SKILL-BASED ACTIVITY
Bicycle Helmet Fit

Timeframe

Beginner: 20 minutes
Intermediate: 15 minutes
Advanced: 15 minutes

Objective

At the conclusion of the activity, the student will be able to:

1. Demonstrate exceptional or reliable bicycle helmet fit as measured by the helmet fit rubric. (Psychomotor)

National Standards

Standard 2
Standard 4

Equipment

- Helmets
- Head barriers
- Pencils
- *Bicycle Helmet Fit* worksheet

Teacher Overview

This activity teaches students how to properly fit a bicycle helmet. This is a critical activity to help prevent brain injuries anytime students will be riding bicycles including during class time.

Preparation

1. Send home information about the bicycle unit of instruction several days in advance of the beginning of the unit to encourage students to arrive with bicycle helmet "friendly" hairstyles.

2. If helmets have not yet been ordered, request that they be color-coded for each size. Example: Red helmets are small, silver helmets are medium and blue helmets are large. If helmets are already present and are not color-coded, organize the helmets by numbering them from smallest to largest. Record the range of each size. Example: Small helmets are numbered 1-15; medium helmets are numbered 16-28.

3. Provide head barriers if using a classroom set of helmets that are shared among students. Proper head barriers could be bandannas, bouffant caps, painter's caps, book socks, etc. Do not use plastic head barriers. Plastic materials do not allow for air circulation, which can cause overheating.

4. Determine the adjustment mechanism of the helmets. If only using helmet pads to adjust the helmet fit, ensure there are ample pads of various sizes for students to use. If helmets have a universal fit mechanism, become familiar with how to adjust the mechanism.

   Make appropriate number of copies of *Bicycle Helmet Fit worksheet*.

Directions

1. Introduce this activity using the following prompt:

   Today, we will be learning how to properly fit a bicycle helmet. This is one of the most important skills you will learn. In order for a helmet to protect the head, it has to be properly fitted. A helmet won't do any good in a crash if the straps are loose or the helmet is sitting too far back on your head. A bicycle helmet is easy to fit when you know the steps to take. You should always check the fit of your helmet before each bicycle ride.

2. Use the following sample questions to prompt students' thinking about the content in this activity.

Q: What is the correct way to wear a helmet?
A: Any of the following:

- Level on the head, approximately 2 finger widths above the eyebrow
- Straps snug and in a "V" under each ear
- The chin strap snug allowing only about 2 fingers between the chin and the chin strap
- The helmet should not easily move around on the head
- Other responses may be accepted

Q: What are some different, unsafe ways you have seen people wear helmets?
A: All responses are acceptable

Q: Why doesn't a helmet protect the head when it's worn incorrectly?
A: Any of the following:

- Crash forces may be directed to the brain as opposed to the helmet
- Helmet could fall off
- Other responses may be accepted

3. Identify the following parts of the bicycle helmet for students: front of helmet, back of helmet, shell, pads, foam, universal fit mechanism, straps, adjuster, chin buckle and air vents.

4. Discuss with students that there is a right way and a wrong way to wear a helmet. If the helmet is worn incorrectly, it cannot effectively protect the brain from injury. The most common mistakes made are:
   - Not wearing a helmet at all
   - Helmet too far off the forehead
   - Helmet straps not buckled
   - Helmet not fitted properly (example: straps too loose, straps twisted)

Common Mistakes With Helmet Use

- Not wearing a helmet at all
- Helmet too far off the forehead
- Helmet straps not buckled
- Helmet not fitted properly
  (example: straps too loose, straps twisted)

5. Use the following steps to properly fit a bicycle helmet. Go over each step with students demonstrating what will be required of students before they complete the activity themselves. Verifying that the helmet is fitted properly according to these steps will be referred to as the Bicycle Helmet Check from this point forward. This should be performed at the beginning of any lesson that involves on-the-bike activity.

   - Choose a helmet that fits snugly on the head. If the helmet is too big or too small, try another helmet. Newer helmets have a universal-fit mechanism in the back of the helmet, which can be used to make adjustments to fit.
   - Sit helmet level on your head approximately two finger widths above the eyebrow.
   - Slide each adjuster so the straps form a "V" under each ear. The adjuster should be positioned under and slightly in front of the ear lobe.
   - Adjust the chin strap so that approximately two fingers fit between the chin and strap when buckled.
   - Explain the 2-2-2 rule to students to ensure safety:
     - 2 fingers width between eyebrow and helmet
     - 2 straps make the "V" under and slightly in front of each ear lobe
     - 2 fingers between the chin and strap
   - Helmets should not "rock-n-roll."
     - If the helmet rocks back more than two fingers above the eyebrows, unbuckle, shorten the front strap, buckle and test again
     - If the helmet rocks forward over eyes, unbuckle, shorten the back strap, buckle and test again.

6. Pair students with partners or put into small groups to complete the helmet fit activity using the *Bicycle Helmet Fit* worksheet.

See: Bicycle Helmet Fit Worksheet. Page 45.

7. One student should complete the activity while the other completes *the Bicycle Helmet Fit* worksheet.

8. The peer assessor should ask each question on the *Bicycle Helmet Fit* worksheet and observe the student completing the activity and fill in the worksheet.
   - Insert a **YES** on the worksheet if the activity is completed correctly.
   - Insert a **NO** on the worksheet if the activity is completed incorrectly.
   - If the activity is completed incorrectly, the peer assessor should identify what was incorrect and provide feedback to his peer about how to correctly perform the activity. The student should repeat the activity until it is completed correctly. If having problems, students should seek guidance from the teacher.

9. Encourage peers to assist each other in ensuring the helmet is the correct size and fitted properly.

Refer to optional take-home handouts.

10. Prepare and provide NHTSA handout(s) for take home (optional). Make copies from the parent section or print directly from the following links:
www.nhtsa.gov/staticfiles/nti/bicycles/pdf/8010-wear_a_helmet.pdf
www.nhtsa.gov/staticfiles/nti/bicycles/pdf/8019_Fitting-A-Helmet.pdf

Assessment

1. Assess helmet fit of each student using the following rubric:

PERFORMANCE RUBRIC: HELMET FIT

Exceptional	Reliable	Inconsistent	Struggling/ Survival
Student is able to fit helmet correctly on his own, demonstrating the following characteristics of helmet fit (all must be correct): Is snug on head (no rock-n-roll side to side); Sits level on head; Straps form a V under ears; Strap is no more than two finger widths from chin; Does not rock-n-roll on head (forward or backward).	Student can fit helmet correctly, possibly with a little help from a teacher/aide, demonstrating the following characteristics of helmet fit (all must be correct): Is snug on head (no rock-n-roll side to side); Sits level on head; Straps form a V under ears; Strap is no more than two finger widths from chin; Does not rock-n-roll on head (forward or backward).	Student has difficulty fitting helmet correctly, requiring help from teacher/ aide, and more than one of the following are not completed correctly: Is snug on head (no rock-n-roll side to side); Sits level on head; Straps form a V under; Strap is no more than two finger widths from chin; Does not rock-n-roll on head (forward or backward).	Student has difficulty fitting helmet correctly, needing a significant amount of help in the process. The student cannot fit a helmet on his/her own.

2. Assess the performance of social behavior for each student using the following rubric.

PERFORMANCE RUBRIC: SOCIAL BEHAVIOR

Exceptional	Reliable	Inconsistent	Struggling/ Survival
Student is respectful toward classmates, teacher, and equipment; Student receives and uses feedback from teacher and peers in a courteous manner; Student participates fully, without teacher prompting or supervision; Student is able to work cooperatively and productively with classmates, including during peer assessments; Student perseveres, even through difficult skills/activities, and maintains a positive attitude; Student is committed to learning; Student is committed to engaging in cycling in a safe manner, and keeping all classmates safe during the cycling unit.	Student is respectful toward classmates, teacher, and equipment; Student receives and uses feedback from teacher and peers in a courteous manner; Student participates fully, but needs some teacher prompting and/or supervision; Participates in most class activities at an appropriate and productive level; Student is most often able to work cooperatively and productively with classmates, including during peer assessments; Student is able to work hard and not get frustrated with setbacks; Student is committed to learning; Student is committed to engaging in cycling in a safe manner, and keeping all classmates safe during the cycling unit.	Student may not always be respectful toward classmates, teacher, and equipment; Student may listen to feedback from teacher or peers, but may not attempt and/or have difficulty applying it; Student requires some teacher supervision, but does exhibit some self-control at times; Student demonstrates the ability to work cooperatively and productively with classmates, but may need teacher direction or supervision; Student participates in most class activities; Student is willing to try, but may get frustrated with setbacks, and pout and/or verbalize frustration; Student may fluctuate between riding safely and unsafely at times.	Student may struggle with being respectful toward classmates, teacher, and equipment and/or show anger and/or blame others for cycling mishaps; Student does not listen to feedback from teacher or peers, and does not attempt to apply it; Student requires ongoing supervision and does not ride safely; Student may be unprepared and show very little interest in learning or the activity; Student becomes frustrated easily and may quit participating.

Safety

None

Differentiating Instruction

Adapted

- Depending on the student's skill level, a teacher or aide may have to complete this activity for the student.
- At no time should a student be allowed to ride without a helmet. This may mean additional time should be allotted to fit students who may have additional challenges.

Best Practices

1. The teacher should perform a quick visual inspection of proper helmet fit at the beginning of every class when on-the-bike activities are involved.
2. Use peers/partners to practice, inspect and correct helmet fit for each other. In addition to this being a way to reinforce proper fit, it will also make the most efficient use of class time. This should not replace teacher assessment.
3. Assign students a numbered helmet or helmet color, once proper fit is determined. This will be the helmet number or color of helmet that the student will use in every class. Log this number or color on the student roll.
4. Teach bicycle helmet instruction in the health classroom, if possible, to allow more time for on-the-bike instruction in the physical education classroom/gym.
5. Purchase and use bicycle helmets with the universal fit mechanisms, as opposed to helmets with only straps, if possible. They are easier for students to adjust and less likely to loosen, therefore saving class time and ensuring the helmet stays properly fit.
6. If students are sharing helmets, use head barriers to prevent head lice.
7. Ensure safety precautions if students opt to use their own helmets:
   - Check for the presence of CPSC label
   - Visually assess for the presence of obvious damage to the helmet
   - Request students to verify that helmets have not been associated with a previous crash. Teachers should have extra helmets on hand for those students who are unsure of their helmet's crash history

Diagram: Correct Helmet Fit

BICYCLE HELMET FIT WORKSHEET

Student _____ Date _____

Directions: Peer assessor should ask each question and observe the student completing the helmet fit. Place a checkmark in the **YES** column if the fit is completed correctly. Place a checkmark in the **NO** column if the helmet fit is completed incorrectly. If the activity is completed incorrectly, the peer assessor should identify what was incorrect and write down on the form what corrections need to be made. The student should repeat the helmet fit until it is completed correctly.

	Date:		**Date:**		**Date:**	
	Observation 1		**Observation 2**		**Observation 3**	
Activity	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
Does the helmet fit snugly on your head? Is there rock-n-roll side to side? *Check the universal fit mechanisms / pads inside helmet*						
Does the helmet fit level on your head? *Check for 2 finger widths between eyebrows and helmet.*						
Do the straps form a "V" on both sides of the ears (under the ear and slightly in front of the ear lobes? *Check the straps and adjuster to create a "V" on both sides.*						
Do more than two fingers fit between your chin and chinstrap? *Readjust the straps so there is no more than 2 finger widths between. This may change the angle of the "V" at the ears, so make sure to keep the "V".*						
Does your helmet rock-n-roll when you move your head forward/ backward or side to side? *Readjust the straps and possibly the internal fit mechanism, for a better fit.*						

Explain any NO checkmarks.