



The Learn Outside Guide was designed to make it easy and fun to take learning outside, no matter the weather. Its lessons connect movement, curiosity, and academic standards in ways that get students excited about exploring Maine's winter world.

The Winter Games grew out of this same idea, giving schools a playful way to put those lessons into practice together. **The activities on the following pages are the ones featured in this year's PLAYBook**, gathered here to make your planning a little easier.

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Activity 4 Flexibility Assessment



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FLEXIBILITY ASSESSMENT

WEEK 1

ACTIVITY 2 *PLAYBook Page 4*

Name _____ Grade _____ Teacher _____

1. List two benefits of flexibility.

1.

2.

2. Explain why flexibility is important.

3. Describe something that flexibility helps you do better.

4. Name two different stretches that increase your flexibility.



HOW TO STRETCH

1 of 3

WEEK 1

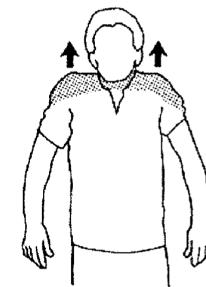
ACTIVITY 4 *PLAYBook Page 6*

These stretches should be done slowly with no bouncing. You should feel the stretch, but it should not hurt. Each stretch will be held for 10-20 seconds total. Hold the stretch feeling for 5-10 seconds. This is called the easy stretch. After holding the easy stretch, move a little more into the stretch until you feel the stretch again. This is called the developmental stretch. Hold for 5-10 seconds. If the stretch becomes painful, you are stretching too much. The developmental stretch will safely increase flexibility. Hold only stretch tensions that feel good to you. Be relaxed while you stretch. Your breathing should be slow and deep. Don't worry about how far you can stretch.

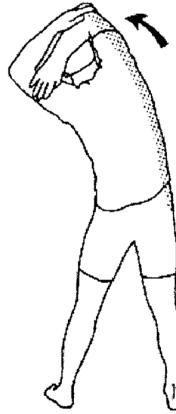
Interlace your fingers above your head, palms facing up. Stretch your arms back and up a little. Do not hold your breath. Hold stretch for 10 seconds.



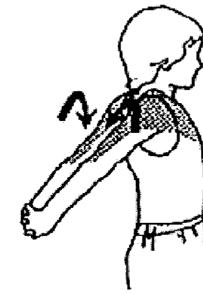
Raise the top of your shoulder up toward your ears. Hold a feeling of tension in your neck and shoulders for 3-5 seconds. Relax your shoulders downward to their normal position. Do this 2-3 times.



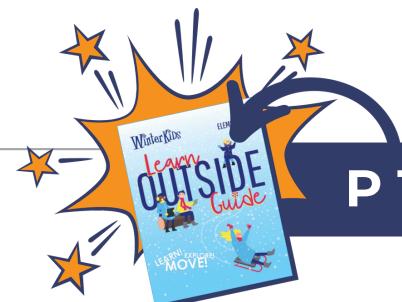
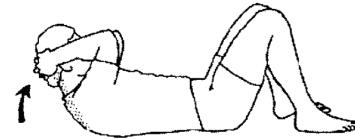
Hold the elbow of one arm with the hand of your other arm. Slowly pull your elbow down behind your head as you bend over sideways. Keep your knees bent during this stretch. Hold any easy stretch for 10-20 seconds.



Interlace your fingers like a basket behind your back. Slowly turn your elbows inward while straightening your arms. Hold for 5-10 seconds. Do twice.



Interlace your fingers behind your head, resting your arms on the floor. Use the power in your arms and hands to slowly and gently pull your head, neck, and shoulders forward until a mild stretch is felt in the back of your neck. Hold for 5 seconds then relax in the starting position. Do 3 times.





HOW TO STRETCH

2 of 3

WEEK 1

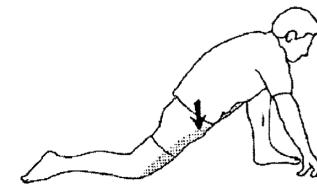
ACTIVITY 4

PLAYBook Page 6

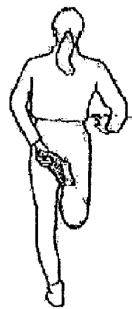
Straighten out your arms and legs. Point fingers and toes and stretch as far as possible. Hold for 10-20 seconds. Relax. If you get cramps in legs or feet, bring your toes toward your knees.



Move one leg forward until the knee of the forward leg is directly over the ankle. Your other knee should be resting on the floor. Now without changing the position of the knee on the floor or the forward foot, lower the front of your hip downward to create an easy stretch. This stretch should be felt in the front of your hip and possibly your hamstring and groin. This will help relieve tension in your lower back. Hold the stretch for 20-30 seconds. Repeat for other leg.



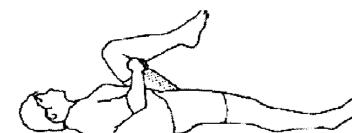
Gently pull your right foot (from the inside of the foot) toward buttocks with your left hand until you feel a mild stretch. If necessary place your other hand on a support for balance. Hold for 15-20 seconds. Stretch the other leg. Breathe. This stretch can also be done using the same hand to the same foot with hand holding on top of the foot.



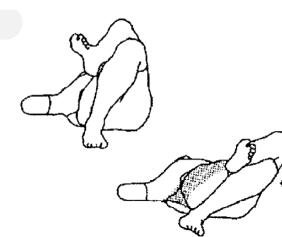
Lean on the wall with your forearms, your head resting on your hands or forearms. Bend one leg and place your foot on the ground in front of you keeping your back leg straight. Move your hips forward a little. Make sure your heels are on the ground and your toes are pointed straight ahead. Stretch each leg for 10-20 seconds. Do not bounce.



Lying on your back, straighten both legs and relax. Pull your left leg toward your chest. Keep the back of your head on the floor, if possible, but don't strain. Hold an easy stretch for 10-20 seconds. Repeat with other leg.



From a bent knee position, interlace your fingers behind your head and lift the left leg over the right leg. From here, use your left leg to pull your right leg toward the floor until you feel a stretch along the side of your hip and lower back. Stretch and relax. Keep your upper back, shoulders, and elbows flat on the floor. The idea is not to touch the floor with your knees, but to stretch within your limits. Hold for 15-30 seconds. Repeat on other side.





HOW TO STRETCH

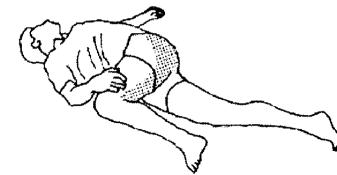
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WEEK 1

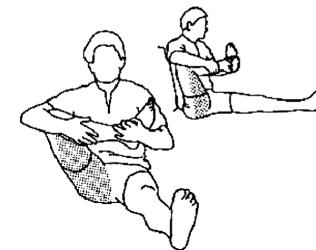
ACTIVITY 4

PLAYBook Page 6

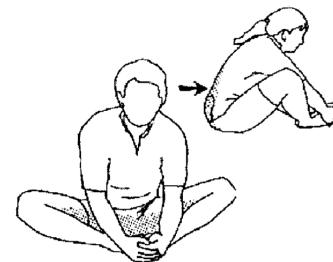
Keeping one leg outstretched, bend the other leg. With your opposite hand, pull the bent leg over the other leg as shown above. Turn your head to look away from the bent knee (your head should be resting on the floor). Now using your hand on your thigh (resting just above the knee) pull your bent leg down toward the floor until you get the correct stretch feeling in your lower back and side of hip. Keep feet and ankles relaxed. Hold a comfortable stretch for 15-30 seconds. Repeat on other side.



Rotate your ankle clockwise and counter-clockwise creating a complete range of motion with slight resistance provided by your hand. Rotary motion of the ankle helps to gently stretch out tight ligaments. Repeat 10-20 times in each direction. Do both ankles. A variation of this stretch can be done while lying on back and bringing knee and ankle towards chest.



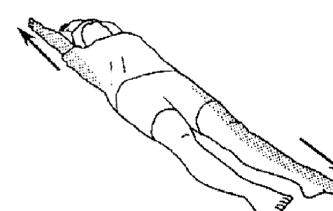
Sit with the soles of your feet together. Put your hands around your feet. Move your upper body forward with your back straight, bending at the hips. Keep your elbows in front of your legs. Hold for 15-20 seconds.

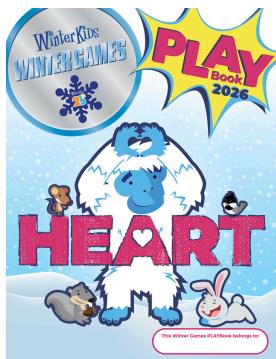


Sit with your right leg straight. Put the bottom of your left foot next to the inside of your straight leg/knee. Lean forward from your hips until you feel a stretch in your back and/ or back of your upper leg (hamstring). Hold for 10-20 seconds. Stretch both legs.



Stretch diagonally. Point the toes of your left foot as you extend your right arm. Stretch as far as is comfortable. Hold 5 seconds, and then relax. Repeat, stretching the right leg and the left arm.





5-2-1-0 RELAY RACE

1 of 4

WEEK 2

ACTIVITY 2 *PLAYBook Page 11*

Lesson Summary

Students will learn the 5-2-1-0 message which emphasizes healthy behaviors including eating five or more fruits and vegetables a day, limiting recreational screen time to two hours or less a day, participating in one hour or more of physical activity every day, and limiting sugary drinks—and instead drinking more water. This outdoor activity will reinforce learning 5-2-1-0 healthy habits. For additional information about this message and program, visit <https://www.letsgo.org/school>.

Objectives

Students will:

- ✿ Sort the 5-2-1-0 components in the appropriate categories.
- ✿ Explain how the 5-2-1-0 message promotes good health.

Materials

- ✿ 5-2-1-0 Poster (<https://assets.mainehealth.io/s3fs-public/2025-03/5-2-1-0-Poster.pdf>)
- ✿ 4 Hula Hoops-In lieu of hoops, stomp out circles or squares in the snow to contain the message cards at the start
- ✿ 5 containers for each team
- ✿ 4 sets of pictures representing the different components of the 5-2-1-0 message
- ✿ Small prizes to award the winning team (optional)

Preparation

1. Print four sets of pictures from the attached list of 5-2-1-0 concepts.
2. Make four containers for each team, into which students will place appropriate message cards. Paper bags, small boxes or coffee cans will work well as containers. Next, mark each container with a 5, 2, 1, and 0. The fifth container will hold all the cards at the start.
3. Before students arrive, create a start line, by putting the containers with all the cards in four hula hoops side by side, leaving some space between them. Place the four numbered containers opposite each start hoop, across the playing space. When placing the containers, make sure they are far enough away to make for an active game.



5-2-1-0 RELAY RACE

2 of 4

WEEK 2

ACTIVITY 2 *PLAYBook Page 11*

Procedure

Inside:

1. Briefly discuss the 5-2-1-0 message using the 5-2-1-0 poster. When discussing the poster, avoid giving too many examples, as this is part of the lesson later.
2. Explain that the next activity will help them understand sorting/organizing by breaking down the components of the 5-2-1-0 message.

Outside:

1. Divide the classroom into four teams.
2. Next, have the students come up with a name for their team.
3. Designate each team to a “course.”
4. Explain to the students that they will work together to decide which pictures should be put into each container.
5. The students line up in front of the start hula hoops. The first student in line will select one picture card, run to the opposite end of the field, and deposit it in the appropriate container, and run back to the start.
6. Once the first student returns to the start line and tags the next teammate in line, that teammate can then select a card, and run to deposit it in the proper container. Continue until teams have sorted all the cards. As teams finish, they can cheer on the remaining teams until all cards are sorted.
7. After the race, take a few minutes to review each group’s sorting and decisions, making corrections as appropriate.

Back Inside:

Have students work in small groups to develop a group explanation of why the 5-2-1-0 message promotes good health.

Special Needs Students

Students unable to run from start to finish may be stationed at the finish/answer hula hoop to help their teammates sort the pictures.



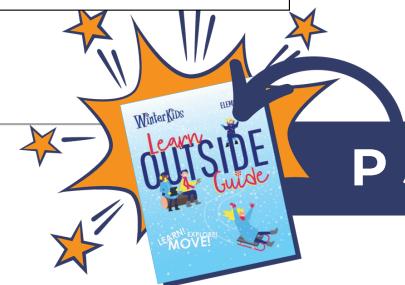
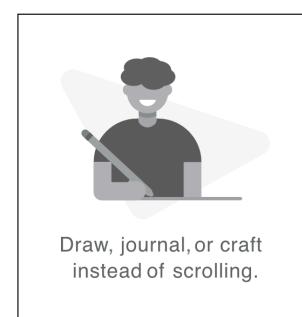
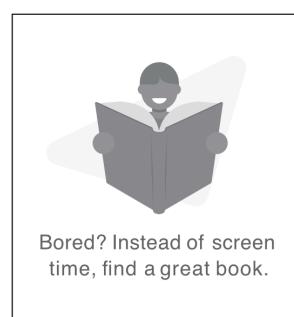
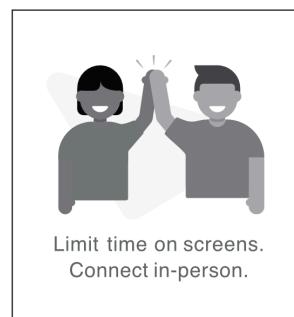
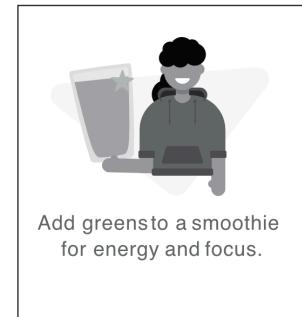
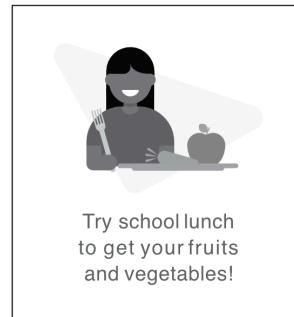
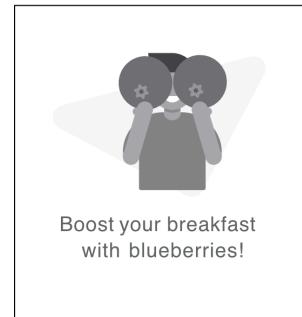
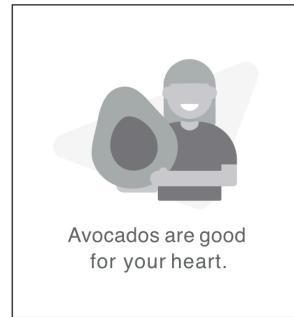
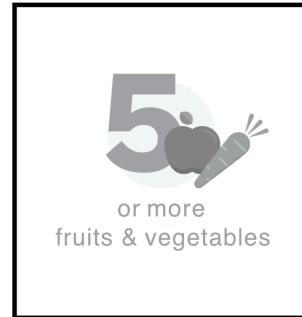
5-2-1-0 RELAY RACE

3 of 4

WEEK 2

ACTIVITY 2

PLAYBook Page 11





5-2-1-0 RELAY RACE

4 of 4

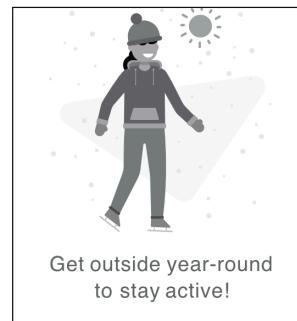
WEEK 2

ACTIVITY 2

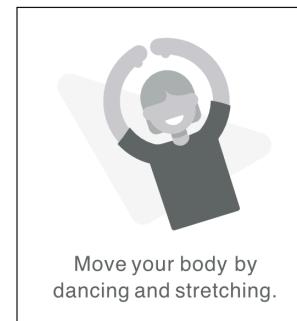
PLAYBook Page 11



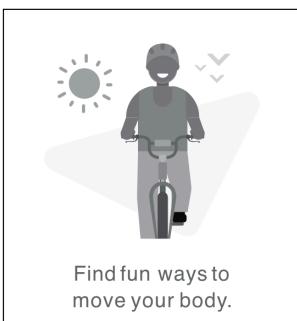
hour or more of physical activity



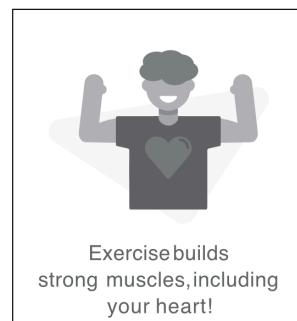
Get outside year-round to stay active!



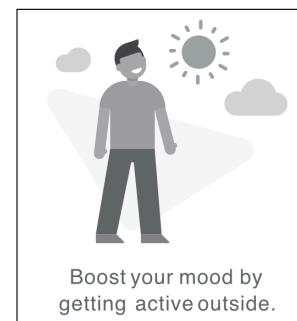
Move your body by dancing and stretching.



Find fun ways to move your body.



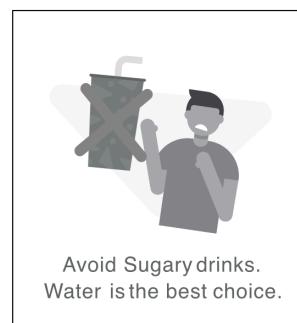
Exercise builds strong muscles, including your heart!



Boost your mood by getting active outside.



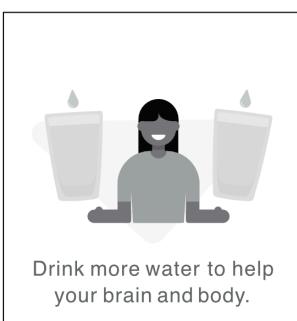
sugary drinks, more water



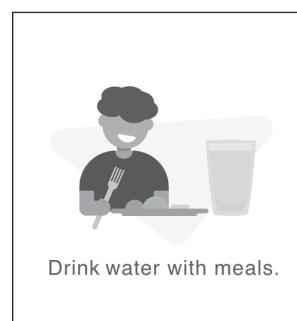
Avoid Sugary drinks. Water is the best choice.



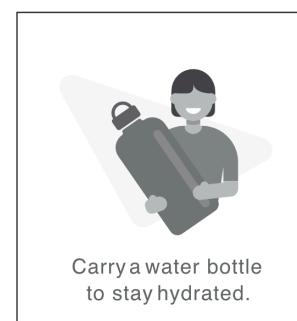
Add fresh fruit to water to add flavor.



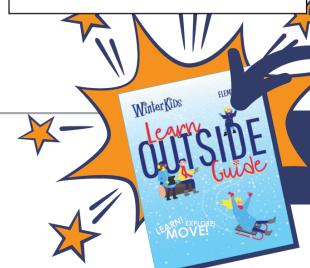
Drink more water to help your brain and body.



Drink water with meals.



Carry a water bottle to stay hydrated.

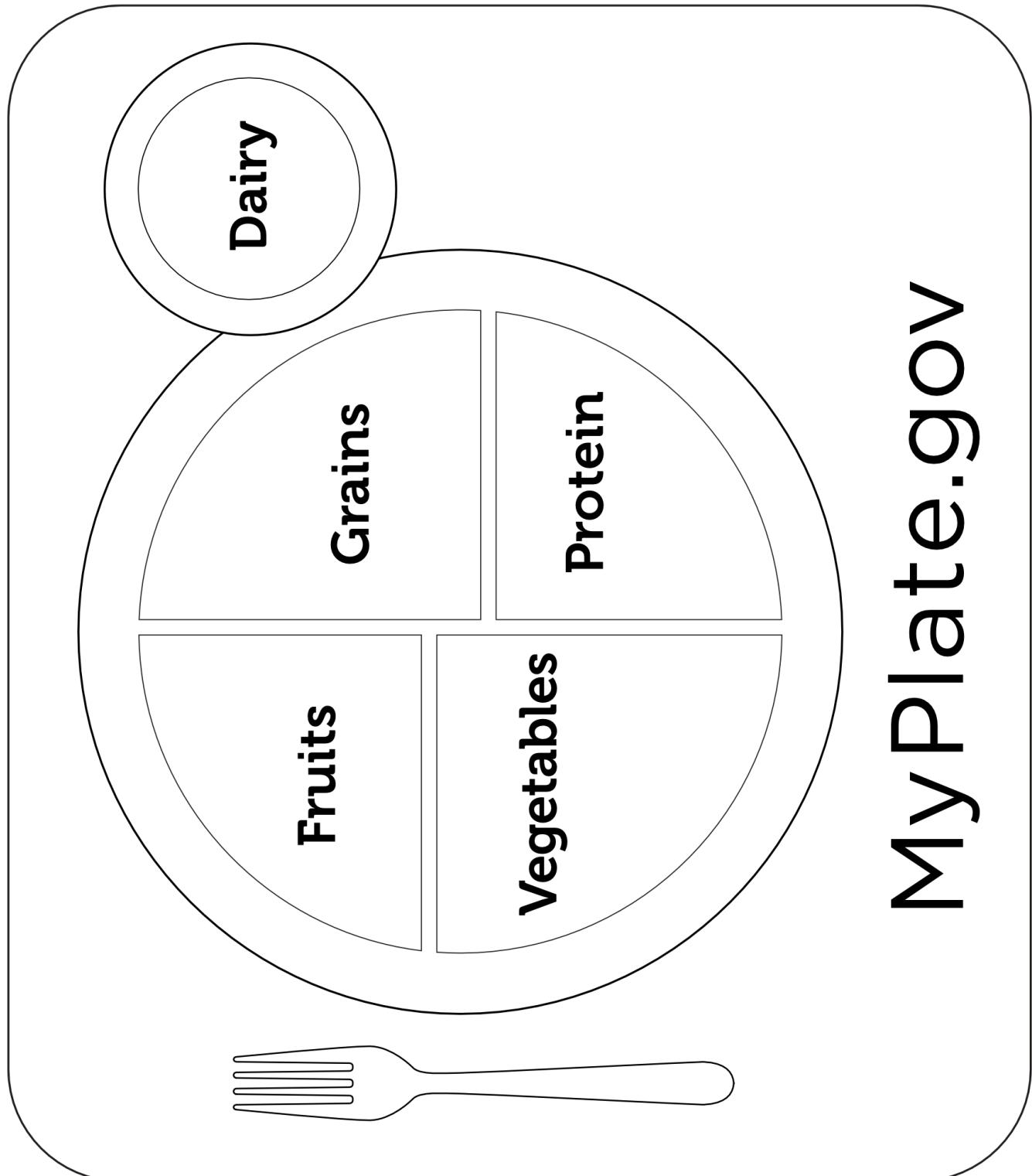




HEALTHY FOODS, HEALTHY BODIES | MYPLATE GRAPHIC

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*



MyPlate.gov

United States
Department of
Agriculture





HEALTHY FOODS, HEALTHY BODIES | grades K-2

1 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

Lesson Summary

Students will learn to identify healthy foods through an interactive game where they will group foods that constitute healthy eating habits.

Objectives

Students will:

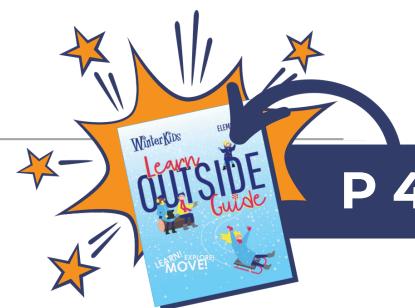
- * Match various foods with their food groups.
- * Choose three healthy foods.

Materials

- * Cut out pictures of a variety of foods-2 or 3 per child (Note: Collect empty cereal boxes, cans, milk jugs, etc., for use in the classroom as actual food models. Check out www.MyPlate.gov for more ideas.)
- * Scissors
- * Construction paper
- * Glue
- * Basket
- * USDA's MyPlate graphic (see www.MyPlate.gov)
- * 5 reusable grocery bags or other containers

Preparation

1. Download food images from [WinterKids.org](https://winterkids.org/teachers-schools/resources-for-educators/) <https://winterkids.org/teachers-schools/resources-for-educators/> or cut out pictures of foods from magazines. Individual items work best with this age group, e.g., a picture of a tomato instead of a picture of a salad.
2. Sort the foods by food group, and glue the pictures to colored construction paper to match the MyPlate food group colors (red for fruits, green for vegetables, blue for dairy, etc.). For durability, laminate the photos.
3. Create signs for each of the five food groups and attach them to grocery bags or other containers.





HEALTHY FOODS, HEALTHY BODIES | grades K-2

2 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

Procedure

Inside:

1. Introduce the USDA MyPlate to your students. Point out the similarities among foods within each group. Use the following question to prompt class discussion:

Why don't we see candy bars and chips on the MyPlate of healthy foods?

Answer: Candy bars and chips have added salt and sugar. Eating a lot of salt or sugar can keep our bodies from functioning well and can cause things like tooth decay and obesity. When you eat a lot of salty and sugary foods, you can feel more tired and can be more likely to get sick. You can think of candy bars and chips as "sometimes" or "once-in-a-while" foods, not every day foods.

2. Brainstorm foods that fit into the different food categories.
 - Grains: cereal, bread, spaghetti, crackers, rice, etc.
 - Vegetables: carrots, celery, lettuce, spinach, etc.
 - Fruits: apples, bananas, oranges, blueberries, watermelon, grapes, etc.
 - Dairy: yogurt, milk, cheese, smoothies, ice cream, etc.
 - Protein: hamburger, steak, fish, nuts, chicken, peanut butter, etc.
3. Explain that, in addition to eating healthy foods, physical activity is also very important in building strong, healthy bodies. Have your students brainstorm different types of physical activities and say which ones they enjoy. Be sure to discuss outdoor winter activities, too.
4. Have students get dressed for outdoors.

Outside:

1. Place the labeled food group bags across the playground or a field. Leave plenty of space between the bags to allow for an active game.
2. Have your students work in pairs. Each pair will select a food card, determine what the food is, and decide to which food group it belongs. Each pair will then run or snowshoe to the bag with the corresponding food group name and drop the card in. Each pair will return to the teacher to get another card and repeat the process. Have students do this until all the food cards have been used.
3. Consider having your students move in different ways to distribute the food cards, e.g. hopping, crawling, jumping, running, walking backwards, "flying," "swimming," taking giant steps, taking baby steps, etc.
4. Gather your entire class around each bag and check the cards for accuracy. Have each pair choose a healthy food from the bag to determine if it was placed in the correct bag. If a card was placed in the wrong bag, discuss with the group where it belongs and why.



HEALTHY FOODS, HEALTHY BODIES | grades K-2

3 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

Optional Follow Up

Discuss the importance of physical activity. Copy the Family Activity Log on page 64 and distribute to each student. Have them record the activity and the amount of time they spend doing that activity, as indicated on the log. You may choose to create incentives or rewards for these healthy behaviors!

Special Needs Students

For the outdoor procedure, students with physical disabilities can use their wheelchairs or walkers and participate with their classmates or be the leader and hand out the food cards. Students who need help identifying foods and/or groups can be paired with another student (their "nutrition buddy") for help.





HEALTHY FOODS, HEALTHY BODIES | grades 3-5

1 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

Lesson Summary

Students will learn to identify healthy foods through an interactive game where they group foods that constitute healthy eating habits.

Objectives

Students will:

- ✿ Choose healthy foods and sort them into their appropriate MyPlate category.
- ✿ Explain why certain foods are healthy and why others should be eaten less often.

Materials

- ✿ Cutout pictures of a variety of foods-2 or 3 per student (Note: Collect empty cereal boxes, cans, milk jugs, etc. for use in the classroom as actual food models.)
- ✿ Construction paper
- ✿ Glue
- ✿ USDA's MyPlate poster (from www.MyPlate.gov)
- ✿ Grocery bags or other containers

Preparation

1. Cut out pictures of foods from magazines. Be sure to include some meals that have more than one food group (e.g. salad, pizza, macaroni and cheese, etc.). Glue the pictures to colored construction paper. Note: For younger children, use colors that correlate with MyPlate, i.e. blue=dairy; red=fruit, etc. For durability, laminate the photos. Create some cards with food words instead of pictures to increase literacy.
2. Create signs for each of the six food groups and attach them to grocery bags or containers.

Procedure

Inside:

1. Introduce the USDA MyPlate. Display the poster in the classroom where everyone can see it. Explain to your students that the sizes of the sections on the plate represent how much of that food group should be a part of their daily diet. For instance, grains are a larger section than proteins. We need more servings of grains because they are rich in carbohydrates which give us energy. Point out the similarities among foods contained within each group.



HEALTHY FOODS, HEALTHY BODIES | grades 3-5

2 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

2. Brainstorm foods that fit into the different food categories. Look at the school lunch menu for the week and determine which food groups are represented.
 - Grains: cereal, bread, spaghetti, crackers, rice, etc.
 - Vegetables: carrots, celery, lettuce, spinach, etc.
 - Fruits: apples, bananas, oranges, blueberries, watermelon, grapes, etc.
 - Dairy: yogurt, milk, cheese, smoothies, ice cream, etc.
 - Proteins: hamburger, steak, fish, nuts, chicken, peanut butter, etc.

Some concepts to discuss:

Which are healthier, whole grains or refined (processed) grains?

Answer: Whole grains! Whole grains haven't had their bran and germ removed by milling, making them good sources of fiber — the part of plant-based foods that your body doesn't digest. In addition to their many health benefits, high-fiber foods also tend to make you feel full longer. Refined grains, such as white rice or white flour, have both the bran and germ removed from the grain. Although vitamins and minerals are added back into refined grains after the milling process, they still don't have as many nutrients as whole grains do, and they don't provide as much fiber naturally.

Is there such a thing as good fats?

Answer: Yes! We all need some fat in our diets. Fats help our bodies absorb nutrients. However, too much fat contributes to weight gain, heart disease, and Type II Diabetes. Good fats are the unsaturated fats—monounsaturated fats lower total cholesterol and increase HDL cholesterol (the good kind!). Monounsaturated fats are found in nuts, avocado, and canola and olive oils. Polyunsaturated fats are also good fats. These are found in seafood like salmon, sardines, and fish oil. Corn, soy, safflower and sunflower oils are all high in polyunsaturated fats.

Saturated fats and trans fats are the "bad fats."

Saturated fats can be found in animal products like meat, milk, and cheese. It is wise to choose lean meats (pork and chicken without skin) and low-fat milk and cheeses to limit saturated fat in your diet. Coconut oil and palm kernel oils are high in saturated fats and can often be found in packaged foods including milk chocolate, cookies, crackers, and snack chips. Trans fats, or partially hydrogenated fats, should be avoided if possible. Trans fats are responsible for clogging arteries, one reason for heart attacks. Food companies are beginning to remove partially hydrogenated fats from our foods, but it's still found in some stick margarine, shortening, fast food, cookies, crackers, granola bars, and microwave popcorn. Read the ingredient labels to limit these fats.

3. Explain that MyPlate shows us what to eat and, although it does not show us ways to be active, physical activity is very important in building strong bodies. Children should have at least 60 minutes of moderate activity each day. Ask your students to suggest different types of physical activities, and ask them which ones they enjoy. What can students do outside in winter to stay active?
4. Have students get dressed for the outdoors.



HEALTHY FOODS, HEALTHY BODIES | grades 3-5

3 of 3

WEEK 2

ACTIVITY 4 *PLAYBook Page 13*

Outside:

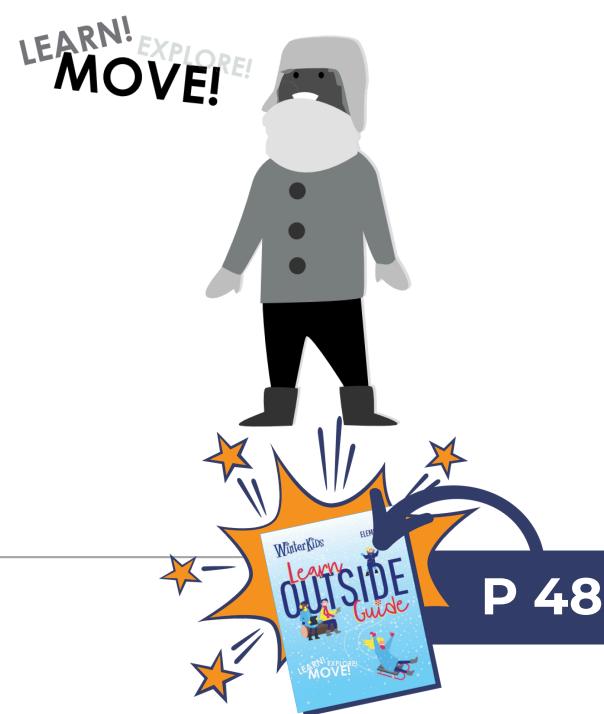
1. Place the labeled food group bags across a playground or field. Leave plenty of space between the bags to allow for an active game.
2. Have each student select a healthy food card, decide the category to which the food belongs, and then run or snowshoe to the corresponding bag. They will drop the card in the food bag and return for another. Repeat until all the cards have been placed in the proper bag.
3. Consider having your students move in different ways to distribute the food cards, e.g. hopping, crawling, jumping, running, walking backwards, "flying," "swimming," taking giant steps, taking baby steps, etc.
4. When all the cards have been placed in the paper bags, gather the class around each bag and examine the contents. Have students explain why they categorized the foods the way they did. If any food cards have been misplaced, discuss the reasons why and then place them in the appropriate bag.

Optional Follow Up

Discuss the importance of physical activity. Copy the Family Activity Log on page 64 and distribute to each student. Have them record the activity and amount of time doing that activity as indicated on the log. Perhaps create incentives or rewards for these healthy behaviors!

Special Needs Students:

For the outdoor procedure, students with physical disabilities can use their wheelchairs or walkers and participate with their classmates or be the leader and hand out the food cards. Students who need help identifying foods and/or groups can be paired with another student (their "nutrition buddy") for help.





LET'S DISCUSS IT

1 of 2

WEEK 3

ACTIVITY 2

PLAYBook Page 19

Lesson Summary

Students will enjoy a brisk walk outdoors, stopping at points of interest to find interesting topics and subjects that inspire discussion. Students will then practice and demonstrate their discussion skills.

Objectives

Students will:

- ✿ Follow rules for discussion.
- ✿ Pose and respond to questions to clarify information.
- ✿ Make comments that contribute to the discussion.
- ✿ Link comments to the remarks of others.

Materials

- ✿ Clipboard
- ✿ Pencil

Procedure

Outside:

1. Be sure your class is bundled up, and then take them outside to line up for some warm-up stretches (i.e. touch your toes, raise your hands high over your head, do some squats). Explain that the class is going on a fast-paced walk and will be stopping now and then to ask questions about what the students are seeing and doing and to have discussions about their responses.
2. Review the rules of discussion (i.e. good listening, one voice at a time, stay on topic).

Common Core Standards

English Language Arts

CCSS.ELA-LITERACY.SL.4.1.B

Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-LITERACY.SL.4.1.C

Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

CCSS.ELA-LITERACY.SL.3.1.B

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

CCSS.ELA-LITERACY.SL.3.1.C

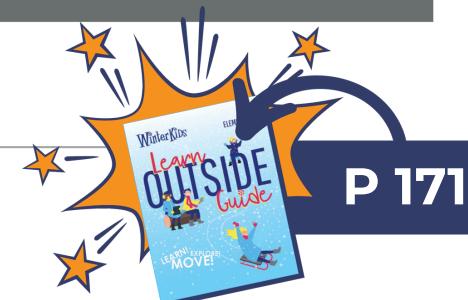
Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

CCSS.ELA-LITERACY.SL.5.1.B

Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-LITERACY.SL.5.1.C

Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.





LET'S DISCUSS IT

2 of 2

WEEK 3

ACTIVITY 2 *PLAYBook Page 19*

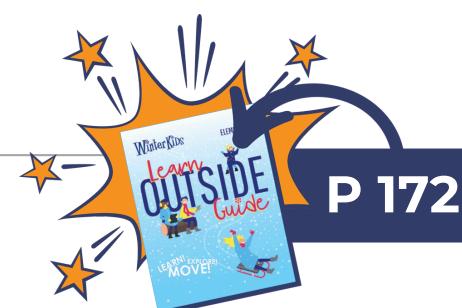
3. Walk for five minutes or until you find a point of interest, stop the group, and ask what your students see, hear, smell, and feel. Record several students' responses.
4. Choose a subject from the student responses that you think would encourage discussion. Ask students for comments that connect to the subject and to the responses of others.
5. Repeat as time allows.

Inside:

1. Wrap up any discussions that you felt were unfinished outside.
2. Have a discussion on the strengths and weaknesses of the students' discussion skills.

Special Needs Students

Some students may need the help of an assistant.





FUN PARTNER RELAY

WEEK 3

ACTIVITY 4 *PLAYBook Page 21*

Description

This is another good warm-up activity and opportunity for student leadership.

Equipment

* None

Formation

Students paired, one behind the other, in double line along one side of the gym.

Rules

Those in the front line choose exercise movements and perform them across the gym and back. Those in the second line copy their partners' movements. For example, a student might gallop to the center line, do five mountain climbers (push-up position with one leg extended and one pulled up to chest, quickly alternate legs), and then gallop to the other side; or skip to the center line, roll once, and skip to the other side; or run to the center line, leap once, and run to the other side. Have partners take turns making up and copying each other's movement patterns. Challenge older students to invent more difficult moves.

Variation

Keep movements appropriate to comfort level. Examples: hopping, silly walks. Use varied terrain or enlist kids' help in building a variety of snow mounds for walking over.





SHAPING STUDENTS | grades K-2

WEEK 4

ACTIVITY 2 *PLAYBook Page 26*

Lesson Summary & Objective

This lesson is designed to give students an opportunity to discuss and demonstrate their ability to define the attributes of shapes.

Materials

* None

Procedure

Outside:

1. Gather students. Have them form a circle, facing one another. Discuss the attributes of a circle (no angles, no corners, no straight lines).
2. Next, have students form a triangle. Discuss the attributes of a triangle (a triangle is made of straight lines and has three angles). Discuss squares and compare them to circles and triangles.
3. Choose a group of students whose number is divisible by four and have those students form a square, arms extended to their sides, with each student representing one unit.
4. Each time the students complete a task successfully, reward them with ten jumping jacks – this adds fun and helps keep warm.
5. Challenge groups of students to form a trapezoid, rectangle, hexagon, etc.

Inside:

1. Discuss the shapes your students created outside.
2. Have volunteers draw the shapes on the board and label them. Vote on which was the class favorite.

Common Core Standards

Mathematics

CCSS.MATH.CONTENT.K.G.B.5

Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

CSS.MATH.CONTENT.1.G.A.1

Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

CCSS.MATH.CONTENT.2.G.A.1

Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.



SHAPING STUDENTS | grades 3-5

WEEK 4

ACTIVITY 2 *PLAYBook Page 26*

Lesson Summary & Objective

This activity is designed to enhance and demonstrate student knowledge of the attributes of shapes through interactive movement.

Materials

- ✿ Notebook or clipboard to record student responses
- ✿ Stopwatch

Procedure

Outside:

1. Have your students stand in a circle, facing one another. Discuss what attributes make a circle different than other geometric shapes (i.e. no angles or straight lines).
2. Have students take a step back and do ten jumping jacks as a reward for their discussion input, and to keep warm.
3. Choose eight students and, with their arms extended, challenge them to make a square. Explain to those students that they are a linear unit of measure, not a point or angle. If the group is successful, reward the students with running in place to your count of ten.
4. Remind students that they are units, not points, and challenge them to form a variety of triangles, including right triangles, discussing angles as an attribute.
5. Try octagons and parallelograms if you dare!
6. You could get competitive. Divide the class into two or more teams and see which team can successfully complete a shape in the least time. You may also want to choose a few students to be "checkers." Checkers help a teacher referee the team competitions.

Inside:

1. Draw several large geometric shapes on the board and have students volunteer to write one of the shape's attributes inside it.

Common Core Standards

Mathematics

CCSS.MATH.CONTENT.3.G.A.1

Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

CCSS.MATH.CONTENT.4.G.A.2

Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

CCSS.MATH.CONTENT.5.G.B.3

Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.



SHAPE UP | grades 6-8

WEEK 4

ACTIVITY 2 *PLAYBook Page 26*

Lesson Summary & Objective

This lesson is designed to give students an opportunity to use movement to enhance and demonstrate their knowledge of the properties of triangles.

Materials

- * Stopwatch
- * Calculators for Grade 8

Procedure

Grades 6 and 7

Outside:

1. Gather students and explain that they will be forming right triangles and solving for the area of those triangles.
2. Choose a small group of students to demonstrate a right triangle. Have the selected students stand with arms extended, and direct them into the shape of a triangle, explaining that they are a unit on a line segment, not a point. Discuss the properties of a right triangle and the formula for the area of a right triangle. As a class, find the area of your student demonstration triangle.
3. Choose teams of students to construct a variety of right triangles and then find their areas. Teams with the same number of members on each team could compete to see which team can most quickly construct a successful right triangle and then solve for its area. Reward students with ten jumping jacks for each correct answer.

Inside:

1. Draw several right triangles on the board.
2. Have students go to the board and solve for the areas of the triangles.

Common Core Standards

Mathematics

CCSS.MATH.CONTENT.6.G.A.1

Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

CCSS.MATH.CONTENT.7.G.B.6

Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

CCSS.MATH.CONTENT.8.G.B.7

Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.



FLEXIBILITY ASSESSMENT

WEEK 4

ACTIVITY 2 *PLAYBook Page 28*

Name _____ Grade _____ Teacher _____

1. List two benefits of flexibility.

1.

2.

2. Explain why flexibility is important.

3. Describe something that flexibility helps you do better.

4. Name two different stretches that increase your flexibility.