

Personal Safety

Month: Mar.

Week #: 27

Day: c. Wed. Time: 20 - 30 min.

Protective Head Gear

Life Tree Learning Systems ©

Objectives/Aims

The students will: recognize the importance of wearing protective head gear when biking, skateboarding, etc.

Materials

cantaloupe with a face drawn on it with markers, a large Zip-Loc bag to put cantaloupe in, bicycle helmet, cement floor or sidewalk

Illustration

While a melon is not as attractive as your head, it is just as fragile. What happens if you throw a melon at a cement floor?

Background

Scientists from the U.S. Centers for Disease Control and Prevention (CDC) reviewed bicycle deaths and injury data from 1984 through 1988 and found that some 1,000 people died each year from bicycle crashes. Head injury was involved in 62 percent of those deaths. Some 558,000 people sustained bicycle-associated injuries each year, and of those, 32.5 percent or 181,000 suffered head injuries. The CDC estimated that if all bicyclists had worn helmets during the five-year



study period, one death could have been prevented every day and one head injury could have been prevented every four minutes (Sacks et al., 1991)

Group Activity

1. Ask the students, “By a show of hands, how many of you have hurt yourself while riding a bike? Skateboarding? In-line skating? Would anybody like to tell what happened when you got hurt?” After several students share, state statistic about how many children injured/killed that weren’t wearing safety equipment.

2. Hold up the cantaloupe strapped into the helmet and say, “Imagine that this melon is your head inside this helmet. What do you think will happen if I drop this helmet from four feet high onto the cement?” Accept predictions without confirming right or wrong answers. Dramatically have the students count down from ten and then drop the melon/helmet. Ask a student to tell what he observed: A: The melon did not break. Ask students why the melon didn’t break. A: The helmet absorbed the blow. Ask if there are any differences between this experiment, and a situation in which they were riding their bicycle. A: They would probably be going faster and the helmet would hit the cement with much more force. Now take the melon from inside the helmet and place it in a zip-lock bag. Following the same procedure as before and drop it on the floor. Once again, ask a student what they observed. A: The melon broke apart. (If the melon does not break apart, say that a brain encased in a skull will slam forward against the bone causing internal injuries. Now throw the melon against the floor saying that you are replicating the velocity associated with riding a bike). Ask the students what they think would happen to their head in a similar situation or

Group Activity (continued)

accident. A: They would suffer severe head trauma, perhaps even death.

Conclusion

A melon, your brain. Your brain is, arguably, the most important organ in your body. It controls your senses and your motions. It is the house of your emotions and intellect. In short, it is all that is you. So use your 'melon' and protect it.



**While a melon is not as attractive as your head, it is just as fragile.
What happens if you throw a melon at a cement floor?**