

Neighborhood Navigators



Oregon Safe Routes to School
Curriculum for Grades K-8



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This curriculum is dedicated to our children, who are learning to become safe, active participants in the complex system of transportation, and their teachers, who are providing them with the tools to be successful.

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Introduction

The *Neighborhood Navigators* curriculum focuses on safe, efficient and healthy transportation choices, pedestrian safety, community and neighborhood design, and was developed for Oregon's Safe Routes to School Program.

Why This Course?

Never has the need been greater for programs that encourage active lifestyles and healthy eating in a supportive environment. One in four Oregon 8th graders is overweight or at risk of becoming overweight. If this trend continues, this will be the first generation of youth to have a shorter life expectancy than their parents.



Regular physical activity is associated with enhanced health and reduced risk of disease, and yet a 2003 survey by National Survey of Children's Health found that 49% of youth were not regularly exercising. Also, in the 1970s, 67% of kids walked and biked to school--today, fewer than 15% of all trips to and from school are made by walking or bicycling. In addition, our youth are not eating the recommended levels of fruits and vegetables (Oregon Department of Human Services, Health Services).

At a time when many schools lack funding for physical education and nutrition classes, youth have few models of healthy and active lifestyles and few structured opportunities to engage in physical activity in school and throughout the community. All youth need to have healthy, active living modeled and taught to them at an early age. With early modeling, healthy active lifestyles are more likely to be carried forward over a lifetime.

The educational content of *Neighborhood Navigators* is aligned with Oregon Education Standards for the appropriate grade, and many of the lessons meet other subject standards, as shown at the beginning of each section. While the specific benchmarks have been identified, please remember that the ultimate goal is to get out and about, have fun and help our youth develop healthy, active lifestyles.

Lesson Outline

Each grade level section has five lessons plus walks to reinforce what was learned during the lesson. Ideally, students will complete all five lessons and the walks within a month with repetition and practice reflecting best practice and personal choice throughout the year. Flexibility regarding planning and teaching style is certainly encouraged.

Each lesson includes all the components you will need to understand the objectives and plan for the activities:

- Lesson Objectives
- Lesson Overview
- Materials
- Vocabulary
- Preparation
- Activities
- Teacher Reflection/ Evaluation
- Extension Activities

Children and Traffic

Although children are part of the same traffic system when they walk or ride on the same streets as other road users, research tells us that children perceive traffic differently than adults.

- Children are likely to believe that cars can stop instantly, and that if they can see the car, the driver can see them.
- Children have difficulty judging speed and distance.
- Young children have underdeveloped peripheral vision.
- Children have trouble telling where a sound (siren/ horn) comes from.
- Children often lack a sense of danger.
- Children are often restless, and have trouble waiting for things like traffic lights.
- Children have problems paying attention for long periods of time.
- Children have not developed the ability to think through cause and effect and have difficulty understanding complex chains of events.

- Children tend to focus only on the things that interest them most.
- Children have difficulty discerning myth from reality.
- Children may believe that grown-ups will always look out for them.

Excellent pedestrian videos which depict the child's perspective on traffic are "Children in Traffic," (1983) and "The New Children in Traffic," (1999). To view them, go to the American Automobile Association (AAA) video vault link: <http://www.aaafoundation.org/multimedial/index.cfm?button=videos&vidsearch=1>

Through ongoing skill development and practice, children can significantly reduce the likelihood of injury-causing crashes.

Getting Started

The *Neighborhood Navigators* program can be taught in a variety of settings but we do recommend that each day starts in a classroom setting with convenient access to outside.

Permission Forms: check with school policy about off-school permission required.

As you decide on locations of the walk, be sure it is a reasonable distance to do in the time available. Walk a route you propose, assume it will take longer for the class to walk it than it takes you to walk it, and see the difference with the first walk with the class. Use this as a benchmark as you decide future walking routes. Always give the school office a map of the route you will be taking each day and be sure that both you and the office have a list of participants and their parents' or guardians' contact information.

Thank you for taking an active role in your students' and the community's present and future health.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by



U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Neighborhood Navigators

Grades K-3

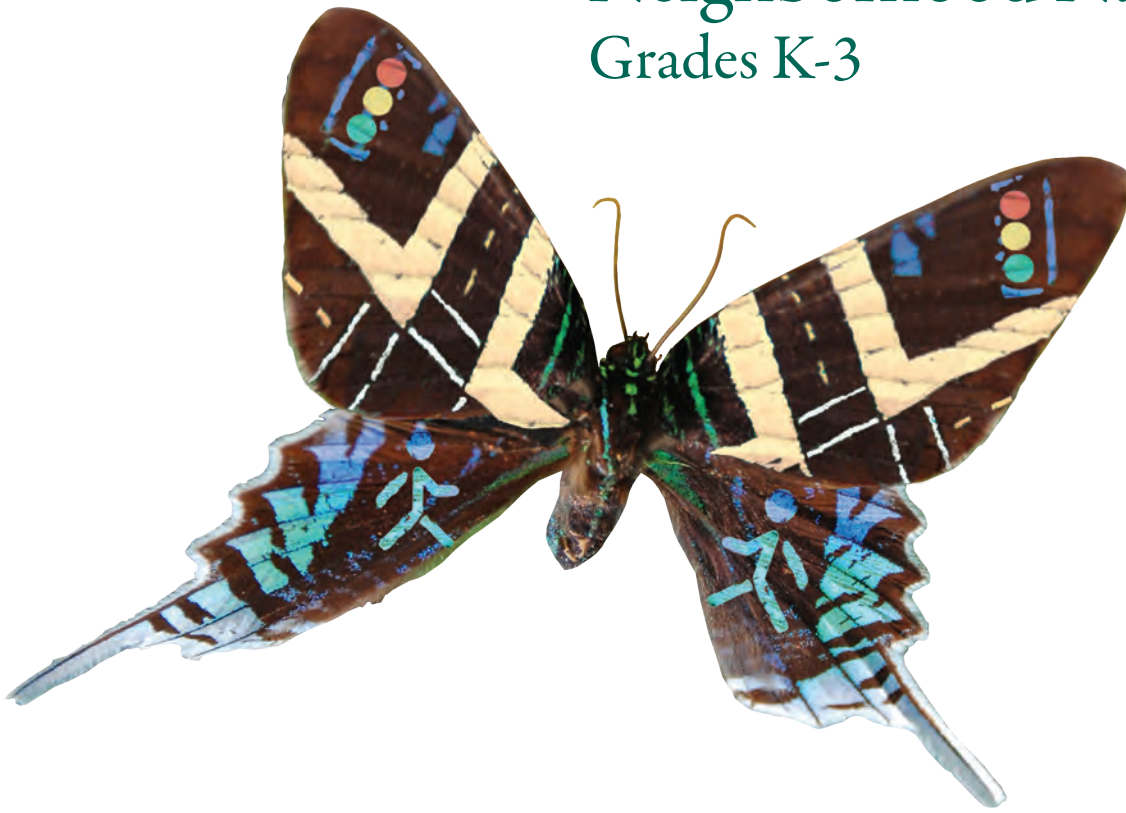


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Neighborhood Navigators

Grades K-3

Introduction

N*eighborhood Navigators* for primary or K-3 grades focuses on pedestrian safety, traffic systems safety and actual practice. As students experience the *Neighborhood Navigators* curriculum, they will gain a basic understanding of their roles and responsibilities as safe and respected pedestrians.

In lessons two and three, students will have an opportunity to practice being safe pedestrians in the school neighborhood. *Some schools require parent permission slips when students leave the school grounds.* Make sure to check into this prior to taking students off school property. If you can enlist the help of adult volunteers, it is encouraged.



K-3 Lesson Summary (5 lessons)

Lesson Title	Summary
Basic Rules of Pedestrian Safety	Students learn and practice the basic rules of being safe pedestrians.
Pedestrian Clues and Practice	Students learn different clues to help them be safe pedestrians.
Practicing Safety	Students have an opportunity to practice pedestrian safety.
Signs, Signals and Safe Routes	Students learn about the signs and signals used to help pedestrians stay safe. They begin to recognize hazards that a pedestrian may experience.
Safe and Healthy	Students have an opportunity to propose and advocate for safe routes around school.

Grades K-3 Learning Objectives

Purpose To provide students with the basic knowledge and skill practice necessary to be safe pedestrians.

Learning Objectives Students will be able to:

- define basic rules of being a safe pedestrian.
- identify and demonstrate the steps necessary to cross the road safely.
- define what a **hazard** is for a pedestrian.
- identify **clues** that help determine dangerous situations.
- define **“Walking School Bus.”**
- participate in a supervised safe walk around the school neighborhood that allows them to practice safe street crossing.
- identify safe walking routes and routes that may be unsafe.
- demonstrate safe pedestrian behaviors in school and classroom settings and during the supervised neighborhood walk.
- identify different signs and signals used for vehicles and pedestrians.
- begin to understand what is the safer route for pedestrians in various situations.
- read scenarios and discuss a safe action or behavior for that situation.
- design and advocate for safe routes around school.
- discuss why walking and bicycling are healthful choices personally and for the environment.

Grades K-3 Benchmarks

Social Science **SS.03.GE.02** Understand the purpose of maps, globes, and other geographic tools.

SS.03.CG.03 Identify ways that people can participate in their communities and the responsibilities of participation.

Health **HE.03.IP.01** Identify safe behaviors when traveling to and from school and in the community.

HE.03.IP.02 Use decision-making model to plan ahead to avoid dangerous situations and injuries on the way to and from school.

HE.03.HS.02 Demonstrate ways to avoid unsafe situations and practice healthy behaviors.

HE.03.HS.07 Advocate for healthy and safe behaviors at home and at school.

Physical Education **PE.03.SM.01** Identify rules, procedures, and etiquette in a specified physical activity.

PE.03.EE Understand and participate in a variety of physical and recreational activities available in the school and community.



Resources

OREGON'S SAFE ROUTES TO SCHOOL PROGRAM

<http://www.oregon.gov/saferoutes>

OREGON WALK + BIKE

<http://www.walknbike.org>

CITY OF PORTLAND, OFFICE OF TRANSPORTATION

Safe Routes to School, Educational Materials

<http://www.portlandonline.com/TRANSPORTATION/index.cfm?c=40561>

OHSU THINK FIRST PROGRAM

<http://www.ohsu.edu/thinkfirst>

(programs for grades 1-3 and 4-6; teacher pages included)

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CENTERS FOR DISEASE CONTROL AND PREVENTION

<http://www.cdc.gov/nccdphp/dnpa/kidswalk/resources.htm>

(Kids Walk-to-School resource materials)

NATIONAL CENTER FOR SAFE ROUTES TO SCHOOL

<http://www.saferoutesinfo.org>

INTERNATIONAL WALK TO SCHOOL DAY

<http://www.walktoschool-usa.org/>

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION NHTSA

<http://www.nhtsa.dot.gov> - on menu bar, select *Traffic Safety* topic, then under *Browse Topics* choose *Pedestrian*

(pedestrian page includes links to resource guides, activities and materials for kids)

THE OTTO CLUB – AAA

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

(games and information about driving and safety; can be extremely slow to run but it has good tips and games younger kids will like; includes teacher pages)

SAFE-A-ROONI™

<http://www.safe-a-rooni.org/>

(Minnesota, North Dakota, etc. Safety Councils – wonderfully engaging, fun cartooney site for younger kids to teach all aspects of safety)

WAY TO GO!

<http://www.waytogo.icbc.bc.ca/>

(British Columbia-based program for schools to help encourage kids to walk to school; includes traffic safety education)

SAFEKIDS USA

<http://www.usa.safekids.org/>

(SafeKids USA is part of a global network of organizations whose mission is to prevent accidental childhood injury; includes pedestrian, bike and skateboard safety; note the “Activities for Kids!” menu)





Lesson 1:

Basic Rules of Pedestrian Safety

Objectives Students will be able to:

1. define basic rules of being a safe pedestrian.
2. identify and demonstrate the steps necessary to cross the road safely.

- Materials**
- Student workbook
 - Chalkboard or chart paper and markers
 - Groundsheet or tarp of a roadway, masking or duct tape (see Appendix A1 and A2)
 - Overhead or enlarged picture of roadway (Appendix A3 and A4)
 - I See You, You See Me Overhead (Appendix C)
 - Traffic Control Signs (Appendix E)

Advance Preparation Place groundsheet in open area (in the gym or in the classroom with desks cleared). Students sit along one side of ground sheet. If you do not have the groundsheet, use masking or duct tape to tape off an area that looks like the example in Appendix A1 or A2.

Vocabulary Words **bike lane** - the marked lane on the road for use by bicycles that separates bicycles from other vehicles

crosswalk - any part of an intersection, marked or unmarked, that is for pedestrians crossing a street or road (every intersection is a crosswalk)

driver - someone who controls the actions of the vehicle

driveway - a private road from the street to a building, house or garage

intersection - a place where two or more streets join together (cross each other)

pedestrian - someone who walks/moves (including people in wheelchairs)

roadway - the part of a road used by vehicles

shoulder - the portion of a highway, paved or unpaved, touching the roadway, for use by pedestrians, stopped vehicles and emergency use

sidewalk - a walk (usually paved) for pedestrians at the side of a street

street corner - a place where two streets come together, usually the location of a crosswalk

safe pedestrian - someone who knows and applies the rules of the road to be safe

traffic sign - a visual sign for controlling traffic so people are safe

vehicles - modes of transportation for persons or property that use roadway (including cars, buses, trucks, trains, bicycles, skateboards, scooters)

Activities An initial introductory activity for all five lessons could be a “daily tally” of who walked, biked, scootered, skated, rode a bus, rode in a car to school. See Appendix B for a sample tally form. An alternative counting method might include hanging pictures or words of each of the travel modes on the wall or from the ceiling. At the start of each class students go to the travel mode used that day. Teacher or student records the number.

Explain to students that *Neighborhood Navigators* includes lessons about learning and practicing how to cross the street safely, identifying road signs and determining safe routes to walk around the school and neighborhood.

Have all students push back their chairs, but stay seated. Explain that you are going to say a sentence and when they agree with that sentence, they stand up and yell, “That’s **Me!**”

Sentences:

“I am safe when I am playing outside.”

“I walk or ride my bicycle, skateboard or scooter to school.”

“I understand that walking or riding a bicycle, skateboard or scooter is good for my body.”

“I know what a pedestrian is.”

“I know some rules of the road.”

“I know what some traffic signs mean.”

Thank students for participating and explain that those sentences introduce some of the topics we will be covering in the lesson.

Hand out student workbooks and have students put their name, date and grade on the front. Have them turn to page 2, the example of a roadway. As you explain the vocabulary words, have students label the diagram together as a class.

You may make an enlargement or an overhead of the intersection example (Appendix A3 or A4) to lead the discussion.

Explain to students that a **roadway** includes **crosswalks**, **intersections**, **sidewalks**, **corners**, and **driveways**. Reinforce each of these roadway components for visual and/or kinesthetic learners by pointing to them on the overhead and/or standing in the appropriate place on the groundsheet.

Write the word **pedestrian** on the board. Define pedestrian as someone who walks (including people in wheelchairs). Add the word “safe” in front of pedestrian on the board. Define **safe pedestrian**. Ask students: “Do you want to be a safe pedestrian?” Describe a **safe pedestrian** as someone who walks and moves responsibly, who chooses **safe routes**, and crosses the street safely.

Tell students that in order to be safe pedestrians, they need to learn the basic rules of pedestrian safety. Ask students, “What is a vehicle?” Define **vehicle**. Explain that vehicles can be cars, buses, trains, bicycles, and even scooters!

Define **driver**. Discuss the role of the driver in relation to the vehicle. Younger children often see vehicles as animated objects capable of acting independently, and having a discussion about the driver operating the vehicle helps break down that fantasy.

Tell students that when walking near vehicles, it is important to make sure that the drivers can see them and they can see the drivers. Display the overhead, “I See You, You See Me” (Appendix C), or refer to the student workbook picture on page 3.

Explain to students that when pedestrians are walking they may need to cross the street at some time. It is important to remember these rules when crossing the street:

1. Always stop at the corner or edge of a sidewalk or street.
2. Look all ways with your eyes and listen with your ears.
3. Make sure the vehicle has stopped and the driver knows you are crossing before stepping into the street.

Point out that the child in the picture can see the drivers in the

vehicles around him. Ask students how the child knows that the driver sees and understands that the child wants to cross.

Work with the students to create a list of clues drivers may give to signal that they see the child wanting to cross the street.

Possible clues could be verbal (i.e., calling out the window to go ahead and cross) or non-verbal (e.g., motioning with the hand, nodding the head, smiling and nodding), or a combination. You may wish to demonstrate the clues as you create the list.

Have the students practice by pairing up with a neighbor. One is the driver, one is the walker. Have the driver practice giving the walker the verbal cue (i.e., “I see you. Go ahead and cross.”). Point out that both the driver and the walker must be watching and listening to each other in order for this to work.

Have the students switch roles. The driver gives a non-verbal cue (i.e., motioning with the hand to cross or nodding the head) to the walker. Point out that both the driver and the walker must be watching and listening to each other in order for this to work. Have students sit back down.

Ask, “Why is making contact with the driver important when you are crossing the street?” Explain that just because a driver is looking your way, you can’t be certain the driver will let you cross. Be sure to explain to students that this is a difficult concept. Many adults have problems with this scenario and this form of two-way communication.

Share, “It is important to listen with your ears because sometimes you cannot see the vehicle. You must take out the ear-buds or earphones and stop talking on the phone to listen well.”

Read the Pedestrian Safety Poem (Appendix D) to students and have them repeat it. Students may follow the poem in their student workbooks (page 4).

**Stop every time at the edge of the street,
Use your head before your feet.
Make sure you hear every sound,
Look left, look right, look all around!**

Tell students that we have traffic signs and signals to make sure that people are safe on the road.

Introduce WALK and DON’T WALK signs, Appendix E, by either drawing them on the board, or pointing them out in the student workbook (page 5). Ask students what each sign means, then practice.

Ask students to stand up. Point to the WALK sign. Students demonstrate what to do when they see this sign by walking carefully around the room. Tell students that when you point to the DON'T WALK sign, they need to stop. Do this a few times. Have students sit down.

Using the groundsheet set up in the classroom or gym, demonstrate safe crossing procedures. Use the following scenarios:

- Practice crossing the “road” with and without crosswalk.
- Cross the road with and without “cars.”
- Cross with WALK/DON'T WALK signs.

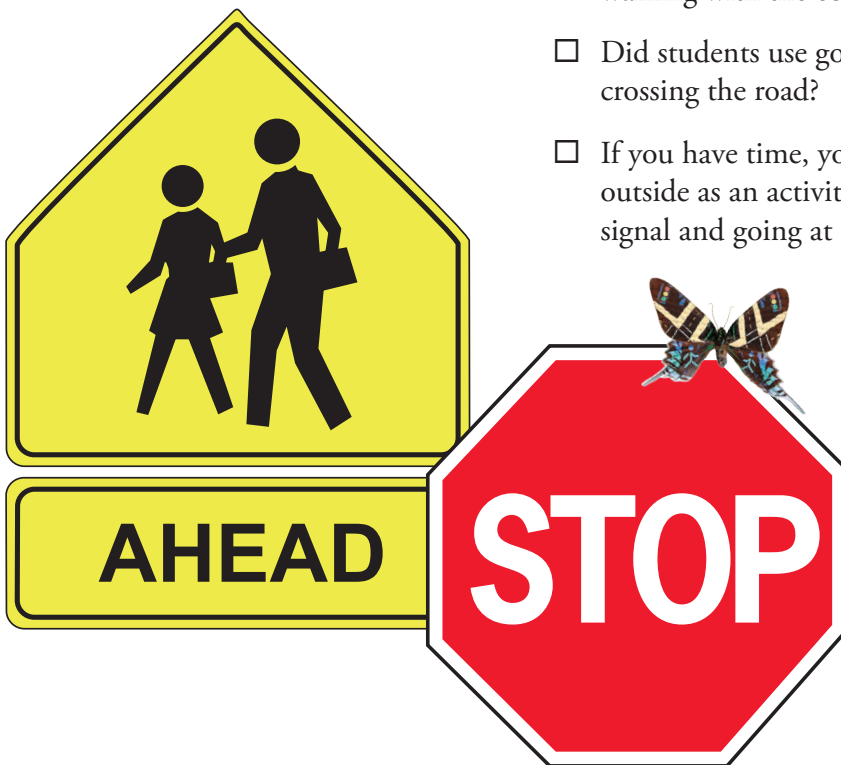
Select a group of two or three students to practice and demonstrate for each scenario. Other students remain seated and comment on what they observed.

If time allows, include other possible scenarios:

- Driveways
- Stray balls going into the street
- Being in a hurry and not being safe, and
- A friend calling you from across the street

Teacher Reflection/Class Evaluation

- Did students correctly demonstrate walking and not walking with the correct traffic signs?
- Did students use good judgement by safely and responsibly crossing the road?
- If you have time, you could play “Red Light, Green Light” outside as an activity that reinforces stopping at the red signal and going at the green signal.







Lesson 2: Pedestrian Clues and Practice

Objectives Students will be able to:

1. define “hazard.”
2. identify clues that help determine dangerous situations.
3. define “walking school bus.”
4. participate in a safe walk around the school neighborhood that allows them to demonstrate and practice safe street crossing.

Materials

- Student workbook
- Expectations for walk posted in room
- Safety vests or sports pinnies
- Description/illustration of Walking School Bus
- Walking route/neighborhood map
- A whistle, or some way to get students attention on the walk
- Adult helper (i.e., teaching assistant, parent volunteer)

Advance Preparation Determine a safe neighborhood route to walk with students. Include a route with opportunities to practice crossing with and without crosswalks, driveways and sidewalks. Recruit adult helper for the Walking School Bus walk.

Vocabulary Words **clues** - bits of information that can help help to solve a problem

hazard - a source of danger

Walking School Bus - a group of children walking to school with one or more adults

Activities Review Pedestrian Safety poem, (Appendix D) or in student workbook (page 4).

Refer students to their workbooks and recite the Pedestrian Safety Poem aloud.

Stop every time at the edge of the street,
Use your head before your feet.
Make sure you hear every sound,
Look left, look right, look all around!

Ask students, “You already know that traffic signs help people to safely cross the street. What do we use on our bodies to safely cross the street? Let’s point to the parts of our bodies that help us safely cross the street.” Have the entire class point to their eyes, ears, brain, feet.

Ask, “Why do you need your eyes? Ears? Brain? Feet? Eyes and ears will send your brain bits of information and your brain will send your feet information related to crossing the street safely. In the Pedestrian Safety Poem, let’s identify the needed steps to cross the street safely.”

Define **hazard** as a source of danger. Define **clues** as pieces of information that can help you spot hazards.

Give examples of clues and hazards:

- The clue is a driveway; the hazards are the cars driving in and backing out putting pedestrians in danger
- The clue is a high hedge or overgrown plants; the hazard is that these plants can block the view of the driver from seeing a pedestrian
- The clue is uneven sidewalk, crumbling curb; crumbling sidewalk; the hazard is an uneven or broken sidewalk may cause a pedestrian to trip and fall
- The clue is parked cars; the hazard is a driver may not see a pedestrian stepping out between parked cars

Ask students, “As a safe pedestrian, what are things you can do to avoid or be aware of hazards?” You can use your body parts... (pointing to eyes, ears, brain, feet again). Have students look at the pictures of the hazards in their workbooks, pages 6-7.

Describe to students that a Walking School Bus is a human-powered bus. Explain that they will be practicing being safe pedestrians in the school neighborhood and will be organized as a Walking School Bus (Appendix F).

Point to and explain the expectations for all students:

- ✓ Wear your safety vest (if available).
- ✓ Stay beside your buddy.
- ✓ Stay behind the driver (adult) or in front of the break lights (adult).
- ✓ When whistle is blown, stop and listen.
- ✓ Stay on safe walking route (off private property).
- ✓ Keep hands to yourself (not petting animals or picking up objects).

Distribute safety vests and walk the pre-determined neighborhood route. Practice safe crossing along the route. It will be difficult, but try to have each student make the decision for himself/herself whether to cross the street as opposed to following the student ahead or asking the teacher for approval. If crossing in pairs, each student should check for safety independently, then check with partner and make the decision to cross.

Once back in classroom, collect safety vests.

Discuss hazards that students noticed or experienced. What parts of their bodies did they use to become aware of hazards? What did they use to avoid becoming one of those hazards?

Ask students to share something they enjoyed or learned on the walk.

Teacher Reflection/Class Evaluation

- Were students able to identify body parts they use to be a safe pedestrian?
- Did students exhibit safe and responsible pedestrian safety skills?
- Were students respectful of self? others? and others' property on the walk?

Extension Activity/ Home Connection

Have students color in Hazard Worksheet (workbook pages 6-7, Appendix H) in small group or at home.

Possible hazards pictured:

- pothole;
- dog in the street;
- bicycle in street
- distracted driver on cellphone;
- cracked sidewalk
- high curb
- distracted pedestrian
- overgrown bushes
- car backing out of driveway

Using the illustrations, talk with students about what clues helped them decide if it is safe to:

- cross the street at the corner;
- walk on the sidewalk;
- cross a driveway.

Encourage students to go on a walk with their family (parents, guardian) and share with them what they learned about being a **safe pedestrian**.





Lesson 3: Practicing Safety

Objectives Students will be able to:

1. identify routes for safe walking and routes that may be unsafe.
2. demonstrate safe pedestrian behaviors in the school neighborhood.

Materials

- Safety Poem (Appendix E)
- Neighborhood map
- Clipboards or something to write on while outside
- Safety vests (optional)

Advance Preparation Determine another neighborhood route to allow students time to practice crossing with and without crosswalk and demonstrate safe behaviors around driveways and sidewalks. Enlarge neighborhood map for students to see routes they will be walking and practicing safe crossing.

Activities Review Pedestrian Safety poem from lessons 1 and 2 (Appendix D and workbook, page 4).

Review what a **hazard** is.

Review the Walking School Bus expectations.

Explain the expectations for all students:

- ✓ Find and stay beside your buddy.
- ✓ Stay behind the driver (Adult) or in front of the caboose (Adult).
- ✓ When whistle is blown, stop and listen.
- ✓ Stay off private property.
- ✓ Keep hands to yourself (no petting animals or picking up objects).

Distribute safety vests, if using.

Walk the neighborhood route. Practice safe crossing. Try to include driveways and alleyways. Students must treat these like intersections. They must stop, check for safety, then proceed with caution. Parking lots are also hazards. If available, practice walking through the school parking lot looking for clues to indicate whether a perked car will begin to move: someone sitting the driver's seat, engine exhaust, etc.

When back in classroom, collect the safety vests. Ask students about the experience. Ask, "Why do people walk?" Possible answers may include:

- to exercise;
- to get from one place to another;
- to compete in a race;
- to make their hearts healthy;
- to lose weight;
- to spend time with a neighbor or friend;
- for a healthier environment.

If time allows, use workbook (pages 8-9) to mark and/or write down hazards they saw while on their walk as well as safe pedestrian behaviors they witnessed.

Teacher Reflection/ Class Evaluation

- Did students exhibit safe and responsible pedestrian safety skills?
- Did students respect themselves, others and others' property on walk?
- Did students describe walking as a healthful behavior?

Extension Activity/ Home Connection

Add "Walking Wednesdays" or any other school day that could be scheduled throughout the school year (can be for class, school, or suggestion for home).

Have students do Hazard Worksheet (pages 6-7) as homework-if not done. Ask them to share the homework with their parents.





Lesson 4: Signs, Signals, and Safe Routes

Objectives Students will be able to:

1. identify different signs and signals used for vehicles and pedestrians.
2. determine the safest route for pedestrians in series of situations.
3. read scenarios and determine a safe action or behavior for that situation.

- Materials**
- Student workbooks
 - Large paper (chart paper or newsprint)
 - Tape
 - Markers
 - Whistle or chime
 - Overhead of Traffic Signs (Appendix E)
 - Overhead of Safe Routes Worksheet (Appendix I)

Advance Preparation Write or print out each of the scenarios listed in Appendix G, Decision-making Carousel on a large piece of paper for the carousel activity. Tape each scenario paper around the room so that students can move safely to and from scenarios described on each paper. If you have access to other adults, they could be at each station to help write or facilitate the conversation. Display a visual of the traffic signs (Appendix E).

Activities. Ask students, “What traffic signs have you seen on our walks? In your workbook (page 10) draw at least two signs or signals you have seen.” Have students share traffic signs they drew and what they mean. Have students share any clues or hazards they noticed.

Complete Safe Routes Worksheet (workbook page 11, Appendix I) as a class. Have students draw a circle around who is walking safely and put a big “X” over those who are not walking safely.

Then have students draw a line on the picture to show the safest routes.

Decision-making Carousel

Organize students into small groups. Assign each group to a station. Once at the station, have students read situation/scenario (Appendix G) and discuss, make decisions and report back to class what they decided was the safest decision. You may assign students in each group a task, such as: reader, recorder, reporter, and timekeeper. (NOTE: You may wish to modify this activity to accommodate the language level of your class.)

Situations/scenarios:

1. You are walking with a parent and you need to cross the street. What do you look for in order to cross safely? What do you decide to do?
2. You are with your friend and you are not near a crosswalk. You want to cross in the middle of the street. What are your choices? What do you decide to do?
3. You are watching a classmate run across the street. What can you tell him or her about being safe when crossing the street?
4. You are in your yard and a basketball rolls into the street. What should you do?
5. You are being picked up by parent/guardian after school. There is a lot of vehicle and pedestrian traffic at school (buses, cars are parking, soccer practice in the field). What do you do to safely find your way to your ride home?

After students have had time at one or more of the stations, have all students sit down. Read each situation/scenario and ask each group to respond and share with the class the safe decisions they made. Provide students feedback with what you noticed they did well during carousel activity (i.e. cooperation, safe movement, smart and safe decisions, appropriate communication, used *Neighborhood Navigators* vocabulary, etc).

Teacher Reflection/Class Evaluation

Ask students, “Whose job is it to make sure that you stay safe when walking and crossing the street?” Tell students to complete sentence (below) in student workbook (page 12).

The person who can keep me safe when I cross the road is _____ . (ME!)

- Did students draw traffic signs and accurately describe their use?
- Did students accurately select the safest routes in their workbooks?
- Were students able to talk in their groups about pedestrian safety rules?
- Were appropriate decisions made during carousel activity?



Lesson 5: Safe and Healthy

Objectives Students will be able to:

1. design and advocate for safe routes around school.
2. describe why walking and biking are healthful choices personally and for the environment.

Materials

- Rules of the Road for Pedestrians (Appendix J)
- 8.5 x 11 sheets of paper
- Markers, colored pencils, crayons
- Safe Pedestrian poster checklist (Appendix K)

Advance Preparation none

Activities Have students brainstorm Rules of the Road for Pedestrians (Appendix J) in their workbooks (page 13).

Next, discuss walking and biking as healthy outdoor activities. Have students complete the unfinished sentences in their workbook (page 14):

Walking (or biking) is a healthful choice for me because _____.
Walking (or biking) is good for the environment because _____.

Have students create a Safe Pedestrian poster to teach others how to be safe pedestrians. Students are expected to illustrate and describe at least one of the following safe pedestrian concepts:

- ✓ Rules of the Road
- ✓ Using clues
- ✓ How to avoid hazards
- ✓ How to safely cross the street
- ✓ How to safely cross a driveway
- ✓ Safe behavior on a sidewalk

Students present and share their posters. Classmates can check safe behaviors (on checklist, Appendix K) addressed in poster. Posters may be displayed around school and/or community for advocacy.

Extension Activity/ Home Connection

Create class poster from students' sentences on why walking is a healthful choice personally and environmentally (simply transferring student sentences to large paper).

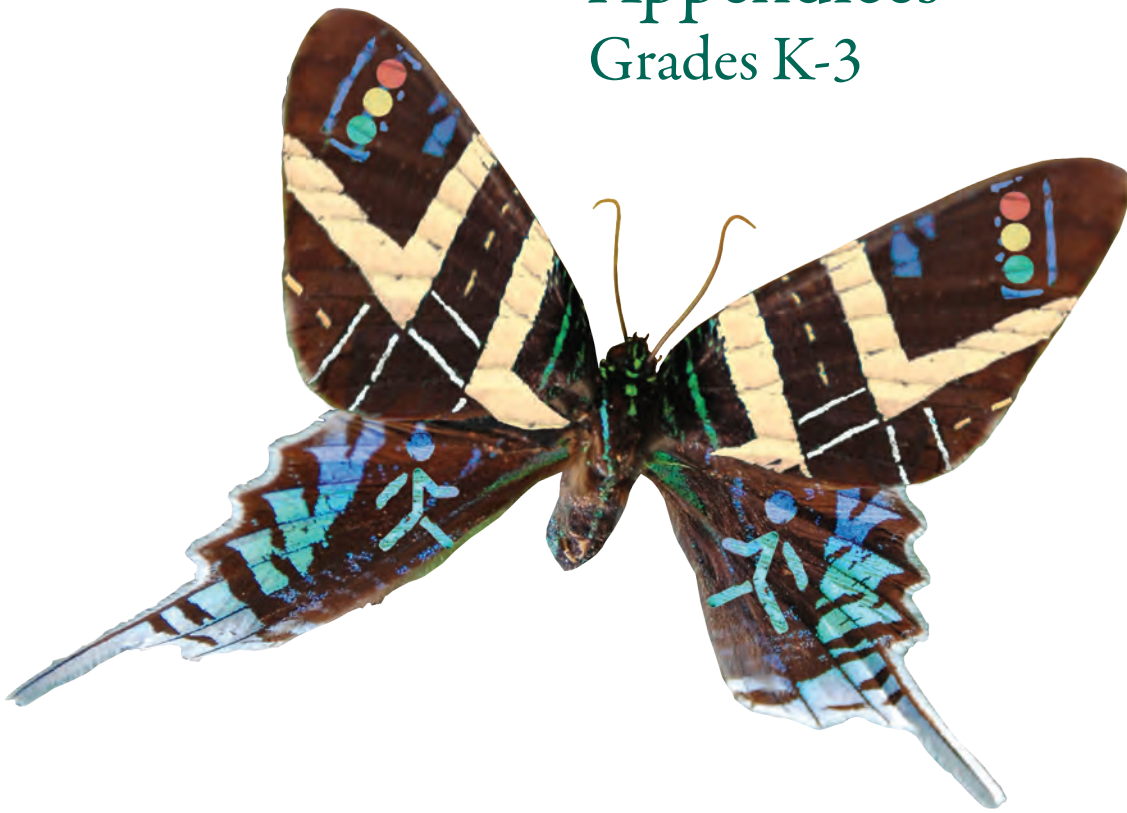
Encourage students to go on a family walk or bike ride and share what was learned about safe and healthy choices.

Send note home (or include in class newsletter) encouraging families to explore walking and biking resources on the Internet. You may wish to print out the resource page at the beginning of this curriculum, page 4.



Appendices

Grades K-3



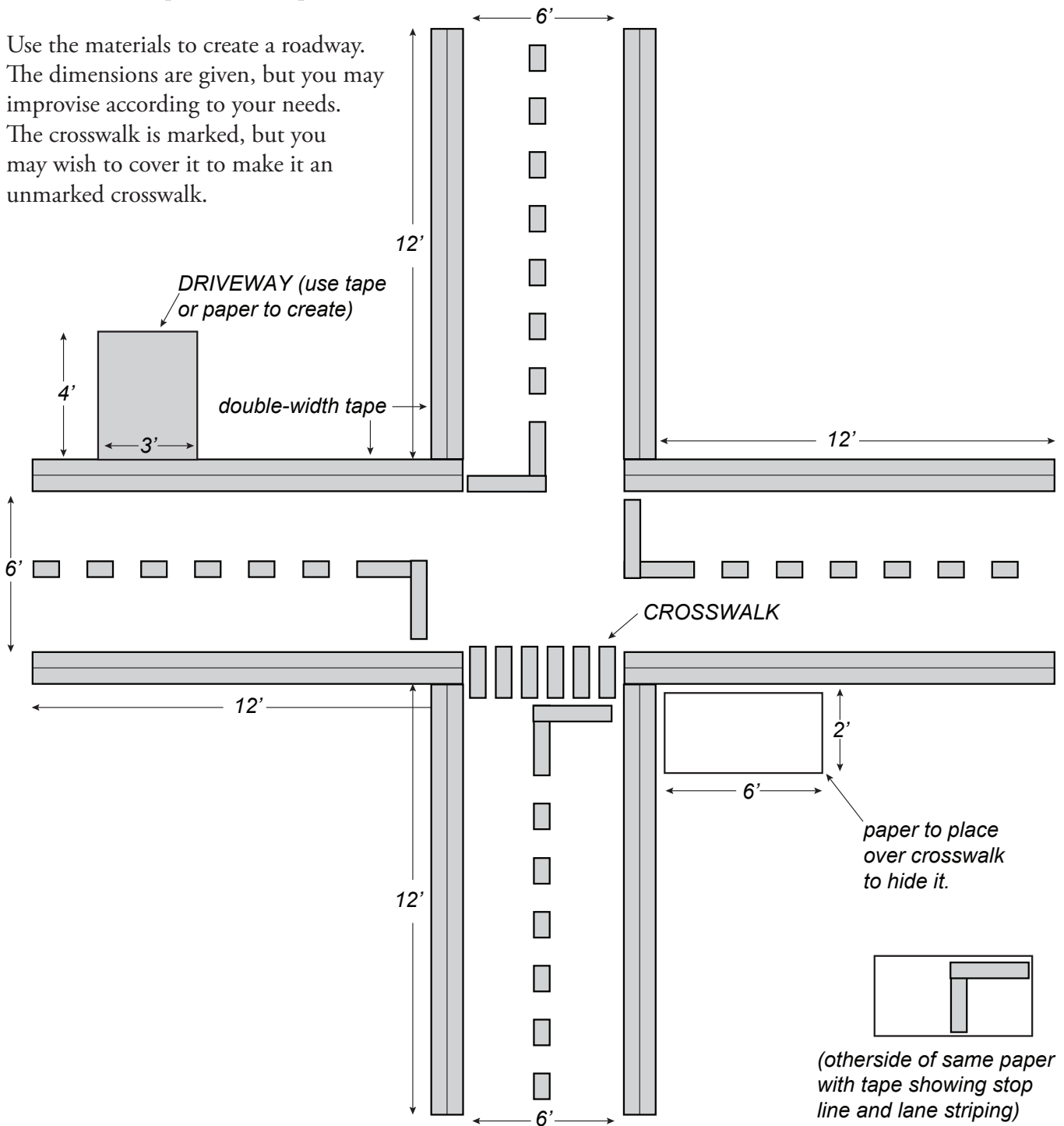
Appendix A-1

Template of Roadway

Materials needed to make this roadway:

1. ground sheet, tarp, or cleared floor area
2. duct or masking tape rolls
3. measuring tape
4. toy cars and pedestrians (optional)

Use the materials to create a roadway. The dimensions are given, but you may improvise according to your needs. The crosswalk is marked, but you may wish to cover it to make it an unmarked crosswalk.



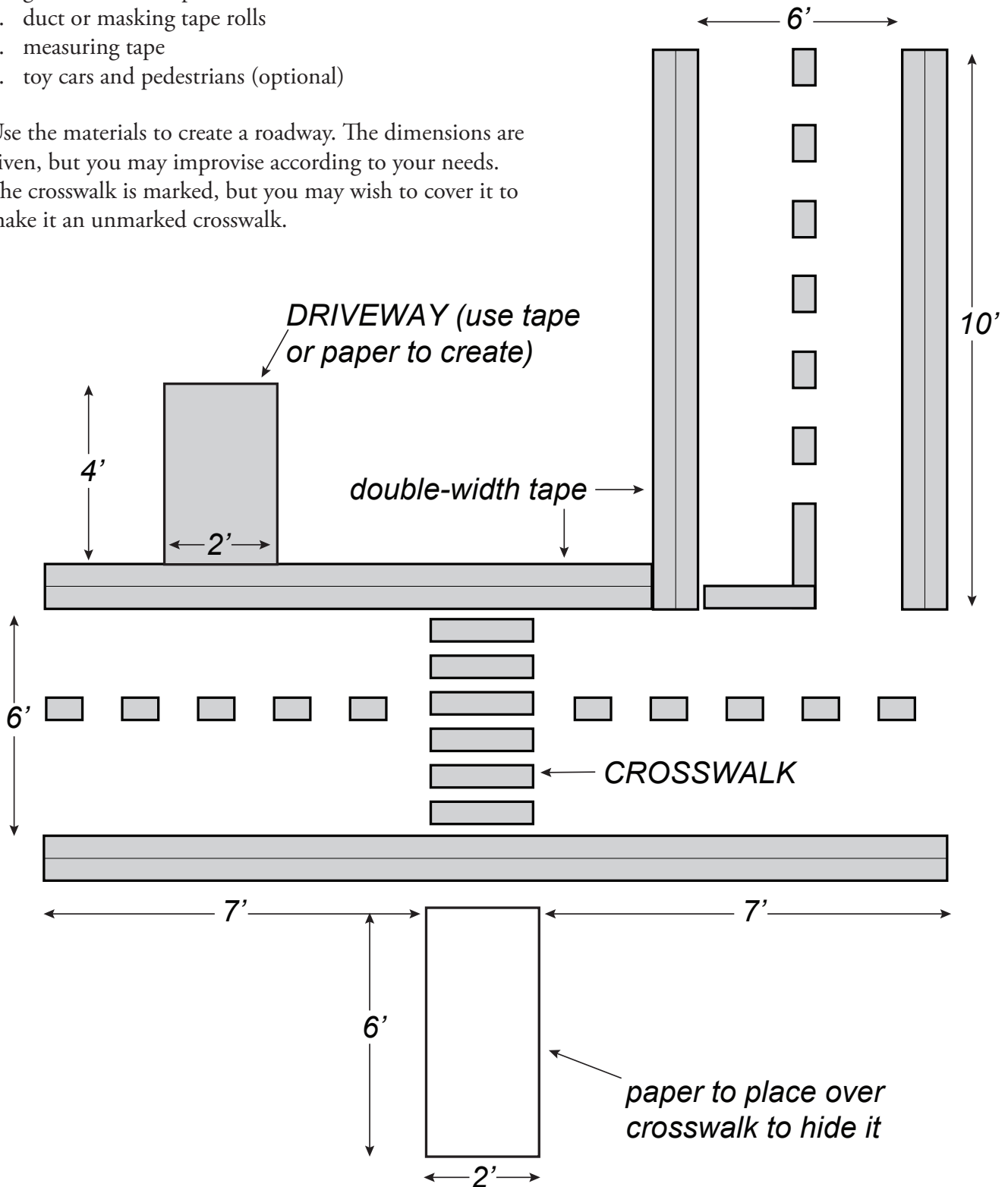
Appendix A-2

Template of Roadway - Midblock Crossing

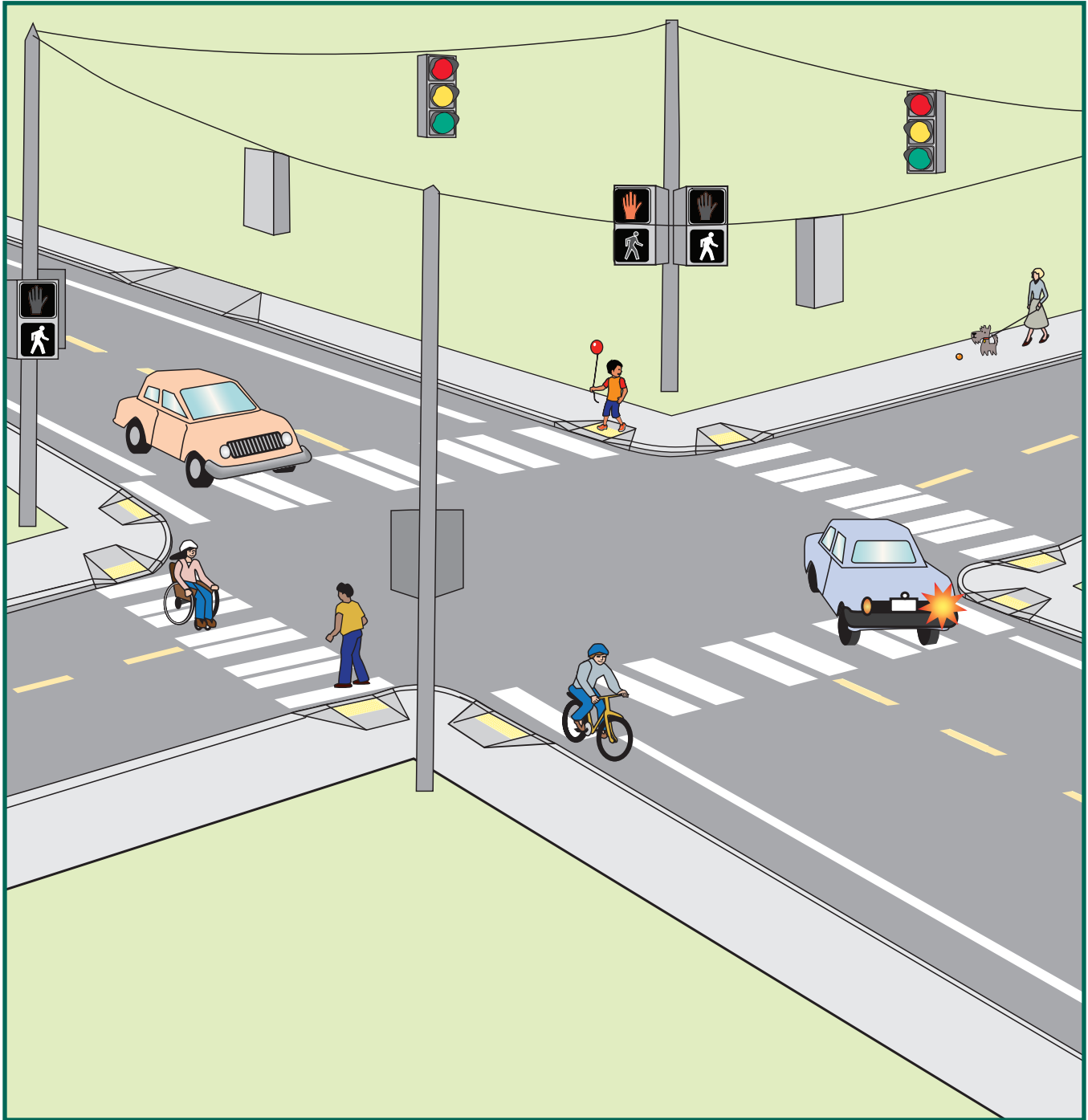
Materials needed to make this roadway:

1. ground sheet, tarp, or cleared floor area
2. duct or masking tape rolls
3. measuring tape
4. toy cars and pedestrians (optional)

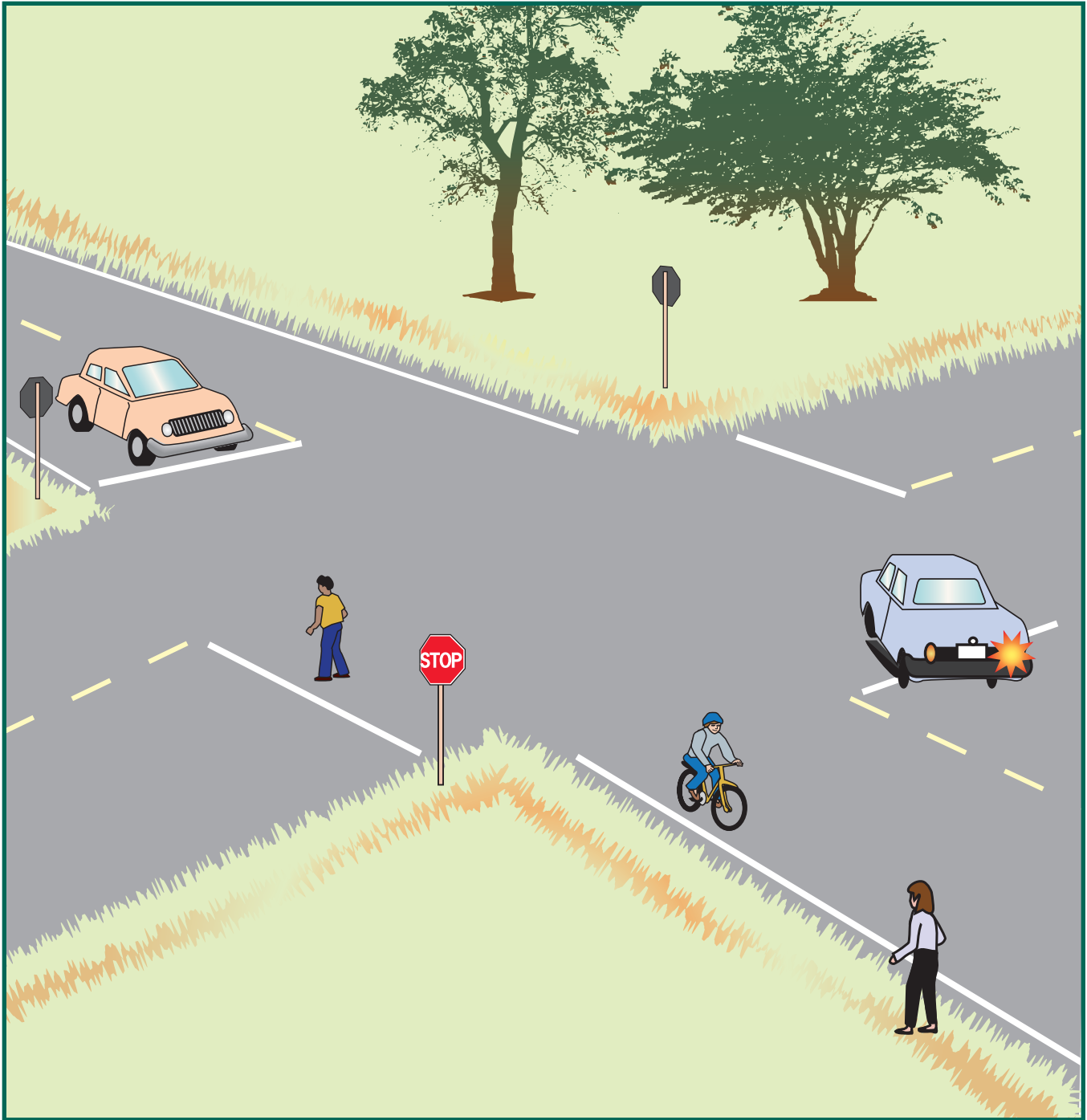
Use the materials to create a roadway. The dimensions are given, but you may improvise according to your needs. The crosswalk is marked, but you may wish to cover it to make it an unmarked crosswalk.



Appendix A3
Visual of Intersection (URBAN)



Appendix A4
Visual of Intersection (RURAL)



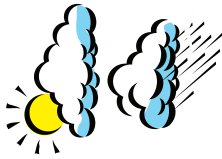
Appendix B

How We Traveled to School Today

Teacher:

Grade:

Week starting:



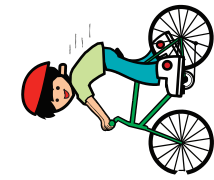
SUNNY?
CLOUDY?
RAINY?



WALK ALL
THE WAY



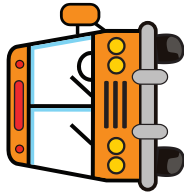
WALK
PART WAY*



BIKE



SKATE/
SCOOTER



BUS/MAX
SCHOOL
BUS



CARPPOOL
WITH
OTHERS



FAMILY
CAR



OTHER?

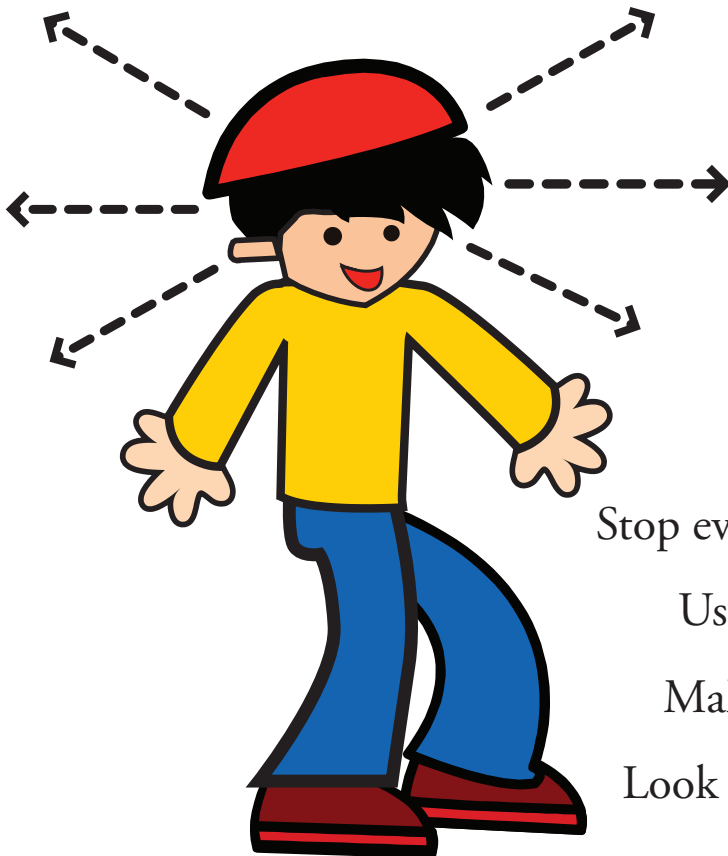
	SUNNY? CLOUDY? RAINY?	WALK ALL THE WAY	WALK PART WAY*	BIKE	SKATE/ SCOOTER	BUS/MAX SCHOOL BUS	CARPPOOL WITH OTHERS	FAMILY CAR	OTHER?
MONDAY									
TUESDAY									
WEDNESDAY									
THURSDAY									
FRIDAY									

* walked more than two blocks

Appendix C
I See You, You See Me



Appendix D
Pedestrian Safety Poem



Stop every time at the edge of the street,
Use your head before your feet.
Make sure you hear every sound,
Look left, look right, look all around!

Appendix E1 Traffic Signs



This is the older version of
WALK/DON'T WALK



Appendix E2
Traffic Signs



Appendix E3
Traffic Signs



Appendix F

Walking School Bus Rules

Be Cool
Walk to School



1. No running! This is a walking school bus, not a running school bus.
2. No throwing of anything – pinecones, rocks, or even paper – all out!
3. We have to look both ways before crossing the street always.
4. No pushing, pulling, hitting, or otherwise harassing other walking school bus riders – we all want to enjoy our walk.
5. When the Walking School Bus is crossing the street, we all must wait and decide as a group when it is safe to cross. We must stay on the sidewalk to stay safe before we cross.
6. If you are walking faster than the rest of the bus, slow down and wait for your friends; if they are walking faster, step up the pace and catch up. We need to stay together so we can stay safe and cars will see us.

Appendix G

Decision Making Carousel

You are walking with a parent and you need to cross the street.

What do you look for in order to cross safely?

What do you decide to do?

You are walking with your friend and you are not near a crosswalk. You want to cross in the middle of the street.

What are your choices?

What do you decide to do?

You are watching a classmate run across the street

What can you tell him or her about being safe when crossing the street?

You are playing basketball in your yard and your ball rolls into the street.

What are your choices?

What do you decide to do?

You are being picked up after school by your parent/ guardian. There is a lot of vehicle and pedestrian traffic- confusing!

How (car, walk, bike) do you get home?

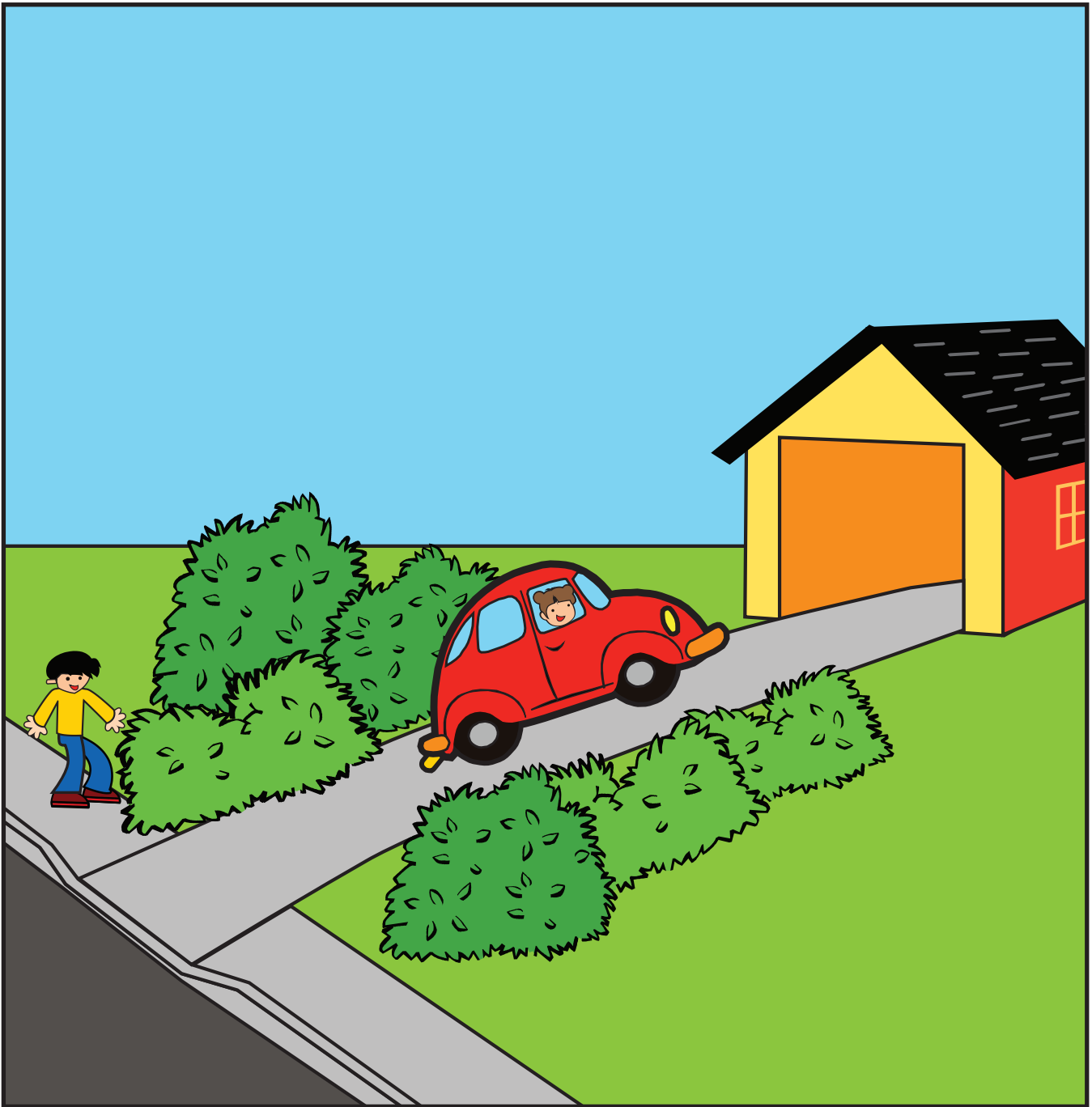
What can you do to safely find your way to your ride home?

Appendix H1

Hazard Worksheets

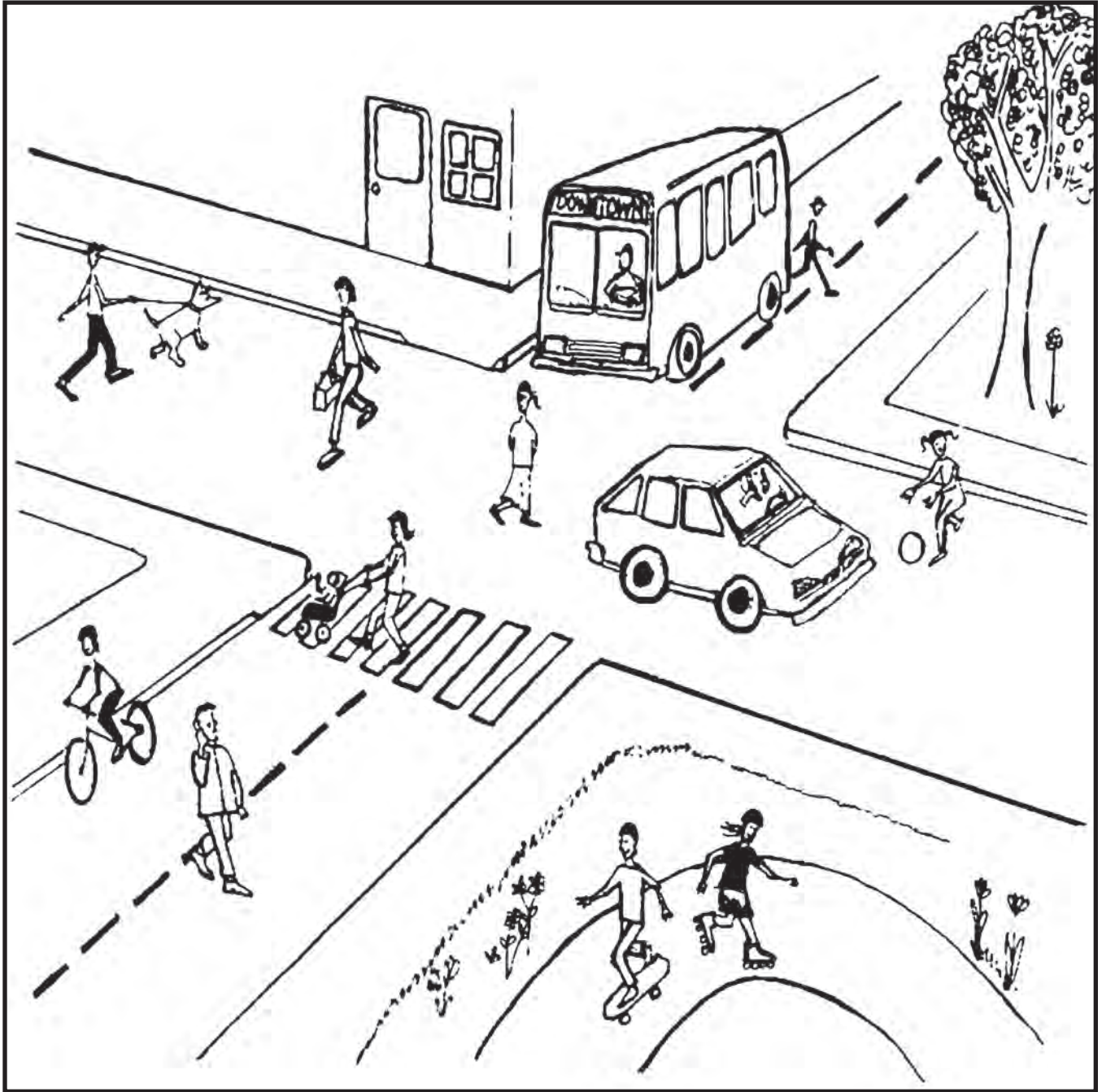


Appendix H2
Hazards Worksheets



Appendix I

Safe Routes Worksheet



Appendix J

Rules of the Road for Pedestrians

1. Look all ways before crossing (left, right, behind and left again).
2. Walk, don't run across or into the street.
3. Cross only at safe corners, not between parked cars.
4. Choose a route with the smallest number of crossings.
5. When possible, walk on sidewalks.
6. When possible, cross streets at crosswalks, and where there are traffic signs and signals.
7. Always obey traffic signs and signals.
8. Walk facing traffic when walking on roads without sidewalks.
9. Always look for turning cars and be ready to respond.
10. Say "NO" when asked to ride in a car with strangers.

Appendix K

Safe Pedestrian Poster Checklist

You are to create a Safe Pedestrian poster to teach others how to be safe pedestrians. You are expected to illustrate and/or describe at least one of the following safe pedestrian concepts:

- ✓ Rules of the road
- ✓ Using clues
- ✓ How to avoid hazards
- ✓ How to cross the street safely
- ✓ How to cross a driveway safely
- ✓ Safe behavior on a sidewalk



Neighborhood Navigators' Pledge

This is to certify that

I, _____

promise to be SAFE and make street safety a habit.

I will walk on sidewalks when available.

I will walk facing traffic so drivers can see me.

I will stop at curbs and corners.

And I will look and listen to make sure that vehicles stop for me
before I step into the street to cross.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by

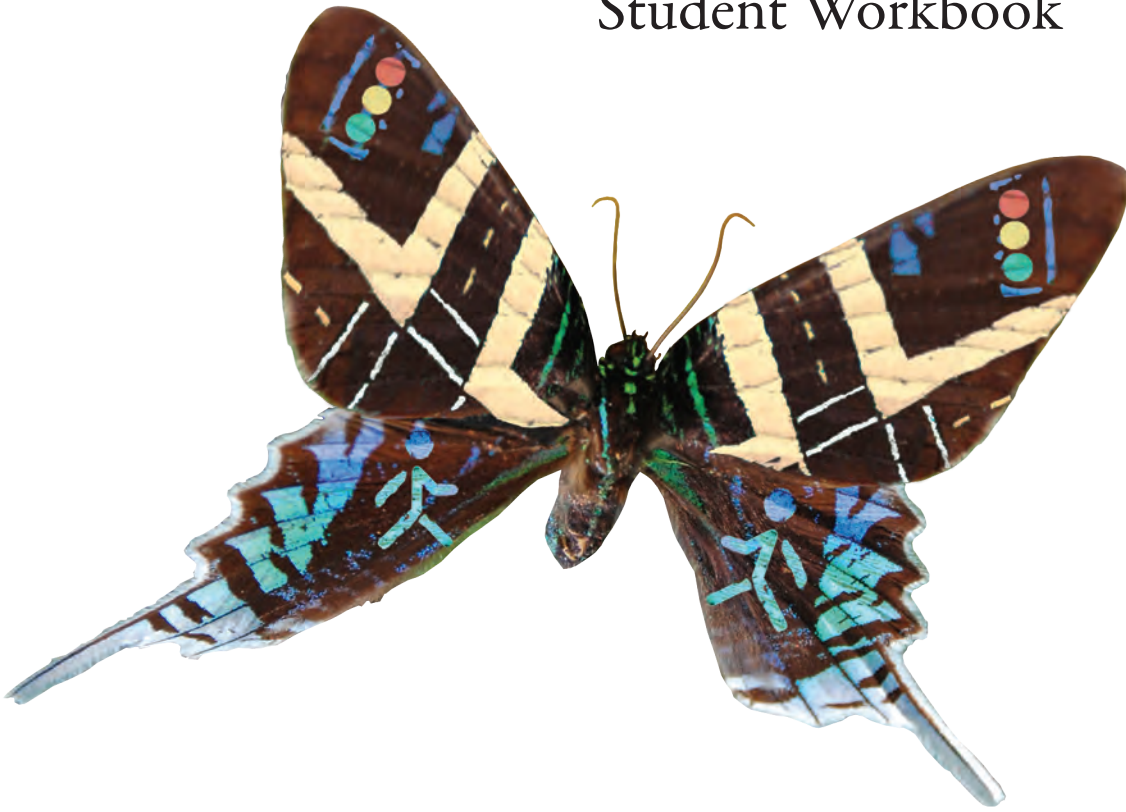


U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Neighborhood Navigators

Grades K-3

Student Workbook



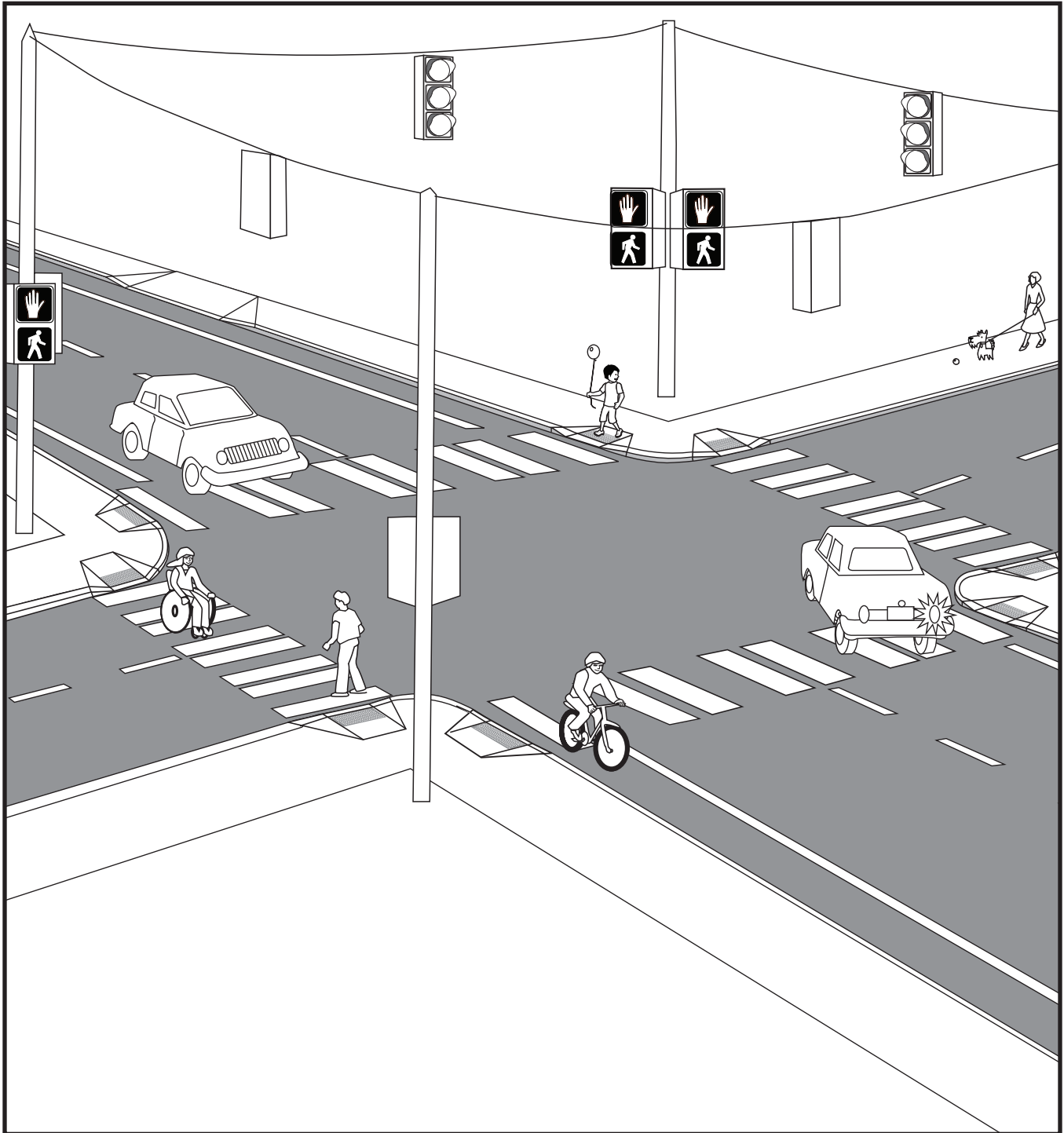
Name: _____

Date: _____

Grade: _____

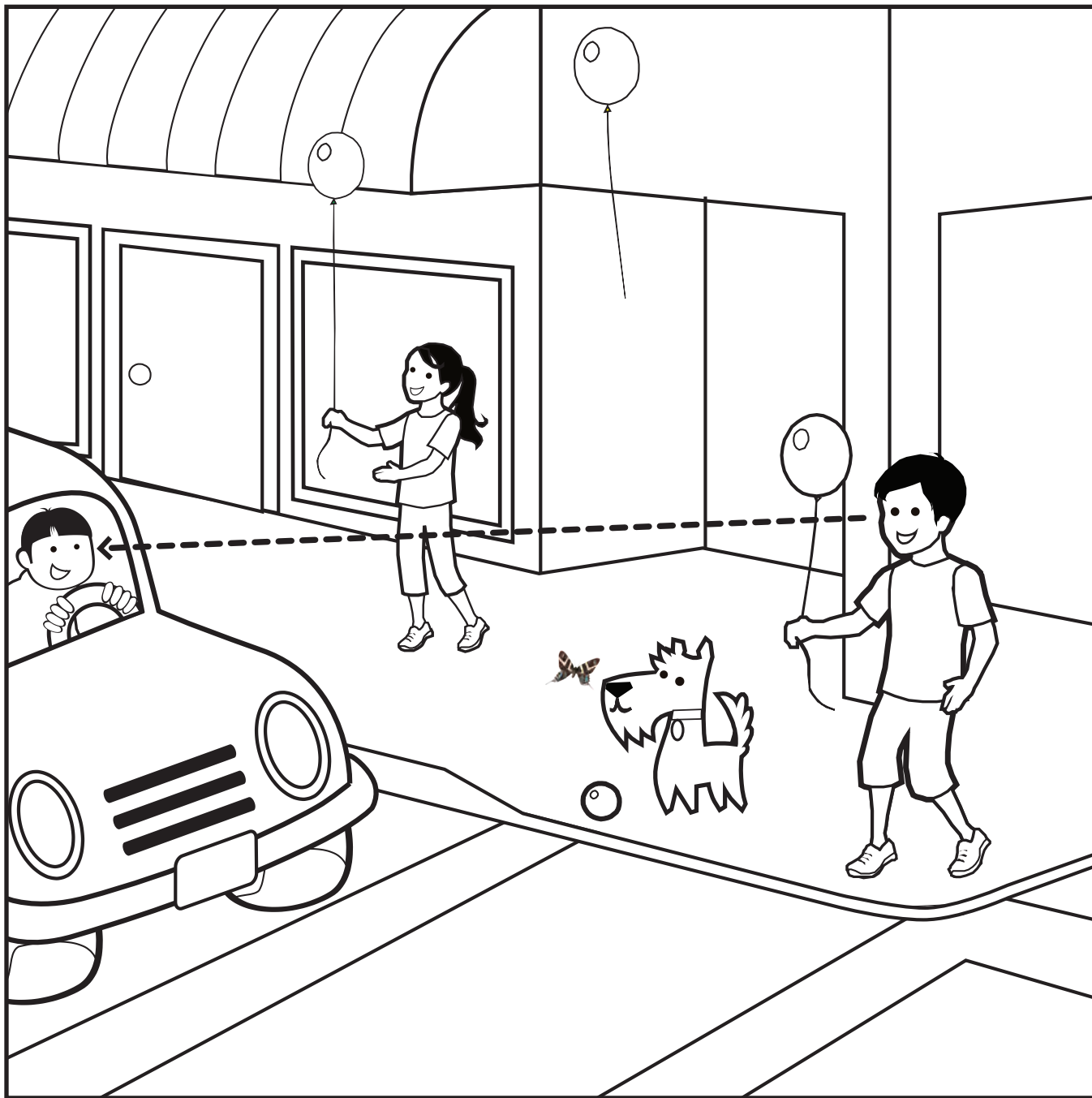
Lesson 1

Picture of a Roadway

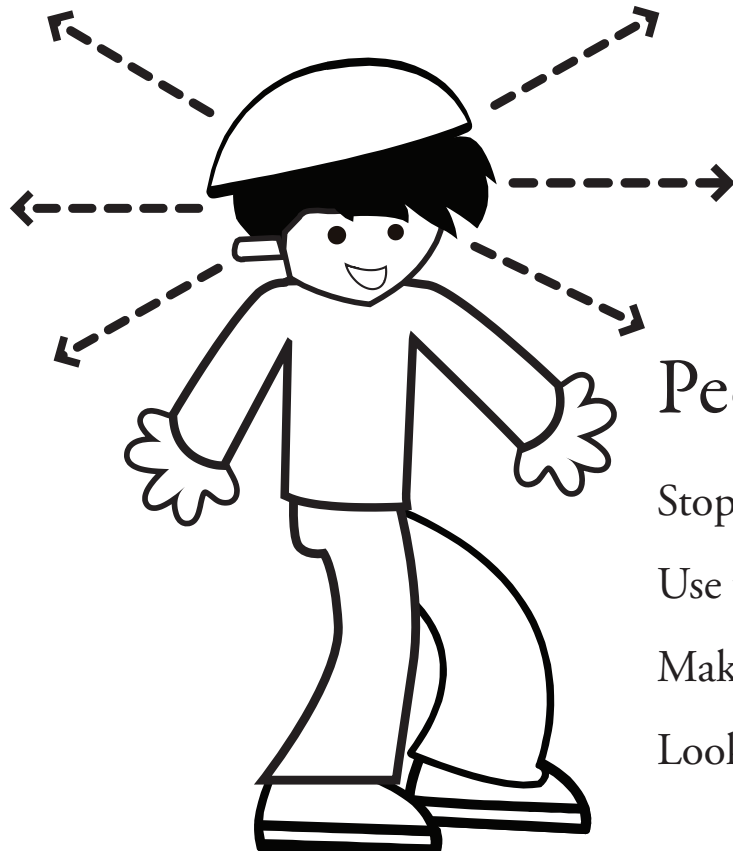
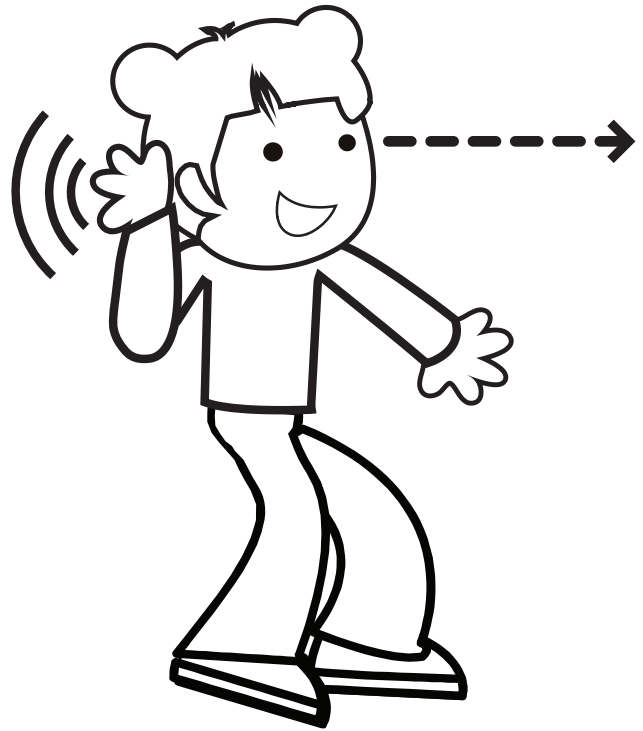
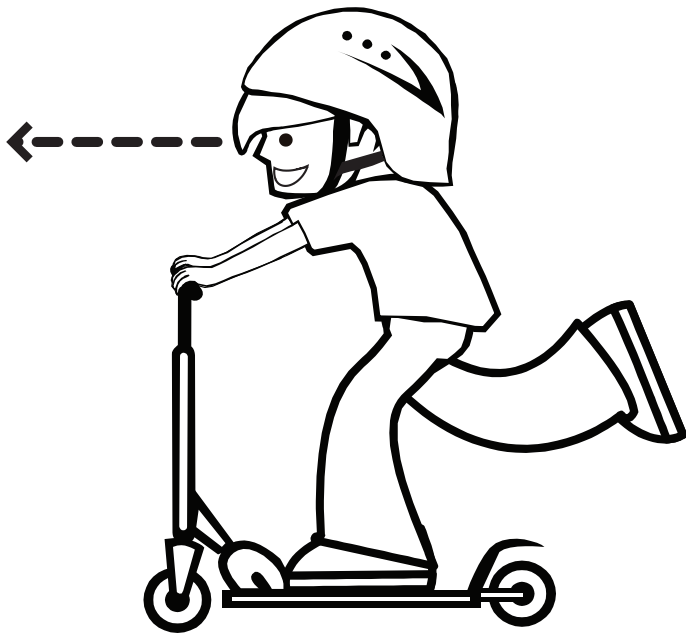


Lesson 1 *continued*

I See You - You See Me



Make eye contact with the person in car before starting to cross the street. Is the car stopped?
Does the driver see me?



Pedestrian Safety Poem

Stop every time at the edge of the street,

Use your head before your feet.

Make sure you hear every sound,

Look left, look right, look all around!

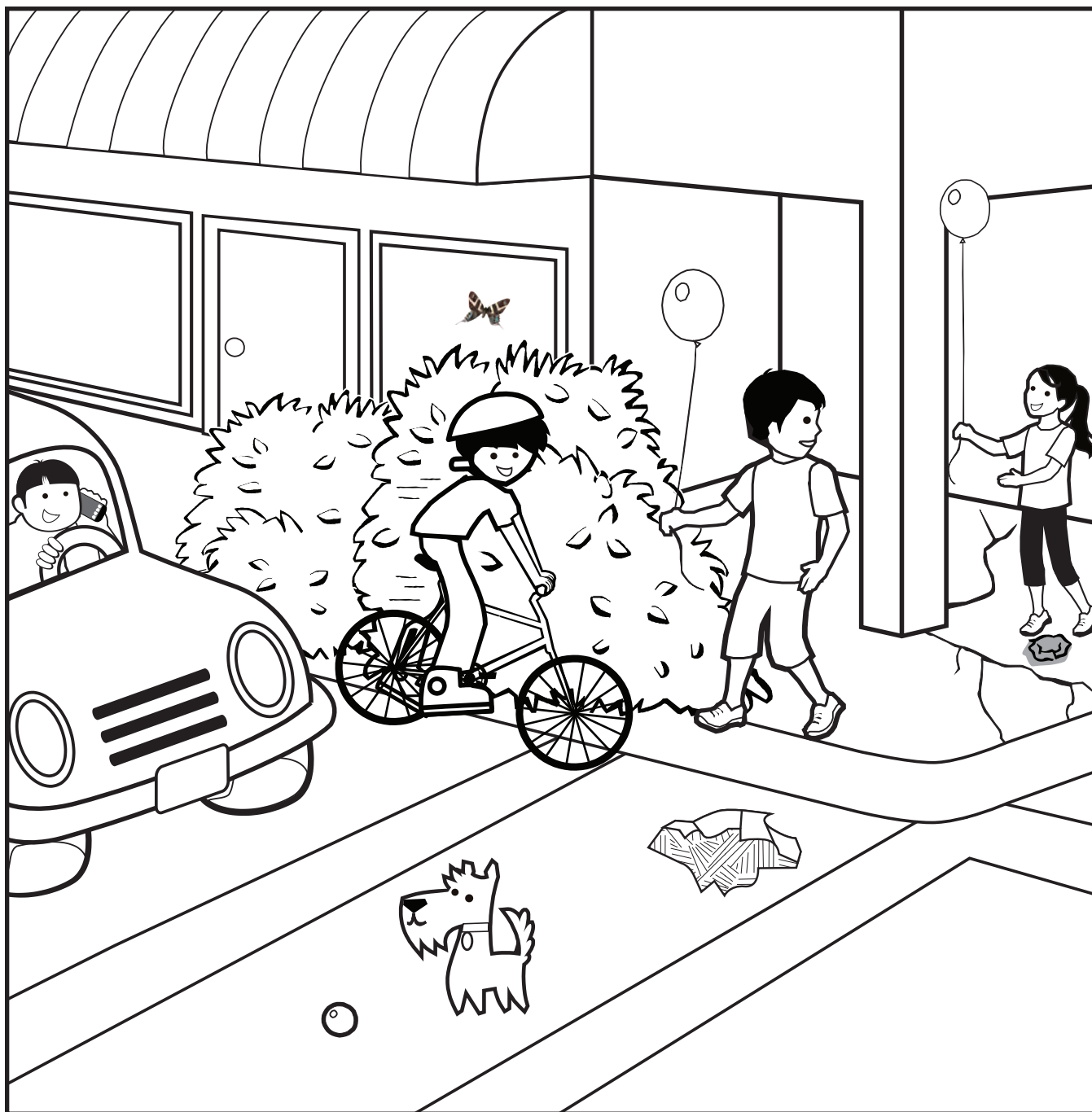
Lesson 1 *continued*
Walk/Don't Walk Signs



Lesson 2



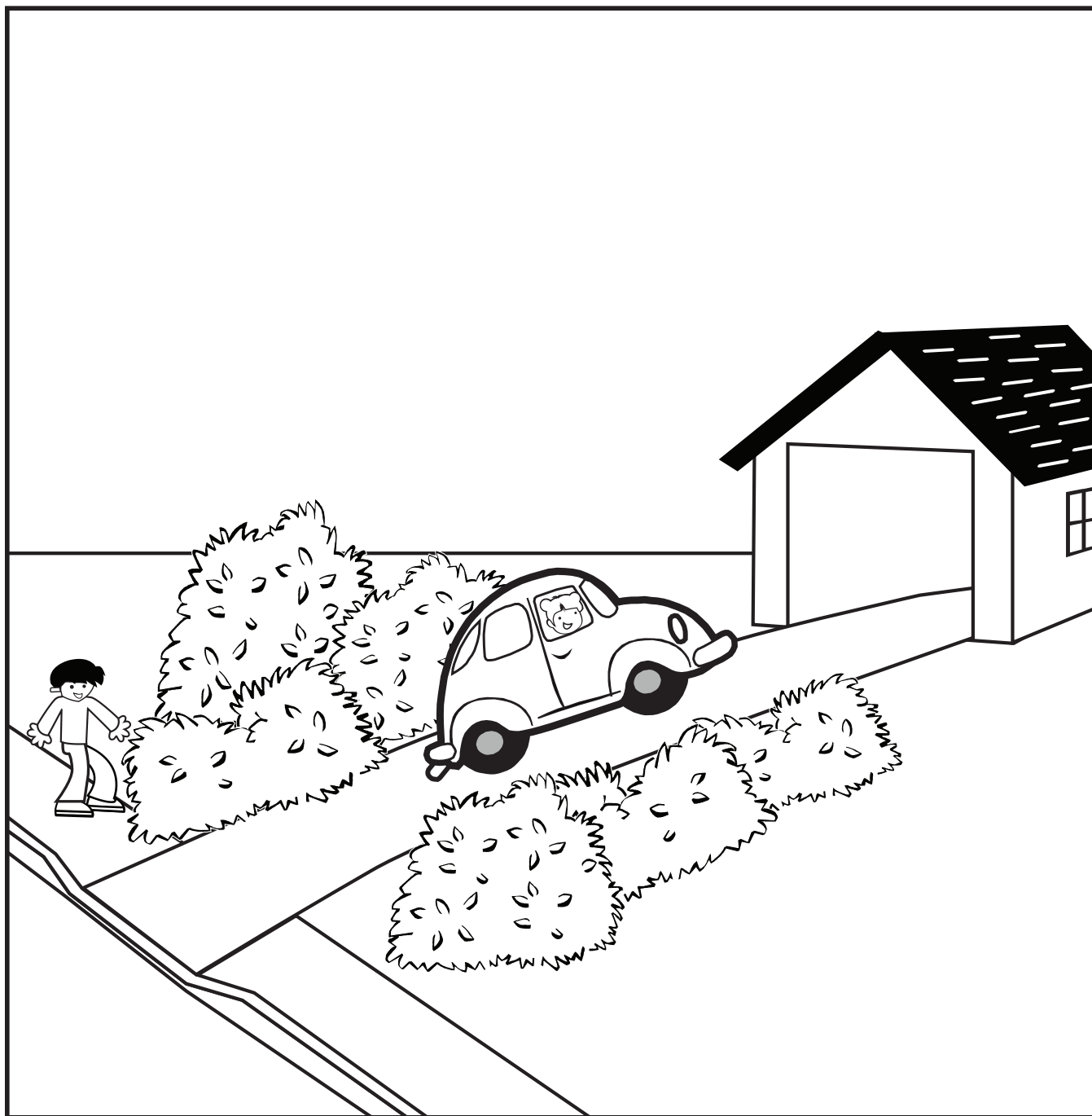
Hazard Worksheet



What hazards do you see here? Circle them.

Lesson 2 *continued*

Hazard Worksheet



What hazards do you see here? Circle them.

Lesson 3



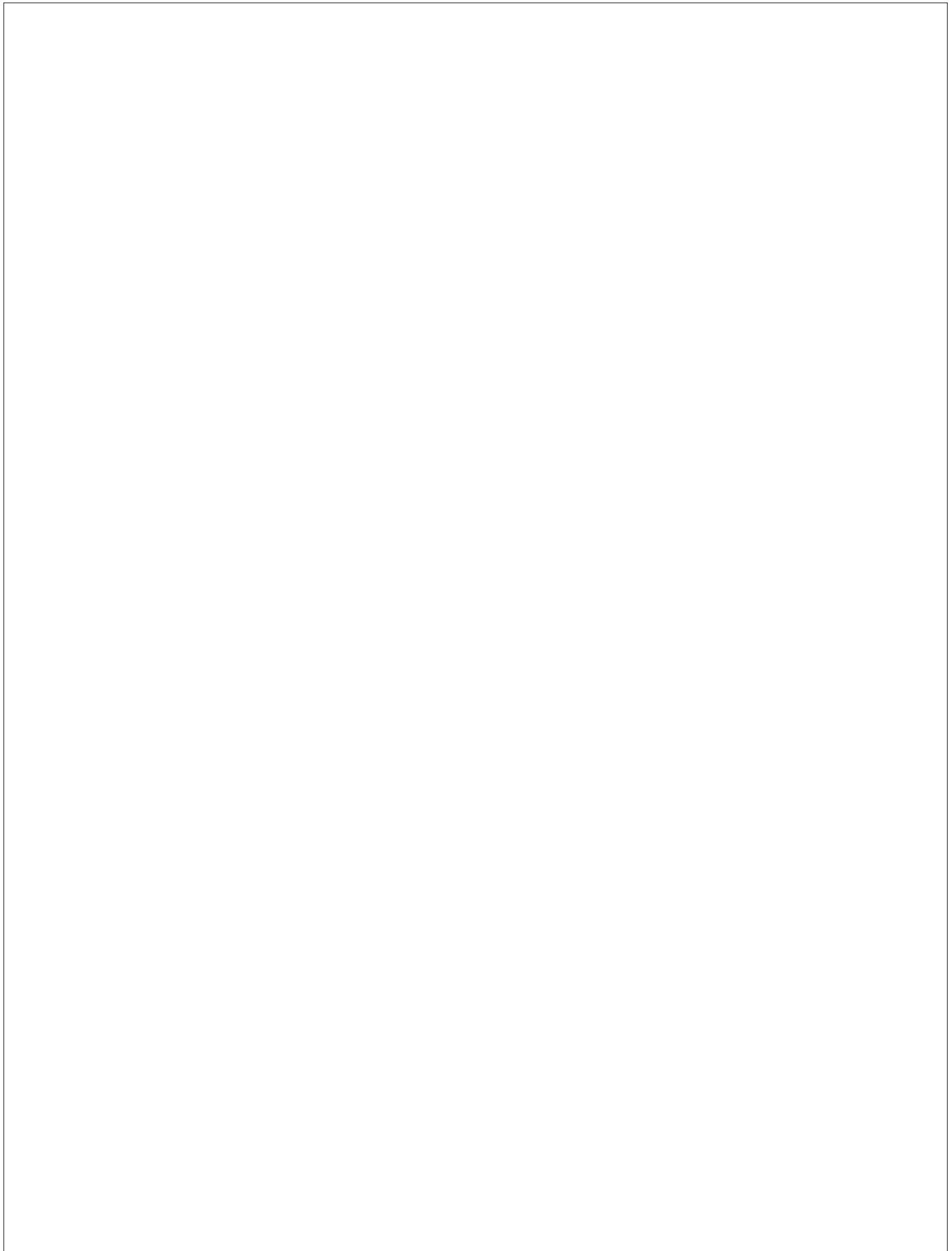
Practicing Safety

Hazards are things that can make walking feel unsafe.

Draw a picture of hazards I saw on the walk.

A large empty rectangular box with a thin black border, intended for the student to draw a picture of hazards they saw on the walk.

Draw a picture of someone walking safely.

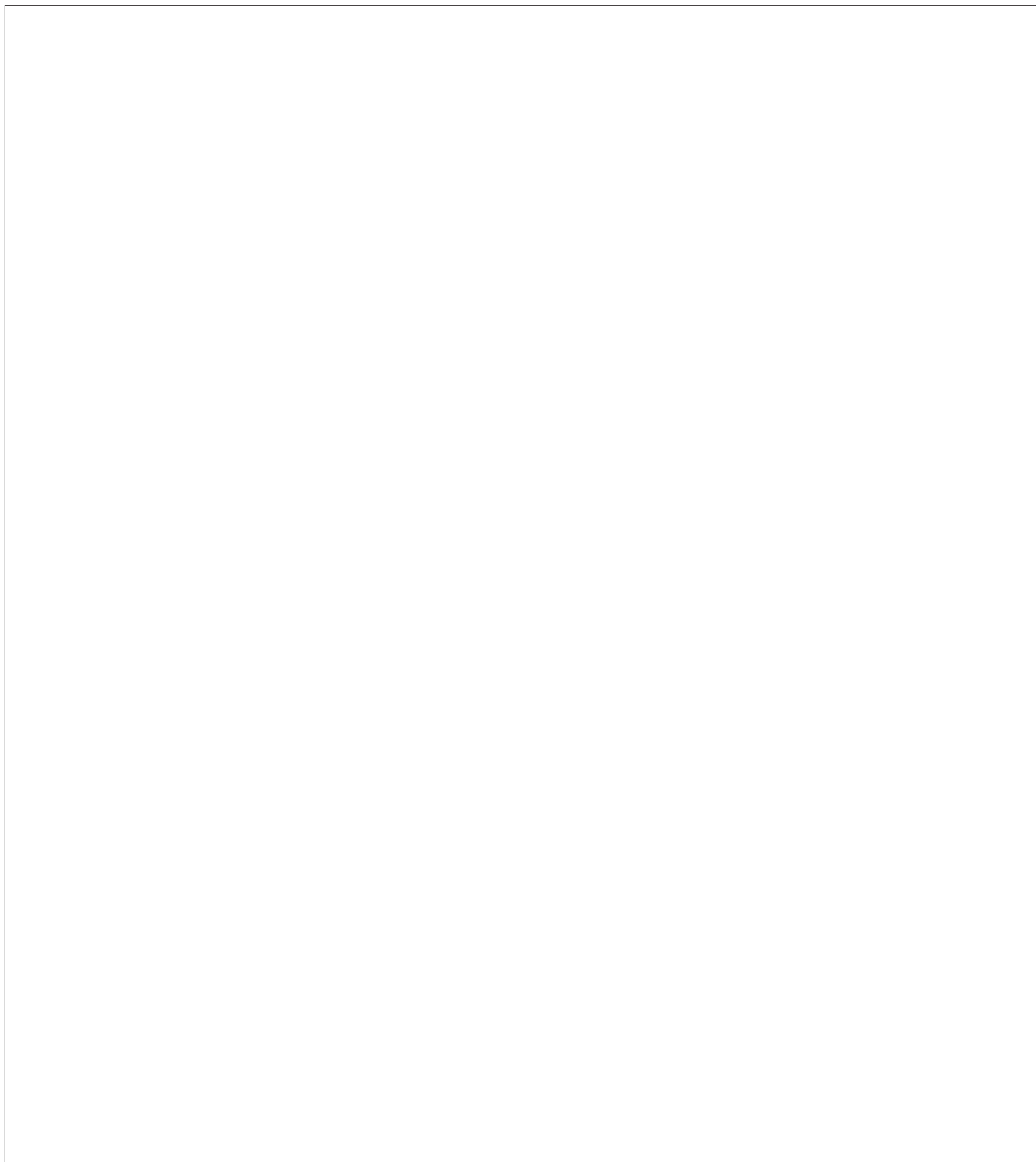


Lesson 4

Signs, Signals and Safe Routes

What common signs or signals have you seen on our walks?

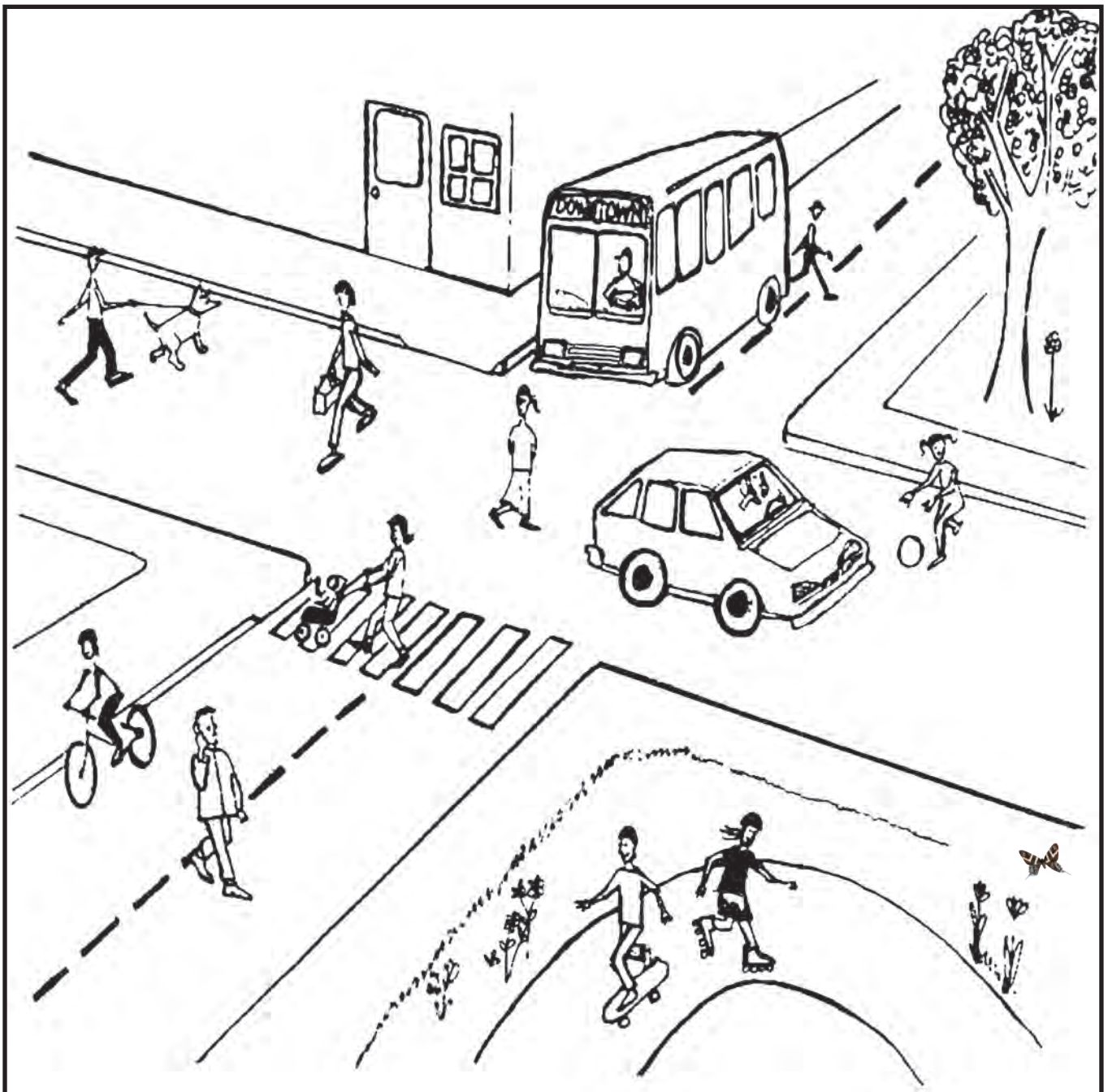
Draw a few here:



Lesson 4

Safe Routes Worksheet

Draw circles around the pedestrians who are walking safely. Put a big “X” over pedestrians who are NOT walking safely.



The person who can keep me safe
when I cross the road is:



Lesson 5



Safe and Healthy

Rules of the Road for Pedestrians

Lesson 5 *continued*



Walking (or biking) is
a healthful choice for me because . . .

Walking (or biking) is good for
the environment because . . .





Neighborhood Navigators' Pledge

This is to certify that

I, _____

promise to be SAFE and make street safety a habit.

I will walk on sidewalks when available.

I will walk facing traffic so drivers can see me.

I will stop at curbs and corners.

And I will look and listen to make sure that vehicles stop for me
before I step into the street to cross.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by



U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Neighborhood Navigators

Grades 4-5

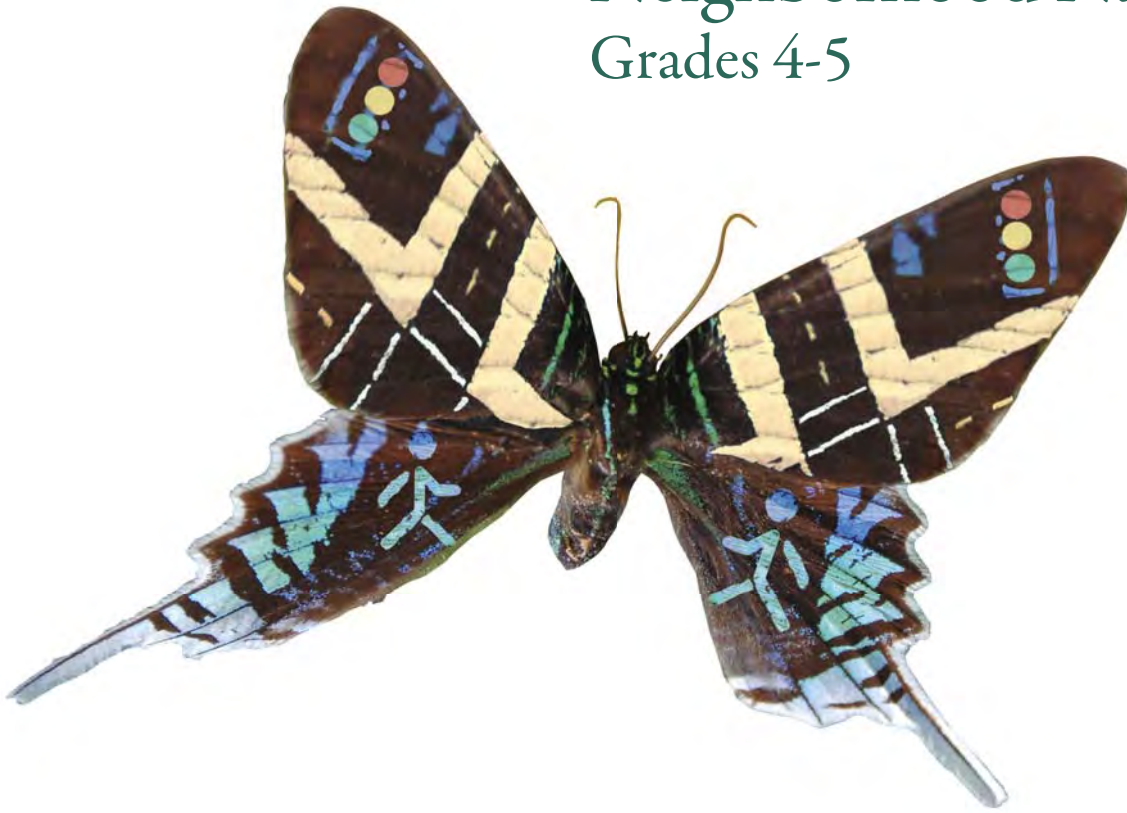


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5	Grades 4-5 Benchmarks
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13	Lesson 3: Healthy Travel
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Neighborhood Navigators

Grades 4-5

Introduction

The Grade 4-5 *Neighborhood Navigators* focuses on the roles and responsibilities of being active participants in the transportation system. Students map and experience their neighborhood transportation system as they learn about options available to make it safer.

In addition to pedestrian safety, this age of students is well-suited to on-road bike safety education programs. While this is outside the scope of *Neighborhood Navigators*, you may wish to explore the possibility of providing bike safety education.

An example of a program is the Bicycle Transportation Alliance's Bicycle Safety Education program for 4th – 7th grade students. The 10-hour curriculum includes four hours of classroom instruction, six hours of bike skills on neighborhood streets. The on-road teaching of this curriculum requires that instructors have extensive training and/or experience to ensure the safety of students.

Information on local bike safety programs and instructors can be found by contacting bike shops, bike clubs, the League of American Bicyclists, the BTA, or by searching the Internet.



4- 5 Lesson Summary (5 lessons)

Lesson Title	Summary
Know the Road and Rules	Understand the roles and responsibilities of being a pedestrian and the various components of the road.
Talking the Talk, Walking the Walk	View a Pedestrian Safety DVD and practice advocating for pedestrian safety.
Healthy Travel	Talk about why people walk, locate safe routes on a map and set a personal safe walking goal.
Past, Present, Future	Use historical timeline to explore walking.
You Can Walk Too!	Advocate for safe walking.

Grades 4-5 Learning Objectives

Purpose To provide students with age-appropriate knowledge and skills to be responsible pedestrians to keep themselves and others safe when using roadways.

Learning Objectives Students will be able to:

- locate their school on a neighborhood map.
- understand the components of a road.
- understand laws and rules of pedestrian safety.
- identify who can help support students follow the rules of the road.
- advocate for pedestrian safety to other students.
- brainstorm different reasons why people walk.
- understand the correlation between walking and health (physical and emotional).
- develop mapping skills and identify safe routes for pedestrians in their neighborhoods.
- set a personal walking goal.
- understand why people walked throughout history.
- discuss different historic routes/walks and their significance today.
- walk a route in school neighborhood and practice safe pedestrian rules.
- map a safe walking route for the class and be able to advocate to make it and other routes safer.

Grades 4-5 Benchmarks

Social Science **SS.05.GE.01** Define basic geography vocabulary such as concepts of location, direction, distance, scale, movement, and region using appropriate words and diagrams.

SS.05.GE.07 Understand how physical environments are affected by human activities

SS.05.CG.06 Identify and give examples of how individuals can influence the actions of government.



Health **HE.05.HS.01** Identify and access resources at home, at school, and in the community for health and safety information.

HE.05.HS.02 Demonstrate management skills to prevent unsafe situations and promote behaviors that enhance health and safety.

HE.05.HS.04 Use communication skills to help self and others avoid unsafe situations and promote healthy behaviors.

HE.05.HS.05 Use a goal-setting model to set goals that enhance health and safety.

HE.05.HS.07 Advocate for the benefits of safe and healthy actions and environments at home, at school and in the community.

Physical Education **PE.05.FL.01** Identify changes in his/her body before, during and after moderate to vigorous exercise (e.g., perspiration, increased heart and breathing rates).

NOTE: Website for Oregon Department of Education benchmark standards link - <http://www.ode.state.or.us/teachlearn/real/standards/sbd.aspx>



Lesson 1:

Know the Road and Rules

Objectives Students will be able to:

1. locate their school on a neighborhood map.
2. understand the components of a road.
3. understand laws and rules of pedestrian safety.
4. identify who can help support students follow the rules of the road.

- Materials**
- Neighborhood Map- can be found on school's website, school board's website, Google or Yahoo maps
 - School/Building Procedures and Rules
 - Ten Index Cards
 - Student Workbooks
 - Roadway overhead or poster with the following labels:
 - Sidewalk
 - Curb
 - Intersection
 - Corner
 - Crosswalk (marked and unmarked)
 - Crossing signals
 - Stop sign
 - Stop bar
 - Roadway
 - Shoulder
 - Lane
 - Bike lane
 - Overhead transparency
 - Markers
 - List of safety laws (Appendix B)

Advance Preparation

Display a map of the surrounding school neighborhood. Write each of the ten pedestrian rules (Appendix B) on an index card.

NOTE: You may choose all pedestrian or a combination of pedestrian and bicycle rules depending on your school's situation.

Vocabulary

bike lane - the marked lane on the road for use by bicycles that separates bicycles from other vehicles

crosswalk - any part of an intersection, marked or unmarked, that is for pedestrians crossing a street or road (every intersection is a crosswalk)

driveway - a private road from the street to a building, house or garage

intersection - a place where two or more streets join together (cross each other)

pedestrian - someone who walks/moves (including people in wheelchairs)

roadway - the part of a road used by vehicles

shoulder - the portion of a highway, paved or unpaved, touching the roadway, for use by pedestrians, stopped vehicles and emergency use

sidewalk - a walk (usually paved) for pedestrians at the side of a street

street corner - a place where two streets come together, usually the location of a crosswalk

safe pedestrian - someone who knows and applies the rules of the road to be safe

traffic sign - a visual sign for controlling traffic so people are safe

vehicles - modes of transportation for persons or property that use roadway (including cars, buses, trucks, trains, bicycles, skateboards, scooters)



Activities Hand out student workbooks and have students write their names on the front. Explain that they will be learning about being safe pedestrians and will be practicing safe pedestrians skills. Discuss with students the idea that the school has rules designed to keep students safe when at school. Review with the class some of the school’s building procedures and rules.

In small groups, have students brainstorm the rules necessary to keep themselves safe when walking to school and throughout the neighborhood. Record in their workbooks (page 2).

With the whole class together, refer to vocabulary list above. Highlight **pedestrian** and **safe pedestrian**. A pedestrian is someone who walks and moves (this includes a person in a wheelchair). A safe pedestrian is someone who knows and applies the rules of the road to keep him or herself and others safe.

Ask students, “Who thinks they are a safe pedestrian? What do you do to be a safe pedestrian?”

Discuss and introduce the following:

First, a safe pedestrian needs to be aware of where he/she is located and where he/she is going. Ask students, “What tool can we use to help us locate things in a neighborhood?” Point to the map displayed on classroom wall. Identify (with a tack, sticker or magnet) where school is located on the map. Ask students to identify other public buildings in their neighborhood (e.g., hospital, police station, supermarket, library).

Second, a safe pedestrian needs to know the parts of a road. Display the Roadway overhead (Appendix A, urban or rural) and ask students to turn to page 3 and 4 in their workbook with the roadway diagrams. In a class discussion, label the parts of the road on the overhead transparency while students label the diagrams in their workbooks.

Third, a safe pedestrian needs to know and follow the rules of the road. Organize students into ten groups. Have each group assign or nominate a recorder and a reporter. Hand each group one index card. They are to read the rule on the index card and discuss the following:

1. What does this rule mean to you?
2. What might happen if this rule was not followed?
3. Who might help someone your age follow this rule?

After groups spend time discussing, recorder presents group responses to class.

Walk As a class, go for a walk around the school area and practice road rules discussed and/or observe others practicing or not practicing the road rules.

- Teacher Reflection/Class Evaluation**
- Were students able to understand the components of the road?
 - Were students able to define what rules of the road mean to them?
 - Were students able to share who could help them follow rules of the road?





Lesson 2:

Talking the Talk – Walking the Walk

Objectives Students will be able to:

1. view pedestrian safety DVD.
2. demonstrate and advocate pedestrian safety to other students.

Materials

- Student Workbooks
- Pedestrian Safety DVD: ASIMO, “Step to Safety” (14 min)
- Equipment for viewing
- Walking School Bus Rules (Appendix C)
- School Neighborhood Map

Advance Preparation Write on the chalkboard: “What is important for pedestrians to know?”

Activities Show the pedestrian safety DVD.

Content includes:

- stopping at curbs
- looking left, right and all around
- crossing between parked cars
- crossing at intersections
- traffic lights and signals
- never follow - look for yourself

After the DVD, direct students' attention to the board again. Ask students, "What is important for pedestrians to know?" The object is to generate a class list, including:

- specific rules of the road
- components of the road
- what signals look like
- how to find themselves on a map.

Students think, pair, and share: think for themselves, divide into pairs and discuss what is important for pedestrians to know. Tell students to open their workbook to the Role Plays (page 5). Students practice applying their safe pedestrian skills in the following role-plays:

- as a crossing guard;
- as a leader for younger student(s);
- as a neighbor helping a senior citizen or visually/ physically impaired person to cross the road.
- as a friend - tell a friend that their behavior isn't safe and suggest safe pedestrian behavior.

Divide class into pairs, discuss and plan options for these role-plays. Rehearse role-plays then present pedestrian safety to the larger class, if time allows.

Ask students, "What did you learn from practicing role-plays with your partner? What did you teach your partner? What did you learn from your partner?"

Student workbook entry:

Today, I learned I can help others to be safe pedestrians by _____.

Walk

Discuss Walking School Bus expectations (Appendix C). Hand out the school neighborhood maps to each student. Ask students to identify a destination in the school's neighborhood to walk to from the school (like a park, the pool, the library, etc.). Discuss the routes pedestrians might use. Ask students to determine which route would be the safest (consider sidewalks, signals, etc.). Have students highlight the route(s) on the map and walk the route.

Teacher Reflection/Class Evaluation

- Did students practice role-plays with their partners?
- Were students able to teach their partners pedestrian safety skills?
- Did students learn pedestrian safety skills from their partners?



Lesson 3: Healthy Travel

Objectives Students will be able to:

1. brainstorm different reasons why people walk.
2. understand the correlation between walking and health (physical and emotional).
3. develop mapping skills and identify safe routes for pedestrians in their neighborhoods.
4. set a personal walking goal.

Materials

- Student Workbooks
- Chart paper or board
- Markers
- School neighborhood map for each student (Google maps will work)

Advance Preparation Write on chart paper or board:

1. Environment Livability
2. Personal Health and Safety
3. Freedom and Mobility

Activities Students brainstorm as a class and write down reasons for walking in their student workbooks (page 6) as teacher writes reasons on chart paper or board.

Reasons for Walking

Some examples students may share include:

Environment and Livability	Personal Health and Safety	Freedom and Mobility
Low impact to the environment	Exercise leads to healthy heart and lungs	Feels great to be outside
It's good to see people walking, strolling and biking	Exercise leads to healthy muscles and bones	Feels great to get your body moving
Neighborhoods may be safer when people are outside walking	Exercise provides more positive outlook on life	Feeling of freedom and independence
		Allows you to get places on your own fuel

Choose 1-2 examples from class chart and discuss how they feel about their current school or home environment. Brainstorm reason(s) for walking, such as transportation, exercise, fun, being with friends, no other way to get there, etc.

Hand out the school neighborhood maps to each student. Ask students about two locations in the school area and the best route for pedestrians to take when walking between the two locations. For example, select your school and public library (or, a park and Boys and Girls Club). Ask students to determine which route would be the safest (consider sidewalks, signals, etc.). Have students highlight the route on the map.

Have students open their workbooks to the Goal Setting (page 7). Guide students through the following walking-related goal example:

My goal is: I will teach my 7 year-old brother how to cross the street.

FIRST STEP: While inside, walk him through the steps of crossing safely.

SECOND STEP: While inside, model the steps.

THIRD STEP: While inside, have him practice the steps.

NEXT STEP: We go outside to a quiet street and he watches me do it.

NEXT STEP: We cross the street safely together.

FINAL STEP: He crosses the street safely on his own.

Encourage students to set a walking-related goal.

Examples include: walk three times a week to/from school; teach others to cross the street safely; participate in family walks once a week; sharing safe walking rules with the rest of the school on the intercom or on school doors.

Students write goal/plan in workbook.

Walk Create class goal of a walk that would take 30 minutes. Map the route. Ask class if they think they can achieve that goal. Walk the walk. Afterwards, review with students whether or not they met their walking goal.

- Teacher Reflection/Class Evaluation**
- Were students able to share meaningful reasons why people walk?
 - Did students discuss safe walking routes on the map?
 - Did students set an achievable walking goal?





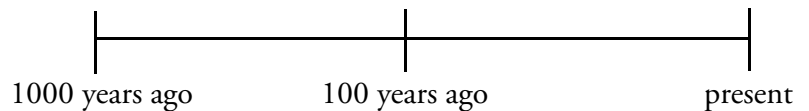
Lesson 4: Past, Present, and Future

Objectives Students will be able to:

1. understand why people walked throughout history.
2. discuss different historic routes/walks and their significance today.
3. walk a route in school neighborhood and practice safe pedestrian rules.

Materials Chart paper or board
 Resources on Lewis and Clark expedition, Oregon Trail

Advance Preparation Draw a timeline on chart paper or board. 1000 years ago on left, 100 years ago in the middle, and present on right:



Compile list of references including web site documents or books.

Activities

Students open their workbook to Past, Present, and Future (page 8). They draw and describe who traveled, how they traveled and why they traveled 1000 years ago; 100 years ago; and at present.

Note: students may need references (class books) for this activity.

Ask students to share their examples. Transfer to timeline. Student work representing 1000 years ago may include: hunting food, farming, getting water, and moving from one place to the next.

Student work representing 100 years ago may include the above information, as well as the following: exploring, traveling to the main street of a town for provisions, or walking to work, places of worship or school.

Discuss early explorers. Connect to grade 4-5 social studies curriculum (i.e. Lewis and Clark expedition, Oregon Trail). Identify on timeline.

Lewis and Clark

http://www.nps.gov/pub_aff/lewis_clark/overview.htm

In 1803, President Thomas Jefferson acquired the Louisiana Purchase from France, expanding the borders of the United States from the Atlantic Ocean to the Rocky Mountains. The vast areas of unexplored country offered the new nation the potential for growth and the possibility of a practical water route all the way to the Pacific Ocean. Jefferson had for years been fascinated by the unexplored territory west of the Mississippi River, and in June 1803 he announced plans to send an expedition overland to the Pacific. The President chose Meriwether Lewis to lead the expedition. Lewis selected his friend and former commanding officer, William Clark, to serve as co-leader of the expedition. The objective was to explore the Missouri River to its source and establish the most direct water route to the Pacific. They were instructed to write detailed accounts of their journeys, make maps, and provide information about the Indian Tribes indigenous to the west. In addition Jefferson expected them to make scientific and geographic observations of all they saw. In 1804, Lewis & Clark, along with 45 men and a dog, began a journey that would take three years and cover territory that would later encompass 11 states.



Read/suggest books to read such as:

- *Apples to Oregon: Being the (Slightly) True Narrative of How a Brave Pioneer Father Brought Apples, Peaches, Pears, Plums, Grapes, and Cherries (and Children) to Oregon* by Deborah Hopkinson

Discuss student work representing the “Present,” workbook (page 9). Examples may include: for exercise, to get somewhere, to participate in a walking event/race, save gas money, for a cause. Share local/state/Pacific NW examples such as:

- Pacific Coast Trail
http://en.wikipedia.org/wiki/Pacific_Crest_Trail
People hike this trail to accomplish a goal, for pleasure, for a challenge, to experience nature. Each year, about 300 people, commonly called thru-hikers, attempt to hike the entire trail from end-to-end. The trip usually takes between four and six months. Around 180 people complete the entire trail each year.

Take students out for a school neighborhood walk. Ask students to imagine that they are at school 100 years ago, how would the neighborhood be different? How would the walk be different? Is the present situation better? How can it still be made better? Observe traffic situations along the way. Discuss as class is walking.

Teacher Reflection/Class Evaluation Were students able to describe what walking was like 1000 years ago? 100 years ago?

Extension Student reflection: What are the transportation advantages and difficulties of living during a certain time? of living in a certain place?

Explore modes of travel in other countries. Share examples from the book, *A Life Like Mine* by DK Publishing.





Lesson 5: You Can Walk Too!

Objectives Students will be able to:

1. walk a school neighborhood route safely.
2. map a safe walking route for the class and be able to advocate why it's safe.

Materials:

- Student Workbooks
- Paper and graph paper
- Safety vests (optional)
- Walking routes (copies for each student)

Advance Preparation Recruit adult volunteers to walk with the class, if possible.

Map and walk route before walking with class. Modify distance, if required.

Activities Distribute safety vests and maps of walking routes. Remind students of rules and expectations. Organize groups with adult leaders.

Groups walk different routes (approximately 15-20 minutes).

Return to class and collect vests.

Review health benefits of walking:

- Physical
- Environmental

Assessment: Students find “You Can Walk Too” assessment in their workbook (pages 10-12) and complete the assessment using the following prompt:

You are designing a safe walking route from one location in your town to another. Pick a starting place and an ending place. Draw the route on a piece of paper or graph paper. Make sure to include landmarks along the way and arrows for the directions. Include street names, if possible. On the back of your piece of paper, list two physical benefits of walking and one environmental benefit of walking.

Performance Checklist:

Task	Yes	No
I labeled a starting and ending point.		
I drew a route that was safe.		
I labeled landmarks and street names.		
I drew arrows for walking direction.		
I listed two benefits of walking for my body and one environmental benefit of walking.		

Students share their papers as a closing to the unit.

**Teacher Reflection/
Class Evaluation**

Use performance checklist to gauge skills and knowledge gained.

Extension

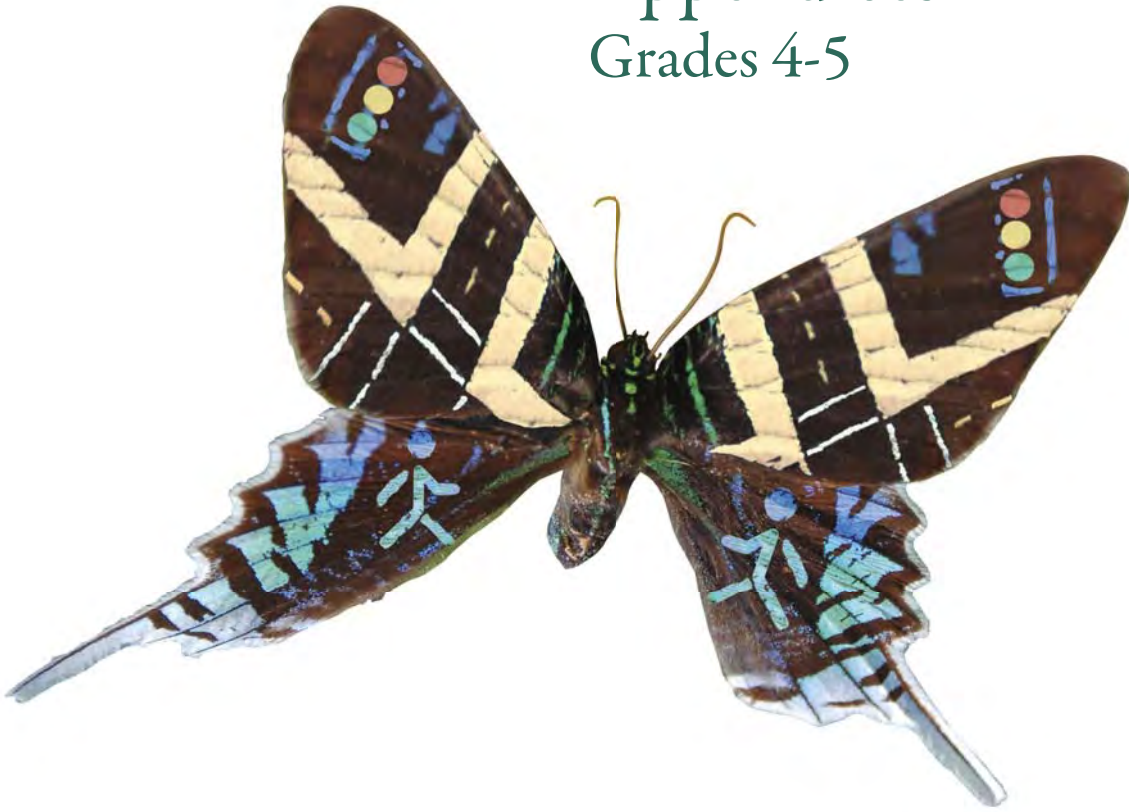
Explore “Walk + Bike to School” website at <http://walknbike.org> (in school or at home)

Neighborhood Navigators boosters (i.e., pedestrian safety checks, class walks) scheduled throughout school year.



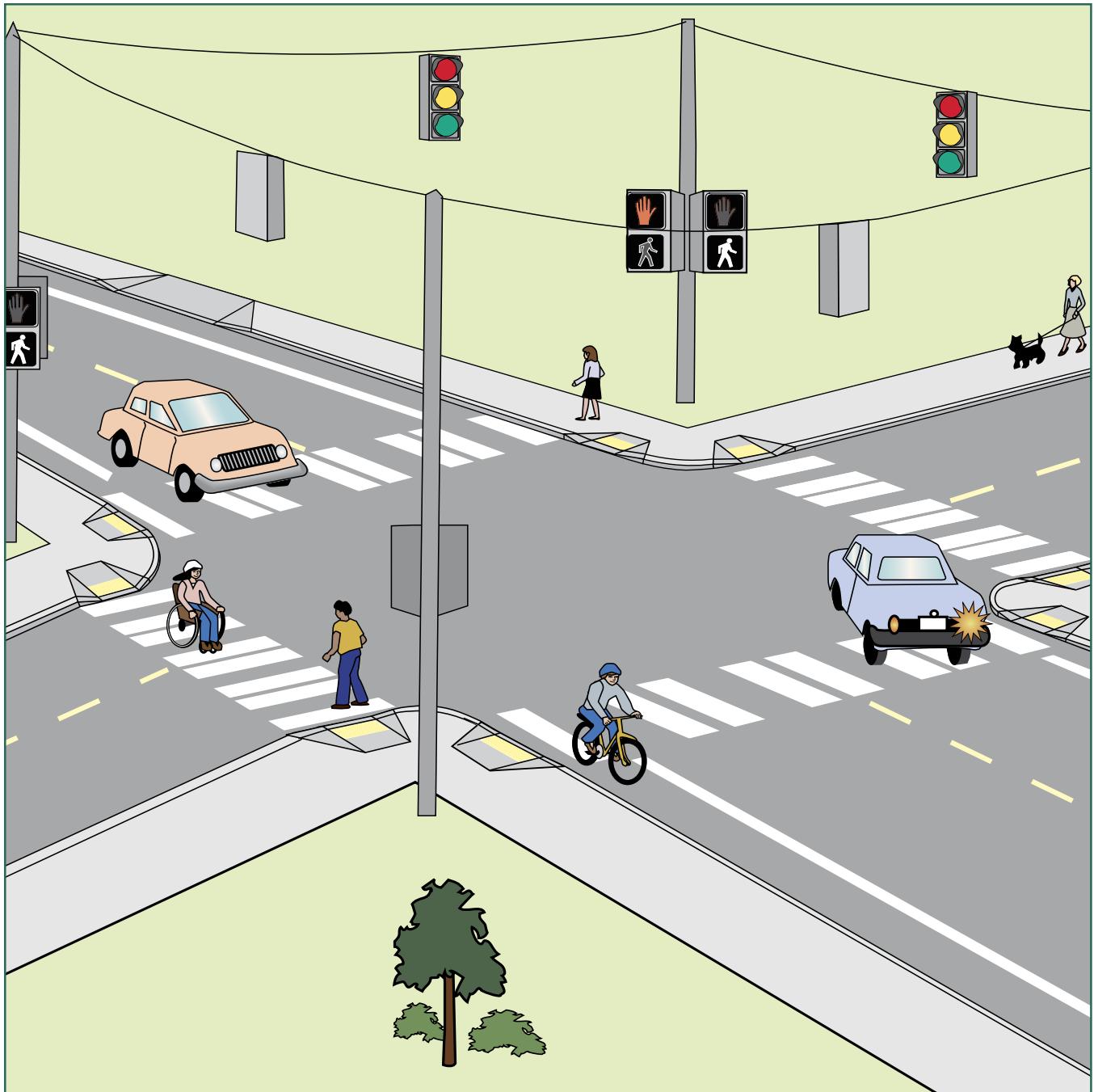
Appendices

Grades 4-5



Appendix A1

Visual of Intersection (URBAN)



2. Know the parts of a road:

crosswalk
(marked or unmarked)

lane

intersection

corner

sidewalk

traffic signal

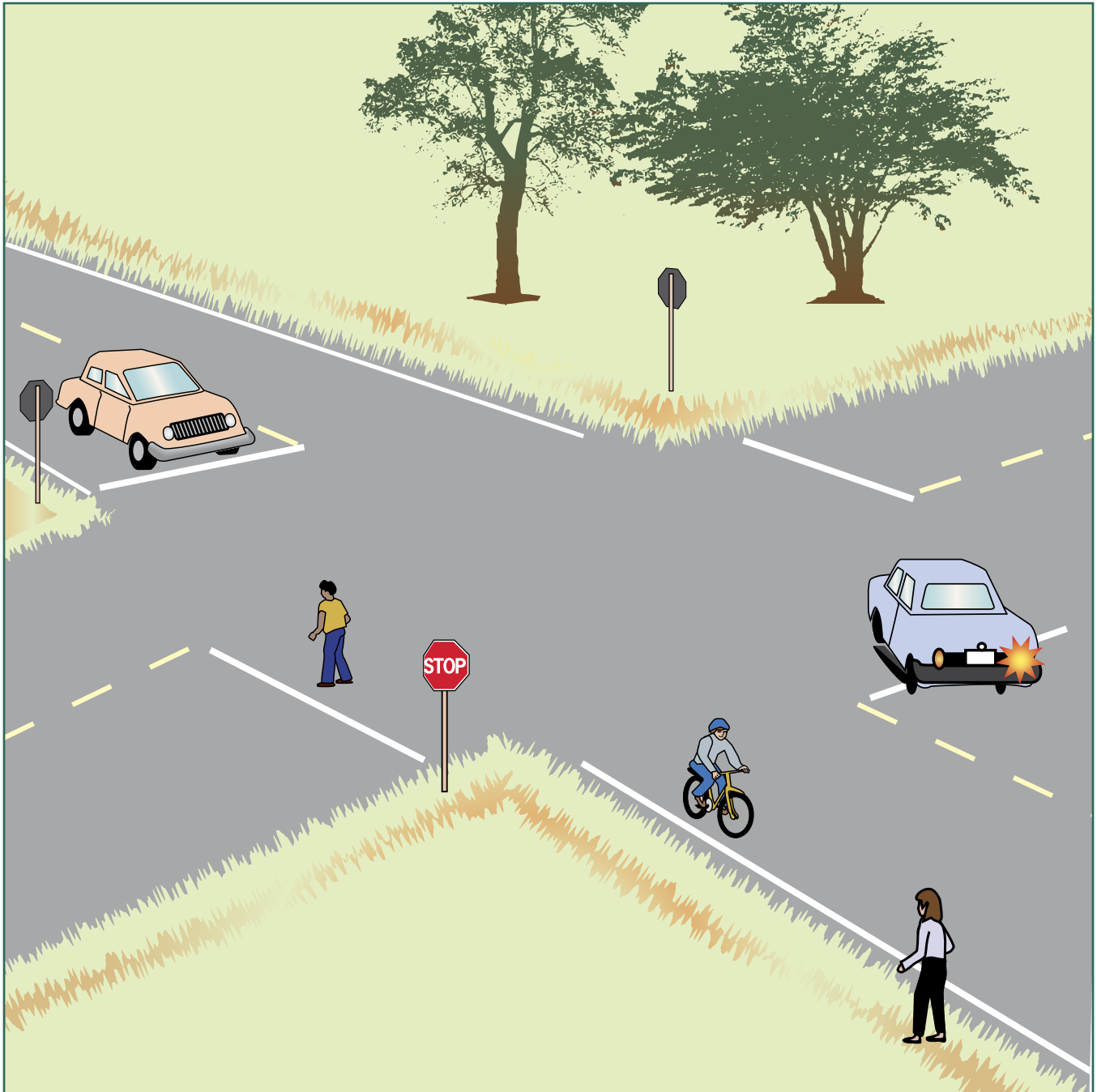
driveway

pedestrian signal

bike lane

Appendix A2

Visual of Intersection (RURAL)



2. Know the parts of a road:

crosswalk
(marked or unmarked)

intersection

pedestrian

bicyclist

roadway

shoulder

street corner

traffic sign

vehicle

Appendix B

Rules of the Road for Pedestrians

1. Look all ways before crossing (left, right, behind and left again).
2. Walk, don't run across or into the street.
3. Cross only at safe corners, not between parked cars.
4. Choose a route with the smallest number of crossings.
5. When possible, walk on sidewalks.
6. When possible, cross streets at crosswalks, and where there are traffic signs and signals.
7. Always obey traffic signs and signals.
8. Walk facing traffic when walking on roads without sidewalks.
9. Always look for turning cars and be ready to respond.
10. Say "NO" when asked to ride in a car with strangers.

Bicycle Safety Rules

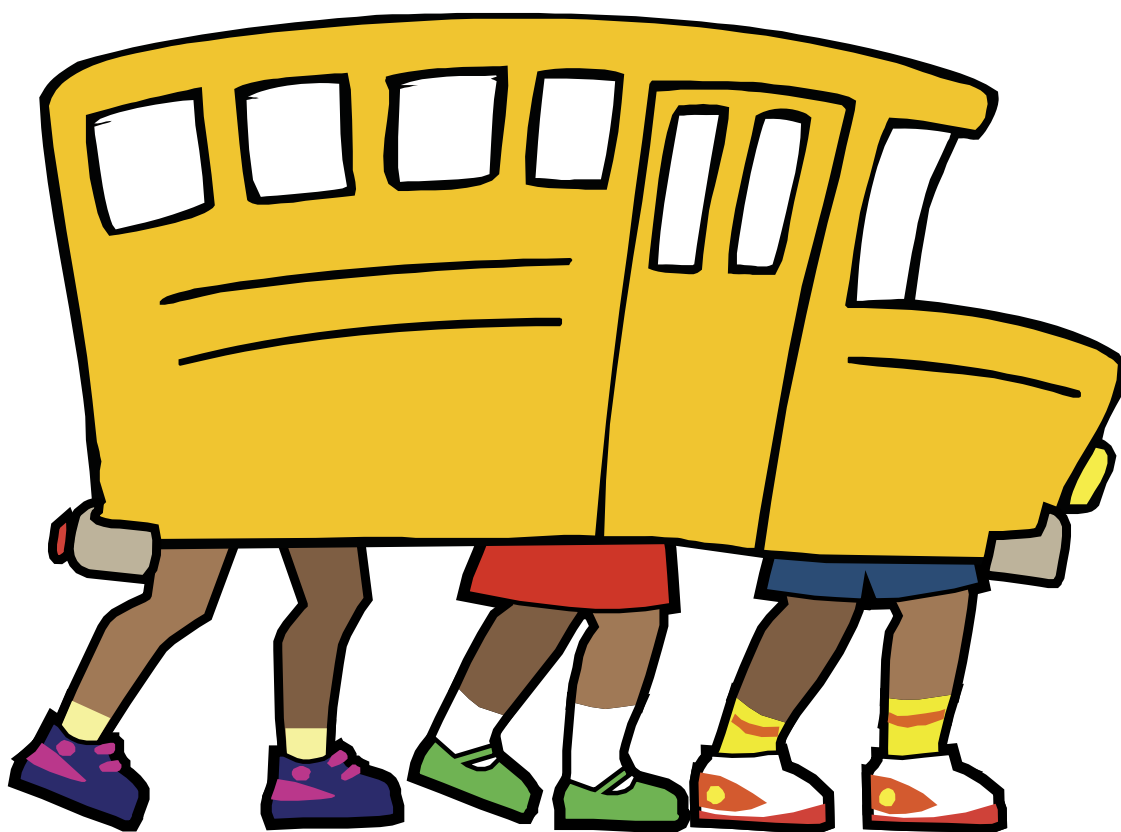
1. Always wear a properly fitted and certified helmet.
2. When entering a sidewalk, path or driveway, stop and look to make sure it's clear and safe to proceed.
3. If crossing the street, walk your bike across the crosswalk or for older more experienced riders, learn to make vehicular style left hand turns.
4. Cross only at the street corner.
5. When riding in the street, obey all traffic signals and laws.
6. Ride with the traffic flow, not against it.
7. Always stop at stop signs and stop lights.
8. Use the correct hand signals when turning to let drivers know your intent.

Appendix C

Walking School Bus Rules

1. No running! This is a walking school bus, not a running school bus.
2. No throwing of anything – pinecones, rocks, or even paper!
3. We have to look both ways before crossing the street – ALWAYS!
4. No pushing, pulling, hitting, or otherwise harassing other walking school bus riders – we all want to enjoy our walk.
5. When the Walking School Bus is crossing the street, we all must wait and decide as a group when it is safe to cross. We must stay on the sidewalk to stay safe before we cross.
6. If you are walking faster than the rest of the bus, slow down and wait for your friends; if they are walking faster, step up the pace and catch up. We need to stay together so we can stay safe and cars will see us.

Be Cool
Walk to School





Neighborhood Navigators' Pledge

This is to certify that

I, _____

promise to be SAFE and make street safety a habit.

I will walk on sidewalks when available.

I will walk facing traffic so drivers can see me.

I will stop at curbs and corners.

And I will look and listen to make sure that vehicles stop for me
before I step into the street to cross.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by



U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Neighborhood Navigators

Grados K-3

Cuaderno de Ejercicios



Nombre: _____

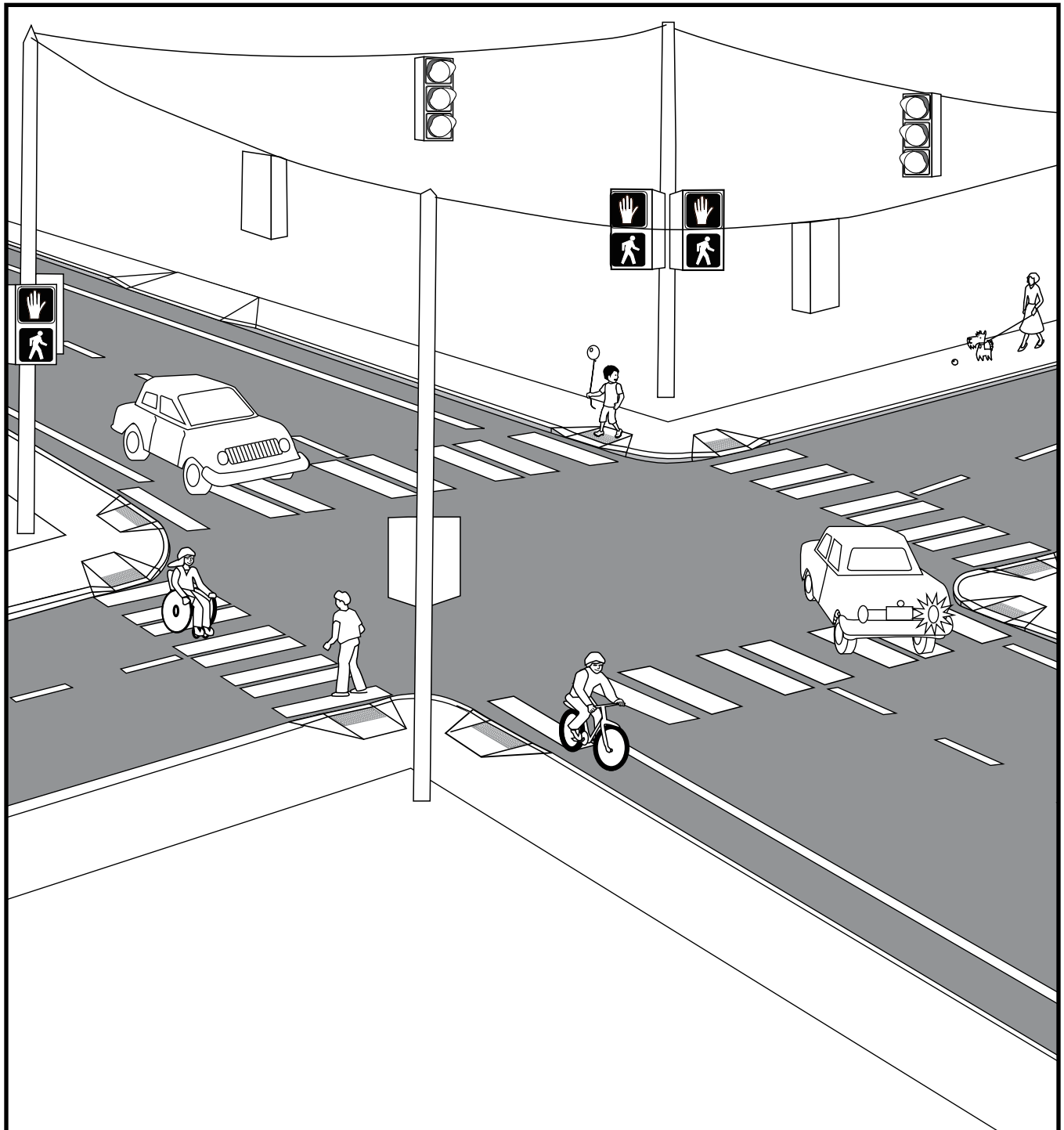
Fecha: _____

Grado: _____

Lección 1

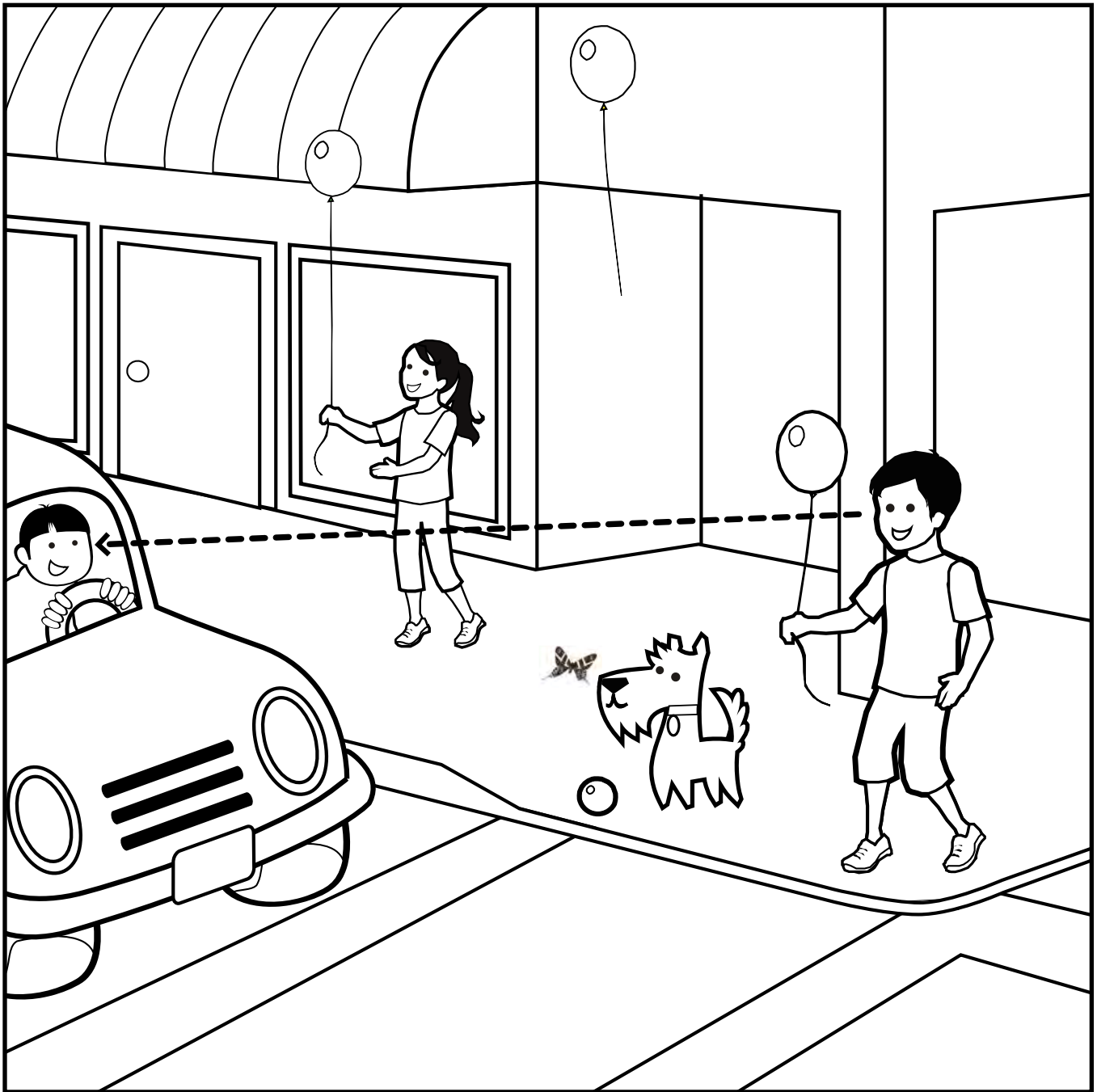


Dibujo de Una Carretera

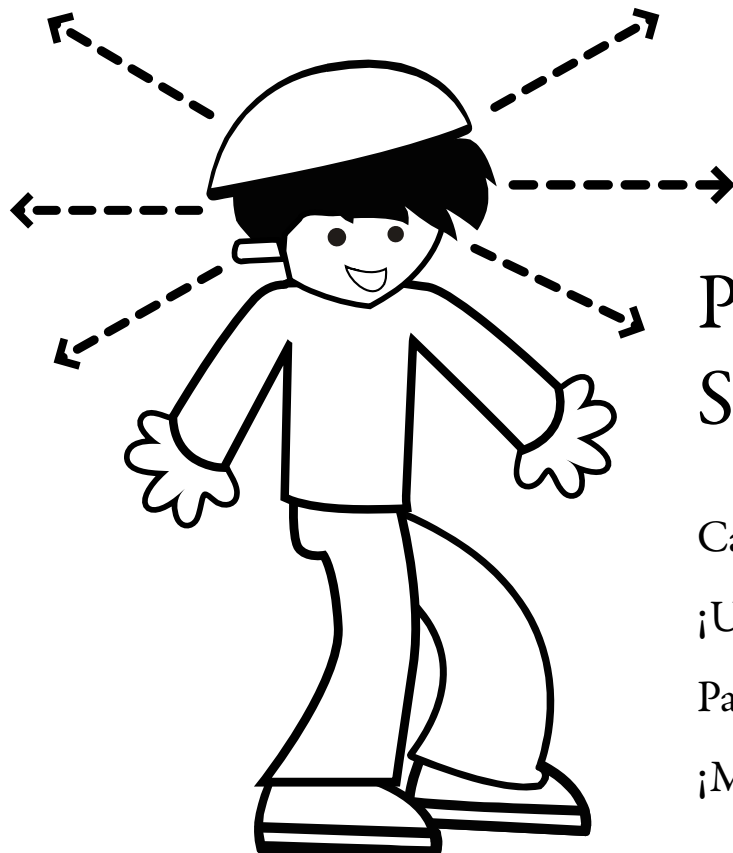
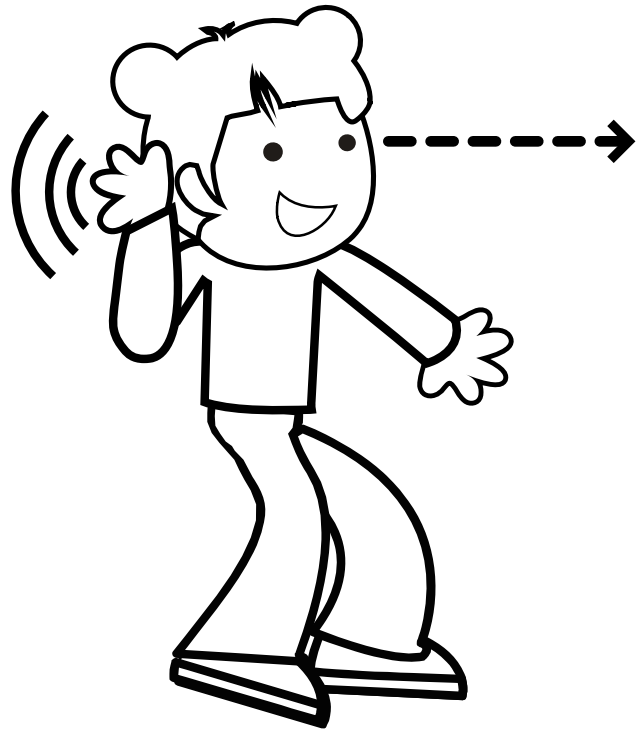
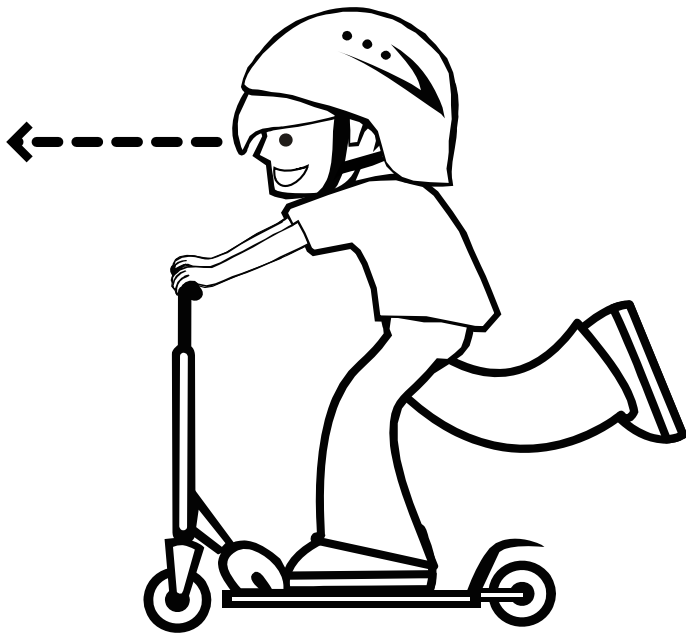


Lección 1 *continuación*

Yo Le Veo - Usted Me Ve



Mira a los ojos del conductor antes que empieces a cruzar la calle. ¿Está parado el carro?
¿Me ve el conductor?



Poema de Seguridad Peatonal

Cada vez que vas a cruzar,
¡Usa tu cerebro antes de andar!
Para, mira a la izquierda y a la derecha
¡Mira de nuevo y escucha!

Lección 1 *continuación*



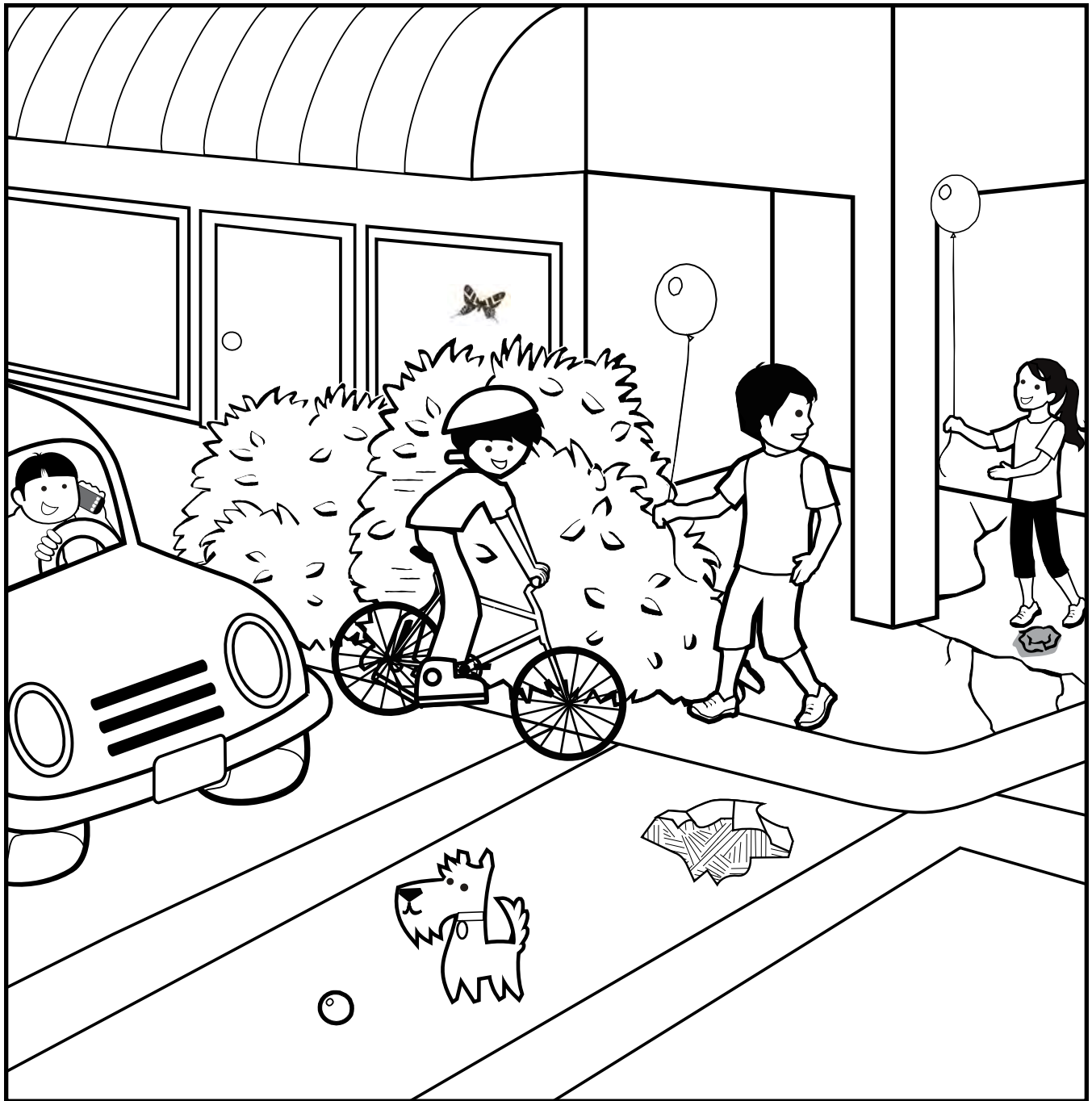
Señales de Walk/Don't Walk (Camina/No Camines)



Lección 2



Hoja de Ejercicios de Peligros

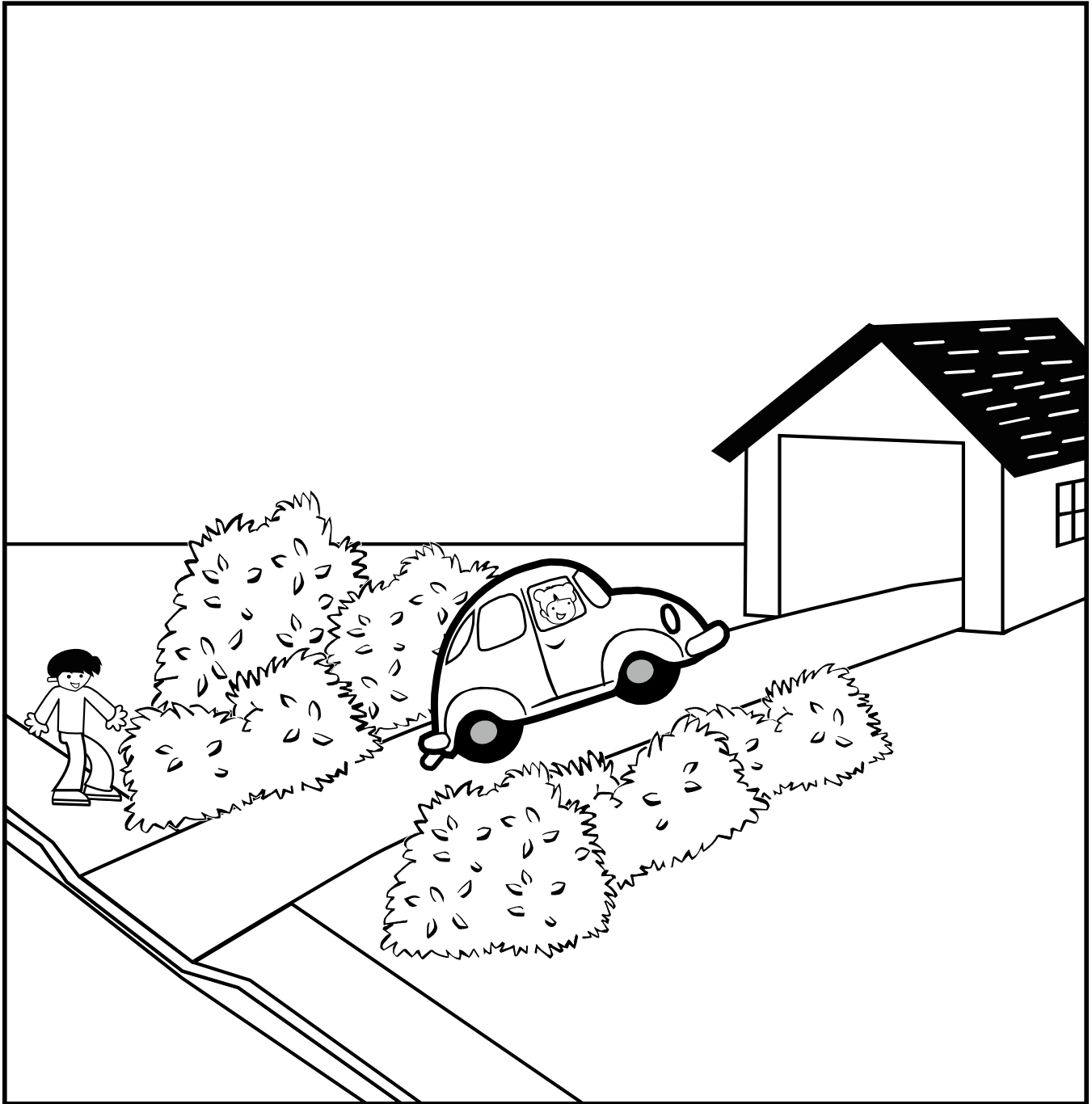


¿Cuáles son los peligros que ves en el dibujo?
Pon un círculo alrededor de ellos.

Lección 2 *continuación*



Hoja de Ejercicios de Peligros



¿Cuáles son los peligros que ves en el dibujo?
Pon un círculo alrededor de ellos.

Lección 3



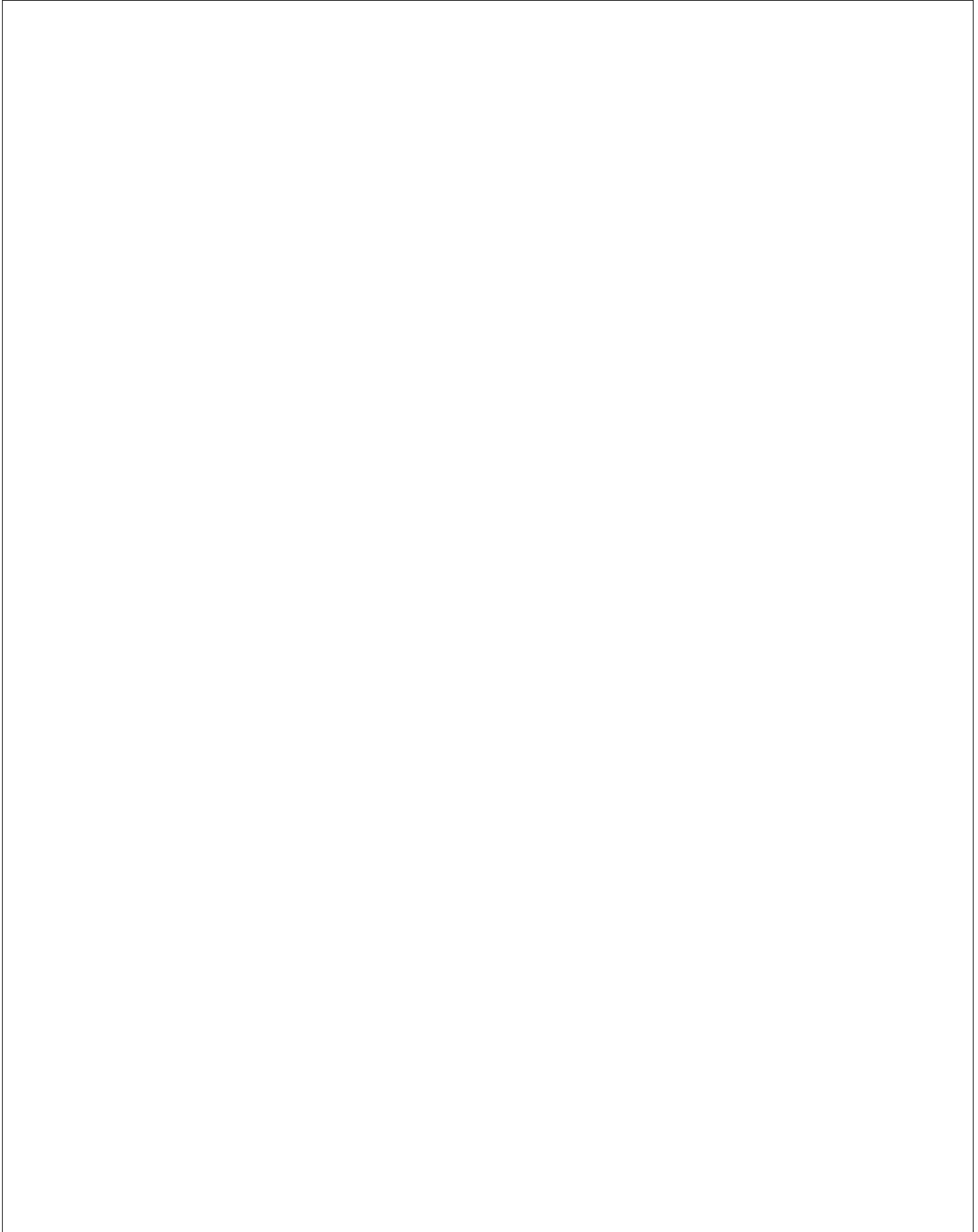
Practicar la Seguridad

Los peligros son cosas que me hacen sentir inseguro cuando estoy caminando.

Este es un dibujo de peligros que vi en el camino:



Haz un dibujo de alguien que está caminando con seguridad.



Lección 4



Letreros, Señales, y Rutas Seguras

¿Cuáles letreros o señales comunes has visto en nuestros caminos?

Dibuja algunos aquí:

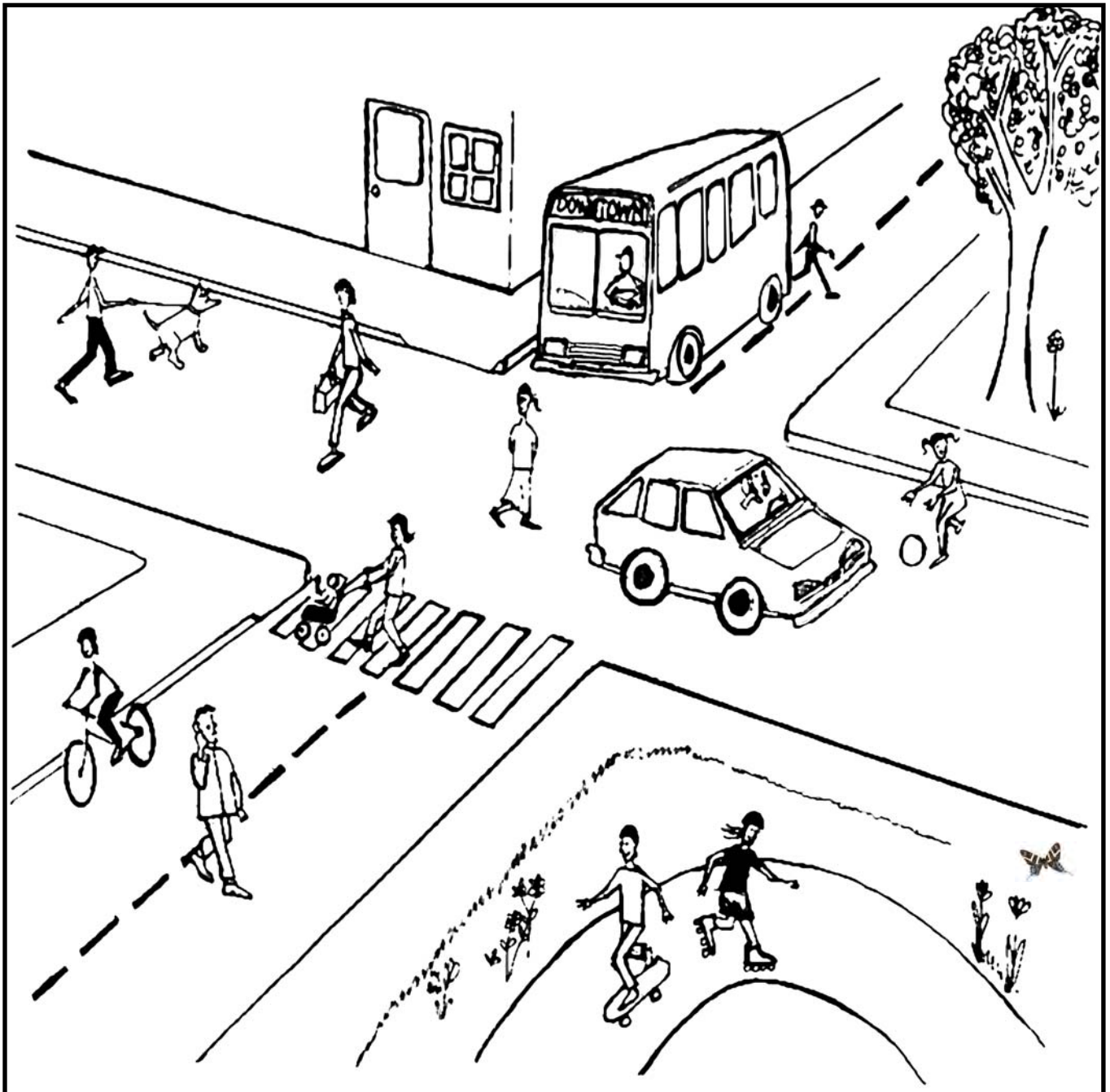
A large, empty rectangular box with a thin black border, intended for the student to draw common signs or letters seen on roads.

Lección 4



Hoja de Ejercicios de Rutas Seguras

Pon un círculo alrededor de los peatones que están caminando con seguridad. Pon un gran “X” sobre los peatones que NO están caminando con seguridad.



La persona quien me hace sentir seguro/a
cuando cruzo la calle es:



Lección 5

Seguro y Sano



Reglas de Seguridad Peatonal

Lección 5 *continuación*



Caminar (o andar en bicicleta) es una opción sana para mí porque . . .

Caminar (o andar en bici) es bueno para el medio ambiente porque . . .





Promesa de Neighborhood Navigators

Esta Certifica que

Yo, _____

- Prometo cumplir las reglas del tránsito automovilístico y peatonal en todo momento.
- Seguiré los caminos y senderos siempre que sea posible.
- Caminaré en contra de la dirección del tráfico y de esta forma los conductores me podrán ver.
- Pararé en las espuinas y en los bordes de las aceras.
- Miraré y escucharé atentamente para asegurarme de que los conductores detienen sus vehículos antes de que yo comience a cruzar la calle.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

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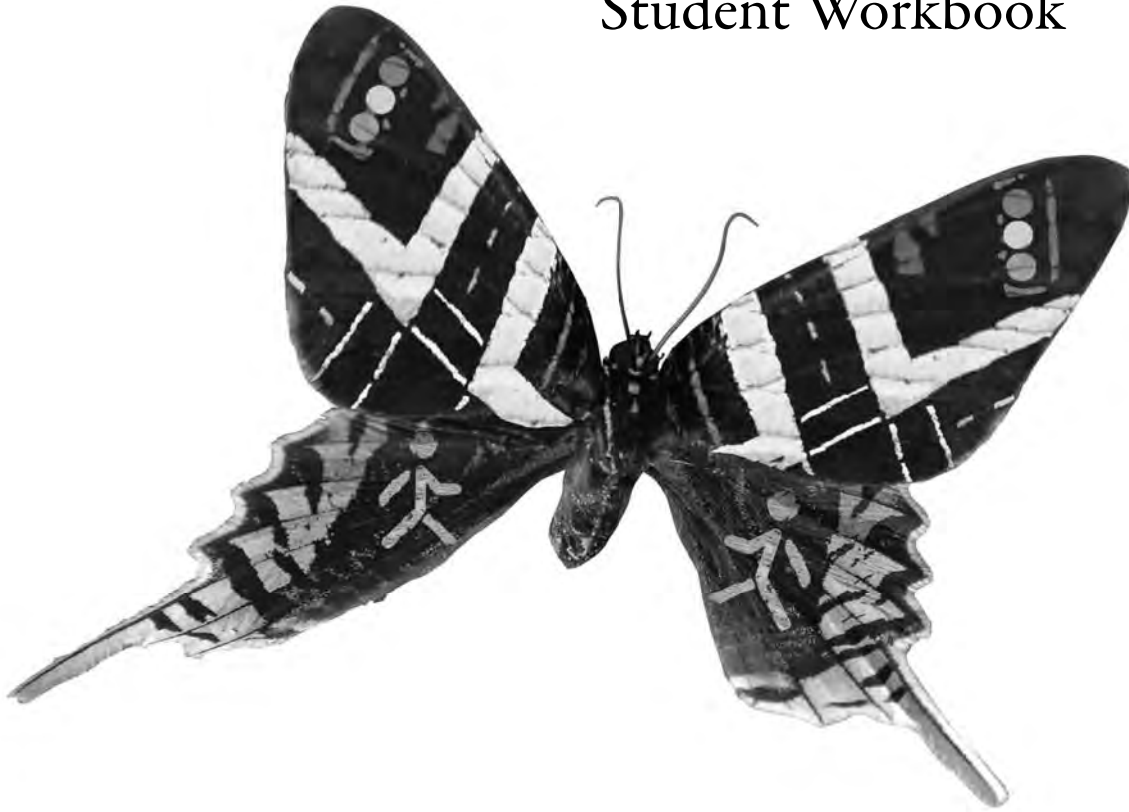
ORIGINALMENTE PUBLICADA EN MARZO 2010

EDICIÓN ESPAÑOLA AGOSTO 2010

Neighborhood Navigators

Grades 4-5

Student Workbook



Name: _____

Date: _____

Grade: _____

Lesson 1



1. Brainstorm rules of the road for walking.

What are some rules to follow that will keep you safe when walking to school or through your neighborhood?

1.

2.

3.

4.

5.

6.

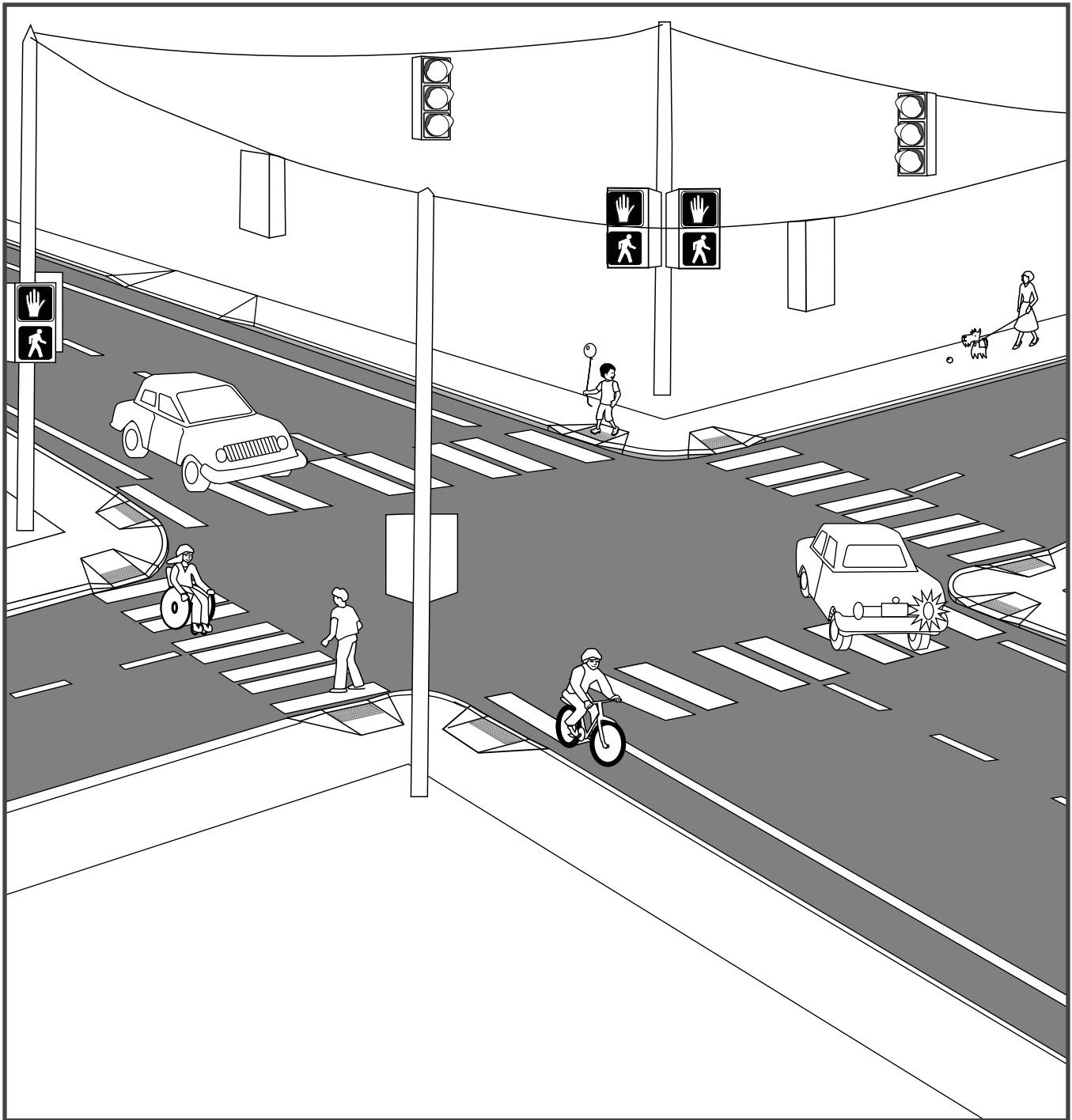
7.

8.

9.

10.





2. Know the parts of a road:

crosswalk (marked or unmarked)

lane

intersection

corner

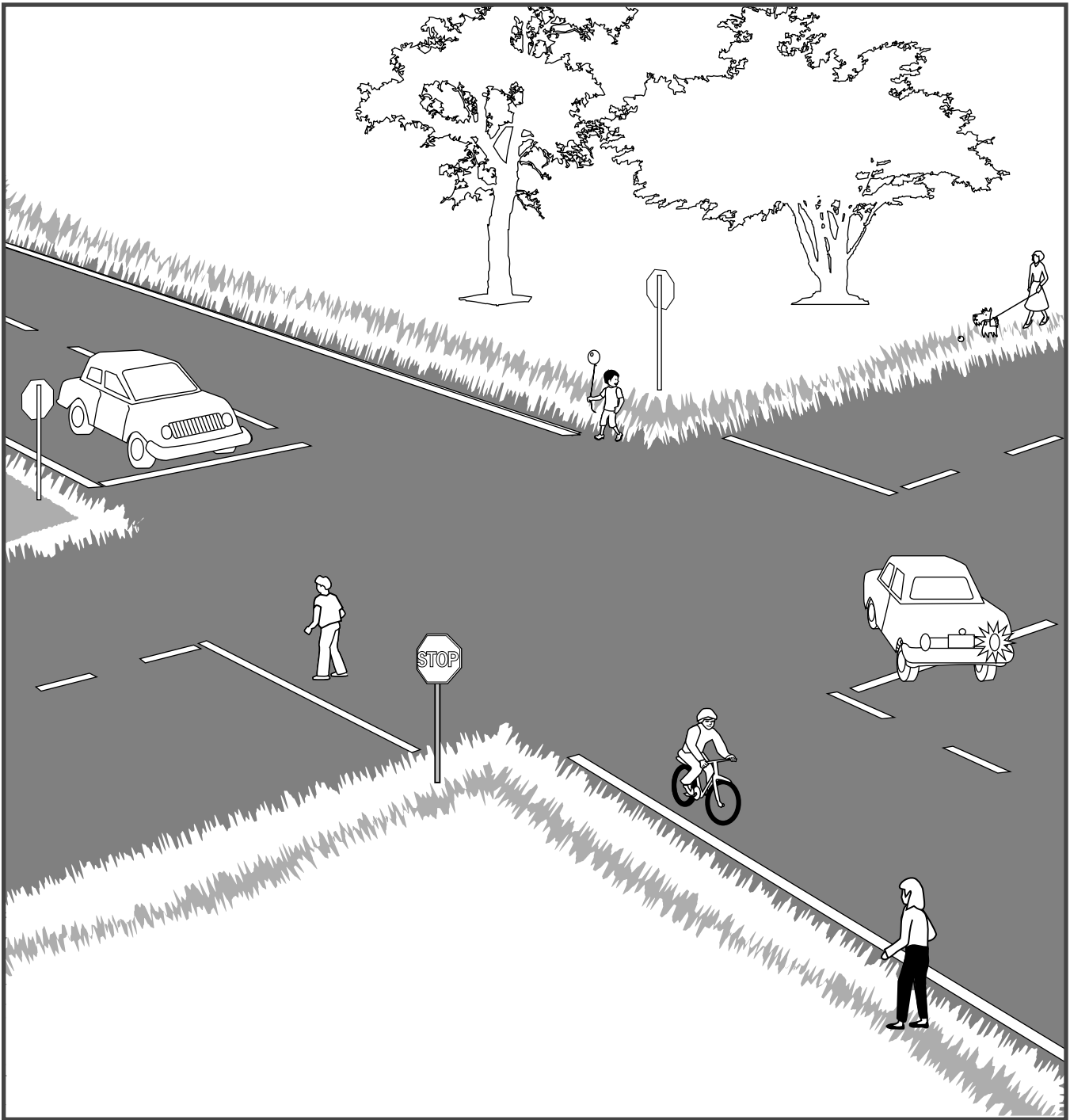
sidewalk

traffic signal

driveway

pedestrian signal

bike lane



2. Know the parts of a road:

crosswalk (marked or unmarked)

intersection

pedestrian

bicyclist

roadway

shoulder

street corner

traffic sign

vehicle

Lesson 2



Talking the Talk- Walking the Walk, Role Plays

Crossing Guard

There is a school crossing guard and a student in this role-play.

At the end of every day, the crossing guard is in charge of making sure vehicles stop and people cross safely. One day, the guard sees a student run across the street without looking and before the guard signals to the cars to stop. Role play what the guard and student talk about after the incident.

Peer Leader

There is a student your age (Jose) and 1st grade student.

Jose has been asked by a teacher he had in 1st grade to come talk to his class about pedestrian safety. Act out what Jose will share with the students and how the students respond.

Helping Out

There is a student and senior citizen in this role-play.

The student (Courtney) and a senior citizen (Joe) at a crosswalk. Joe is blind and needs help crossing the street. Act out the conversation between Courtney and Joe so that they cross safely.

Sister

There is a boy your age (Jamil) and his 4-year old sister, Maria in this role-play.

Jamil and his 4-year old sister Maria are playing with a ball in the front yard. It rolls into the street. Maria is about to run after the ball. Act out what Jamil teaches Maria about running after balls in the street.

Today, I learned I can help others to be safe pedestrians by:

Lesson 3

Healthy Travel



Environmental/ Livability	Personal Health/ Safety	Freedom/ Mobility

Lesson 3 *continued*

Goal Setting



My walking – related goal is:

I will accomplish my goal by:

Two people that can help support me:

This goal benefits...

Lesson 4:



Past, Present and Future

Draw here what people did 1000 years ago when they walked:

A large, empty rectangular box with a thin black border, intended for a drawing of people walking 1000 years ago.

Draw here what people did 100 years ago when they walked:

A large, empty rectangular box with a thin black border, intended for a drawing of people walking 100 years ago.

Lesson 4 *continued*



Draw here why people walk now:

A large empty rectangular box with a thin black border, intended for a drawing or illustration.

Lesson 5:

You Can Walk Too!



You are designing a safe walking route from one location in your town to another. Pick a starting place and an ending place. Draw the route on the space provided on page 11. Make sure to include landmarks along the way and arrows for the directions. It might help to put street names in.

Do You Live Close Enough to Walk or Bike to School?

- Yes. Then draw your route to school on the back of this page.
- No. Where do you walk? Draw the route to someplace you walk in your neighborhood.

Stuff to include in your drawing:

Roads

Traffic

Crosswalks

Sidewalks

Stoplights

Others?





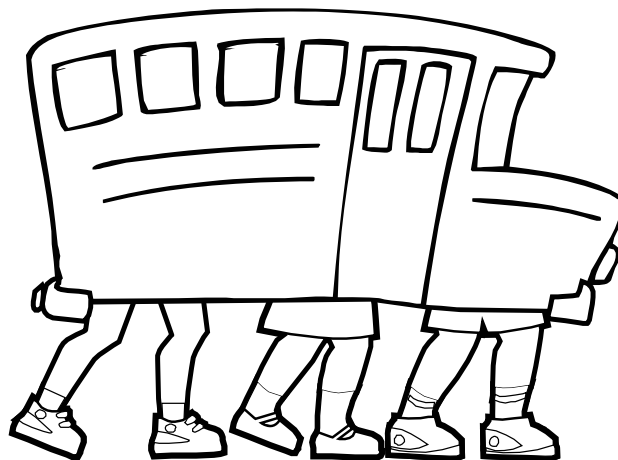
List two benefits that walking provides for your body:

List one environmental benefit of walking:



Performance Checklist	Yes	No?
I labeled a starting and ending point.		
I drew a route that was safe.		
I labeled landmarks and street names.		
I drew arrows for walking direction.		
I listed 2 benefits of walking for my body and one environmental benefit of walking.		

Be Cool
Walk to School





Neighborhood Navigators' Pledge

This is to certify that

I, _____

promise to be SAFE and make street safety a habit.

I will walk on sidewalks when available.

I will walk facing traffic so drivers can see me.

I will stop at curbs and corners.

And I will look and listen to make sure that vehicles stop for me

before I step into the street to cross.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

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Neighborhood Navigators

Grades 6-8

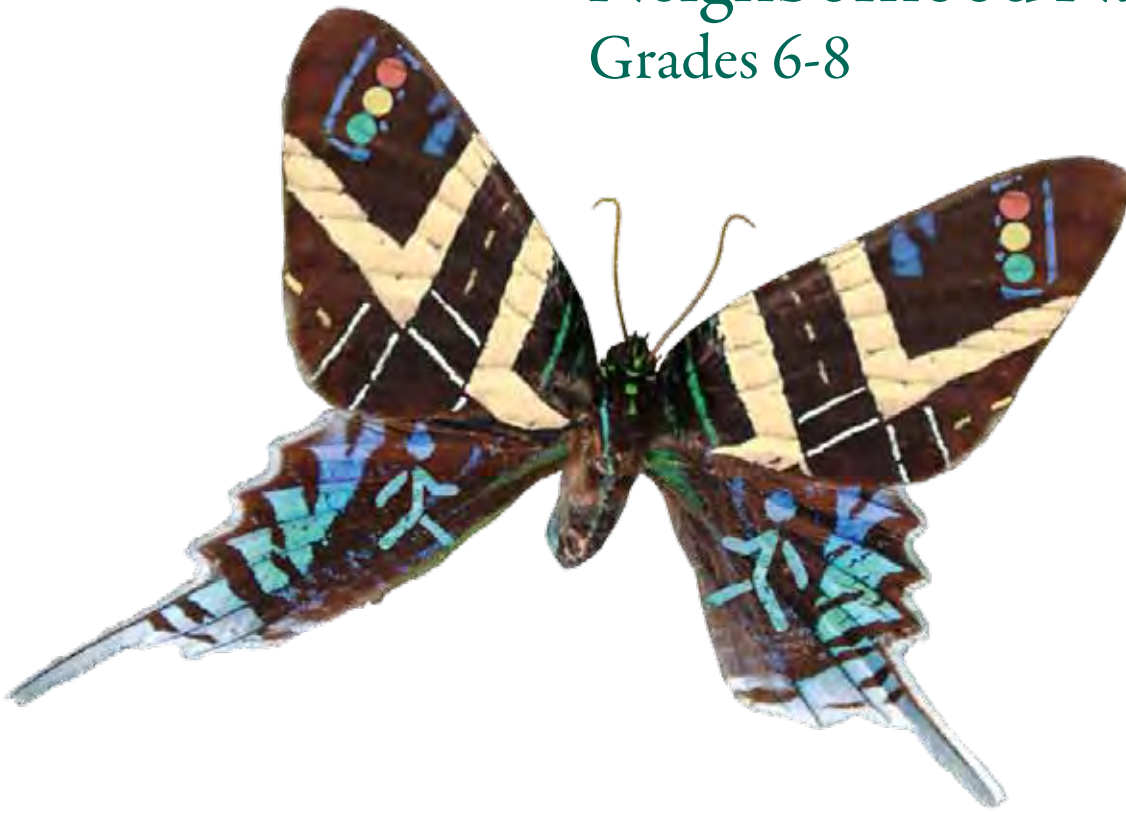


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5	Grades 6-8 Benchmarks
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17	Lesson 3: Community Design
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51	Pledge



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Neighborhood Navigators

Grades 6-8

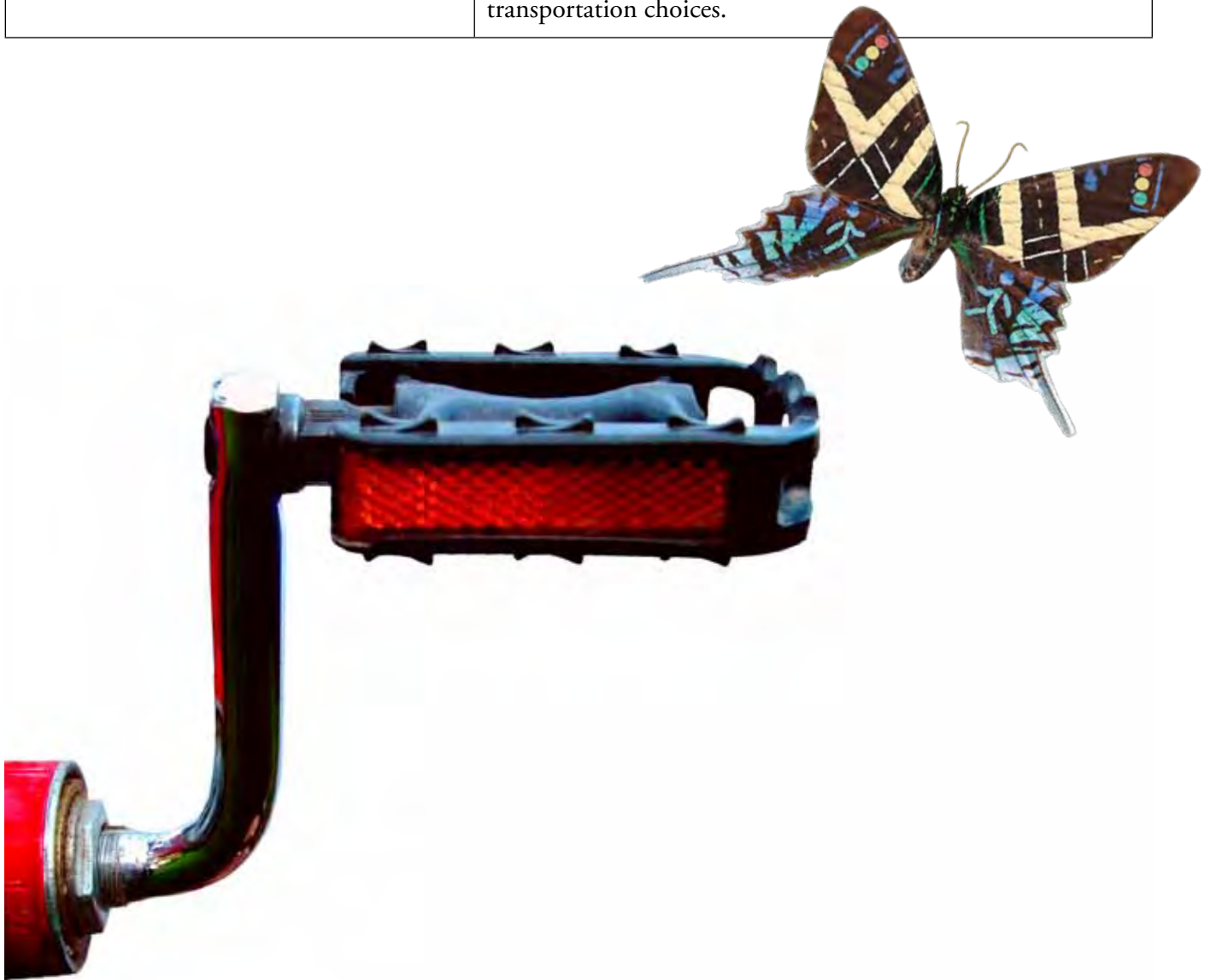
Introduction

The Grade 6-8 curriculum explores how our travel mode choices affect the environment. The following lessons examine how our history of travel affects our choices and habits today. Teachers who have pilot-tested this curriculum have expanded some lessons into two and three sessions. Please feel free to adapt to suit your and your students' needs and interests.



6-8 Lesson Summary

Lesson Title	Summary
What is Transportation	Understand the history of travel and how it affects our environment. Be able to determine how to keep safe while using different modes of transportation.
Consuming Resources	Learn about renewable and non-renewable resources that are used in everyday products and modes of transportation.
Community Design	Evaluate the safe and unsafe areas around our school and determine how things might be able to change to make the areas safer.
Habits and Environmental Impacts	Look at the habits we participate in and their impact upon the environment.
Writing Invitation	Write speech/article to defend or refute transportation choices.



Grades 6-8 Learning Objectives

Purpose To provide students with the basic knowledge, skills and practice necessary to be safe pedestrians and to learn how our travel affects the environment, our health and overall livability in a community.

Learning Objectives Students will be able to:

- describe different modes of transportation and how to stay safe while using them.
- identify traffic safety laws.
- understand how different modes of transportation have been used for discovery through the years.
- understand the difference between renewable and non-renewable resources.
- begin to understand how the built environment can influence travel.
- demonstrate safe travel for self and people with a variety of needs.
- identify ways to reduce risk of injuries while traveling to and from school and in the community.
- be able to analyze safe and unsafe crossings and suggest ways to make them safer.
- begin to understand the environmental impacts of individual transportation habits.
- understand how transportation choices affect land use, lifestyle and the environment - and vice versa.
- consider options when designing an ideal community.
- be able to defend or refute the rationale for a certain land use choice.



Grades 6-8 Benchmark Standards:

- Health**
- HE.08.IP.01** Explain ways to reduce risk of injuries while traveling to and from school and in the community.
- HE.08.IP.02** Identify rules and laws intended to prevent injuries.
- HE.08.IP.03** Demonstrate personal responsibility to follow safety related rules.
- HE.08.HS.01** Access home, school and community resources to meet specific health and safety needs.

Physical Education **PE.08.SM.01** Apply rules, procedures, and etiquette that are safe and effective for specific activities/situations.

Social Science **SS.08.HS.01** Represent and interpret data and chronological relationships from history, using timelines and narratives.

SS.08.HS.03 Identify and give examples of chronological patterns and recognize them in related events over time.

SS.08.GE.07 Understand how human modification of the physical environment in a place affects both that place and other places.

SS.08.GE.08 Understand how changes in a physical environment affect human activity.

SS.08.GE.08.03 Predict how changes in an ecosystem (not caused by human activity) might influence human activity.



Science **SC.08.ES.01** Recognize that Earth materials are limited, and explore strategies for addressing this problem.

SC.08.ES.01.01 Identify ways in which various resources can be recycled and reused.

English **EL.08.SL.01** Develop a focus and present information to achieve particular purposes by matching the message, vocabulary, voice modulation, expression, and tone to the audience and purpose.



Lesson 1:

What is Transportation?

Objectives

Students will be able to:

1. share different modes of transportation and how to stay safe while using them.
2. identify traffic safety laws.
3. understand how different modes of transportation have been used for discovery through the years.

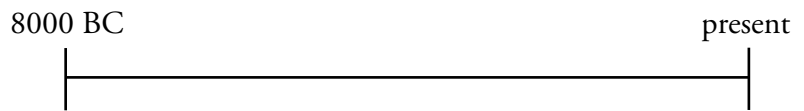
Materials

- Student workbooks
- Paper for each student
- Tape
- Overheads of examples of areas where several road users interact (see Appendix A for examples or use local pictures)
- List of “Traffic Safety Laws and Guidelines” (Appendix B)
- Pictures of different modes of transportation (Appendix C)



Advance Preparation

Draw a timeline on the board.



Vocabulary

transportation - 1) a means or system of transporting, moving from one place to another; 2) the act of transporting or the state of being transported

transportation system - all modes of transportation efficiently working together

Activities

Introduce the curriculum by asking students to draw or write the name of a mode of transportation on a piece of paper. Some examples include:

- a person walking
- cars
- trains
- airplanes
- scooters
- skateboards
- buses, etc.

Be sure to cover all the transportation modes and vehicles that your class suggests.

Write the words “Transportation System” on an overhead or chalkboard. Starting with “System,” brainstorm what a system is (an established or organized procedure) and examples of a system (the cafeteria line to get lunch, procedure to hand in assignments to be graded). Explain that transportation system is defined as *all modes of transportation efficiently working together*. Show on the overhead the examples of transportation systems: an intersection or a crosswalk are simple examples of systems where people move from one side of the intersection to another in a safe and efficient manner. (See Appendix A for other examples.)

Ask students what might be required for safe transportation systems and write these on an overhead or chalkboard. Some examples may include traffic laws, signals, clearance of trees for visibility, minimum modes of transportation at one time (such as a bike lane), safety equipment, etc. What might happen if one or more participants in the system did not follow the laws, rules and procedures of the system?



Have students turn to the Transportation Grid in their workbooks (page 2). Have students fill in modes from the students’ choices in the initial activity and discuss the environmental impact as well as how to keep safe while using that mode.

Sample Transportation Grid

Transportation Mode	What type of energy does it use?	How does it affect the environment (air, water, land)? (maybe a rating scale and students have to rate it?)	How can you stay safe while using this mode?
Airplane	Gas	Gas pollutes the air.	Keep seatbelt on when seated. Follow directions from flight attendants.
Skateboarding	Food energy	It doesn't pollute our air and water but causes some wear and tear on the streets. (Note: Discussion should center on skateboarding as mode of transportation. Manufacture of skateboards is another discussion entirely.)	You should wear a helmet and elbow/knee pads.



Transportation throughout History

On a chalkboard, or on pieces of paper taped on the wall, write from left to right, years starting at 1600 A.D. or other dates, depending on individual choice and subsequent prompt.

Have students take the mode of transportation they wrote down or drew at the beginning of class and take a piece of tape and tape their mode/vehicle on the year that they think the mode was invented.

Go through and adjust any modes that were put up during the time-frame. Here is a grid to help you determine the mode of transportation and date of invention:

Transportation Mode	Date
Boat	Noah's Ark
The Wheel (cart)	8000 BC
Ferry	First ferry line in 1642 between Manhattan and Brooklyn
Hot Air Balloon	1750's
Bicycle	1816
Train	1822
Car	1855
Motorcycle	1867
Airplane	1903
Scooter	1923
Skateboard	1940's

Walk Discuss what this neighborhood may have looked like at various times throughout history.

Discuss how the drop off and pick-up area (and its related system) works. Is it safe? How do walkers/ bikers feel when interacting with the drop off and pick up system?

Ask students why people participate in certain modes of transportation. Include needs, wants, innovations, etc. Some examples may include exercise, cost, efficiency, speed, landscape/views, etc. Go through as many as you would like on the timeline.

Extension Activity

Discuss or define the difference between a law, policy and guideline.

Law: (<http://dictionary.reference.com/browse/law>)

the principles and regulations established in a community by some authority and applicable to its people, whether in the form of legislation or of custom and policies recognized and enforced by judicial decision

Example: ORS 814.040 Failure to yield to vehicle; penalty.

(1) A pedestrian commits the offense of pedestrian failure to yield to a vehicle if the pedestrian does any of the following: (a) Suddenly leaves a curb or other place of safety and moves into the path of a vehicle that is so close as to constitute an immediate hazard. (b) Fails to yield the right of way to a vehicle upon a roadway when the pedestrian is crossing the roadway at any point other than within a marked crosswalk or an unmarked crosswalk at an intersection. (c) Except as otherwise provided under the vehicle code, fails to yield the right of way to all vehicles upon the roadway. (2) The offense described in this section, pedestrian failure to yield to a vehicle, is a Class D traffic violation. [1983 c.338 §555; 1995 c.383 §84]

Policy: (<http://dictionary.reference.com/browse/policy>)

a definite course of action adopted for the sake of expediency, facility, etc. For example, when the school puts in place a new policy, such as requiring students to walk along the left hand side of the hall when walking to the cafeteria.

Guideline: (<http://www.yourdictionary.com/guideline>)

a standard or principle by which to make a judgment or determine a policy or course of action, a “rule of thumb”

Have students get into teams of four. Assign each team one law, policy or guideline (Appendix B). Have them read it and answer the following questions:

- What does this law, policy or guideline have to do with people your age?
- If people were following this law, policy or guideline, what would it look like?
- If people weren't following this law, policy or guideline what would it look like?

Have students share their law, policy or guideline with to the class and the answers to the questions.

Have students develop a poster teaching younger students about the different modes of transportation.

Teacher Reflection/Class Evaluation

- Did students participate in all activities (i.e., draw a mode of transportation, review a law/policy, fill out their transportation grid)?



Lesson 2: Consuming Resources

Objectives Students will be able to:

1. understand the difference between renewable and non-renewable resources.

- Materials**
- Student workbooks
 - “A Day in the Life of a Drop of Water” (Appendix C)
<http://www.catskillcenter.org/programs/edu/csp/H20/Lesson1/daylife2.htm>
 - Overhead of Cheese Sandwich Bubble Map (Appendix D1)
 - Bubble Map (Appendix D2)

Advance Preparation None

Vocabulary

Renewable resource: A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable or faster than its rate of consumption by humans or other users. Solar radiation, tides, winds and hydro energy are perpetual resources that are in no danger of being used in excess of their long-term availability. The term also has the connotation of sustainability of the handling of waste products by the natural environment. http://en.wikipedia.org/wiki/Renewable_resource

Non-renewable resource: Natural resource, such as coal, oil, or natural gas, that takes millions of years to form naturally and therefore cannot be replaced once it is consumed; it will eventually be used up. The main energy sources used by humans are non-renewable. http://en.wikipedia.org/wiki/Nonrenewable_resource

Activities

Have students take out their Transportation Grid from Lesson 1 in their workbooks. Ask students if there are any other modes they have thought of since the previous lesson. Give students time to finish the grid if necessary.

Have students look at the words “renewable” and “non-renewable” in their notebooks. Ask them to try and write a definition for the terms. After a few minutes, discuss and reach consensus on what the definitions of renewable and non-renewable resources are.

Then, on an overhead, brainstorm a list of renewable and non-renewable resources. Some examples include:

Renewable Resources	Non-renewable Resources
Solar Energy	Gasoline
Wind	Coal
Tides	Diesel

Discuss with students how some resources are used and discarded. See Attachment A, “A Day in the Life of a Drop of Water,” Appendix C (workbook, page 3).

Ask students to look at the renewable and non-renewable resources list and their Transportation Grid, and decide how do the modes of transportation run on renewable or non-renewable resources? Put an “R” next to those that are renewable and an “NR” next to those that are non-renewable.

Select an everyday product and brainstorm what goes into making it, using it, and disposing of it. You may want to research your product on the Internet. Using a pencil as an example, the classroom discussion would focus on the transportation systems necessary to get all the pencil components in one spot to assemble, ship to the seller, purchase and transport home.

Q. What materials go into making a pencil? http://www.ehow.com/how-does_4924123_how-pencil-made.html

A. Graphite, clay, water, wood, paint, metal, and rubber.

Q. Where does graphite come from?

A. Graphite may come from Pargas, Finland; Naples, Italy; and the Francon Quarry near Quebec. Graphite is also found in smaller quantities throughout the United States, including parts of New Jersey, New York, Arizona and Colorado. (http://www.ehow.com/how-does_4913720_does-graphite-come.html).

Q. How does graphite get to the pencil plant?

A. Depending on where the graphite mine is located, it may be shipped by container ship, truck and/or train.

Examples of other lines of questioning that may be pursued:

Q. What is the transportation mode used to transport the materials to the plants?

Q. How does the pencil get from the manufacturer to the store for you to buy?

Q. How do you get to the store to buy the pencil, and how do you go home with the pencil?

Q. Are there other modes of transportation you can use in order to go to the store to purchase the pencil?



Have students discuss the natural resources they consume when they buy a pencil, book, or many other things. Continuing with the example of the pencil: “When we buy pencils, we buy everything that went into getting all the parts of the pencil to the plant to be assembled and getting the pencil to us for purchase. We buy the effort of digging the graphite from the ground, and the energy that goes into growing, harvesting and shipping the trees for the wood. We buy the transportation of pencils to stores and the environmental impact from the process.”



Bubble Map Transportation Modes

Split students into groups of four or five. Ask students to turn to the example of the Bubble Map of a Cheese Sandwich in their workbook (page 5); discuss the components that go into the cheese sandwich and how to use this information to make a bubble map. Assign each group two transportation modes - include walking. Have the students develop a bubble map brainstorming what might go into each mode: list the parts of the mode, manufacturing, shipping, operating, disposing/throwing it out. Have students fill the bubble map template, Appendix D (workbook, page 6). Some might want to access the library or internet for this project.

Give students time to work on this bubble map and if time permits, to present to the class.

Walk

Walk through the neighborhood and identify types of transportation modes and talk about what goes into making these modes possible. What by-products are produced? How could we reduce these by-products? During the walk discuss the observed adherence to laws, rules, and guidelines for efficiency and safety.

Teacher Reflection/Class Evaluation

- Did students try and define renewable and non-renewable resources?
- Did students develop a bubble map in groups?



Lesson 3: Community Design

Objectives

Students will be able to:

1. understand how the built environment can influence travel.
2. demonstrate safe travel for self and people with a variety of needs.
3. identify ways to reduce risk of injuries while traveling to and from school and in the community.
4. be able to analyze safe and unsafe crossings and suggest ways to change them to make them safer.
5. understand how and why people alter the physical environment.

Materials

Student workbooks

Optional Resource

http://www.saferoutesinfo.org/resources/education_bikeability-checklist.cfm

Advance Preparation

None

Vocabulary

engineer - a designer or builder

walkability - capable of or suitable for being walked

bikeability - capable of or suitable of being biked

Activities First, with the class, go over the terms in their workbook (page 7): engineer, walkability and bikeability.

Review a bubble map from the prior lesson. Ask students, “Did you learn anything new about a certain transportation mode that you didn’t know before? Was there a transportation mode that used more energy than you thought it did?”

Explain to the class that they are going to walk outside and observe the traffic around the school in order to determine the areas around school that are safe and unsafe.

Ask the class, “What questions might we ask?” See Community Design section (workbook, page 7). You may use these questions or the Walkability Checklist (workbook, page 9). You may also wish to use the Bikeability Checklist web link at the following address: http://www.saferoutesinfo.org/resources/education_bikeability-checklist.cfm

- Is the student drop-off and pick-up area at school safe?
- Are there stop signs and slow signs around the school?
- Are there safe places for students to cross the street?
- Is the school supporting Walkability? Bikeability?
- Is it accessible for people with disabilities?

Go outside and observe. Have students write their answers while outside.

Back in the classroom, students are to create “A Habitat for Healthy Habits!” (workbook, page 10).

Students are to create a map of a perfect neighborhood using the following set-up:

As a member of the student engineering team that has been studying ways to improve the walk- and bike-ability of our school neighborhood, you have been invited to join a community group to share what you’ve learned. This new group is planning a new, safe neighborhood with the following goals:



- Includes homes, schools and parks
- Encourages walking, biking and other physical activities
- Decreases use of cars and gasoline
- Includes at least three traffic safety features for pedestrians and cyclists

Give students time to create the map. This may be done individually or in small work groups.

Alternative: Develop a map of the school grounds; include adjacent streets, parks and other pertinent features. Have students use black ink to show existing travel patterns and in red ink outline what could be improved.

Task	Yes or No
Is there a school, library and or park included in the map?	
Are there roads?	
Are there at least three safety laws recorded?	
Is there is a name of the neighborhood listed?	
Are there people safely crossing the street and walking around the neighborhood?	

Walk (Assignment to be done at home) Walk a four to ten block circuit. Draw a map and identify existing travel patterns in one color and in another color outline what could be improved.

- Teacher Reflection/Class Evaluation**
- Did students walk safely outside?
 - Were students able to do the safety check to determine how safe their school community is?





Lesson 4: Habits and Environmental Impact

- Objectives** Students will be able to:
1. understand the environmental impacts of individual transportation habits.
 2. understand the technological changes that have been made to transportation that both improve and harm the environment and our society.

Materials Student workbooks

Advance Preparation None

Vocabulary **engineer** - a designer or builder
habit - an acquired pattern of behavior that often occurs automatically

Activities Travel Habits
Ask students, “What is a habit?” Share examples of habits – see below, on board or overhead.

Examples of Habits:

- Driving everywhere
- Brushing teeth before bed
- Always wearing a seatbelt
- Nail biting
- Not signaling before turning into the driveway
- Chewing the end of a pencil



Ask students why people participate in certain modes of transportation. Include needs, wants, innovations, etc. Some examples may include exercise, cost, efficiency, speed, landscape/views, etc. Ask students how many of these modes of transportation are used as habit? For example, you always walk to school; therefore walking is a healthy habit. Or do you always drive to the grocery store? Why? Could you use another transportation mode to achieve the same objective? Go through as many as you would like on the timeline from Lesson 1.

Have students open their workbook (page 11) and write down 10 habits they have as they function throughout the day. Add two columns at the side: one labeled “Healthy for Me,” the other labeled “Harmful to Environment.”

Students then rate their habits from **1-5** in the “Harmful” column, with **5** being really harmful for the environment and **1** not harmful at all. Have them rate in the “Healthy” column on a scale from **1-5** how healthy the habit is to their physical, social and mental health, with **5** being unhealthy and **1** being healthy.

Have some students share their lists.

Have students brainstorm a variety of human activities and habits that affect the atmosphere or our world in a negative way. Some answers may include smoke from fires, exhaust from cars. Refer back to their transportation grid from Lesson 1. Have students look at the modes of transportation and how they affect the environment. Discuss.

Briefly review the “perfect neighborhood” the students created for the “A Habitat for Healthy Habits!” exercise in Lesson 3. Remind them of the elements they included that made up their ideal neighborhoods (has homes, schools, parks, encourages walking and biking, lower use of cars and gasoline, has safety features for walking and biking).

Have students select at least one habit that was identified today. The students are to develop a commercial for a friend, family member, or someone in the community, that demonstrates the impact the identified habit has on the environment. If the selected habit has a negative impact, the student should explain or show what can be done to lessen the environmental impact of the habit. If the habit has a positive impact, the project should celebrate how the habit positively affects the environment and encourage continuation and/ or promotion.

For example, you may choose to create a commercial, with a parent as the target audience, encouraging carpooling to work. Included in the commercial would be information on the positive impact s carpooling has on the environment (less vehicles on

the road, less gas consumption, less cars in parking lots) and in personal benefits (saving time, spending time with friends).

Or, you may choose to create a commercial that identifies the reasons for a brother or sister to walk or ride a bicycle to school rather than being driven to school in the family car (walking and biking benefit the environment and one's personal health).

As students develop their commercials, be sure to include the following:

Task	Yes or No
Does the habit have positive or negative impacts on the environment? Did you state two things people can do to change their behavior?	
Does the habit have positive or negative health impacts?	
List three reasons why what you are advocating for is a good choice for personal health.	
List three reasons why changing behavior is good for the environment.	
Was the commercial appropriate for a chosen target audience?	

Walk Walk around school neighborhood or other area, preferably with lots of people. Have students write/ draw examples of people doing everyday things. Are these habits? Are they healthful or not?



Lesson 5: Writing Invitation

- Objectives** Students will be able to:
1. understand how transportation choices affect land use, lifestyle and the environment - and vice versa.
 2. consider options when designing ideal community.
 3. be able to defend or refute the rationale for a certain land use choice.

- Materials**
- Student workbooks
 - Maps of local school neighborhood (Google maps work!)
 - Map designed in Lesson 3

Advance Preparation None

Activities It is time to pull together what has been learned in the previous lessons. Have the students work in small groups and look at their community as a whole to consider how different modes of transportation impact the community's environment and livability.

Students are to write a persuasive letter or speech, using the "Writing Invitation" (workbook, page 14). The students are to convince their audience to adopt and implement suggested changes to improve the walkability and bikeability of their school.

They are to include the following:

- the purpose of the letter or speech;
- three suggested changes and the reasons behind them;
- three ways these changes will have a positive impact on personal health, school safety, natural resources and the environment.

Pictures, graphs, and sample statements from community members are encouraged.

Persuasive Writing Check Sheet

Introduction

- Does the author include an introduction?
- Does the first paragraph clearly state the author's opinion?
- Is the introduction inviting and/or create interest?

Concede to the other side

- Does the author concede to the other side?
- Does the author show s/he understands the other side?
- Does the author state one or two opposing arguments?

Restate opinion and support with details and facts

- Does the author restate his/her opinion in the first sentence?
- Does the author use many supporting details and facts?
- Does the author cite sources for facts? (if applicable)
- Are the arguments and facts convincing?
- Are the arguments and facts organized and easy to understand?

Offering a solution

- Does the author present a solution to the problem?
- Is the solution presented thoroughly?
- Is the solution practical?

Conclusion

- Does the author include a conclusion?
- Does the conclusion restate the author's opinion in another way?
- Does the conclusion leave the reader with something to think about?
- Is the conclusion interesting and/or powerful?



Appendices

Grades 6-8



Appendix A

Intersections



Appendix B

Traffic Safety Laws and Guidelines

Walking and biking are a fantastic way to get to school and get around town. With so many different kinds of wheels using the roads we need to have a few rules to keep us all safe and happy when we use the streets and sidewalks. Here are a few to think about. Discussing these with your family around the table would be great dinner conversation!

Pedestrian Safety Rules

1. Cross the street at the corner or at a crosswalk if there is one, and obey all traffic signals.
2. Walk on a sidewalk; if there is no sidewalk, walk on the left side of the street, facing oncoming traffic.
3. It is best to walk with a responsible adult.
4. Only cross in front of a school bus when the driver says it is safe. Do not cross behind the bus or where the driver can't see you.
5. Look left, right and left again before you cross and keep looking both ways until you reach the other side.
6. If there is traffic, make eye contact with the driver(s) so they see you and understand your intention. Make sure they are at a full stop before you start to cross.
7. Watch out for cars that are turning or backing up out of parking spaces or driveways.
8. If you walk when it is dark, wear light-colored clothing or clothing with reflective material so drivers can see you. A flashlight is also a good idea.
9. Never run into a street without stopping and practicing your safe pedestrian skills.
10. Walk carefully and take short steps when pavement is wet or icy.

Bicycle Safety Rules

1. Always wear a properly fitted and certified helmet.
2. When entering a sidewalk, path or driveway, stop and look to make sure it's clear and safe to proceed.
3. If crossing the street, walk your bike across the crosswalk. For older or more experienced riders, learn to make vehicular-style left hand turns.
4. Cross only at the street corner.
5. When riding in the street, obey all traffic signals and laws.
6. Ride with the traffic flow, not against it.
7. Always stop at stop signs and stop lights.
8. Use the correct hand signals when turning to let drivers know your intent.

Tips to Motorists when Driving around Bicyclists

With so many cyclists on the streets these days, many parents of students receiving bike safety education in school have asked for some tips for driving their vehicles around bicyclists. We hope the following list is useful. For more information on laws and good practices for bicyclists, you can request the Oregon Bicyclist Manual from the Oregon Department of Transportation.

- Check the bike lane. When turning right across a bike lane, always look behind you and in your passenger sideview mirror for bicyclists; bikes can travel fast enough to catch up with you even if you passed them more than a block earlier. If a bicyclist is approaching, wait and yield rather than trying to “beat” them. Think of the bike lane like a train track – never sit and idle on it – don’t start across until you know you can clear it.
- Pass with ample room. Except over a double yellow line, you can cross the center line to pass a bicyclist safely as long as oncoming traffic is clear. Passing closely, especially when traveling over 25 mph, is very scary for the bicyclist.
- Don’t honk to communicate with bicyclists unless there’s an emergency. If your horn sounds loud from inside your car, imagine how loud and shocking it is from just in front of it.
- Do communicate with bicyclists using eye contact and turn signals.
- Don’t follow closely. This is scary and intimidating. Bicyclists prefer to be out of your way as soon as possible but often need to be in the lane for some reason.
- Allow bicyclists to use crosswalks. This is allowed, and some timid bicyclists rely on them for safe crossings.
- Be cautious in residential neighborhoods. Bicyclists like to use quiet streets to get around, so if you are sloppy or impatient at stop signs you risk hitting someone on a silent or vulnerable vehicle. It is really important to slow and stop before stop signs, rather than after, and then ease into the intersection to see if cross traffic is clear. Children riding bikes or running on the sidewalk may not see you and if you aren’t slowing down before they cross the street, you could run them over.
- Look for bicyclists before opening your door. When parking on the street, make sure you’re not opening your car door into the path of a bicyclist.
- Use good manners. Apologize if you make a mistake and it will go a long way. Eye contact and waves are very humanizing, especially in the stress of rush-hour traffic.
- Give children extra space. Children on bicycles are often more wobbly than adults, and more likely to turn or stop suddenly without looking or signaling. It is best not to pass a child on a bicycle unless you have many feet of space and proceed extremely slowly.

Appendix C

A Day in the Life of a Drop of Water

(Source: Expanded from “Birth of a Raindrop”, from Keepers of the Earth, by Michael Caduto and Joseph Bruchac)

You are a small drop of water sitting on top of a fresh blade of green grass. It is mid-summer and the sun is shining. You are wondering, “Will I ever become unstuck from this blade of grass?”

A playful summer breeze blows through the meadow, causing your blade of grass to wave back and forth. The sun feels very strong and you feel yourself becoming more and more full of energy. You feel so hot and alive that your insides are rushing around violently. Suddenly the energy is so great that you are lifted right up into the sky! Your body feels a whole new sensation... you are light, dry and flying! Your insides are still moving around furiously. The wind helps to carry you up and over the treetops.

As you rise higher and higher you feel light as a feather. Down below, the meadow that you came from looks like a dot on the Earth. The wind carries you into a dark gray cloud. You hear a loud cry and almost bump into a large, black bird with a white head. Here in the cloud there are millions and millions of other water vapor molecules rushing around and bumping into each other. “Hey, watch it!” you yell, as one of them bumps into you. “Ouch! It’s too crowded here!”

You are relieved when you begin to feel that familiar moisture feeling again. As you become wetter, you feel heavier, and you move much more slowly. Soon you become so heavy that you start to fall back to Earth. All around you other raindrops are falling. Lower and lower you sink. In every direction you look, there are raindrops. The whole world seems to be wet.

You look down again and the wet blur is becoming clearer. A long, black highway stretches below you, running beside a large expanse of evergreen forest. You hope to land on the forest! As the end of your fall draws near, you close your eyes, bracing yourself for the impact... SPLAT! OUCH! Was it the highway asphalt? But your movement doesn’t stop. You just move much more slowly. As you open your eyes, you are trickling down the crack of a huge boulder on the edge of the forest. A few other raindrops have stuck onto you and you’re all flowing together. More and more drops collide and join your blob, running down the rock. Your speed picks up, and then finally.... tthump! You all have landed on the soft earth. The impact was more gentle this time but it has broken the blob apart.

Once again you are alone and suddenly it is very dark... oops... one droplet friend has attached to you as you find yourself slowly creeping into a strangely-shaped crevice between two fuzzy particles of soil. You feel yourself being pulled down, down, into crevice after crevice.... like little tunnels in the soil. Slowly twisting, turning, percolating, the musty smell of the soft, damp, cool earth comforts you. The softness is disappearing, though, as you go further down and the soil particles are getting harder and bigger with larger crevices that you flow through not quite so slowly now.

More of your droplet friends join you. You all notice that you now seem to be pulled sideways instead of down. A strange force is somewhere off to your right and you’re getting sucked toward it, but you all still have to find your way through the twisting cave-like spaces between the grains of

sand and gravel... the force becomes so strong that you get pulled... fffttt! Splash! Into a huge hole filled with thousands... millions... of your water drop friends... You're all swishing and splashing about... but you can still feel the strange force sucking you... it is much stronger now, and upwards. It is still very, very dark... suddenly you hear a strange echoing sound... all your droplet friends splashing against metal... there is a faint smell of rust now. The force is still pulling you up, when suddenly...

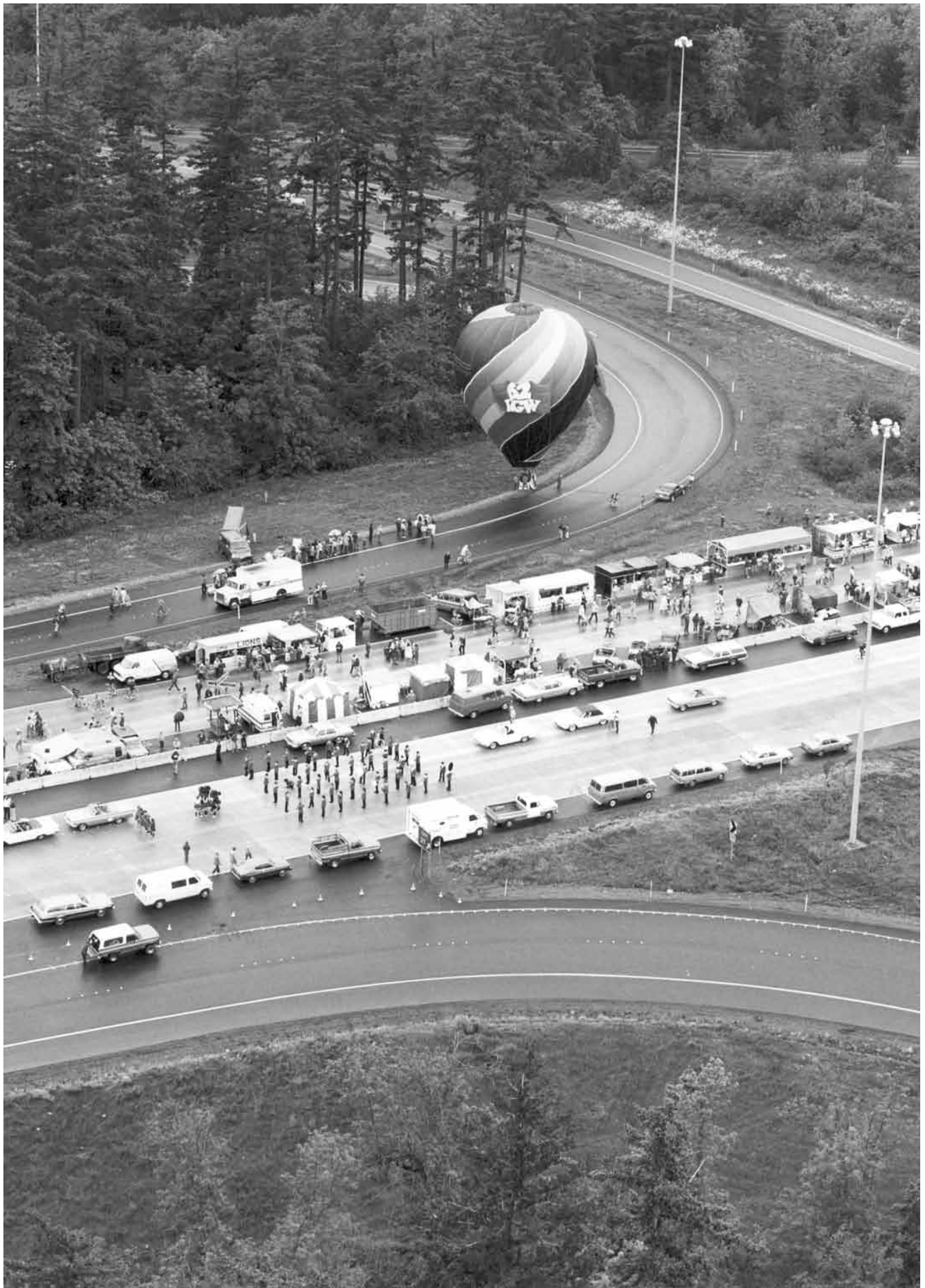
OUCH! Your head hits a hard metal wall and you get pulled sideways again, this time to your left. Faster and faster you travel... OUCH! Your left side hits another metal wall and the force pulls you straight up again. Now you are traveling as fast as you were the last time you saw the light of day... rolling down that boulder on the edge of the forest. But it is still dark and so it is pretty scary to be going so fast and not see where you are going...

Suddenly with a violent jerk you get flipped over and you plunge head first into a blinding light... SPLASH! When the turbulence settles, you turn yourself upright and you see that you're surrounded by your droplet friends, splashing, swishing about in a very clear pool. When you look around, you see these strange flesh-like smudges all around you. The sucking force is gone but you feel yourself and your friends being turned upside down, like you're in a swimming pool that a huge giant is flipping over... and whoosh... it goes completely dark once again. In your last glimpse of light, you were able to see that you were heading straight towards an extremely strange, reddish-pink oval creature with bizarre wart-like bumps all over it. After seeing such a sight, you're glad it's dark again. You're also glad to feel that wherever you are, the pace has slowed way down. Are you in the soil again? Gosh, it seems much warmer than the soil. It's sort of a cozy feeling after all the splashing and cold metal walls and weird sucking forces and strange sights... maybe it's time for a rest.

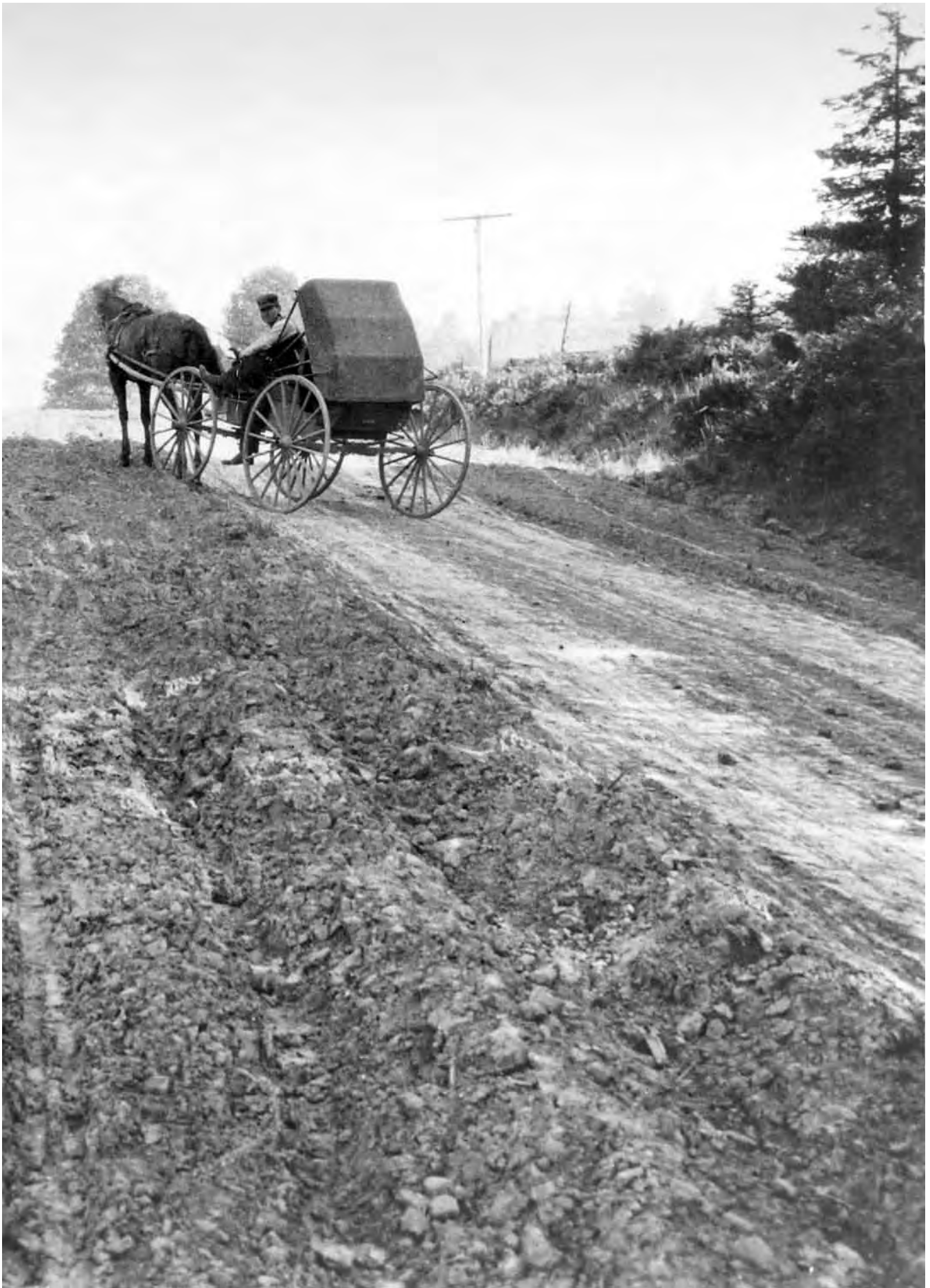
Appendix D

Transportation throughout History











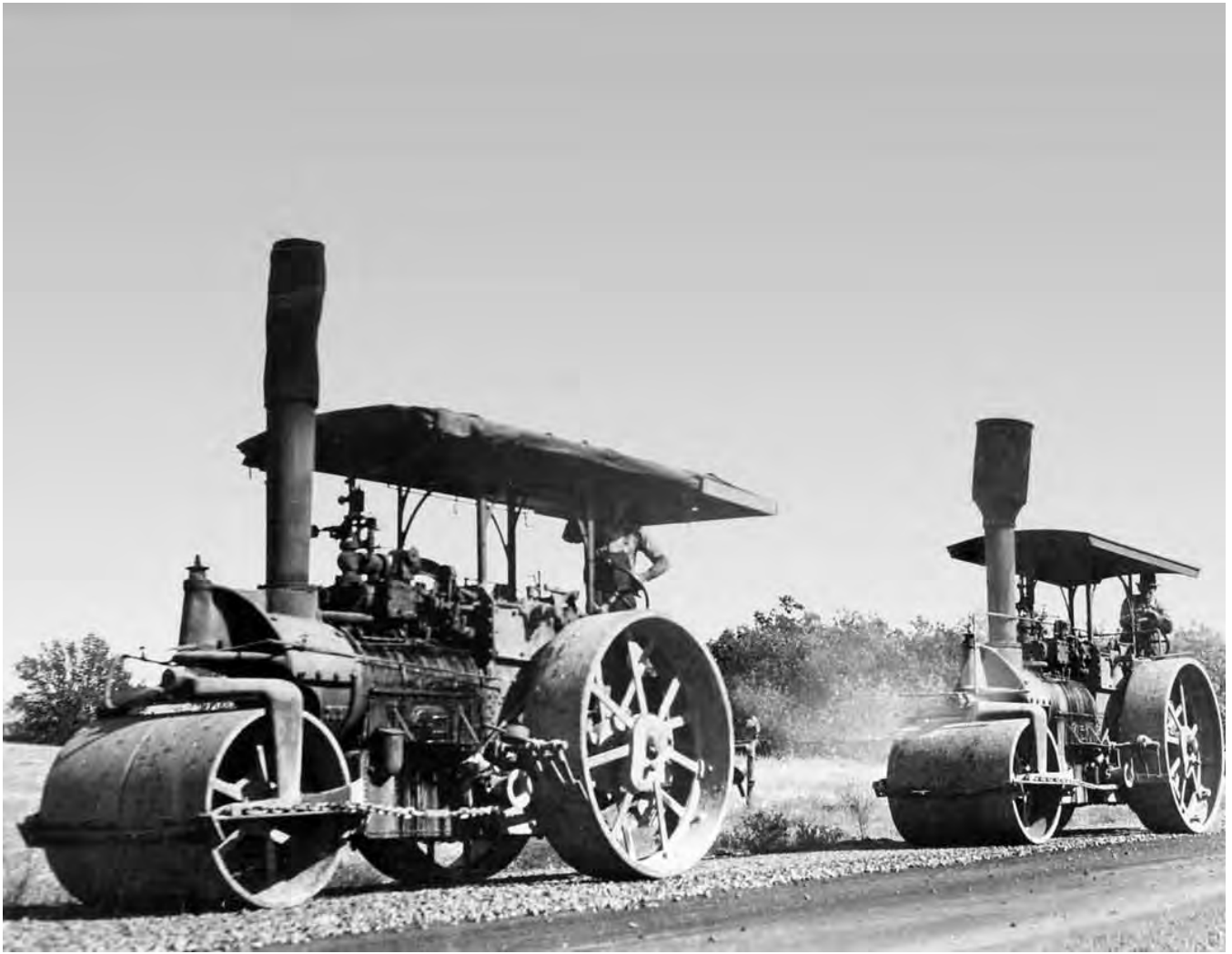














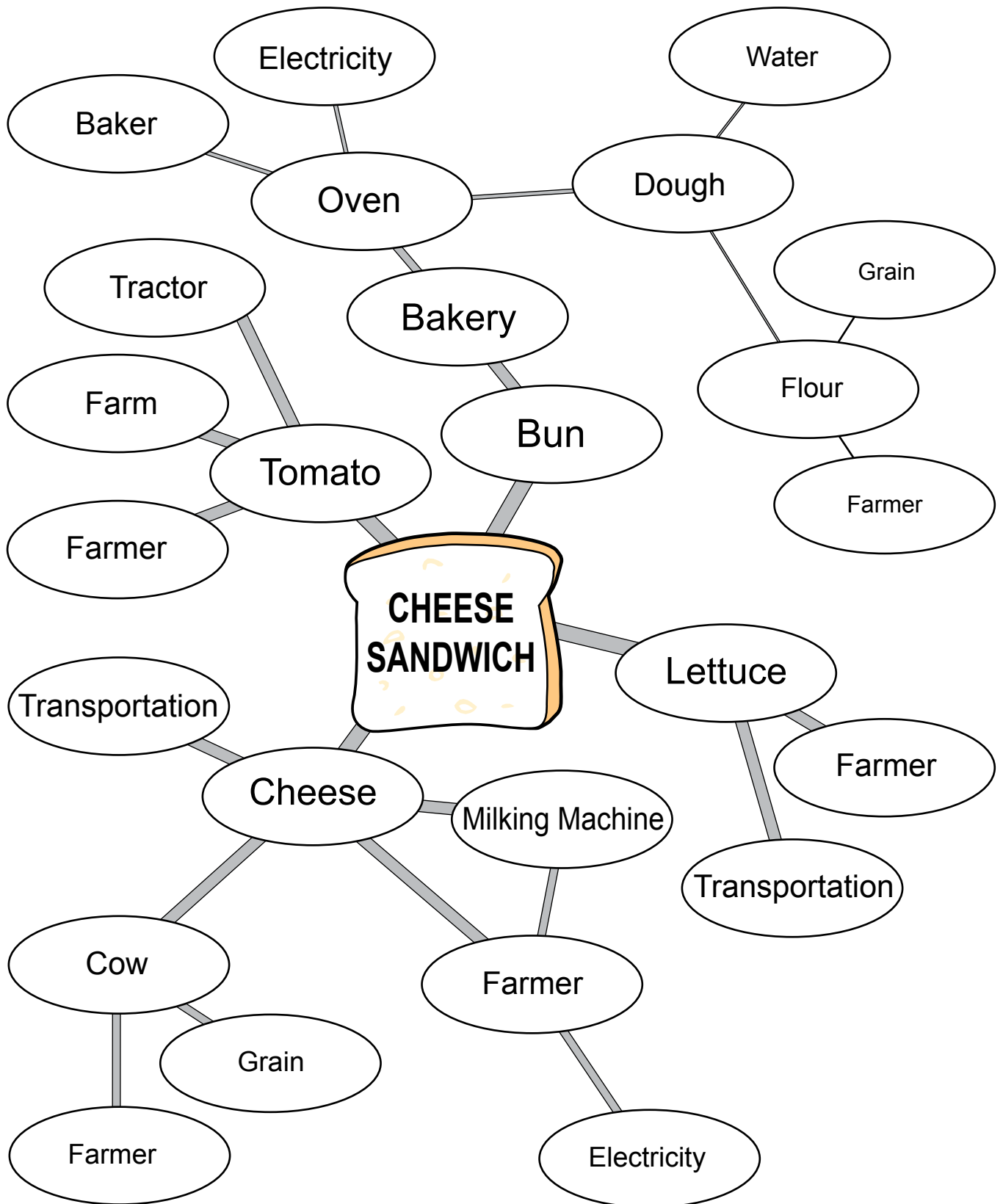




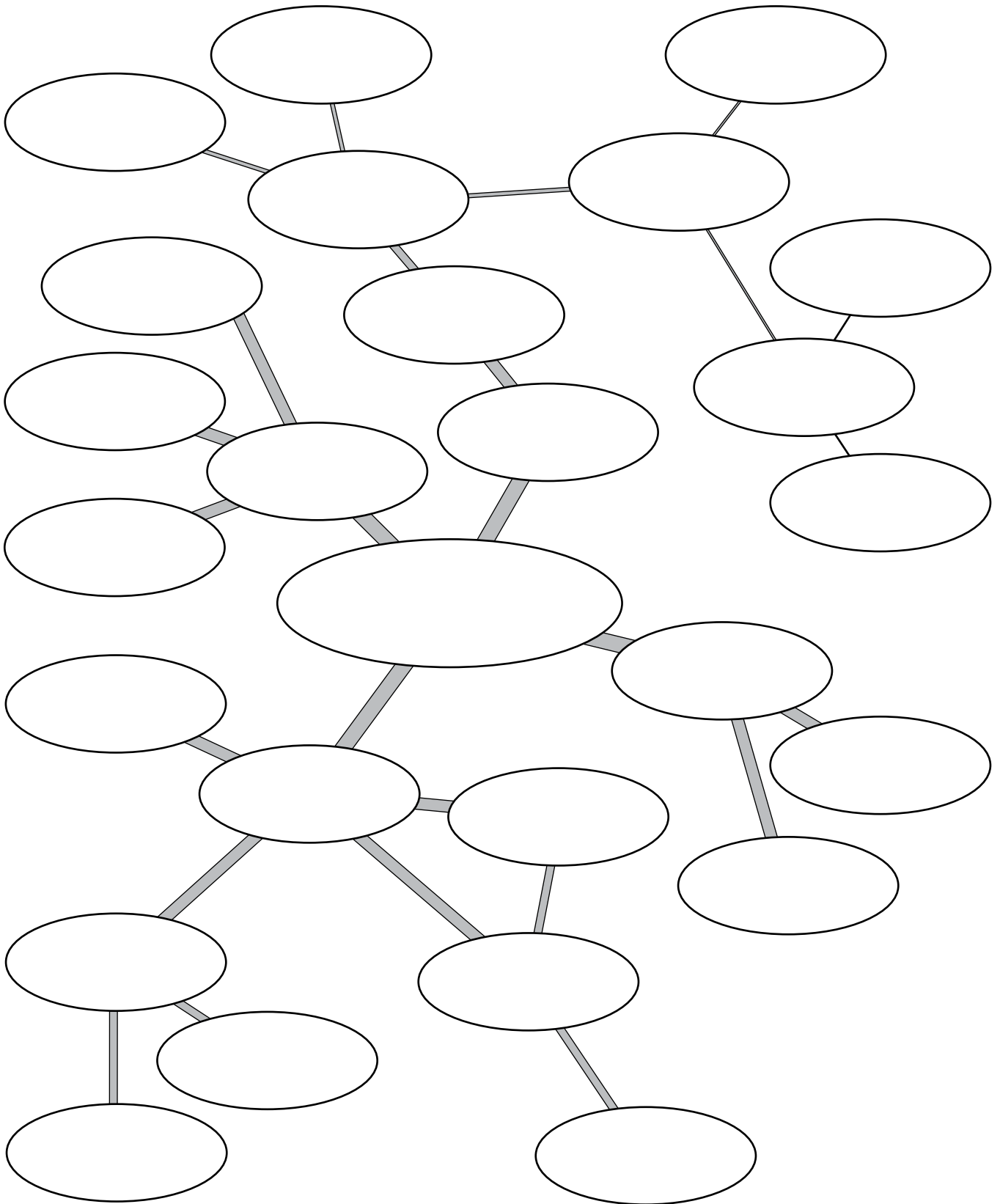


Appendix E1

Bubble Map Template



Bubble Map Template





Neighborhood Navigators' Pledge

This is to certify that

I, _____

have successfully completed
the Neighborhood Navigators program.

I have a better understanding of how my travel choices impact the environment.

I will make it a habit to use my knowledge of renewable and non-renewable
resources when making travel plans in the future.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by

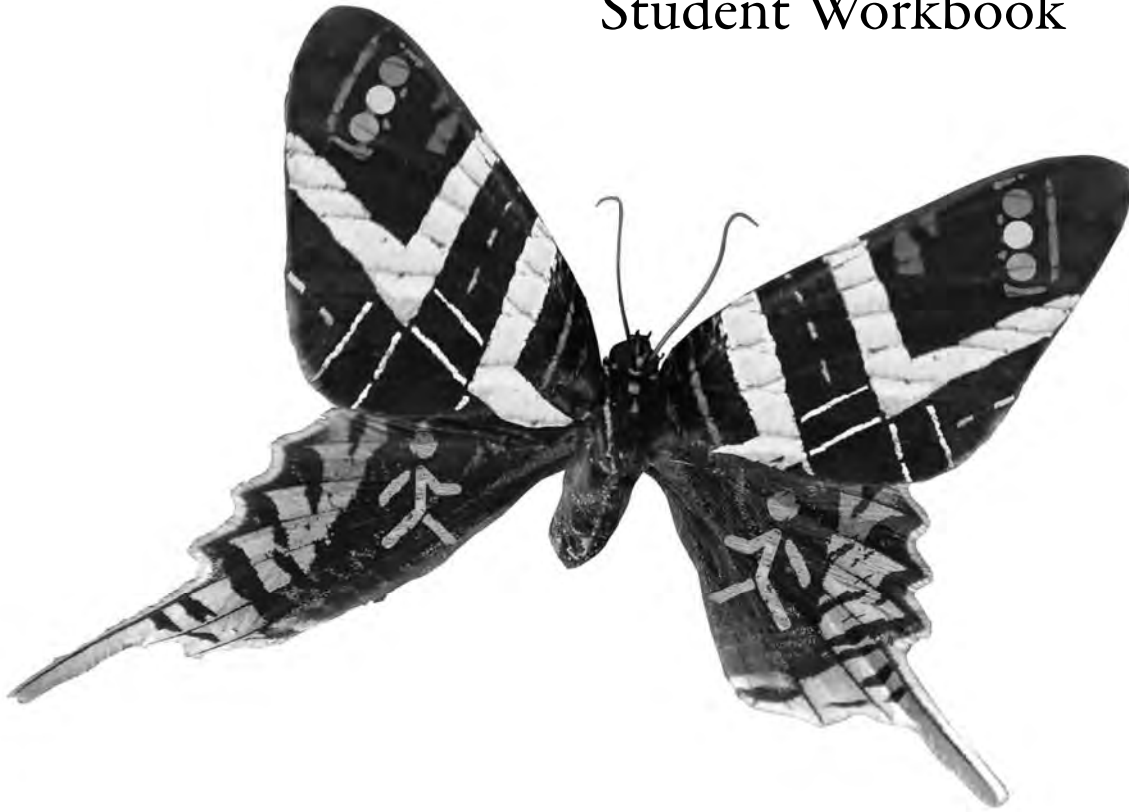


U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Neighborhood Navigators

Grades 6-8

Student Workbook



Name: _____

Date: _____

Grade: _____

Lesson 1



What is Transportation?

Transportation system:

All modes of transportation effectively working together

Transportation Grid

Transportation Mode	What type of energy does it use?	How does it affect the environment (air, water, land)? (maybe a rating scale and students have to rate it?)	How can you stay safe while using this mode?
Airplane	Gas	Gas pollutes the air.	Keep seatbelt on when seated. Follow directions from flight attendants.
Skateboarding	Food energy	Skateboarding doesn't pollute our air/water. Skateboarding does cause some wear and tear on the streets.	You should wear a helmet and elbow/knee pads.

Lesson 2

Consuming Resources



Define

Renewable: _____

Non-Renewable: _____

A Day in the Life of a Drop of Water

(Source: Expanded from “Birth of a Raindrop”, from Keepers of the Earth, by Michael Caduto and Joseph Bruchac)

You are a small drop of water sitting on top of a fresh blade of green grass. It is mid-summer and the sun is shining. You are wondering, “Will I ever become unstuck from this blade of grass?”

A playful summer breeze blows through the meadow, causing your blade of grass to wave back and forth. The sun feels very strong and you feel yourself becoming more and more full of energy. You feel so hot and alive that your insides are rushing around violently. Suddenly the energy is so great that you are lifted right up into the sky! Your body feels a whole new sensation... you are light, dry and flying! Your insides are still moving around furiously. The wind helps to carry you up and over the treetops.

As you rise higher and higher you feel light as a feather. Down below, the meadow that you came from looks like a dot on the Earth. The wind carries you into a dark gray cloud. You hear a loud cry and almost bump into a large, black bird with a white head. Here in the cloud there are millions and millions of other water vapor molecules rushing around and bumping into each other. “Hey, watch it!” you yell, as one of them bumps into you. “Ouch! It’s too crowded here!”

You are relieved when you begin to feel that familiar moisture feeling again. As you become wetter, you feel heavier, and you move much more slowly. Soon you become so heavy that you start to fall back to Earth. All around you other raindrops are falling. Lower and lower you sink. In every direction you look, there are raindrops. The whole world seems to be wet.

You look down again and the wet blur is becoming clearer. A long, black highway stretches below you, running beside a large expanse of evergreen forest. You hope to land on the forest! As the end of your fall draws near, you close your eyes, bracing yourself for the impact... SPLAT! OUCH!

Was it the highway asphalt? But your movement doesn't stop. You just move much more slowly. As you open your eyes, you are trickling down the crack of a huge boulder on the edge of the forest. A few other raindrops have stuck onto you and you're all flowing together. More and more drops collide and join your blob, running down the rock. Your speed picks up, and then finally.... tttthump! You all have landed on the soft earth. The impact was more gentle this time but it has broken the blob apart.

Once again you are alone and suddenly it is very dark... oops... one droplet friend has attached to you as you find yourself slowly creeping into a strangely-shaped crevice between two fuzzy particles of soil. You feel yourself being pulled down, down, into crevice after crevice.... like little tunnels in the soil. Slowly twisting, turning, percolating, the musty smell of the soft, damp, cool earth comforts you. The softness is disappearing, though, as you go further down and the soil particles are getting harder and bigger with larger crevices that you flow through not quite so slowly now.

More of your droplet friends join you. You all notice that you now seem to be pulled sideways instead of down. A strange force is somewhere off to your right and you're getting sucked toward it, but you all still have to find your way through the twisting cave-like spaces between the grains of sand and gravel... the force becomes so strong that you get pulled... fffftt! Splash! Into a huge hole filled with thousands... millions... of your water drop friends... You're all swishing and splashing about... but you can still feel the strange force sucking you... it is much stronger now, and upwards. It is still very, very dark... suddenly you hear a strange echoing sound... all your droplet friends splashing against metal... there is a faint smell of rust now. The force is still pulling you up, when suddenly...

OUCH! Your head hits a hard metal wall and you get pulled sideways again, this time to your left. Faster and faster you travel... OUCH! Your left side hits another metal wall and the force pulls you straight up again. Now you are traveling as fast as you were the last time you saw the light of day... rolling down that boulder on the edge of the forest. But it is still dark and so it is pretty scary to be going so fast and not see where you are going...

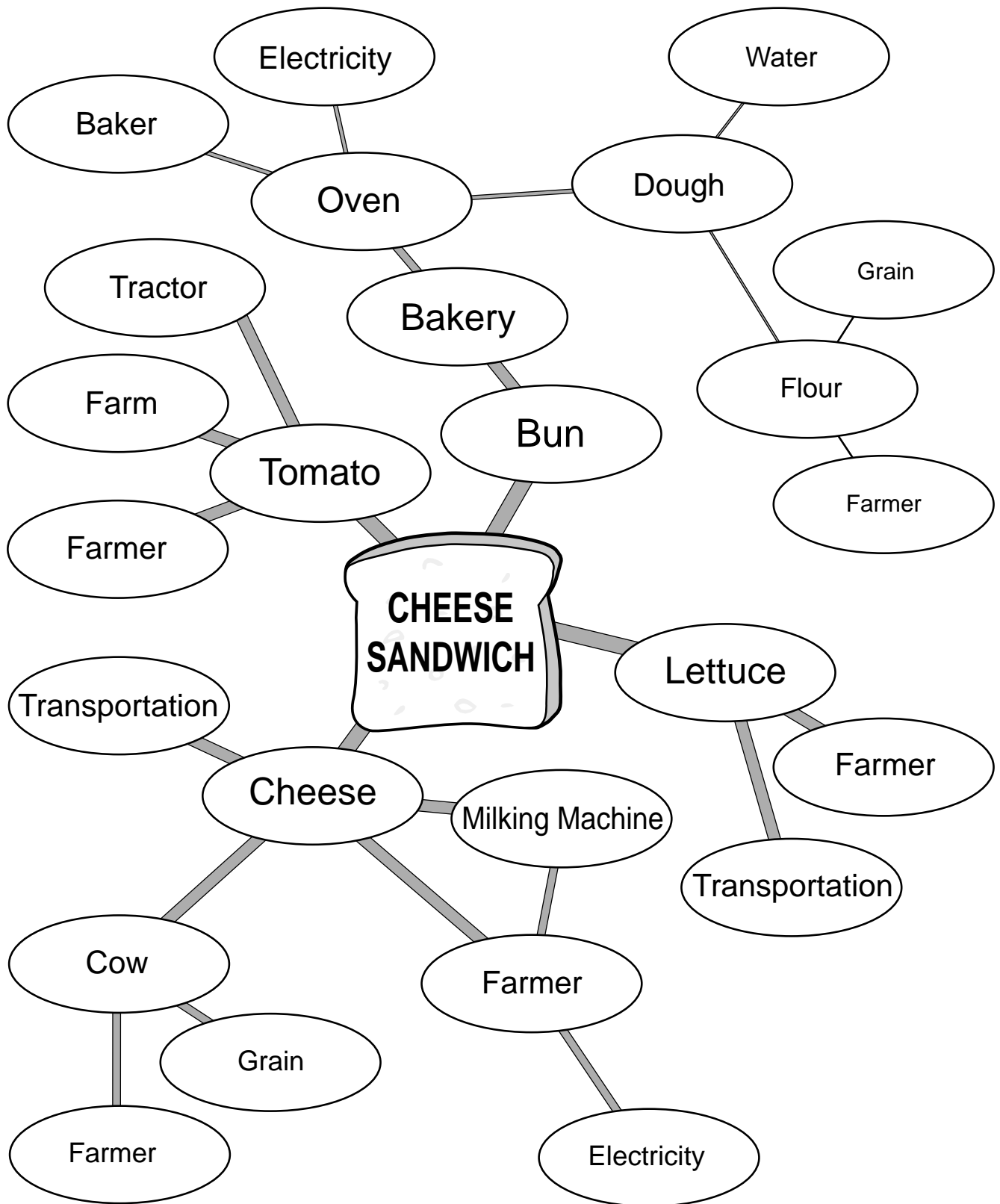
Suddenly with a violent jerk you get flipped over and you plunge head first into a blinding light... SPLASH! When the turbulence settles, you turn yourself upright and you see that you're surrounded by your droplet friends, splashing, swishing about in a very clear pool. When you look around, you see these strange flesh-like smudges all around you. The sucking force is gone but you feel yourself and your friends being turned upside down, like you're in a swimming pool that a huge giant is flipping over... and whoosh... it goes completely dark once again. In your last glimpse of light, you were able to see that you were heading straight towards an extremely strange, reddish-pink oval creature with bizarre wart-like bumps all over it. After seeing such a sight, you're glad it's dark again. You're also glad to feel that wherever you are, the pace has slowed way down. Are you in the soil again? Gosh, it seems much warmer than the soil. It's sort of a cozy feeling after all the splashing and cold metal walls and weird sucking forces and strange sights... maybe it's time for a rest.



Lesson 2 *continued*

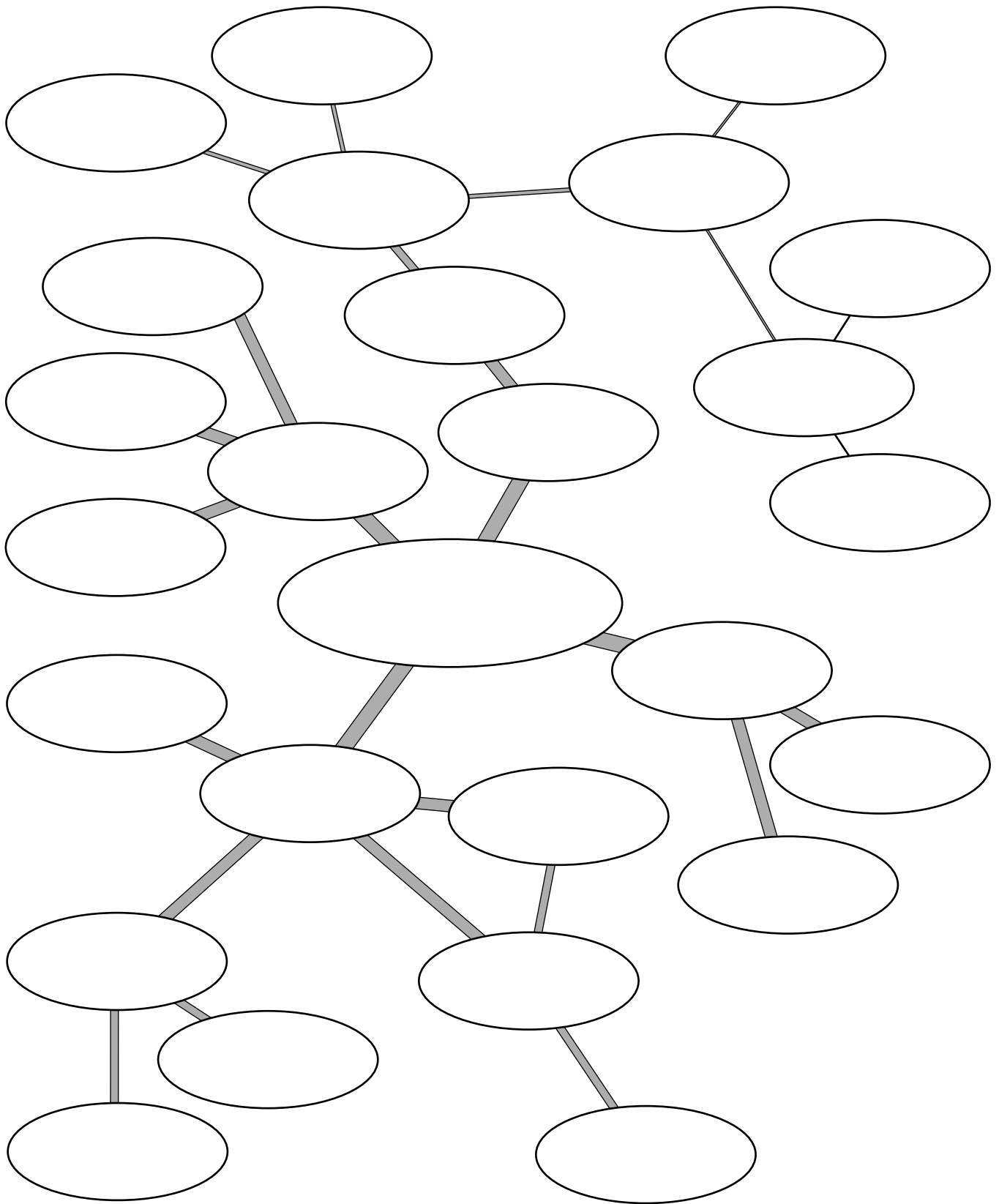


Bubble Map Example (cheese sandwich)



Lesson 2 *continued*

Bubble Map Template



Lesson 3

Community Design



Vocabulary

engineer - a designer or builder

walkability - capable of or suitable for being walked

bikeability - capable of or suitable of being biked

On your walk outside, observe the traffic around your school in order to determine the areas that are safe and unsafe.

What questions could we ask?

Is the student drop-off and pick-up area at school safe? _____

Are there stop signs and slow signs around the school? _____

Are there safe places for students to cross the street? _____

Is the school supporting Walkability? Bikeability? _____

Is it accessible for people with disabilities? _____

This space can be used to draw a map of your walk.



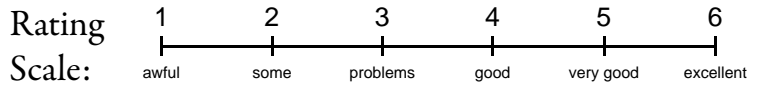
Lesson 3 *continued*



Walkability Checklist

Take a walk and use this checklist to rate your neighborhood's walkability.

Location of walk _____



1. Did you have room to walk?

- Yes Some problems:
- Sidewalks or paths started and stopped
 - Sidewalks were broken or cracked
 - Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
 - No sidewalks, paths, or shoulders
 - Too much traffic
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6 _____

2. Was it easy to cross streets?

- Yes Some problems:
- Road was too wide
 - Traffic signals made us wait too long or did not give us enough time to cross
 - Needed striped crosswalks or traffic signals
 - Parked cars blocked our view of traffic
 - Trees or plants blocked our view of traffic
 - Needed curb ramps or ramps needed repair
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6 _____

3. Did drivers behave well?

- Yes Some problems: Drivers...
- Backed out of driveways without looking
 - Did not yield to people crossing the street
 - Turned into people crossing the street__
 - Drove too fast
 - Sped up to make it through traffic lights or drove through traffic lights?
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6 _____

4. Was it easy to follow safety rules?

- Could you and your child...
- Yes No Cross at crosswalks or where you could see and be seen by drivers?
- Yes No Stop and look left, right and then left again before crossing streets?
- Yes No Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
- Yes No Cross with the light?
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6 _____

5. Was your walk pleasant?

- Yes Some unpleasant things:
- Needed more grass, flowers, or trees
 - Scary dogs
 - Scary people
 - Not well lighted
 - Dirty, lots of litter or trash
 - Dirty air due to automobile exhaust
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
1 2 3 4 5 6 _____

How does your neighborhood stack up?

Add up your ratings and decide.

- | | | |
|--------------------|-------|---|
| 1. _____ | 26-30 | Celebrate! You have a great neighborhood for walking. |
| 2. _____ | | |
| 3. _____ | 21-25 | Celebrate a little. Your neighborhood is pretty good. |
| 4. _____ | | |
| 5. _____ | 16-20 | Okay, but it needs work. |
| Total _____ | 11-15 | It needs lots of work. You deserve better than that. |
| | 5-10 | It's a disaster for walking! |

Lesson 3 *continued*



A Habitat for Healthy Habits

As a member of the student engineering team that has been studying ways to improve the walkability and bikeability of our school neighborhood, you have been invited to join a community group to share what you've learned. This new group is planning a new, safe neighborhood with the following goals:

- Includes homes, schools and parks
- Encourages walking, biking and other physical activities
- Decreases use of cars and gasoline
- Includes at least three traffic safety features for pedestrians and cyclists”

Create a map of the “perfect neighborhood” that includes all of the above components. Your finished product will demonstrate that you understand the value of physical activity, reducing the impact of motor vehicle traffic on the environment and on traffic flow patterns, and the use of various treatments that influence safe travel methods for pedestrians and bicyclists.

You will be scored using the following performance checklist:

Task	Yes or No
Is there a school, library and or park included in the map?	
Are there roads?	
Are there at least three safety laws recorded?	
Is there is a name of the neighborhood listed?	
Are there people safely crossing the street and walking around the neighborhood?	



Lesson 4:



Habits and Environmental Impact

List 10 habits that you do throughout the day. Habits do not have to be negative. They are positive too, like eating a healthy breakfast every morning.

	Name of Habit	Healthy					Unhealthy				
		1	2	3	4	5	1	2	3	4	5
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											

Lesson 4 *continued*



Habits and Environmental Advocacy Activity

You are to select at least one habit that was identified today. Based on the habit, you are to develop and perform a commercial for a friend, family member, or someone in the community, demonstrating the impact the identified habit has on the environment. You may also want to include impacts the habit may have on your personal health.

You will be scored using the following performance checklist:

Task	Yes or No?
If the habit has a negative impact on the environment or on health, did you state two things people can do to change their behavior?	
If the habit has a positive impact on the environment or on health, did you state two things to continue to encourage the behavior?	
Did you list three reasons why what you are advocating for is a good choice for personal health?	
List three reasons why changing behavior is good for the environment.	
Was the commercial appropriate for a chosen target audience?	



Draft story board for commercial:

A large, empty rectangular box with a thin black border, intended for students to draft a storyboard for a commercial. The box occupies most of the page below the title.

Lesson 5



Writing Invitation

Work in a small group and talk about how the different modes of transportation impact your school's environment and affect the livability for students. Your group is to write a persuasive letter or speech convincing the audience to adopt and implement suggested changes to improve the walkability and bikeability of your school.

Include the following:

- the purpose of the letter or speech;
- three suggested changes and the reasons behind them;
- three ways these changes will have a positive impact on personal health, school safety, natural resources and the environment.

Choose your role, audience and format from the chart below by circling one item in each column and add your ideas under Topic and Strong Verb.

Role	Audience	Format	Topic	Strong Verb
Student engineer	Student leadership	Letter	Make changes to improve walk and/or bike-ability at school	Convince
Student leadership rep	Principal	Speech		
School newspaper reporter/ editor	School board	Editorial		
	City council			

Brainstorm ideas for your writing by completing the chart below:

Suggested changes and the reasons for each	Positive effects on personal health, school safety, natural resources and the environment



Congratulations!

*Your hard work makes your
community safer and healthier.*

*Your neighbors thank you and
the environment thanks you!*



Neighborhood Navigators' Pledge

This is to certify that

I, _____

have successfully completed
the Neighborhood Navigators program.

I have a better understanding of how my travel choices impact the environment.

I will make it a habit to use my knowledge of renewable and non-renewable

resources when making travel plans in the future.





SAFE ROUTES TO SCHOOL



OREGON SAFE ROUTES TO SCHOOL PROGRAM



TRANSPORTATION SAFETY DIVISION – ODOT



BICYCLE TRANSPORTATION ALLIANCE

funding provided by



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