Grade 3 Sample Lesson Plan:
Unit 2 – Wear the Gear!

SOLs

- 3.1.L Recognize safe and harmful behaviors
- 3.2.H Explain appropriate protective gear when engaged in physical activities such as cycling, rollerblading, skateboarding, and water sports.

Objectives/Goals

- Students will understand the importance of helmets, PFDs, and other safety behaviors – to protect the brain especially.

Materials

- KidsHealth.org Video: Concussion
- KidsHealth.org Bicycle Safety Lesson
- NHTSA Bicycle Safety Activity Kit
- USDOTFHWA Bicycle Safer Journey Video
- Water Safety Video: Danger Rangers Everybody Be Water Safe
- Water Safety Video: Modeling Water Safety

Procedure

1. Play and discuss the brief KidsHealth.org Concussion Video or other video clips that remind students how fragile the brain is and that protective gear protect the brain from falls and injuries during activity.
2. Play the USDOTFHWA Bicycle Safer Journey video that explains the importance of bicycle helmets and/or conduct the lessons in the KidsHealth.org Bicycle Safety Teacher’s Guide including worksheets. Remind students that the same information applies to other wheeled sports such as rollerblading, skateboarding, using scooters.
3. Ask students the rules they remember and write them on the board. Add rules that they do not mention.
4. Discuss how water safety rules are also intended to protect the brain (e.g., slipping and hitting your head pool side, diving in and hurting your head and spinal cord, or PFDs to prevent drowning which deprives the brain of oxygen).

5. Play a water safety video (e.g., one or both of the 2 water safety videos: *Danger Rangers Everybody Be Water Safe*, and *Modeling Water Safety*). Ask students what rules they remember and write them on the board. Add rules that they do not mention.

6. For an extended lesson on bicycle safety, conduct lessons (e.g., *Always Wear a Helmet*, *Preparing to Ride Safely*, *Bicycle Field Trip*) from the attached *Maryland Pedestrian and Bicycle Safety Education Program* (two of these are excerpted below) or have students complete *NHTSA Bicycle Safety Activity Kit* activities.

**Assessment Idea**
- Student participation in discussions
- Student completion of activity worksheets in *NHTSA Bicycle Safety Activity Kit*
- Students are able to identify safe and harmful behaviors (e.g. safe behaviors of wearing helmet, PDF, adult supervision)

**References**
- KidsHealth.org Video: *Concussion*
  [https://www.youtube.com/watch?v=FkLT_aZ2u5k](https://www.youtube.com/watch?v=FkLT_aZ2u5k)
- KidsHealth.org *Bicycle Safety Lesson*
  [https://classroom.kidshealth.org/classroom/3to5/personal/safety/bike_safety.pdf](https://classroom.kidshealth.org/classroom/3to5/personal/safety/bike_safety.pdf)
- **NHTSA Bicycle Safety Activity Kit**
- USDOTFHWA *Bicycle Safer Journey Video*
  [https://www.youtube.com/watch?v=dkoVxBnnGko&list=PL5_sm9g9d4T3BymM08D8FcNn9PyuynSoG](https://www.youtube.com/watch?v=dkoVxBnnGko&list=PL5_sm9g9d4T3BymM08D8FcNn9PyuynSoG)
- Water Safety Video: *Danger Rangers Everybody Be Water Safe*
  [https://www.youtube.com/watch?v=6AoOXxVOPUw](https://www.youtube.com/watch?v=6AoOXxVOPUw)
- Water Safety Video: *Modeling Water Safety*
  [https://www.youtube.com/watch?v=v3cID86hw0k](https://www.youtube.com/watch?v=v3cID86hw0k)
- Maryland Pedestrian and Bicycle Safety Education Program K-5

**Handout**
The next page includes a handout for the lesson. The handout is designed for print use only.
Bike Lesson 1 - 3rd Grade

Always Wear Your Helmet

Time: 35 minutes

Objectives: To understand the importance of always wearing a helmet when biking. Demonstrate how to properly fit a helmet (be able to check the five steps). Learn how to care for and replace a helmet. Understand that adults use helmets in a variety of occupations and activities.

Maryland Learner Outcomes:
- Health, Health Behaviors (K-3): Identify appropriate and responsible health behaviors.
- Health, Health Behaviors (K-3): Describe ways to avoid and reduce threatening or unsafe situations.
- Health, Health Behaviors (K-3): Identify rules that promote health.

Montgomery County Physical Education Indicators:
- Select and categorize specialized equipment used for participation in a variety of activities (3)
- Identify appropriate equipment to be used for physical activity settings. (3)
- Apply safe use of equipment. (3)
- Respect and accept peer assistance. (3)

Materials: TV, VCR, “Ride Smart–It’s Time to Start” Video (provided with program materials); “Five Steps for Fitting a Helmet” Handout 3.1.1 (provided after the lesson outline); Helmet Fit Checklist 3.1.2.; 2 eggs, Styrofoam pieces, 1 box, 1 piece of aluminum foil (or paper if aluminum is not available), Paper or drawing material, 2-5 adult volunteers to assist with helmet fit (it only takes a few minutes to train the volunteers). Note that the following items will be available in the supply trailer: Helmet for each student (small, medium, and large sizes are provided). Surgical cap for each student. If the trailer is not available, it may be possible to get a separate bucket of helmets through the program.

Suggested teaching venue:
Physical education (great rainy day activity) bicycle unit, home classroom during general health or science units, after school program, or club or other community group meeting.

Plan Ahead: One week before outdoor bike activities, recruit parent volunteers to assist with helmet fit activity or contact local Safe Kids Coordinator or Community Traffic Safety Program Coordinator for assistance. You can also contact the League of American Bicyclists for the names of local League Certified Instructors who might be available to assist. Make copies, overheads, or a poster of “Five Steps for Fitting a Helmet” Handout 3.1.1 and make copies of Helmet Fit Checklist 3.1.2. Arrange to have helmets in the classroom.

Lesson progression:
- Introduction
- Instruction
- Activity
- Conclusion
Bike Lesson 1 – 3rd Grade

Always Wear Your Helmet

Introduction (10 minutes)
1. Explain: Today we will begin to learn about bicycle safety. Learning to ride safely will help you stay healthy and allow you to visit fun places. We will start learning how to be safe cyclists by watching a 10-minute video.
2. Show “Ride Smart - It’s Time to Start” video.

Instruction (10 minutes)
1. Ask: Why should you ALWAYS wear a helmet when riding your bicycle? (To keep you safe, to protect your head and face. You may fall and hit your head even if you are riding in your driveway or away from cars on a bicycle path.)

Egg Drop Demonstration
Note: You may want to do this demonstration separately during a lunch period.
1. Explain that an egg simulates the human brain inside the skull (important material within a fragile shell).
2. Cover a space on the floor with aluminum foil or paper. Ask a student how far from the floor he/she can drop the egg without breaking it. Let the student drop the egg from that distance (The egg will break when dropped from a height of 3”).
3. Make up a clever story about the eggs, by giving them names, such as Eggbert and Shellina. Eggbert goes bicycling without his helmet, falls, and is seriously injured (have the student drop one egg on the floor from a height of 6”). Shellina remembers her helmet. When Shellina falls, she is less likely to be injured severely (Ask another student to hold the other egg high and drop (not throw) it into a box full of styrofoam pieces. The egg should not break.)
4. Show the class a bicycle helmet. Explain that it is constructed with an inside liner of a crushable material like styrofoam. It protects your head in the same way as it protected Shellina when she fell.
5. Emphasize that the helmet is useless unless properly fitted.

Activity (20 minutes)

Proper Helmet Fit
We suggest teachers recruit parent volunteers to help fit all children. Parent volunteers must receive guidelines and practice fitting helmets on their children prior to class.

1. Pass out the “Five Steps for Fitting A Helmet” Handout 3.1.1 and/or display a poster or overhead with the steps on it.

“Make sure that your helmet is a bicycle helmet, with a CPSC, Snell, ATSM or ANSI label. If necessary, use sizing pads to get the helmet to fit the size of your head. The back of the helmet has a thicker base of protective material than the front.

Five Steps for Fitting a Helmet

1. Helmet should be level on your head.
2. The front and back straps should be equally tight and meet at a “V” just below your ear.
3. You should have about 2 fingers of space between your eyebrows and the bottom of your helmet.
4. The chin strap should be tight when you open your mouth. There should be space for one finger between the chin strap and chin when your mouth is closed.
5. A perfectly fit helmet will move the skin on your forehead when moved back and forth.

Note to Teacher: The CPSC is the US Consumer Product Safety Commission (CPSC). The CPSC label for US bicycle helmets “ensures that bicycle helmets provide excellent head protection and that the chin straps are strong enough to keep a helmet on the head and in place during a fall or collision.” You may also find a label indicating it meets one of the following voluntary bicycle helmet safety standards: ASTM, ANSI, or Snell. If a helmet does not have one of these labels, don’t buy it.

2. Pass out surgical caps to the students. The students must wear a surgical cap over their head before wearing their helmet.
3. Demonstrate to the students how to put on a helmet by going through the 5 criteria on yourself. If you have parent volunteers, they can also demonstrate.

4. Have students put on their helmets, following the criteria listed on the handout.

5. Go around to each of the students (with the help of the parent volunteers) to make sure that the helmets are fitted properly.

6. Students should also check each other for proper fit. They can be divided into Groups A, B, C, and D. Group A and Group B can check each other while Group C and Group D check each other. The groups should check all five steps for fitting a helmet and use Helmet Checklist 3.1.2.

7. How should you store and replace your bicycle helmet? (Helmets are fragile and lose their protective value when thrown, hit, or damaged. Any damage that occurs will make the helmet not as safe as it should be. Helmets should always be removed and set down gently and stored safely after riding. They should be replaced every one to two years—form the habit of getting a new one every spring or birthday. If a helmet is banged hard or is in a crash, it should be replaced immediately.)

Ask students the following questions.

1. Why are bicycle helmets different from motorcycle helmets? (Motorcycle helmets are too hot for bicyclists: no airflow to cool them.)

2. Why are bicycle helmets different from baseball helmets? (Not all that different—hard shell, soft interior lining. Purpose is the same: Protect head from impact with harder object.)

3. When should bike helmets be replaced? (When a helmet is hit, the foam is compressed. If your helmet gets in a crash or is banged hard—get a new one! Discuss effect of sweat and rain on foam—breaks down material—gives too easily in event of impact.)

4. Discuss general wear and tear. (Helmets need to be replaced regularly because of the countless times they are tossed on the ground, tripped over, stepped on, etc.)

5. Discuss the effect of a student’s growth on helmet fit. (When a student’s head grows, the helmet becomes too tight and tends to sit on the back of their head.)

6. How often should you replace your bicycle helmet? (Every one to two years. Students could make sure that they examine the helmet for condition and fit every spring or every birthday and buy a new helmet if needed.)

Optional Exercise:
Have children draw themselves on their bikes, wearing properly fitted helmets. This can either be arranged with the art teacher as an art class activity or can be used as a homework assignment.

Conclusion (2 minutes)
1. Review criteria for proper helmet fit.

2. Emphasize that the students will be able to get on the bicycles and practice riding in the next lesson sooner if they put on their helmets quickly and correctly.
Five Steps for Fitting a Helmet 3.1.1

*Make sure that your helmet is a bicycle helmet, with a CPSC, Snell, ATSM or ANSI label. If necessary, use sizing pads to get the helmet to fit the size of your head. The back of the helmet has a thicker base of protective material than the front. If a helmet doesn’t have one of these labels, don’t buy it.

How do I make sure that my helmet is on correctly?

1. The helmet should be level on your head.

2. The front and back straps should be equally tight and meet at a “V” just below your ear.

3. You should have about 2 fingers of space between your eyebrows and the bottom of your helmet.

4. The chin strap should be tight when you open your mouth. There should be space for one finger between the chin strap and chin when your mouth is closed.

5. A perfectly fit helmet will move the skin on your forehead when moved back and forth.
Helmet Fit Checklist 3.1.2.

*Each student checker fills out this form for the student who is fitting his or her helmet.

Name of Student with Helmet _________________________________________________

Name of Student Checker ___________________________________________________

Classroom Teacher __________________________________________________________

____ The helmet is level on your head.

____ The front and back straps are equally tight and meet at a “V” just below your ear.

____ You have about 2 fingers of space between your eyebrows and the bottom of your helmet.

____ The chin strap is tight when you open your mouth. There is space for one finger between the chin strap and chin when your mouth is closed.

____ The helmet moves the skin on your forehead when moved back and forth.

Helmet Size ______ (write this down so that you know what size to get for the next lesson)
Handout 3.2.2

“YOU Check”

1. Wear a properly fitted helmet.
2. Wear brightly colored clothing.
3. Make sure that you do not have any dangling shoe laces, pant legs, etc.
4. Do not wear headphones or anything else that could block sound or be distracting while bicycling.
5. Don’t carry anybody else on your bike.