OPTIONAL ACTIVITY

Party Placemats: 20 minutes

Process:

1. Distribute the MyPlate handout and coloring utensils to each student.

2. Ask them to draw pictures of fruits, vegetables and other “all the time foods” that they would like to have to eat at their healthy family meal.

3. Ask them to draw utensils and other items that they would place on the table for mealtimes.

4. Consider laminating and using as a reference for future MyPlate activities.

Summary of Activity:

Students will draw a healthy meal that they could eat with their family.
Reinforcement Lesson #1: Finding Your Way through the Grocery Store

Grocery List
- Low-Fat Milk
- Lettuce
- Tomatoes
- Apples
- Blueberries
- Fish
- Whole Wheat Bread
DECEMBER
Grocery Store Map

Sharing FAMILY Meals

Protein  Dairy

Fruits + Veggies

Snacks  Bulk

Cashiers

Bakery (Whole Grains)
1. Eat breakfast every morning. It will give you energy and brain power to work through the school day!

2. The cafeteria is serving ___________ today! ___________. are not only good for you but also taste great too! Get yours today at lunch!

3. Did you know that peppers come in more colors than just green? They can also be red, orange or yellow. Look for them next time you are the grocery store!

4. Did you get your milk today? Milk not only tastes good but it also provides the nutrients to help build strong bones!

5. The average person in the United States eats about eight pounds of grapes each year. Do you eat green grapes or purple grapes? Or, do you eat raisins, they are grapes too!

6. Do you know what the featured fruit or vegetable is in the cafeteria today? Today at lunch we are serving up some delicious _________________. Don’t miss out!

7. Get your whole family involved in physical activity! This weekend, turn off the television and play a game with your family instead!

8. Drinking one bottle of soda is like eating 14 spoonfuls of sugar! Next time you’re thirsty, reach for low-fat or fat-free milk or water.
9. **Munch on raw veggies for a snack at lunch!**
   Try carrot sticks, sweet red peppers or celery sticks.

10. **Bananas are the most popular fruit in the world. You can eat bananas all year long.** Look for them in the cafeteria line!

11. **Sweet potatoes are commonly called yams.** They are vegetables that grow in the ground. Unlike white potatoes, this vegetable carries a vibrant color. Can you guess what color they are?

12. **Squash!** Did you know that this vegetable was one of the first planted by European settlers in America?

13. **BRRRRR. It’s getting cold outside.** How can you and your family be active indoors? Why not try having a dance party or playing a game of “Simon Says”?

14. Try turning off the tv, computer, and video games this weekend. Instead, **ask your family to share memories of their favorite family meals.**

15. **During this Holiday Season, remember to fill half your plate with fruits and vegetables!**
Did You Know....

Any meal can be a family meal including breakfast, lunch, dinner or snacks.

Children who eat together with their family:

- Have a healthier diet, and eat more fruits and vegetables.
- Are at lower risk for overweight and obesity.
- Do better in school.
- Develop good self-esteem and social skills.
- Are less likely to smoke and use drugs or alcohol.

Goals for Family Meals

Be your child’s best role model. When they see you eat fruits and veggies, your children will too! Try to include at least one fruit and veggie at each meal.

Involve family members in planning and preparing meals. Children will be more likely to try new foods if they have helped choose and prepare them.

Eat meals at or around the table. Enjoy each other’s company.

Enjoy talking with one another. Turn off the television, video games, phone and computer. Instead, learn about what happened in your child’s day. Talk about their hopes and dreams.

Make mealtime a fun time. Plan a time to use games and activities along with the family meal. This gives children something special to look forward to.

Take Action!

Include your child in mealtime. Try one of these ideas this week:

- Let your child choose and help prepare a fruit or veggie for the meal.
- Allow your child to help cook. They can mix, add ingredients, and wash produce.
- Ask your child to choose a theme or topic to discuss at mealtime.

This month, your child learned the importance of eating together as a family, and some ways he or she could take part in the family meal at home.
This month, students had an opportunity to taste fruits and vegetables mixed together in a salad. Creating a salad for a family meal allows many people to become involved in the meal preparation. One person can measure ingredients, one person can wash fruits and vegetables, cut fruits and vegetables, mix, serve and clean up and store any leftovers!!

Serve this easy to prepare, Apple Cranberry Salad Toss recipe at your next family meal:

**Ingredients (makes about six side servings):**

- 1 large head of lettuce, washed and chopped
- 1 medium apple, washed and sliced
- 1/3 cup walnuts, chopped (optional)
- 3/4 cup dried cranberries
- 1/4 cup green onions, washed and sliced
- 1/2 cup low-fat vinaigrette dressing

**Directions:**

1. Combine lettuce, apples, walnuts (optional), cranberries, and onions in large bowl.
2. Add dressing; toss to coat.
3. Serve!

---

**Nutrition Facts**

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**Vitamin A 15% • Vitamin C 10%**

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Family Meal Planning

Involve everyone in planning and enjoying family meals! Talk with your family to find good time to enjoy each others’ company for a meal together. Using the worksheet below, brainstorm some ways you and others can help create a healthy meal together.

Think about how your family can come together for a family meal this week. Identify a time and a meal that your family would enjoy - then talk with your family about making it happen this week. Make sure you pick foods from MyPlate!

<table>
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<tr>
<th>Choose a day of the week</th>
<th>Who will attend your family meal?</th>
<th>Choose a meal or snack</th>
<th>Select a Fruit</th>
<th>Select a Veggie</th>
<th>Select a Protein</th>
<th>Select a Dairy</th>
<th>Select a Grain</th>
</tr>
</thead>
</table>

Everyone Can Help with Family Meals

Help find ways to involve family members in making meals and meal clean-up.

Young Children
- Help plan meals
- Select a new food to try
- Wash fruits and vegetables
- Select vegetable for meal
- Pick salad ingredients
- Add, mix and stir ingredients
- Set the table
- Clear the table

Other Family Members
- Choose meal options
- Select a new food to try
- Grocery shop
- Peel and chop fruits / vegetables
- Prepare salad
- Cut meat
- Pour milk and water
- Wash or dry dishes

What are some ways you and other family members can help with family meals?

<table>
<thead>
<tr>
<th>Name:</th>
<th>Task:</th>
</tr>
</thead>
<tbody>
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INSTRUCTIONS: Cut cards on lines. Put on table in a small cup or bowl. Choose one card at a time for enjoyable mealtime or snacktime conversations.

- What is a job or a profession that really interests you? Why? Do you know anyone with that job? Who?
- What is the most interesting thing you read lately? Where did you read it and why was it so interesting?
- What makes somebody a good friend? How have you been a good friend to someone recently?
- If you could travel anywhere in the world, where would you go? What would you like to see there?
- What planet, star, or solar system would you like to visit? What do you imagine you would find there?
- What new word did you learn today or recently? What does it mean? How would you use it in a sentence?
- What would you like to do if you were elected President of the United States? Why?
- What are your favorite foods in the meals you make at home? What other foods or recipes would you like to try?
Mealtime Conversation Starters

INSTRUCTIONS: Cut cards on lines. Put on table in a small cup or bowl. Choose one card at a time for enjoyable mealtime or snacktime conversations.

- What is your favorite sport to play? Why? What is your favorite sport to watch in person or on TV? Why?
- What was the most interesting news story you read, heard or watched today? Why?
- What are you looking forward to this week?
- Pretend you are an adult in your family. What is a new rule you would create?
- Describe your dream job.
- Name something you would like to learn to do.
In this unit, Variety: The Spice of Life!, students will begin to understand why it is important to eat fruits and vegetables. Students will learn about basic nutrients associated with the colors of fruits and vegetables and how these nutrients can help our bodies stay healthy. Students will also discuss how advertisements can influence the foods we eat, and the importance of knowing how to choose the right foods in order to stay healthy.

The school themes incorporated into these lessons include:

- **Language Arts**
- **Social Studies**
- **Science**
- **Technology**

The lesson themes include:

- **Variety**
- **Spice**
- **Influence**
Vocabulary Words

**Variety** - A range of things of the same type that are different in character or quality. Many different types of things, especially ones in the same general category.

**Spice** - Something used to flavor food, usually with a strong smell and taste; to make something more interesting or exciting.

**Influence** - The ability to have an affect on the character, development, or behavior of someone or something.

**Clever** - Quick to understand, learn, and create ideas.

**Naïve** - Showing a lack of experience, wisdom, or judgement.

**Testimony** - When a well-known person supports or sells a product.

**Clever** - Quick to understand, learn, and create ideas.

**Slogan** - A catchy phrase or statement used to sell a service or product.

**Jingle** - A short song, usually mentioning a product benefit.

**Promotional Gift** - Using a gift with a logo or a gift as a reward for purchasing a product.

**Product Placement** - Product promotion through appearances in film, entertainment, or other media.
Materials List

Introductory Lesson:
- Fruit and Vegetable Picture Cards (used in Unit 1)
- 5 Shopping bags or brown bags
- Ingredients for Tasting Activity
- Mixing Bowl
- Serving Spoon
- Small paper bowls
- Plastic forks
- Handwipes or Sanitizer

Reinforcement Lesson #1:
- Tops and Bottoms
  by Janet Stevens

Reinforcement Lesson #2:
- Handout: School Lunch Menu (available on county website or from School Food Service Staff)
- Construction Paper
- Coloring utensils (pencils, crayons, and/or markers)

Nutrition Notebook

Variety: The Spice of LIFE!
 Introductory Lesson: Eat a VARIETY of Colors...

Time Required: 45 minutes

Process:

Introduction and Discussion: 10 minutes

1. Introduce and discuss the concept of variety using the MyPlate icon.
2. What are some foods that are part of a healthy diet?
3. What are some of your favorite fruits and vegetables?
4. Why are fruits and vegetables called “healthy foods?”

Key Points:

- Fruits and vegetables are among the healthiest foods we eat. Canned, frozen, fresh, and dried fruits and vegetables are all great choices.

- A healthy diet includes food from all MyPlate food groups: fruits, vegetables, dairy, protein, and grains.

- Fruits and vegetables provide us with nutrients such as vitamins, minerals, and fiber.

- Vitamins, minerals and other nutrients are associated with the color of fruits and vegetables.

- To get a variety of vitamins and minerals, we just need to eat a variety of colors. We should try to select red, orange, yellow, green, and blue/purple-colored foods. That’s why some people say we should “eat a rainbow”.

Materials + Prep

Materials:

- Fruit and Vegetable Picture Cards (used in Unit 1)
- Shopping bag or brown bag (1 for each group)

Prep-Work:

- Tape Fruit and Vegetable Picture Cards to the board in a random arrangement. Make sure you include pictures of the fruits and vegetables that are referred to in “Take Your Pick” game (Step #6).
ACTIVITY

"Take Your Pick" Game: **20 minutes**

Process

1. Introduce the game! Different fruits and vegetables contain different nutrients. We need lots of different nutrients to be healthy. How do we know that we’re getting all of these wonderful vitamins and minerals? We’re going to play “Take Your Pick” to find out.

2. Break students into 5 groups.

3. Give each group one shopping bag.

4. Show students the pictures of produce at the front of the room.

5. Explain game:

   A. Each group will shop for their fruits and vegetables for the week.

   B. Each group must choose which fruits and vegetables they want to buy after the description is read.

   C. When a sentence is read, one person from each group will come up and choose one item from the board based on the statement and put it in their grocery bag.

   D. The student will then return to their group and pass the bag to the next person in their group.

   E. Group members will take turns so that everyone in the class has a chance to pick a fruit or vegetable.

Summary of Activity:

Working in teams, students will “shop” for fruits and vegetables from pictures taped to the board. Their selections will be guided by prompts which you will read aloud to them. Through this game, students learn the health benefits associated with fruits and vegetables, and observe that these benefits are linked to the colors of fruits and vegetables.

Teacher Tip:

Provide students with short reading assignment on eating a variety of colored foods.
ACTIVITY

"Take Your Pick" Game: **20 minutes**

Process (continued)

6. Play the game using the following statements:

A. You’ve decided that you want to pursue a career as a pilot. You will need to have excellent vision in order to be a pilot. You just learned that Vitamin A helps maintain good vision, especially night vision. Choose either cantaloupe, squash, sweet potatoes, carrots or apricots since they are all good sources of Vitamin A.

B. Friday night is pizza night at your house. Some of your favorite toppings are red peppers, tomatoes, and red onion, which is great because these vegetables may help to protect against some cancers. Choose tomatoes, red peppers, or red onion to put in your bag.

C. Your mom asked you to buy some greens. You’re not sure what kind she wants and there are many different types to choose from! Hopefully she won’t mind which one you choose because you just heard that most leafy green vegetables help build strong bones and maintain your vision! Choose one type of leafy green to put in your bag.

D. You just read that purple grapes, blackberries, blueberries, plums, raisins are good for your memory. You have a test next week so you want to buy one of these to pack in your lunch. Choose one of these fruits (grapes, blackberries, blueberries, plums, or raisins) to put in your bag.

7. When the game is complete, have each group look at the contents of their bag and make an observation. Hopefully they will see that their bag contains a variety of colors of fruits and vegetables.

8. If they don’t make the observation on their own, go back through the list and have them hold up the fruit or vegetables that they chose for each prompt.

9. Place each group of selections together on the board.

10. After going through the whole list, they should see that fruits and vegetables with similar nutrients have similar colors.

11. Discuss conclusions that can be drawn from this activity.
Confetti Spaghetti

You Will Need:
- Mixing Bowl
- Serving Spoon
- Small paper bowls
- Plastic forks
- Handwipes or Sanitizer

Summary of Tasting:
Students will have the opportunity to taste a pasta salad made with a variety of colorful vegetables.

Ingredients:
(Makes 20 sample portions)
1 cup cauliflower (about 1/2 a head, washed and cut into small pieces)
1 box whole-wheat pasta such as rotini, cooked and chilled
1 red bell pepper, washed and cut into small pieces
2 carrots, washed and shredded
2 cups baby spinach, washed
1 cup purple cabbage, washed and shredded (about 1/4 of a head)
3 tablespoons reduced-fat Italian dressing (or oil and vinegar alternative)
2 tablespoons part-skim shredded mozzarella cheese (optional)

Directions:
1. Place pasta in a large mixing bowl.
2. Add vegetables one at a time. Discuss the color of each vegetable and why it is good for our bodies.
3. Add dressing.
4. Dish into individual bowls and top with cheese (if desired).
5. Serve!

Teacher Tip:
Consider polling the class to see who liked or did not like the tasting. Integrate fractions and percentages with the results.
Nutrition Notebook:

Why Are Fruits and Vegetables Important?

Lesson Overview:

Students will create a written response to a prompt related to the content covered in the “Variety: The Spice of Life!” unit.

Time Required: 20 minutes

Directions:

Read the prompt aloud to your students. After answering any questions, allow them time to write a response in their Nutrition Notebooks.

Nutrition Tip of the Day

Write a “Nutrition Tip of the Day” that could be read during the morning announcements. Use the tips you have heard during the past few months to tell the rest of the school how important it is to eat fruits and vegetables.

Think about the following questions as you are brainstorming ideas for your announcement:

- Why do our bodies need fruits and vegetables?
- Where can you and your families purchase fruits and vegetables?
- Do you have to have fresh fruits and vegetables or can you select canned, frozen or dried for additional variety?
- How do you like to eat your fruits and vegetables?
Reinforcement Lesson #1  Tops and Bottoms

Lesson Overview:
Students will learn that different vegetables and fruits grow underground and above ground. This concept is discussed through the book “Tops & Bottoms.”

Time Required: 15 minutes

Process:

1. Display book cover, and ask students to predict what this story will discuss.

2. Read book aloud to students. Stop during the story when appropriate or wait until reading is finished to discuss the following questions or key points:

   A. Page 2 - Did they actually cook up something? No! This is an example of figurative language.

   B. Page 5 - Does this sound like a fair plan?

   C. Page 5 - What are some of the different vegetables that grow above ground? Underground?

   D. Page 11 - What kind of crops did Hare grow? All Bottoms!

   E. Page 14 - What words would you use to describe the family? (dedicated, hard working) What about Bear? (lazy, idle, slothful)

   F. What is your favorite fruit or vegetable to have at lunchtime? Where does it grow?

   G. How often should we eat fruits and vegetables? Every day!

   H. How much of your plate should be filled with fruits and vegetables? Half!

   I. What are some ways you can convince your friends and family to eat fruits and vegetables?

Materials + Prep

Variety: The Spice of LIFE!

Materials:
- Tops and Bottoms by Janet Stevens

Prep-Work:
- Read through text and flag pages for talking points.

Key Points:
- To get a variety of vitamins and minerals, we just need to eat a variety of colors. That’s why some people say we should “eat a rainbow”.

- We can help convince our family and friends to eat fruits and vegetables by explaining the many reasons why fruits and vegetables are good for us.

- We should eat fruits and vegetables every day!
Reinforcement Lesson#2  Food Advertising

Lesson Overview:
Students will learn the concept of advertising and how it can affect food intake. Students will create a commercial to encourage other students to eat fruits and vegetables.

Time Required: 30 minutes

Process:

Introduction and Discussion: 10 minutes

1. Review the concept of advertising. Define and explain the following common advertising techniques:
   
   A. Testimony- When a well-known person supports or sells a product.
   
   B. Slogan-A catchy phrase or statement used to sell a service or product.
   
   C. Jingle - A short song, usually mentioning a product benefit.
   
   D. Promotional gift-Using a gift with a logo or a gift as a reward for purchasing a product.
   
   E. Product placement-Product promotion through appearances in film, entertainment and other media.

2. Ask students to think about examples of advertising they have seen for food products.

   A. TV commercials using cartoon characters, posters, radio ads, grocery store ads

   B. Are the advertisements promoting “all the time” foods or “sometimes” foods?

3. It is important to know the nutrients found in fruits and vegetables so that we can make the right choices regardless of what the advertisement says. The more you know, the more likely you are to make healthier choices.

Key Points:
- Advertising can have a large impact on the foods we eat or want to eat.
- Advertising fruits and vegetables can help make other students make healthy choices!

Teacher Tip:
Prior to lesson, assign students to view PBS kids advertising tricks webpage.
Reinforcement Lesson#2  Food Advertising

**ACTIVITY**

Create Your Own Commercial: **20 minutes**

**Process**

1. Divide students into groups of 2-4.
2. Ask each group to select a fruit or vegetable.
3. Explain that the goal is to persuade other students to eat that fruit or vegetable.
4. Explain that there are many ways to convince others to make food choices.
5. Describe how jingles, skits, and television commercials can be used for this purpose.
6. Direct students to work together to create a television ad, jingle, or a skit that promotes their fruit or vegetable.
7. Have the students present their advertisements to the class.
8. Have the class discuss nutrients/colors in each group’s fruit or vegetable.
OPTIONAL ACTIVITY

What’s for Lunch?: 10 minutes

Process
1. Have students review the lunch menu for the current month.
2. Have students select a day that their favorite fruit or vegetable is being served or assign each student a day of the month.
3. Using paper and coloring utensils, have students create posters to be placed in the lunch room on the day that their fruit or vegetable is being served.
4. The poster should encourage other students to select the fruit or vegetable for that day. Encourage students to include nutrients found in the fruit or vegetable, how the fruit or vegetable grows and why other students should eat that fruit or vegetable.

Summary of Activity:
Students will create advertisements to encourage other students in the school to eat the fruits and vegetables offered in the cafeteria.

Materials + Prep

Materials:
• Handout: School Lunch Menu (available on county website or from School Food Service Staff)
• Construction Paper
• Coloring utensils (pencils, crayons, and/or markers)

Prep-Work: None!

Teacher Tip:
Consider this as an extra credit activity.
1. **The cafeteria is serving** ____________ **today!**
   ____________ are not only good for you but also taste great too!
   Get yours today at lunch!

2. **Ever tried ants on a log?** No, not the bugs! To make ants on a log,
   spread peanut butter on celery sticks and top with raisins for a great snack.

3. Did you know that the **tomato** is one of the most popular vegetables
   eaten by Americans? Add tomatoes to any meal to give it some extra flavor
   and important nutrients.

4. **Craving a sweet treat?** Ask for a fruit salad for a snack.
   If you use different fruits each time, the possibilities are endless!

5. Popcorn is a great snack! Did you know that popcorn is actually made from seeds?

6. Next time the rain causes you to be stuck indoors, use the steps in your house
   to **get some exercise**! Ask a family member to time you and see how
   many times you can climb up and down the steps in 5 or 10 minutes! Try to
   beat your record.

7. Make your plate colorful at lunch today. Add the ____________ that are
   being offered to make your lunch even healthier for you!

8. When you help your family with grocery shopping, try to select foods including
   **fruits, vegetables and low-fat dairy products**!

9. Did you know you are supposed to get at least 60 minutes of physical activity
   per day? Instead of playing video games, computer games or watching TV help
   clear the snow off your sidewalk. As long as you are outside – make a snow angel!
10. Eating many different fruits and vegetables everyday can help keep your heart healthy and prevent you from getting sick later in life!

11. You can always eat bananas. Enjoy a banana for lunch or as a snack. Eat sliced bananas in cereal, yogurt, or on a peanut butter sandwich.

12. Do you know what part of the plant broccoli is? When you eat broccoli, you are actually eating the flower of a plant!

13. Carrots are vegetables that grow in the ground. Baby carrots were once longer carrots that have been peeled and trimmed. Can you taste the difference?

14. Pears are a relative fruit to apples. Which do you prefer to eat?

15. Apples are the most popular fruit eaten in the United States. Can you guess which fruit is second? Pears!

16. What do pumpkins and watermelons have in common? They both grow on vines!

17. Can you find the vegetable in this joke? Knock, knock. (Who’s there?) Lettuce. (Lettuce who?) Lettuce in, it’s cold outside!

18. Dried fruit makes a great snack. You can try dried cranberries, cherries, apples and don’t forget raisins! They are easy to carry in your lunchbox for a tasty treat.


20. It’s cold and flu season. Make sure you wash your hands frequently. Always wash them before you eat!
Variety: The Spice of LIFE!

This month, your child discovered how fruits and vegetables grow. The colors of fruits and vegetables are linked to the nutrients that they contain. We also discussed the role of advertising on the food choices we make. The more we know about healthy food options, the more likely we are to eat healthy foods and encourage our friends and families to do the same! Look for many different colored fruits and vegetables at your local farmers’ market or grocery store, and use some of these tips the next time you go shopping!

Grocery Shopping Tips: Save Money, Plan Ahead!

- Keep a grocery list throughout the week. As items run out, place them on the list. Be sure to plan for fruits and veggies at meals and snacks.
- Create meals around foods you already have.
- Take advantage of store specials and coupons.
- Look for store brands. They are often cheaper than name brands.
- Shop when you are not hungry. You’ll be more likely to stick to your grocery list.
- Include fresh, frozen and canned fruits and vegetables. All varieties can be used in meals and snacks.
- Read food labels. Make sure you are getting the best nutrition value for your dollar.

Get Everyone Involved!

Your children can help with your grocery shopping. They can:

- Clip coupons
- Help write a grocery list.
- Suggest foods to put on the grocery list.
- Choose recipes or favorite dishes for the week.

At the grocery store, give each of your children a “job”. This will help them stay focused and behave well.

- Let your kids be “produce pickers”. Have them help choose fruits and veggies at the store.
- Have them read the items on the list as you shop.
- Have them sort items in the cart by food group or color.
- Allow them to be “nutrition detectives”. Have them investigate food sections for new and healthy foods.

Take Action!

Cook together. Eat together. Talk together. Make mealtime a family time. How many of the following ideas can you check off this week?

- Plan ahead to take your child to the grocery store.
- Include at least one fruit or vegetable in each meal you prepare this week.
- Choose two other tips from this newsletter and write them below:

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Variety: The Spice of LIFE!

Tasting Corner

This month, students had an opportunity to taste a healthy pasta salad containing vegetables from all five color groups. Remember - eating a variety of colorful fruits and vegetables is the best way to ensure you and your family are getting a variety of vitamins, minerals and other nutrients.

Serve this tasty Confetti Spaghetti recipe at your next family meal:

**Ingredients (serves 8 as a main dish):**

- 1 box whole-wheat pasta, cooked and chilled
- 1 red bell pepper, washed and cut into small pieces
- 2 carrots, washed and shredded
- 1 cup cauliflower (about ½ a small head), washed and cut into small pieces (raw or lightly steamed)
- 2 cups baby spinach, washed
- 1 cup purple cabbage, washed and shredded (about ¼ of a head)
- 3 Tablespoons reduced-fat Italian dressing
- 2 Tablespoons part-skim shredded mozzarella cheese (optional)

**You will need:**

- Mixing Bowl
- Serving Spoon

**Directions:**

1. Place pasta and vegetables in a large mixing bowl.
2. Add dressing.
3. Mix thoroughly.
4. Dish into individual bowls and top with cheese (if desired).
5. Serve!

---

**Nutrition Facts**

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**Vitamin A 35%**  
**Vitamin C 20%**  
**Calcium 2%**  
**Iron 4%**

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

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In this unit, *Water for Healthy Bodies*, students will learn about the importance of water not only for a healthy diet, but for all living organisms. Students will learn about the water cycle and how plants, animals and humans need water to grow and thrive. Students will discover that we can get water from many fruit and vegetable sources in addition to the beverages we drink. In addition, students will discuss different types of physical activities and how to maintain hydration status during these activities.

The school themes incorporated into these lessons include:

- Valentine’s Day
- Language Arts
- Science
- Math

The lesson themes include:

- Cycle
- Thrive
- Hydration
- Physical
Vocabulary Words

Cycle - A series of events that are repeated in the same order.

Thrive - To grow or develop well.

Hydration - To supply water in order to restore or maintain fluid balance.

Physical - Of or relating to the body, as opposed to the mind.

Fit - To be in good physical health.

Active - Any body movement that requires use of energy.

Precipitation - When water falls from the sky in the form of rain or snow.

Water Storage - Where surface water is stored, such as ponds, lakes, and the ground.

Recommend - To advise or suggest something as a course of action.

Routine - A sequence of actions that are regularly followed.
Materials List

Introductory Lesson:

- Handout: *The Water Cycle* which can be found at: http://ga.water.usgs.gov/edu/watercyclematsmallpage.html
- Food Supplies for Tasting Activity
- Handout: *Red Foods Chart* (appendix)
- Hand sanitizer
- Small paper plates (1 for each student)
- Small paper or plastic cups (1 for each student)

Reinforcement Lesson #1:

- “I.Q. Gets Fit” by Mary Ann Fraser
- Handout: *Physical Activity Log* (appendix)

Reinforcement Lesson #3:

- Empty 34oz beverage cup or container
- Small bag of sugar
- Measuring spoons

Nutrition Notebook
Introductory Lesson: Water, Water, EVERYWHERE...

Time Required: 45 minutes

Process:
Introduction: 15 minutes

1. Explain that we are going to be learning about water today, and why water is important to both people and plants, especially the plants that provide fruits and vegetables.

2. Discuss with students some of the reasons why our body needs water.

3. How do we get water into our bodies?

4. What happens if our bodies do not get enough water?

5. Can you think of some times when your body might need more water than usual?

Key Points:

- Water is used throughout our bodies to keep us healthy. Our bodies are 2/3 water!

- Water is used during digestion and to maintain the temperature of our bodies.

- We lose water through breathing, sweating and digestion.

- Every cell, tissue, and organ in our bodies has water in it, and most body functions, like eating, digesting, thinking, seeing, or growing, require water.

- Starting with our mouth, water helps wash out our digestive system and helps us digest our food.

- Water keeps our eyes wet so we can blink and see.

- Water is the main ingredient in blood, which moves nutrients, vitamins, and oxygen throughout our bodies.

- Water helps to regulate our body temperature. On a hot day, the body produces sweat to cool down.

- If people don't drink enough water, they become dehydrated. Being dehydrated means that your body doesn't have enough water to stay healthy.

- Besides drinking water, eating fruits and vegetables is an important way that we get water into our bodies.

- Plants “drink” water by absorbing it through their roots.

- Plants use water for a number of purposes. One of the most important is photosynthesis. Like humans, plants also use water to move things around their tissues. They are made up of a large percentage of water (over 80%), just like people.
Introductory Lesson: Water, Water, EVERYWHERE...

ACTIVITY

The Water Cycle Handout: 20 minutes

Process

1. Distribute a copy of The Water Cycle handout to each student. This handout depicts how water travels from the clouds as rain, into the soil, through the plant, and into the air again. Water can also go directly from the ground to the air by evaporating.

2. Have students review the handout. Discuss the definitions of each cycle. Although you can start anywhere on the cycle, it is usually easiest to start with the clouds because students should be familiar with them.

3. When talking about transpiration, explain how water travels through a plant. Water enters the plant through the roots, travels up the plant’s stem, and then out of the undersides of the plant’s leaves through tiny openings.

4. Have students discuss similarities between plants and people in relation to water.

Summary of Activity:
Students will learn how water moves through the air, ground and plants.

Materials + Prep

Materials:

Handout: The Water Cycle which can be found at:
http://ga.water.usgs.gov/edu/watercyclematsmallpage.html

• Handout: Red Foods Chart (appendix)

Prep Work:

• Make copies of The Water Cycle handout (1 for each student)

• Make copies of the Red Foods Chart (1 for each student)
**Valentine Red Food Tasting**

**15 Minutes**

**Directions:**

1. Discuss with students the part of the body and color that is generally associated with Valentine’s Day.

2. Explain that they are going to try foods that are naturally red and that are good for your heart.

3. Distribute the Red Foods Chart to each student.

4. Explain to students the tasting directions:
   
   A. Students will draw a red heart in the “like it” or “don’t like it” column.

   B. Students will describe the reasons for liking or not liking a food.

   C. Students will also describe if there is water in the food they tasted.

5. Ask the students why they think an orange is on the list. Cut the blood orange open and let them see the red flesh. After they have tasted the fruit you can tell them that the orange is called a blood orange.

6. Have the students taste each of the remaining foods, predict the % of water in the food item, and complete the chart (Red pepper - 92%; Hummus - 67%; Grape tomato - 95%; Juice - 87%; Blood orange - 87%).

**Summary of Tasting:**

Students will taste a variety of food items made from red fruits and vegetables. Students will also discuss how fruits and vegetables contain water and help us stay hydrated.

**Food Supplies:**

(Sample for 20 students)

- 2 Red peppers, washed and sliced
- 1 small container Red Pepper Hummus
- 20 Grape Tomatoes, washed (1 per student)
- 64oz container of 100% Cranberry Juice (or other 100% juice that is red)
- 3 Blood Oranges (or use red grape fruit if unavailable)

**Teacher Tip:**

What is hummus? The main ingredient in hummus is chick peas. Use canned chick peas to show “before and after.”
Lesson Overview:
Students will create a written response to a prompt related to the content covered in the “Water for Healthy Bodies” unit.

Time Required: 20 minutes

Directions:
Read the prompt aloud to your students. After answering any questions, allow them time to write a response in their Nutrition Notebooks.
Teacher will share journal entries with school principal.

Nutrition Notebook: Why is Water Important?

Writing Prompt
Write a letter to your school principal explaining why water is important for our bodies. Use the information you have learned in the ReFresh lessons to explain the need for water throughout the day. Provide some ideas of what you and your classmates can do to drink more water while at school. Then describe how you plan to encourage your family members to drink more water at home and at work.

Dear Principal...

Consider making this into a Top Ten List assignment.
Reinforcement Lesson#1 I.Q. Gets Fit

Lesson Overview:
Mrs. Furber's class has a pet mouse named I.Q. When the students are encouraged to participate in a fitness challenge for a gold ribbon award, I.Q. decides he is up for the challenge as well. He will quickly learn that he needs to change some of his old habits.

Time Required: 30 minutes

Process:
Introduction: 5 minutes
1. Discuss with students their ideas on what it means to be physically active. Is that the same as being “fit”?
2. From the title, can you predict what I.Q. will do in this story?

Discussion: 25 minutes
1. Read book aloud to students. Stop during the story when appropriate or wait until reading is finished to discuss the following questions or key points.

   A. Page 3 - How does I.Q. feel? Why is it important to eat breakfast?
   B. Page 4 - What will it take for I.Q. to earn a ribbon?
   C. Page 8 - Mac and cheese and brownies! Does this sound like a healthy variety? What types of foods are these? (sometimes)
   D. Page 10 - Take time to review MyPyramid pictured in the book. Ask students if the pyramid looks at all like MyPlate. What is the same? What is different? (food groups and their color)

Continued on next page
Reinforcement Lesson#1  I.Q. Gets Fit

Lesson Overview:

Discussion (continued):

E. Discuss the changes I.Q. needed to make in order to win a ribbon. Guide answers to highlight:
   1. Eating a variety of foods.
   2. Getting regular physical activity.
   3. Drinking lots of water to stay hydrated.
   4. Getting enough sleep.

F. Do you think I.Q. earned his award?

G. A major part of I.Q.’s fit regimen was physical activity. What are some of your favorite activities that help you to be physically active?

H. What can your class or family do together to become more physically active?

2. Distribute Physical Activity Log. Ask students to keep track of their physical activity each day for the next week. Revisit and complete Reinforcement Lesson 2.

Key Points:

- Physical activity is fun and helps you stay healthy and fit!
- Eating a variety of foods including fruits and vegetables will give you enough energy to be healthy and physically active.
- Drinking plenty of water is important to stay hydrated and to help your body function.
Reinforcement Lesson #2
How Physically Active Were You?

Time Required: 15 minutes

Lesson Overview:
Students will share their physical activity logs with the class and learn about the recommendations for physical activity.

Process:
Introduction: 5 minutes

1. Discuss tips for increasing physical activity. Tell students to choose activities that they enjoy and can do regularly. Fitting activity into a daily routine can be easy—such as playing ball, riding a bike, or taking a brisk 10 minute walk to and from the bus stop.

Discussion: 10 minutes

1. What is your favorite physical activity?

2. Discuss types of physical activity students recorded during the week. Was it hard meeting the recommended 60 minutes per day? Why or why not?
   A. Discuss challenges to meeting physical activity requirements

3. Ask students how much time they think they spend each day in front of a screen (ie tv, computer, video game etc).

4. Ask students to brainstorm ways to add more physical activity into their schedule.
   A. Limit TV and play outside
   B. If they play video games, play interactive games that require you to move
   C. Walk or ride your bike to school or extracurricular activities

Key Points:
• Physical activity is important to keep our bodies healthy. Kids need 60 minutes each day!
• Keep being active interesting by trying something different on alternate days. What’s important is to be active most days of the week and make it part of daily routine.
• It’s important to make sure we stay hydrated during physical activity. Drinking plenty of water helps us stay hydrated.

Teacher Tip:
Graph the class’ physical activity results
Reinforcement Lesson#3  Rethink Your Drink!

Time Required: 20 minutes

Introduction: 5 minutes
1. Have students discuss the beverages they drink each week.

ACTIVITY
How Much Sugar are you Drinking? 15 minutes

Process
1. Display the empty beverage container.
2. Show students what one teaspoon looks like.
3. Ask students to estimate how many teaspoons of sugar are in the container if it were filled with soda or another sugar sweetened beverage. Record estimates.
4. Have the class count along as you measure 27 teaspoons of sugar into the 34oz beverage container.
5. Discuss with students the importance of selecting water as a better choice than sugar sweetened beverages.

Lesson Overview:
Students will estimate the amount of sugar in one 34oz soda or sugar sweetened beverage.

Materials + Prep

Materials:
- Empty 34oz beverage cup or container
- Small bag of sugar
- Measuring spoons

Prep-Work:
None!
OPTIONAL ACTIVITY

Planet Power: 15 minutes

Process

1. Divide students into pairs and have each play the computer game called Blast Off. Direct them to the following website: www.fns.usda.gov/multimedia/Games/Blastoff/BlastOff_Game.html

2. One student on each team will act as pilot and enter his/her name in the Control Panel. The game challenges players to reach Planet Power by fueling their rocket with smart food choices from the five food groups and 60 minutes of physical activity. It reinforces the importance of choosing foods from all five food groups in order to be healthy.

3. Did their rockets make it to Planet Power? Print a copy of their “Mission Report” for information on their “fuel” choices.

4. Discuss with the class how many teams reached their goal for each food group. Did any teams not reach their goal for a particular food group?

5. What advice does the Mission Report offer students about reaching their goal the next time?

Materials + Prep

Materials:
- Computer with internet access

Prep-Work:
- Reserve computer lab
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<th>Red Foods</th>
<th>I like it.</th>
<th>I don’t like it.</th>
<th>Why?</th>
<th>Prediction of % of water in food item?</th>
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Student Name: ________________________________

Date Started: ________________________________

Date Completed: ________________________________
This month your child learned about healthy lifestyle tips such as drinking water to stay hydrated and regularly participating in physical activity. We tasted different red colored fruits and vegetables and found out that fruits and vegetables are not only nutritious and delicious, but are sources of water too! Make sure you bring your water bottle when you and your family try out the activities listed below to meet the recommended 60 minutes of daily physical activity!

Did You Know....

Physical Activity can take place anywhere. Any activity that gets your body moving and heart beating faster is physical activity.

Children need at least 60 minutes of physical activity per day. This activity can be nonstop or in segments of at least 10 to 15 minutes.

Active children have a better focus and attention span. Activity also improves behavior.

Check out the following websites to learn ways to be physically active:
www.letsmove.gov
www.presidentschallenge.org

Tips for Getting your Family Moving !!!

Instead of watching TV or playing video games, plan something fun and active for the family. Let your children see you move!

Turn on your favorite music and have a dance party!

Take an extra trip up and down your stairs to get your legs moving.

Take a walk to a nearby park or playground.

Play a game of tag.

Visit the local community center for activities and team games.

Walk around a farmers’ market.

Invite neighbors and friends to join you for a team game.

Take Action!

Create your own FAMILY FITNESS CHALLENGE

Set specific goals that you and your child can strive to achieve together. Keep a log of your progress. Here are some ideas:

☐ Walk for 20 minutes: 3, 5 or 7 times a week.

☐ Agree to use the stairs and not the elevator.

☐ Choose a tip from the list on the left!
This month, students participated in a Valentine Red Foods Tasting activity as part of our class ReFresh activities. The students tried foods that are naturally red in color and are also good for your heart. In addition, students learned that fruits and vegetables contain water and help to keep our bodies hydrated.

Don’t forget to ask your child which RED food they liked the best so you know to add this item to your food shopping list.

They tried:

- Red bell pepper
- Grape tomato
- 100% juice
- Blood orange
- Other red food item tasted: ________________
In this unit, Environmental Literacy, students will learn about seeds and how seeds help plants reproduce. Students will discover that growing fruits and vegetables in a garden is a low-cost and environmentally friendly way to obtain healthy foods. In a group discussion, students will brainstorm ideas to help their school support local agriculture efforts and advocate to school administrators to help their school become “greener.”

The school themes incorporated into these lessons include:

Science  Engineering  Language Arts
Technology  Math  St. Patrick’s Day

The lesson themes include:

Green

Sustainability
Vocabulary Words

**Green** - A word used to describe practices that strive to improve the environment. A color.

**Sustainability** - Conserve balance in nature by caring for, and not overusing, natural resources.

**Input** - What you put into something or a situation.

**Output** - What comes out of something or a situation.

**Monetary Value** - Something that has worth in dollars or money.
Introductory Lesson #1:
- Handout: Green Food Chart (appendix)
- Food Supplies for Tasting Activity
- Small paper plates (1 for each student)
- Hand sanitizer

Reinforcement Lesson #2:
- Handout: Garden Store Specials (appendix)
- Handout: Grocery Store Specials (appendix)
- Handout: Value of Garden Inputs and Outputs (appendix)
- Calculators
- 1 broccoli seed packet
- 5 small disposable cups

Fruit is a Suitcase for Seeds by Jean Richards

Materials List

Nutrition Notebooks:
Introductory Lesson#1 Going "GREEN"

Time Required: 30 minutes

Process:

Introduction and Discussion: 10 minutes

1. Discuss the definition of sustainability/going green.
   A. Sustainable agriculture is a way of raising healthy food that does not harm the environment. Buying local produce is an example of sustainable agriculture because our food does not have to travel very far (farmers’ markets). This can help reduce pollution in the air.

   B. Some available websites:
      http://www.sustainabletable.org/schools/
      http://www.nifa.usda.gov/nea/ag_systems/in_focus/sustain_ag_if_profiles.html

2. Discuss ways that students and families may already help the environment at home.
   A. Examples include: buying local foods or growing your own garden of fruits and vegetables, recycling, composting, turning off lights when exiting a room, reducing water waste by turning off water faucets.

Key Points:

- Students can make small changes that will have a large impact on the environment.
- Students can make their schools more environmentally friendly by showing support for greener practices.

Teacher Tip:

Introduce lesson with a video on one of the following topics: going green, farmers’ markets, farm to school or sustainability.
Summary of Activity:

Students will work in small groups to develop a list of potential ways their school and home can be more “green” and environmentally friendly.

ACTIVITY

Group Discussion and Writing Activity : 10 minutes

Process

Guide students to create their own ideas. If some groups are having difficulty, example ideas include but are not limited to:

1. Recycling paper, glass, plastic, etc. on the school property in the cafeteria and/or classrooms.

2. Composting paper and organic material for fertilizer use.

3. Purchasing local dairy, fruits and vegetables for school meals.

4. Donating leftover food to soup kitchens, shelters or food pantries to reduce waste.

5. Creating a school garden and using produce in school meals.

6. Removing trays from the cafeteria to save water/dishwashing costs.

7. Centralized dispensers in the cafeteria for condiments, napkins and silverware to reduce waste.

8. Water fountains and reusable water bottles to reduce plastic waste.


10. Eliminate packaging in lunches.

Teacher Tip:

Consider discussing feasibility of each idea at home or school.
Great "GREEN" Foods TASTING

Directions:

1. Explain that you are going to try foods that are naturally green and good for you.
2. Distribute the Green Foods Chart to each student.
3. Explain to students the tasting directions:
   A. Students will draw a green shamrock in the “like it” or “don’t like it” column.
   B. Students will describe the reasons for liking or not liking a food.

Food Supplies:
- Small container of Spinach Hummus
- 1 small bag of spinach tortillas
- 1 bunch of raw celery stalks, washed and cut into bite sized pieces
- 4 kiwis, washed and sliced
- 20 green beans, washed (1 per student)

Materials:
- Green Food Chart
- Green foods for tasting (listed above)
- Small plates (1 for each student)

Teacher Tip:
Link green foods tasting results to integrate fractions and percentages.
Nutrition Notebook: What’s your favorite fruit or vegetable?

Lesson Overview:

Students will write a written response to a prompt related to the content covered in the “Environmental Literacy” unit.

Time Required: 20 minutes

Writing Prompt

Think back to previous lessons where you learned about “in-season” produce available at farmers’ markets. Describe your favorite fruit and or vegetable that is grown in Maryland and available during the school year. Write a letter to your food service director asking them to purchase this fruit or vegetable from a local farmer for school meals. Explain the benefits of purchasing fruits and vegetables from local farmers and why it is important for students to eat these foods during school meals.

Teacher Tip:
Consider referring to Home Grown School Lunch Week (September) and link student requests with local options during that week.
Reinforcement Lesson #1: Fruit is a Suitcase for Seeds

Lesson Overview:
This book is an introduction to seeds—where they come from, their purpose, and how different fruits carry them in different places.

Time Required: 20 minutes

Process:

Introduction: 5 minutes
1. Review the main idea that plants grow from seeds. Explain that seeds contain energy and nutrients to grow into plants. These plants provide us with energy and nutrients when we eat them.

Discussion: 15 minutes
1. Read book aloud to students.
2. Use the following questions to guide a discussion:
   A. Where do seeds come from?
   B. Why is fruit like a suitcase? Discuss the need for seeds to travel to be planted.
   C. What are some examples of fruits with small seeds on the inside? (i.e. bananas, apples)
   D. What are some examples of fruits with one big seed on the inside? (i.e. cherries, peaches)
   E. What are some examples of fruits with edible seeds on the outside? (i.e. strawberries, raspberries, blackberries)
   F. What are some other examples of seeds that we eat? (i.e. Corn, peas, beans, nuts)

Materials + Prep

Materials:
• Fruit is a Suitcase for Seeds by Jean Richards

Prep-Work:
None!
Reinforcements Lesson#2: Healthy Harvest

Lesson Overview:
Students will discuss vegetable gardens as production systems that have inputs and outputs. They will discover that a garden's output of healthy vegetables has monetary value.

Time Required: 20 minutes

Process:

Introduction: 5 minutes

1. Help the class brainstorm some of the benefits of growing our own food at home, at school, or in a community garden.

2. Explain that gardening provides healthy food, fun, a good way to learn about nature, a great source of exercise, etc.

3. Explain that one very good reason many people grow food at home is that it helps save money.

4. Explain that the garden is a system for producing food. That means that in order to get something valuable out of gardening, you have to put something valuable into it.

Discussion: 15 minutes

1. Why does food at the store cost money?

2. What resources do we need in order to grow vegetables? What do we need to put into the garden in order to get vegetables out of the garden?

3. If gardening requires so many items, why do we do it? What do we get out of it? What are the rewards of a garden?

4. Review the definition of resource (anything that has value to humans because it can be used to produce or obtain something else or because it improves the quality of life). Explain that the inputs and outputs from the garden are all resources that have value. Some of them have monetary value, while others are valuable as an experience.

5. Discuss Garden Store Specials handout aloud as a list of items needed to start a garden. Discuss Grocery Store Specials handout as a list of rewards from growing a garden.
ACTIVITY

Summary of Activity:
Students will use mock garden store circulars to calculate the cost of purchasing materials to start a garden. They will then count the number of seeds in a packet of broccoli seeds to envision how much broccoli they could potentially grow with these resources. They will then calculate the value of that broccoli using a mock grocery store circular.

Materials + Prep

Materials:
- Handout: Garden Store Specials (in appendix)
- Handout: Grocery Store Specials (in appendix)
- Handout: Value of Garden Inputs and Outputs (appendix)
- Calculators
- 1 broccoli seed packet
- 5 small disposable cups

Prep-Work:
- Make copies of each of the handouts for each student.

Teacher Tip:
Consider conducting Optional Activity "Garden Inputs and Outputs."
OPTIONAL ACTIVITY

What’s in your Suitcase?: 15 minutes

Process

1. Display and name each fruit.
2. Ask students to hypothesize the following:
   A. Does this fruit have seeds?
   B. If yes, what will they look like? (size, color etc).
   C. Where are they located? (outside, center, scattered throughout)
   D. Do we eat these seeds?
3. Consider making this into a counting or charting activity. Ask students to predict which type of fruit will have the most seeds. Create a table on the board and ask each student to place an “x” under the various predictions. Then count the seeds.
4. Reveal the contents of each fruit. Discuss the results of each hypothesis. Compare the seeds.

Additional Materials + Prep

Materials:
- Cutting Board
- Knife

From the categories listed below, select one item (at least two categories are needed):
- Outside Seeds: Strawberries, Blackberries, Raspberries
- Small Seeds Inside: Apples, Oranges, Pears, Melon
- Tiny Seeds Inside: Blueberries, Bananas, Kiwi
- Large Seeds (“pits”) Inside: Plums, Peaches, Nectarines
- Other Samples of Seeds: Corn, Sunflower seeds, Peas or Beans

Prep-Work:
- Wash fruit!
OPTIONAL ACTIVITY

Garden Inputs and Outputs: 25 minutes

Process

1. Pass out the Value of Garden Inputs and Outputs handout. Ask the students to list the garden inputs that were mentioned earlier that must be purchased with money.

2. Record answers in the Value of Garden Inputs and Outputs table on the board in the Garden Inputs column. Have students do the same on their handouts. Explain that seeds, soil amendments/fertilizer, tools, containers (if relevant) are all garden inputs that cost money.

3. Divide the students into five groups. Divide the contents of the broccoli seed packet into the disposable cups so that each group gets one cup.

4. Pass the cups out to the groups. Have the students work together to count the seeds in their cup.

5. After each group has finished, have them report how many seeds were in the cup. Add the total number of seeds in the packet. Record this number in the table on the board in the appropriate blank.

6. Pass out the Grocery Store Specials handout. Explain that they will use the ads from the grocery store to figure out the value of all the broccoli we could grow from one seed packet.

7. Have the students locate the price of broccoli crowns. Record this number on the board in the appropriate blank.

8. Have the students multiply the number of broccoli seeds by the price of broccoli crowns, and record this number on the chart as well.

9. Ask students to identify which has a monetary value, garden inputs or garden outputs.

10. Say: Gardening is one way to get healthy foods very cheaply. If we are willing to spend some money in the beginning of the season, and work hard to help our plants grow, we can grow fruits and vegetables and save money at the grocery store.

11. Explain that not every seed will grow, but there are so many seeds in a packet that even if we used only a fraction of them to grow a vegetable, it could help save money. We can also share excess seeds with other gardeners, or store them over the winter in our refrigerator or freezer.
# March Appendix

## Environmental Literacy

### Value of Garden Inputs and Outputs

<table>
<thead>
<tr>
<th>Garden Inputs</th>
<th>Dollar Value</th>
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<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Garden Outputs</th>
<th>Potential Dollar Value of Garden Outputs</th>
</tr>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

\[ \text{# broccoli seeds} \times \$\text{value of broccoli} = \$\text{value of broccoli} \]
# Green Foods Chart

<table>
<thead>
<tr>
<th>Green Foods</th>
<th>I like it.</th>
<th>I don't like it.</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinach Hummus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spinach Tortilla</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Celery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiwi</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Green Beans</td>
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<td></td>
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</tbody>
</table>

March Appendix
GARDEN STORE SPECIALS

**Vegetable Seeds**
Nothing is as fresh as home grown! $1 per packet

**Large Pots**
$2 each!

**Potting Soil**
Only $3 per bag! Enough to fill 2 large pots!

**Everyone Needs a Garden Gnome!**
Garden Gnome Sale! $15 each!

**Gardener's Trowel**
A gardener's best friend... Now only $2 each!

**Fancy Plant Labels**
$8 per dozen!

**Compost: The Natural Fertilizer**
Sold by the bag...only $2 each!

**Relax...on a Garden Bench**
This week only $150!
### GROCERY STORE SPECIALS

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broccoli</td>
<td>$2 per crown</td>
</tr>
<tr>
<td>Carrots</td>
<td>$2 per 1 pound bag</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>$3 per pound</td>
</tr>
<tr>
<td>Snow Peas</td>
<td>$3 per 1/2 pound bag</td>
</tr>
<tr>
<td>Peppers</td>
<td>$1 each</td>
</tr>
<tr>
<td>Kale</td>
<td>$1 per pound</td>
</tr>
<tr>
<td>Garlic</td>
<td>3 for $1</td>
</tr>
<tr>
<td>Eggplant</td>
<td>$1.50 each</td>
</tr>
<tr>
<td>Zucchini or</td>
<td>$2 per pound</td>
</tr>
<tr>
<td>Summer Squash</td>
<td></td>
</tr>
<tr>
<td>Snap Pas</td>
<td>$3 per 1/2 pound bag</td>
</tr>
</tbody>
</table>
Where do Your Fruits and Veggies Come From?

Farmer’s markets and grocery stores are great places to shop for fruits and veggies. You can also grow them yourself!

AT HOME
If you have an EBT card it can be used to buy fruit and vegetable seeds. Spend time with your child growing your own fruits and vegetables. Seeds can grow in-ground or in containers.

AT SCHOOL
Developing a school garden is a great teaching tool. Children work outdoors, learn how to grow fruits and vegetables, and have a safe place for physical activity.

Ask your child’s school principal if they have a school garden and how you and your child can get involved!

This month your child learned that eating a variety of fruits and vegetables is important for a healthy diet, and that gardening provides fresh, delicious fruits and vegetables at a low cost. Though it requires some initial work to get started, you end up saving money in the end. We also learned that plants grow from seeds to provide healthy foods, and that some seeds are even good to eat!

What’s So Great About Seeds?
Seeds are nutritious. They contain protein, iron, fiber, and healthy fats.

People often snack on sunflower and pumpkin seeds. We also eat seeds found in fruits and vegetables such as tomatoes, cucumbers, and strawberries.

Look at the fruits you have at home with your child. Discuss where the seeds are found in those fruits.

Did you know that all of the following are considered “seeds” as well? Beans? Peas? Nuts?

Give your family a boost of energy and nutrients! Try adding these foods as part of your meal or as a healthy snack:

- Seeds can top a salad
- Beans and peas can be added to soups, rice or casseroles
- Try seeds plain or with dried fruit for a tasty snack

Have Fun with Seeds at Home!
Use the seeds from a pumpkin, winter squash, or sunflower to create a fun and healthy snack for the family to enjoy. Follow these simple steps:

- Rinse and separate seeds
- Spread them on a shallow cooking sheet or pan
- Preheat oven to 325 degrees
- Coat seeds lightly with olive oil or cooking spray
- Bake at 325 degrees for 25 minutes or until lightly toasted
- Sprinkle with salt and serve!

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Tasting Corner

This month, students participated in a Great “GREEN” Tasting activity as part of our class ReFresh activities. The students tried foods that are naturally green in color.

Don’t forget to ask your child which GREEN food they liked the best so you know to add this item to your food shopping list.

They tried:

- Spinach tortilla
- Spinach hummus
- Celery
- Kiwi
- Green beans
- Other green food item tasted: ______________________
In this unit, Whole Grains, students will observe and learn the difference between whole and refined grains. Students will also learn how to read a Nutrition Facts label to differentiate between whole grains and refined grains and to help them make better food choices.

The school themes incorporated into these lessons include:

- Language Arts
- Math
- Science
- Maryland Agriculture

The lesson themes include:

- Whole Grains
- Refined Grains
- Digestion
Whole Grains - Grains that contain all three parts of the grain; germ, endosperm and bran. Whole grain foods contain fiber, vitamins, and minerals.

Refined Grains - Grains that have had the germ and bran removed.

Digestion - The process of breaking down food in the stomach and intestines into substances that can be used by the body.

Additives - A substance added to food in very small quantities. Additives can be used for flavor or color.
Materials List

Introductory Lesson:
- Whole Grain Poster (provided)
- Why Eat Whole Grains? Mini Poster (appendix)
- What is a Whole Grain? Mini Poster (appendix)
- Whole Grain Foods Chart (appendix)
- Ingredients for Tasting Activity
- Small Plates (1 for each student)
- Knife
- Napkins
- Hand Sanitizer

Reinforcement Lesson #1:
- Bread Comes to Life by George Levenson
- Handout: MyPlate which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf

Reinforcement Lesson #2:
- Variety of nutrition facts labels from grains products (whole grain, multigrain, white, wheat, etc.) Not Provided
Introductory Lesson: What is a Whole Grain?

Time Required: 30 minutes

Process:

Introduction: 15 minutes

1. Refer back to the MyPlate diagram. Point out the orange grains group. Ask students to brainstorm together as a class some of their favorite foods from the grains group. Ideas include rice, pasta, bread, breakfast cereal, and popcorn.

2. Pass out What is a Whole Grain? mini poster to each student.

3. Use whole grains poster to demonstrate the three parts of a whole grain.

4. Explain the 3 parts of the grain: the bran, the endosperm and the germ.

5. Explain to the class that part of the whole grain is missing in refined grains. Bran and germ are lost in this processing. Remove these sections of the grain from the Whole Grains Poster.

6. Ask the class to identify which nutrients are missing when we consume refined grains that only contain the endosperm of the wheat grain.

   A. Answers: Fiber, B vitamins, Vitamin E, unsaturated fats


8. Explain to students that half of the grain foods they eat should be whole grains. Have students now discuss the whole grain foods they eat. Examples include whole wheat bread, whole wheat rolls, whole wheat pasta, and corn tortilla.

9. Pop Quiz! Ask the class which is healthier: White rice or Whole grain/brown rice? White bread or Whole wheat bread?

Teacher Tip:
Consider having students read news article on whole grains.

Lesson Objectives:
Students will:
Learn the three components that make up a wheat kernel and the nutrients found in each part.

Materials + Prep

Materials:
- Handout MyPlate which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
- Whole Grains Poster
- Why Eat Whole Grains? mini Poster (appendix)
- What is a Whole Grain? mini Poster (appendix)
- Whole Grain Foods Chart

Prep-Work:
Make copies of mini-posters and chart (1 for each student)

Key Points:
- Whole grain foods contain fiber, vitamins and minerals because they contain the entire whole grain kernel.
- Whole grain foods contain fiber that helps us stay fuller longer.
Tasting Whole Grain Foods Tasting

*Time Required: 15 minutes*

1. Cut whole grain products into bite-sized pieces. *
2. Distribute copies of the Whole Grain Foods Chart to each student.
3. Allow each student to taste a piece of each whole grain food.
4. Instruct students to write whether they liked or disliked each food. Instruct students to describe the food and why they did or did not like the food.
5. After each food, ask the class how many students liked the food.
6. Ask the class how they could use these foods to make a family meal (sandwiches, breakfast, wraps, snacks).
7. What are some other examples of their favorite whole grain foods?
   A. Remind students of other whole grain foods- whole wheat spaghetti, brown rice, whole grain cereals, etc.

**Note:** For gluten intolerant students consider brown rice cakes, rice chips, and corn tortillas.

**Ingredients**

1. small loaf of Whole Grain Bread
2. small package of Whole Wheat Tortillas
3. small package of Whole Wheat Pitas
4. small box of Whole Wheat Crackers
5. box of Whole Grain cereal (a whole grain should be listed as first cereal ingredient)

**Materials:**

Whole Grain Foods Chart (appendix)
Small Plates (1 for each student)
Knife
Napkins
Hummus, low-fat dip, soy nut butter, or low-fat margarine to taste with the whole wheat products (optional)

**Teacher Tip:**
Integrate tasting results to include fractions and percentages.
Lesson Overview:
Students will write a written response to a prompt related to the lessons in the Whole Grains unit.

Time Required: 20 minutes

Writing Prompt
Write a persuasive letter home asking the person who grocery shops in your family to add whole grain products to the grocery list to serve at family meals. Describe some of the different whole grain products that are found in the grocery store that you think the family would enjoy. Include the importance of eating whole grains and what to look for on the label when choosing whole grains. Once complete, bring your notebook home and share this letter with your family.

Dear Mom,

I think whole grains are actually pretty good...

Can we get some oatmeal?
Reinforcement Lesson #1: Bread Comes to Life

Lesson Overview:
Students will learn the process of making breads, starting with planting and harvesting the wheat plant to the process of baking bread.

Time Required: 30 minutes

Process:

Introduction: 5 minutes
1. Remind students that wheat is a grain planted in the ground like fruits and vegetables.
2. Discuss foods that are included in the grains group. Include examples for breakfast, lunch, dinner and snacks.
   A. Examples include bread, cereal, crackers, pasta, pancakes, tortillas, and rice
3. Remind students about the three parts of the grain: the bran, the endosperm and the germ.
4. Remind students what nutrients are missing when we consume refined grain foods that contain only the endosperm of the grain.
   A. Answers: Fiber, B vitamins, Vitamin E, unsaturated fats

Discussion: 25 minutes
1. Read book aloud to students. Stop during the story when appropriate or wait until reading is finished to discuss the following questions or key points:
   A. Ask students to recall the sequence of activities from planting a seed to baking bread.
      1. Plant the seed. Sunlight, water, air, and soil all contribute to growing a healthy plant.
      2. A full-grown wheat plant is picked and “threshed” to separate the seeds.
      3. Wheat seeds are ground into whole wheat flour.
      4. Ingredients are combined to make the dough that is baked into bread!
   B. Can anyone recall which part of the plant are grains made from? Seeds. Explain that seeds hold energy and vitamins and minerals for a growing plant.

Materials + Prep

Materials:
• Bread Comes to Life by George Levenson
• Handout: MyPlate which can be found at the following website: http://www.cnpp.usda.gov/Publications/MyPlate/GraphicsSlick.pdf
• Maryland Agriculture Education Foundation (MAEF) Map located at: http://maefonline.com/attachments/File/MDCommodityMap.pdf

Prep Work
• Make copies of handouts (1 for each student)
Reinforcement Lesson #1: Bread Comes to Life

Discussion (continued)

2. When we eat whole grains, we are getting all of the nutrients and energy included in the whole seed. This helps us grow strong and healthy.

3. What do you need your strength and energy to do? Name some of your favorite activities.

4. Guide a discussion to identify whole grain foods.
   - Examples include whole wheat bread and pasta, brown and wild rice, whole grain cereals, buckwheat, bulgur (cracked wheat), oatmeal, popcorn, muesli, whole-grain barley, whole-grain cornmeal, whole rye, whole-wheat crackers, whole-wheat tortillas.

5. Refer to the Maryland Agriculture Map and ask students to identify the counties in Maryland where wheat is grown.

6. Remind students of the Pilgrims and foods available at the time of the first Thanksgiving (November Unit).

7. Do you think the Pilgrims ate whole grains or refined grains? Why?
   - The very first bread was a loose mixture of crushed whole grains mixed into water which was flattened to dry in the sun or bake over an open fire.
   - Refined grains are processed foods. Remind students that a processed food is one that has been through many steps and changes between the farm and your plate.

Key Points:
- Grains are made from the seeds of the wheat plant.
- Whole grain foods contain all three parts of the wheat seed.
- Whole grain foods contain important B Vitamins, fiber, Vitamin E and unsaturated fats.
Reinforcement Lesson #2: Label Reading

Lesson Overview:
Students will review the Nutrition Facts label to determine the ingredients in different whole grain products.

Time Required: 25 minutes

Process:

Introduction: 5 minutes

1. Remind students about the 3 parts of the grain: the bran, the endosperm, and the germ.

2. If the digestion experiment (optional activity) is completed, remind students about the differences between white bread and wheat bread.

Discussion: 5 minutes

1. Discuss with students the value of selecting whole grain foods.
   - Fiber (fullness, digestion), B vitamins (energy), Vitamin E and unsaturated fats.

2. Point out that some breads and other grain products are brown but are not whole grain. Discuss why this color may occur.
   - Molasses or other coloring additives

Key Points:

- Look for the term “whole” before the grain (whole wheat flour) to make sure that the product is made with whole grains.
- Reading a food label can help you make healthy food choices.
- Read the ingredient list on cereals or snack food packages and choose those with whole grains at the beginning of the list.
ACTIVITY

Label Reading: **15 minutes**

1. Separate class into smaller groups.

2. Pass out labels from a variety of different grain products (whole grain, white, wheat, etc.) to each group of students and have them read them as a group.

3. Prompt students to attempt unknown words using phonics, structural analysis, and prior knowledge.

4. Have the students look for the word “whole” in front of the grain, such as “whole wheat flour”.
   
   A. These ingredients should be listed at the beginning of the ingredient list.
   
   B. Other words to look for to indicate whole grain: whole-wheat flour; bulgur (cracked wheat); oatmeal; whole cornmeal; brown rice.
   
   C. Words to indicate refined grain: white flour; degermed cornmeal; white bread; white rice, enriched wheat, wheat.
   
   D. Foods labeled with the words “multi-grain,” “stone-ground,” “100% wheat,” “cracked wheat,” “seven-grain,” or “bran” are usually not whole-grain products.

5. Discuss the difference between the words “whole” and “hole”.

6. Discuss with students that it is important to look for the word “whole” when selecting grain products. Describe the difference between whole wheat flour, wheat flour and flour. Explain that some wheat breads do not contain whole grains, and are often colored with molasses or other coloring to make them appear to contain whole wheat flour.

7. Ask each group to read their label aloud and have the other groups guess if this is a whole grain food.

8. Ask the students what part of MyPlate should include whole grains.

9. Ask the students to describe their favorite whole grain food.
OPTIONAL ACTIVITY
Cafeteria Menu Makeover: **20 minutes**

**Process**

1. Assign students to groups of 4-5.
2. Instruct students to brainstorm current and past whole grain items they have seen in their cafeteria for breakfast or lunch.
3. Discuss lists as a class.
4. If students state that they have not seen whole grain items in the cafeteria, instruct students to makeover the school breakfast and lunch menu to include whole grains every day for both meals.
5. Assign each group one week of the month for the breakfast and lunch school menu.
6. Instruct students to brainstorm where whole grains can be used on the menu.

**Summary of Activity:**

Students will discuss current whole grain items in their school cafeteria. Students will review the school lunch menu and give it a “makeover” to include more whole grains if they are not already on the menu.

**Optional Materials:**

- School lunch menu (available on county website or from school food service staff)

**Prep-Work:**

Make a copy of lunch menu for each student
OPTIONAL ACTIVITY

Digestion Experiment: **10 minutes**

**Process**

1. Combine ½ cup of vinegar with 1 gallon of water in a clear container with a lid. Explain to students that this represents the gastric juices found in the stomach during digestion.

2. Place a slice of white bread and a slice of whole wheat bread in the container and put the top on.

3. Have the students make a prediction and write it in their Nutrition Notebook of which bread would take longer to be digested, thus remaining in their stomachs a longer time.

4. Have students make daily observations for one week of the breads and keep a journal of their findings in their Nutrition Notebooks.

5. When finished collecting observations, discuss the students’ observations and how they support or refute the students’ predictions.

6. Explain to students that the whole wheat bread has more fiber and nutrients that take longer to digest. This is why whole wheat bread keeps us fuller longer than white bread.

**Materials:**

- Vinegar
- Water
- Clear gallon-size container with lid
- 1 slice of white bread
- 1 slice of whole wheat bread

**Summary of Activity:**

Students will see the differences in digesting a piece of whole wheat bread as compared to a piece of white bread.
What do we mean when we say "Whole Grain?"

**Whole Grains contain three parts**
The bran, endosperm, and germ

**Bran**
High in fiber and B vitamins! Contains most of the minerals...

**Endosperm**
The starchy part that contains complex carbohydrates, protein and some B vitamins

**Germ**
Contains most of B vitamins, Vitamin E, and unsaturated fats

**Whole Grain Foods**
Contain all 3 parts of the grain

**What are Refined Grains?**
1. Grains that have had the germ and bran removed (through processing). Only the endosperm remains.
2. Refined grains are sometimes enriched with some of the nutrients that were removed.
Why Eat Whole Grains?

- Whole grains give us nutrients such as B Vitamins, Vitamin E and minerals
- Whole grains contain fiber
- Whole wheat bread has more fiber in each slice than white bread
- Fiber helps you feel full and delays hunger
- Whole grains reduce the risk for cancer, heart disease, high blood pressure, obesity, and Type 2 diabetes.
# Whole Grain Foods Chart

<table>
<thead>
<tr>
<th>Whole Grain Foods</th>
<th>I like it.</th>
<th>I don’t like it.</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Grain Bread</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Wheat Tortilla</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Whole Wheat Pita</td>
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<td></td>
<td></td>
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<tr>
<td>Whole Wheat Crackers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Grain Cereal</td>
<td></td>
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<td></td>
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</tbody>
</table>
1. The cafeteria is serving ____________ today! ____________ are not only good for you but also taste great too! Get yours today at lunch!

2. Make your plate colorful at lunch today. Add the ____________ that are being offered to make your lunch even healthier for you!

3. What are you doing during Spring Break? Don’t forget to keep eating healthy and being physically active!

4. Do you know where the featured fruit or vegetable is located in the cafeteria line? If not, be sure to check them out today at lunch because they are serving up some delicious ____________ . Don’t miss out!

5. Remember, Spring break is a great time for the entire family to be physically active. What will your family do together on break?

6. Add a banana to your cereal in the morning to add a serving of fruit to your breakfast.

7. Growing your own herbs or vegetable garden is fun! Ask the adults at home how you can help grow fresh vegetables in your backyard that you will be able to eat all summer long!
8. Switch from white bread to **whole wheat bread** so you get more fiber and energy. Fiber will help you stay full throughout the day so you can concentrate on school and play.

9. **Dried fruits make a great snack!** They are also easy to carry in your lunchbox to school.

10. Did you know you can **make your own frozen yogurt?**
    Try freezing containers of your favorite low-fat or fat-free yogurt.
    This healthy and cool treat is perfect on a hot day!

11. Did you know that the skin is where **extra fiber** and **nutrients** are found in fruit and vegetables? Try to leave the skin on whenever you can—but be sure to wash it before you eat!

12. **Many fruits taste great with a dip.** Try dipping your favorite fruit in low-fat yogurt or pudding for a healthy treat.

13. Did you get your physical activity today? Even when it’s rainy, you can still **dance to your favorite music inside.**

14. Choose fat-free or low-fat milk, yogurt and cheese. These foods contain **calcium and protein** that helps your body grow big and strong.

15. Now that you’re back from Spring break, remember to select the featured **fruit or vegetable** at lunch today.
This month, your child learned about the importance of whole grains. We read about how bread is made from planting the seeds to making the dough. Your child also learned how to read a food label to make sure the foods you eat are made with whole grains.

Did You Know... Whole Grain Foods are Really Good for You?
Eating whole grains can help reduce the risk of some cancers, heart disease and high cholesterol. Many whole grain foods are high in fiber. Eating fiber will help you feel full. This also helps with weight management.

Some examples of whole grain foods are listed below:
- Whole wheat bread
- Brown or wild rice
- Whole Oats or Oatmeal
- Whole wheat pasta
- Whole grain barley
- Popcorn

A complete list of whole grains can be found at the following link.
http://choosemyplate.gov (click "grains")

Shopping for Whole Grains
A grains food that is brown in color does not mean always mean it is whole grain.
Watch out for labels that say "multigrain" or "wheat". These may not be whole grain choices.
To be sure you are choosing a whole grain food, read the ingredients list on the nutrition facts label. The first ingredient must list a whole grain.

Make at Least Half Your Grains Whole Grains.
Instead of white bread, rice and pasta, try some whole grain choices.
Snack on whole grain cereals.
Eat popcorn plain or with light butter.
Substitute half of the flour with whole wheat flour in muffin, pancakes, and cookie recipes.
Try whole wheat crackers with low-fat string cheese for a great snack.

Take Action!
How many of the following tips can you and your family check off this week?
(check boxes with each below)

☐ Try one new whole grain food this week.
☐ Have a scavenger hunt in your kitchen with your child. Search for grains and decide if they are whole grains.
☐ Locate a food in the grocery store that you typically buy and purchase it in a whole grain variety.
☐ Make whole grain pita pizza with your family. Visit the following link for quick and easy directions.
http://www.youtube.com/watch?v=KMWdIpDhUQ
This month, students participated in a Whole Grains Foods Tasting activity as part of our class ReFresh activities. The students tried whole grain foods and discussed ways they could use these foods to make a family meal.

Don’t forget to ask your child which WHOLE GRAIN food they liked the best so you know to add this item to your food shopping list.

- Whole grain bread
- Whole wheat tortilla
- Whole wheat pita
- Whole wheat crackers
- Whole grain cereal
- Other whole grain food item tasted
In this unit, Energy Balance, students will learn about the concept of energy and its different forms. Students will discover that not all foods contribute the same quality of energy to the diet, and that humans need to balance food intake with physical activity to maintain energy equilibrium. Students will tie together the lessons learned in the previous months through a final reflection on healthy eating and physical activity habits.

The lesson theme:

Equilibrium
Energy Balance!!!

Vocabulary Words

Equilibrium - A state of balance.

Potential Energy - Energy that is stored in the body, ready for use; also called stored energy.

Kinetic Energy - Energy that is being used by the body in motion; also called active energy.

Energy Balance - A balance between stored energy and active energy.

Calories - A unit of measurement that measures the amount of energy in a food.
Materials List

Introductory Lesson:
- My Amazing Body by Pat Thomas
- Ingredients for Tasting Activity
- Quart-sized freezer plastic bags
- Gallon-sized freezer plastic bags
- Spoons
- Hand Sanitizer
- Paper Towels

Reinforcement Lesson #1:
- 1 almond nut
- 1 potato, cut in half
- Paper clip
- Cardboard box (about the size of a shoebox or larger)
- Long “barbeque” lighter
- Stopwatch or watch with a second hand

Reinforcement Lesson #2:
- Energy In = Energy Out worksheet (appendix)
- Activity Chart (appendix)

Nutrition Notebooks:

MAY

Energy Balance!!!
Introductory Lesson: My Amazing Body

Time Required: 45 minutes

Introduction and Discussion: 25 minutes

1. Ask students to name some things that their bodies need to grow and be healthy.
   A. Fruits, vegetables and healthy foods, vitamins, minerals, water, physical activity and sleep.

2. Read book aloud to students.

3. Explain the following concepts:
   A. Energy: Our bodies need energy to think, grow and be active. We get energy from food.
   B. Nutrients: Vitamins and minerals are nutrients that help our bodies stay healthy. Fruits, vegetables, and whole grains are examples of foods that give our bodies important nutrients.

4. Use the following questions to guide a discussion:
   A. What do you do to help your body stay healthy?
   B. What are some physical activities you enjoy that require your body to move?
      i. Examples may include running, biking, swimming, etc.
      ii. Explain that it is important to be physically active every day.
   C. What are some activities you enjoy that do not require you to move?
      i. Examples may include watching television, playing video games, computer time, etc.
      ii. Explain that these activities are ok for us to do sometimes, but not every day.

Lesson Objectives

Students will:

#1 Identify healthy food choices.

#2 Discuss ways to be physically active.

#3 Categorize different foods and activities based on how they affect the body.

Materials + Prep

Materials:
My Amazing Body by Pat Thomas

Prep-Work:
Read text and flag pages for talking points that relate to discussion questions.
Introductory Lesson: My Amazing Body

D. What are some foods you like to eat to help your body grow strong and healthy?
   i. Examples include fruits, vegetables, whole grains, dairy and protein.
   ii. Explain that these are foods we need every day. Reviewing concepts from throughout the curriculum, these are referred to as “always” foods because we should “always” be eating them!

E. What are some foods that do not help our bodies grow and stay healthy?
   i. Examples may include cookies, chips, cakes, candy etc.
   ii. Review that these foods are ok to eat sometimes, but not every day. They can be called “sometimes” foods because we should only eat them every once in a while.

F. Introduce tasting activity “Ice Cream in a Bag.” Explain and review that all ReFresh tastings this year have featured “all the time” foods. For today’s tasting, students will create a healthy version of a “sometimes” food.

Key Points:

- When all of the energy we consume from our food is used by our bodies to function and be active, we are in energy balance.

- If we consume more energy that our bodies need, we need to increase our physical activity to use the extra calories. Otherwise, the body stores the extra energy in the form of fat.

- It is important to consider the nutrient content, as well as calories, of foods we eat, and always remember to include foods high in vitamins, minerals, fiber and other nutrients (i.e. “always” foods).
TASTING

ICE CREAM IN A BAG

Time required: 20 minutes

Directions

(This recipe is easily prepared if students work in assembly line manner)

1. Take 1 quart-sized freezer bag.
2. Add 2% reduced-fat milk, sugar and vanilla extract to the quart-sized freezer bag.
3. Seal your quart-sized freezer bag.
4. Place the quart-sized bag inside a gallon-sized freezer bag.
5. Add salt and ice to gallon-sized freezer bag.
6. Seal the gallon-sized bag.
7. Shake for 5 minutes or until the milk turns to ice cream and enjoy!

Makes 1 sample portion

Ingredients (for each student):
- ¼ cup 2% reduced-fat milk
- ½ Tablespoon sugar
- ¼ Teaspoon vanilla extract

Materials (for each student):
- Quart-sized freezer plastic bags
- Gallon-sized freezer plastic bags
- 2 Tablespoons Table or rock salt
- ½ cup crushed ice
- Spoons

Teacher Tip:
Consider polling the class to see who liked or did not like the tasting. Integrate fractions and percentages with the results.
Nutrition Notebook: How will you stay in Energy Balance?

Lesson Overview:
Students will write a written response to a prompt related to the content covered in all of the lessons learned over the past school year.

Time Required: 20 minutes

Writing Prompt

Over the past year, you have learned a great deal about healthy foods and physical activity. Eating healthy foods and getting at least 60 minutes of physical activity everyday will help you be healthy and full of energy. Write two goals for how you will try to live a healthy lifestyle this summer.

Describe some of your favorite fruits, vegetables, and whole grains, and ways to be physically active. Include how you feel after doing some of those favorite activities and eating these healthy foods. Discuss any changes you have made this year to become healthier and more physically active.

Read your answers aloud.

Teacher Tip:
After students write reflection, consider having students share with 3rd graders what they learned to live a healthy lifestyle.
Reinforcement Lesson #1: What Is Energy?

Lesson Overview:

Students will discuss the concept of energy and its different forms. Students will move outside to observe a demonstration of how energy is transformed from “stored” sources to “active” sources. They will use this information to consider how energy from the sun is transformed by plants, and then again by our bodies.

Time Required: 30 minutes

Introduction: 5 minutes

1. Display the almond and ask what part of the plant the almond is.
2. Explain that the almond is a seed.
3. Seeds store energy to help a new plant start growing. When people eat seeds, they give our bodies energy.

Discussion: 5 minutes

1. What does the word “energy” mean to you?
2. What are some words that are related to energy?

Key Points:

- Energy is hard to define because energy can take many forms.
- Energy is related to many different things such as food, electricity, activity, wind, gasoline, motion and heat.
- Energy can be broken into two categories: energy that is stored, or “inactive”, and energy that is burned, or “active”.
- Our bodies turn stored energy in foods into active energy that helps our heart pump and muscle work.

Materials + Prep

Materials:
- 1 almond nut
- 1 potato, cut in half
- Paper clip
- Cardboard box with an open top (about the size of a shoebox or larger)
- Long “barbeque” lighter
- Stopwatch or watch with a second hand

Prep-Work:
Cut the bottom out of a cardboard box (this box will serve as a wind shield during the demonstration and will ensure students stay a safe distance from the burning almond).
ACTIVITY

Almond Energy Burn Activity: 20 minutes

Process

1. Gather all materials and take students outside to an area with either concrete or bare soil. Set the bottomless box on the ground with half of the potato inside (cut side down) and ask students to gather around it in a circle.

2. The potato and paperclip will serve as a stand for the almond while it burns. Use the paperclip to make a cradle for the almond. Straighten the large loop of the paperclip and bend the small loop in half to set the almond inside.

3. Stick the straight end of the paperclip in the potato, while the almond lies in the cradle.

4. Ask students to make a hypothesis about what will happen if the almond is lit on fire.

5. Light the almond (it might take several seconds to stay lit) and have one of the students record how much time it takes to burn using a stopwatch or watch with a second hand.

6. Explain to students that we know that plants get energy from the sun. Through photosynthesis, the plant changes light energy into stored energy. That energy is then used by the plant to grow, or it is stored for later use. Seeds store energy so that new plants can start growing. Energy that is stored, such as the energy in the almond, can change forms to produce "active" energy, such as the light and heat that was released from the almond as it burned.

7. Highlight that energy stored in plants is available to us when we eat plant foods.

8. Explain to students that just like plants turn light energy into stored energy, our bodies turn stored energy in plants into other forms of energy. What does our body do with the stored energy in plants when we eat foods such as the almond?

SUMMARY OF ACTIVITY

This activity will take place outside. It is a demonstration of energy changing forms. Students will watch as the almond slowly burns, then eventually burns out as the energy is used up. By observing a burning almond, students will see that energy that is stored in a food plant can be converted to light and heat, just as our bodies convert energy from our food to heat and motion.
Reinforcement Lesson#2: Energy In = Energy Out

Lesson Overview:
Students will complete the Energy In = Energy Out worksheet.

Time Required: 30 minutes

Introduction: 5 minutes
1. Ask the students if they have heard of the word “calorie”.
2. Explain to students that calories are a unit of measurement that measures the amount of energy in a food.

Discussion: 5 minutes
1. Energy balance means eating the same number of calories that you are burning off.
2. Explain that “all the time” foods often have fewer calories and more nutrients than “sometimes” foods. “All the time” foods provide better quality calories because they are full of nutrients.

A. 1 Donut vs. 1 apple- which has more calories (donut) and which has more nutrients (apple)?

Key Points:
• Everything you do requires energy.
• Some foods provide better quality energy than others.
• Eating too many calories without burning them off can cause your body to store fat.

Materials + Prep

Materials:
• Energy In = Energy Out worksheet (appendix)
• Activity Chart (appendix)

Prep-Work:
Make copies of worksheets

ACTIVITY

20 minutes

Process
1. Pass out the Energy In = Energy Out Worksheet.
2. Read aloud the worksheet introduction. Display the Activity Chart on the overhead.
3. Have students complete the worksheet either individually or in a group.
4. Have students share their answers to the worksheet.

Energy In = Energy Out
Energy In = Energy Out

Food contains calories that provide you with energy for your body. Without food, you would not have the necessary fuel for your body to do its everyday activities. When you eat food, you need to think about how to balance this with the energy your body uses. Your body uses some energy even when you are sleeping. Everything you do uses some amount of energy.

The energy that goes in your body needs to be equal to the energy your body uses. One way your body uses energy is during physical activity. If you are active, you can use up the energy your body is getting from the foods you are eating.

For lunch you just ate:

6 chicken nuggets (250 calories)
+ 1 medium soda (208 calories)

Add the calorie amounts to get the total calories consumed from these foods.

$250 + 208 = \phantom{0}$

You are going to use this fuel (food) to provide energy for your body to use for some kind of physical activity. Using the chart shown, what activities could you do to balance the equation. For example: I shot baskets at the gym for 30 minutes so I am going to burn 48 calories for this activity. When I got back from the gym, it had snowed so I spent 30 minutes shoveling my sidewalk and an elderly neighbor’s which burned 68 calories. Then I went sledding for 1 1/2 hours with some of my friends which burned 246 calories. That evening I had a dance class that burned 96 more calories.

In your nutrition notebooks:

1. Write your idea of what activities you could do to use up the energy in the food you just ate.
2. Write your equation to balance calories used for activity with calories in foods you eat.
3. Repeat using a menu of Turkey sandwich (200 calories), an apple (100 calories) and water (0 calories).
4. Write about the differences between the two meals. Discuss whether each meal is composed of “sometimes” or “always” foods.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Number calories used in 15 minutes</th>
<th>Number calories used in 60 minutes (1 hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball, shooting baskets</td>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>Bicycling</td>
<td>48</td>
<td>192</td>
</tr>
<tr>
<td>Cleaning house</td>
<td>14</td>
<td>56</td>
</tr>
<tr>
<td>Cooking, with some walking</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Dancing</td>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>Football</td>
<td>48</td>
<td>192</td>
</tr>
<tr>
<td>Jogging</td>
<td>41</td>
<td>164</td>
</tr>
<tr>
<td>Shoveling snow, by hand</td>
<td>34</td>
<td>136</td>
</tr>
<tr>
<td>Skateboarding</td>
<td>28</td>
<td>112</td>
</tr>
<tr>
<td>Sledding</td>
<td>41</td>
<td>164</td>
</tr>
<tr>
<td>Walking the dog</td>
<td>14</td>
<td>56</td>
</tr>
</tbody>
</table>
1. The cafeteria is serving _______ today! _______ are not only good for you but also taste great too! Get yours today at lunch!

2. Try adding veggies to your pizza! Order a veggie pizza with toppings like mushrooms, green peppers and onions and ask for extra veggies!

3. Don’t forget to wash your hands often – especially before you eat and when you are making food. Washing your hands helps prevent the spread of germs and harmful bacteria than can make you sick!

4. Lots of people drink sweetened soft drinks. Did you know that one soda is like eating 13 teaspoons of sugar! Try eating a piece of fruit instead of drinking a soda next time!

5. Make your plate colorful at lunch today. Add the _______ that are being offered to make your lunch even healthier for you!

6. Try drinking water rather than soda when you’re thirsty. Your body needs it to grow healthy and strong!

7. It’s easy to get your servings of fruits, but you have to be creative! At breakfast, top your cereal with bananas or peaches, add blueberries or pumpkin to pancakes, or drink 100% fruit juice.

8. Vitamin C helps heal cuts and wounds and keeps your teeth and gums healthy. Fruits high in vitamin C include citrus fruits like oranges and grapefruits, and vegetables like red peppers and broccoli.

9. Do you know where the featured fruit or vegetable is located in the cafeteria line? If not, be sure to check them out today at lunch because they are serving up some delicious _______. Don’t miss out!

10. Share your favorite fruit and vegetable with your classmates and family. Eating a variety of fruits and vegetables now will help you feel well later in life!
Can’t Go Outside?

When it is raining or too dark outside, you and your child may not be able to play outdoors. Below are ideas for bringing physical activity indoors.

- Turn on your favorite music and have a dance party!
- Have your child help with chores. Some examples include vacuuming, cleaning their room, and putting away groceries.
- Make time spent watching television more active. See who can do the most sit-ups or push-ups during commercials!
- Clear some space to jump rope!
- Play a game of “Simon Says.”
- Keep track of your activity!

This month your child learned how important it is to take care of their body. We discussed how important it is to eat the right foods and get enough physical activity to stay healthy. We encourage you and your child to use the information provided from the previous lessons and newsletters to continue your healthy journey!

Did You Know?

The average child spends over four hours a day watching television. Children spend even more time using electronics.

Help your child watch less and move more!

- Try to limit screen time. Provide other options. Replace television and other electronic time with a new hobby, playing outside or family time.
- Reward your children with active time together. Go for a walk, play a game, or learn to cook!
- Create “screen-free” bedrooms. Your children will be able to sleep better without a television, computer, or video games in the bedroom.
- Set a good example. When you spend more time being active your children will do the same.

Take Action! Get Moving Together!

Try to add an extra 10 minutes of physical activity with your child each day!
This month, students had an opportunity to make “Ice Cream In A Bag” as part of our class ReFresh activities. Throughout this year, the monthly ReFresh tastings have all featured “All the Time” foods. Ice Cream In A Bag is a healthy version of a “Sometimes” food. Students utilized their own energy, getting their heart rates to increase and feeling their arms become tired.

A fun family activity to try is Ice Cream In A Bag. You only need a few ingredients and some energy!

**To make 1 sample portion you need the following ingredients:**
- 1/4 cup 2% reduced-fat milk
- 1/2 Tablespoon sugar
- 1/4 Teaspoon vanilla extract

**And the following supplies:**
- 1 quart sized freezer bag
- 1 gallon sized freezer bag
- 2 Tablespoons table or rock salt
- 1/2 cup crushed ice

**Follow these directions:**
1. Take 1 quart-sized freezer bag.
2. Add 2% reduced-fat milk, sugar and vanilla extract to the quart-sized freezer bag.
3. Seal your quart-sized freezer bag.
4. Place the quart-sized bag inside a gallon-sized freezer bag.
5. Add salt and ice to gallon-sized freezer bag.
6. Seal the gallon-sized bag.
7. Shake for 5 minutes or until the milk turns to ice cream and ENJOY!
## Additional Web-Based Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
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<tbody>
<tr>
<td><a href="http://www.choosemyplate.gov">http://www.choosemyplate.gov</a></td>
<td>USDA’s website for MyPlate icon provides links to teach fruit, vegetable and whole grains information. This site has information, newsletters, worksheets and interactive tools.</td>
</tr>
<tr>
<td><a href="http://www.fruitsandveggiesmatter.gov/">http://www.fruitsandveggiesmatter.gov/</a></td>
<td>Centers for Disease Control Division of Nutrition, Physical Activity, and Obesity. Provides information on the benefits of consuming fruits and vegetables, featured produce of the month, serving size, tips for use, recipes and interactive tools.</td>
</tr>
<tr>
<td><a href="http://www.letsmove.gov">www.letsmove.gov</a></td>
<td>White House initiative to end childhood obesity. Contains resources for children, parents and schools and links to ChooseMyPlate.gov with interactive resources on fruits, vegetables, whole grains and fiber.</td>
</tr>
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*Denotes technology focused resource for students*
### Additional Web-Based Resources

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<td><a href="http://www.pbhfoundation.org/pub_sec/edu/">http://www.pbhfoundation.org/pub_sec/edu/</a></td>
<td>Produce for Better Health Foundation site for school nutrition education resources including activity sheets, educational tools, etc.</td>
</tr>
<tr>
<td><a href="http://www.mda.state.md.us/mdfarmtoschool/pdf/make_a_rainbow_lp.pdf">http://www.mda.state.md.us/mdfarmtoschool/pdf/make_a_rainbow_lp.pdf</a></td>
<td>Fruit and Veggie lesson linking to Farm to School. Additional teacher resources list.</td>
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<td><a href="http://www.FRAC.com">www.FRAC.com</a></td>
<td>Food Research and Action Center Information on relationship between poverty and overweight/obesity as well as hunger and overweight/obesity.</td>
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<td><a href="http://recipefinder.nal.usda.gov/">http://recipefinder.nal.usda.gov/</a></td>
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Appendix

Food Allergies in Schools*

Introduction
A food allergy is an abnormal immune response to a certain food that the body reacts to as harmful. An estimated 4% to 6% of U.S. children of children under age 18 have food allergies.1–3 Although reasons for this are poorly understood, the prevalence of food allergies and associated anaphylaxis appears to be on the rise.

Although any child can be at risk for food allergies, children are at greater risk if they are younger than age 3 or have a family history of asthma and allergies, a genetic predisposition to allergic disease, or elevated allergen-specific serum immunoglobulin levels (IgE concentrations).

Common Food Allergens
Eight types of foods account for 90% of all food-allergy reactions: cow’s milk, eggs, peanuts, tree nuts (such as walnuts, pecans, hazelnuts, almonds, cashews, pistachios, and macadamia nuts), fish, shellfish, soybeans, and wheat.

Symptoms of Food Allergy
Symptoms of an allergic reaction to food can range from mild to sudden and severe and commonly include one or more of the following:

- Hives
- Tingling in the mouth
- Swelling in the tongue and throat
- Difficulty breathing
- Abdominal cramps
- Vomiting or diarrhea
- Eczema or rash
- Coughing or wheezing
- Loss of consciousness
- Dizziness

Anaphylaxis is a sudden, severe allergic reaction that involves various areas of the body simultaneously or causes difficulty breathing and swelling of the throat and tongue. Anaphylaxis can result in death.

Treatment and Prevention of Food Allergies
Some types of mild food allergies are treatable with an antihistamine or bronchodilator. Severe, or anaphylactic reactions, require epinephrine. At present, there is no cure for food allergies. The best method for managing food allergies is prevention by way of strict avoidance of any food that triggers a reaction.

School Environment
Food allergies are a particular concern in the school environment. Studies show that 16%–18% of children with food allergies have had allergic reactions to accidental ingestion of food allergens while in school.7,8 Moreover, food-induced anaphylaxis data reveals that 25% of anaphylaxis reactions in schools occur among students without a previous food allergy diagnosis.

School personnel should be ready to effectively manage students with known food allergies and should also be vigilant and prepared to respond effectively to emergency needs of students who are not known to have food allergies but who exhibit allergy-related signs and symptoms.

Spotlight On...

Food Allergy and Anaphylaxis: A NASN Tool Kit National Association of School Nurses, with support from CDC http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis

*Centers for Disease Control and Prevention www.cdc.gov/healthyyouth/foodallergies/
You can’t see, taste or smell them. They’re sneaky little critters, and they can spread throughout the kitchen and get onto cutting boards, utensils, countertops, and food. They’re foodborne bacteria—and if eaten, they can cause foodborne illness. So on your mark, get set, go . . . CLEAN!

Did You Know?
It is important to consistently wash hands and kitchen surfaces before and after preparing food. 67 percent of Americans report they “always” wash cutting boards, utensils, and countertops after preparing each food.
– Consumer Survey, Partnership for Food Safety Education

THE BIG 3: To Fight BAC!® always...

1. Rub-a-Dub
Wash your hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers and handling pets. For best results, use warm water to moisten hands, then apply soap and rub hands together for 20 seconds before rinsing thoroughly.

Rub-a-Dub
Wash your cutting boards, dishes, utensils, and countertops with hot water and soap after preparing each food item and before going on to the next food.

2. Towel Toss
Consider using paper towels to clean up kitchen surfaces. When done, throw away the towel. If you use cloth towels, wash them often in the hot cycle of your washing machine. If you use kitchen sponges, replace them frequently.

Wash!
Always wash hands with warm water and soap:
• before handling food;
• after handling food;
• after using the bathroom;
• after changing a diaper;
• after tending to a sick person;
• after blowing nose, coughing, or sneezing; and
• after handling pets.

Surface Cleaning Tips
Using a mixture of 3/4 teaspoon liquid chlorine bleach per quart of water (or one tablespoon bleach per gallon of water) can provide some added protection against bacteria on surfaces. Flood the surface with the bleach solution and allow it to stand for several minutes, then rinse with clean water and air dry or pat dry with fresh paper towels. Bleach solutions can lose their effectiveness over time, so discard unused portions after one week.

Reusable Shopping Bag Tips
• If you use cloth shopping bags, make sure to wash them in the washing machine frequently.
• For reusable grocery bags that are not machine washable, wash by hand frequently with hot water and soap.
• When shopping, put meat, poultry and fish in separate plastic bags. This will help prevent the juices from leaking out and contaminating your reusable bags and your food.
Fruit & Veggie Handling

Prep the kitchen
Before preparing fruits and vegetables, wash your hands with warm water and soap and use hot water and soap to clean your cutting board, countertop and utensils.

USE Water
Thoroughly rinse fresh produce under running tap water, including those with skins and rinds that are not eaten. Packaged fruits and vegetables labeled “ready to eat”, “washed” or triple washed” need not be washed. Never use detergent or bleach to wash fresh fruits or vegetables. These products are not intended for consumption.

Scrub Thoroughly
Rub firm-skin fruits and vegetables under running tap water or scrub with a clean vegetable brush while rinsing with running tap water.

BAC! Attack
How long should you wash your hands to send bacteria down the drain?

a. 5 seconds
b. 10 seconds
c. 15 seconds
d. 20 seconds

Answer: d – 20 seconds

If you have questions or concerns about food safety, contact:

- Gateway to Government Food Safety Information at www.foodsafety.gov.
- The Partnership for Food Safety Education is a non-profit organization and creator and steward of the FightBAC!® consumer education program.

The Partnership is dedicated to providing the public with science-based, actionable recommendations for the prevention of foodborne illness. BAC! Attack Fruit & Veggie Handling

Partnership for Food Safety Education
2345 Crystal drive, suite 800
Arlington, VA 22202
FARM

Food Systems Sequencing Cards

RE Fresh
FACTORY
GROCERY STORE
CORN ON THE COB
cantaloupe  squash
sweet potato  carrots
apricots

tomato

tomato

red pepper
red pepper

red onion

spinach

spinach
kale

collard greens

pineapple
banana

peach

mango

lettuce
purple grapes

blackberries

blueberries

plums
cauliflower

asparagus

celery

peas
strawberry
watermelon
pumpkin
cucumber
"Sometimes" Foods

1. candy
2. cake
3. cookies
4. chips
“Sometimes” Foods

- Ice cream
- Sweetened lemonade
- Soda/fruit punch
- Bacon

RE Fresh
salad

sweet potatoes

low-fat yogurt

fruit salad

"All The Time" Foods
trail mix

nuts

blueberries

tomatoes

“All The Time” Foods

RE Fresh
oranges
squash
peas
raisins

“All The Time” Foods
This is my...

ReFresh

Nutrition Notebook

My name is: ____________________________
Welcome to your ReFresh nutrition notebook. We hope that you have fun learning about how to eat healthy and be physically active. This journal will stay with you throughout your learning experiences. At the end of the year, we hope you take it home to share with your family!
Welcome to your ReFresh nutrition notebook. We hope that you have fun learning about how to eat healthy and be physically active. This journal will stay with you throughout your learning experiences. At the end of the year, we hope you take it home to share with your family!

Write down words or phrases that are new to you. Define what they mean in the space provided below.

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Imagine you are going to advertise the local farmers’ market to other students and teachers at school, and you are going to have time during lunch to encourage them to purchase fruits and vegetables at the farmers’ market. Write a commercial for the farmers’ market that could be used at lunchtime. Be sure to include details that describe how and where the produce was grown, and how that affects its taste and freshness, as well as the importance of fruits and vegetables for good health.
Sketches, Doodles, Drawings and Such...
Write a letter to a pilgrim comparing the meals we eat today to the meals the pilgrims ate. Discuss the similarities and differences between foods, including where foods are obtained and how foods are prepared. Think about differences between living conditions and transportation of colonial times and those of today. Do you think the foods we eat today are more or less healthy than the foods the pilgrims ate?
THE FIRST THANKSGIVING (AND THANKSGIVING TODAY)

Date: 

---

---
Describe your favorite family meal. Include the following in your description: people at the meal, foods you help to prepare, foods you like to eat, where you eat your meals, and topics you discuss at meal times. Why is this your favorite meal? How often do you have a meal together with your family?
Write a “Nutrition Tip of the Day” that could be read during the morning announcements. Use the tips you have heard during the past few months to tell the rest of the school how important it is to eat fruits and vegetables. Think about the following questions as you are brainstorming ideas for your announcement:

- Why do our bodies need fruits and vegetables?
- Where can you and your families purchase fruits and vegetables?
- Do you have to have fresh fruits and vegetables or can you select canned, frozen or dried for additional variety?
- How do you like to eat your fruits and vegetables?

Remember: Your morning announcement will be heard by the whole school, so BE CREATIVE!
Fruits and vegetables are important for everyone to eat!

Date:
Write a letter to your school principal explaining why water is important for our bodies. Use the information you have learned in the ReFresh lessons to explain the need for water throughout the day. Provide some ideas of what you and your classmates can do to drink more water while at school. Then describe how you plan to encourage your family members to drink more water at home and at work.
Think back to previous lessons where you learned about "in-season" produce available at farmers' markets. Describe your favorite fruit and/or vegetable that is grown in Maryland and is available during the school year. Write a letter to your food service director asking them to purchase this fruit or vegetable from a local farmer for school meals. Explain the benefits of purchasing fruits and vegetables from local farmers and why it is important for students to eat these foods during school meals.
WHAT IS YOUR FAVORITE FRUIT OR VEGETABLE?

Date:

[Blank lines for writing]
Write a persuasive letter home asking the person who grocery shops in your family to add whole grain products to the grocery list to serve at family meals. Describe some of the different whole grain products that are found in the grocery store that you think the family would enjoy. Include the importance of eating whole grains and what to look for on the label when choosing whole grains. Once complete, bring your notebook home and share this letter with your family.
Date: [Blank]
Sketches, Doodles, Drawings and Such...
Over the past year, you have learned a great deal about healthy foods and physical activity. Eating healthy foods and getting at least 60 minutes of physical activity every day will help you be healthy and full of energy.

Write two goals for how you will try to live a healthy lifestyle this summer. Describe some of your favorite fruits, vegetables, and whole grains, and ways to be physically active. Include how you feel after doing some of those favorite activities and eating these healthy foods.

Discuss any changes you have made this year to become healthier and more physically active.
A HEALTHIER ME!

Date: [Handwritten date]
I do not like it...

I like it!
In this section, write down any fruits, vegetables, and whole grains that you have tasted during the school year. This includes foods in the classroom and in the cafeteria. Write down the day you tried the foods, and include a reflection on how the foods tasted, and why you liked or did not like them.

I like it!

It's Okay.

I do not like it...
My Favorite Foods

First Name: __________________________ Last Name, First Letter: ________________________

School Name: ________________________________________________________________

Date: __________ Food Name: ____________________________

Did you like this food? (circle one) I like it  It’s okay  I do not like it

Explain why you did like or did not like this food:

_________________________________________________________________________

Date: __________ Food Name: ____________________________

Did you like this food? (circle one) I like it  It’s okay  I do not like it

Explain why you did like or did not like this food:

_________________________________________________________________________

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_________________________________________________________________________
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My Favorite Foods

First Name: ___________________  Last Name, First Letter: ___________________

School Name: ____________________________

Date: _______  Food Name: ____________

Did you like this food? (circle one)  I like it  It's okay  I do not like it

Explain why you did like or did not like this food:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Date: _______  Food Name: ____________

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________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

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________________________________________________________________________
My Favorite Foods

First Name: ___________________ Last Name, First Letter: ____________

School Name: ________________________________________________________

Date: ___________ Food Name: __________________________________________

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Explain why you did like or did not like this food:
____________________________________________________________________

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____________________________________________________________________

Date: ___________ Food Name: __________________________________________

Did you like this food? (circle one)  I like it    It’s okay    I do not like it

Explain why you did like or did not like this food:
____________________________________________________________________
This material was funded by USDA’s Supplemental Nutrition Assistance Program in cooperation with the Maryland Department of Human Resources and the University of Maryland. The University of Maryland Extension will not discriminate against any person because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact the Maryland Department of Human Resources at 1-800-332-6347 or apply online at www.marylandsail.org.