

# ABC BICYCLE SAFETY CHECK & HELMET CHECK

## LESSON PLAN – Grades 4 & 5

### **PURPOSE:**

To teach students how to check their bikes for safety, to remind them of the importance of wearing bike helmets, and to re-teach how to wear helmets correctly.

### **OBJECTIVE:**

Students will learn how to check their bikes and make sure their helmets are on properly. Students will understand why checking their bikes and wearing helmets are important. They will know the quick bike safety refresher: **ABC, Eyes, Ears and Mouth**. They also will practice checking tire pressure by using a pressure gauge.

### **INTRODUCTION:**

Total Lesson Time: 20 minutes

#### **I. Type: Fact-based Attention Getter**

Helmets can prevent up to 84 per cent of cyclists' brain injuries,<sup>1</sup> but they have to be worn and fitted properly to work. Education and promotion can increase helmet use and decrease brain injury.<sup>2</sup> In addition to protecting your brain with a helmet, you also can check your bike before you ride to help to prevent crashes.

Today's lesson is a refresher on safety precautions for you and your bicycle.

#### **II. Establish Credibility:**

How many of you ever have fallen off a bike – a friend's bike or your own? How many of you ever have fallen anywhere and felt like you were shaken all over? Your head felt "funny?" When you fall, you risk hurting your head and your brain. Why do we want to protect our brains? [Help us walk, talk, play, move, eat, do everything, etc.]

#### **III. Preview Main Points:**

Today, we will talk about how to do a quick safety check on your bike before riding and how to make sure that your bike helmet is on your head correctly so that you don't hurt your brain.

---

<sup>1</sup> Jeffrey J. Sacks, MD, MPH; Patricia Holmgreen, MS; Suzanne M. Smith, MD; Daniel M. Sosin, MD *Bicycle-Associated Head Injuries and Deaths in the United States From 1984 Through 1988 How Many Are Preventable?* JAMA. 1991;266(21):3016-3018.

<sup>2</sup> Rivara FP, Thompson DC, Thompson RS, Rogers LW, Alexander B, Felix D, Bergman AB. *The Seattle Children's Bicycle Helmet Campaign: Changes in Helmet Use and Head Injury Admissions* Pediatrics, Apr 1994; 93: 567 - 569.

## **PRESENTATION:**

**Type:** Lecture + Discussion + Activity

**Materials:** A bicycle helmet  
Head covers for trying on helmets  
A bike pump  
An air pressure gauge for a bike tire  
A bicycle [ask one of the students to bring one]

### **Outline:**

#### **1<sup>st</sup> Main Point: ABC Bicycle Check:**

An ABC check is a quick once over that you give your bike before riding, even in the neighborhood. Doing an ABC check every time you ride lets you know your bike is good to go.

**A is for AIR.** Check to make sure your tires are fully pumped up. A tire low on air is more likely to get a flat which could cause a crash. Tires without enough air also make it hard to pedal. Have your parent or guardian push down on your tires. If they are able to make a dent in the tire, it is time to pump it up. Do not over pump them; the side of the tires tells the best pressure [measured in psi – pressure per square inch.] Check the condition of your tires. If they are worn or cracked, it may be time to replace them.

**B is for BRAKES.** Make sure your brakes are working. You do not want to find your brakes aren't going to stop you when you are cruising down a hill. If you have hand breaks, make sure the brake lever doesn't touch the handle bar when you squeeze it. Squeeze your brakes one at a time while trying to push your bike forward. When you squeeze the brake on your front wheel and push on your handle bars, the back tire will come up off the ground. When you squeeze the brake on your back wheel and push your bike forward, your bike will move but your tire will not. If you have coaster breaks, the next step is key!

**C is for CHAIN.** Look over your chain and make sure it is not too dirty, rusty or broken. If your chain is too loose it is more likely to fall off. If you have coaster breaks (back pedal brakes) and your chain falls off or breaks, your brakes will not work! Turn your pedals and make sure your chain runs smoothly.

#### **Are there any questions about the A,B,C Bicycle Check?**

**Transition:** After we've checked our bikes to make sure they're ready to go, we have to get ourselves ready to go! ALWAYS WEAR YOUR HELMETS – EVERYWHERE! Helmets keep our brains safe. We need our brains to walk, ride, talk, play, learn move – everything, so we need to be very careful.

**Check your helmet:** Your helmet should be straight on your forehead- not tilted back and not tilted down to your eyes. You should be able to just see the rim of you helmet when you look up. The side straps should come down just below your ear lobes in a V shape. The chin strap should be buckled under your chin. You should be able to get one or two fingers between you strap and your chin. Remember eyes, ears and mouth.

1. **EYES-** you should be able to see the rim of your helmet.
2. **EARS-** your straps should come to a V just below your ears.
3. **MOUTH-** you should be able to feel your chin strap when you open your mouth.

**Transition:**

**Suggested Demonstration:** Bring in a bike for a hands-on ABC Bicycle Check. Point to and name different parts of the bicycle. Have students feel what proper tire pressure feels like. Show students where to find the recommended tire pressure on the sidewall of the tire. Different tires need different air pressure. Usually the fatter the tire, the lower the pressure per square inch (PSI) or air pressure.

Also, have a student model the correct way to wear a helmet.

**Student Activities:** Let students pump up a tire. Use an air pressure gauge to see how they do.

Also, have students fit helmets on each other [use head covers.]

**Any Questions?**

**Transition/CONCLUSION:** Today, we've reviewed how to check our bikes for safety, how to wear our helmets to protect our brains, and how to use a new instrument – a tire gauge.

Compiled by Rebecca Gomez

Minneapolis Bicycle Ambassador, Department of Public Works

Edited and Formatted by Lynne Krehbiel-Breneman J.D., M.A., Consultant  
to MPS Safe Routes to School, aided by Robert Anderson, MPS  
Transportation Department Academy Administrator; Summer, 2010

---

**This curriculum has been made possible by funding from the Minnesota Department of Health's Statewide Health Improvement Program.**

The Statewide Health Improvement Program (SHIP) is a nation-leading effort to reduce the incidence of chronic disease, such as obesity, diabetes and heart disease through prevention. It focuses on creating sustainable, systemic changes that make it easier for individuals to make healthy choices in their daily lives. SHIP is working in communities across Minnesota using a health promotion and prevention approach to help all Minnesotans lead healthier lives. The Minneapolis Department of Health and Family Support is a SHIP grantee and has subcontracted with the Minneapolis Public Schools (MPS) to implement health interventions in the areas of Active Recess/Playground management, Safe Routes to School, Physical Education and Nutrition.



MINNEAPOLIS  
PUBLIC SCHOOLS  
Urban Education. Global Citizens.