

Grades

2-3

Lessons 1-5

Go By Bike 1

Signs Signals and Safety 2

Bicycling Basics 3

Bike Control 4

Cooperative Riding 5

Let's Go Biking!



Go By Bike



Time: 35-40 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through learners' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Instructors should use their discretion to break up material to accommodate their daily schedules. The Skill Building Activity is an essential component to this curriculum, and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this introductory lesson is to teach children the basic concepts of what a bicycle is, how it is used, and the health benefits of bicycling. It also covers the importance of wearing a bike helmet. Bicycling is a skill that can help children maintain a healthy lifestyle into adulthood, but children should always ask permission before riding their bikes outside their home area. It is important to emphasize that children should never bike near traffic but they are learning the skills to one day become independent riders. To stay safe while bicycling, children should always wear a properly fitted helmet.

The children will be able to:

- Identify safe places to ride bikes.
- Name reasons why people like to ride bikes.
- Understand the health benefits of cycling and how it benefits their bodies and minds.
- Explain why a well-fitted helmet is important and how to wear it properly.

Why This Lesson is Important

Bicycling is an important skill for children to learn because it will give them the ability to choose healthy, active transportation options into adulthood. Being a smart bicyclist is an important step in the evolution of independence and autonomy, especially through developed decision-making skills. Getting kids into the habit of cycling early on encourages physical fitness, awareness of their surroundings and an understanding of their environment that they won't get in a car. This lesson covers why people choose to bicycle as a part of a healthy lifestyle, where bikes belong, places people bike and the importance of wearing a bicycle helmet.

Essential Standards

<p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p> <p>2.NPA.1.3: Classify activities in terms of their appropriateness for a healthy lifestyle.</p> <p>2.NPA.3.1: Contrast a physically active and inactive lifestyle.</p> <p>PE.2.HF.3.2: Identify enjoyable and challenging activities that one can do for increasing periods of time without stopping.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>2.G.1.1: Interpret maps of the school and community that contain symbols, legends and cardinal directions.</p>	<p>3.PCH.1.2: Classify behaviors in terms of whether they do or do not contribute to healthy living.</p> <p>3.NPA.1.3: Plan activities for fitness and recreation during out of school hours.</p> <p>3.G.1.1: Find absolute and relative locations of places within the local community and region.</p>
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Common Core

<p>CCSS.ELA-Literacy.SL.2.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>CCSS.ELA-Literacy.L.2.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe.</p>	<p>CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.</p> <p>CCSS.ELA-Literacy.L.3.6: Acquire and use accurately grade-appropriate conversational, general academic, and domain specific words and phrases, including those that signal spatial and temporal relationships.</p>
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Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self determination to build independence.</p>
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Materials

- 2 or more honeydew melons. This type of melon offers a good helmet fit and their smooth surfaces are easy to draw faces on. A melon that is not ripe enough for seeds to rattle inside when you shake it works best.
- Markers or paint for the melon activity
- Helmets – one for the presenter, one for the melon (*use a rounded toddler helmet for the melon and pad the inside with extra soft padding. The helmet won't ever fit a melon perfectly and this padding just helps ensure a better, more snug fit).
- Step Ladder
- Tarp
- Clean up supplies
- One helmet for each child plus one for the instructor (It is preferable to use the helmets that children will be wearing during the on-bike skills training in Lessons 4 and 5.)
- Physical Activity and the Body
- Fitting Your Bike Helmet Guide
- Parent/Caregiver Tip Sheet
- Child Assessment and Answer Key – Select a Helmet that Fits
- Child Assessment and Answer Key – Who Needs a Helmet?

Preparation

Review the *Let's Go Biking! Getting Started* video which can be found in the For Instructors portion of the *Let's Go NC!* Interface. It is recommended that you also view the *Let's Go Biking!* lesson videos, "**Getting Ready to Ride**" and "**Bicycling Basics**," to see a demonstration of how the skills taught in this set of lessons are performed by older children in realistic settings.

Prepare the melons with facial expressions. Melons that are to be dropped without helmets should look alarmed; melons dropped wearing helmets should look happy.

It may be helpful to have knowledgeable volunteers on hand during class time to assist with helmet fitting at the end of the lesson. Coordinate with assistants in advance.

Part 1 – Discussion and Demonstration

► Time: 20-25 minutes

1. Places to Ride Bicycles
2. Where Bikes Belong
3. Why People Ride Bicycles
4. Healthy for Life
5. Wear a Helmet

Introduction

The instructor will...

- Discuss places to which we can ride bikes.
- Discuss where bikes belong.
- Discuss why people ride bicycles.
- Discuss the health benefits of riding a bike.
- Show the importance of wearing a bike helmet.



Today, we are going to begin a new unit of study. For the next several days, we are going to talk about riding a bike safely to stay healthy and help our world.

Raise your hand if you have a bicycle or know someone who has a bike.

Great! It looks like everyone in this class has seen a bike before.

1. Places to Ride Bicycles

If a distance is short, walking is very quick and easy. Bikes are good for traveling distances that are too far to walk in a small amount of time. Once a distance is too great, buses and cars may be better options. Since kids can't drive cars, walking and cycling are good skills to practice for when you get older.

Raise your hand if you have ever biked somewhere.

Great, it looks like many of you have ridden a bike. At your age it is important to only ride a bike with adult supervision.

Let's talk about places that we can bikes. Raise your hand and tell me one place that people like to ride bikes.

- Grocery store
- Neighborhood park
- Soccer/baseball game
- Library
- Friend's house
- School!

Great! These are all good examples of places we can bike to if they are not far from our homes.

2. Where Bikes Belong

Now that we've talked about what a bike is, why people bike and places that we can bike to, we're going to talk about where bikes belong. You will often notice that children ride their bikes on the sidewalk while adults ride their bikes in the road.

Sidewalks are for people who walk places. Kids who are still learning to ride their bikes may ride on a sidewalk until they are older. When they are older and have control of their bicycle and understand the rules of the road, they can begin to ride in the roadway.

There are other places that may be OK for kids to learn how to ride. One place that you might go to is a "greenway" or a path that cars are not allowed on. Riding on a greenway is a great way to experience nature.

[If applicable, discuss some of the greenways in your community.]



Because you are still learning to ride a bike, you should ride on a sidewalk or a safe area such as a path. You should always ride with an adult. It is always important to watch for people who are walking and pass them safely, whether they are on the sidewalk or a greenway.

3. Why People Ride Bicycles

Cycling is a great way to get places that are too far to walk, but that are close enough to get to quickly by bike. Let's discuss why people ride bikes. Can you name a reason why people ride bicycles? I'll write your reasons on the board/chart.

- It's good for you (exercise).
- It's good for the environment (no air pollution).
- It's good for your neighborhood (less traffic).
- It's not expensive.
- It's a great activity to do outdoors.
- When you're older, you can get around on your bike on your own.
- And last, but not least, it's fun!

Cycling is good for many reasons, and it's a great way to include physical activity in your daily life. There are special bicycles that allow people with disabilities to get places and enjoy the outdoors, too.

[See the Instructor's Guide for a more detailed discussion of the different types of bicycles available for children of varying abilities]

Cycling is good for the environment because it does not cause pollution. Cars and trucks cause huge amounts of pollution. When you ride a bike instead of going in a car, you do not pollute the air. Smog, a chemical haze, can form in the air from automobile exhaust making it hard to see and to breathe.

4. Healthy for Life

Maintaining your health is one of the best reasons to ride a bike. If you ride to places that you need to go, you can get exercise every day. Let's talk about some reasons that cycling is a good choice for a healthy activity.

- Families can bike together.
- It helps you have fun.
- It's great exercise.

Kids are much healthier and happier when they have activity in their day. Bicycling is a great way to be active and have fun! Physical activity can improve your health and help prevent health problems. Let's talk about reasons why bicycling is a great way to stay healthy:

Physical Fitness benefits:

- **Body Composition:** Regular physical activity, like cycling, can help people maintain their current weight or lose extra weight. It can help retain muscle.
- **Cardiovascular Endurance:** Cycling works your heart and lungs so that they can learn to work longer and longer without getting tired.
- **Muscular Strength:** Cycling helps you build muscles, especially in your legs, rear end, back, and upper arms.

Other Physical benefits:

- **Mental Health:** Exercise, especially outdoors, can help you stay happy and energetic all day long. Bicycling can help keep you in a good mood.

- **Prevention against disease:** You can keep your body healthy by giving it plenty of exercise. Exercise like cycling can help you avoid diseases like diabetes and heart disease.
- **Balance and coordination:** Riding a bike helps you learn to balance, and the more you practice, the more coordinated you will become.

Parts of the Body benefits:

- **Brain:** Physical activity makes your brain work better and can help you do better in school.
- **Heart:** Your heart's a muscle. Aerobic exercise that works the large muscles in your arms and legs helps your heart by making it work more efficiently during exercise and rest – so it can beat for a long time.
- **Lungs:** Exercise makes you breathe deeper and makes your lungs stronger.
- **Joints:** Cycling is a low-impact activity, so it helps build joint strength and does not cause the cartilage in your joints to break down, which hurts.

[Instructor provides “Physical Activity and the Body” page found in the Materials section.]

5. Wear a Helmet Correctly

The Child Assessments at the end of this lesson focus on “Who Should Wear a Helmet?” and “How to Wear a Helmet.” Go over the following materials:

There is a long list of reasons why it is important to wear a helmet! In North Carolina, children under the age of 16 must wear a helmet when they ride a bike. Can you list some reasons why it is important to wear a helmet?

Let's talk about when you should wear a helmet.

Have children brainstorm a list of when they should wear a helmet. Examples include, when riding a scooter, skiing, riding a bicycle, and when wearing roller blades or roller skates. Use the **Fitting Your Bike Helmet Guide** in the materials section to go over the steps on how to properly fit a bike helmet.

Part 2 - Activity

► **Time:** 15 minutes

Keep Your Melon Safe!

The objective of this demonstration is to observe the effects of a melon dropped at high velocity with and without a helmet. Draw parallels between the melon and the human head and have kids imagine the drop being equivalent to a bicycle crash at moderate speed. Melons should be prepared in advance of the class activity.

Give the Facts

Explain the importance of wearing a helmet.

Wearing a properly fitted helmet can protect your brain from injury and possibly save your life. It's the single most effective way to reduce head injuries and fatalities resulting from bicycle crashes.

Introduce the Melons

Introduce children to both the alarmed and happy melons: *the alarmed melon is about to take a fall without a helmet; the happy melon will also fall, but his head will be protected by a helmet.*

Talk to the class about what will happen to each melon on impact. Make sure the helmet is properly fitted on the helmet with the chin straps tightly secured.

Climb the Ladder

The presenter should put on his or her helmet before climbing up the ladder. As the presenter heads up the ladder explain the importance of helmets. Hold the melon six feet above the ground. Have the class countdown for the melon drop.

Drop the Melons

Drop the melon in the helmet first. Make sure the helmet is facing down so the helmet hits the ground first. As the presenter comes down from the ladder and examines the melon, discuss the outcome. Explain how the head is protected because the helmet absorbed the force of the fall. If the melon gets injured, note that even with a helmet, the head can get injured but the amount of damage is less than if a helmet is not worn.

Next, drop the melon without the helmet, making sure the drop is over the tarp. Ask the class to *watch what happens as the drop is made without any helmet*. As the presenter comes down from the ladder, discuss the outcome. A head is fragile and it may crack causing temporary damage or permanent brain damage as the result of impact. Explain that if a bicyclist falls and hits his or her head, wearing a helmet significantly reduces the chance of serious brain injury or death. Explain that the best neurosurgeons can't put this head back together.

If you have time, loosen the straps on the helmeted melon and drop it again. Show the class that the helmet must be properly adjusted and fit snugly or it won't protect their heads. Show the class the loosely fitted helmet before you drop it. Chances are it may roll out of the helmet altogether when it falls.

Summary Discussion

1. Kids must wear a helmet when they ride a bike. It's the law!
2. Helmets can protect your head from injury and brain damage.
3. A helmet should always fit snugly and be secured properly.
 - It should fit level on the head (one to two finger widths above the eyebrows).
 - The straps should form a "V" under the ears.
 - The straps must be buckled and tight enough so no more than two fingers can fit between the chin and the strap.
4. When adjusted, the helmet should not move more than about an inch in any direction.
5. A helmet that has been in a crash has done its job. It's time to get a new one.

Helmet Fitting

At the end of the melon drop, work with children to properly fit helmets using the **Fitting Your Bike Helmet Guide** at the end of this lesson. It may be helpful to have assistants.

Review (optional)

- **Time:** 5 minutes

The instructor will review...

- **Why people ride bikes,**
- **Places to ride and where 2nd and 3rd graders should ride to be safe,**
- **How cycling can benefit children and what parts of the body become stronger through physical activity, and**
- **Correct answers to the Child Assessments. Review how wearing a helmet the wrong way could cause them to get hurt, the correct way to wear a helmet, and when a child should wear a helmet.**



Suggestions for a Balanced Curriculum

Grades
2-3
Lesson 1

Go By Bike

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period, or may be assigned as homework opportunities.

Healthful Living

To be physically fit, children should be active for 60 minutes each day. It helps keep your heart strong. Riding a bike to school or walking to school is a great way to have an active lifestyle. Help children answer the following questions through this activity:

- What is an inactive lifestyle?
- What things can you do to have an active lifestyle?

Hand out the **Heart Rate Worksheet** (found in the Materials Section) and discuss how physical activity affects the heart.

- Show children the two places to measure their heart rate by checking their pulse (carotid artery in the neck and blood vessels at the wrist)
- While the children are sitting, have them feel their pulse and count the number of beats in a minute. They should write down or remember the number in the correct box.
- Have children walk quickly for a few minutes. Have them check their heart rate again and write down the number in the correct box.
- Discuss with children why their heart rate changed after physical activity and how it benefits their hearts and bodies. Remind children that exercise that increases their heart rate helps to keep it healthy, and their heart should be worked for 60 minutes each day. Have them complete the worksheet for all of the activities.
- Note: You may have to adapt the physical activities on the worksheet to include children of differing abilities.

Social Studies

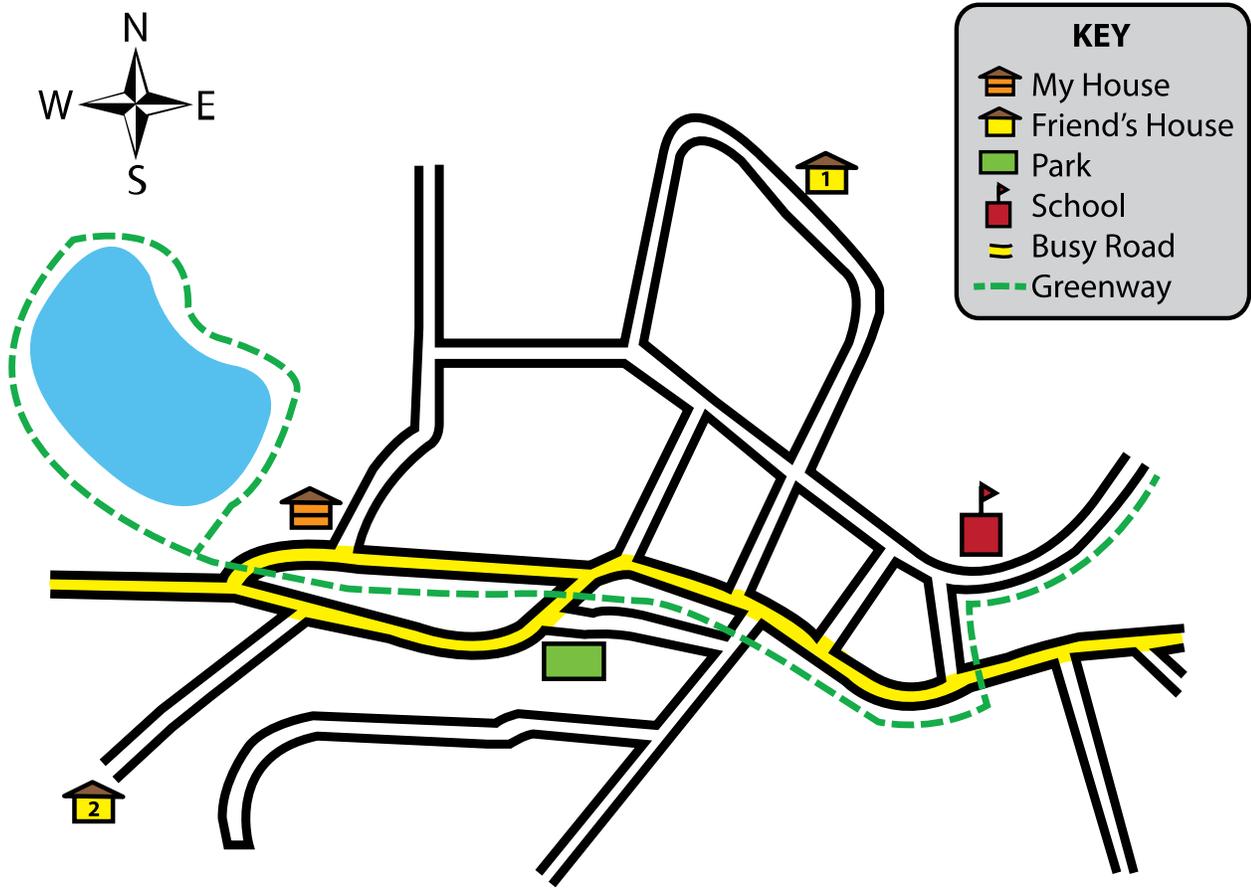
Where would I bike? Have children use maps to identify places and landmarks they would bike with their family and friends.

Print out several simple maps of your community and divide into groups. First, have children brainstorm 10 places where they would like to go, and make a list. Create a key that uses a different symbol for each common destination (libraries, stores, greenways, parks). Explain that understanding symbols on the map requires the use of a key. Have children complete the map of destinations using the symbols in the key. Mark the busy roads with a highlighter. Have children identify safe routes that they would take between destinations and explain why they chose the route.

For more mapping skills, an instructor can also add map scale and direction to this activity and explain each concept. Additionally, the instructor can have children give directions to destinations from the school in terms of relative location using cardinal directions and intermediate directions.

For ideas on how to create your own map, use the “Safe Routes” in My Town map.

Safe Routes in My Town





Name _____

Physical Activity & the Body

Label the Body Parts

How does bicycling affect these parts of the body?

Brain

Muscles

Heart

Lungs

Joints



How does bicycling keep you fit?

List scenarios where bicycling keeps your body healthy.

Body Composition

Flexibility

Muscle Strength

Muscle Endurance

Cardiovascular Endurance



Name _____

Heart Rate Worksheet

In Class: Measure your actual heart rate for sitting and walking quickly by checking your pulse and recording the number of beats per minute. Fill in the predictions.

Out of Class: Perform each activity listed for at least two minutes. Check your pulse and record the answer. If you participate in other activities, record them in the extra space provided. Wait several minutes between activities so your heart rate can return to “normal” before you start another activity. Check your heart rate after sleeping first thing in the morning.

Activity	Heart Rate (Prediction)	Heart Rate (Actual)
Sitting		
Walking Quickly		
Walking Slowly		
Reading		
Watching TV		
Sprinting		
Jogging		
Sleeping		

Were your predictions correct? Which one was the highest? Why?

Fitting Your Bike Helmet

Buy it. Fit it. Wear it.
EVERY RIDE!

The Proper Helmet Fit

Helmets come in various sizes, just like hats. Size can vary between manufacturers. Follow the steps to fit a helmet properly. It may take time to ensure a proper helmet fit, but your life is worth it. It's usually easier to look in the mirror or have someone else adjust the straps. For the most comprehensive list of helmet sizes according to manufacturers, go the Bicycle Helmet Safety Institute (BHSI) Web site at: www.bhsi.org/.

STEP 1

Size:

Measure your head to find your size. Try on several helmets in your size until one feels right. Now put the helmet level on your head and adjust the sizing pads or fit ring until the helmet is snug.

STEP 2



Position:

The helmet should sit level on your head and low on your forehead—one or two finger-widths above your eyebrow.

STEP 5



Chin Strap:

Buckle your chin strap. Tighten the strap until it is snug, so that no more than one or two fingers fit under the strap.

STEP 3



Side Straps:

Adjust the slider on both straps to form a "V" shape under, and slightly in front of, the ears. Lock the slider if possible.

STEP 6



Final Fitting:

A. Does your helmet fit right? Open your mouth wide...big yawn! The helmet should pull down on your head. If not, refer back to step 5 and tighten the chin strap.

STEP 4



Buckles:

Center the left buckle under the chin. On most helmets, the straps can be pulled from the back of the helmet to lengthen or shorten the chin straps. This task is easier if you take the helmet off to make these adjustments.

- B.** Does your helmet rock back more than two fingers above the eyebrows? If so, unbuckle and shorten the front strap by moving the slider forward. Buckle and retighten the chin strap, and test again.
- C.** Does your helmet rock forward into your eyes? If so, unbuckle and tighten the back strap by moving the slider back toward the ear. Buckle and retighten the chin strap, and test again.
- D.** Roll the rubber band down to the buckle. All four straps must go through the rubber band and be close to the buckle to prevent the buckle from slipping.

Replace a Helmet.

Replace your helmet when it has been in a crash; damage is not always visible.

Buy/Fit the Helmet For Now.

Buy a helmet that fits your head now, not a helmet to “grow into.”

Ensure Helmet Comfort.

If you buy a helmet that you find comfortable and attractive, you are more likely to wear it. Readjust as necessary to ensure the helmet fits properly each ride.

Cover Your Forehead.

Adjust the helmet fitting based on your helmet first being in the correct position, level on the head and low on your forehead.

Adjust Straps Until Snug.

Both the side and chin straps need to be snug.

Avoid Helmet Rocking.

Your helmet should not rock forward or backward, or side to side on your head.

If your helmet rocks more than an inch, go back to step 6, and readjust.

Be a “Roll” Model for Safe Behavior

Everyone — adult and child — should wear a bicycle helmet each time they ride. Wearing a helmet each ride can encourage the same smart behavior in others.

Helmet Certification

Bicycle helmets sold in the U.S. must meet the standards issued by the U.S. Consumer Product Safety Commission (CPSC). Look for the certification label inside the helmet.



Helmet Laws

More children ages 5-14 go to emergency rooms for bicycle-related injuries than with any other sport; many are head injuries. As a result, many States and local jurisdictions have child bicycle helmet laws to increase and better ensure the safety of children when bicycling. See: www.helmets.org/mandator.htm.

Like car crashes, bicycle crashes can happen at any time, involving not only children, but adults, many of whom are skilled riders. In fact, middle-age adults represent the average age of bicycle riders killed and injured.

Helmets are the single most effective piece of safety equipment for riders of all ages, if you crash. Everyone should choose to wear a helmet; it just makes sense!

For more information on
bicycle safety, visit the National
Highway Traffic Safety
Administration Web site at:
www.nhtsa.dot.gov/bicycles

**ROLL
MODEL**





Parent/Caregiver Tip Sheet

Go By Bike

Today in school your child learned that bicycling is a healthy way to keep physically active and the many situations in which they can enjoy cycling as transportation and exercise.

Ask your child about what he/she learned about the following areas of the body and how bicycling can affect his/her health (correct answers are noted in parentheses):

- **Brain:** Physical activity makes your brain work better and can help you do better in school.
- **Muscles:** Cycling helps you build muscles, especially in your legs, rear end, back, and upper arms.
- **Heart:** Your heart's a muscle! Aerobic exercise that works the large muscles in your arms and legs helps your heart by making it work more efficiently during exercise and rest – so it can beat for a long time.
- **Lungs:** Exercise makes you breathe deeper and makes your lungs stronger.
- **Joints:** Cycling is a low-impact activity, so it helps build joint strength and does not cause the cartilage in your joints to break down, which hurts.
- **Weight Control:** Regular physical activity can help maintain a healthy weight.
- **Mental Health:** Exercise, especially outdoors, can help you release stress so you can stay happy and energetic all day long.
- **Balance and coordination:** Riding a bike helps you learn to balance, and the more you practice, the more coordinated you will become.
- **Stamina:** Cycling works your heart and lungs, so that they can learn to work longer and longer without getting tired.
- **Prevention against disease:** You can keep your body healthy by giving it plenty of exercise. Cycling can help you avoid diseases like diabetes and heart disease.



Did you know?

Parents can play a vital role in encouraging children's healthy, active lifestyles. Parents who incorporate physical activities in their own lives are more likely to pass on good habits to their children.

Children in second and third grade:

- Enjoy testing muscle strength and skills.
- Typically have developed a good sense of balance.
- Learn best through active, concrete experiences.
- Are old enough to grasp more complex information about laws, traffic signs, safety concepts, and personal responsibility for safety.

PRACTICE AT HOME!

Go By Bike

In preparation for Lesson 4, when your child will be riding a bike, the children learned how to ensure that their helmets fit correctly. Work with your child at home to ensure he or she is wearing a properly fitted and adjusted helmet.

How to Properly Fit Your Child's Helmet

Helmets are not hats! They must be level on your head and strapped on securely to be protective in a crash. You want the helmet to be level on the head, with the fitting pads inside touching all the way around, and the strap comfortably snug.



First, adjust the fit pads or ring

Most helmets come with extra foam fitting pads to customize the fit. You can usually remove the top pad or use a thin one there to lower the helmet on the head, bringing its protection down further on the sides. Use thicker pads on the side if your head is narrow and there is a space, or add thicker pads in the back for rounder heads. Move pads around to touch your head evenly all the way around. If you have a “one size fits all” model with a fitting ring instead, just adjust the fit by tightening the ring if needed.

Then Adjust the Side Straps

Put the helmet on, level on your head. Adjust the rear (nape) straps, then the front straps, to locate the Y fitting where the straps come together just under your ear. You may have to slide the straps across the top of the helmet to get them even on both sides.

Finally, Adjust the Chin Strap

Adjust the chin strap so it is comfortably snug. Now adjust the rear stabilizer if the helmet has one.

Are you done?

Shake your head around. Then put your palm under the front edge and push up and back. Can you move the helmet more than an inch or so from level, exposing your bare forehead? Then you need to tighten the strap in front of your ear. Now reach back and pull up on the back edge. Can you move the helmet more than an inch? If so, tighten the nape strap. When you are done, your helmet should be level, feel solid on your head and be comfortable. It should not bump on your glasses (if it does, tighten the nape strap). If it still does not fit that way, keep working with the straps and pads, or try another helmet.

Adapted from the Bicycle Helmet Safety Institute website: www.bhsi.org



Let's Go Biking!



Name _____

Child Assessment

Select the Helmet That Fits

For the helmets that do not fit right, explain why.



1. _____



2. _____



3. _____



4. _____

Let's Go Biking!

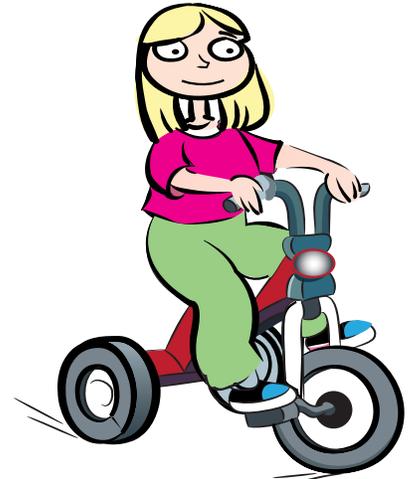


Name _____

Child Assessment

Who Needs a Helmet?

Draw a helmet on each person who needs one.



Instructor's Question and Answer Key

Select the Helmet That Fits

For the helmets that do not fit right, explain why.



1. Wrong Way!
Helmet is too far forward.



2. Wrong Way!
Helmet does not cover forehead.



3. Wrong Way!
Helmet straps are too loose.

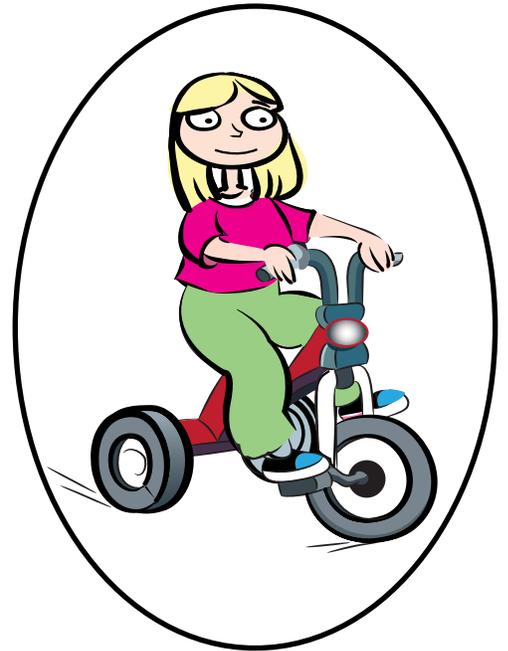


4. Right way!
Helmet is level, covers forehead, and straps are tight.

Instructor's Question and Answer Key

Who Needs a Helmet?

Draw a helmet on each person who needs one.





Signs Signals and Safety



Time: 30-40 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through learners' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Instructors should use their discretion to break up material to accommodate their daily schedules. The Skill-Building Activity is an essential component of this curriculum and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this lesson is to teach children how to be safe when biking by being more visible, riding bikes that operate properly, knowing traffic signs and signals and understanding rules of the road.

The children will be able to:

- Know how to make themselves and their bikes more visible for safety,
- Check their bikes to see that everything is working properly,
- Identify traffic signs and signals and what they mean
- Understand the rules of the road and why cyclists must obey them.

Why This Lesson is Important

This lesson is important for helping children learn how to increase their safety whenever they ride their bikes, even though we recommend that, at this age, they ride only on sidewalks, trails, greenways or around their homes. It's important for children to begin to understand traffic signs and signals and rules of the road in preparation for eventually biking on the road themselves.

Applicable Standards of Learning



Essential Standards

<p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>2.TT.1.1: Use a variety of technology tools to gather data and information.</p>	<p>3.TT.1.1: Use a variety of technology tools to gather data and information.</p>
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Common Core

<p>CCSS.ELA-Literacy.SL.2.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>CCSS.ELA-Literacy.L.2.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.</p> <p>CCSS.ELA-Literacy.L.2.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe.</p>	<p>CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.</p> <p>CCSS.ELA-Literacy.L.2.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.</p> <p>CCSS.ELA-Literacy.L.3.6: Acquire and use accurately grade-appropriate conversational, general academic, and domain specific words and phrases, including those that signal spatial and temporal relationships.</p>
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Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self determination to build independence.</p>
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Signs, Signals, and Safety

Grades

2-3

Lesson 2

Signs, Signals
and Safety

Materials

- Traffic Signs and Signals (Stop Sign, Yield Sign, Railroad Crossing, Pedestrian Signal)
- Bike for performing ABC Quick Check
- Parts of the Bicycle Diagram
- Know the Signs and Signals! Bingo Squares, Cards, and Key
- Large beans, plastic chips, or other markers for Road Safety Bingo game
- Parent/Caregiver Tip Sheet
- Child Assessment and Answer Key - How Does My Bike Work?

Preparation

Obtain a bicycle for the ABC Quick Check demonstration and to use when going over the Parts of the Bicycle Diagram. Prepare the materials needed for the Road Safety Bingo Game.

Part 1 – Discussion and Demonstration

► **Time:** 15-20 minutes

1. **Be Visible**
2. **Perform an ABC Quick Check**
3. **Understand Traffic Signs & Signals**
4. **Follow the Rules**

Introduction

The instructor will...

- **Explain the term “visible” and discuss what kids should wear when riding a bike to be more visible to motorists.**
- **Demonstrate how to perform a bike check to make sure the bike is safe to ride.**
- **Review traffic signs and signals**
- **Go over basic rules to follow when bicycling.**

1. Be Visible

*The word “**visible**” means “able to be seen.” When it rain or is dark outsides, it is hard for drivers in cars to see people walking or bicycling. If you wear bright clothing, you will be easier for other people to see.*

Read the children the following short passage and have them answer questions about the importance of being visible:

Jeremy was playing at his friend Michael’s house. The boys were having so much fun shooting hoops that they didn’t realize it was starting to get dark. When Michael’s mother called him in for dinner, Jeremy threw his dark green jacket on over his T-shirt and jeans. As Jeremy was riding his bike home, he noticed that cars had their headlights on.



- What time of day is it when Jeremy rides his bike home?
- What is Jeremy wearing that day?
- Are the drivers of cars likely to see Jeremy? Why? Why not?
- What could Jeremy wear so that he is more likely to be seen?
- What else could Jeremy do to be more visible to drivers?

2. Perform an ABC Quick Check

Review the parts of the bike using the **Parts of the Bicycle Diagram** at the end of the lesson and the sample bike you have in class. (Then, go over the ABC Quick Check.) The Child Assessment at the end of this lesson focuses on terminology provided in the diagram and ABC Quick Check. It's helpful to have a bicycle in class to explain.

You should always perform the ABC Quick Check before riding your bike:

A is for Air: Check the air pressure. What is air **pressure**? Air pressure will help you determine if your bike tires are filled with the right amount of air. If a bicycle tire doesn't have enough air pressure, it is flat. You shouldn't ride a bike with a flat tire! The correct pressure is stated on the side wall of the tire. (If possible, bring a child's bike into class to show how to find the recommended air pressure.) Also, spin the wheels and make sure the tires are not worn out.'

B is for Brakes: Check to make sure coaster brakes will stop the bike by spinning the back wheel and then pedaling backwards. If the bike has hand brakes, check to see that the levers don't hit the handlebars and that the pads are clean, straight and contact the rims properly. Brake pads that contact the tire can cause a blow-out. Brake pads that go under the rim and contact the spokes can cause a crash.

C is for Cranks and Chain: Grab the pedal at the end of the crank arms and try to wiggle side to side. There should be no movement. Spin the pedals and cranks backwards to see if the chain runs smoothly over the cogs. The chain should look like metal, not rust or black gunk.

3. Understand Traffic Signs & Signals

Let's talk about traffic. Let's brainstorm what is meant by traffic.

[Instructor has kids name different kinds of traffic (e.g. cars, trucks, buses, motorcycles, trains, semi-trucks etc.) and writes them down on a flipchart.]

All of these things are traffic because they are moving vehicles. All of these examples of traffic have wheels.

How do drivers know where to drive? How do drivers avoid crashing into other vehicles?

[Instructor steers children into discussion about traffic rules and laws, which will lead into the next sections about signs and signals. Kids may want to tell stories about seeing or being in a crash so be prepared to keep the discussion focused on how to prevent crashes.]

Understand Traffic Signs

[Instructor shows Stop Sign.]

Can anyone tell me what this sign is and what it tells you to do? Great! This is a stop sign and a stop sign means to STOP. When you are at a stop sign, you must look in all directions for pedestrians and other vehicles. You must make sure it is safe before you go.

[Instructor shows Yield Sign.]

Tell me if you know what this sign means. The yield sign tells you to slow down and look for pedestrians and other vehicles. You must stop and let the pedestrians and other vehicles go first. When you do not see pedestrians or other vehicles, it is safe for you to go.

[Instructor shows Railroad Crossing Sign.]

Tell me if you know what this sign means. The railroad crossing sign means that this is a location where trains cross the road. Railroad tracks can often be uneven, so it may be dangerous to ride over them on a kid vehicle such as a scooter, tricycle, or bicycle. Some railroad crossings have a gate that closes. You should never go around a closed railroad gate. Listen very carefully and look before crossing railroad tracks to be sure that no trains are coming.

Understand Traffic Signals**[Instructor shows Traffic Signal.]**

What is a traffic signal? What colors do you see on a traffic signal? A traffic signal tells drivers what to do when they approach by using colored lights. If a driver does not understand what to do when they see a color on the traffic signal, they could crash into another vehicle.

Let's go over what each color means.

- **RED** is a warning color. It means stop.
- **YELLOW** means to look and listen for danger. Prepare to stop because the light will be turning red.
- **GREEN** means go, but look to make sure it is safe.

When you are at a red signal, you wait for the light to change to green before you can go.

[Instructor shows Pedestrian Signal.]

Often, next to a traffic signal you will see another signal. What does this signal mean? Pedestrians and others on the sidewalk obey this signal, so they know when it is safe to cross the street. Young bicyclists may also use this signal. If a person on the sidewalk does not understand or obey this signal, there could be a crash.

What does the **RED** hand mean? Red means to **STOP**. The other symbol is a walking person, and it is **WHITE**. What does this white symbol mean? When the signal changes from the **RED** hand to the **WHITE** symbol, you can go after you look in all directions to be sure it is safe. Always wait for an adult when crossing the street.

4. Follow the Rules

Now that we've talked about traffic, signals, and signs, let's talk about some basic rules that you need to follow when you ride a kid vehicle such as a scooter, tricycle, or bicycle.

What should you always wear when you ride a bike or scooter? That's right. You should always wear a helmet when you ride. Here are some other basic rules to remember:

- **Always ask an adult before you ride.** Have an adult help you put on your helmet and look over your bicycle to make sure its parts are all working.
- **Wear bright colors when riding** so others can see you.
- **Look and Listen for traffic.** Pay attention when you ride.
- **Ride on the sidewalk.** Small kids' vehicles belong on the sidewalk or on a greenway, not in the street with cars. Older kids and adults may ride in the street when they can follow the same rules that other vehicles do.
- **Don't carry things in your hands.** Your hands should be free of objects when you ride. If you have objects to carry, put them in a backpack.
- **Stop at the edge.** Treat all roadways and driveways as edges like you would if you were walking on the sidewalk. You always stop at the edge of a road or a driveway whether you are walking or biking. Check for traffic before you enter the street.

Remember, you should always ask an adult before you ride a bike or scooter. If you follow these rules you are learning how to be a good bike driver.

Part 2 - Activity

► **Time:** 15-20 minutes

Road Safety Bingo

The outcome of this activity is for children to recognize road signs that are important to bike safety and their meanings. Review these traffic signs and their meanings with children before starting the game. At the end of the first game, you can make the winner the caller.

Introduce new signage used in this game:

- Speed Limit – The maximum speed a vehicle is permitted to travel on a roadway.
 - Road Curves – Alerts drivers and bicyclists that there is a right curve ahead.
 - One Way – Identifies a street in which vehicles may only travel one direction.
 - Share the Road – Informs drivers to share the road with bicyclists.
 - Pedestrian Crossing – Alerts drivers of a pedestrian crossing ahead.
 - Bike Lane – Clearly identifies a lane on the road which is for bicycles only.
 - Bike Route – Indicates streets designated as routes for bicyclists.
 - Do Not Enter – Directs vehicles from entering a prohibited area such as a one-way street.
1. Using the materials at the end of this lesson, give each child a **Know the Signs and Signals! Bingo Squares** and a **Know the Signs and Signals! Bingo Card**.
 2. Have children color the signs the correct color. The instructor can use the **Know the Signs and Signals! Bingo Key** to assist them with this task.
 3. Have the children cut out the signs and paste them in random order on the Bingo card, one square in each square on the card.
 4. Cut out a set of **Road Safety Bingo Signs** for the teacher/caller to use during the Bingo game and use the **Road Safety Bingo Key** to keep track of which signs you have called.
 5. To start the game, pull a sign from a container, call it out and show the sign square.
 6. Have children use a Bingo chip to cover the sign if they have it.
 7. Have children call out, “Bingo!” when they have completed a horizontal, vertical or diagonal row.
 8. When a child calls, “Bingo!” have him or her explain the meaning of each sign to become the winner.

Review

► **Time:** 5 minutes

The instructor will review...

- How to be more visible when riding a bicycle,
- What to check on your bike before you ride,
- Traffic signs and signals, including those used in the Road Safety Bingo exercise,
- That a bicycle is a vehicle that must obey the rules of the road and traffic signs and signals
- Correct answers to the Child Assessment - How Does My Bike Work?



Suggestions for a Balanced Curriculum

Grades
2-3

Lesson 2

Signs, Signals
and Safety

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period, or may be assigned as homework opportunities.

English Language Arts / Information and Technology

Give each child a copy of the **Parts of a Bicycle Diagram** and **“How Does My Bike Work?” Child Assessment** at the end of this lesson. Have children work in pairs to read the sentences about how a bike works and decide whether they are true or false. Allow them to use online resources, a dictionary, or a bicycle repair manual to help them understand the parts of the bicycle and what they do. Have them correct the sentences that are false by providing the correct term.

Go through the each of the parts of the bicycle with your class.

Science

The objective of this activity is to demonstrate the limitations of seeing and being seen by drivers at night. Children learn how light can be reflected and how reflection can help drivers see objects at night.

Materials:

- Construction paper triangles in white, yellow, black, and other dark colors
- Glue sticks
- Flashlight
- Reflector from bicycle, reflective tape or stickers (can be found at most hardware stores or bike shops)

Have children cut out triangle shapes. Have them create triangles using white, yellow and a few darker colored papers, pasting one triangle on each black sheet. Instructor darkens the room then flashes the flashlight quickly on all of the triangles in turn. Ask the children which triangle appeared the brightest. Which triangle could they see the longest?

Next try the same experiment with a reflector from a bicycle. (A reflective sticker or a piece of reflective tape on a sheet of black construction paper can also be used.) What differences do the children notice? **Reflection** is an effect that occurs when light hits smooth, shiny surfaces. The light changes direction and a mirror image is reflected.

Who can see the reflected light best? (The child holding the flashlight has the light reflected back at them directly.) Why?

Instructor summarizes:

It is always important to wear bright colored clothing when you ride your bike. Kids in dark colors are hard to see when it's rainy or dark outside.



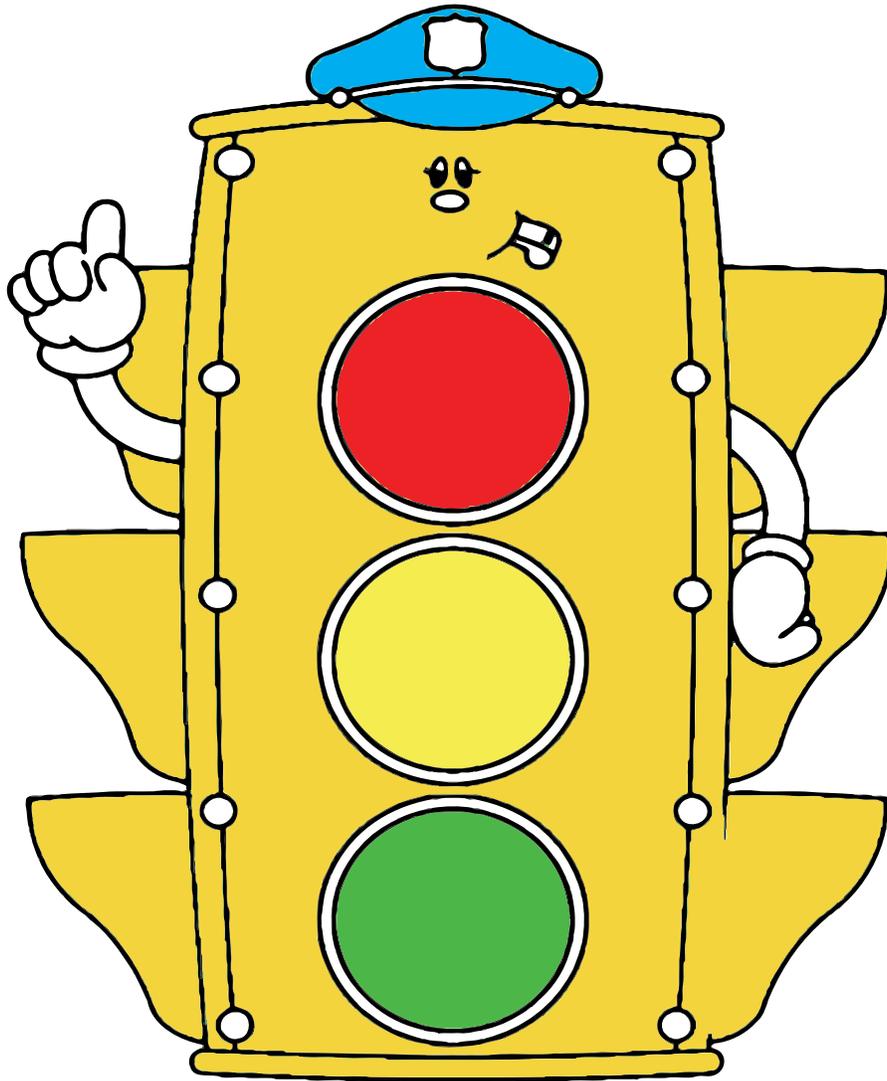
Stop Sign



Yield Sign



Railroad Crossing



Traffic Signal

Signs & Signals



Pedestrian Signal

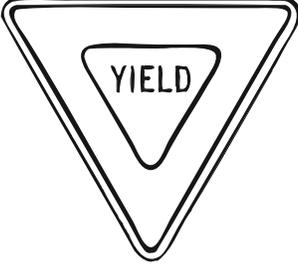
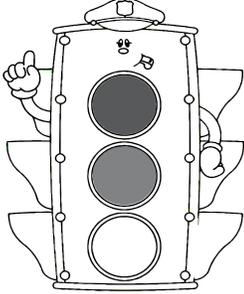
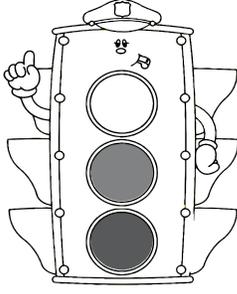
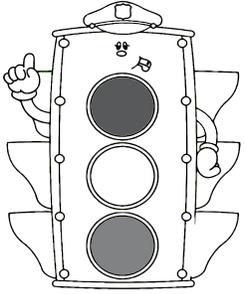
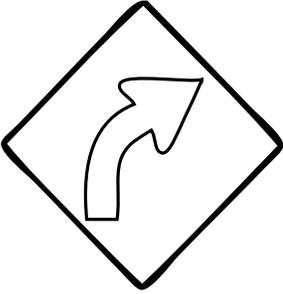
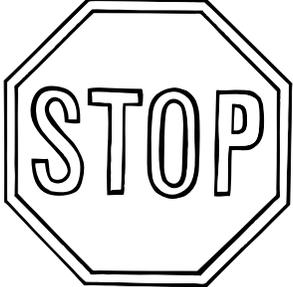
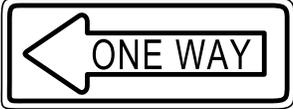
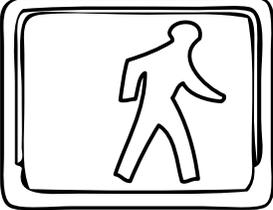
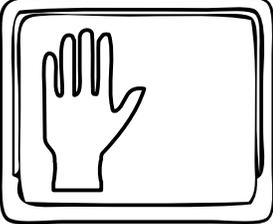
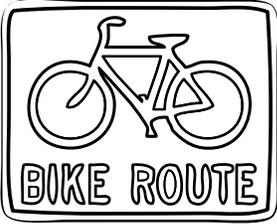


Name _____

Road Safety Bingo

Know The Signs and Signals! Bingo Squares

First, color the signs using the correct color. Then, cut out the signs and signals and adhere to the bingo card.



Name _____

Road Safety Bingo

Know The Signs and Signals! Bingo Card

Glue the colored road safety squares on to the grid below.

Road Safety Bingo Key



Know The Signs and Signals! Bingo Key

Use the chart below to assist the children with appropriate coloring.



Parent/Caregiver Tip Sheet

This week in school your child learned to bicycle safely by following the rules of the road.

First, we discussed the importance of being visible as a bike rider and demonstrated how reflective clothing and materials are safer for bicyclists than dark or other non-reflective clothing. Ask your child about the art project with construction paper and which colors were easiest to see with a flashlight.

We identified the parts of a bike, and how to perform a check on the basic functions of a bike before riding. You can help your children perform these checks on their own bikes:

- **A is for Air:** Check the air pressure, spin the wheels and make sure the tires are not worn out. The correct pressure is stated on the side wall of the tire.
- **B is for Brakes:** Check to make sure coaster brakes will stop the bike by spinning the back wheel and then pedaling backwards. If the bike has hand brakes, check to see that the levers don't hit the handlebars and that the pads are clean, straight and contact the rims properly. Brake pads that contact the tire can cause a blowout. Brake pads that go under the rim and contact the spokes can cause a crash.
- **C is for Cranks and Chain:** Grab the pedal at the end of the crank arms and try to wiggle side to side. There should be no movement. Spin the pedals and cranks backwards to see if the chain runs smoothly over the cogs. The chain should look like metal, not rust or black gunk.

We spent time reviewing road rules. We learned the meanings of some of the most frequently occurring street signs.

Overall safety guidelines that your child learned today:

- **Always ask an adult before you ride.** Have an adult help you put on your helmet and look over your bicycle to make sure its parts are all working.
- **Wear bright colors when riding** so others can see you.
- **Look and listen for traffic.** Pay attention when you ride.
- **Don't ride in the roadway.** Small kids' vehicles belong on the sidewalk or on a greenway, not in the street with cars. Older kids and adults may ride in the street when they can follow the same rules that other vehicles do.
- **Don't carry things in your hands.** Your hands should be free of objects when you ride. If you have objects to carry, put them in a backpack or basket.
- **Stop at the edge.** Treat all roadways and driveways as edges like you would if you were walking on the sidewalk. You always stop at the edge of a road or a driveway whether you are walking or biking. Check for traffic before you enter the street.





Name _____

Child Assessment

How Does My Bike Work?

Read the following sentences about how a bike works. In the left column, write if the statement is True or False. Use the diagram provided and textual clues to help you. If you have trouble, use online resources, a dictionary, or a bicycle repair manual to help you.

- _____ 1. When I push on the **spokes**, the bike stops.
- _____ 2. When I want to make it easier to move the bike up a hill, I use the **shifter** to change speeds.
- _____ 3. The **fork** of the bike holds my front **wheel** in place while I ride.
- _____ 4. When I turn the **handlebar** to the right, the front **wheel** turns to the right.
- _____ 5. When the **chain** goes around, it turns the **fork**.
- _____ 6. The **tire** is made of rubber and makes contact with the ground when I ride.
- _____ 7. To ride my bike, I sit on the **pedal** which is attached to the **frame**.
- _____ 8. The **chain** transfers powers from the **pedals** to the bicycle **wheels**.
- _____ 9. I push on the **pedals** with my feet to propel the bicycle forward.
- _____ 10. The **brake** makes contact with the **tire** to stop the bicycle.
- _____ 11. I adjust the height of the **seat**, by sliding the **seat post** up or down.
- _____ 12. If a **tire** is flat, it should be inflated to the correct **pressure** before riding.

Instructor's Question and Answer Key

How Does My Bike Work?



- FALSE 1. When I push on the **spokes**, the bike stops.
When I push on the **pedals**, the bike stops.
- TRUE 2. When I want to make it easier to move the bike up a hill, I use the **shifter** to change speeds.
- TRUE 3. The **fork** of the bike holds my front **wheel** in place while I ride.
- TRUE 4. When I turn the **handlebar** to the right, the front **wheel** turns to the right.
- FALSE 5. When the **chain** goes around, it turns the **fork**.
When the **chain** goes around, it turns the **wheel**.
- TRUE 6. The **tire** is made of rubber and makes contact with the ground when I ride.
- FALSE 7. To ride my bike, I sit on the **pedal** which is attached to the **frame**.
To ride my bike, I sit on the **saddle, or bike seat** which is attached to the **frame**.
- TRUE 8. The **chain** transfers powers from the **pedals** to the bicycle **wheels**.
- TRUE 9. I push on the **pedals** with my feet to propel the bicycle forward.
- FALSE 10. The **brake** makes contact with the **tire** to stop the bicycle.
The **brake** makes contact with the **rim** to stop the bicycle.
- TRUE 11. I adjust the height of the **seat**, by sliding the **seat post** up or down.
- TRUE 12. If a **tire** is flat, it should be inflated to the correct **pressure** before riding.



Bicycling Basics



Time: 35-40 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through learners' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Instructors should use their discretion to break up material to accommodate their daily schedule. The Skill-Building Activity is an essential component to this curriculum, and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this lesson is to teach children basic actions, reactions, and behaviors that will help them stay safe while cycling.

The children will be able to:

- Know what they need to do before they should ride.
- State what they should do when they come to a driveway to avoid colliding with a vehicle.
- Be able to use the proper hand signals.
- Understand risky behaviors to avoid.

Why This Lesson is Important

At this age, most children will be cycling on sidewalks and trails, so they need to understand how to avoid collisions with vehicles entering or exiting driveways. By wearing a properly fitted helmet and using hand signals, children can reduce the chances of collision with other vehicles and pedestrians. Learning risky behaviors to avoid can also improve their safety while cycling.

Applicable Standards of Learning

Essential Standards

<p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>2.V.1.2: Create original art that expresses ideas about people, neighborhoods, or communities.</p> <p>2.V.3.3: Use the processes of drawing, painting, weaving, printing, stitchery, collage, mixed media, sculpture, and ceramics to create art.</p>	<p>3.V.1.2: Understand that artists use their art to express personal ideas.</p> <p>3.V.3.3: Create art using the processes of drawing, painting, weaving, printing, stitchery, collage, mixed media, sculpture, ceramics, and current technology.</p>
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Common Core

<p>CCSS.ELA-Literacy.SL.2.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>CCSS.ELA-Literacy.L.2.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>CCSS.ELA-Literacy.L.2.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>CCSS.ELA-Literacy.L.2.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe.</p>	<p>CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others ideas and expressing their own clearly.</p> <p>CCSS.ELA-Literacy.L.3: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>CCSS.ELA-Literacy.L.3.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>CCSS.ELA-Literacy.L.3.6: Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships.</p>
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Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self-determination to build independence.</p>
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Bicycling Basics

Grades

2-3

Lesson 3

Materials

- Bicycle Hand Signals
- “I Spy” Worksheet
- Red and green crayons or markers for each child
- Parent/Caregiver Tip Sheet
- Child Assessment and Answer Key – Find the Safety Do’s and Don’ts
- Child Assessment and Answer Key – I Ride Safely!
- Parent Notification Letter and Consent Form (Instructor’s Guide, Appendix B)

Preparation

- Confirm that volunteers are ready to assist you with setting up and conducting on-bicycle course in Lessons 4-5.
- Remind children to bring their Consent Form back to school before Lesson 4 begins.

Part 1 – Discussion and Demonstration

► **Time:** 20-25 minutes

1. Watch for Driveways
2. Use Hand Signals
3. Avoid Risky Behaviors
4. Safe or Unsafe?

Introduction

The instructor will...

- Lead the discussion on how to be safe and cautious where sidewalks cross driveways.
- Review the hand signals with children.
- Discuss risky behaviors and why they are dangerous.
- Help children learn to wear their helmet correctly.

Before you ride your bike, you should always ask an adult for permission. When you ask an adult, be mindful of where they tell you that you can ride. They will tell you the safest place to ride your bike. Until you master the skills to handle your bike, you should always ride on the sidewalk, a pathway, or near your home.

Always stay in the safe place that they tell you to ride.

1. Watch for Driveways

As you are bicycling, you may come to a driveway. Remember that even though we are on the sidewalk and off the street, this is one area where bicycles and cars share space together.

Raise your hand if you have a tip about how to be safe before you cross a driveway on your bicycle?

(Suggested answers below.)

- Stop before you get to the driveway.
- Check cars that may be parked in the driveway. If there is a person inside or the back white lights are on, DON'T MOVE! Stop and wait until you know the car is not moving.
- Look left, right, and left again to make sure cars aren't coming before you cross the driveway.

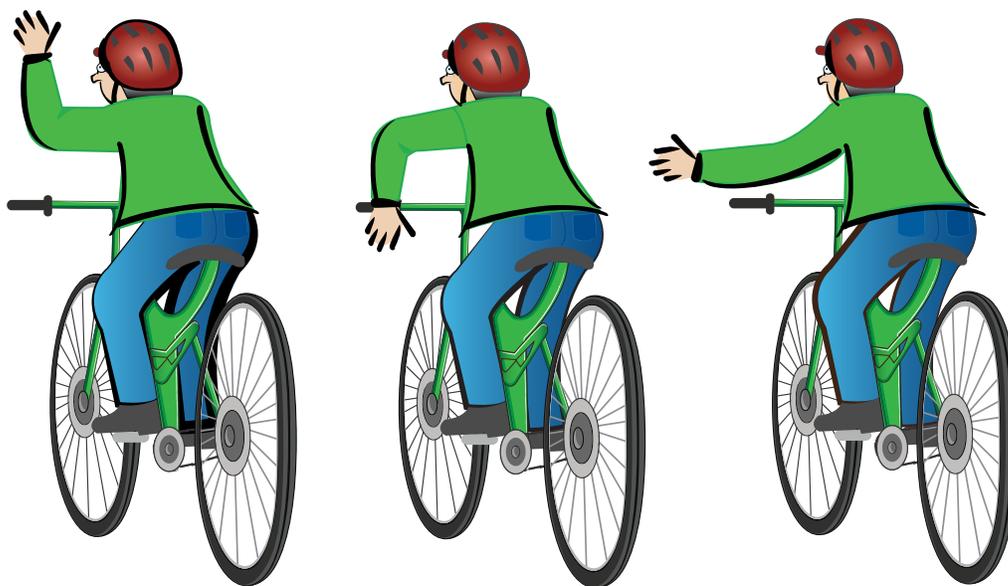
If there is no one in the car, the lights are not on, and all directions are clear, it is safe to cross. Ride your bike with your head up, looking for traffic as you cross.

You should also watch for cars that may be turning into driveways from the street and be prepared to stop.

2. Use Hand Signals

[Give children a copy of the "Bicycle Hand Signals" handout to review while you go over the following material.]

It's important that bicyclists let other bicyclists, drivers and pedestrians know when they are turning or stopping. Let's review the hand signals that bicyclists use to communicate:



Right Turn

Slow or Stop

Left Turn

- Which hand do you use to signal?
- How do you show a left turn?
- How do you show a right turn?
- How do you show slowing or stopping?
- When should you use these hand signals?
- Why do you use these signals?

When turning, slowing, or stopping, you use signals to tell others what you are about to do! Therefore, you use the signal before you make your move.

Depending on how well children do, the instructor may want to play a game by calling out signals in a different order until children indicate mastery of the signals.

3. Avoid Risky Behaviors

Engage children in a discussion on what is meant by a “danger” or a “risk” and the topic of risky behaviors. Go through examples of risky behaviors that they should avoid doing when riding a bicycle. Talk about why each example is “risky.”

What is meant by a “danger” or a “risk?”

- *An activity that might injure or hurt someone.*

Can you name some risky behaviors that you should avoid doing while on a bicycle?

- *Riding two people on one bicycle,*
- *Carrying bags on the handlebar,*
- *Riding the wrong way down a street,*
- *Not following the rules at traffic signs or traffic lights (One Way, Stop, Do Not Enter),*
- *Cycling at night, and*
- *Cycling in the rain.*

4. Safe or Unsafe?

Describe the following scenarios and have children tell you whether the person is being safe or unsafe.

- *Kumar puts his helmet on but forgets to ask his parents before he goes to the garage to get his bicycle.*

[Kumar should always ask his parents before he rides his bicycle!]

- *Avery was going to ride her bicycle to her friend’s house, but she decides to grab an umbrella and walk because it is raining.*

[Avery did the right thing. She shouldn’t ride her bike when it is wet.]

- *Lauren wants to play with her toys while she’s at the park with her mom, so she puts them in a plastic grocery bag to carry on her handlebars.*

[Lauren did not do the right thing. Don’t put things on your handlebars because they can get caught in your wheels and cause a crash. If you can, put items in a backpack before riding.]

- *Ed is going to ride his bicycle with his dad to the library so he takes his ear buds out and turns off his music player.*

[Ed did the right thing. He turns off all devices, so he can be fully aware of traffic while riding his bicycle.]

- *After dinner, Madeline changes into her favorite navy blue shirt and pants before riding her bike to the store to get ice cream with her older brother.*

[Madeline should not wear dark colors when riding her bike. She should have chosen a shirt that was bright, so she is visible to drivers.]

- *As the traffic light changed from yellow to red, John started slowing down using the brakes and stopped his bicycle to wait for the light to turn green.*

[John did the right thing. Always follow traffic signs and signals when riding your bicycle. When a traffic light is red, that means stop.]



- One of the bikes has a flat tire, so Sarah decides to sit on the handlebar while Shawn pedals.

[Sarah and Shawn should never ride with two people on one bicycle. They could lose control and crash. It's better that they dismount and walk the bicycle to get where they are going.]

Part 2 – Activity

► **Time:** 15 minutes

It is highly recommended that instructors have children practice skills that will help them operate a kid vehicle such as a scooter, tricycle or bicycle. Understanding dangerous or risky behaviors will help keep them safe. These skills will be the foundation for riding a bike using safe behaviors later on.

I Spy!

Distribute the **Find the Safety Do's and Don'ts** to each child (at the end of this lesson). Have them collaborate in groups or work alone.

Ask children to use a green marker to number from 1-5 the 5 safety “Do’s” or safe behaviors in the picture. Next ask them to use a red marker to number from 1-5 the safety “Don’ts” or dangers.

Here is a list of what they should find:

Do's:

1. Child and adult stopping at curb;
2. Child holding adult's hand walking on the sidewalk;
3. Cyclists riding in a single file;
4. Cyclists wearing bike helmets;
5. The cyclist near the stop sign is giving a hand signal to turn.

Don'ts:

1. Child throwing an object out the bus window;
2. Cyclists riding side-by-side;
3. Cyclist riding without a bike helmet and crossing in the middle of the block;
4. Child crossing between parked cars;
5. Child chasing a ball out into the road.

Use the Child Assessment **I Ride Safely!** Have children draw themselves performing a safe behavior and write about what they can do to be safe while bicycling on the bottom of the page.

Review (optional)

► **Time:** 5 minutes

The instructor will review...

- What to watch for when exiting driveways,
- Hand signals, and
- Risky behaviors to avoid.
- Correct answers to the Child Assessments. Go over the Safety Do's and Don'ts that are found in the Key. Have kids discuss what they drew in the “I Ride Safely!” exercise and talk about each behavior.



Suggestions for a Balanced Curriculum

Grades
2-3
Lesson 3

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period, or may be assigned as homework opportunities.

English Language Arts

Distribute the ***Bike Your Way Through Grammar and Punctuation!*** handout found in the materials section to each child. Have them respond to the 10 questions on sentence structure, parts of speech, word choice, and punctuation.

Arts Education

Ask children to draw what they should do at driveways to be a safe bicyclist. Have them list the safe behavior on the bottom of the page. Ask for volunteers to show their drawings and describe the safe behaviors that they should use at driveways.

Alternatively, you can do this exercise by having children use other processes – painting, collage or mixed media – instead of drawing. You may also have the opportunity to use computer software that allows the children to express themselves creatively in a digital or online format. ***Electronic submissions of art to the NC Safe Routes to School Program is encouraged!***

Bicycle Hand Signals

Bicycle Hand Signals

Use the hand signals below to tell other bicyclists, drivers, and pedestrians what you are about to do.



I use this signal before I turn

RIGHT



I use this signal before I turn

LEFT



I use this signal before I

SLOW or STOP



Name _____

Bike Your Way Through Grammar and Punctuation

There are so many great places to ride a bike. You can ride your bike to the grocery store or the library. You can bike to school when it is nice outside. You can ride your bike around the neighborhood, too. Cycling is fun for everybody.

1. Which is the topic sentence of this paragraph?
 - A. There are so many great places to ride a bike.
 - B. You can ride your bike to the grocery store or the library.
 - C. You can bike to school when it is nice outside.
 - D. Cycling is fun for everybody.

We were looking at _____ bikes at the bike shop.

2. Which word correctly completes this sentence?
 - A. kids
 - B. kid's
 - C. kids'

The boys promised that them would ride home before dark.

3. Which pronoun should be used in place of the underlined word?
 - A. they
 - B. their
 - C. those
 - D. they're

Richard enjoys swimming laps, bicycling and running.

4. Where should a comma be added in this sentence?
 - A. after *enjoys*
 - B. after *swimming*
 - C. after *bicycling*
 - D. after *and*

We always obey traffic signs and signals.

5. Which is the verb in this sentence?
 - A. always
 - B. obey
 - C. signs
 - D. and

Who can help me lock my bike to the bike rack?

6. Which part of speech is the underlined word in this sentence?
- A. verb
 - B. adverb
 - C. pronoun
 - D. adjective
7. David is looking up information on Bicycle Repair in a book on bikes. Where would he MOST LIKELY find definitions for the parts of the bicycle in the book?
- A. index
 - B. glossary
 - C. title page
 - D. front cover
8. Which sentence has the correct punctuation?
- A. Kristy asked her mom, Is it ok if I ride my bike to school?
 - B. Kristy asked her mom, "Is it ok if I ride my bike to school?"
 - C. Kristy asked her mom, "Is it ok if I ride my bike to school?"
 - D. Kristy asked her mom "Is it ok if I ride my bike to school?"

The police officer said, "always stop at stop signs when you ride your bike!"

9. Which word in this sentence should be capitalized?
- A. police
 - B. said
 - C. always
 - D. you

My older brother fixed the flat tire on my bike.

10. What is the subject of this sentence?
- A. older
 - B. brother
 - C. tire
 - D. bike



Parent/Caregiver Tip Sheet

Bicycling Basics

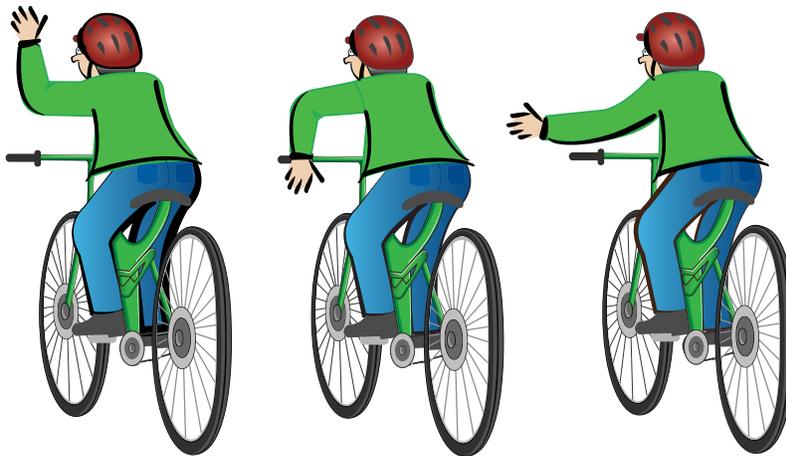
Today your child learned about bicycling safely and how to avoid behaviors that might put him/her at risk of an accident.

First, we learned about how to be aware of driveways and how to avoid accidents that may happen in these areas. Here are safe behaviors to know and use:

- Stop before reaching a driveway.
- Check cars that may be parked in the driveway. If there is a person inside or the back white lights are on, DON'T MOVE! Stop and wait until you know the car is not moving.
- Look left, right, and left again to make sure cars aren't coming before crossing the driveway.

We also reviewed hand signals for bicyclists to ensure that we were communicating well with other cyclists and motorists.

Children really enjoy learning hand signals. Ask your child to demonstrate the following hand signals and explain their meanings:



Right Turn

Slow or Stop

Left Turn

Here are some basic risky behaviors that your child learned about in class this week. Review this list with your child so they can have fun AND be safe while riding their bikes:

- *Never ride with two people on one bicycle.*
- *Don't carry bags on the handlebar.*
- *Never ride the wrong way down a street.*
- *Don't ignore the rules at traffic signs or traffic lights (One Way, Stop, Do Not Enter).*
- *Avoid cycling at night or in the rain.*
- *Never bike without your helmet.*
- *Don't ride your bike without asking first!*

PRACTICE AT HOME!

Bicycling Basics

Children Love Cycling

It's time spent talking together, learning about their environment, exploring the neighborhood, enjoying fresh air and exercise. Set a good example for them, and they pick up on your enthusiasm. Family cycling is a great way to spend time together because it introduces them to riding. If they are not yet ready to ride on their own, a trailer bike can be a great way to get them going.

Plan a Ride

Bicycle riding is a fun, healthy activity that people can enjoy all their lives. But it is important to remember that a bicycle is not a toy — it's a vehicle! Talk to your child about where he or she they can ride his or her bike. With breaks, children over the age of six are often capable of riding a dozen miles at one time. Plan the ride so you're going places that will interest the children — playgrounds, farmer's markets, weekend events, etc. Don't overestimate your speed when planning the route. If they're on their own bikes, you may be averaging only 5 mph. Above all, relax! Enjoy the journey.

Be prepared with snacks and water! Have fun!

Did you Know?

Parents can play a vital role in encouraging children's healthy, active lifestyles. Parents who incorporate physical activities in their own lives are more likely to pass on good habits to their children.

Children in second and third grade:

- Enjoy testing muscle strength and skills,
- Typically have developed a good sense of balance,
- Learn best through active, concrete experiences, and
- Are old enough to grasp more complex information about laws, traffic signs, safety concepts, and personal responsibility for safety.





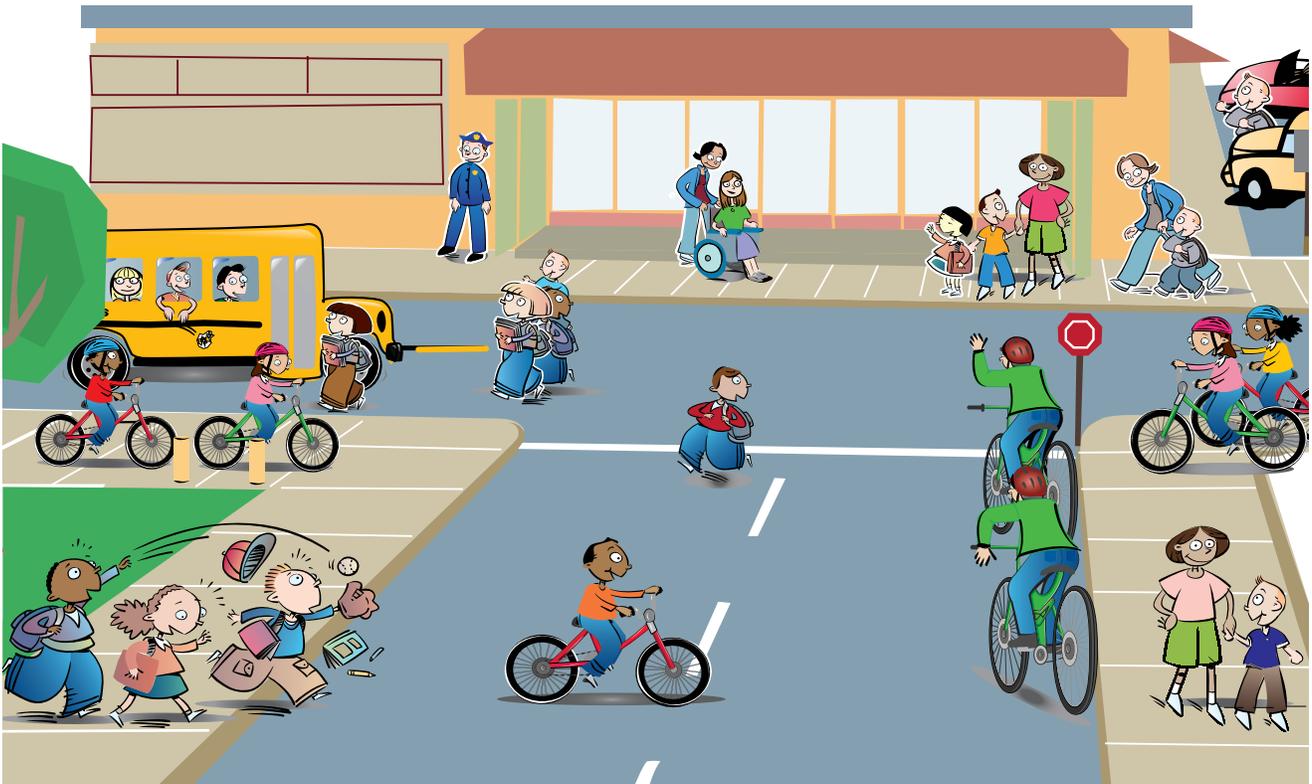
Name _____

Child Assessment

Find the Safety Do's and Don'ts!

I Spy...

See if you can find them all! Use a green marker to number the 5 safety DO's. Use a red marker to number the 5 safety DON'Ts.





Name _____

Child Assessment

I Ride Safely!

Draw yourself on your bicycle showing safe behavior.

Write the safe behaviors you are showing:



Bike Control



Time: 30-45 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote student retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through students' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Teachers should use their discretion to break up material to accommodate their daily schedules. The following Skill-Building Activities are an essential component to this curriculum, and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this lesson is to help children develop skills to control their bikes and communicate with other road users.

The children will be able to:

- Know how to properly fit their bike and helmet,
- Use the Power Pedal to start off smoothly and quickly,
- Stop quickly and smoothly,
- Stop at the end of the driveway or at a stop sign,
- Ride their bikes in a straight line without wobbling, and
- Signal their intentions to others around them.

Why This Lesson is Important

While second and third graders should still be cycling with an adult or experienced rider, they still need to learn how to handle their bikes skillfully and safely, perform basic maneuvers such as starting off and stopping smoothly and efficiently, control their bikes by riding in a straight line and signal their intentions. This practice prepares them for more advanced instruction in grades 4 and 5 and for eventually riding safely on the street.

Essential Standards

<p>PE.2.MS.1.2: Execute a variety of manipulative skills while maintaining good balance and follow-through.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>PE.2.MC.2.1: Use equipment to illustrate multiple movement concepts.</p> <p>PE.2.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p> <p>2.C.2.1: Use improvisation to communicate problems and resolutions.</p> <p>2.CU.2.1: Illustrate how to share focus with others in a group setting.</p>	<p>PE.3.MS.1.2: Apply basic manipulative skills while moving/traveling.</p> <p>PE.3.MC.2.1: Illustrate how practice, attention and effort are required to improve skills.</p> <p>PE.3.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>PE.3.PR.4.1: Use self-control to demonstrate personal responsibility and respect for self and others.</p> <p>3.PCH.3: Understand necessary steps to prevent and respond to unintentional injury.</p> <p>3.C.2.1: Use improvisation to present a variety of simple stories or situations.</p>
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Common Core

<p>CCSS.ELA-Literacy.SL.2.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>CCSS.ELA-Literacy.SL.2.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p>	<p>CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others ideas and expressing their own clearly.</p> <p>CCSS.ELA-Literacy.SL.3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p>
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Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self determination to build independence.</p>
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Materials

- Instructor bicycle
- One bike for each child
- Bicycle helmet for each child and instructor
- Extra helmet sizing pads of various thicknesses
- Surgical or painter's cap for each child (wear under helmet to keep it clean)
- Small zip lock bag for each child, labeled with his/her name (to store caps between lessons)
- Bicycle tools: A variety of hex keys (also called Allen wrenches, typically metric) and adjustable crescent wrenches for seat and handlebar adjustments; pedal wrench to remove pedals.
- Bike pump(s)
- Bike Control Course Activities
- Bike Control Course Set Up Diagram
- 2 rolls of 2" masking tape
- 10' or 12' tape measure
- Props: Free-standing stop sign
- Whistle
- Parent/Caregiver Tip Sheet
- Child Assessment – Initial Skills Checklist for Grades 2-3 (Class)
- Child Assessment – Initial Skills Checklist for Grades 2-3 (Individual)

Preparation

Review the *Let's Go Biking! Teaching The Skill-Building Activities* video which can be found in the For Instructors portion of the *Let's Go NC! Interface*.

Check general condition of helmets and bikes. Ensure enough time to fit helmets. This will go more quickly with knowledgeable volunteers assigned to this specific task.

With masking tape, lay out the course according to the *Bike Control Course* diagram found in the materials section. This course will be used for Ride in a Straight Line, Stop at End of Driveways, and Practice Hand Signals in Lesson 4.

NOTE: The course should be set up so that there is sufficient space for children to circle around the course on their bikes to go through the course again. This course will be used again for skills in Lesson 5.

Review and prepare the *Initial Skills Checklist for Grades 2-3*. The checklist should be sent home after the Skill-Building Activity along with the Parent/Guardian Tip sheets included in this lesson. Copy the individual checklist onto the back of the Parent/Caregiver Tip Sheet.

Have additional persons on hand to help during class time to assist with fitting helmets, preparing bicycles, and conducting the on-bike skill building activities. Helmet fitting can be time consuming. Coordinate with assistants in advance.

Lesson 4 – Demonstration and Skill-Building Activity



► **Time:** 30-45 minutes

1. **Helmet Fitting**
2. **Bike Fitting**
3. **Start Off with Power Pedal**
4. **Stop Quickly and Safely**
5. **Stop at End of Driveway**
6. **Ride in a Straight Line**
7. **Practice Hand Signals**

Introduction

All new skills require practice – it's required for proficiency and expertise. Cyclists need to be predictable to motorists and to others who may share roads, sidewalks, paths or trails with cyclists. Further, cyclists often ride in confined lanes or on sidewalks or paths. In order to be predictable and safe, cyclists must be proficient in starting, stopping, and riding steadily and in a straight line. This lesson gives children the opportunity to practice their bicycling skills in a safe environment away from traffic.

Children with disabilities may have compromised balance and still be able to ride a 3-wheeled bicycle (trike). See the Instructor's Guide for more detailed information on working with children of all abilities.

Assess the class using the ***Child Assessment – Initial Skills Checklist for Grades 2-3 (Class)*** during the lesson to track a child's performance throughout the course activities.

1. Helmet Fitting

Have children work in pairs to practice fitting helmets (their own or helmets they use as part of the course) in preparation for the on-bike lessons to follow.

- Use the straps and sizing pads to get it to fit just right. The helmet should sit level on the head and cover the top of the forehead, so that you can put 2 fingers between your eyebrows and the helmet.
- Straps should be adjusted to fit snugly, but not tightly, forming a V under each ear. A helmet with loose straps can come off in a crash. With your helmet buckled, you should not be able to take it off, rock it from side to side or back and forth.
- Use the ***Fitting Your Bike Helmet Guide*** at the end of Lesson 1 for more helpful pointers.

2. Bike Fitting

- Check to make sure the bike fits.
 - Diamond frame: Stand over the frame with 1 to 3 inches of clearance.
 - Step-through frame: Seat can be adjusted low enough to fit.
- Adjust the seat height to assure a safe and comfortable ride.
 - Beginners: When you sit on the seat, you should be able to touch both feet on the ground.
 - Advanced riders: When you sit on the seat with your foot on the pedal in its lowest position, your leg should be slightly bent.

3. Start Off with Power Pedal

Even when kids already know how to ride a bike, they may not be proficient in steering and balancing. Getting a strong start is important to gaining your balance quickly. Have children use the “Power Pedal” method to start each time they ride.

- Demonstrate to children how to start using the “Power Pedal” method:
 - Begin straddling the bicycle with both feet on the ground.
 - Arrange your bike so that one pedal is up high in a “2 o’clock” (right foot start off) or “10 o’clock” (left foot start off) position. (Either foot can be used.) This is the power pedal, as you will push down on it with one foot to get started. Note: cyclists riding geared bicycles should shift into a low (easy to pedal) gear before beginning the power position start.
 - Put your foot on the high pedal and push down to start the bike rolling.
 - As the bike begins to roll, lift your other foot and place it the second pedal, and sit on the saddle as you’re pedaling forward. You’re off!
- Line children up side by side along one side of the course/parking lot, allowing one arm’s length on either side.
- Have children practice starting off with the Power Pedal, ride to the other side of the course/parking lot and stop.
- Have them turn their bikes and practice the Power Pedal start and ride back to the first side.
- Continue practicing until they can propel themselves forward with ease using the “Power Pedal” method.

4. Stop Quickly and Safely

- Have the children perform a “Whistle Stop.”
- Have children turn their bikes to face the parking lot.
- Explain that while they are riding, you will blow your whistle, and they need to use their brakes to stop safely but quickly when they hear the whistle.
- Remind them to use the brakes to come to a complete stop. With hand brakes, effective stopping requires pressure on both the front and rear brake levers. Encourage young children to use both hand brakes when stopping.
- After coming to a complete stop, children should put one foot on the ground and return pedals to the power position to be ready to start again.
- Have them use the Power Pedal to start each time and ride in a straight line toward the opposite side of the course/parking lot.
- Give them time to start off and get balanced, then blow the whistle for them to stop. Repeat a few more times and observe how the children are performing.

5. Ride in a Straight Line

It’s important for cyclists to be predictable to others when they are riding. Riding in a straight line can help cyclists avoid other vehicles and be predictable. Get them started by having them practice straight line riding on the ***Bike Control Course***.

- Explain that children will be riding on the right side of course, which represents a street. They should try to steer straight and stay within the lane.
- Send children onto the course one at a time, leaving a few seconds between riders.
- Have them ride the course at least twice to demonstrate that they can ride in a straight line and steer their bikes properly.

6. Stop at End of Driveways

Ask children to pretend that the **Bike Control Course** is a driveway from their house or apartment. Even though driveways don't have stop signs, cyclists should always stop at the end of the driveway to check for vehicles and pedestrians before entering a street.

- Explain to children that they will be expected to ride between the lines and come to a complete stop at the end of the driveway.
- At the end of the driveway, children should look both ways for pedestrians or vehicles, give a hand signal and turn right or left to circle back to the beginning of the course.
- Explain to children that this is not a race.
- Have each child go through the course a few times demonstrating that they can stop completely at the end of the driveway.

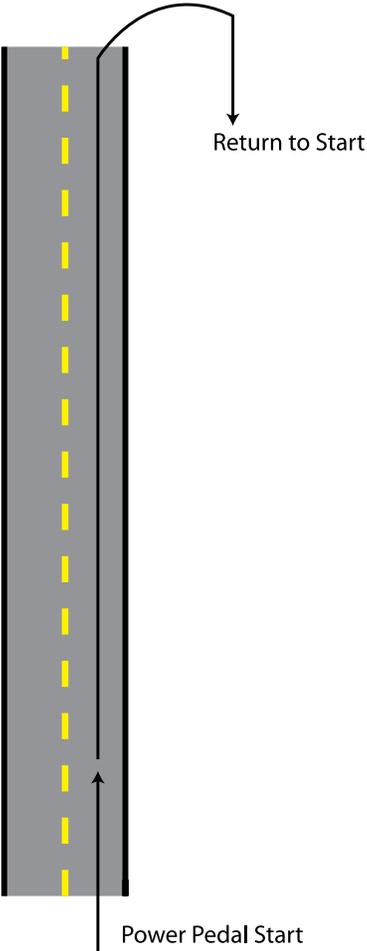
7. Practice Hand Signals

Have children ride through the **Bike Control Course** again, this time practicing controlling the bike in a straight line while using hand signals. This exercise is a step in getting them comfortable controlling the bike while performing a hand signal. Place the stop sign near the end of the course.

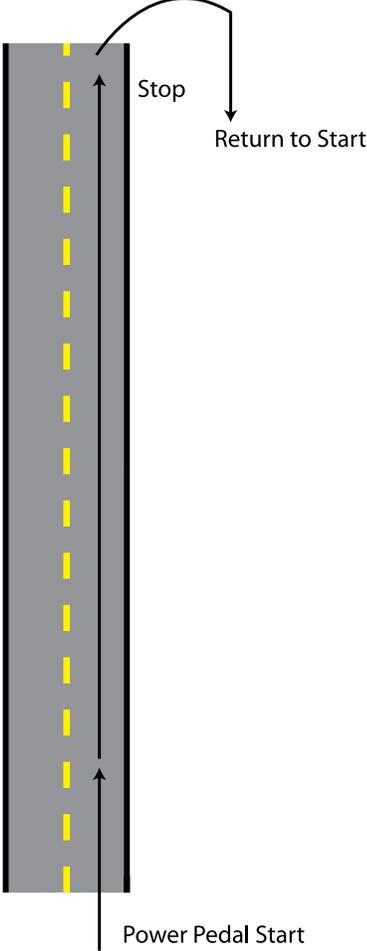
- Demonstrate the hand signals that they should use for left, right, and slow/stop.
- Have children ride through the course again, giving the left turn signal in the lane, the slow/stop signal as they approach the stop sign, and the right signal before they start off from the stop sign.
- Have all children complete the course (several times is optimal). Have them try to hold each signal they perform for 2-3 seconds.

At the end of the Lesson 4, transfer skills assessments to **Initial Skills Checklist (Individual)**. This assessment can be copied onto the back of the Parent/Caregiver Tip Sheet and sent home with the child.

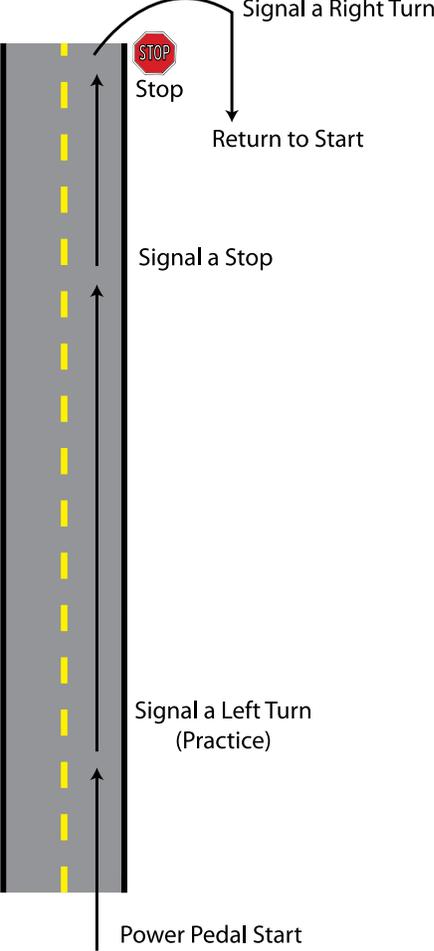
Bike Control Course Activities



5. Ride in a Straight Line



6. Stop at End of Driveways



7. Practice Hand Signals



Suggestions for a Balanced Curriculum

Grades
2-3
Lesson 4

Bike Control

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period or may be assigned as homework opportunities.

English Language Arts

Have children recount an experience about cycling to a favorite location. Children should use appropriate facts and relevant descriptive details. Have children present their story to the class speaking audibly in coherent sentences.

If they haven't ridden a bicycle in the past, have them tell a story about a place they'd like to go by bicycle.

Arts Education

Divide children into groups of four or five. Assign each group a topic related to bicycle safety (safe street crossing, hand signals, stopping at driveways, etc.).

Instruct each group to develop a short skit (2-3 minutes long) that informs the audience about the topic and demonstrates safety concepts by using verbal and non-verbal communication. Each skit should include a problem and resolution.

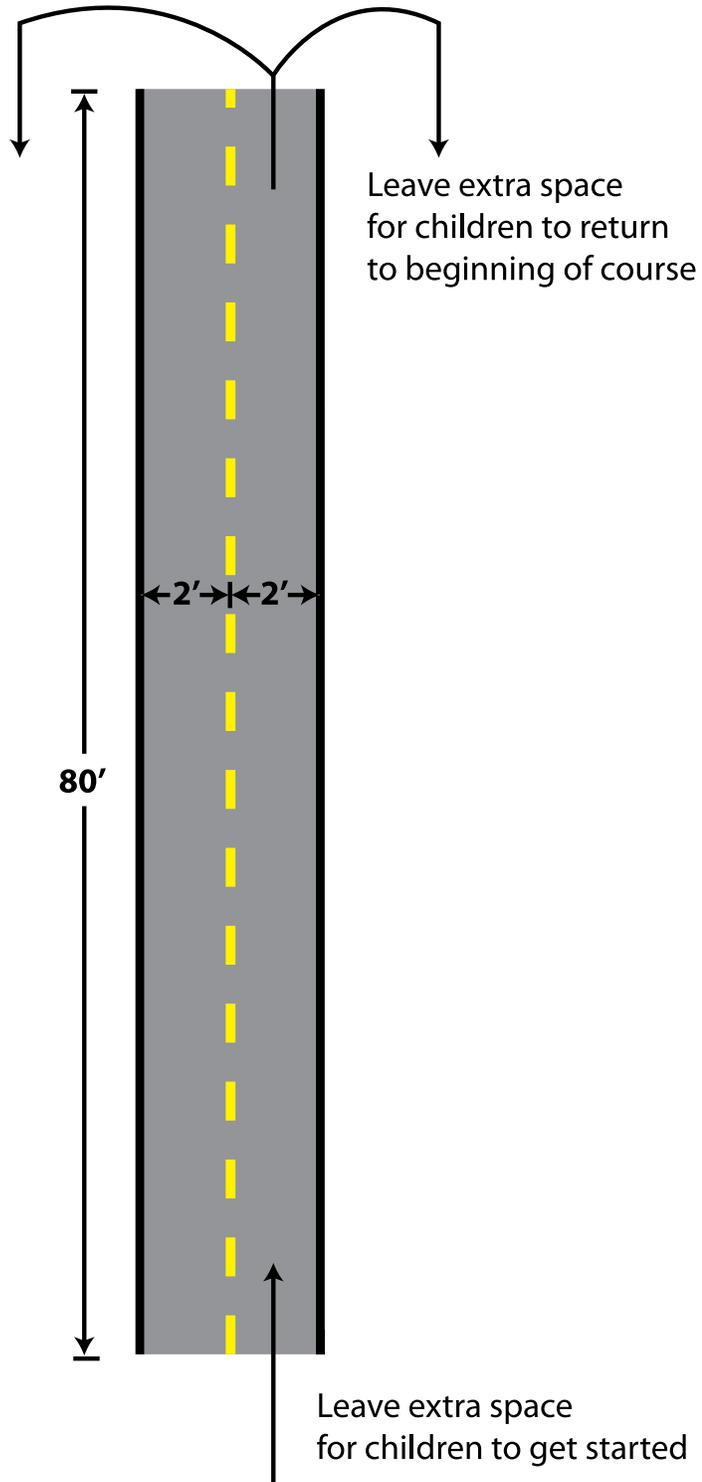
Have the children in each group share their concepts for the skit one at a time, so every child has a chance to include his or her own ideas. After about 10 minutes of writing and rehearsing, have each group perform the skit for the class. **Video submissions of skits to the NC Safe Routes to School Program are encouraged!**



Set Up Diagram

Bike Control Course

Use this diagram to set up your skills course for Lesson 4. If space and staffing permit, you can lay out a second course beside the first one so more children can participate at one time.





Parent/Caregiver Tip Sheet

Bike Control

Today your child learned how to control a bicycle by practicing in a supervised, safe environment.

After reviewing helmet fitting guidelines and ensuring bike fit, your child learned how to place the pedals on his/her bicycle to get the bike rolling quickly and safely.

- **Ask your child to demonstrate! Have them describe the “Power Pedal” position and have them perform a few “starts” on their bicycle.**

We discussed and practiced safe stopping techniques. We also talked about when is the right time to stop (at ends of driveways and at stop signs).

- **Help your child practice! Have him or her ride in a straight line and stop quickly when you call out a “Whistle Stop!”**

On a course we set up for practice, the children practiced bike control and riding in straight lines. When they were comfortable with those skills, we reviewed and used hand signals.

- **Ask your child to demonstrate bicycle hand signals for a left turn, right turn, and slow/stop.**

Driveway ride-out is the most frequent cause of crashes that injure or kill young children, so it's important that your child know to stop at the end of the driveway and look for vehicles before entering the street. Riding in a straight line and using hand signals helps your child ride more predictably and communicate to others any intended moves.

PRACTICE AT HOME!

Encourage your child to continue practicing bike control by setting up a simple skills course in your driveway or nearby park. Use chalk, tape or empty cans/plastic bottles to set up a course 2 feet wide by 30 feet long. Ask your child to demonstrate and practice these skills:

- Starting Off with Power Pedal
- Stopping at End of Driveway
- Riding in a Straight Line
- Using Hand Signals
- Stopping Quickly and Safely



Did you know?

Children in second and third grade:

- Enjoy testing muscle strength and skills,
- Typically have developed a good sense of balance,
- Learn best through active, concrete experiences. and
- Are old enough to grasp more complex information about laws, traffic signs, safety concepts, and personal responsibility for safety.



Name _____

Child Assessment

Initial Skills Checklist for Grades 2-3

Parent/Guardian: Please sign this report below and have your child return it to the instructor.

During the Basics of Bicycling course, your child worked on the bicycle skills shown below to help prepare him or her to bicycle safely in traffic. The following scoring symbols indicate your child's level of achievement:

Good +

Satisfactory ✓

Needs more work —

Please encourage your child to continue working on these skills to master them!

Knows how helmet and bike should fit	Uses the Power Pedal to start off smoothly and safely	Is able to balance and steer the bike	Can ride consistently in a straight line without swerving	Uses the brakes to stop quickly and safely	Remembers to stop at the end of the driveway	Knows and uses proper hand signals while controlling the bike

Comments:

Signature of parent/guardian

Date



Cooperative Riding



Time: 30-45 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote student retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through students' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Teachers should use their discretion to break up material to accommodate their daily schedules. The following Skill Building Activities are an essential component to this curriculum, and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this lesson is to develop a child's on-bike skills to cooperate with others while using the roadway. With additional practice, they will become more skilled in controlling the bicycle while being able to perform these cooperative tasks.

The children will be able to:

- Scan over their shoulders,
- Follow other cyclists safely,
- Signal appropriately, and
- Interact safely with other cyclists.

Why This Lesson is Important

This lesson helps children further develop their on-bike skills as well as techniques for interacting safely with pedestrians, other bicyclists, and motor vehicles in preparation for eventually riding on the road. These skills also lay groundwork for children to understand principles of interacting with bicyclists and pedestrians when they are old enough for a driver's license.

Essential Standards

<p>PE.2.MS.1.2: Execute a variety of manipulative skills while maintaining good balance and follow-through.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>PE.2.MC.2.1: Use equipment to illustrate multiple movement concepts.</p> <p>PE.2.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p>	<p>PE.3.MS.1.2: Apply basic manipulative skills while moving/traveling.</p> <p>PE.3.MC.2.1: Illustrate how practice, attention and effort are required to improve skills.</p> <p>PE.3.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>PE.3.PR.4.1: Use self-control to demonstrate personal responsibility and respect for self and others.</p> <p>3.PCH.3: Understand necessary steps to prevent and respond to unintentional injury.</p>
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Common Core

<p>CCSS.ELA-Literacy.SL.2.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p> <p>CCSS.ELA-Literacy.L.2.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe.</p> <p>CCSS.ELA-Literacy.W.2.2: Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.</p>	<p>CCSS.ELA-Literacy.SL.3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p> <p>CCSS.ELA-Literacy.L.3.6: Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships.</p> <p>CCSS.ELA-Literacy.W.3.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p>
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Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self determination to build independence.</p>
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Materials

- Instructor bicycle
- One bike for each child
- Bicycle helmet for each child and instructor
- Extra helmet sizing pads of various thicknesses
- Surgical or painter's cap for each child (wear under helmet to keep it clean)
- Small zip lock bag for each child, labeled with his/her name (to store caps between lessons)
- Bicycle tools (2 sets): assortment of crescent and open-end wrenches for seat and handlebar adjustments, regular and Phillips screwdrivers, Allen wrenches
- Bike pump(s)
- Bike Control Course Activities
- Bike Control Course Set Up Diagram
- 2 rolls of 2" masking tape
- 10' or 12' tape measure
- Whistle
- Props: 2-3 Hazards (These can be created with masking tape, rubber shower mats, or plastic discs. The goal is to symbolize a hazard in the roadway without endangering the children.)
- Parent/Caregiver Tip Sheet
- Child Assessment – Final Skills Checklist for Grades 2-3 (Class)
- Child Assessment – Final Skills Checklist for Grades 2-3 (Individual)

Preparation

Check general condition of helmets and bikes.

With masking tape, lay out the course according to **Bike Control Course** diagram found in the materials section.

NOTE: The course should be set up so that there is sufficient space for children to circle around the course on their bikes to go through the course again.

Review and prepare the **Final Skills Checklist for Grades 2-3**. The checklist should be sent home after the Skill Building Activity along with the Parent/Guardian Tip sheets included in this lesson. Copy the individual checklist onto the back of the Parent/Caregiver Tip Sheet.

An assistant is needed for the Scan over Shoulder activity. In addition, it is helpful to have additional volunteers on hand during class time to assist with preparing bicycles and helmets or conducting skill-building activities. Coordinate with assistants in advance.

Lesson 5 – Demonstration and Skill-Building Activity



► Time: 30-45 minutes

1. Signal Turns
2. Scan over Shoulder
3. Follow the Leader
4. Hazard Dodge

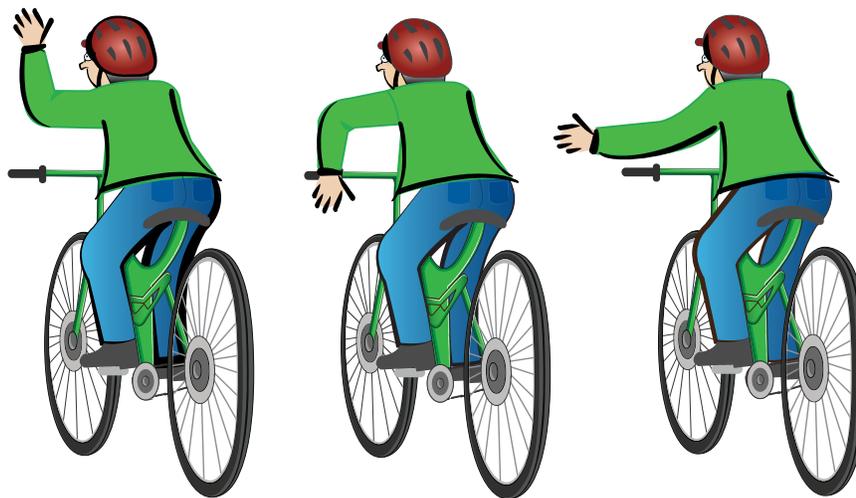
Introduction

Have children put on helmets and check that they fit securely. Have them perform an ABC Quick Check on their bikes. In Lesson 4, they signaled and turned right to go back to the beginning of the course; in Lesson 5, they will practice signaling and turning left.

Assess skills using the **Child Assessment – Final Skills Checklist for Grades 2-3 (Class)** during the lesson.

1. Signal Turns

Have children ride through the **Bike Control Course** to practice controlling the bike in a straight line while using hand signals. This exercise is a step in getting them comfortable controlling the bike while performing a hand signal, therefore they are not required to turn the bike at this stage.



Right Turn

Slow or Stop

Left Turn

- While straddling their bikes, have children demonstrate the signals for left turn, right turn and slowing/stopping.
- Explain that hand signals are to show others what you are about to do.
- Have the children ride the course, giving the slowing/stopping signal, stop at the end and signal a left turn and look for vehicles, then turn left and circle back to the beginning.
- Have all children complete the course (several times is optimal). Have them try to hold each signal they perform for 2-3 seconds.

2. Scan over Shoulder

Have children ride the **Bike Control Course** to practice controlling the bike while scanning behind them. An assistant will stand to the left of the course behind the child with one arm either up or down as each child goes through the course.

1. Have each child ride the course. Instruct the children to look back over their left shoulders once they have good control of their bikes.
2. The child has to look back and call out “Arm Up!” or “Arm Down!” while riding in a straight line.
3. When the rider nears the end of the course he/she gives the slowing/stopping signal and stops at the end. Instruct children to give a left turn signal, then turn left to circle back to the beginning.

3. Follow the Leader

Instruct children to practice the following skills, which teach them to ride cooperatively with others on the **Bike Control Course**. Instruct them to be aware of what is happening around them and to keep a safe distance between each other.

- Designate a more skilled child to lead off and have all the other children follow with at least one bike length between children. The leader will signal slowing/stopping then stop at the end.
- The leader can choose whether to turn right or left and signal accordingly with all children behind doing the same.
- Have children go through the course at least twice with a different leader each time.

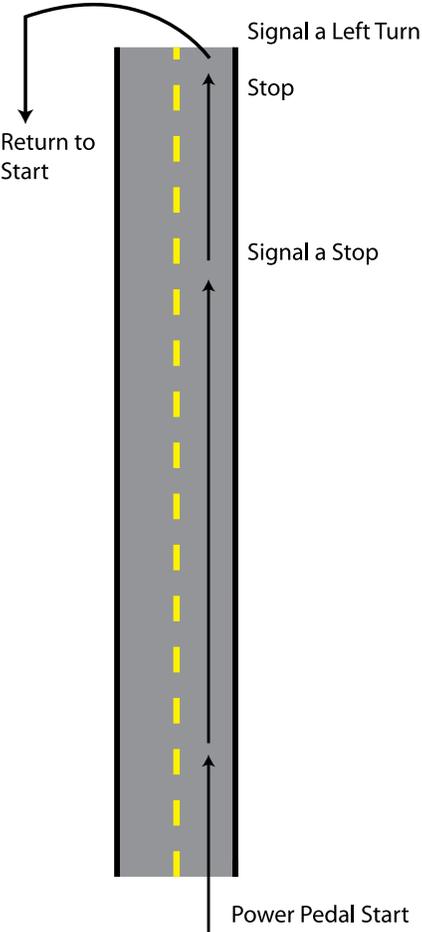
4. Hazard Dodge

In this exercise, children will react to simulated hazards on the **Bike Control Course**. They will practice checking over their shoulders to make sure it is clear to change lanes. Place 2 to 3 “hazards” in the right lane of the course, spaced out so that children have time to move back into the right lane before encountering the second hazard. TIP: Place the hazard so there is no room to pass it on the right.

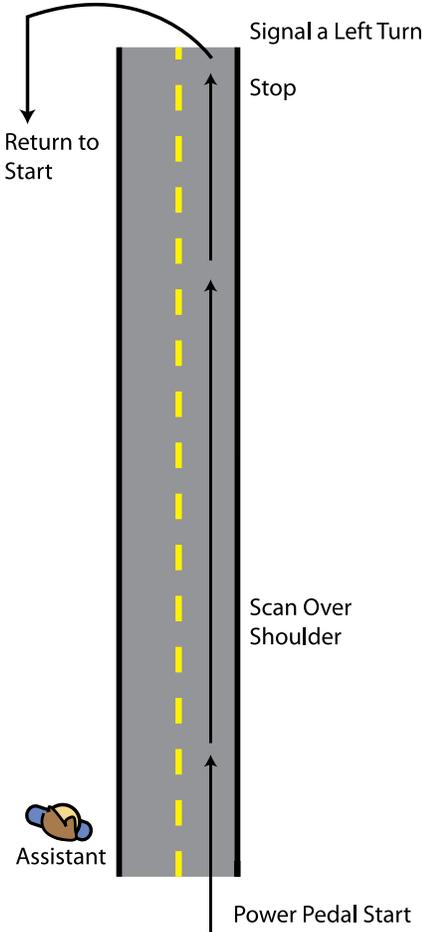
- The children should look back over their left shoulders before moving left to avoid the hazard. After passing the hazard, they should return to the right side of the lane.
- Have them repeat as often as time allows.

At the end of Lesson 5, transfer skills assessments to **Child Assessment – Final Skills Checklist for Grades 2-3 (Individual)**. This assessment can be copied onto the back of the Parent/Caregiver Tip Sheet and sent home with the child.

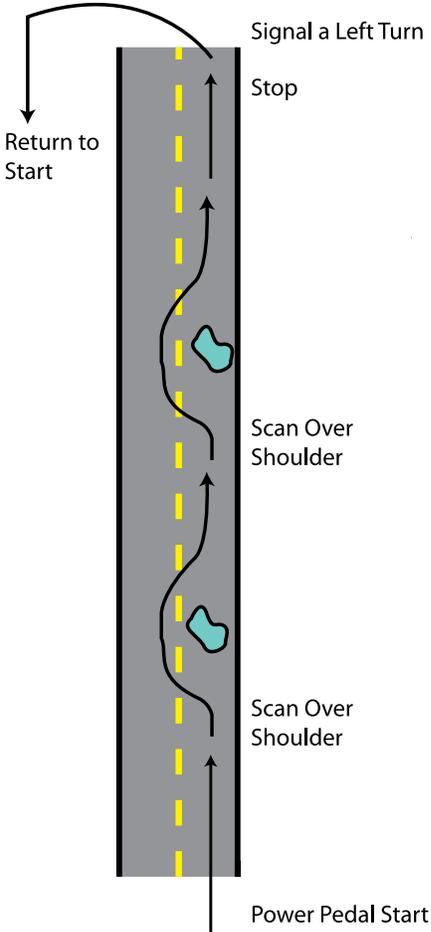
Bike Control Course Activities



1. Signal Turns



2. Scan Over Shoulder



4. Hazard Dodge



Suggestions for a Balanced Curriculum

Grades
2-3
Lesson 5

Cooperative
Riding

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period, or may be assigned as homework opportunities.

English Language Arts

Have children create a bike story to demonstrate their understanding of the concepts used throughout **Let's Go Biking!** Use the following phrases or create your own:

- | | |
|-----------------------|-----------------------|
| 1. Check your bike | 6. Cycling is healthy |
| 2. Wear bright colors | 7. Wear a helmet |
| 3. Watch for hazards | 8. Ask an adult |
| 4. Exercise daily | 9. Obey signs |
| 5. Bikes are vehicles | 10. Plan a safe route |

Prior to class, write or type out the phrases about cycling safety onto strips of paper. Be sure to make enough strips so that each child will receive 10. Hand out 10 phrases to each child.

Instruct each child to use at least five of the 10 phrases to create an explanatory text about bicycling. Children should add their own words to assemble the text, but they must use five of the phrases they are given. Each text should introduce a topic and use facts, details, and definitions to develop points. The text should have a concluding statement or section. The phrases should be highlighted in the story so they stand out.

After about 15 minutes of writing and assembling, ask children to share their stories with the class. Stories should have relevant facts and descriptive details appropriate to the phrases that they use in their story.

English Language Arts

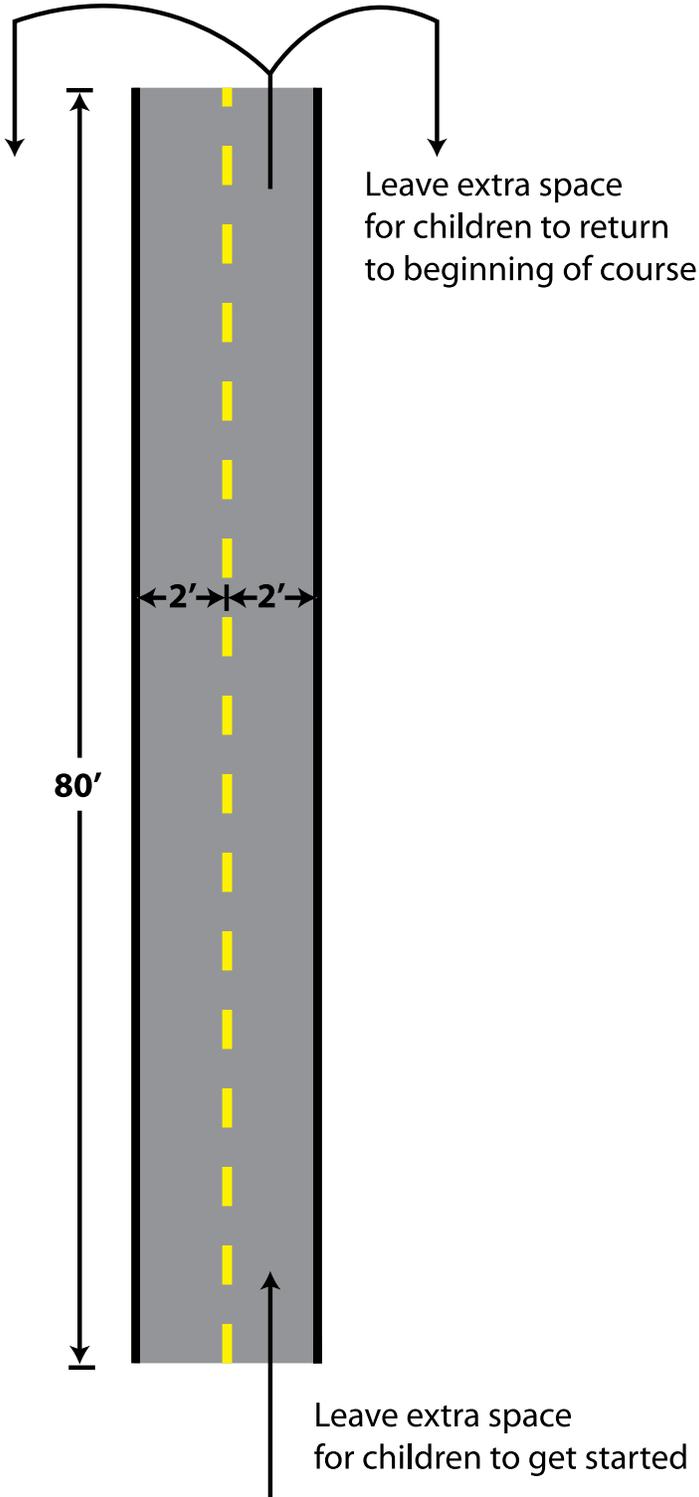
Have children demonstrate understanding of the meaning of vocabulary used in **Let's Go Biking!** Have children sort the following list of words into categories. Then, have them define each group of words by one or more key attributes.

- | | |
|----------------|----------------|
| Walk | Exercise |
| Crossing Guard | Health |
| Helmet | Traffic Signal |
| Stop Sign | Heart |
| Sidewalk | Yield Sign |
| Muscles | Traffic |
| Crosswalk | Bike |
| Street | Driveway |



Set Up Diagram

Bike Control Course





Parent/Caregiver Tip Sheet

Cooperative Riding

In class today your child put together all the bike skills learned so far. You can see on the accompanying Skills Checklist which of the following skills your child performed well and which ones need additional practice:

- Understands proper helmet and bike fit
- Uses the Power Pedal to start off smoothly and safely
- Can ride consistently in a straight line without swerving from side to side
- Can scan over left shoulder while maintaining control of the bicycle
- Knows and uses proper hand signals
- Stops quickly and safely at the end of the driveway and at stop signs
- Scans behind before changing position to avoid a hazard in the road or sidewalk

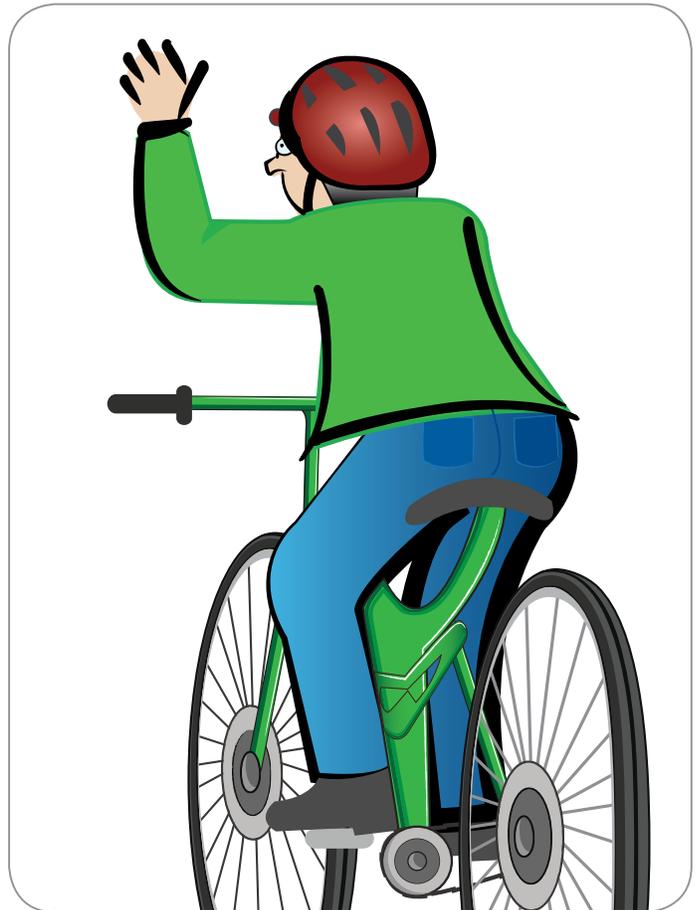
PRACTICE AT HOME!

If your child has mastered the initial skills, like using the power pedal and riding in control of their bicycle in a straight line, they can move on to more advanced ones. You can help your child continue to develop these skills by setting up a course in your driveway or nearby park using chalk, tape, or empty cans/plastic bottles. The course should be 2 feet wide by 30 feet long.

Ask your child to demonstrate each of the skills listed above. Encourage your child to continue practicing the weaker skills to become proficient. The better your child can control the bike, the more likely she or he can avoid a crash.

Better yet, ride together as a family so you can model appropriate cycling behavior for your child.

Happy cycling!





Name _____

Child Assessment

Final Skills Checklist for Grades 2-3

Parent/Guardian: Please sign this report below and have your child return it to the instructor.

During the Basics of Bicycling course, your child worked on the bicycle skills shown below to help prepare him or her to bicycle safely in traffic. The following scoring symbols indicate your child's level of achievement:

Good **+**

Satisfactory **✓**

Needs more work **—**

Please encourage your child to continue working on these skills to master them.

Understands proper helmet and bike fit	Uses the Power Pedal to start off smoothly and safely	Can ride consistently in a straight line without swerving from side to side	Scans over left shoulder while maintaining control of the bicycle	Knows and uses proper hand signals while controlling the bike	Stops quickly and safely at the end of the driveway	Scans behind before avoiding a hazard

Comments:

Signature of parent/guardian

Date