



Minnesota Public Radio's Sound Learning presents

BLUE ZONES™ CHALLENGE

Extend the Quest experience and bridge the connections between what your students know and what they do. Blue Zones™ is an open-ended learning experience that offers countless opportunities for critical-thinking skills, such as inquiry, analysis, synthesis, and evaluation. Use the Blue Zones Challenge to help students make the connection between the science of healthy aging and their own long-term health.



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Background

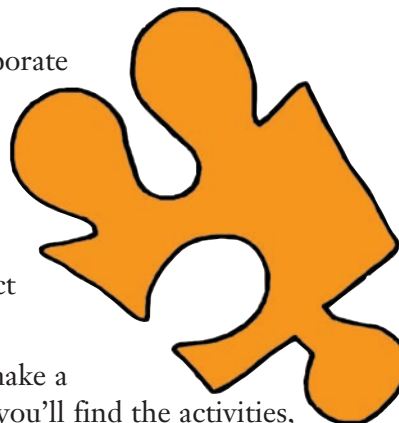
In recent years, the rapid increase in obesity, particularly among children, has concerned public health officials. According to recent figures, an estimated 61 percent of U.S. adults and 13 percent of children and adolescents are overweight or obese (U.S. Department of Health and Human Services). In fact, one study indicates that the diets of 45 percent of American children fail to meet the recommendations set forth by the U.S. Department of Agriculture's Dietary Guidelines. This means that the dietary habits of almost half of America's children are lacking in essential nutrients. Given that obesity is an important risk factor for chronic diseases, including heart disease and diabetes, most experts agree that the obesity epidemic requires urgent attention.

Studies have shown that school-based health interventions that incorporate educational and behavioral components can improve physical activity and nutrition-related behaviors in children and adolescents. The Child and Adolescent Trial for Cardiovascular Health (CATCH) program has shown that children who participated in these types of programs consumed less total and saturated fat and were involved in more physical activity. Furthermore, these behaviors were still in effect three years after completion of the program.

By integrating this project into your classroom curriculum, you can make a significant difference in your students' lives. On the following pages, you'll find the activities, charts and related materials for students and their parents—since this involves tracking dietary habits, this is an activity that works best when students have the support of their families.

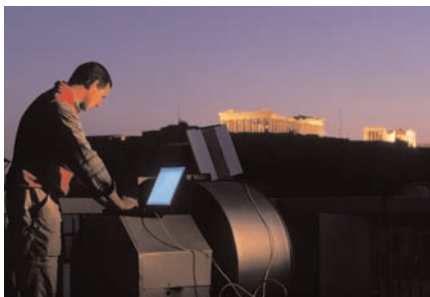
• **Note:** Blue Zones promotes healthy lifestyle choices for all students and knows that a long, healthy life is an attainable goal for everyone, regardless of body type. We are, however, concerned with the prevalence of poor body image and eating disorders among children and adolescents. For more information about what teachers can do to promote positive body image and prevent eating disorders go to:

<http://www.girlpower.gov/AdultsWhoCare/resources/Pubs/teachers.pdf>.



Website Connections

The Blue Zones Challenge will allow students to track several behaviors that contribute to childhood obesity: the number of servings of fruits and vegetables, the number of servings of sweetened beverages, the number of minutes spent exercising, and the number of minutes spent watching TV.



During the Quest, participating classrooms around the country will aggregate their data and determine whether the knowledge gained during Blue Zones had a significant impact on the health-related behaviors that affect childhood obesity.



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Getting Started

Every student will need: a unique user id at bluezones.com, Letter to Parents, Tips for Parents, Blue Zones Challenge Contract, Blue Zones Challenge Log (4 copies)

Get Web ready: Begin by creating unique user ids for each of your students at bluezones.com. This will allow every student to enter their activity totals each week at the Blue Zones website and track their progress, as well as compare their results to that of other participating students around the nation and the world.

Begin the discussion: Launch the Blue Zones Challenge with an open dialogue about your students' health habits – and yours. *Do your students know how much exercise they get each day? How much television they watch? How many servings of fruits, vegetables, and sweetened beverages they consume? How do they think they compare to the national average? And do they think their current behaviors are healthy?*

Pre-Challenge Week: When you are ready to begin, send home the Letter to Parents. Students will be most successful if their parents are aware of the program and become involved at home. You may also send home a Blue Zones Challenge Log (though some teachers may prefer to complete the logs during class time).

During this first week, we call it Pre-Challenge Week, your students will record their current behaviors. Following Pre-Challenge Week, you may want to revisit the opening discussion questions to see if students were able to accurately assess their current behaviors. *Did their original responses match their actual daily choices?*

At the end of the week, send students to bluezones.com to enter their data. They can do this either from school or from home.



Week 1: When you have completed Pre-Challenge Week, send home the Blue Zones Challenge Contract and Tips for Parents, as well as a second Blue Zones Challenge Log, if you choose to send them home. Students will now set their long-term goals for the Blue Zones Challenge, as well as smaller weekly goals.

Throughout Weeks 1-3, use the suggested Blue Zones Challenge activities to give your students the tools they need to meet their individual goals.

Weeks 2-3: For the remaining two weeks, you only need to send home a Blue Zones Challenge Log, if you choose to have them completed at home.

Wrapping Up: Ask students to return their completed Blue Zones Challenge Contracts. *Were they able to meet their goals? What were the most difficult obstacles they encountered? Did they feel they were able to make any lasting changes to improve their health and fitness?*

Ask students to share their success stories with us at contact@questnetwork.com. We will post the most inspiring stories on our Website to motivate other students.



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Strategies for Success

You can support your students' efforts to change important health behaviors using these simple strategies in your classroom.

Daily record keeping: Have students keep their Blue Zones Challenge log in a convenient place and remind them to fill it in every day. If kept at home, suggest posting it on their refrigerator or other visible place. Encourage them to set up their own record keeping routine, for example every night before they go to bed or every day when they finish their homework. If you choose to have your students keep the logs at school, designate a time each day to have students fill it in.

Setting realistic goals: After your class has collected their baseline data (Pre-Challenge Week), students will set goals to increase their daily physical activity and consumption of fruits and vegetables and decrease their intake of sweetened beverages and TV watching. Some students will want to make huge changes all at once and some will want to make very insignificant ones.



Lead a discussion with your class about making realistic goals; goals they think they could really meet. Remind students that setting goals that would be difficult to meet, such as watching no television after having established a routine of watching three hours of TV, will likely be unsuccessful and won't help them. On the other hand, their goals should be meaningful. For example, watching five minutes less of TV a week is not a very effective goal. Emphasize that it is easiest and most successful to make changes gradually, instead of all at once.

Remember - it is important that students look at what they are doing now, in order to set realistic goals for the next week.

Suggested beginning goals are:

- Eat one additional serving of fruits or vegetables four days this week.
- Watch one less 30 minute TV show four days this week.
- Increase physical activity by 15 minutes every day this week.
- Drink one less serving of sweetened beverages every day this week.

Your students are more likely to be successful if their goals are realistic and this will help them to gradually adopt the healthy lifestyles they are aiming for.

Challenge Partners: It is helpful if students have the support of peers as they try to meet the Blue Zones Challenge. Assign students challenge partners or have them choose their own. Set aside a designated time at the end of each week for students to meet with their partners and discuss how and why they did or did not meet their goals. Partners can help them problem-solve solutions to the obstacles they encountered and help them set appropriate goals for the next week.

Checking In: Designate 5-10 minutes of class time each week to check in with your students as a group. This may also be a time for challenge partners to meet.

Ask students:

1. Who has met their goals this week?
2. What were your goals and how and when did you meet them?
3. What obstacles did you encounter?
4. What suggestions do you have for overcoming the obstacles you encountered during the next week?



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Motivating Moves

Set up rewards: You might feel your class needs a reward in the middle of the Challenge to keep them focused and motivated. Take a look at how your class is doing and set a weekly classroom goal. Reward your class with some extra, fun physical activity time or an afternoon fruit snack.



Set up a competition with other classes: If there are other classes in your school participating in the Blue Zones Challenge you might want to set up a competition between classes. Compare classroom averages to adjust for differences in class size.

Be a role model: Teachers – you are an important role model for your students. Track your own behaviors using the Blue Zones Challenge. Students will enjoy hearing about and learning from your successes and failures. Encourage other school staff to take the challenge as well, including school administrators.



Give encouragement: Remind your students to try new things and encourage them along the way.



Get the word out: Let other school staff know that your class is participating in the Blue Zones Challenge, especially physical education teachers and school food service staff. These people can encourage your students to be more active and select and eat more fruits and vegetables in school lunches.



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Healthier Food, Healthier You!

LEVEL: Upper Elementary and Middle School

Materials: paper, pencils



Learning Goals

In this activity, students will:

- Identify ways to increase their consumption of fruits and vegetables
- 1. Explain to students the importance of eating at least 5 servings of fruits and vegetables a day for their long-term health and wellness.
- 2. Ask students to create a simple chart. Fold a piece of paper in half. On the left hand, list breakfast, snack, lunch, snack, dinner, and snack. Leave the right side blank.
- 3. Have students work in pairs and interview each other to find out what fruits and vegetables they eat on a typical day. *Are they getting 5 servings a day?*
- 4. Have students interview their partner about their favorite fruits and vegetables. *Which are their favorites? Why do they like them (sweet, sour, juicy, crunchy, etc.)?*
- 5. Have students suggest to their partner ways to increase their consumption of fruits and vegetables. *If they like sweet flavors, what are some other fruits and vegetables they might enjoy? During what meal or snack times would it be easiest to add another fruit or vegetable serving?*



Blue Zones Challenge Fun Fact: Only 9% of children ages 6-11 eat the recommended five servings of fruits and vegetables every day.

In one study of elementary age children, the only fruit or vegetable source of 40% of the children was French fries or tomato sauce.

LifeLinks

Studies show that the effectiveness of health intervention programs is vastly improved when children receive support both at home and at school. To aid your students' success, we have created activities tied to each of the four behaviors they will track during the four-week Blue Zones Challenge experience. We hope you will continue to support your students' understanding of nutrition and fitness through further investigation using activities like these:

PBS Teacher Source Nutrition Resources

Upper Elementary - http://www.pbs.org/teachersource/health_fitness/35-nutrition.html

Middle School - http://www.pbs.org/teachersource/health_fitness/middle-nutrition.html

The Produce for Better Health Foundation

http://www.5aday.com/html/educators/educators_home.php

Resources for teaching healthy eating habits.



Minnesota Public Radio's Sound Learning presents BLUE ZONES™ CHALLENGE

Tuning Out

LEVEL - Upper Elementary and Middle School

Materials: Five sets of Tuning Out Situation Cards (see following page for a set of cards you can duplicate)

Learning Goals

In this activity, students will:

- Identify ways to reduce time spent watching television when faced with common situations and peer pressure
- 1. Divide students into small discussion groups and distribute a set of Tuning Out situation cards to each group.
- 2. Have students take turns reading the situation cards within their small group and discuss ways to respond to each situation and still watch less television.
- 3. As a class, review some of these common situations and ask students to share their small group solutions.



Blue Zones Challenge Fun Fact: In addition to being a sedentary activity, a study in the Archives of Pediatric & Adolescent Medicine reported that elementary school students who have televisions in their bedrooms scored consistently lower on math, reading, and language arts tests.

LifeLinks

TV Turnoff Network

<http://www.tvturnoff.org/>

Promotes watching less television to lead healthier lives.

CNN.com

<http://www.cnn.com/2003/HEALTH/parenting/12/08/television.vegetables.reut/>

A study shows that watching more television results in eating fewer fruits and vegetables.

Tuning Out: You want to watch less TV but...

Your sister is watching your very favorite show. It's so tempting. Now what?

Tuning Out: You want to watch less TV but...

You planned to ride your bike today, but it's raining cats and dogs! What do you do?

Tuning Out: You want to watch less TV but...

You'd love to play outside, but it's so hot you'll melt! What are your options?

Tuning Out: You want to watch less TV but...

The television is a nice distraction when you're babysitting your baby brother. Can you think of other things to do?

Tuning Out: You want to watch less TV but...

It's just not safe. Yeah, playing outside is a nice concept – but it's just not a good idea for you. Can you think of ways to get the exercise that you need and still stay safe?

Tuning Out: You want to watch less TV but...

Your best friend is at your house, but he really wants to watch television. Ideas?

Tuning Out: You want to watch less TV but...

Your very cool friend thinks it's weird not to watch TV. What do you say to her?

Tuning Out: You want to watch less TV but...

It's been a very long day. Sometimes vegging out in front of the television is all you can manage. How do you get motivated?

Tuning Out: You want to watch less TV but...

You try watching half a show, but you get hooked and watch the entire episode. What should you do next time?

Tuning Out: You want to watch less TV but...

You keep sneaking it. It's hard! You just can't seem to help yourself. How can you break your routine?

Tuning Out: You want to watch less TV but...

Your friends always talk about your favorite show. If you don't watch, you'll feel so out of it! What can you do?

Tuning Out: You want to watch less TV but...

Your parents watch a lot of TV. It starts with the news, but drags on for hours. How do you deal with this?

Tuning Out: You want to watch less TV but...

It's quiet when you're home alone – and the TV keeps you company. Can you think of other alternatives?

Tuning Out: You want to watch less TV but...

Exercising outdoors is great, but it's so cold today you'd become a human popsicle. What should you do?



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Sippin' Sweets: Liquid Sugar

LEVEL - Upper Elementary and Middle School

Materials: cups, a sample of sweetened beverages, sugar, fruit juice and juice drink labels, paper and pencils

Learning Goals

In this activity, students will:

- Read nutritional labels
- Understand the health costs associated with consuming sweetened beverages
- Calculate the financial cost of consuming sweetened beverages
- Identify ways to reduce their consumption of sweetened beverages



1. Prior to class, set up four beverage stations as follows:

Station Set-up

a. **Station One** – Collect a sample of various sweetened beverages and determine their sugar content (4g sugar is approximately equal to one teaspoon). Set out the sweetened beverage containers (covering up the nutrition information), numbered cups filled with the corresponding sugar content, an answer key (face down), and the Station One instructions card.

Key:

Minute Maid® Orange Soda, 12oz	48g	12 tsp
Mountain Dew®, 12oz	46g	11 tsp
Pepsi®, 12oz	41g	10 tsp
Dr Pepper®, 12oz	40g	10 tsp
Coca-Cola® Classic, 12oz	39g	9 tsp
7Up®, 12oz	39g	9 tsp
Sprite®, 12oz	38g	9 tsp
Capri Sun®, 8oz	30g	7 tsp
Fruitopia®, 20oz	72g	18 tsp
Slim Fast®, 10oz	40g	10 tsp
Gatorade®, 16oz	28g	7 tsp
Hawaiian Punch®, 12oz	44g	11 tsp
Crystal Light®, 12oz	2g	.5 tsp

Blue Zones Challenge Fun Fact: If you drank an extra can of regular cola every day for one year and everything else stayed the same (diet, amount of exercise, etc.), you would gain 15 pounds of body fat!

b. **Station Two** - Collect a sample of 100% fruit juices, juice drinks, ades, and fruit-flavored drinks, affixing the front labels to note cards. Affix the back labels, which include their nutritional information, to the back of the corresponding cards. Be sure to remove or cover any portions on the front label that provide specific information about juice or sugar content. Set out the sample of fruit juice and juice drink label cards and the Station Two instructions card.

Blue Zones Challenge Helpful Hint: 100% fruit juice is a better choice than fruit drinks or pop, but because it also has calories, you shouldn't drink too much. 7-18 year olds should limit themselves to 8-12 ounces per day.

Eat fruits and vegetables to fill out the rest of your daily requirement. And remember to drink enough low-fat milk and water. If you must drink sweetened beverages, diet beverages are a better choice.



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Sippin' Sweets: Liquid Sugar

continued

c. **Station Three** - Determine your local costs of purchasing five common sports or energy drinks, like Gatorade, Red Bull, and Powerade. Set out a sheet containing the names and costs of these beverages and the Station Three instructions card.

Sample Sports and Energy Drink Prices

Rooster Booster® (8.3 oz)	\$1.49
Fruit Punch Gatorade® (24 oz.)	\$1.59
Orange Powerade® (32 oz.)	\$1.59
Strawberry SPORT SHAKE® (11 oz.)	\$1.69
SoBe Adrenaline Rush® (8.3 oz.)	\$1.89
Amp® (8.4 oz.)	\$1.99
Red Bull® (8.3 oz)	\$1.99

d. **Station Four** – Set out the Station Four instructions card

2. Provide the class with directions for each of the four stations. For specific station directions, please see below.
3. Divide students into four groups and rotate them through the beverage stations.
4. After students have completed all four stations, gather as a large group and review student findings. *Were they surprised by the amount of sugar present in many sodas and juice drinks? What clues on drink labels may help guide them to healthier choices? What are the financial costs of choosing sweetened beverages? How could that money more wisely be spent? What choices are they making today? Can they identify healthier alternatives?*

Station Directions

Station One:

1. Ask students to match and record the sugar content in the numbered cups to the correct sweetened beverage.
2. As a small group, encourage them to discuss what they found. *Which beverage had the highest sugar content? Which one had the lowest? Were they surprised by any of their findings?*

Station Two:

1. Ask students to write down the percentage of real juice they believe to be in each beverage.
2. After they've written down their answers, have them look at the back of the cards to check their answers.
3. As a small group, encourage them to read the nutrition labels and list of ingredients, then discuss what they found. *Were they surprised by the amount of added sugar in many of the fruit drinks? What ingredients were listed first? Where did real juice fall in the list of ingredients? Can messages on the beverage container provide clues into the nutrition content of the drink?*

Station Three:

1. Ask students to calculate the cost of purchasing sports or energy drinks every day for a year.
2. As a small group, have students discuss the costs of consuming sports and energy drinks versus water. *Is this a good use of their money? If they were to save that money, what sorts of health related products or activities could they spend that money on?*

Station Four:

1. Have students record what types of beverages they drink and when on an average day.
2. As a small group, have students discuss their current behaviors. *Do they consider these to be healthy behaviors? Where can they make changes? Can they identify healthier alternatives?*

Lifelinks

<http://www.adluri.com/factfile/fact01.htm>

A knowledge gap exists between parents and pediatricians regarding real fruit juice and juice drinks.

www.newstarget.com/006110.html

For information about the harmful effects of sports and energy drinks on your teeth.

<http://atg.wa.gov/teenconsumer/pages/healthandsafety/sportsdrinks.htm>

Create your own sports drinks at a fraction of the cost.



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Sippin' Sweets: Liquid Sugar Instruction Cards

Station One Instructions

Sitting before you are several beverages that you, your family, or friends might enjoy and several numbered cups filled with sugar.

Before you begin, try to guess which of these drinks contains the most sugar – and which one contains the least.

Now, try to match the right drink to the correct cup of sugar and write down your answers on a piece of paper.

When you have finished, flip over the answer key. Did you guess correctly?

Which drink had the most sugar? Which one had the least? Were you surprised by the amount of sugar contained in these beverages?

Sippin' Sweets: Liquid Sugar

Station Two Instructions

Your teacher has set out several drink label cards representing beverages that you might find in your neighborhood grocery store.

Think about how much real juice is in each drink. *Which beverage do you think contains the most real fruit juice? Which one do you think contains the least?*

On a piece of paper, write down the percentage of real juice you think each drink contains.

When you've finished, look at the back of the cards to check your answers.

Were you surprised by how little real juice was present in some of these beverages? Which ingredients were listed first on the nutrition label? Where did juice fall in the list of ingredients? Can you find messages on the label that might provide clues to the real juice content of the drink?

Sippin' Sweets: Liquid Sugar



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Sippin' Sweets: Liquid Sugar Instruction Cards

Station Three Instructions

On this table are several sports and energy drinks.

Sports and energy drinks, more so than other sweetened beverages, can be expensive. Imagine you bought these sports and energy drinks every single day. At the end of the year, how much money would you have spent on these beverages?

On a piece of paper, calculate the cost of buying each beverage every day for one year.

_____ X 365 days = _____
Price of energy and sports drink Cost per year

Every time you purchase something, you are making a choice. If you spend money on one thing, it won't be available for something else.

Imagine if you replaced sports and energy drinks with water. What could you do with that money? As a group, brainstorm ways that you could spend that money on products or activities that would help you to live a healthier lifestyle.

Sippin' Sweets: Liquid Sugar

Station Four Instructions

On a piece of paper, write down what beverages you drink on a typical day at meals, snack times, when you exercise – and when.

For example: At 7:30 a.m. – I drink one small glass of 100% real orange juice.

At 12:30 p.m. – I drink a carton of skim milk.

At 3:45 p.m. – I drink a can of Coca Cola®.

As a group, talk about the beverages you normally drink every day.

Are you drinking beverages that are healthy or unhealthy for you? Can your group identify ways to make changes? Can your group suggest healthier alternatives?

Sippin' Sweets: Liquid Sugar



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Get Moving!

LEVEL - Upper Elementary and Middle School

Materials: 5 sets of the Get Moving! cards (on following page)

Learning Goals

In this activity, students will:

- Understand the importance of being physically active
 - Identify physical activities that fit common scenarios
1. Introduce the activity by explaining the importance of physical activity to leading a long and healthy life. Explain that aerobic exercise is the most desirable form of physical activity and should be done at least 1 hour a day. These exercises produce sweat, increased heart rate, heavy breathing, and a flushed face. Also explain that, though aerobic exercise is most desirable, it's important to just get moving.
 2. Ask students to give examples of aerobic exercise.
 3. Ask students to brainstorm reasons kids their age don't get enough exercise.
 4. Divide students into small discussion groups and distribute a set of Get Moving! situation cards to each group. Students will take turns. One turn consists of picking one card from the Who, What, Where, and When stacks and brainstorming an activity that will fit that particular situation. Students can help each other.

For example, if a student draws the following cards:

- Who – With their best friend
- What – Aerobic exercise
- Where – Outside at a park
- When – A busy day when you don't have much time for exercise

Some possible answers might be:

- Ride our bikes to the park to get there quickly and play half-court basketball for 30 minutes.
 - Rollerblade around the lake, rather than walk.
 - Jog to the park and practice dribbling and passing a soccer ball.
5. After students have had an opportunity to discuss physical activities as small groups, gather as a class to review some of these common situations and ask students to share their group's ideas. The goal is to come up with lots of ideas for increasing their level of physical activity.



Lifelinks

PBS Teacher Source Fitness Resources

Upper Elementary - http://www.pbs.org/teachersource/health_fitness/35-fitness.html

Middle School - http://www.pbs.org/teachersource/health_fitness/middle-fitness.html

CDC Recommendations

<http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/young.htm>

The CDC provides recommendations on how much daily exercise young people need and how you can support them in living active, healthy lives.



 BLUE ZONES™ CHALLENGE

Get Moving!

Who?

By yourself

 BLUE ZONES™ CHALLENGE

Get Moving!

Who?

With your best friend

 BLUE ZONES™ CHALLENGE

Get Moving!

Who?

With an adult family member

 BLUE ZONES™ CHALLENGE

Get Moving!

Who?

With a large group of friends

 BLUE ZONES™ CHALLENGE

Get Moving!

Who?

With a brother, sister, or cousin

 BLUE ZONES™ CHALLENGE

Get Moving!

What?

Aerobic

 BLUE ZONES™ CHALLENGE

Get Moving!

What?

Aerobic

 BLUE ZONES™ CHALLENGE

Get Moving!

What?

Just get moving

 BLUE ZONES™ CHALLENGE

Get Moving!

When?

On a Friday night

 BLUE ZONES™ CHALLENGE

Get Moving!

When?

A busy day when you don't have much time for exercise

 BLUE ZONES™ CHALLENGE

Get Moving!

When?

On a Saturday—you've got all day!

 BLUE ZONES™ CHALLENGE

Get Moving!

When?

After school

 BLUE ZONES™ CHALLENGE

Get Moving!

Where?

Outside at a park

 BLUE ZONES™ CHALLENGE

Get Moving!

Where?

Outside your school

 BLUE ZONES™ CHALLENGE

Get Moving!

Where?

At a gym

 BLUE ZONES™ CHALLENGE

Get Moving!

Where?

Inside your home