# TEACHING CHILDREN HOW TO WALK AND BIKE SAFELY

Resource Manual

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### Introduction

This manual is a guide to the Teaching Children Pedestrian and Bicycle Safety presentations created to educate children in grades Kindergarten-8. The curriculum was designed to assist police officers, and others who are called upon to provide safety instruction to schoolchildren in assemblies and classrooms. The PowerPoint presentations, activities, and videos are intended to be informative and to engage children through discussions and physical movement.

Activities and videos are embedded in the PowerPoint presentations. However, if you do not have access to a laptop, projector, or speakers, have limited time or technical issues, or if you choose not to use these presentations, you can conduct a lesson using the activities and other information described in this manual.

You can treat this manual as a menu. Depending on how much time you have to conduct your presentation and based on what you need to convey in your lesson, you can choose what to use as a part of your lesson. For example, you may choose to use only a few slides from the PowerPoint presentation, showcase one video, and practice an activity or two.

If you cannot access the Bicycle Safety videos, backup PowerPoint presentation slides are available to convey the necessary knowledge. Specific bicycle safety resources are included in a section of this manual.

In order to be prepared to conduct your presentations, we recommend that you review this manual and, specifically, the activities section. At the end of this manual, you will find links to some resources that may be useful. Please view those links for additional information and support.

If you have any questions, please feel free to contact the New Jersey Safe Routes to School Resource Center Help Desk:

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# Tips for Working with Schools & Students

### A little planning goes a long way when working with schools and students:

### Set expectations early

- Understand from the beginning what the school is looking for.
- What setting will your program take place in, i.e., classroom, gym, auditorium?
- How much time is available for your presentation, and what resources are available (projector, screen, computer)?
- Make sure that you have a "day of event" contact who will be able to assist you should any issues arise.
- If you are working at the district level, make sure you have an individual contact for each school.

### Timing is important

- If you are approaching a school to organize an event, be sure to avoid hectic times.
- Back-to-school time in September is usually quite busy, however many schools might welcome an event in October during International Walk and Bike to School Month.
- State testing for all public school students in grades 3-8 begins in late April and extends through the middle of May.
- As the end of the school year approaches, teachers are more flexible with their classroom time and welcome others to teach a lesson. Some schools may be looking for activities during this period.

### Don't let the teachers off the hook

 Whether you will be presenting in an auditorium or a classroom setting, teachers should be present during your program to assist with student management and to reprimand students if necessary.

### Arrive early with technical backup

- Always expect the unexpected and ensure you have plenty of prep time.
   Setting up computers and ensuring file compatibility can take much longer than you might think.
- Even if you have ensured that the school will have a projector and computer for you to use, things may still go wrong.
- Be sure to have a backup plan. Bring a copy of any presentation files in both PowerPoint and as a .pdf so you have another option in case the school has a different version of PowerPoint and your file won't open.
- If you have access to a computer and projector of your own, it may be a good idea to have them with you as a back-up.
- If you are planning to show videos, make sure there is an internet connection available to access the video and a sound system so that the video can be heard.
- If all of your technology preparation falls, have a plan for implementing lessons that can be modified for use without technology.
- This Resource Guide provides activities that can be used in these situations.

### Ensure your presentations are interactive

- Delivering a lecture-style presentation is a sure way to lose the focus of children.
   Make sure to get the students involved from the beginning.
- If it is a small group, perhaps ask them to introduce themselves.







# Tips for Working with Schools & Students

- In a larger group, you can ask an interactive opening question such as "raise your hand if you walk to school" or "raise your hand if you ride a bicycle." Make sure you ask questions throughout the presentation and look for opportunities to ask students for their thoughts or opinions.
- In large groups, do your best to ensure you have engaged the whole group. Instead of asking only one child for an answer, perhaps offer multiple choices and then have the children raise their hands to indicate what they think is the correct answer.
- Bring props or items such as a bicycle or helmet to engage the students in an interactive discussion.

### Use movement to get kids focused

- Movement can be very helpful for keeping children interested and motivated to pay attention during your lesson. Many of the lessons in this curriculum incorporate movement.
- When asking a large group of children a question, you can ask them to stand up to indicate which answer they think is correct.
- Quick breaks to stand up and stretch can also help with focus. If you are doing a long presentation or lesson, try to break the lesson up with some sort of movement or physical activity. For example, ask the students to stand up if they choose answer A.
- Take into consideration that there may be children with disabilities present. Communicate with teachers before beginning your presentation and ask about the children in the classroom and if there is anything else you should know.

### Make it personal

- Try to relate your stories to the children's lives, speaking about real places in their community that they are familiar with or relating the lesson to common situations they may find themselves in.
- Tell a story to relate the lesson to yourself. Students tend to pay more attention to a lesson when it connects to their life or tells a personal story that helps them relate to the instructor.
- Adapt the presentation to the school neighborhood by using photos of local intersections and crossing guards so that children recognize their route to school.

### Use "I" language

Instead of telling children to "quiet down," say, "I get distracted when there is too much talking." By using the "I" language, you have made the situation about yourself and provided a reason why the extra talking should stop. Speaking to children directly and using subjective language often makes a bigger impact.

### Praise publically, reprimand privately

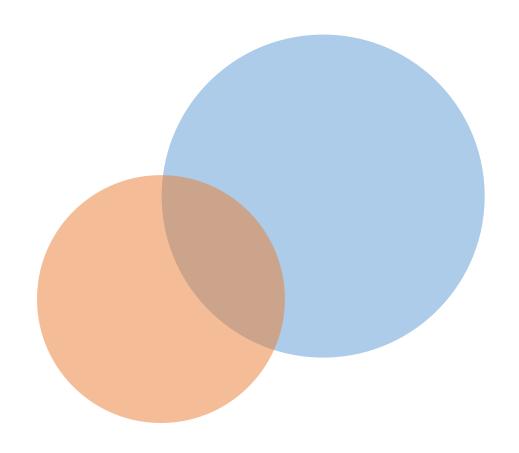
Teachers should be present during your program. Whenever possible, student management and any reprimands should be left to them. If you must reprimand a student, do your best to do so as privately as possible. On the other hand, take every opportunity to publicly praise students who are doing well.







# Pedestrian and Bicycle Safety Activities Kindergarten-Grade 2 Grades 3-5



# Crossing Safely: Edge

**LESSON OVERVIEW** 

SUGGESTED GRADE LEVEL K 1 2 3 4 5 6 7 8

SUGGESTED TIME SETTING 5 minutes

LEARNING STYLE ACCESS auditorium classroom gymnasium outside

### **OVERVIEW**

This activity teaches children about "the edge," by demonstrating what happens to a pencil when it is on the desk versus when it falls to the ground; the difference between being safe and unsafe.

### **MATERIALS**

Desk (or any tabletop surface), pencil

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### MODIFICATIONS IF NOT USING THE POWERPOINT PRESENTATION

Go through the exercise by going through steps 1a and 1b.

### SOURCE

Maryland Pedestrian and Bicycle Safety Education Program

### **Crossing Safely: Edge**

### **Purpose**

This activity teaches children about "the edge," by demonstrating what happens to a pencil when it is on the desk versus when it falls to the ground; the difference between being safe and unsafe.

### Lesson

### 1. Use the following to speak to the class:

- a. Say: Let's think about how to cross the street safely. Everyone, please take out a pencil. Place your pencil at the edge of your desk. Now, drop the pencil off the edge to the ground.
- b. **Ask:** What happens to the pencil when it goes off the edge? **Explain:** When talking about crossing the street, the word edge means the line between safe and being unsafe.
- c. **Ask:** Where is the edge in the picture on your left? **Action:** Press key for red line animation to pop up.
- d. **Ask:** Where is the edge in the picture on your right? **Action:** Press key for red line animation to pop up.

**Note:** This exercise can be used at Slide 3 of the K-2 and 3-5 PowerPoint presentations. Make sure you are in "presentation mode" if you are using the presentations. If you are not using the presentations, you can still use this exercise by going through steps 1a and 1b.



# **Use Your Safety Toolbox**

### **LESSON OVERVIEW**

SUGGESTED GRADE LEVEL K 1 2 3 4 5 6 7 8

SUGGESTED TIME SETTING 5 minutes

LEARNING STYLE ACCESS auditorium classroom gymnasium outside

### **OVERVIEW**

This activity engages children to use their senses and think about crossing, teaching them the correct steps to crossing the street safely.

### **MATERIALS**

None

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally. Use slide with images and point to body parts.

### MODIFICATIONS IF NOT USING THE POWERPOINT PRESENTATION

Come prepared to go through all the steps of the exercise.

### SOURCE

Bicycle Transportation Alliance 2nd Grade Pedestrian Safety Curriculum

http://www.saferoutesnj.org/resources/education/

### **Use Your Safety Toolbox**

### **Purpose**

This activity engages children to use their senses and think about our personal crossing safely toolbox, teaching them the correct steps to crossing the street safely.

### Lesson

- 1. Use the following when speaking to the class:
  - a. Say: Everybody please stand up!

**Say:** Now, close your eyes, and think about walking on the sidewalk and imagine reaching a crosswalk.

Action: stamp your feet

b. Say: Now, STOP. What do you usually hear at the intersection?

**Answer:** car engines, fire trucks, car horns.

Say: If it is quiet, there are no vehicles moving.

Say: Open your eyes, look left-right-left again and over the shoulder, and if no

vehicles are moving, you can start to cross.

Say: Remember to stay alert and listen to your surroundings as you are crossing. We are going to talk about the tools you bring with you every day that can help you

be a safer pedestrian.

c. Action: Point at your eyes

**Ask:** Who can name one of these tools?

**Answer**: Eyes

**Ask:** What do our eyes help us do?

**Answer**: They help us see

Ask: What should we be looking for?

**Answer**: Cars, buses, trains, other pedestrians, bikes crosswalks, sidewalks.

**Say:** We should also be looking for eye contact. Eye contact is when you can see someone's eyes and they are looking at you. Making eye contact is a good way to make sure that a driver sees you and knows you are there. Everyone make eye contact with me right now.

Action: Look at each student.

**Say:** Now, think about walking on the sidewalk and imagine reaching a crosswalk.



**Action:** stamp your feet

d. *Action:* Point at your ears and

Ask: Who can name another tool?

**Answer**: Ears

**Ask:** What do our ears help us do?

Answer: They help us listen

**Ask:** What should we be listening for?

**Answer**: Cars, trucks, buses, trains, sirens, bike bells, and instructions from crossing

guards

e. **Say:** Be sure to always listen to crossing guards and to stay on the corner until the crossing guard tells you it is safe to cross.

Action: Point at your head and

Ask: Who can name another tool?

Answer: Brain.

**Ask:** What does our brain help us do?

**Answer:** Think.

**Ask:** What should we be thinking about?

**Answer:** We should be thinking about making safe choices like using our eyes and ears to watch out for cars, walking across streets instead of running, looking left-right-left again and over the shoulder before crossing, and always listening to crossing guards.

f. Say: You bring these important tools with you every day wherever you go.
Remember to use them to stay alert and to observe and listen to your surroundings as you're walking and crossing.

<u>Note:</u> This exercise can be found at Slide 16 of the K-2 presentation or Slide 15 of the 3-5 presentation. If you are not using the presentations, you can use this exercise to talk through all steps.

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# Pedestrian Safety Rhyme

### **LESSON OVERVIEW**

SUGGESTED GRADE LEVEL K 1 2 3 4 5 6 7

SUGGESTED TIME SETTING 10 minutes

LEARNING STYLE ACCESS auditorium classroom gymnasium outside

### **OVERVIEW**

This rhyme engages children using hand motions to help them memorize the steps to crossing safely.

### **MATERIALS**

None

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally. Point to various body parts.

### MODIFICATIONS IF NOT USING THE POWERPOINT PRESENTATION

Come prepared to go through all the steps of the exercise and memorize the pedestrian safety rhyme ahead of time.

### SOURCE

Bicycle Transportation Alliance 2nd Grade Pedestrian Safety Curriculum

### Pedestrian Safety Rhyme

### **Purpose**

This rhyme engages children using hand motions to help them memorize the steps to crossing safely.

### Activity

### PEDESTRIAN SAFETY RHYME

every time at the edge of the street;

Use your 🥳 before your 😴 ;

Make sure you  $\ \ \,$  every sound;

Look III, look Right, look all around.

Bicycle Transportation Alliance

### Lesson

- 1. Do each hand motion as you say each line.
  - a. Say: Stop every time at the edge of the street.

**Action:** Hold your hand up with palm out to signal stop. Students repeat.

b. Say: Use your head before your feet.

**Action:** Point to your head and then feet. Students repeat.

c. **Say:** Make sure you hear every sound.

Action: Cup your hands behind your ears and turn from side to side. Students repeat.

d. Say: Look left, look right, look all around.

**Action:** Cup your hands above your eyes and turn your head slowly left to right, right to left, and look over your shoulders. Students repeat.

2. Have the students repeat the rhyme line by line after you. Recite the rhyme all together. Repeat until the kids can recite the whole rhyme.

a. **Say:** Everyone stand up and put your hands in the air, now down to your toes, now in the air again. Shake out your arms. Now we are ready.

**Say:** I'm going to say each line of the poem and you repeat the line after me.

**Say:** Listen to each line of the poem when I say it and look at the hand motions. Repeat the lines and the motions after me.

**Action:** Repeat rhyme and motions

**Note**: Other options would be to say the rhyme loudly, slowly or quickly.

### 3. Discuss the rhyme.

a. **Say:** Let's talk about each line. We stop every time at the edge of the street, so we have time to use everything in our toolbox. We use our head before our feet to make safe decisions before we step into the street. We make sure we hear every sound, so we won't miss a thing. And we look left, right, and all around."

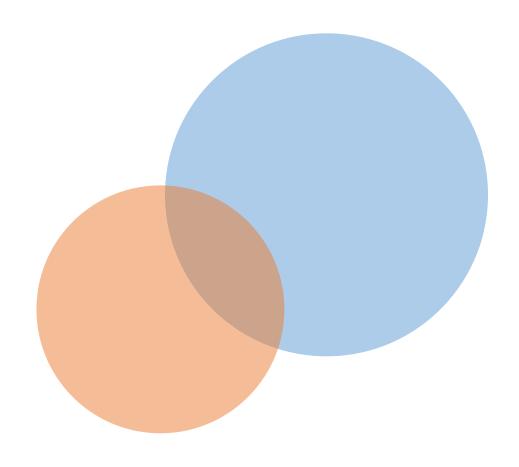
**Ask**: "Does that mean to look up in the sky?

Answer: No.

**Ask:** Does that mean look down on the ground?

**Answer:** No. That's right because there are no cars coming from under the ground or in the sky. Cars are using the roads. So I am going to look around for cars on the roadway.

# Pedestrian and Bicycle Safety Activities Grades 6-8



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# Traffic Safety Game Show

**LESSON OVERVIEW** 

SUGGESTED TIME SETTING

30 minutes

LEARNING STYLE ACCESS

auditorium classroom gymnasium outside

### **OVERVIEW**

This PowerPoint presentation is set up like "Jeopardy." The game asks questions regarding rules of the road, safe walking, and safe cycling.

The game must be displayed in "presentation mode" in PowerPoint.

### **MATERIALS**

Timer (phone, buzzer, bell), prizes

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### MODIFICATIONS IF NOT USING THE POWERPOINT PRESENTATION

If you are not using the Traffic Safety Game Show PowerPoint, you can use the Pedestrian Safety Quiz questions in the Resource Manual and discuss the answers with the students.

### SOURCE

Sacramento, California Safe Routes to School, http://www.saferoutesnj.org/resources/education/

### Traffic Safety Game Show

### **Purpose**

This PowerPoint presentation is set up like "Jeopardy." The game asks questions regarding rules of the road, safe walking, and safe cycling. The game must be displayed in "presentation mode" in PowerPoint. The full gameshow presentation is in a separate PowerPoint

WALK THIS WAY	SAFE CYCLING	RULES OF THE ROAD
10 points	10 points	10 points
20 points	20 points	20 points
30 points	30 points	30 points
40 points	40 points	40 points

Presentation and you will need to open it up separately to use it.

### Lesson

- First, split the group into two teams.
- Teams choose a name or you can use the school colors. identify a spokesperson.
- Ask a helper to act as timer.
- Ask a helper to act as scorekeeper.
- Describe how the game will work.
- 1. Call on a student from the first team to pick a category.
- 2. Click on the colored oval for the first question in that category. The question will appear.
- 3. State the question.
- 4. The student can talk to his/her teammates and decide what the answer might be. Give them 15 seconds to respond.
- 5. The student answers. If they are correct, the team gets the points. If they are incorrect, they do not get the points.
- 6. You can give the answer by clicking on the slide. Or you can ask the second team if they know the answer. Call on one person to answer. If they are correct, the second team gets the points. If they are incorrect, they do not get the points.
- 7. Then ask the second team to choose a category. Ask the first question in the category. To get back to the main slide, click the "house-like" icon on the bottom right side of the slide and it will take your straight there.
- 8. Continue until all questions are answered either by the teams or by you.

### Tips:

Prizes for members of the winning team might be something small to hand out to students on the winning team, or you might use an activity such as the following:

- 1-minute dance of their choice to be performed in front of the audience
- Victory cheer
- Lead an all-student sing-along

DO NOT use food or candy as a prize. Many schools have nutrition policies or policies to protect children with food allergies, both of which would prohibit the presence of food or candy in the classroom or auditorium.

### Bicycle and Pedestrian Safety Quiz

<u>Instructions:</u> If you are not using the Traffic Safety Game Show PowerPoint, you can use the following quiz questions below and discuss the answers with the students. With multiple choice questions, give the students all the answers and have students raise their hands as you list them. *Answers are bolded.* 

- 1. What should you do before stepping off a curb?
  - a. Stop, then run across the street.
  - b. Don't stop, just keep moving.
  - c. Stop, look and listen.

Look left, right, left, over your shoulder, and ahead.

- 2. What should you do if you are halfway across the street and the WALK signal changes to the DON'T WALK signal?
  - a. Keep crossing at a normal pace
  - b. Turn around and go back
  - c. Run the rest of the way across the street
- 3. Why is it dangerous to step out from between two parked cars to cross a street?
  - a. The parked cars are blocking you
  - b. It is hard for you to see what is going on in the street
  - c. Drivers do not expect you to be crossing in these places
  - d. All of the above.
- 4. When there is no sidewalk, do you walk facing oncoming cars or do you walk in the same direction as cars?
  - i. In the same direction as cars
  - ii. Facing oncoming cars
- 5. When bicycling on the road, do you ride facing oncoming cars or do you ride in the same direction as cars?
  - i. In the same direction as cars
  - ii. Facing oncoming cars
- 6. How can you avoid the "Door Zone"?
  - a. Ride 3 feet away from parked cars to avoid getting hit if a car door opens suddenly
  - b. Ride as close to parked cars as possible
  - c. Don't ride on the sidewalk
- 7. According to New Jersey law, everyone under what age must wear a helmet when riding a bicycle, scooter, skateboard, rollerblades, etc.?
  - a. 14
  - b. 16
  - c. 17

- 8. When riding on a multi-use bike path you will often need to pass people who are walking. What do you do to safely pass someone on the multi-use path?
  - a. Slow down
  - b. Let them know you are there
  - c. Look over your shoulder
  - d. Look up the path ahead of you
  - e. All of the above
- 9. Who has the right of way on the sidewalk a bicyclist or a pedestrian?
  - a. The bicyclist
  - b. The pedestrian
- 10. True or False: You do not have to stop at a STOP sign if you are on a bike and there are no vehicles coming.
  - a. True
  - b. False.

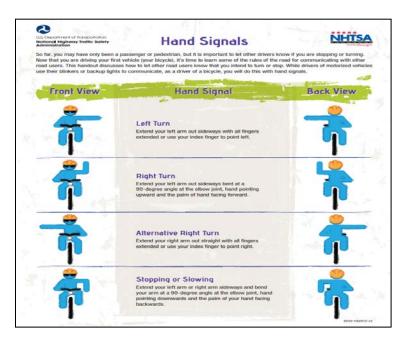
Bikes are subject to the same laws as cars.

- 11. True or False: If you are at a crosswalk, you have the right to step into the crosswalk at any time to cross the street.
  - a. True
  - b. False.

Pedestrians cannot step into the street in front of a vehicle when the driver does not have time to stop.

12. Demonstrate how you would signal to make a left or right turn, or stop when riding a bicycle.

### **Answer:**



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# Traffic Haiku

### **LESSON OVERVIEW**

SUGGESTED TIME SETTING

20 minutes

LEARNING STYLE ACCESS

auditorium classroom gymnasium outside

3

### **OVERVIEW**

Students will compose a haiku poem from the perspective of a walking/biking safety device and present it to the class. Haiku poems have three lines. The first and third line have five syllables, the second line has seven syllables. The lines rarely rhyme.

### **MATERIALS**

Pencil, paper

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### SOURCE

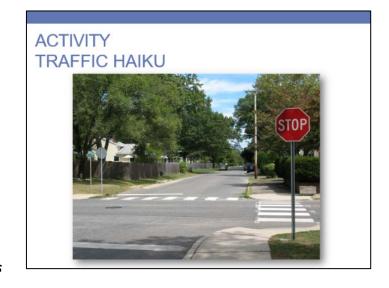
SRTS NEBRASKA

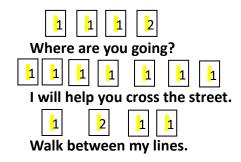
### Traffic Haiku

### **Purpose**

Students will compose a haiku poem from the perspective of a walking/biking safety device and present it to the class. Haiku poems have three lines. The first and third line have five syllables, the second line has seven syllables. The lines rarely rhyme.

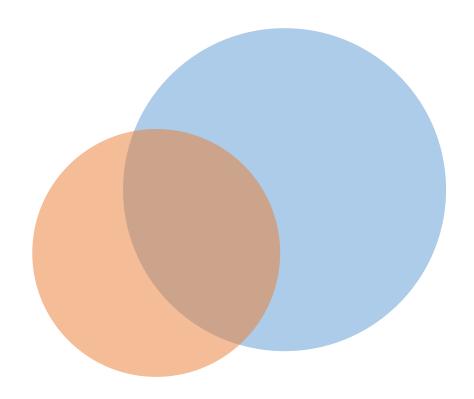
Example: The numbers on top of the words indicate the syllable.





- 1. Assign students to pairs or small groups, depending on the class size. Students choose a traffic safety device (examples: stop sign, speed bump, sidewalk, helmet, traffic signal, curb, crosswalk, WALK signal, DON'T WALK signal).
- 2. Instruct students to write a haiku from the perspective of their walking/biking/traffic safety device, as if the device could talk.
- 3. Request that students consider what the device likes, doesn't like, what it would like to improve about its life, its sense of purpose, its friends, its fears and hopes, etc.
- 4. After 5-7 minutes of writing, give each group a turn to present their work.

# **Pedestrian and Bicycle Safety Videos**



### Pedestrian & Bicycle Safety Videos

These videos can be used to explain pedestrian and bicyclist safety concepts to kids. There are both English and Spanish versions and the videos can be an engaging way to teach students.

Test internet access and sound systems in school classrooms and auditoriums before you begin your lessons. Be prepared with other materials in case you have technical difficulties; use alternative lessons that present the same concepts.

### **Videos Grades K-2**

- Pedestrian Safer Journey- US DOT FWHA (Video Time 5:10)
   https://www.youtube.com/watch?v=Dv0NQdUveC4&feature=youtu.be
- Bicycle Safety: Always Wear A Helmet- WonderGroveKids (Video Time 2:26)
   https://www.youtube.com/watch?v=NF8CiNXEmcU

### **Videos Grades 3-5**

- Bicycle Safer Journey- US DOT FHWA (Video Time 5:02)
   https://www.youtube.com/watch?v=dkoVxBnnGko
- Learn The ABC QUICK CHECK- The Active Transportation Alliance (Video Time 3:14)
   (Alternative: Bring and use your bike)
   https://www.youtube.com/watch?v=xGorQe\_wW-0
- Cross This Way- NYC DOT (3-8) (Video Time 4:15)
   <a href="https://www.youtube.com/watch?time">https://www.youtube.com/watch?time</a> continue=2&v=YawXV1AUxlg -------- REVIEW EDUCATORS GUIDE & BRING COPY WITH YOU TO PRESENTATION FOR REFERENCE. Educators Guide: <a href="http://www.nyc.gov/html/dot/downloads/pdf/cross-this-way-educator-guide.pdf">http://www.nyc.gov/html/dot/downloads/pdf/cross-this-way-educator-guide.pdf</a>

### Scenario I: Turning Vehicles at an Intersection

 Begin the video and pause at the frame "What went wrong?" Use this moment to ask the students to identify critical aspects of "crossing at the crosswalk with the signal." Explain that even though pedestrians have the right of way at crosswalks, vehicles may turn aggressively. Discuss inattentive pedestrian behavior and how putting your phone away and looking as you cross will help protect you from injury.

### **Scenario II: Midblock Crossing**

- Allow the video to play though Scenario II to "What went wrong?" Discuss the "midblock crossing" scenario, when a person decides to cross in between cars in the middle of the block. There are some streets where students feel safer crossing mid-block than at the corner; turning vehicles may make intersections hazardous for pedestrians.
- Ask: What's going on here? and discuss mid-block crossing. Emphasize that although crossing at intersections is preferred because that is where drivers expect to see pedestrians, people sometimes cross mid-block, so it is important to know how to do it safely. This is the best time to tell them that they cannot judge how quickly a car is moving, so if there is one approaching, they should wait until the block is clear before crossing.

### **Scenario III: Stop Sign Intersection**

- Play the video though Scenario III to "What went wrong?" and discuss the "Stop Sign controlled intersection" situation. At an intersection with a stop sign, children expect drivers to obey the stop sign and allow them to cross the street, but sometimes they do not.
- Ask: What's happening here? Students should explain why it is important to look both ways on one-way streets – looking for backing vehicles, bicyclists etc.

**Ask:** What is eye contact?

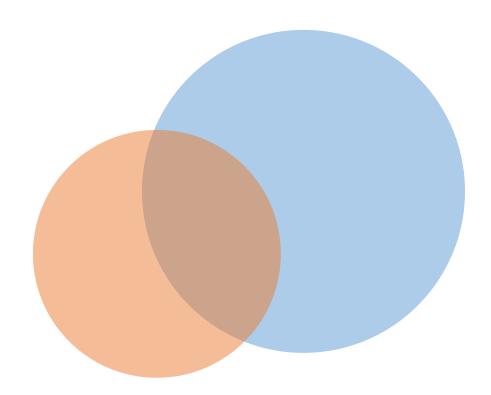
**Ask:** Why should we wave? and

**Ask:** How can you be sure you're seen? Emphasize that if they think the driver has not seen them and is not at a complete stop, they should wait to cross until the intersection is clear.

### **Videos Grades 6-8**

- Bicycle Safer Journey- US DOT FHWA (Video Time 5:02)
   <a href="http://www.pedbikeinfo.org/bicyclesaferjourney/mi\_en.html">http://www.pedbikeinfo.org/bicyclesaferjourney/mi\_en.html</a>
- Learn The ABC QUICK CHECK- The Active Transportation Alliance (Video Time 3:14)
   https://www.youtube.com/watch?v=xGorQe\_wW-0

# **Bicycle Safety Activities**



# **Bicycle Helmet Fit**

### **LESSON OVERVIEW**

SUGGESTED GRADE LEVEL SUGGESTED TIME SETTING LEARNING STYLE ACCESS K 1 2 3 4 5 6 7 8

10 minutes

auditorium classroom gymnasium outside

### **OVERVIEW**

We are going to find out the right way to wear a helmet while biking.

### **MATERIALS**

Bicycle Helmet

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

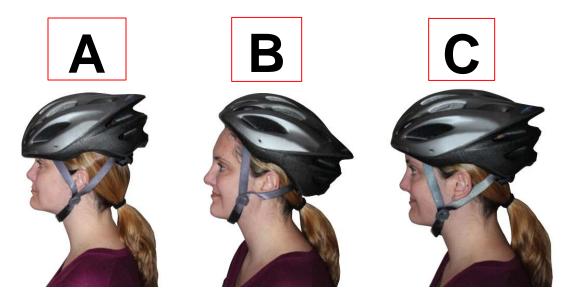
### **SOURCE**

SRTS NJ, Unit 2: Bicycle Handling Basics

http://www.saferoutesnj.org/resources/education/

### Bicycle Helmet Fit (all grades)

Bicycle safety includes understanding helmet fit, hand signals, and road rules. Helmet fit is important. However, emphasize that it is not crash prevention.



### Steps:

- **1.** *Action:* Ask for a volunteer or demonstrate on yourself the following steps.
  - a. Adjust the helmet as in A. Ask the students if that looks right.
  - b. Adjust the helmet as in B. Ask the students if that looks right.
  - c. Adjust the helmet as in C. Ask the students if that looks right.
  - d. C shows the correct way to wear a helmet.
- 2. Ask: Why should you not have the helmet too far forward or too far backward?

  Answer: If it is too far forward, then the back of your head is exposed. If you fall off your bike, the back of your head may hit the pavement. If it is too far backwards, then your forehead is exposed. If you fall off your bike, your forehead may hit the pavement. We want the helmet to hit, not your head.
- **3.** *Action:* Demonstrate the following steps.
  - **Say:** To figure out for yourself that you are wearing your helmet correctly, follow these rules.
    - a. After you put your helmet on, make sure there is space for one or two fingers on your forehead, above your eyebrows.
    - b. Make sure there is space for one or two fingers between the chin strap and your chin.
    - c. The straps of the helmet should form a "V" around your ears when buckled.
    - d. Then your helmet is adjusted correctly for your head and you're good to go!

<u>Note:</u> This exercise is included in the K-2 presentation at Slide 25, in the 3-5 presentation at Slide 29, and in the 6-8 presentation at Slide 22.

- **4.** In this demonstration, the egg represents the head and brain. The demonstration shows what can happen when bicyclists fall and their heads are not protected by bicycle helmets. The Egg Drop demonstration consists of two drops. In the first drop, the egg is held in a protective material simulating a protective bicycle helmet and then dropped. Because the egg is protected, it should not break. In the second drop, the egg has no protective material and breaks.
  - a. **Action:** Demonstrate the Egg Drop test or explain if you do not have the resources.
  - b. You will need 2 eggs, 2 plastic bags (to avoid getting messy), and a foam cup.
    - i. Place two eggs in zip lock bags.
    - ii. Wrap one egg in a paper towel and place it in a Styrofoam cup. The cup represents the helmet. Drop the cup from your waist straight to the floor.
      - 1. The egg should not break (though it may have cracks).
      - 2. Allow the students to make observations, but do not hold the discussion yet.
    - iii. Take the egg in the other bag and drop it to the floor. The egg will break.
    - iv. Ask: What do you think this demonstration is showing us.Answer: Helmets will protect our brains from getting hurt.
    - v. Share with the students that helmets are made with thick Styrofoam that protects our heads and that not wearing a helmet is dangerous and may result in serious head injuries.

8

# **Bicycle Hand Signals**

**LESSON OVERVIEW** 

SUGGESTED GRADE LEVEL K 1 2 3 4 5 6 7

SUGGESTED TIME SETTING 10 minutes

LEARNING STYLE ACCESS auditorium classroom gymnasium outside

### **OVERVIEW**

We are going to find out the right way to use hand signals when biking to indicate stopping and turning.

### **MATERIALS**

None

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

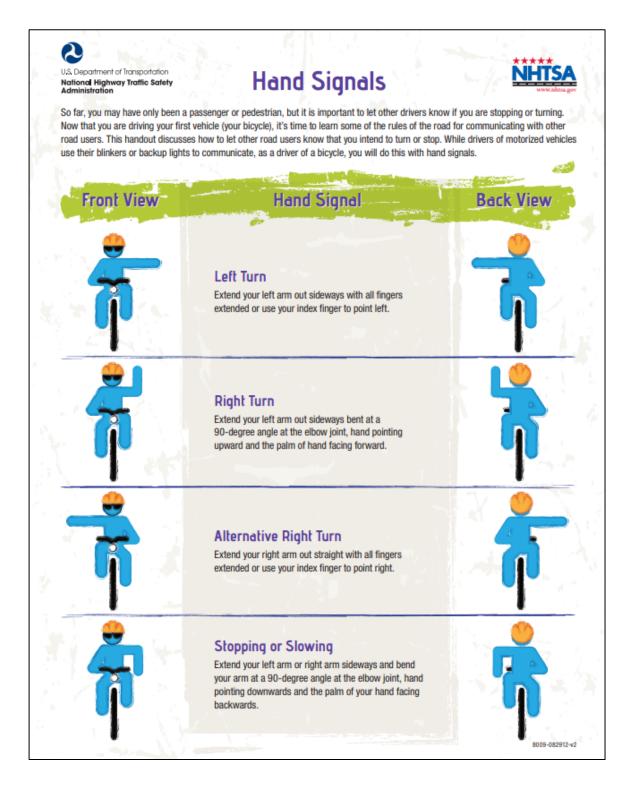
### MODIFICATIONS IF NOT USING THE POWERPOINT PRESENTATION

If not using the PowerPoint presentation, print out the instruction guide for Hand Signals in the manual.

### SOURCE

U.S. Department of Transportation National Highway Traffic Safety Administration

### **Bicycling Hand Signals**



### Bicycle Hand Signals

**1. Action:** Stand with your back to the group so that you can demonstrate left and right without confusing the students.

**Say:** I am standing with my back to you so that you can follow me as we talk about hand signals for left and right turns on the bicycle.

**2. Say:** Everyone stand up and let's practice hand signals we will use while biking! Everyone raise your left hand.

**Action:** You can show the "L" of your left hand (hold up your index finger and hold out your thumb to make a capital letter "L") as a reminder of which hand is left.

**Say:** You can remember which is your left hand by making an "L" with your fingers.

**3. Say:** To signal right, we put our right arm out this way.

**Action:** Extend your right arm straight out to the side. The alternative signal is to extend your left arm at a 90-degree angle with fingers pointing upward. Explain both are acceptable.

**Say:** To signal left, we put our left arm out this way.

Action: Extend your left arm straight out to the side.

**Say:** To STOP, we put our left arm down this way at a right angle.

**Action:** Extend left arm to the side at a 90-degree angle with fingers pointing downward.

**4.** You can use a "Simon Says" approach to direct the activity such as the following:

Say: Now, you guys try!

- a. Simon Says, signal RIGHT (students imitate signaling RIGHT).
- b. Simon Says, signal LEFT (students imitate signaling LEFT).
- c. Simon Says, signal to STOP (students imitate signaling to STOP).

GREAT JOB EVERYONE! Give yourselves and your classmates a round of applause!

**5. Say:** You should practice hand signals on your bikes in a driveway or other safe place until you are comfortable with taking your hand off the handlebar to signal.

### Bicycling Pop Quiz (grades 3-8)

This is a quiz to test the knowledge of students on bicycle riding rules and regulations. You can ask the students these questions, wait for a response, and then present them with the correct answer and discuss why the answer given is the correct one.

### Answers are bolded.

**Note:** this quiz is included in the Grades 3-5 presentation at Slides 38-41 and the Grades 6-8 presentation at Slides 31-35.

### 1. Up to what age are students required to wear bicycle helmets in NJ?

A. 10

B. 14

C. 17

**Answer:** C. New Jersey law (title 39:4-10.1) requires all children under the age of <u>17</u> to wear a properly fitted and fastened bicycle helmet while bicycling, roller-skating, in-line skating or skateboarding.

The statute also requires that children wear helmets when riding in restraining seats or in trailers towed by a bike.

### 2. Which of these are bicycles required to have?

- A. Brakes, front lamp, and rear red light
- B. Rear red light, bell or horn
- C. Brakes, and bell or horn
- D. Brakes, front lamp, rear red light, bell or horn

**Answer:** C. Brakes, and bell or horn when riding during the day

D. Brakes, front lamp, rear red light, and bell or horn when riding at night

### 3. When riding on a street, bicyclists should -

- A. Ride on the left, in order to see cars coming.
- B. Ride on the right, in the same direction as traffic.
- C. Ride as close to the edge of the street, curb, or parked cars as possible.
- D. Ride in and out between parked cars.

**Answer:** B. Ride on the right, in the same direction as traffic.

### 4. Are bicyclists allowed to ride on sidewalks?

- A. Yes
- B. No
- C. Maybe

**Answer:** C. Maybe – State law does not outlaw riding on the sidewalk, but some municipalities have passed ordinances that prohibit doing so.

7

8

# ABC Quick Check

**LESSON OVERVIEW** 

SUGGESTED TIME SETTING

20 minutes

K 1 2

LEARNING STYLE ACCESS

auditorium classroom gymnasium outside

5

### **OVERVIEW**

The lesson is comprised of a series of steps to inspect the basic functioning of a bicycle that should be performed before each ride. A= Air; B=Brakes; C=Chain/Crank; Quick=Quick release; and Check=Check it over.

### **MATERIALS**

Bicycle, helmet.

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### SOURCE

SRTS NJ

http://www.saferoutesnj.org/resources/education/

### THE ABC QUICK CHECK

The ABC QUICK CHECK teaches bicyclists of all ages safety precautions to take before riding a bike. It would be helpful to bring a bike into the classroom or assembly to demonstrate. The lesson is comprised of a series of steps to inspect the basic functioning of a bicycle that should be performed before each ride. A= Air; B=Brakes; C=Chain/Crank; Quick=Quick release; and Check=Check it over. For this demonstration, it is important to emphasize that the ABC Quick Check is about crash prevention. Ninety percent of all child bike crashes do not involve a motor vehicle, but involve cyclists falling off their bikes. Likely causes of these crashes include poor bike handling skills, surface hazards, or bikes in poor mechanical condition. Performing the ABC Quick Check can help prevent crashes from happening.



### Steps:

Introduce this activity using the following prompt,

**Say**: Before going out on a bicycle ride, it's important to check your bicycle to make sure it is safe. There is an easy way to remember this. It's called the ABC Quick Check. A stands for Air; B stands for Brakes; C stands for Chain and Crank; Quick means check all Quick Releases; and Check means to check everything with a slow, short ride.

<u>Note:</u> Use the following sample questions to prompt students' thinking about the content in this activity.

### FIRST:

- 1. **Ask:** How do you know your bicycle is safe to ride?
  - a. All the parts are working properly
  - b. By testing it out
  - c. Other responses may be accepted
  - d. All of the above
- 2. **Ask:** What parts do you think are important to check?
  - a. Tires
  - b. Brakes
  - c. Chain
  - d. Quick releases
  - e. All of the above
- 3. Ask: What can happen if you ride a bicycle that is not safe or that has a problem?
  - a. The rider could get hurt
  - b. More likely to have a bicycle crash
  - c. Won't enjoy the bicycle ride
  - d. All of the above

### THEN:

- 1. Arrange students in a "U" shape so that all students are able to see your instruction.
- **2.** Demonstrate the ABC Quick Check for the whole group, going through each step and describing the use of the mnemonic as an easy way to remind them of the steps.
  - a. Discuss the letter A stands for Air
    - i. Explain that maintaining proper air pressure in the tires makes riding more comfortable and increases the life of the tires.
    - **ii.** Check the front and rear tires for air pressure by squeezing the tires. Tires should be hard, not soft. If tires need air, students should pump up tires.
    - iii. Demonstrate how to use a tire pump.
  - b. Discuss the letter B stands for Brakes
    - i. There are three different types of braking systems: coaster brakes, rim brakes and disc brakes.
    - ii. Discuss use of brakes based on the type of brake. If a bicycle has coaster brakes, the rider will stop the bicycle by pedaling backward. If the bicycle has rim or disc brakes, the rider will stop the bicycle by squeezing the brake levers on the handlebar.

- **iii.** To use the brake lever, always use the index and middle fingers to apply brakes. The right brake lever stops the rear wheel and the left brake lever stops the front wheel.
- **iv.** Care should be taken when using the front brake. If the front brake is applied too hard or too quickly, the rider could be propelled over the handlebars.
- v. Until proper braking skill is taught, only the rear brake should be used. Cover the left-hand brake with red tape and remind students not to use that brake. Some bicycles, such as BMX bikes, may only have a rear brake.
- vi. Demonstrate proper brake use for students before they try it themselves:
  - 1. Squeeze brake lever to ensure the distance between the brake lever and handlebar is a minimum of 1 inch (from knuckle to knuckle).
  - **2.** Apply brakes while pushing the bicycle forward and backward to ensure that the bicycle stops.

### c. Discuss the letter C stands for Chain and Crank

- i. Explain to students: It is very rare to have a crank that is loose. If this occurs, however, do not use the bicycle until it has been repaired by a professional.
- **ii.** Demonstrate the following to students before they try it themselves.
  - Check the cranks by grasping the crank and trying to move it horizontally toward and away from the frame of the bicycle, to ensure crank is securely attached to the frame.
  - **2.** Explain to students that the chain should be completely on a gear to help prevent the chain from falling off.
  - **3.** Check the chain by placing a hand under the saddle to lift rear wheel off the ground; using the other hand, grasp the pedal and spin, moving the wheel to ensure the chain is properly set on the gears.
- d. Discuss the words Quick Check: Quick-check quick releases and Check check everything with a slow, short ride.
  - i. Point to lever behind seat and explain to close the quick release lever so it does not catch on clothing or potentially open.
  - ii. Instruct students to inspect the seat quick release.
  - **iii.** Explain the front wheel quick release should be closed and pointing in an upward direction, parallel to the fork, so it does not catch on anything on the ground and potentially open.
  - iv. Instruct students to inspect the front wheel quick release.

- **v.** Explain the rear wheel quick release should be closed and pointing toward the front tire, in between the chain and seat stays, so it does not catch on anything on the ground and potentially open.
- vi. Instruct students to inspect the rear wheel quick release.
- e. Remind students of the following safety rules while riding:
  - i. Explain the 2-2-2-2 rule to students to ensure safety and classroom management:
    - 1. 2 wheels on the ground
    - 2. 2 feet on the pedals
    - **3.** 2 hands on the handlebars
    - **4.** 2 fingers on the brake levers

# The ABG Quick Check

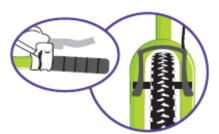
# A is for air:

Check the air pressure, spin the wheels and make sure the tires are not worn out.



# B is for brakes:

Check to make sure coaster brakes will stop the bike by spinning the back wheel and applying the brake. If the bike has hand brakes check to see that the levers don't hit the handlebars when squeezed. Lift one tire up at a time and spin it; squeeze the levers to see if the tire stops. The brake pads should be clean, straight and contact the rims properly.



# C is for Cranks, Chain, and Cogs:

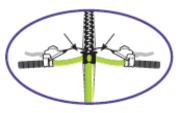
✓ Grab the crank arms and try to wiggle side to side. There should be no movement. Spin the pedals and cranks to see if the chain drives the rear wheel. The chain should look like metal not rust or black gunk. If the bike has gears check to make sure the gear levers and derailleurs (gear-changing mechanism) work to shift the chain between gears.



### Quick Refers to the Quick Release:

Some bikes have quick releases on the wheels or the seat post. Check to make sure they are tight and closed properly.





### Check:

After making sure the seat and handlebars are tight and the proper height, have the child ride the bicycle around the parking lot and check that everything works well.

# Filling a Tire with Air

### **LESSON OVERVIEW**

SUGGESTED GRADE LEVEL SUGGESTED TIME SETTING LEARNING STYLE ACCESS K 1 2 3 4 5 6 7 8

15 minutes

auditorium classroom gymnasium outside

### **OVERVIEW**

This activity teaches students how to inflate a bike tire.

### **MATERIALS**

One bicycle, bicycle pump, Schrader and Presta Valve Tubes, air pressure gauge.



### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### SOURCE

SRTS NJ

http://www.saferoutesnj.org/resources/education/

## Filling a Tire with Air

This activity teaches students how to inflate a bike tire.

### Steps:

- **1. Ask** students to find the tire valve. Does it look like the valve from a car tire or is it different?
  - **a.** Schrader Valves found on bikes are exactly the same as those found on car tires.
- 2. Ask students to look for the pressure range (maximum tire pressure) on the side of the tire. Say: Actual tire pressure depends on rider weight, the type of riding and terrain and personal comfort. However, for safety, tires should always be filled within the recommended range.
- **3. Action:** Have a student connect and fill a tire with a pump. Show how to use the gauge on the pump and a hand-held gauge.

# How to Lock a Bike

**LESSON OVERVIEW** 

SUGGESTED GRADE LEVEL SUGGESTED TIME SETTING LEARNING STYLE ACCESS K 1 2 3 4 5 6 7 8

15 minutes

auditorium classroom gymnasium outside

### **OVERVIEW**

This activity teaches students how to lock a bike properly.

### **MATERIALS**

One bicycle, one cable lock. A U-lock may be used instead or in addition to the cable lock.

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### SOURCE

SRTS NJ

http://www.saferoutesnj.org/resources/education/

### How to Lock a Bike

This activity teaches students how to lock a bike properly. Use the graphic on page 45 to demonstrate proper bike-locking techniques.

### Steps:

### Parking a Bike

- 1. Ask students "How should you park your bike when you are staying with it?"
  - a. Use kickstand and make sure it will not fall over
  - **b.** Lean against a wall, bench, etc. in a way that it will not fall over
  - **c.** Gently lay the bike on its side with the chain side up to prevent damaging parts. Best to choose a soft spot like grass over a paved area

### Locking/Securing a Bike

1. Say: Always look for the most secure place available to park your bike.

Ask: If you are not using a lock, where might that be?

### **Answer:**

- **a.** Inside a house, apartment, or garage.
- **b.** In a back yard.
- **2. Ask:** If these options are not available you will need to have a lock and to find a place to lock the bike. What should you look for?

### **Answer:**

- **a.** A proper bicycle rack specifically made for this purpose.
- **b.** A sign post or fence might work in a pinch.
- **3. Ask:** When locking your bike what should you do?

### Answer:

- **a.** Lock both the frame and at least one wheel, preferably lock both wheels.
- **b.** If your bike has a quick release front wheel you may want to secure it too. Either remove the front wheel and attach it with the lock to the rear frame or use a cable lock to secure the front wheel in place.
- c. Remove any easily removable parts (seat) or items and take them with you.
- **4. Ask:** What else might help to keep your bike secure?

### Answer:

- a. Lock your bike close to your destination, maybe even in a location where you can watch it.
- **b.** Lock it in a place sheltered from the weather.
- **5. Say:** DO NOT lock your bicycle to a tree or wooden railing. Thieves can easily cut wood posts and trees to steal bikes. Locking a bike to a tree can permanently injure the tree.

**Say:** DO NOT leave your unlocked bike unattended in a public space even for a minute. The two seconds it takes you to hop on your bike and ride away is all the time a thief needs to steal your unlocked bike.

### **BIKE LOCKING TECHNIQUES**



U-Lock secures rear wheel and frame, with additional cable to secure front wheel.



U-Lock secures front wheel only, leaving rest of bicycle vulnerable to theft.



U-Lock secures rear wheel and frame.



U-Lock secures bicycle frame only, leaving both wheels vulnerable to theft.



Cable lock secures rear wheel and frame.



Cable lock secures rear wheel only, leaving rest of bicycle vulnerable to theft.

# Traffic Signals

# Stop and Go Game

LESSON PLAN OVERVIEW

SUGGESTED GRADE LEVEL K 1 2 3 4 5

SUGGESTED TIME one class period

SETTING auditorium classroom gymnasium outside

LEARNING STYLE ACCESS auditory kinesthetic visual

**OVERVIEW** 

Students will be able to identify the meaning of 7 pedestrian and traffic signals by playing an active memory game.

### **MATERIALS**

Signal flash cards (included) Large, open space, such as a gym or school yard to play the game

### **VOCABULARY**

extend, signal, yield, simulation

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Copy of all materials, use some of the modifications listed in the materials.

### MODIFICATIONS FOR USE IN LOW INCOME SCHOOLS

Do not use PowerPoint, print out presentation instead to a class set.

### **IMPRESSIONS**

Great activity that isn't lecture based.

SOURCE

SR2S Philly

### Traffic Signals Stop and Go Game

### Steps:

- 1. **SIGNALS:** Introduce traffic signals using the flashcards (left, right, walk, don't walk, yellow, red and green). These signs are included at the end of this manual for you to print.
- 2. **SIGNALS STOP AND GO GAME:** Tell students they are going to play a game to learn the meaning of each signal. Think of this game as a combination of "Red light, Green light" and "Simon Says".
  - a. Explain that each signal is associated with a different action and model the actions on the next page (you may need to modify actions to fit the needs of your students).
  - b. Instruct students to spread out around the space, giving themselves plenty of room, but making sure they can still see the signal cards when you hold them up.
- Stand where you are visible to each student and hold up the flashcards, rotating them at random
  while students perform the actions associated with each card. Play the game for approximately
  10 minutes.
  - **» LEFT:** Shuffle left 5 times; (look and point left)
  - **» RIGHT:** Shuffle right 5 times; (look and point right)
  - **WALK:** Walk or lunge forward; (march in place)
  - **» DON'T WALK:** Stop moving and place your hands on your hips
  - **>> GREEN:** Move forward by running or skipping; (pump your arms as if you were running)
  - **>> YELLOW:** Run in place; (flash hands by opening and closing them)
  - ""> RED: Stop moving and extend your right arm in front of your body, signaling "stop"

<u>Note:</u> If you have limited space, use the motions in parentheses, which allow students to stay seated or stand next to their desks. Also, when modeling "left" and "right" be sure to either turn your back to the class or use the opposite hand so that students know the correct hand to use. Images available at the end of the manual.









You can use this lesson for a 5th grade bike safety lesson by using the bike safety simulation cards and making the following modifications:

- » For "left" and "right", have students show you their hand signals for bicycling
- » Omit "walk" and "don't walk" from the signal cards used
- » Add in the "yield" sign and instruct students to hop in place





# Traffic Signs

### LESSON PLAN OVERVIEW

SUGGESTED GRADE LEVEL
SUGGESTED TIME
SETTING

LEARNING STYLE ACCESS

K 1 2 3 4 5 6 7 8

one class period

auditorium classroom gymnasium outside

auditory kinesthetic visual

**OVERVIEW** 

Students will be able to practice matching the sign to its proper definition.

### **MATERIALS**

Road sign cards, road definition cards (included at end of manual).

### **VOCABULARY**

extend, signal, yield, simulation

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Copy of all materials, use some of the modifications listed in the materials.

### MODIFICATIONS FOR USE IN LOW INCOME SCHOOLS

Do not use PowerPoint, print out presentation instead to a class set.

### **IMPRESSIONS**

Great activity that isn't lecture based.

### **SOURCE**

Bike New York

### **Traffic Signs**

### Steps:

- 1. Give each child a road sign card or a road sign definition card. If there are more cards than students participating in the exercise, children can be given multiple cards. These signs are included at the end of this manual for you to print.
- 2. Instruct students to interact with the rest of the group to match each road sign card with its corresponding road sign definition card.
- 3. After the students have paired each set of cards, make sure that the sign and definition match and review each sign and its definition with the group.



Slow down, scan for cross traffic, yield the right of way and stop if it is not clear.



This is a one-way road: do not go against the direction of traffic.



Road divides, stay to the right of the divide. This



lane is only for turning left.



Right turn not allowed.



Railroad tracks ahead. Slow down and scan for trains.



Sharp left curve (not turn) ahead.



People working/construction ahead. Slow down and use caution.



Intersection ahead.



Traffic is merging into your lane from the right.



One-way road. Do not go against the direction of this arrow.



Right lane ends; move into the next lane on your left.

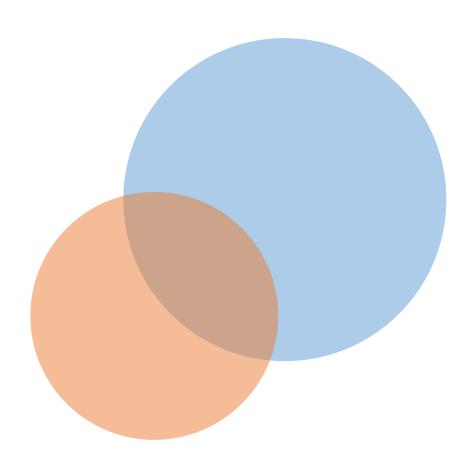


School zone ahead. Slow down and use caution. Pedestrians have the right of



Two-way road ahead. Stay on the right side, and go in the same direction as other traffic going in your direction.

# Pedestrian and Bicycle Safety Activities K-8 Activity



# **Crossing Zone**

**LESSON OVERVIEW** 

SUGGESTED GRADE LEVEL SUGGESTED TIME SETTING

LEARNING STYLE ACCESS

K 1 2 3 4 5 6 7

20+ minutes

auditorium classroom gymnasium outside

### **OVERVIEW**

This activity gives students a chance to visualize crossings at intersections.

### **MATERIALS**

White tape, black garbage bags or plastic tablecloths, signs, name tags, helmets, a bicycle, other props resembling street signs and signals.

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Print out all materials instead of giving instructions orally.

### MODIFICATIONS FOR DIFFERENT AGE LEVELS

With younger students, you can ask about the parts of the roadway.

### MODIFICATIONS FOR LACK OF SPACE

In the event that you do not have 3 feet in the assembly or classroom to demonstrate the space a bicyclist should stay from parked cars, talk to the students about what 3 feet is.

### SOURCE

Bicycle Transportation Alliance 2nd Grade Pedestrian Safety Curriculum

### **Crossing Zone**

### **Purpose**

This activity gives students a chance to visualize crossings at intersections.

You will be creating an intersection on the floor. The intersection will be the stage for the three scenarios discussed starting on page 53. Instructions for creating a plastic roadway are on page 60. You can mark out the intersection using painters tape, or use black material (garbage bags, black plastic tablecloths, black plastic sheeting) taped together to construct an intersection. The intersection should be set up to include a two-way road, and at least one marked/painted crosswalk.



### **Materials:**

You will need signs with titles for the students to hold during the scene enactments. These signs are included at the end of this manual for you to print. We have included both Spanish and English versions. If you plan on using both, we suggest that you print those signs double-sided so that you have the English on one side and the Spanish on the other. There are eight roles for students to play:

- Pedestrian
- Bicyclist
- Car #1
- Car #2

- Traffic light
- 2 STOP signs
- Pedestrian walk/don't walk signal

- The titles/roles can be printed; or
- Large name tags can be created for students to stick on their shirts or hold.
  - Keep in mind that in an assembly, students sitting farther from the stage may not be able to see clearly if the tag or font is small
- Additional signs, helmets, a bicycle, and other props resembling street signs and signals can be brought in for use.

### Preparation

- Secure an open space in which to conduct the lesson (the gym, cafeteria, outside, or a classroom where desks have been cleared away).
- Before conducting the lesson, obtain or make a plastic roadway and the required signs for the nine roles the students will play. Instructions for creating a plastic roadway are on page 60. If you do not have access to a plastic roadway, the roadway can be created using tape on a floor, following the dimensions presented in the roadway construction instructions. If you are going to use tape to create the roadway, be sure to allow plenty of time before the lesson for construction.
- Set up the plastic roadway allowing space for students to sit, facing the roadway in a semi-circle or two rows. You will start the lesson standing in front of the roadway addressing the students.

### Lesson

Use the following when speaking to the class:

- a. **Say**: Hi, my name is \_\_\_\_\_ and I'm here today to talk with you about learning safe ways to walk to school, especially how to cross the street safely. We are going to practice on this pretend road, but before we get started I have a few questions I would like for you all to help me with.
- b. Say: Who can tell me what a pedestrian is?

**Answer**: A **pedestrian** is a person who is walking.

**Say**: If my mom and I are walking to school together on the sidewalk, are we pedestrians? Show me thumbs up if you think we are pedestrians and thumbs down if you think we are not.

**Action:** Demonstrate what you mean by thumbs up and thumbs down.

**Answer**: Thumbs up. If my mom and I are walking to school together we are pedestrians.

**Say**: If I am riding in the backseat of my mom's car, am I a pedestrian? Show me thumbs up if you think I am pedestrian in the back seat of a car and thumbs down if you think I am not.

**Answer**: Thumbs down. If I am riding in a car I am not a pedestrian.

**Say**: If I went to the grocery store with my dad in a car, but we parked the car and are now walking to the store together, are we now pedestrians? Show me thumbs up if you think my dad and I are now pedestrians as we walk to the store and thumbs down if you think we are not.

**Answer**: Thumbs up, now that we aren't in the car anymore and are walking we are now pedestrians.

**Say**: If I am in a wheelchair, am I a pedestrian? Show me thumbs up if you think people in wheelchairs are pedestrians and thumbs down if you think they are not.

**Answer**: Thumbs up, a person in a wheelchair is a pedestrian when they travel without a car. People who use wheelchairs follow the same pedestrian rules we are about to discuss.

c. Say: Who can tell me what an intersection is?

**Answer**: An **intersection** is where two or more roads come together.

**Say**: Who can show me an intersection on my pretend road?

**Action**: Invite a student up to point out the intersection.

d. Say: Who can tell me what a sidewalk is?

**Answer**: A **sidewalk** is a paved area made for pedestrians to walk beside the street.

**Say**: Who can show me where a sidewalk might be located on my pretend road?

**Action**: Invite a student up to point out a section next to the street where a sidewalk would be.

**Say**: Who knows where we should walk if there are no sidewalks, like on my pretend road?

**Answer:** On the side of the road.

**For older students, say**: "If we are walking on the side of the road, not on a sidewalk, should we be facing cars coming toward us or walking in the same direction as traffic?" **Answer**: Facing oncoming traffic so that drivers are more likely to see us.

e. **Say**: What is a **crosswalk**?

**Answer**: A **crosswalk** is a striped area used by pedestrians to cross the street. Drivers expect to see people walking in the crosswalk, but may not expect them to be walking in other parts of the roadway.

**Say**: Who can show me a crosswalk on my pretend road?

**Action**: Invite a student up to point out the crosswalk.

**For older students, say**: If there is no painted crosswalk at an intersection, can we still cross there?

**Answer**: Yes, if it is not painted, it is called an unmarked crosswalk. It is best to cross at painted, or marked crosswalks, but you may cross at an unmarked crosswalk at an intersection.

f. Introduce the lights, stop sign, and signals to the students by showing each of the prepared title signs mentioned above.

Action: Hold up "Stop" sign.

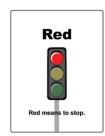
**Say**: Who can tell me what this sign means?

**Answer**: Tells drivers that they must come to a complete stop. Tells pedestrians that they must remain on the curb until they are sure it is safe to cross.

Action: Hold up "Red light" sign.

**Say**: Who can tell me what this red light means?

**Answer**: Tells drivers that they must come to a complete stop and stay stopped while the light remains red. Tells pedestrians that they must wait on the curb to cross.



Action: Hold up "Yellow light" sign.

**Say**: Who can tell me what this yellow light means?

**Answer**: Tells drivers that they must slow and prepare to stop. Tells pedestrians that they should not begin crossing the street. If they are already crossing, they should complete the crossing.



Action: Hold up "Green light" sign.

**Say**: Who can tell me what this green light means?

**Answer**: Tells drivers that they can go. Tells pedestrians that they can begin crossing the street, but to look first to make sure drivers have stopped.



Action: Hold up Walking Pedestrian Signal.

**Say**: Who can tell me what this signal means?

**Answer**: This pedestrian signal means that is safe to cross, but you always

have to look first to make sure drivers have stopped.

Action: Hold up Walking Pedestrian Signal with timing.

Say: Who can tell me what it means when these numbers appear with the Walk signal?

**Answer**: These numbers show how many seconds are left to cross the street before the

signal changes and it is no longer safe to cross.

Action: Hold up the hand Don't Walk signal.

**Say**: Who can tell me what this sign means?

**Answer**: This is a picture of a red hand, meaning you should STOP.

Wait to cross the street until the picture of the person walking is showing.

When the red hand is flashing, it means use caution. If you are in the street,

finish crossing the street but if you have not yet started crossing, don't start

if the sign is flashing.



g. **Say**: Now let's talk about the steps for safely crossing the street. Before you can cross the street you need to be sure to stop at the edge and look for cars. Who can tell me what I mean by the edge?

**Answer**: The edge is the curb or side of the road. It is the line between where the cars are and where the pedestrians are. It is the line between safe and unsafe.

**Action**: Invite a student to show you the edge on the plastic roadway.

**Say:** What if a car is parked at the side of the road, does the car make a second edge?

**Answer:** Yes, we need to pause a second time and look for cars.

h. **Say**: Now that we are at the edge, the second step of crossing the street is to Look and Listen for traffic. Remember to look Left, Right, Left Again, over your shoulder, and ahead.

**Action:** Model the Left, Right, Left Again and over your shoulder.

**Say**: We look left first because that is the direction that cars closest to us are coming from. Then, we look right to see if traffic is coming from the other direction. We look left again because cars move fast and we want to make sure it is still safe to cross where cars are moving closest to us. Make sure that when you look left and right you touch

your chin to your shoulder. This is called the "shoulder check" to make sure you look as far as you can to see if any traffic is coming from behind you as well. We always need to look for turning cars.

**Action**: Repeat the Left, Right, Left Again and over your shoulder.

**Say**: While we are looking for traffic we should also be listening for traffic. Who can tell me what we should be listening for?

**Answer**: Car engines, horns, sirens. If we hear traffic coming, we should stop and wait. **Say**: Who can come up and show us how to stop at the edge and look and listen for traffic?

**Action:** Invite a student to the plastic roadway to model the behaviors you just demonstrated.

i. **Say**: The final step to crossing the street is to cross quickly and safely. Once we are sure traffic is stopped and it is safe to cross, we should walk across the street in a straight line. While we are crossing we should continue looking left and right for traffic. Why should we walk and not run?

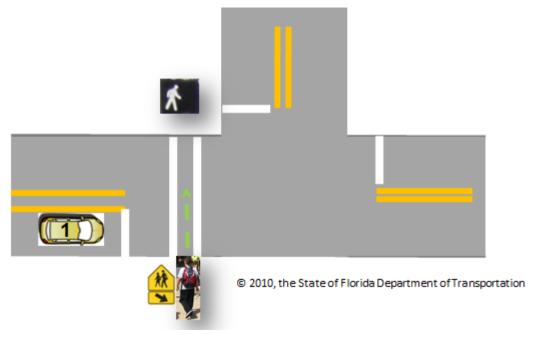
**Answer**: If we run, we might trip and fall. Say: What would happen if we walked in a diagonal line instead of a straight line?

**Action**: Cross the roadway in a diagonal line to emphasize the difference.

**Answer**: Crossing at a diagonal leaves us in the street for much longer and puts us in spaces where drivers may not expect to see us. Following the rules helps us to be seen, which makes us safer.

j. **Say**: Now let's practice what to do in some typical situations you might find in your neighborhood and on your way to school.

### SCENE 1 – Crossing with a pedestrian signal



### **Volunteers:**

- Need 3 student volunteers to act as:
  - a. A "WALK" signal (for young students, the officer may choose to serve as the walk signal)
  - b. A walker/pedestrian
  - c. A car

### Steps:

- 1. Student #1 is a "WALK" sign- stands on an edge of a road, across the crosswalk from Student #2, the walker. Explain to student #1 that they are controlling the walk signal. They can give the walk sign, flash the don't walk sign by turning it around back and forth, or show the don't walk sign by holding it still.
- 2. Student #2 is a 'PEDESTRIAN"- Explain that they will be preparing to cross
- 3. Position Student #3, the car, at the intersection before the crosswalk
- 4. **Say**: Everyone remind me of what the first step for crossing the street is.

**Answer**: Stop at the edge and look for cars.

**Say**: How many edges do we have here – raise your hand for one. Raise your hand for two.

Answer: One.

5. **Say** to Student #2 (pedestrian): Now that we have identified our edge, do you remember what we should be doing at each edge?

**Answer**: Look for cars by looking Left, Right, Left Again over your shoulder and listening for car sounds or sirens. If they don't answer or answer incorrectly,

**Say**: Who can help him/her?

6. **Say**: But that's not all. We have a signal at this intersection. What happens if you press the signal button to cross?

**Answer:** The "Walk/Don't Walk" signal appears to tell us when it is time to cross.

**Say**: Who can tell me when we should start to cross?

**Answer**: When the "Walk" signal is displayed and we are sure traffic has stopped. **Say**: If we are already crossing and the walk signal changes to a flashing "Don't Walk" signal, should we keep crossing?

**Answer**: Yes – if the signal is flashing we should continue walking, but if we have not started crossing we should wait for the next "Walk" signal.

7. **Say**: OK, so we have a walk signal, right?

Answer: Yes.

**Say**: So now our pedestrian is going to look and listen at the edge, right?

Answer: yes.

**Action:** Instruct student to look and listen at the edge and begin the crossing if they think it is safe.

**Say:** What should he/she be doing as they cross?

**Answer**: Continue looking left and right and remain alert while crossing.

**Say**: Remember to keep an eye out for turning cars.

8. **Action:** Pick up traffic signals and stand next to student with walk signals; ask student to stop displaying walk signals.

**Say**: What do we do if there is a traffic signal but no pedestrian signal? How do we know when it is safest to cross?

**Answer**: We look at the traffic lights.

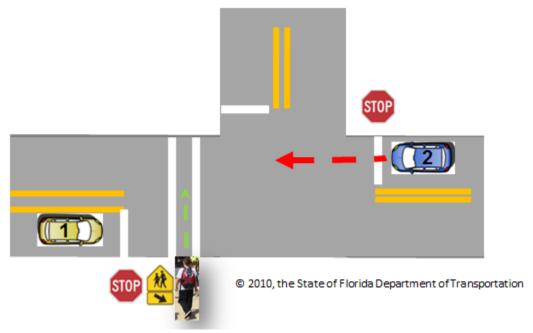
**Say**: We look for a green signal in the direction we are crossing. There should be a red signal displayed for the cars we are crossing in front of.

**Action**: (point out the directions as you speak). You can keep crossing if you have already started and the signal turns yellow, but do not start crossing on a yellow or a red signal.

9. **Say**: Thank you to our volunteers for doing such a good job.

**Action**: If time allows, have each child practice walking through the intersection. Ask them to tell you the steps as they do it. The volunteer acting as the walk signal should vary the signal, not always having it display "walk" as each student arrives. If there are too many students or not enough time, select a few additional volunteers to walk through the intersection.

### SCENE 2— Crossing with Stop signs



### **Volunteers:**

- Need 5 student volunteers to act as:
  - d. Car #1
  - e. Car # 2
  - f. 2 Stop signs
  - g. A walker/pedestrian

### Steps:

- 1. Student #1 is car #1, a car stopped before the crosswalk, near the crossing
- 2. Student #2 is car #2, a car stopped on the opposite side of the road, waiting to move through the intersection.
- 3. Students #3 and #4 are stop signs, stopping the traffic on either side of the crosswalk.
- 4. Student #5 is a pedestrian waiting to cross at the crosswalk.
- 5. **Say**: At this crossing the cars have to stop at the stop signs, but we do not have any pedestrian or traffic signals to help us to see when it is safest to cross. We still start our crossing by stopping at the edges.

**Say**: How many edges do we have here – raise your hand for one. Raise your hand for two.

Answer: One.

6. **Say**: What we should be doing at each edge?

**Answer**: Remember to look for cars by looking Left, Right, Left Again, and over your shoulder and listening for car sounds or sirens. If the students don't answer or answer incorrectly,

**Say**: Who can help him/her?

**Say**: Because we do not have a signal, we have to do an extra good job looking and listening for traffic. What should we be listening for?

**Answer:** Car engines, horns, sirens. If we hear traffic coming, we should stop and wait.

**Say**: What should we be looking for?

**Answer**: We should be looking to make sure the cars in both directions have fully stopped before we cross. We should try to make eye contact with the driver.

**Ask**: Who can tell me what eye contact means?

**Answer:** Eye contact means that you and the driver have looked at each other and noticed each other.

**Say:** Everyone make eye contact with me. (All the children should be looking at the instructor).

**Say**: If a driver looks our way, or even appears to look right at us does that guarantee that we have made eye contact and that they have seen us?

**Answer**: No. We still need to be very careful and do our best to make sure that the cars have stopped before we cross.

**Say**: Remember to keep an eye out for turning cars and to watch out for cars that may start moving if the drivers have not seen us. If a car starts moving, stop your crossing and try to get the driver's attention by waving your arms. Start crossing again only when you are sure they have stopped.

7. **Say**: OK, so we have stopped at the edge, we have looked and listened at each of our edge, and tried to make eye contact with drivers in both directions.

**Action**: Instruct student to look and listen at each edge and begin the crossing if they think it is safe.

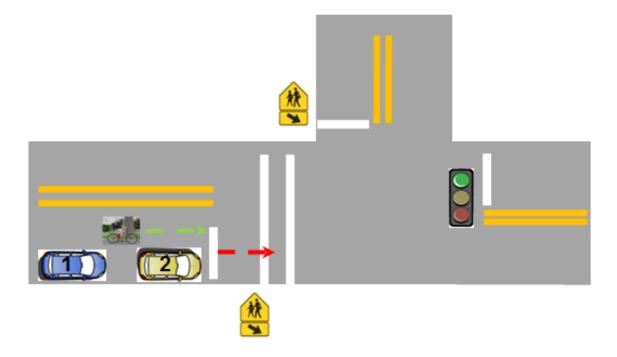
**Say**: What should he/she be doing as they cross?

**Answer**: Continue looking left and right and remain alert while crossing, look for moving cars and try to get the attention of the driver if a car starts moving.

8. **Say**: Thank you to our volunteers for doing such a good job.

**Action**: If time allows, have each child practice walking through the intersection. Ask them to tell you the steps as they do it. If there are too many students or not enough time, select a few additional volunteers to walk through the intersection.

### SCENE 3 – Bicycle Crossing



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### **Volunteers:**

- Need 4 student volunteers to act as:
  - o Car 1 (door open)
  - o Car 2 (parked)
  - o Bicyclist
  - o Traffic light

### Steps:

- 1. Student #1 is car #1, a car parked before the crosswalk.
- 2. Student #2 is car #2, a car parked before the crosswalk with a door open (have the student extend their left arm).
- 3. Student #3 is a bicyclist riding in the street.
- 4. Student 4 is the traffic light, standing across for the cars and bicyclist on the other side of the intersection.

**5. Say**: In this situation we have a bicyclist riding their bicycle in the street. Who can tell me which side the bicyclists should be riding on; should he/she be traveling with the traffic, or should he/she be riding on the other side of the street facing the oncoming traffic?

**Answer:** Bicycles are considered vehicles; bicyclists should travel in the same direction and follow the same rules as other traffic.

**Say**: Now that we know where our bicyclists should be, let's have our volunteer get in the right place. (Ask the volunteer to stand on the correct side of the intersection.)

6. **Say**: Before our bicyclist starts riding, we need to talk about hand signals. Who can show me the hand signal for a left turn?

Answer: Left arm extended to the side.

Say: Who can show me the signal for a right turn?

**Answer**: Right arm extended to the side or left arm extended at a 90-degree angle with fingers pointing upward. Explain both are acceptable.

**Say:** Who can show me the signal for stopping?

**Answer**: Left arm extended at a 90-degree angle with fingers pointing downward.

**Action**: Demonstrate signals and have students perform them for you as you call out the signals.

**Hand Signals** 



7. **Say**: So now our bicyclist is riding along the street next to two parked cars. One of our parked cars has a door open. What will happen to our bicyclist if he/she rides too close to that car?

**Answer**: They will ride into the door.

**Say:** This is why we say to stay out of the "door zone." You need to leave enough space between you and the parked cars so that you will not get hit by doors opening.

**Say**: Now that we know our bicyclist should ride outside of the door zone, should he/she ride in a straight line or should they weave between the parked cars?

**Answer**: The bicyclist should maintain a straight line, making them more visible and predictable to drivers.

**Say**: So now that we have passed the parked cars we are approaching an intersection. If the light is red, does our bicyclist have to stop for it?

**Answer**: Yes, bicyclists have to obey signs and signals just like people driving cars. **Action**: Ask the bicyclist to travel along the road past the parked cars and to stop if there is a red light or to pass through the intersection if there is a green light. Praise the volunteer for a good job or correct any mistakes.

- 8. **Say**: But what if we want to turn left? If you are turning left, you want to move away from your normal position on the right of the road and move towards the center of the road to prepare for the left turn. If there are two lanes, make sure you are in the left most lane to make your turn. If it is a very busy intersection and you do not want to ride your bike through the intersection, you can always pull over at the side of the road, get off your bike, and walk it through the intersection. When you get off your bike you become a pedestrian and should cross like one. Always remember to walk your bike in a crosswalk.
- 9. **Say**: Thank you to our volunteers for doing such a good job. **Action**: If time allows, have each child practice "biking" through the intersection. Ask them to tell you the steps as they do it. The volunteer acting as the traffic signal should vary the signal, not always having it display green as each student arrives. You can tell the students as they start if they will be going through the intersection or making a Left turn. If there are too many students or not enough time, **select** a few additional volunteers to walk the "bike" through the intersection as the class watches.

### **Roadway Construction**

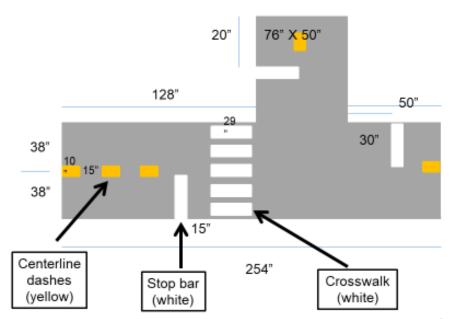
### **Materials**

- 1 Roll yellow duct tape
- 1 Roll black duct tape
- 3 Rolls white duct tape
- 160 square feet of black plastic sheeting, black garbage bags, or black plastic tablecloths

### Set-up:

- 15 29" strips of white duct tape (crosswalk). Use 3 strips to create one stripe of the crosswalk, 5 in total.
- 10 10" strips of yellow duct tape (lane divider). Use 2 strips to create one yellow lane divider for 5 total dividers.
- 9 38" strips of white duct tape (stop bar). Use 3 strips to create one stop bar for a total of 3. The stop bar should be 15" from the crosswalk and 30" inches from the intersection for the other sides.
- 2 pieces of black plastic sheeting
  - o 76" x 254" for the main road
  - o 76" x 50" for the top segment
- White duct tape can also be used to line the edges of the road
- Black duct tape is used to hold the black plastic sheeting together.

### Diagram

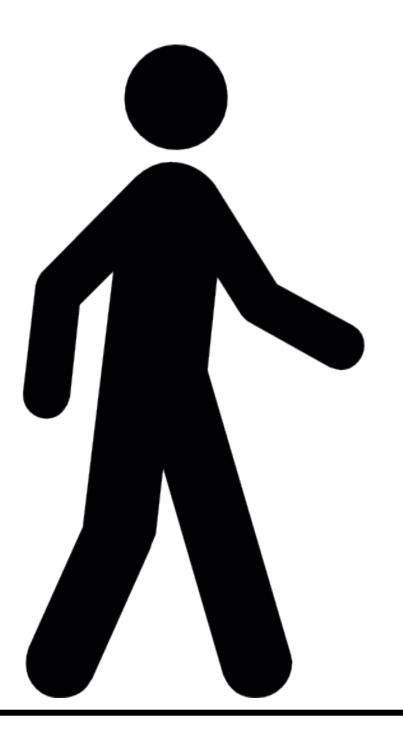


Stop bar = 2 strips of 38" white tape, 15 " from crosswalk.

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On the following pages you will find signs that you can print and use to implement the activities. Additionally, these signs can be used to teach the children about the meaning of the signs and traffic signals.

# **PEDESTRIAN**



# BICYCLIST

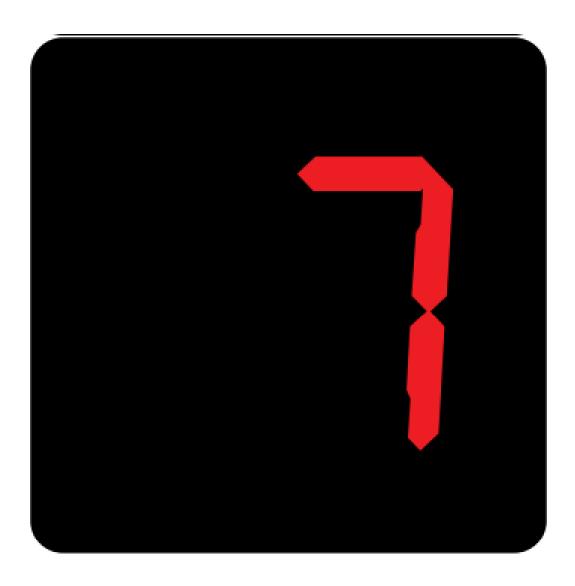
# CAR 1



# CAR 2



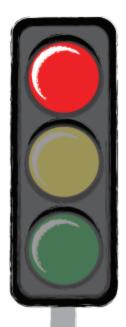








#### Red



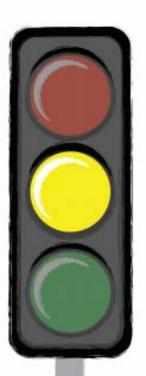
Red means to stop.

#### Rojo



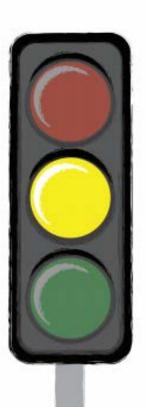
Rojo significa parada.

#### Yellow



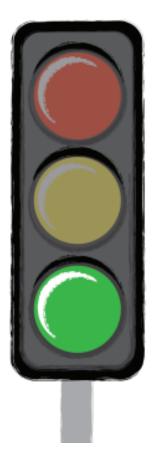
Yellow means be careful, signal is changing.

#### Amarillo



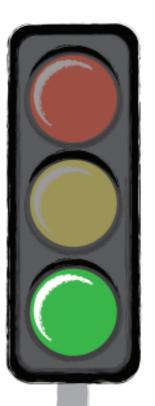
Amarillo significa tener cuidado, la señal está cambiando.

#### Verde



Verde significa ir, pero siempre mirar primero.

#### Green



Green means go, but always look first.

## Don't Walk





Stop and wait for signal.

#### No Caminar





Deténgase y espere la señal.

#### Walk





Go, but always look first.

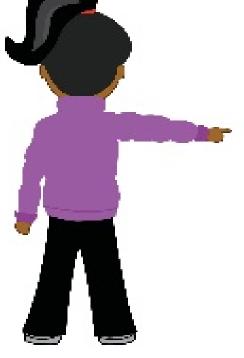
#### Caminar





Ve, pero siempre mira primero.

### Right



She is pointing right.



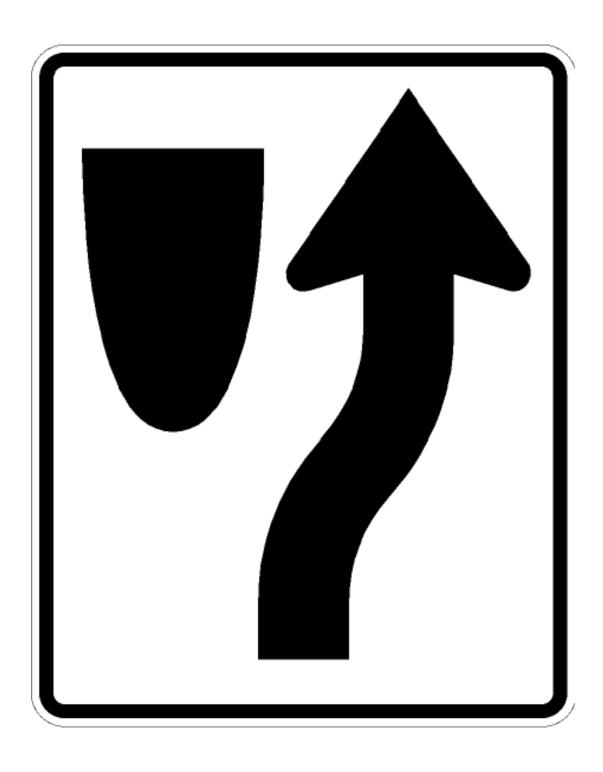


She is pointing left.



















This is a one-way road. Do not enter from this direction.

Road divides, stay to the right of the divide.

Slow down, scan for cross traffic and let that traffic go first.

# Right turn not allowed.

Railroad tracks ahead.

# This lane is only for turning left.

### Sharp left curve ahead.

### Intersection Ahead

# Traffic is merging into your lane from the right.

One-way road. Do not goagainst the direction of this arrow.

## Right lane ends; move into the next lane on your left.

School Zone Ahead, pedestrians have the right of way.

Two-way road ahead. Stay on the right side, and go in the same direction as other traffic going in your direction

## People working/construction ahead.

### Stop and scan leftright- left for crossing traffic.

### Looking for More?

SRTS Regional Coordinators: <a href="https://www.saferoutesnj.org/about/regional-coordinator-tmas/">https://www.saferoutesnj.org/about/regional-coordinator-tmas/</a>

Safe Routes to School Regional Coordinators from eight Transportation Management Associations (TMAs) throughout New Jersey are ready, willing and able to offer FREE technical assistance in kicking off Safe Routes to School programs in communities from all 21 counties.

### NJ Safe Routes Resource Center: http://www.saferoutesnj.org/

The New Jersey SRTS Resource Center assists public officials, transportation and health professionals, and the general public in creating a safer and more accessible walking and bicycling environment through primary research, education and dissemination of information about best practices in policy and design.

### NJ Bike School: <a href="http://www.saferoutesnj.org/resources/education/">http://www.saferoutesnj.org/resources/education/</a>

This on-bike skills curriculum focuses on bicycle lesson plans that are most appropriate for youth in grades 6-12. The guide contains the necessary preparations and minimum-level benchmarks for physical education teachers and recreation specialists to meet when teaching safe bicycle riding, and can be used to enhance recreational bicycling skills.

### Bike Parking Guide:

http://www.saferoutesnj.org/wp-content/uploads/2017/03/School-Bike-Parking-Guide SRTSResourceCenter.pdf

School bicycle parking, particularly for elementary and middle-school students, requires additional considerations than for bike parking in other environments. Universally, bike parking should be secure, sheltered, easy to use, and have adequate capacity, but factors such as school location and riders' ages are important when determining the most appropriate type of bike rack. With younger students, for example, ease-of-use is especially crucial, while schools

where large numbers of students arrive by bike may need to select high-capacity racks.

### Crossing Guard Training: <a href="http://www.nj.crossingguards.org/">http://www.nj.crossingguards.org/</a>

School crossing guards provide children with a safe crossing of the roadway and model appropriate street skills and behavior to young children. The New Jersey Safe Routes to School Resource Center compiles research and tools to support school crossing guards and traffic safety officers who supervise crossing guards.

### NJ Bicycle and Pedestrian Resource Center: <a href="http://njbikeped.org/">http://njbikeped.org/</a>

The New Jersey Bicycle and Pedestrian Resource Center (BPRC) assists public officials, transportation and health professionals, and the public in creating a safer and more accessible walking and bicycling environment through primary research, education and dissemination of information about best practices in policy and design. The Center is supported by the New Jersey Department of Transportation through funds provided by the Federal Highway Administration.

### **Image Sources**

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NJ State Association of Chiefs of Police

NJ Highway Traffic Safety Police Advisory Council

County and regional police academies

