
Chapter 4

Classroom Activities



EAT SMART. PLAY HARD.

To the Teacher...

Classroom activities are an integral part of the Body Walk program. You are strongly encouraged to implement some of the suggested activities with your students. The activities are designed to introduce the concepts presented in Body Walk. Suggested follow-up classroom activities will help reinforce and extend the learning experience. As you know, students retain more knowledge when they are exposed to information more than once.

The first activity in this section is a general goal-setting activity. Additional activities are divided by Body Walk station. There is one suggested pre-Body Walk activity and one follow-up activity for each of the nine main Body Walk stations:

- Brain
- Mouth
- Stomach
- Small Intestine
- Heart
- Lungs
- Bones
- Muscles
- Skin

Materials and supplies needed are listed at the beginning of each activity as well as the time required to complete the activity and subject matter areas in which the activity might be incorporated. Some activities require worksheets or student handouts. These are included at the end of this section and are ready to be copied.



MyPyramid For Kids

Eat Right. Exercise. Have Fun.
MyPyramid.gov

Grains	Vegetables	Fruits	Milk	Meat & Beans
<p>Make half your grains whole</p> <p>Start smart with breakfast. Look for whole-grain cereals.</p> <p>Just because bread is brown doesn't mean it's whole-grain. Search the ingredients list to make sure the first word is "whole" (like "whole wheat").</p>	<p>Vary your veggies</p> <p>Color your plate with all kinds of great-tasting veggies.</p> <p>What's green and orange and tastes good? Veggies! Go dark green with broccoli and spinach, or try orange ones like carrots and sweet potatoes.</p>	<p>Focus on fruits</p> <p>Fruits are nature's treats – sweet and delicious.</p> <p>Go easy on juice and make sure it's 100%.</p>	<p>Get your calcium-rich foods</p> <p>Move to the milk group to get your calcium. Calcium builds strong bones.</p> <p>Look at the carton or container to make sure your milk, yogurt, or cheese is lowfat or fat-free.</p>	<p>Go lean with protein</p> <p>Eat lean or lowfat meat, chicken, turkey, and fish. Ask for it baked, broiled, or grilled – not fried.</p> <p>It's nutty, but true. Nuts, seeds, peas, and beans are all great sources of protein, too.</p>
<p>For an 1,800-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.</p>				
<p>Eat 6 oz. every day; at least half should be whole</p>	<p>Eat 2 1/2 cups every day</p>	<p>Eat 1 1/2 cups every day</p>	<p>Get 3 cups every day; for kids ages 2 to 8, it's 2 cups</p>	<p>Eat 5 oz. every day</p>
<p>Oils Oils are not a food group, but you need some for good health. Get your oils from fish, nuts, and liquid oils such as corn oil, soybean oil, and canola oil.</p>				
<p>Find your balance between food and fun</p> <ul style="list-style-type: none"> Move more. Aim for at least 60 minutes everyday, or most days. Walk, dance, bike, rollerblade – it all counts. How great is that! 				
<p>Fats and sugars – know your limits</p> <ul style="list-style-type: none"> Get your fat facts and sugar smarts from the Nutrition Facts label. Limit solid fats as well as foods that contain them. Choose food and beverages low in added sugars and other caloric sweeteners. 				

MyPyramid.gov
Steps to a healthier you

U.S. Department of Agriculture
Food and Nutrition Service
September 2005
FNS-581

TEAM
National Center for Education and the Arts

Goal-Setting Activity

Body Walk was designed to provide teachers with a resource to help students make healthy lifestyle choices. To learn about these healthy choices, teachers can encourage students to set weekly health, nutrition and physical activity goals. The goals should be for new behaviors or to increase the frequency of current positive behaviors.

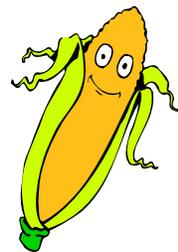
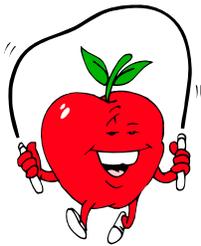
Goals should be simple, achievable and easy to measure. Rewards are a great way to encourage students to achieve goals. Ideas for rewards include stickers, pencils, bookmarks, classroom or recess privileges, or a walk with the principal. Goals can be recorded on bar or line graphs, on calendars, or in journals or contracts.

Encourage students to determine and set their own goals. Here are a few suggestions for goals:

- Try a new vegetable or fruit
- Play active games or ride my bike after school
- Eat breakfast
- Choose nutritious after-school snacks
- Drink water more often instead of sweetened drinks
- Drink or eat 3 servings of foods from the dairy group each day
- Get involved in *Walk Kansas* (www.oznet.ksu.edu/walk) or The American Heart Association's *Jump Rope for Heart* (www.americanheart.org click on Fundraising, then on Jump Rope for Heart)



You may also want to consider working together as a classroom and setting weekly goals. As a class, students could encourage each other to drink water after recess. You might bring small samples of a new fruit or vegetable for everyone to taste or ask students to bring samples from home.

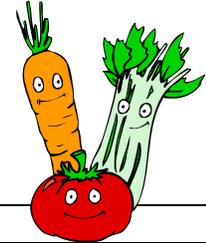


Sample Goal-Setting Calendar

Name: _____

	Sun	Mon	Tues	Weds	Thurs	Fri	Sat	
Week 1 9/2 - 9/6 My goal this week: TRY AT LEAST 2 NEW VEGGIES	TRIED JILAMA - YUM!		MOM PUT PEA PODS IN THE STIR-FRY			AT SCHOOL WE HAD BABY CORN ON SALAD. OK		<input checked="" type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 2 9/9 - 9/13 My goal this week: RIDE MY BIKE TO MY FRIENDS HOUSES AT LEAST TWICE		RODE BIKE TO SUSAN'S	RODE BIKE TO MATT'S (BIG HILL)					<input checked="" type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 3 9/16 - 9/20 My goal this week: EAT BREAKFAST EVERY DAY THIS WEEK	YES - HAD PANCAKES	YES HAD TO GET UP EARLY BECAUSE I HAD BAND PRACTICE	YES!	OVERSLEPT SO ATE BREAKFAST AT SCHOOL. IT WAS GREAT!	YES	YES	DAD TOOK US OUT TO A BREAKFAST BUFFET TO CELEBRATE	<input checked="" type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 4 9/23 - 9/27 My goal this week: CUT DOWN ON SODA POP - DRINK ONLY 3 CANS INSTEAD OF 7	I CAN AT GRANDMAS	NO SODA!	I CAN	I CAN AT ROBERTS HOUSE	NO SODA!	I CAN AT MOVIES	I CAN	<input type="checkbox"/> I met my goal! <input checked="" type="checkbox"/> I still need to work on this! I will: try to drink WATER INSTEAD

My Goal-Setting Calendar



Name: _____

	Sun	Mon	Tues	Weds	Thurs	Fri	Sat	
Week 1 My goal this week:								<input type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 2 My goal this week:								<input type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 3 My goal this week:								<input type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:
Week 4 My goal this week:								<input type="checkbox"/> I met my goal! <input type="checkbox"/> I still need to work on this! I will:

BRAIN

POWER PANTHER says **EAT SMART. PLAY HARD.** Healthy food choices from MyPyramid and vigorous exercise help jump start your brain!

Overview: We use our brains everyday to make important choices. Choose foods from each MyPyramid food group each day. Choose to play hard! Physical fitness and physical activity are part of good health and help us grow. Being physically fit or active reduces the risk of certain diseases, encourages our bones to grow stronger, helps us make bigger muscles and keeps our bodies from storing too much fat. Always wear a helmet when you play hard. A helmet protects the brain from injury.

Before Body Walk Do This Activity:

What is a Healthy Diet?

Grades: K-5
Subjects: Health, Science
Time Required: 30 minutes

Materials: MyPyramid for kids Handout (page 26)
Assorted Food Labels-Have students bring in labels from foods they like (if possible)
Poster Board
Markers

Procedure:

1. Distribute the MyPyramid Handout. Allow students time to read it and discuss it.
2. Explain that MyPyramid represents a balanced diet to help people make healthy eating choices.
3. Have students work in teams to figure out how many foods they can name for each food group. In which food groups could they name the most foods? Where did they place combination foods such as burritos? Have them list their favorite foods and try to place them in the pyramid.
4. Older students can work in teams to make a serving-size poster showing full-scale drawings of serving sizes of their favorite foods. Discuss how to determine serving sizes using MyPyramid and food labels.

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After Body Walk Do This Activity:

Choices for a Snack Attack

Grades: K-5
Subjects: Health, Science
Time Required: 30 minutes

Materials: Worksheets:
• K-2: MyPyramid Worksheet (pages 27-31)
• 3-5: Fast Food Shake Down (pages 32-34)
Pencils
Glue (K-2)
Scissors (K-2)

Procedure:

1. MyPyramid Worksheet and Healthy Snack Activity: Distribute the worksheets (5 pages). Cut snack food blocks from page 29. Paste snack foods under the correct column. Discuss pyramid snacks and FOS (Fats, Oils, Sweets) snacks. Encourage them to choose pyramid snacks most often instead of FOS snacks. Each student then draws his/her favorite non-FOS snack in the triangle on page 30. Finally they complete the Choices for a Snack Attack Worksheet by marking a triangle on the foods that would be pyramid snacks.
2. Fast Food Shake Down: Distribute the worksheets (3 pages). Discuss the pyramid groups in pizza. Identify pizza with the most calories, fat grams, and sodium. Ask students which pizza would be the healthiest choice for a snack attack. Next, look at the nutrients in fast food sandwiches. Answer the questions on the worksheet. Discuss which sandwiches would be the healthiest choices. Refer to teacher KEY on page 35.

MOUTH

POWER PANTHER says **EAT SMART. PLAY HARD.** You need a healthy mouth to enjoy your food.

Overview: Tooth decay is one of the most common diseases today. Foods that are sticky, starchy, or sugary can provide the food that bacteria on your teeth use to make acids and cavities. Crunchy and hard vegetables and fruits help clean teeth as they are chewed. To take care of your teeth, brush and floss after meals and snacks.

Before Body Walk Do This Activity:

Sticky Snacks

Grades: K-5
Subjects: Health, Science
Time Required: 25 minutes

Materials:

- Water
- 1 Marshmallow
- 1 Apple
- 1 Sharp Knife
- 1 Wet Towel
- 1 (per student) Carrot Slice
- 1 (per student) Hard Candy
- 2 (per student) Paper Cups
- 1 (per student) Paper Towel Sheet

Procedure:

1. Have students feel the carrot and candy and discuss the way they feel. Use feel words to describe: sticky, smooth, slick, rough, hard, soft, wet, dry, slimy, etc.
2. Have them put each food into a separate cup of water.
3. Wait a few minutes, and then have the students feel the foods again. What do they feel like now?
4. Cut the marshmallow with the knife. Show how sticky it becomes. Then cut the apple with the knife and show the difference.
5. Point out the reasons for avoiding sticky sweets between meals.
6. Talk about foods from the Milk Group that are especially healthy for the teeth as well as healthy snacks from the Fruit and Vegetable Groups.

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After Body Walk Do This Activity:

What Causes Tooth Decay?

Grades: K-5

Subjects: Health, Science

Time Required: 5 minutes to set up. 15 minutes for observations on 2 days

Materials:
2 Raw Eggs
3 cups White Vinegar
1 oz Fluoride Mouth Rinse
2 Plastic Cups

Procedure:

1. Put fluoride in a cup with water. Soak one egg with shell intact in this solution for 24 hours. Remove egg, rinse with clear water and mark with an "F".
2. Put the treated and untreated eggs with shells intact into clean cups.
3. Cover each with vinegar (vinegar represents mouth acids).
4. Note bubbles on the shell of the untreated egg. This shows the dissolution of calcium.
5. Observe what happens to the shells on the eggs and record results. Note differences between the treated and untreated eggs.
6. This is a simulation of teeth decomposition. Explain the importance of brushing with fluoride toothpaste after meals and snacks.

STOMACH

POWER PANTHER says **EAT SMART**. Digestion begins in the mouth and continues in the stomach.

Overview: The stomach is like a stretchy bag that holds food after it is eaten. The stomach helps break the food into smaller pieces so the body can use it. Little glands in the stomach make special juices that are waiting for food. Once the food enters the stomach, muscles move the walls of the stomach. This mashes and stirs the food with the special juices breaking the food into smaller pieces. When the stomach is empty, it shrinks like a balloon without air. The stomach is a stretchy storage tank!

Before Body Walk Do This Activity:

Digest This!

Grades: K-5
Subjects: Health, Science, Physical Education
Time Required: 30 minutes

Materials: 1 (per jar) Chunked Potato
1 (per jar) Grated Potato
Water
2 (for 2 students) Jars with Lids
Digestive System Handout (page 36)

Procedure:

1. Divide the class into pairs, and give each pair two jars.
2. Put some potato chunks in one jar. Put some grated potato in the other jar. Add water to each jar. Fasten the lid.
3. Students take turns shaking both jars for 10 minutes.
4. Look at the mixture. Discuss what happened to the potato. Talk about the digestive action that takes place in the stomach. Food is churned into small pieces and mixed with gastric juices that change the solid food to liquid called chyme.
5. Distribute the digestive system chart. Use the chart to describe how food moves through the digestive system. The breaking down of food, called digestion, changes food into nutrients that can be used by the cells for growth, repair and energy. The digestive system can be compared to a giant food processor.

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After Body Walk Do This Activity:

Overflow

Grades: K-5
Subjects: Health, Science
Time Required: 20 minutes

Materials: 1 Tube of Toothpaste
1 Paper Cup

Procedure:

1. Hold the tube of toothpaste in your hands.
2. With the cap screwed on tightly, position the tube above the paper cup.
3. Moving your fingers, squeeze the tube in different places.
4. Remove the cap from the tube, and squeeze the tube with your fingers.
5. Discuss the results. When the cap is secured, the toothpaste inside the tube moves around, but remains inside the tube. Without the cap, the toothpaste moves out the opening of the tube.
6. Explain that the stomach has three layers of muscles contracting in different directions. These squeezing actions, like your hands squeezing the toothpaste tube, thoroughly mash the food in the stomach and mix it with the digestive juices, forming a soupy paste. Between the stomach and the upper part of the small intestine there is a muscle called the sphincter. When the sphincter relaxes, it opens and a small amount of food is squeezed into the small intestine, just as toothpaste moves out of the tube when the cap is off. After a small amount of food leaves the stomach, the sphincter quickly closes, sealing off the passageway. The rest of the food remains in the stomach until the small intestine is ready to receive it.

SMALL INTESTINE

POWER PANTHER says **EAT SMART**. In the small intestine, foods are broken into building blocks called nutrients and the nutrients travel to all parts of the body.

Overview: Food moves from the stomach into the small intestine. Inside this approximately 20-foot-long tube, juices break the food down into tinier bits. The small intestine squeezes food along like toothpaste is squeezed through a tube. Tiny hairlike villi cover the inside walls of the small intestine. Villi are like doors in the walls of the intestine. Food goes through the villi and into the bloodstream.

Before Body Walk Do This Activity:

Your Small Intestine

Grades: K-5
Subjects: Health, Science, Language Arts
Time Required: 30 minutes

Materials: Digestive System Handout (page 36)
1 teaspoon Black Pepper
1 cup Water
1 Bowl
1 Strainer
1 Coffee Filter

Procedure:

1. Mix the pepper and water. Explain that food has to be tiny to go through the villi.
2. Pour the water and pepper mixture through a coffee filter inside a strainer into a bowl.
3. Discuss what went through the coffee filter and what did not.
4. Compare the experiment to how the small intestine and villi work. Compare the bowl to the bloodstream, which receives the nutrients, the strainer to the small intestine and the coffee filter to the villi.
5. Have the students write or draw a journal entry telling or showing how the small intestine and the villi work. What do they do to help with digestion?

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After Body Walk Do This Activity:

How Long Am I?

Grades: K-5
Subjects: Health, Science, Math
Time Required: 20 minutes

Materials: 20 feet of Rope (approx 1 inch wide) or Yarn or String
Ruler

Procedure:

1. Have students measure a 20-foot long piece of rope, yarn or string.
2. Using the ruler, also show students that the small intestine is about 1 to 1.6 inches wide.
3. Have the students coil the string so that it would fit into the abdominal cavity (about the size of a saucer).
4. Discuss why the intestines are so long, pointing out that the longer the intestines, the greater surface area through which nutrients from food can be absorbed into the bloodstream.
5. For older students, calculate the surface area of the small intestine.

HEART

POWER PANTHER says **EAT SMART**. Low-fat foods are good for your heart.

Overview: The heart is a muscular organ that pumps blood through blood vessels throughout the body. A child's heart is about the size of a clenched fist. The heart works 24 hours a day without stopping through a person's whole lifetime. The heart never rests. It is important to take good care of the heart by exercising and eating healthy foods. Too much fat in the diet is unhealthy for the heart.

Before Body Walk Do This Activity:

Detecting Your Pulse

Grades: K-5
Subjects: Health, Science, Math
Time Required: 15 minutes

Materials: Toothpicks
Modeling Clay

Procedure:

1. Construct a simple apparatus to visually detect the pulse. Provide each student with a toothpick and a "dime-sized" piece of clay.
2. Have students stick the toothpick into the clay-this will be their "counter".
3. Have students rest the "counter" on the inside of their wrist just below the base of the thumb.
4. Have students observe the toothpick as it moves. Let students work in pairs to time the counts in 15 seconds. Use this information to determine how many beats per minute (Count x 4). For younger students, have them count the movements they see in 6 seconds and then add a 0.
5. Optional: Have the students feel for their own pulse. After doing the activity with the clay, they can easily see where to feel for their own pulse.
6. Construct a class graph using the information from each student.

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After Body Walk Do This Activity:

Heartbeat

Grades: K-5
Subjects: Health, Science, Math
Time Required: 15 minutes

Materials: 1 (per every 2 students) Cardboard Tube from a paper towel roll

Procedure:

1. Have students pair up and listen for their partner's heartbeat by placing the tube over the partner's heart.
2. Count the number of beats per 30 seconds. Double this number to find out how many times each minute the person's heart beats. Or count the number of beats for 6 seconds and then add a 0 for younger students.
3. Have one partner run in place for one minute, then listen again. Have the student write down what they hear and calculate the new beats per minute. Then have the partners switch.
4. Follow-up Discussion: The heart beats faster after the exercise in order to pump more blood (oxygen) to the working muscles.

Note: For older students, make graphs showing the difference in heart rate before and after exercise.

LUNGS

POWER PANTHER says **PLAY HARD**. Healthy lungs help you breathe faster when you run and play.

Overview: Lungs are used in breathing to bring oxygen to all parts of the body. It is important to keep lungs healthy. Smoking is unhealthy because of the nicotine, tar and carbon monoxide produced. The best way to have healthy lungs is to never start smoking, eat a variety of healthy foods, and exercise.

Before Body Walk Do This Activity:

Fogger

Subjects: Health, Science

Time Required: 15 minutes

Materials: Hand Mirror
Paper Towels

Procedure:

1. Use the paper towel to clean and dry the mirror.
2. Hold the mirror near, but not touching, the mouth.
3. Exhale onto the mirror two or three times.
4. Examine the surface of the mirror.
5. The purpose of this experiment is to collect one of the gases in our breath. The surface of the mirror will become fogged because of respiration. Respiration is the process by which oxygen combines with glucose to produce energy and two waste byproducts, carbon dioxide and water vapor (water in the form of a gas). Respiration is constantly occurring in each of the cells of the body. The water that is seen on the mirror is the water vapor produced by the respiration reaction inside the cells. When the warm water vapor comes in contact with the cool mirror, condensation (a process by which a gas loses heat energy and turns to a liquid) occurs because the mirror is colder than the inside of the lungs.

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After Body Walk Do This Activity:

Measuring Your Lung Capacity

Grades: K-5
Subjects: Health, Science, Math
Time Required: 30 minutes

Materials: 1 (per student) String (24 inch lengths)
1 (per student) Balloons (round shaped)
Rulers

Procedure:

1. Divide students into pairs and ask them to think of a way to measure the amount of air our lungs can hold. (Hold up a balloon and let them make the connection.)
2. Explain that they will be measuring their lung capacity (amount something can hold) using balloons. To show the size of the person's lung capacity in comparison with another's, you will be measuring how big around the balloon gets.
3. Demonstrate how to measure the circumference of a balloon that you've blown up with the string and then how to measure the amount of string used with a ruler.
4. Have each student actually blow up the balloon with ONE breath and measure it. Partners will take turns helping each other.
5. Give each student an opportunity to tell his/her lung capacity. Compare and discuss the lung capacity of different people. This activity creates a physical representation of the amount of air that the student's lungs can hold in one breath.
6. Optional: Make a bulletin board! Tie off each balloon and attach it to the bulletin board with a label stating the child's name and lung capacity.

BONES

POWER PANTHER says **EAT SMART**. **Bones provide the framework for the body and calcium in dairy products builds strong bones.**

Overview: Bones hold you up. They give the body its shape. Bones are very strong and hard on the outside to support the body. Inside, the bone cells are soft like a sponge. When you are born, you have about 300 bones. As you grow, some of these bones grow or fuse together. When you are an adult you will have 206 bones. Bones must have a daily supply of building materials to be strong and healthy. Calcium is an important nutrient needed by bones, and it can be found primarily in the Milk Group. Three servings from this group are needed for growing children. Other nutrients important for bone strength are vitamin D, a calcium absorption enhancer; vitamin C, a “cement” between bone layers; and protein, a basic body building material.

Before Body Walk Do This Activity:

Chicken Bone Experiment

Grades: K-5
Subjects: Health, Science, Math
Time Required: 20 minutes on 2 days (Must soak one bone overnight)

Materials: 2 Uncooked Chicken Bones
Vinegar
7 cups Flour
1 Jar

Procedure:

1. Fill a jar with vinegar and place one chicken bone in the jar overnight.
2. Leave one chicken bone untreated.
3. Observe the bones the next day. The chicken bone in the vinegar jar can now be bent. The vinegar will remove the calcium from the bone.
4. Discuss the importance of calcium in making strong bones. Ask the students what kind of bones they would like in their bodies. Stress the importance of eating foods rich in calcium so their bones will be healthy and strong.
5. Demonstrate the amount of calcium in the body. If calcium were removed from the body it would resemble flour. By using this display of varying amounts of flour, children can learn how much calcium is needed to stay healthy. Newborn- ¼ cup flour; Age 10- 3½ cups flour; Age 15- 7 cups flour.

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After Body Walk Do This Activity:

Backbone

Grades: K-5
Subjects: Health, Science
Time Required: 45 minutes

Materials:
2 Large Thread Spools
2 Medium Thread Spools
2 Small Thread Spools
Cardboard
Paper Hole-punch
Pencil
Ruler
Scissors
String (18 inches)
Tape

Continued on next page.

Backbone, continued

Procedure:

1. Place the flat ends of all the thread spools (except one of the small spools) on the cardboard.
2. Draw circles on the cardboard by tracing around the base of each spool.
3. Cut out the five paper circles from the cardboard, and use the hole-punch to make a hole in the center of each.
4. Cut an 18-inch length of string.
5. Thread one end of the string through the hole in one of the large spools, then tape the end of the string to the bottom of the spool.
6. Thread the free end of the string through the hole in one of the large cardboard circles.
7. Add the second large spool to the string, followed by the second large cardboard circle.
8. Add the medium-sized spools and the medium cardboard circles alternately to the string.
9. Add the small spool to the string with the small cardboard circle between them.
10. Tape the free end of the string to the end of the small spool.
11. Stand the column of spools on a table, with the large spool on the bottom.
12. Holding the bottom spool on a table, push the top spool about 2 inches to one side.
13. Repeat the previous step several times, pushing the top spool in different directions.
14. A model of the spine is made. The string of spools is able to lean in any direction. Because the vertebrae, like the thread spools, are not permanently attached together, you can lean and bend in different directions. Between each pair of vertebrae is a disk of cartilage that acts as a shock absorber, just as the cardboard circle between the spools. Like the hole in the thread spool, there is hole in the back part of each vertebra that creates a passageway called the spinal canal.

MUSCLES

POWER PANTHER says **EAT SMART**. Foods with carbohydrates provide fuel for exercising muscles, and protein helps build muscle tissue.

Overview: All body movements are possible because of the more than 600 muscles in the body. Exercise helps maintain muscle strength, flexibility and endurance. It is important to provide good fuels for exercising muscles. Foods from the Grain Group like rice, pasta and bread are packed with carbohydrates---great fuel for exercising muscles. Protein foods like meat, poultry, eggs, nuts, beans and milk help build muscle tissue. Muscles need to be exercised in combination with a good diet to become bigger and stronger.

Before Body Walk Do This Activity:

Muscle Power

Grades: K-5
Subjects: Health, Science, Physical Education
Time Required: 15 minutes

Materials: Chair
Heavy Table

Procedure:

1. Ask students to work in pairs.
2. Ask one student to place his or her hands, palm up, under the edge of the table and to try to lift the table with medium pressure.
3. While pressure is being applied to the table, feel the front and back of the student's upper arm.
4. Next, ask the student to place his or her hands, palm down, on top of the table and to press down.
5. Again, feel the same parts of the student's upper arm.
6. Have students change places and repeat.
7. Discuss that the muscle in front of the arm feels harder than the muscle in the back of the arm when the hand is pushing up on the table. The back muscle in the arm feels harder when the hand is pressing down on the table.
8. Pushing up on the table causes the flexor muscle in the front of the arm to contract and harden. Pushing down on the table causes the extensor muscle in the back of the arm to contract and harden. The muscle pair in the upper arm is identified in this activity.

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After Body Walk Do This Activity:

Building Muscle Strength

Grades: K-5
Subjects: Health, Science, Physical Education
Time Required: 15 minutes

Materials: Heavy Book

Procedure:

1. Muscle Fatigue Exercise:

Have students open and close their fist as many times as possible within a three-minute period (less for younger children). Tell the students why the hand becomes tired. The muscle was put through repetitive exercise to tire the muscle. The muscle becomes tired because the energy stores are used up.

2. Strength Building Exercise:

Have the children stand and flex one arm for two minutes. Then have them put a heavy book in the other arm and flex for two minutes. Tell why the arm with the book became tired more quickly. It is important to push muscles past their limit to build strength. For example, you lift 50 pounds every day. After a few weeks, it becomes easier, so you add more weight. Eventually you can lift 100 pounds. When muscles are overused over a period of time, it takes more to tire the muscle. Therefore the muscle becomes stronger. This is called endurance.

SKIN

POWER PANTHER says **EAT SMART**. Nutrients we get in our food help the skin heal itself.

Overview: Skin is the largest protective organ that our bodies have. It is living tissue that can repair itself. It is important to take good care of the skin on the outside and the inside. We can take care of our skin on the outside, by wearing sunscreen, to limit the damage caused by the sun. Staying out of the sun during the most damaging time of the day (11:00 a.m. to 3:00 p.m.) and wearing protective clothing also help protect our skin. What we eat affects how healthy our skin is from the inside. Fruits and vegetables that contain vitamin C are important for helping the skin to heal. Foods like oranges, green peppers, strawberries, broccoli and tomatoes have a lot of vitamin C.

Before Body Walk Do This Activity:

How Much Skin Do You Have?

Grades: K-5
Subjects: Health, Science, Math
Time Required: 30 minutes

Materials: Large Paper or Graph Paper Large Enough to Lie On
Pencil

Procedure:

1. Assign the students to work in pairs.
2. One student lies down on a large piece of paper.
3. Have the other student draw around the student's body.
4. The students then change places and repeat.
5. Each student then cuts out the body shape.
6. To find out exactly how much skin you have, cover the cut out with 1-inch graph paper and count the squares or actually draw the outline on 1-inch graph paper.

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After Body Walk Do This Activity:

Sun Sensitivity Survey

Grades: K-5
Subjects: Health, Science, Math
Time Required: 20 minutes

Materials: Graph Paper
Colored Pencils or Markers

Procedure:

1. Ask how many students in the class have been sunburned.
2. Draw conclusions about who is most likely to get sunburned based on skin color, hair color and eye color.
3. Graph the results.
4. Discuss the importance of using sun block, wearing protective clothing, and limiting exposure during the most damaging time of the day (11:00 a.m. to 3:00 p.m.).

Student Worksheets For Classroom Activities

For Kids

MyPyramid

Eat Right. Exercise. Have Fun.

MyPyramid.gov

oils

Oils are not a food group, but you need some for good health. Get your oils from fish, nuts, and liquid oils such as corn oil, soybean oil, and canola oil.

Grains

Make half your grains whole

Vegetables

Vary your veggies

Fruits

Focus on fruits

Milk

Get your calcium-rich foods

Meat & Beans

Go lean with protein

★ Find your balance between food and fun

★ Fats and sugars — know your limits

USDA

U.S. Department of Agriculture
 U.S. Department of Health and Human Services
 10-2008

USDA IS AN EQUAL OPPORTUNITY PROVIDER FOR ALL PEOPLE.

MyPyramid FOR KIDS

Name: _____

MyPyramid Worksheet

Check how you did yesterday and set a goal to aim for tomorrow

Write In Your Choices From Yesterday	Food and Activity	Tip	Goal (Based On a 1800 Calorie Pattern)	List Each Food Choice In Its Food Group*	Estimate Your Total
Breakfast: _____	Grains 	Make at least half your grains whole grains.	6 ounce equivalents (1 ounce equivalent is about 1 slice bread, 1 cup dry cereal, or 1/2 cup cooked rice, pasta, or cereal)		_____ ounce equivalents
Lunch: _____	Vegetables 	Color your plate with all kinds of great tasting veggies.	2 1/2 cups (Choose from dark green, orange, starchy, dry beans and peas, or other veggies).		_____ cups
Snack: _____	Fruits 	Make most choices fruit, not juice.	1 1/2 cups		_____ cups
Dinner: _____	Milk 	Choose fat-free or lowfat most often.	3 cups (1 cup yogurt or 1 1/2 ounces cheese = 1 cup milk)		_____ cups
Physical activity: _____	Meat and Beans 	Choose lean meat and chicken or turkey. Vary your choices—more fish, beans, peas, nuts, and seeds.	5 ounce equivalents (1 ounce equivalent is 1 ounce meat, chicken or turkey, or fish, 1 egg, 1 T. peanut butter, 1/2 ounce nuts, or 1/4 cup dry beans)		_____ ounce equivalents
_____	Physical Activity 	Build more physical activity into your daily routine at home and school.	At least 60 minutes of moderate to vigorous activity a day or most days.		_____ minutes

* Some foods don't fit into any group. These "extras" may be mainly fat or sugar—limit your intake of these.

How did you do yesterday? Great So-So Not So Great

My food goal for tomorrow is: _____

My activity goal for tomorrow is: _____



Pyramid Pat's Snacks

Cut snack food blocks from page 29. Paste snack foods under the correct column.

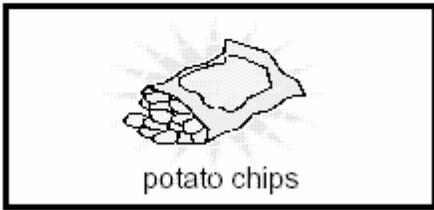
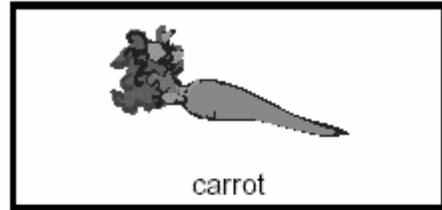
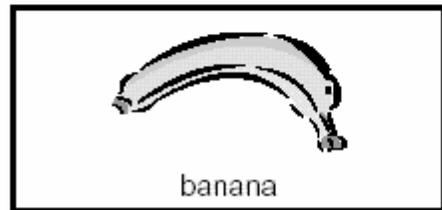
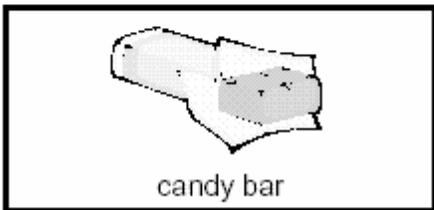
Pyramid Snacks

Fats, Oils & Sweets



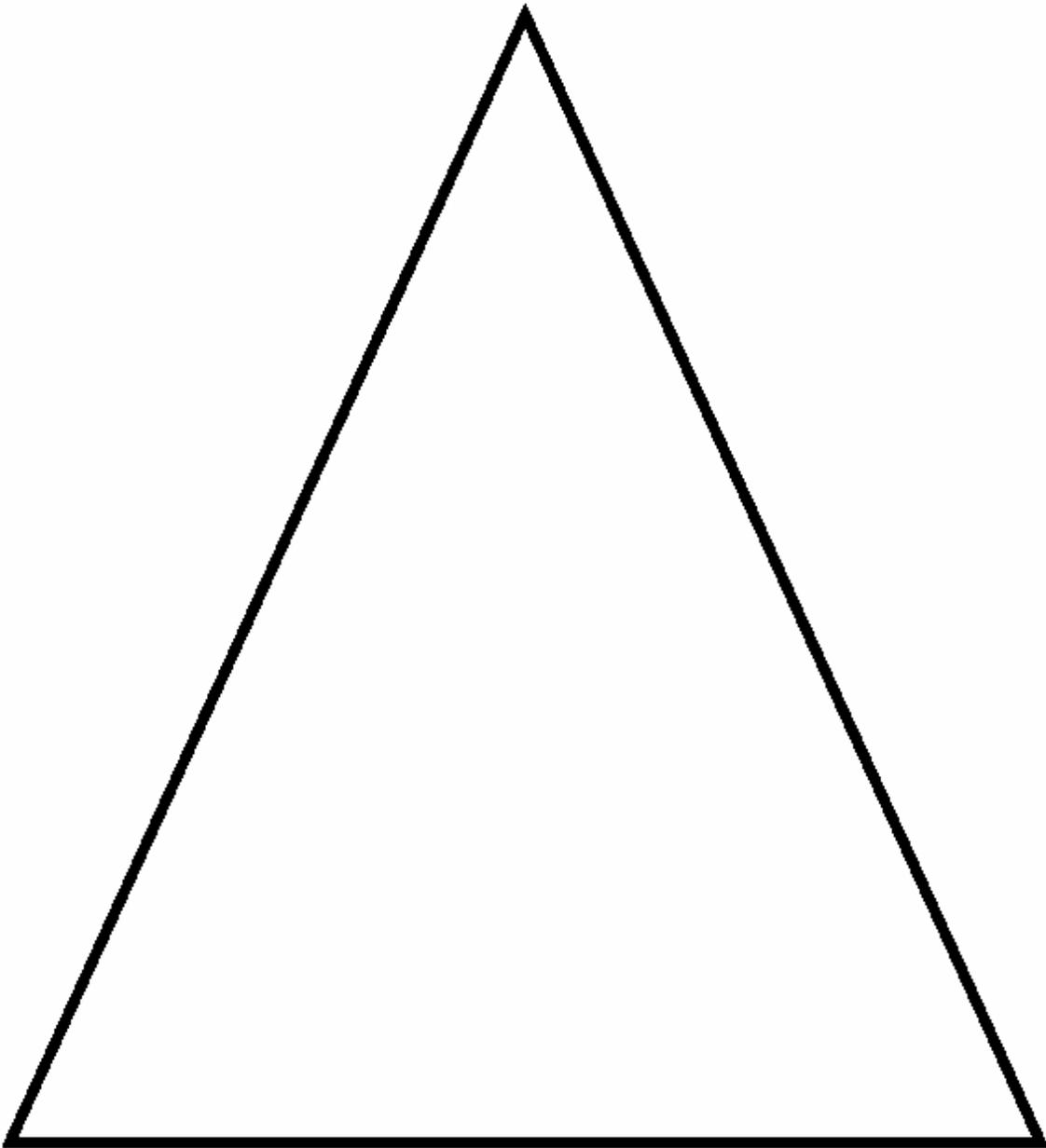
Pyramid Pat's Snacks

Cut snack food blocks below. Paste snack foods under the correct column on page 28.



Pyramid Pat's Snacks

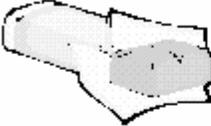
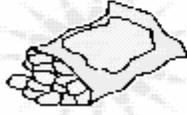
Draw your favorite snack in this triangle.



Pyramid Pat's Snacks

CHOICES FOR A SNACK ATTACK

Draw a triangle on each healthy snack from the five major pyramid groups.

 apple	 carrot	 candy bar	 orange
 cheese	 soft drink	 banana	 celery
 peach	 green peppers	 potato chips	 cauliflower
 corn curls	 broccoli	 grapes	 doughnut

FAST FOOD SHAKE-DOWN



PEPPERONI PIZZA

Svg. Size	—	6.5 oz.
Calories	—	526
Protein	—	19.5 gm
Fat	—	28.5 gm
Sodium	—	1365 mg

CHEESE PIZZA

Svg. Size	—	6.5 oz.
Calories	—	497
Protein	—	21.2 gm
Fat	—	24.5 gm
Sodium	—	828 mg

SAUSAGE PIZZA

Svg. Size	—	6.5 oz.
Calories	—	494
Protein	—	20 gm
Fat	—	27.5 gm
Sodium	—	1190 mg

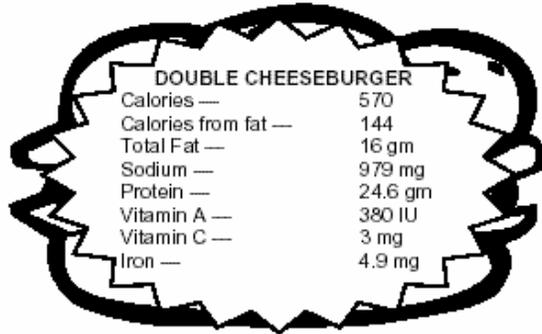
Answer the following questions:

1. What Pyramid Groups are in pizza? _____

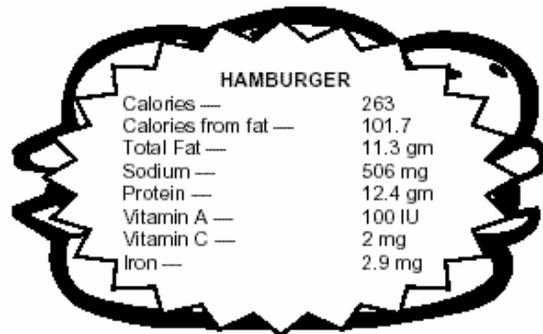
2. Which pizza has the most calories? _____
3. Which pizza has the most fat grams? _____
4. Which pizza has the most sodium? _____

Fast Food Shake Down

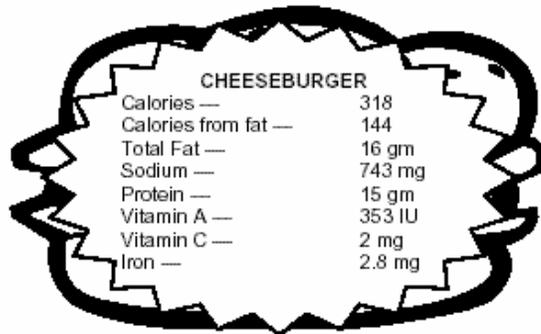
SANDWICHES!



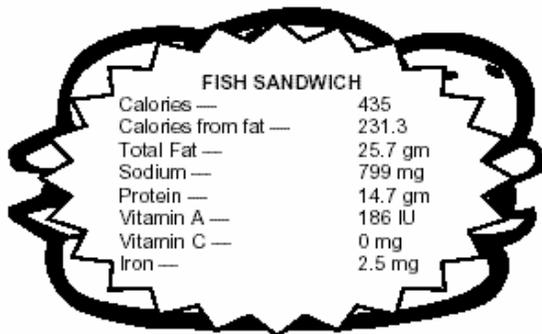
DOUBLE CHEESEBURGER	
Calories —	570
Calories from fat —	144
Total Fat —	16 gm
Sodium —	979 mg
Protein —	24.6 gm
Vitamin A —	380 IU
Vitamin C —	3 mg
Iron —	4.9 mg



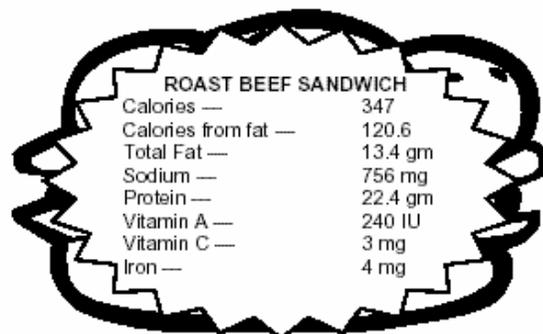
HAMBURGER	
Calories —	263
Calories from fat —	101.7
Total Fat —	11.3 gm
Sodium —	506 mg
Protein —	12.4 gm
Vitamin A —	100 IU
Vitamin C —	2 mg
Iron —	2.9 mg



CHEESEBURGER	
Calories —	318
Calories from fat —	144
Total Fat —	16 gm
Sodium —	743 mg
Protein —	15 gm
Vitamin A —	353 IU
Vitamin C —	2 mg
Iron —	2.8 mg



FISH SANDWICH	
Calories —	435
Calories from fat —	231.3
Total Fat —	25.7 gm
Sodium —	799 mg
Protein —	14.7 gm
Vitamin A —	186 IU
Vitamin C —	0 mg
Iron —	2.5 mg



ROAST BEEF SANDWICH	
Calories —	347
Calories from fat —	120.6
Total Fat —	13.4 gm
Sodium —	756 mg
Protein —	22.4 gm
Vitamin A —	240 IU
Vitamin C —	3 mg
Iron —	4 mg

Fast Food Shake Down

Look at the nutrients in fast food sandwiches. Answer the questions that follow.

1. Which sandwich has the most calories?

2. Which sandwich has the most grams of fat?

3. a. Which 2 sandwiches have the most vitamin A?

b. What is the food both sandwiches have in common?

4. Which sandwich has the most sodium?

5. Which 2 sandwiches have the most iron?

Fast Food Shake Down

Teacher Key

Pizza

1. What pyramid groups are in pizza? **Vegetable, grain, milk, meat**
2. Which pizza has the most calories? **Pepperoni –526 calories**
3. Which pizza has the most fat grams? **Pepperoni—28.5 grams of fat**
4. Which pizza has the most sodium? **Pepperoni—1365**

Sandwiches

1. Which sandwich has the most calories?
Double cheeseburger
2. Which sandwich has the most grams of fat?
Double cheeseburger
3. a. Which 2 sandwiches have the most vitamin A?
Double cheeseburger and cheeseburger
b. What is the food both sandwiches have in common?
Cheese
3. Which sandwich has the most sodium?
Double cheeseburger
4. Which 2 sandwiches have the most iron?
Double cheeseburger and roast beef

The Digestive System

