# Why Should I Wear a Helmet?

LESSON PLAN OVERVIEW

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

SUGGESTED TIME one class period

SETTING auditorium classroom gymnasium outside

LEARNING STYLE ACCESS auditory kinesthetic visual

### **OVERVIEW**

Cyclists will experience a simulation of brain damage. Cyclists will understand how a helmet protects fragile skulls.

### **MATERIALS**

Pens or pencils, Student workbook or copies of Do You Wear a Bike Helmet questionnaire (page B2-5), Hand-held mirror for each student, Student workbook or copies of mirror exercises

### **VOCABULARY**

brain damage, perception, disability

### MODIFICATIONS FOR CHILDREN WITH DISABILITIES

Printouts for students to have in front of them.

### MODIFICATIONS FOR USE IN LOW INCOME SCHOOLS

Bring your own supplies and mirrors.

### **IMPRESSIONS**

A very unique approach to teaching the importance of helmets and attempting to understand brain damage.

### SOURCE

Bike New York



#### **OBJECTIVES**

- Cyclists will experience what brain damage is like.
- Cyclists will understand how a helmet protects fragile skulls.

TEACHER'S NOTE: Students may offer many reasons for not wearing a helmet while cycling. Excuses often reflect fears about their appearance ("Helmets look geeky," "Helmets are for babies," "They mess up my hair," "No one on my block wears a helmet"), as well as the belief that they will never have an accident ("I know how to ride a bike," "If I'm about to crash into a car, I'll just jump out of the way"). The statistics do not support these arguments. Some 83% of all bike crashes do not involve a motor vehicle according to the League of American Bicyclists, and a New York City Department of Health study showed that 97% of cyclists who had fatal crashes were not wearing a helmet.

Teaching about helmets helps students develop a less self-conscious and more positive, practical attitude toward wearing them. It's important to treat helmets as part of the sport, and to compare cycling to other sports where the use of helmets and other safety gear is normal and expected.



If students have shown resistance to wearing a helmet, the following activities will reinforce the importance of doing so.

**FUN FACT:** The one-minute mile was a goal that cyclists had been inching toward when **Charles Murphy**, with the help of the Long Island Railroad, achieved it on June 30, 1899.

Murphy, a professional racing cyclist, had been bragging that no train could outpace a cyclist as long as the bike was equipped with a high-enough gear to sustain a speed of 60 mph. But Murphy had a trick up his sleeve: he knew that if he could stay right behind the train, it would pull him along in a pocket of calm air. Cyclists today call this "drafting."

A public relations official for the Long Island Railroad saw an opportunity to prove to the public that the railroad wasn't as slow as everyone believed. The railroad constructed a special wooden track on a stretch between Farmingdale and Babylon, and after weeks of training, the sprint was on. Murphy drafted closely behind the train, even catching up to it and striking the rear car six times. Dust, cinders, and gravel were flying into his face. It was a very dangerous feat, and at the end, he was nearly killed when he almost ran out of wooden track between the rails. People on the rear car grabbed Murphy and pulled him aboard.

He had done it, covering one mile in 57.8 seconds, which earned him the nickname "Mile-a-Minute Murphy." Murphy later became a New York City police officer.





### **ACTIVITY A: DO YOU WEAR A HELMET?**

### **Necessary Resources**

- Pens or pencils
- Student workbook or copies of Do You Wear a Bike Helmet questionnaire (page B2-5)

#### Instructions

Have the students fill out the Do You Wear a Bike Helmet questionnaire. To encourage honest answers, tell them they should not write their names on it. Collect the questionnaires and study the types of answers. Discuss the responses and counter-responses with the students.

Typical responses Helmets mess up my hair.	Ask students for possible solutions or counter-responses Carry a comb or brush to use after you take off your helmet.	
Helmets look stupid.	Most passersby won't know you and won't care that you're wearing a helmet.	
	Get a helmet that you like and make sure it's adjusted properly on your head.	
	Show students pictures of cyclists with head or face injuries resulting from bike crashes while not wearing a helmet.	
	Do the "brain damage" exercise below. (Activity B)	
	Your family and friends won't think you look stupid for trying to protect yourself and be safe.	
I'm a good cyclist and don't need a helmet.	All competitive bike events require participants to wear helmets. Even professional racers must use helmets.	
I'll just ride on the sidewalk, not in the street.	83% of all bike accidents don't involve a collision with a motor vehicle. (Source: League of American Bicyclists)	
No one in my neighborhood wears a helmet.	Discuss peer pressure. Making the same mistake everyone else is making will not prevent a head injury.	
It won't happen to me.	Discuss students' dreams for their future. How might a head injury prevent them from reaching those goals?  Have students read about people who were saved by their helmets (www.helmets.org/crashes.htm) and people who were not wearing helmets when they crashed (www.helmets.org/crashmor.htm).	



# 2. Why Should I Wear a Helmet?

### **ACTIVITY B: BRAIN DAMAGE EXERCISE**

### **Necessary Resources**

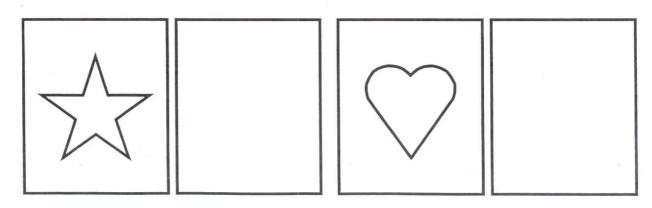
- Hand-held mirror for each student
- Pencils or pens
- Student workbook or copies of mirror exercises, below

### **Instructions**

Ask students what they think having brain damage is like. Have them perform the mirror exercises below. These exercises approximate the difficulties someone with brain damage might have performing even simple tasks.

	king only at the mirro reflection of the paper	in the box below. I	Oo not look at the	paper, only
1				

Looking only at the mirror, recreate the two shapes.



BIKE DRIVER'S ED 

BIKE NEW YORK



### **ACTIVITY C: WHAT DIFFERENCE DOES A HELMET MAKE?**

## **Necessary Resources**

- An egg for each student
- Styrofoam cups and paper napkins for half the students
- Small sandwich bags for half the students
- Newspapers

### Instructions

- Distribute eggs and newspapers to all students. Have them place the newspapers on the floor in front of
- Give cups and napkins to half the students. Ask them to wrap the napkin around their egg and place it inside
- Have the other students place their egg in a sandwich bag, seal it.
- Have both groups drop their eggs onto the newspaper. Compare the results. Explain that bike helmets are made of the same material as the Styrofoam cups, although stronger and more compressed.
- Alternative drop test: Use a bike helmet with a melon strapped into it, and a helmetless melon.



# 2. Why Should I Wear a Helmet?

### Do You Wear a Bike Helmet?

1. Do you own a bike helmet? Yes No

2. Do you wear a bike helmet every time you ride? Yes No

If the answer to 1 or 2 is no, please answer 3.

3. List all the reasons you don't wear a bike helmet in the space below.

### Do You Wear a Bike Helmet?

1. Do you own a bike helmet? Yes No

2. Do you wear a bike helmet every time you ride? Yes No

If the answer to 1 or 2 is no, please answer 3.

3. List all the reasons you don't wear a bike helmet in the space below.