Elementary School Activities
Grades 3-5

Introduction

Thanks for your interest in this interdisciplinary project designed for upper elementary students. It's simple, rewarding, and a chance for your students to win a design competition! In this packet you will find suggested activities and handouts to help prepare your students’ contest entry.

In order to raise awareness about the importance of walking in New York, our suggested activities highlight the following three key categories:

Health: There are major health benefits to walking, from a healthy heart, to weight loss—and more.

Environmental Sustainability: With zero carbon emissions, walking is great way to go green.

Safety: We can do our part to be safe when we walk by staying alert and making ourselves visible. We can also ask drivers to be alert and slow down to make walking safer!

It’s up to you to decide which activity or activities to do with your students. Your studies can examine any of the many aspects of walking that are relevant to your contest entry and correspond to the competition guidelines.

Handouts

- (1) Neighborhood Walk
- (2) The Carbon Footprint of a Commute
- (3) School Zone Behaviors
- (4) Maria’s Safety Toolbox
- (5) How Many Steps?
- (6) NYC Walking Facts
- (7) PSA Planning Sheet
- (8) Safer Streets for Pedestrians
- (9) Outline Your Letter

About We’re Walking Here

New York City is a city of walkers. The majority of young New Yorkers walk to school, to transit, and around their city each day. We want to take the opportunity this October, the month of International Walk to School Day, to celebrate this achievement – and to encourage students and their families to walk more often.

Safe Routes to School (SRtS) is a national program that was born out of the need to protect school-aged children as they walk or bike to school. Here in New York City, we at NYCDOT’s Division of Safety Education and Outreach work directly with schools to educate children to be skilled pedestrians and cyclists. Additionally, NYCDOT is working to make streets safer by slowing traffic around schools and raising awareness about the importance of safe driving and biking behavior.
Classroom Activities

**Neighborhood Walk for Safety**

Categories: Safety  
Subjects: Social Studies, Science  
Time: 30-45 minutes  
Handout: (1) Neighborhood Walk

Lead the students in a discussion about the area around their school and the way the streets are designed. You can use the “Neighborhood Walk” handout that we’ve included. Distribute copies to each student and assign teams. Take a walk with your students on the block directly around the school or a few blocks that are close by. Have the students use the handout to write down observations for each category, determining what kinds of behaviors you see that are dangerous. When you return from your walk, discuss how these observations and notes can inform their competition entry. Were you surprised by what you saw? Why is it especially dangerous when drivers don’t pay attention? If a lot of kids walk to your school, but people are driving dangerously, what changes should be made to make walking safer in the area? What could your students teach drivers to make them safer? How can they walk more safely?

**Personal Carbon Footprint**

Categories: Environment  
Subjects: Environmental Science, Social Studies  
Time: 20-30 minutes  
Handout: (2)The Carbon Footprint of a Commute

Ask the class to define the term “carbon footprint.” If you want to give them an official definition, it’s a “measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide.” In other words, your personal carbon footprint is how much pollution you put in the air from your behavior in a day. For the purposes of this lesson, we will concentrate only on the carbon footprint of a commute to and from school. Use “The Carbon Footprint of a Commute” handout to go over the different amounts of pollution produced by the different modes of transportation. Why is walking so great for the environment?

**How We Get Around Town**

Categories: Health, Environment, Safety  
Subjects: Social Studies, ELA, Math  
Time: 20-30 minutes

Have the students list the various modes of transportation available in the city. Encourage them to think outside the box and include things like the ferry, skateboarding, scootering, etc. Now take a poll of the students. Ask them to raise their hands and identify the way they got to school this morning.
School Zone Behaviors

Categories: Safety
Subjects: Social Studies
Time: 20-30 minutes
Handout: (3) School Zone Behaviors

Distribute the “School Zone Behaviors" handout. Have students work with partners to list examples of ways they have seen drivers, pedestrians, and cyclists being unsafe. Come back together for a class discussion. Be sure to highlight the different ways in which dangerous car driving behaviors (distraction, fast turns, speeding) can have serious consequences for both pedestrians and cyclists. Have a discussion about why it is important for the streets to be safe for pedestrians given the percentage of walkers and their vulnerability. If they believe that people are generally driving dangerously in the area, encourage them to think about what particular changes need to be made to solve this problem. Do we need better education, engineering or enforcement? Do we need all three? If so, how would we go about doing any of these things? And in the meantime, what could we do to protect ourselves?

Safe Walking Skits

Categories: Safety
Subjects: ELA, Drama, Social Studies
Time: 20-30 minutes

Students work with groups to put together skits demonstrating safe and unsafe walking behaviors. Rearrange tables, chairs, and desks to create a “street” that pedestrians must cross. Have students take some time to prepare their skits. First do skits with students walking distractedly across the street. Have a discussion after the first skit to talk about how they could use their “personal safety tools” (see the above activity) to be safer walkers. What were people doing wrong? Then have students redo the skit taking into account suggestions from their peers, so they are walking safely. Some important points to highlight:

- STOP at the curb before entering the street
- LOOK both directions even on one-way streets
- If you cross where there are parked cars, STOP AGAIN at the edge of the parked cars.
- BE SURE drivers SEE YOU. Hold up your hand to make yourself more visible to large vehicles such as trucks and buses.
- ALWAYS STAY ALERT for bad drivers!

Using Your Safety Toolbox

Categories: Safety
Subjects: Social Studies, Health, P.E.
Time: 20 minutes
Handout: (4) Maria’s Safety Toolbox

Ask students to share some of their ideas about what they do to keep safe when walking around their school. How do you use your personal safety tools (your eyes, ears, hands, feet, brain), to help you cross safely? Distribute the handout titled “Maria’s Safety Toolbox” and have students fill it out. Go over the handout as a group. What would be in Maria’s “personal safety toolbox” to keep her safe when she crosses the street? What do you do to stay safe? Is there heavy traffic on your way to school? Do the vehicles around you travel fast? Connect the handout to the actions we must take in real life to be safe.
P.E. Class Walking Day
Categories: Health, Safety
Subjects: Phys Ed, Health
Handout: (5) How Many Steps?
(6) NYC Walking Facts
Time: 45 minutes - 1 hour

Incorporate a walking theme into Physical Education class. Take a look at the “How Many Steps” handout and go for a walk around the school, counting steps with a pedometer or simply by counting each step. Play walking songs and have a dance party before or after a long walk (we recommend Beyonce’s “Move Your Body” YouTube dance workout). Ask the students to share stories about walking for exercise. Talk about ways we can be safe when we walk, and why walking counts as a key form of exercise. You can also use our “Walking Facts” handout to further connect to the information.

Public Service Announcements
Categories: Health, Safety, Environment
Subjects: ELA, Social Studies
Time: 1.5 hours
Handout: (7) PSA Planning Sheet

Create posters or flyers promoting walking and safe driving. As a class, you can define what a Public Service Announcement (PSA) is. You can help them think of some examples of PSA campaigns that have been effective (around smoking or obesity, for example). You can explain to the class that we can make our own, to be advocates in our communities. Students can work alone, with partners, or in groups to make their PSAs. We’ve included a planning sheet you can use. They can present these as posters or flyers to their classmates, the rest of the school, or leaders in their community. Put up posters at the front entrance for the month of October, or hand out flyers at a school-wide event.

Walkability Maps
Categories: Health, Safety
Subjects: Social Studies, Geography
Time: 1.5 hours

Create “walkability” maps by surveying the area around the school. Create a set of criteria as a class such as looking at street markings, how safe the street crossings are, if there are places to sit and rest along the route etc. Then go outside to conduct research, and then split into groups to create the maps. You can use NYC Oasis [www.oasisnyc.net/map.aspx] to find a good aerial view of your school zone. Have a discussion about the areas where you can walk more safely and easily than others. Why is it important to be able to walk to get around? Use these maps as a jumping off point for your design ideas.
How Many Steps?

Categories: Health, Safety
Subjects: Math, Health, P.E.
Time: 45 minutes
Handout: (5) How Many Steps? (6) NYC Walking Facts

Take a look at the “How Many Steps?” handout. Estimate how many steps it will take to go for a walk around your school. Then, go for a walk around your school while counting your steps. Use math calculations to estimate how many steps the students take in a day. Use the “NYC Walking Facts” handout to note the health benefits of walking. You can extend the project to keep logs of walking time or steps; calculate speeds and distances, and determine individual and group averages. For a bigger challenge, encourage the students to walk 10,000 steps each day for a set period of time. This is the amount of steps recommended by the President’s Challenge.

*Please note, this activity can also be done with pedometers.

Oral History Project

Categories: Health, Safety, Environment
Subjects: History, Social Studies
Time: 1 hour

Visit a local senior center or retirement community and interview older adults about how streets in the area used to be when they were children or young adults. How did they get around their city? Did they do a lot of walking? What were the transit options like? Have the streets changed since? Do they feel safe in the area? Why or why not? What are their recommendations for making the streets safer for seniors to walk today?

Photography Project

Categories: Health, Safety, Environment
Subjects: Geography, Social Studies, Art
Time: 1.5 hours

Students should photograph important things that are beautiful, interesting, and/or dangerous about the streets around the school. Take a look at the pictures. Anything they would like to change? What can you do about the streets? Have students work with groups to draw their ideas for improved streets by layering transparent vellum/tracing paper over print outs of these photographs. They should also create a key to their designs and write up accompanying descriptions. Or if time is limited, just have them write up verbal descriptions of proposed changes. Put up these photos and proposed changes in an exhibit somewhere in the school or a nearby community center.
Video Conference
Categories: Health, Safety, Environment
Subjects: Social Studies
Time: 45 minutes

Video conference with another classroom in the city, preferably from another borough, and discuss walking in that area. How do most students get to that school each day? What are streets like in the area? How is it similar or different from how students get to your school?

Alternatively, find a school in a suburban or rural location, or another city, to discuss the differences between NYC and their location.

Sketch Safer Streets
Categories: Safety
Subjects: Social Studies, Art
Time: 20-30 minutes
Handout: (8) Safer Streets for Pedestrians

Brainstorm ways that we can design streets to help pedestrians be more protected from car traffic. Distribute our “Safer Streets for Pedestrians” worksheet and have students fill it using the “Safety Tools” section. Talk about each of the suggestions and how it helps make streets safer for pedestrians. Then discuss their ideas for ways to be a safer walker.

“Dear Elected Official”
Categories: Health, Safety, Environment
Subjects: ELA, Social Studies, Government
Time: 45 minutes-1.5 hours
Handout: (9) Outline Your Letter

Identify ways in which streets could be improved to make for safer walking. Discuss letter writing as a form of political action, and why it is a good way to make your voice heard. First you need to collect some information about your streets to figure out what is wrong (you can brainstorm in groups using the “School Zone Behaviors” handout). We’ve included a worksheet, “(9) Outline Your Letter,” if you want to take more time to plan out your letters in advance. Identify the appropriate official to send letters. Find your school zone’s elected officials by typing in the zip code at the following website: www.congress.org/congressorg/dbq/officials/.
**Walking Banner**

Categories: Health, Safety, Environment
Subjects: Art, Health, Social Studies

Have a discussion about the social, health, environmental and cost benefits of walking to get around. Think about what kind of images portray these themes. Make a big banner about walking in September, and put up the banner at the front of the school for the month of October to celebrate walking.

**Wall Chart or Counting Jar**

Categories: Health, Safety, Environment
Subjects: Art, Health, Social Studies

For a week in October, put up a chart or jars in the front of the school with all the different modes of getting around (walking, biking, transit, taxi, car, ferry, other) and have students tick a mark on the chart or put a counter (like a penny or pebble) in large jars for the way they got to school that day. Encourage classrooms to discuss the numbers. Why do so many of us walk and take transit in New York City? If you are in a neighborhood where this isn’t the case, why aren’t more of us walking? What are the barriers? If many of the students are bused, talk about this and the importance of sharing our ride for environmental health.

**School-wide Walk**

Categories: Health, Safety, Environment
Subjects: Art, Health, Social Studies

Organize a school-wide walk around the block. Greet walkers with stickers, gifts and refreshments. Public officials can be invited to say a few words. Carry signs that display pedestrian safety messages - or messages for the passing cars and bikes. Have a nutritious breakfast before or after the walk. Wear costumes, and sing or play walking songs. You could hold the walk during lunchtime recess or as an outdoor assembly.

**School-wide Active Transportation Competition**

Categories: Health, Safety, Environment
Subjects: Art, Health, Social Studies, Science, Math

Create a competition to log miles that students have accumulated via walking, transit, and biking. Classes can compete against each other or different grades, or the school could work as a team to accumulate green miles towards a common goal, such as “Getting To Antarctica.” Have an assembly as a culmination of this school-wide project to celebrate sustainable miles logged.

Worksheets
Grades 3-5
# Neighborhood Walk

Walk around your neighborhood with your team for twenty minutes. Look at the behaviors of pedestrians, cyclists, and drivers, and note how many people you see doing each one of the dangerous behaviors. What should they be doing differently?

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>How many people do you see?</th>
<th>What should they be doing differently?</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRACTED WALKING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(using ipod, talking on cell phone, talking to friends)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPEEDING CARS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cars that speed through yellow lights, are going more than 30mph)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WALKING AGAINST TRAFFIC SIGNAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(crossing the street during a “don’t walk” signal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTRACTED DRIVERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOT “BIKING SMART”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(going the wrong way, adults on sidewalks, no helmet)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(2) The Carbon Footprint of a Commute

Let’s say Maria lives 5 miles from school. That means she travels 10 miles per day to and from school.

If she:

rode in an SUV, that would put 16 pounds of carbon dioxide in the air each day.

rode in a typical car, her drive would make 12 pounds of carbon dioxide.

rode in a hybrid car, her car would produce 4 pounds of carbon dioxide.

took the bus, it would create 5 pounds of carbon dioxide.

rode the train or subway she would put 2 pounds of carbon dioxide into the atmosphere.

walked, biked, or skated, she would create 0 carbon dioxide.
Graph the Carbon Footprint of Maria’s 10-mile Commute

1. Are there any easy changes you could make to the way you get to school to lower your personal carbon footprint? Could you walk more often?

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________________________________________________________________________
(3) School Zone Behaviors

Brainstorm with a partner and list the different unsafe behaviors you see car drivers, cyclists, and pedestrians do around your school every day.

DRIVERS:

What could they do differently?

CYCLISTS:

What could they do differently?

PEDESTRIANS:

What could they do differently?
Maria’s Safety Tools

How can Maria use her personal safety tools—her eyes, ears, hands, feet, brain—to help her cross safely?

**BRAIN**

**EYES**

**HANDS**

**FEET**
## (5) How Many Steps?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Steps per Minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball (shooting baskets)</td>
<td>136</td>
</tr>
<tr>
<td>Basketball game</td>
<td>242</td>
</tr>
<tr>
<td>Bicycling</td>
<td>121 – 364</td>
</tr>
<tr>
<td>Billiards/pool</td>
<td>76</td>
</tr>
<tr>
<td>Bowling</td>
<td>91</td>
</tr>
<tr>
<td>Cooking</td>
<td>61</td>
</tr>
<tr>
<td>Football</td>
<td>242</td>
</tr>
<tr>
<td>Frisbee</td>
<td>91</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>121</td>
</tr>
<tr>
<td>Health club</td>
<td>167</td>
</tr>
<tr>
<td>Hiking</td>
<td>182</td>
</tr>
<tr>
<td>Hockey (field/ice)</td>
<td>242</td>
</tr>
<tr>
<td>Ice skating</td>
<td>212</td>
</tr>
<tr>
<td>Inline skating</td>
<td>364</td>
</tr>
<tr>
<td>Jogging</td>
<td>212</td>
</tr>
<tr>
<td>Jump rope</td>
<td>303</td>
</tr>
<tr>
<td>Roller skating</td>
<td>212</td>
</tr>
<tr>
<td>Rowing machine</td>
<td>212</td>
</tr>
<tr>
<td>Rugby</td>
<td>303</td>
</tr>
<tr>
<td>Running (5mph – 12 minute miles)</td>
<td>242</td>
</tr>
<tr>
<td>Shopping</td>
<td>70</td>
</tr>
<tr>
<td>Skateboarding</td>
<td>152</td>
</tr>
<tr>
<td>Skiing</td>
<td>182 - 242</td>
</tr>
<tr>
<td>Ski mobiling</td>
<td>212</td>
</tr>
<tr>
<td>Sledding</td>
<td>212</td>
</tr>
<tr>
<td>Soccer</td>
<td>212</td>
</tr>
<tr>
<td>Softball</td>
<td>152</td>
</tr>
<tr>
<td>Stretching, yoga</td>
<td>76</td>
</tr>
<tr>
<td>Swimming</td>
<td>182 - 303</td>
</tr>
<tr>
<td>Tennis</td>
<td>212</td>
</tr>
<tr>
<td>Weight lifting</td>
<td>121 – 182</td>
</tr>
<tr>
<td>Wrestling</td>
<td>182</td>
</tr>
</tbody>
</table>

How many steps (on average) do you take in a day? **7,500**

How many steps (on average) do you take in a lifetime? **216,262,500**

How many steps does it take to walk a mile? **2,000** (range 1,900-2,400)

How many steps does it take to walk a block? **200**

Estimate how many steps it takes to walk around your school:
NYC Walking Facts

Safety

In a crash, pedestrians are in more danger than the people in a car.

When it comes to traffic danger when walking, children, teens, and the elderly are the most at risk.

Children hit by a car while crossing against the signal are more likely to be seriously hurt than an adult.

Drivers not paying attention cause at least 1 in 3 crashes where pedestrians are seriously hurt.

Transit riders are much safer than people driving in cars.

In New York City, 3 in 4 serious pedestrian crashes happen at intersections.

Almost half of serious pedestrian crashes happen in the late afternoon and early evening.

Most New Yorkers do not know the city’s speed limit is 30 m.p.h.
(6) NYC Walking Facts

Health

New Yorkers who take public transportation get almost half an hour more daily exercise than those who drive.

People who walk to get around make their heart strong and stay healthy.

People that live in areas with more high quality sidewalks are more active.

The most air pollution is in areas where there is the most traffic.

If fewer cars are on the roads, air quality will improve.

People who walk or bike to work or school get more than an hour of exercise each day.
Transportation is the largest single source of air pollution in the United States.

Walking produces NO pollution!

Getting to work, only one in four New Yorkers drive; the rest take public transit, walk, or bike.

One in every four transit trips in the US is made in New York.

Without limiting carbon emissions, the world’s average temperature will keep going up and cause environmental problems that affect plants, animals, and humans.

Cutting emissions would keep world average temperatures from going up too high, and will be better for the planet!
(7) PSA Planning

Brainstorm

What did you learn about walking from doing this project that you would want to teach others?

Focus

What one key thing would you tell people to do differently to make walking more popular?

Why?

Why should they make this change in their behavior?

Art

How will you design your message to look?
(8) Safer Streets for Pedestrians

What safety tools should pedestrians use to get across the street safely? Fill out the street scene with safety tools and potential dangers. Use the box on the right for ideas and come up with your own.
1. What do pedestrians need to look and listen for to be safe?

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2. What else did you add to your picture that wasn’t already suggested? How could we design streets to be even safer?

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________________________________________________________________________
(9) Outline Your Letter

Use this outline to plan your letter to an elected official.

TOPIC
What subject will you write about?

PURPOSE
What improvements will you ask for?

LETTER RECIPIENT
Who will you write to? If you don’t know the official to contact, ask your teacher for help.

Now write notes for yourself about what information you will include in your introduction, 2-3 body paragraphs, and conclusion:

INTRODUCTION
(9) Outline Your Letter (continued)

BODY PARAGRAPH #1

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BODY PARAGRAPH #2

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BODY PARAGRAPH #3

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CONCLUSION

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