

LESSON 1: Bicycle Ridership and Safety



OVERVIEW

Educational Goal: To develop an understanding of the importance of traffic laws and how they pertain to riding a bicycle.

Preparation

- Set up technology to view and listen to video from the Internet.
- (OPTIONAL) Invite a police officer or person familiar with Minnesota bicycle laws to present to the students. Make sure the guest speaker is made aware of any special needs of the students. The speaker should make sure what they teach and how they teach is beneficial for every child in class.

Topics covered

- Basic bicycle etiquette
- Traffic laws and signs

Options

Consider beginning the bicycle safety unit as part of “Transportation Safety Week” at the beginning of the school year or prior to “International Walk/Bike to School Day,” which is the first Wednesday of October.

Learning Objectives and Minnesota Physical Education Standards (SEE PAGE VI FOR “STANDARDS”)

At the end of this lesson, students will be able to:

- 1 Describe the importance of doing bicycle safety checks as described in the video. (Standard 2)
- 2 Describe how equipment and gear relate to bicycle safety as described in the video. (Standard 2)
- 3 Identify a common traffic law and potential consequences when not followed. (Standard 2)
- 4 Describe how basic traffic laws relate to bicycling. (Standard 2)
- 5 Identify the five key rules for bicycling related to traffic laws. (Standard 2)

LESSON 1

Timeline

	10 MINUTES Introducing Bike Fun!	28
	10 MINUTES How Much Do You Know?	30
	10 MINUTES “Bike Safe, Bike Smart”	31
	15 MINUTES Ask the Expert (OPTIONAL)	32

Materials and Equipment

- One pre-test per student
(RESOURCE GUIDE PAGES 163–66)
- Pencil for each student
- Whiteboard and markers (OPTIONAL)
- Computer, speakers, and projector with Internet connection, or Smartboard
- “Bike Safe, Bike Smart” video:
www.bikemn.org/education/walk-bike-fun/supplemental-resources
- Parent letter and agreement form for each student
(RESOURCE GUIDE PAGE 162)
- Pocket Guide to Minnesota Bicycle Laws and Minnesota Statutes

BIKE FUN! LESSON 1: Bicycle Ridership and Safety



INTRODUCING BIKE FUN!

Focus Point: Children who are taught bicycle ridership and safety skills at an early age are more likely to grow up and become safe bicyclists who enjoy the benefits of bicycling. They can learn these skills in a controlled and supervised setting before they venture out into traffic. Mastering these skills leads to healthy practices that will help them to be safer and predictable pedestrians, bicyclists, and future motorists.

Materials and Equipment

- Parent letter and agreement form for each student (RESOURCE GUIDE PAGE 162)

Tips to Differentiated Learning

- Have a bike and helmet present for students to associate the concept of learning about bike riding. The concrete example of the bike and helmet will do more for the students than hearing about it only.
- The Parent Letter may need to be “delivered” to the parent/guardian via the teacher and not the student.

Discussion

- 1 Introduce the *Bike Fun!* unit to the students. The following are ways to introduce the unit. Allow for a variety of answers to the following questions:
 - *How many of you have tried to ride a bike?*
 - *Anyone ride their bike to school today?*
- 2 Ask students why they ride their bikes. Allow time for them to provide answers. Stress to students that there are so many great reasons to ride your bike. It offers fun, freedom, and exercise, and it's good for the environment.
- 3 Explain to students:
 - *The Bike Fun! unit is a hands-on curriculum with in-class lessons and on-the-bicycle training that we complete outside, as weather permits. We will have a team of bicycle experts and enthusiasts assist with this training—police officers; representatives from the Bicycle Alliance of Minnesota, a bicycle advocacy and education organization; and others—to help us learn about bicycling. Stress to students that helmets are required and they should bring their own from home.*
- 4 Hand out parent letter with agreement form that a parent or guardian must sign. Explain to the students that they must hand in their agreement form before riding a bike.

BACKGROUND

In general, children up to the age of nine or ten should probably ride on the sidewalk on all but the quietest roads, unless they are accompanied by an adult. It is important they are trained to treat every driveway and intersection with extreme caution even while on the sidewalk. There is no magic age at which children become capable of riding safely in traffic; parents need to make that judgment call based on the child's ability to negotiate traffic situations and exercise good judgment as they ride.

5 Explain to students:

- *We will learn bicycle safety, proper bicycle fit, and parts of a bike. There are many different types of bikes for many different types of people and that is important to remember.*
- *We will learn some basic laws and skills that teach us to prepare for a safe ride. We drive our bicycles. The same rules apply to anyone who drives a car or drives a bike. Safety rules include: we stop at stop signs, ride on the right side of the road, and use hand signals. Can you think of any other safety rules?*
- *Another safety rule is: we do not ride our bikes on sidewalks. Why do you think that is?*
 - > *Riding our bicycles on the sidewalk is dangerous and is only recommended for children younger than age nine.*
- *In the last six lessons, we use our bicycles and learn how to drive them. We learn basic riding skills, such as how we ride in a straight line, make quick stops and quick turns, and how we ride in traffic. Again, we learn how to drive a bike!*
- *If the students in our class perform well, we plan to take rides through the community.*



HOW MUCH DO YOU KNOW?

Focus Point: Children may have some ideas and practice with riding a bike. It is beneficial to the program to find out how much they know about being a bicyclist. A pre-test gives a guide to what needs to be taught and practiced. At the end of the unit, the children will take the same test to assess knowledge about riding a bike and confidence levels about being a driver of a bike. This activity may be given to a classroom teacher for students to complete. This is not to be graded, but used as an evaluation tool for teaching and learning.

Materials and Equipment

- Pre-test for each student (RESOURCE GUIDE PAGE 163–66)
- Pencil for each student

Tips to Differentiated Learning

- Provide opportunity for students who need assistance to complete the pre-test orally or with a paraprofessional.
- Offer students to draw, storytell or use pictograms to complete the pre-test to the best of their ability.

Activity

- 1 Introduce the pre-test. Ask students:
 - *Do you know what a pre-test is?*
 - *What is a post-test?*
- 2 Tell students:
 - *You have enough time to complete the pre-test to the best of your ability, which will be corrected but not graded. At the end of the unit, you will then take the same test and compare your results to that of the pre-test. This pre-test and post-test process allows us to evaluate the effectiveness of the unit. In other words, we test you on your knowledge and test ourselves on how well we are teaching you.*
- 3 Administer the pre-test. Give students approximately eight minutes to complete the pre-test. Students may not finish within the allotted time. Advise students to skip questions they do not know at all and go back to those questions if they have time. This is good test-taking practice.
- 4 Correct the pre-test and keep on file. This should not be graded, but compare results at the end of the unit with the post-test.



"BIKE SAFE, BIKE SMART"

Focus Point: This entertaining yet instructional nine-minute bicycle safety video uses a visually stimulating, peer-to-peer approach to teach elementary- and middle-school-age audiences how to "Bike Safe. Bike Smart." Viewers will learn about the rules of the road, signaling, riding at night, safe riding practices, risky behaviors that they should avoid, and tips for purchasing and correctly fitting a bicycle helmet.

Materials and Equipment

- Computer, speakers, and projector with Internet connection, or Smartboard
- "Bike Safe, Bike Smart" video (nine minutes):
www.bikemn.org/education/walk-bike-fun/supplemental-resources

Tips to Differentiated Learning

- Provide students with visual or hearing impairments the proper equipment to view the video.

Video and Discussion

- 1 Introduce the "Bike Safe, Bike Smart" video. Turn on "Closed Captions" if available. Ask students while they are watching the video to remember two ideas they didn't already know about safe bicycling.
- 2 Discuss the video for a few minutes afterward. Ask students to volunteer to share two ideas they learned from the video.
- 3 Stress the importance of obeying the laws when riding. Ask students:
 - *Why is it important to follow the laws of the road when bicycling?*
 - > *Riding by the laws makes you safe and predictable so you do not get into crashes with cars.*

BIKE FUN! LESSON 1: Bicycle Ridership and Safety



ASK THE EXPERT

(OPTIONAL)

Focus Point: Bicycle ridership and safety presented by a police officer offers an in-depth discussion about the traffic laws that bicyclists must follow so students can understand the consequences of a violation and abide by traffic laws.

Materials and Equipment

- Computer and projector with Internet connection, or Smartboard
- “A Pocket Guide to Minnesota Bicycle Laws” and/or “Drive Your Bike” bookmark, available to order for free from MnDOT:
www.dot.state.mn.us/sharetheroad/bike/materials.html
- Minnesota Statutes:
www.bikemn.org/education/minnesota-bicycle-laws

Discussion

- 1 Ask the students:
 - *What is a law?*
 - > *A rule or regulation set up by a government that everyone must follow.*
 - *Why do we have laws?*
 - > *Answers may vary.*
- 2 Introduce the guest speaker.
- 3 At the end of the presentation, thank the guest for coming.
- 4 Send the guest a thank-you card from the class.

VOCABULARY

Law: a rule or regulation set up by a government that everyone must follow.

Enforcement: the actions taken by police officers or other people who are instructed to make sure we do not break rules or laws. For example, a referee enforces the rules in a basketball game and calls a foul on those who break the rules.

Severity of punishment: the degree of punishment we may receive when we break a rule or law. In a basketball game, the team fouled often gets extra foul shots when an opponent breaks a rule.

Liability: to be responsible for an action. We are responsible (liable) for the way we behave. If we break a school rule, we may go to the principal's office for a punishment.

Predictable: to act so other people know what we are going to do. “I am so predictable; I always want pizza for dinner.” As bicyclists, we must travel in a predictable manner so other motorists and cyclists know what we will do. Predictability prevents crashes.

Guidance for Guest Speaker

We live with many different types of laws. Some laws are in place that make it a crime for people to steal and the law includes consequences or punishment for breaking the law. Some laws are made to help keep people safe and healthy.

Laws are rules that we are supposed to follow. The rules are generally set up so people remain safe and healthy. A good way of thinking about whether something should be against the law is if everyone did it, would it still work? If everyone ran a red light, would traffic work? Would everyone be safe?

EXAMPLE: *One example of a law is the requirement that people must have a driver's license before they are allowed to drive a car.*

This law ensures that people understand traffic laws and that it is important to drive safely so they do not get into a crash.

EXAMPLE: *Another example is a law that prohibits people from driving when they have consumed too much alcohol and their ability to drive safely is impaired. Alcohol decreases people's reaction speeds and ability to make decisions. This increases the chance for a crash and makes it very dangerous to drive.*

Of course, there are certain consequences for breaking laws. What do you know about what happens when someone breaks the law? Allow students to answer.

Because it is very dangerous to drive while under the influence of alcohol, drunk drivers who are caught are usually arrested, go to court, pay a fine (hundreds of dollars paid to the state), often go to prison, and may lose their driver's license. If they crash and hurt or kill a person, they may go to prison for many years.

Why do different laws have different punishments? This is called severity of punishment. That means, "the degree of punishment we may receive when we break a rule or law." If a law has a lesser punishment than another, are they both important?

Being responsible for your actions is called liability. You are responsible (liable) for the way you behave. If you break a rule, you may go to the principal's office, get detention, etc. Liability is important because if you injure someone or their property and break the law, you are liable for the damage.

LAWS AND CONSEQUENCES

LAW: Must stop at a red light

REASON: Allows for drivers to take turns and travel safely through an intersection

IF VIOLATED: A fine of up to \$300. If we cause a crash, we might have to pay for the other person's property. If we kill another person, motorist, bicyclist or pedestrian, you may have to go to prison even if we didn't mean it.

LAW: No driving after drinking alcohol

REASON: To prevent crashes due to drivers who are drunk and operate a vehicle

IF VIOLATED: Possibility of paying a fine of up to \$1,000 and up to ninety days in jail, losing driver's license and going to prison

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ASK THE EXPERT

[OPTIONAL-CONT.]

EXAMPLE: *We don't stop at a stop sign. We get into a crash. We are liable.*

This means that we may have to replace the property of the individual involved in the crash or pay the bills to the doctor for any of the person's injuries. Sometimes, we may need to pay a fine or go to jail.

So, laws are put in place to create order, to keep us safe, and protect our stuff. In traffic, laws are essential so others can predict what we are going to do. Bicycles must ride like all other vehicles to remain predictable and safe!

BACKGROUND

MN STATUTES: 169.222 OPERATION OF BICYCLE

Subdivision 1. Traffic laws apply.

Every person operating a bicycle shall have all of the rights and duties applicable to the driver of any other vehicle by this chapter, except in respect to those provisions in this chapter relating expressly to bicycles and in respect to those provisions of this chapter which by their nature cannot reasonably be applied to bicycles.

Subdivision 4. Riding rules.

(a) Every person operating a bicycle upon a roadway shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:

- (1) when overtaking and passing another vehicle proceeding in the same direction;
- (2) when preparing for a left turn at an intersection or into a private road or driveway;
- (3) when reasonably necessary to avoid conditions, including fixed or moving objects, vehicles, pedestrians, animals, surface hazards, or narrow width lanes, that make it unsafe to continue along the right-hand curb or edge.

(b) If a bicycle is traveling on a shoulder of a roadway, the bicycle shall travel in the same direction as adjacent vehicular traffic.

(c) Persons riding bicycles upon a roadway or shoulder shall not ride more than two abreast and shall not impede the normal and reasonable movement of traffic and, on a laned roadway, shall ride within a single lane.

(d) A person operating a bicycle upon a sidewalk, or across a roadway or shoulder on a crosswalk, shall yield the right-of-way to any pedestrian and shall give an audible signal when necessary before overtaking and passing any pedestrian. No person shall ride a bicycle upon a sidewalk within a business district unless permitted by local authorities. Local authorities may prohibit the operation of bicycles on any sidewalk or crosswalk under their jurisdiction.

(e) An individual operating a bicycle or other vehicle on a bikeway shall leave a safe distance when overtaking a bicycle or individual proceeding in the same direction on the bikeway, and shall maintain clearance until safely past the overtaken bicycle or individual.

(f) A person lawfully operating a bicycle on a sidewalk, or across a roadway or shoulder on a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances.