

SAFE ROUTES PHILLY BICYCLE SAFETY LESSONS:

GRADES 4-5 INSTRUCTORS GUIDE

These **Safe Routes Philly Bicycle Safety Lessons** teach and encourage bicycle safety for students in grades 4-5. There are four lessons that can be downloaded and delivered separately:

- Introduction to safe bicycling
- Bicycle helmet and equipment,
- Bicycling basics, and
- Bicycling safely near traffic

The lessons are adapted from content in Bikeology - a middle and high school bicycle safety curriculum for physical education teachers and recreation specialists developed by SHAPE America and the National Highway Traffic Safety Administration. They include a combination of knowledge building and skill building activities and are designed to develop core skills necessary for safe bicycling. The lessons include modifications for students with disabilities and meet state and national learning standards for health and physical education.

- The **knowledge building lessons** contain multiple resources to support instruction, including lesson plans to guide independent instruction, flashcards with vocabulary or situational pictures to use as visual aids (noted by a **purple** eye icon), short safety videos to supplement instruction of key concepts, and optional activities to support learning.
 - The **skill building lessons** include instructions on how to set up a bicycle skills course in a gymnasium or empty parking lot and provide detailed instructor guidance on how to demonstrate and facilitate student bicycle drills. The lessons also provide optional, more advanced activities for students who demonstrate proficiency in the basic skills. Student bicycles and helmets are required, and volunteer support is recommended.
- On-bike motor skills practice is critical for bicycle safety education; students cannot develop basic bicycle handling skills through classroom learning alone.

When teaching the skill building lessons, instructors should always start with the basics in lesson 3 and only advance to lesson 4 if all students demonstrate proficiency in basic bicycle control. Instructors should not assume all students know how to ride a bike or have basic bicycling skills, regardless of age.




AGE APPROPRIATE TEACHING CONSIDERATIONS




It is also important to understand that at this age children are still developing the cognitive abilities and motor skills required to consistently demonstrate safe bicyclist behaviors. For example, while children have fully developed spatial and temporal abilities allowing them to choose the same gap sizes to cross in traffic as adults, they have slower response times. This means that children have a delay from the moment they make their decision to the moment they begin to act on their decision, which can create dangerous situations for them while bicycling.

While children in grades 4-5 can begin learning and practicing basic bicycling skills, it is best for them to be accompanied by an adult when bicycling, especially if bicycling in the road. In Philadelphia, children under age 12 are allowed to ride on the sidewalk.

For more information on age-appropriate bicycle safety education, please see the National Highway Traffic Safety Administration report: Bicycle Safety Education for Children from a Developmental and Learning Perspective: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/bicycle_safety_education_for_children-811880.pdf

GRADES 2-3 BICYCLE SAFETY LESSON OVERVIEW

 LESSON NAME		 TIME	 OUTCOMES
Lesson 1: Introduction to Safe Bicycling	Knowledge building lesson	25 minutes	Students will be able to: <ul style="list-style-type: none"> • Explain reasons we bicycle places • Recognize that bicycles are a vehicle • Recognize that everyone has a role in keeping each other safe • Understand the requirements to bicycling in the road • Understand how to navigate driveways and alleys • Recognize safe practices near traffic such as bicycling on a sidewalk or side of the street, being visible during low-light conditions, and wearing a helmet
Lesson 2: Bicycle Helmet and Equipment	Knowledge building lesson	20 minutes	Students will be able to: <ul style="list-style-type: none"> • Understand why it's important to protect your head with a helmet • Explain how to properly fit a helmet • Identify improper ways to wear a helmet • Understand that anyone can get into a crash • Explain why a properly fitted bicycle is important and describe two basic ways to check for bicycle fit • Describe the process for checking whether a bicycle is safe to ride (Bike ABC's) If helmets and/or bicycles available, students will be able to: <ul style="list-style-type: none"> • Demonstrate how to properly fit a helmet. • Demonstrate the steps to perform a pre-ride safety check (Bike ABC's)

 LESSON NAME		 TIME	 OUTCOMES
Lesson 3: Bicycling Basics	Skill building lesson	35 minutes	Students will be able to: <ul style="list-style-type: none"> • Demonstrate how to properly fit a bicycle helmet and how to perform a pre-ride safety check (Bike ABC's) • Demonstrate basic bicycle maneuvers, such as balancing, pedaling, braking, and controlled stopping • Demonstrate ability to ride in a straight line and turn • Demonstrate how to follow other cyclists safely
	Knowledge building lesson	30 minutes	Students will be able to: <ul style="list-style-type: none"> • Identify and explain the meaning of traffic signs and signals • Understand safe places to ride your bike • Understand the rules of the road and why bicyclists need to obey them • Understand the importance of riding straight and with traffic • Recognize how to communicate effectively with other road users by learning the bike signals for a left turn, right turn, and stop • Demonstrate how to scan for vehicles
Lesson 4: Bicycling Safely Near Traffic	Skill building lesson	35 minutes	Students will be able to: <ul style="list-style-type: none"> • Demonstrate proper understanding of traffic signs and signals • Demonstrate proper use of hand signals • Safely interact and communicate with other cyclists

LEARNING STANDARDS

The bicycle safety lessons included here meet the following state and national learning standards for health, safety and physical education:

PENNSYLVANIA ¹		NATIONAL ²
Grade 4	<ul style="list-style-type: none"> • 10.2.3.B - Identify health-related information (signs and symbols, terminology, products and services). • 10.3.3.A - Recognize safe/unsafe practices in the home, school and community. • 10.4.3.A - Identify and engage in physical activities that promote physical fitness and health. • 10.4.3.F – Recognize positive and negative interactions of small group activities (roles, cooperation/sharing, on-task participation) 	<ul style="list-style-type: none"> • S1.E7.4 - Balances on different bases of support on apparatus, demonstrating levels and shapes. • S3.E1.4 - Analyzes opportunities for participating in physical activity outside physical education class. • S3.E3.4 - Identifies the components of health-related fitness.5 • S4.E5.4 - Exhibits etiquette and adherence to rules in a variety of physical activities. • S4.E6.4- Works safely with peers and equipment in physical activity settings. • S5.E1.4 – Examines the health benefits for participating in physical activity.
Grade 5	<ul style="list-style-type: none"> • 10.2.3.B - Identify health-related information (signs and symbols, terminology, products and services). • 10.3.3.A - Recognize safe/unsafe practices in the home, school and community. • 10.4.3.A - Identify and engage in physical activities that promote physical fitness and health. • 10.4.3.F – Recognize positive and negative interactions of small group activities (roles, cooperation/sharing, on-task participation) 	<ul style="list-style-type: none"> • S1.E7.5 - Combines balance and transferring weight in a gymnastics sequence or dance with a partner. • S2.E1.5 - Combines spatial concepts with locomotor and non-locomotor movements for small groups in gymnastics, dance and games environments. • S4.E1.5 - Engages in physical activity with responsible interpersonal behavior (e.g., peer to peer, student to teacher, student to referee). • S4.E6.5 - Applies safety principles with age appropriate physical activities. • S5.E1.5 - Compares the health benefits of participating in selected physical activities.

1 Pennsylvania Department of Education, *Standards Aligned System*. <https://www.pdesas.org/standard/search/>

2 SHAPE America, *Grade Level Outcomes for K-12 Physical Education*. <https://www.shapeamerica.org/uploads/pdfs/2017/Grade-Level-Outcomes-for-K-12-Physical-Education.pdf>