

Grade 4 Sample Lesson Plan: Unit 1 – Safety Protects Health

SOLs

- 4.1.B Describe the benefits of a physically active lifestyle, safe behaviors, healthy food choices and sleep.
- 4.2.I Explain the health consequences of not following safety practices (e.g., seatbelt and helmet use, home fire escape plan, swimming safety, sports safety)

Objectives/Goals

 To have students understand and explain the health consequences of unsafe practices.

Materials

- You Tube Video Clips (e.g., *Street Smart-Think First*, *KidsHealth.org Concussions, Jello Brain*).
- Printouts of CDC Street Smarz Safety Tips: -Looking Out For Yourself, Media, Gear, Physical, Roads
- Printouts of Blank *Headline News Templates*
- Markers, Imagery for Students to Create News Covers

Procedure

Step 1

- Watch the *Street Smart-Think First* Video:
 - https://www.youtube.com/watch?v=1q FUH6iIldA
- Show age appropriate images of health consequences of not wearing a helmet or seatbelt, burn and smoke injuries, swimming hazards, and concussions from sports including online video clips (e.g., *Concussions* and *Jello Brain*) and/or have an emergency provider or trauma nurse (such as those available through the National Head and Spinal Cord Injury Prevention Program network) visit the class to educate students about health consequences of preventable injury.
- Discuss health consequences of injury and/or conduct the attached *Helmet*

- Safety Egg Drop Lesson to illustrate the hazards of not wearing a helmet and the protection afforded by the brain by a helmet. Discuss how most injuries can be prevented by thinking in advance and taking safety precautions to avoid the danger, following safety rules, and wearing protective gear
- Have students review Street Smartz CDC Safety Tip Sheets on protective gear, social media, bullying, road safety, and physical safety
- Assign 5 teams of students to major injury topices (e.g., seatbelt use, helmet use, swim safety, sports safety, home fires). Create blank printouts using one of the attached *Newspaper Headline* template powerpoint and have each team come up with a newspaper headline or cover story that warns about health consequences of not following safety practices. Share these with the class.

Assessment Idea

• Are students able to explain health consequences of unsafe behaviors in the news headlines they develop?

References

- CDC Street Smartz https://www.cdc.gov/bam/safety/street.html
- CDC Brain Injury Basics http://www.cdc.gov/headsup/basics/index.html
- National Head and Spinal Cord Injury Prevention Program http://thinkfirst.org/youth
- News Headline Templates
 https://www.presentationmagazine.com/editable-powerpoint-newspapers-407.htm
- Philly Safe Routes to School <u>http://saferoutesphilly.org/wp-content/uploads/2011/09/Egg Drop.pdf</u>

Videos

- Street Smart-Think First video https://www.youtube.com/watch?v=1qFUH6jIldA
- KidsHealth.Org Concussions https://www.youtube.com/watch?v=FkLT_aZ2u5k
- Jello Brain- ShawTV Edmonton https://www.youtube.com/watch?v=BBbxCT5whN0

Handout

The next page includes a handout for the lesson. The handout is designed for print use only.

Science: Helmet Safety Egg Drop, 45 minutes

Objectives: Students will be able to:

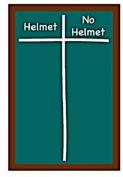
- » Discuss the reasons why people choose to wear or not to wear bicycle helmets.
- » Explain how a helmet protects the brain and discuss what kind of consequences result from a brain injury.



Activity Book Connection: "Helmet fitting", page 5

MATERIALS:

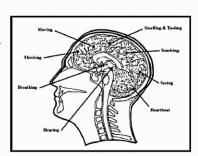
- » 2 Eggs
- » 2 zip-lock plastic bags
- » T-chart (drawing on the board is fine)
 » 1 Styrofoam cup lined with paper towel
 - » Brain diagram (see page 61 of Teacher's Guide)
- 1. T CHART (7 MINUTES): Create a t-chart like the one to the right.
- » In the first column write "Helmet" and in the second column write "No Helmet".
- » Hold a classroom discussion by asking students why it is important to wear a helmet or why they choose to wear a helmet if they do. Record those answers in column 1.
- » Ask the students what they think holds people back from wearing helmets. Record student responses in column 2.



Note: This lesson is designed to allow students to come to their own opinion that wearing a helmet is the right choice.

- 2. PEOPLE WHO LOVE WHAT THEY DO WEAR HELMETS (8 MINUTES): Ask the students, "Who do you see wearing helmets in the world?" (Common answers include athletes, firemen, astronauts, skaters, construction workers, etc.)
- » Help students make this connection: People wear helmets because they love what they do and want to keep doing it. For example, a football player could not be successful if he played without a helmet because he would get hurt and no longer be able to play!
- 3. SMALL GROUP DISCUSSION (5 MINUTES): Instruct students to discuss the following two questions. Have them choose one student who will share a few of the group's responses after 5 minutes.
 - 1. What can happen if you don't wear a helmet?
 - 2. Have you or someone you know been hurt by not wearing a helmet?

- **4. CLASS DISCUSSION (5 MINUTES):** Have one person from each group share their answers from the small group questions. Below are sample responses to what can happen when you don't wear a helmet. Use the brain diagram (page 61) to further emphasize the importance of the brain for all human functions. Examples of brain injuries include:
- » Not being able to speak
- » Not being able to see
- » Not being able to hear
- » Having frequent headaches/migraines
- » Not being able to move your arms and/or legs
- » Having seizures
- » Not being able to remember things, like your friends' names
- » Having frequent mood swings (anxiety or depression)
- » Having trouble socializing with others
- » Not being able to get your driver's license— EVER
- **5. BRAIN CHART (5 MINUTES):** Show students the brain chart. Briefly discuss how different parts of your brain control different functions in the body. If we hurt a specific part of our brain, we could lose control over another body function as well.



- **6. EGG DROP (15 MINUTES):** To demonstrate how a helmet protects our brain, complete an egg drop demonstration.
 - 1. Place two eggs in zip lock bags
 - 2. Wrap one egg in a paper towel and place it in a Styrofoam cup. The cup represents the helmet. Drop the cup from your waist straight to the floor.
 - » The egg should not break (though it may have cracks).
 - » Allow the students to make observations, but do not hold the discussion yet.
 - 3. Take the egg in the other bag and drop it to the floor. The egg will break.
 - 4. Call on students to share their conclusions about what this demonstration means: **Helmets** will protect our brains from getting hurt.
 - 5. Share with the students that helmets are made out of thick Styrofoam that protects our head.



For a more hands-on lesson, pair students up and let each pair of students drop the eggs and record their observations. Add on an additional 10–15 minutes for this procedure!

