Activity #1

Stop and Search

(adapted from the Florida Traffic and Bicycle Safety Education Program © 2001)

Grades: K and 1st

Computer Program: This activity corresponds to Walk Smart -- 15 minutes

Discussion Topics: 7 minutes

Activity: Mid-block crossing: (Stop and Search) – 20 minutes

Objective: For children to understand why it's important to stop at the edge (curb or driveway) before crossing a street and look left, right, and left again.

Materials: Masking tape, field markers or rope

Cassette Player

Tape with fun music (If it is not viable to play music outside so that it will be heard, consider using a whistle to start and stop the activity.)

Background Information: This is a great activity to begin teaching children left and right directions. More importantly, it introduces them to one of the basic components of traffic safety: stopping and searching. Children must be taught to stop and think before venturing out in traffic – this means looking and identifying traffic, not just shaking their heads left-right-left.

Discussion Topics & Questions:

After the children have seen the Walk Smart Program discuss the following:

- Children under the age of 10 should never try to cross a street unless they have their parent's permission and are with someone who is older than 10.
- When you look left, right, left, what are you looking for?
- Why do you think you look left, right and then left again?
- Why do you think you keep looking the whole time you cross the street?

Preparation for activity: Use field marker, or rope in a straight line, stretching about 30 feet to simulate the edge of the street.

Activity Description:

Stop and Search

Use the "Pinky Partners" activity to identify your partner for each round. You start each round by playing the music or blowing your whistle. In each round the children move about alone in a style you decide (elephant walk, crab walk, walk

backwards, spin, etc...), until the music stops (or you blow the whistle again). Each time the music stops, the children find a new partner with whom they link a different body part that you identify (pinky, knee, elbow, shoulder, foot, forehead, etc...). Each time they find a new partner, you call out, "Go to the edge and stop." The new pair moves in the same style as they were moving to the crossing line and stop. Once all the children are lined up at the "street":

- a. Say aloud, "Look left," and call out something they will see to their left.
- b. Say aloud, "Look right, " and call out something they will see to their right.
- c. Say aloud, "Look left again, and keep on looking as you walk across."

Ask the children to return to a space behind the line and repeat this activity several times.

Activity #2

Stop, Search and Look Back

(adapted from the Florida Traffic and Bicycle Safety Education Program)

Grades: 2nd and 3rd

Computer Program: This activity corresponds to Bike Smart – Lesson 2 -- "How

Cars Move" -- 15 minutes

Discussion Topics: 7 minutes

Activity: Mid-block and Intersection crossing: (Stop, Search and Look Back) –

30 minutes

Objective: For children to understand why it's important to stop at the edge (curb or driveway) before crossing a street and look left, right, and left again, and to look behind their shoulder for on-coming traffic before crossing at an intersection.

Materials: Masking tape, field markers or rope

Cassette Player

Tape with fun music (If it is not viable to play music outside so that it will be heard, consider using a whistle to start and stop the activity instead)

Background Information: Children cannot perceive complicated traffic situations, therefore, it is especially important for children to be taught the similarities and differences between crossing a street and crossing at an intersection. All possible street-crossing scenarios should be explored with children. The messages conveyed by traffic signs and signals must also be taught to children. Traffic signs, signals and rules were made up by adults for adults; children often interpret these differently. For children to learn how to safely cross a street and an intersection, they must also understand the traffic signs, signals, and rules of the road that regulate those streets and intersections.

Discussion Topics & Questions:

After the children have watched Bike Smart – Lesson 2 -- "How Cars Move" discuss the following:

- Children should never try to cross a street unless they have their parent's permission and are with someone who is older than 10.
- Recognizing the differences between a neighborhood street and an intersection
 - o What is an intersection?
 - Why is an intersection more dangerous to cross than a neighborhood street?
 - o Do you have an intersection in your neighborhood?

Preparation for the activity: Arrange masking tape, field markers, or rope to simulate street corners. Allow one side to extend an additional thirty feet to simulate a place where a child might cross a street mid-block.

Activity Description:

Start with the "Pinky Partners" activity to identify your partner for the second half of this lesson. Children move around a defined space until the music stops (or when you blow a whistle). The children stop movement and link a pinky with someone nearby. They need to remember this person for later. When you start the music again, the children move about alone in a style you decide (elephant walk, crab walk, walk backwards, spin, etc...). until the music stops again. This time the children find a new partner with whom they link a different body part that you identify (knee, elbow, shoulder, foot, forehead, etc...). While each child is with this new partner, you call out "Go to the edge and stop." The new pairs move in the same style as they were moving before to the crossing line and stop. Once all the children are lined up at the "street":

- d. Say aloud, "Look left," and call out something they will see to their left.
- e. Say aloud, "Look right, " and call out something they will see to their right.
- f. Say aloud, "Look left again, and keep on looking as you walk across."

Ask the children to return to a space behind the line and repeat this activity several times. After the last round, ask the children to find the pinky partner they started with, and then ask them to move to the area where the intersection is simulated.

Define and explain to the class what an intersection is, and that cars can drive up from behind, so you need to search there too.

Explain that the search pattern for intersections (corners) is:

- a. Stop at the edge.
- b. Look left, right, left, and sweep behind.
- c. Cross when clear and keep looking while crossing.

Demonstrate the stop and search pattern.

Have the students line up in their pairs at one of the corners. Each pair will take a turn at the corner and follow your instructions to "Stop. Look left – look right – look left – and cross when it's clear – and keep looking while you cross."

When all the pairs have crossed safely, discuss controlled intersections. Explain the meaning of the different signals: green=walk, flashing red=don't walk, solid red=don't walk.

Activity #3 – Egg Drop

(adapted from the Florida Traffic and Bicycle Safety Education Program)

Grades: 2 and 3

Computer Program: Bike Smart – Disc 1 "Helmets" 10 minutes

Discussion Topics: 5 minutes

Activity: Helmet and Injury Prevention (with the variation) – 15 minutes

Objective: To demonstrate the importance of wearing a bicycle helmet because it reduces the severity of head injuries.

Materials:

• 2 raw eggs or 2 ripe melons (cantaloupe or honeydew)

- Waterproof barrier (plastic bag) and napkins for cleaning
- Cardboard box, approximately 12" x 12" x 6", full of Styrofoam or sand
- Chair to stand on
- CPSC approved helmet

Background Information: Research shows that up to 90% of fatal bicycle crashes are the result of head trauma. A properly worn and certified bicycle helmet cushions and protects the head from injurious impact with hard surfaces such as asphalt and concrete. Scientists measure how hard something hits with "g-forces." Things that hit hard have a high "g-force" and high potential for damage. Three hundred g's is enough to cause permanent brain damage. Five hundred g's can fracture the skull and cause death. The head of someone who falls from bicycle height to a concrete surface can receive a force of more than 1800 g's. CPCS approved helmets can reduce the 1800 g's of bicycle falls to less than 200 g's, which is not enough to fracture the skull. Many doctors agree if all bicyclists wore helmets, 75% or more bicycle related deaths would be eliminated.

Discussion Topics & Questions: Why is a helmet important? Recognizing a certified helmet (use a helmet to demonstrate).

Activity Description:

- 1. After the children work through the "Helmet" section of Bike Smart -- Lesson 1, begin the Egg Drop activity.
- 2. Teacher explains that an egg simulates the human brain inside the skull (important material within a fragile shell).
- 3. Ask a student to decide how far from a hard surface s/he can drop the egg

- without breaking it. Let the student drop the egg from that height. (Be sure to cover the surface with a waterproof barrier.) The egg will break when dropped from a height of 3 inches.
- 4. Ask the student to hold another egg high and drop it into a box of styrofoam pieces or sand. (Be sure the box is a large enough target for the student to hit.) The egg should not break.
- 5. Show the class a bicycle helmet. Explain that it is constructed with an inside crushable liner of Styrofoam, like that in the box, which can reduce force to the head from 1800 g's to less than 200 g's

Variation: Perform the same experiment using 2 ripe melons. Drop a ripe melon from 6 feet onto a hard surface; it will burst or sustain obvious damage. Then snugly strap a melon into a helmet, and drop it. The melon should still be intact. Note: Be sure to perform this activity of asphalt or concrete. If the "helmetless" melon does not burst, save it for a few days and the damage will become obvious. Also, the helmet should only be used for this demonstration, as it will be damaged in the fall.

Definitions:

- 1. G Force a measure scientists use to indicate how hard one object hits another.
- Bicycle Helmet equipment worn to protect a person's head. Reliable helmets carry a sticker of approval by CPCS, which means those helmets have met safety standards. Properly fitted helmets snug and cannot move or slide about.
- Crushable liner: the inner portion of a helmet that absorbs and reduces gforce to the head.

Activity #4 - The Helmet Song

Grades: 2nd and 3rd (optional activity at end for grades K and 1)

Computer Program: Bike Smart – Disc 1 "Helmets" -- 10 minutes

Discussion Topics: 2 minutes to teach the chorus of the song

Activity: Helmet safety – 15 minutes

Objective: To reinforce through music the important concept that a bicyclist should ALWAYS wear a helmet when they ride.

Materials:

Megaphone or loudspeaker

- Drum (optional)
- Cones laid out in a riding pattern on the field
- Bicycles
- CPSC approved helmets for all students

Background Information:

Singing or chanting has long been a way children have learned rules and expectations. This song is fun to sing, especially for non-singers, since it has no melody, only rhythm.

Activity Description:

- Ask all your students to bring their bikes and helmets to school. (Have extra bikes and helmets, in various sizes, available for those students who don't have their own.)
- 2. All the students will put on their helmets and then pair up with another student to check the fit.
- 3. Pass among the students to help each student attain a properly fitted helmet.
- 4. Teach the song (which they will have heard in the Bike Smart program).
- Have the students ride their bikes on the course you've laid out with your cones, while you lead them in the song over your megaphone or loudspeaker system.
- 6. Repeat the song until all the students have had a chance to ride through the course a few times.

HELMET SONG

(Teacher chants)
Skull, Noggin, Cabesa, Lid
No matter what you call it keep it hid.
If you're riding in your neighborhood or beyond,
Always remember, keep your helmet on.

(Students chant)
Keep your helmet on
Keep your helmet on
No matter where you're riding
Keep your helmet on.

Keep your helmet on Keep your helmet on No matter where you're riding Keep your helmet on.

(Teacher chants) Even if I'm just on my way to school

(Students chant)
No matter where you're riding
Keep your helmet on.

(Teacher chants)
Sing me again the basic rule.

(Students chant)
No matter where you're riding
Keep your helmet on.

(Teacher and students together)
Keep your helmet on
Keep your helmet on
No matter where you're riding
Keep your helmet on.

Keep your helmet on Keep your helmet on No matter where you're riding Keep your helmet on.

Optional Helmet Song Activity Description for grades K and 1:

- 1. Ask all your students to bring their bike helmets to school. (Have extra helmets, in various sizes, available for those students who don't have their own.)
- 2. All the students will put on their helmets and then pair up with another student to check the fit.
- 3. Pass among the students to help each student attain a properly fitted helmet.
- 4. Teach the song (which they will have heard in the Bike Smart program).
- 5. Have the students wearing their helmets, march along the course you've laid out with your cones, while you lead them in the song over your megaphone or loudspeaker system.
- 6. Repeat the song until all the students have had a chance to march through the course a few times.

Activity #5 - Hand Signals

Grades: K and 1st (Optional activity at end for grades 2 and 3)

Computer Program: Bike Smart – Disc 1 "Hand Signals" -- 5 minutes

Discussion Topics: 5 minutes

Activity: Learning hand signals – 15 minutes

Objective: To teach student the proper hand signals to use when riding their bikes.

Materials:

Field markers, cones or rope to lay out a walking pattern on the field

• A Stop Sign (can be made out of cardboard, mounted on a stick)

Background Information: Younger children may have a hard time mimicking the hand signals modeled in the program, and may need the teacher to demonstrate using the correct arm for each hand signal.

Discussion Topics & Questions:

After the children have seen Bike Smart – Hand Signals, discuss the following:

- The importance of being predictable when riding bikes.
- How hand signals let people know what you are about to do.
- That doing a hand signal is the only reason to take your hand off the handlebars while riding.

Preparation for activity: Use field markers, cones or rope to create a walking course in an open area. This course should have at least two left turns, two right turns and one place for the stop sign.

Activity Description:

- Show the children the hand signals (left turn, right turn, slow or stop), reviewing what each one means. Be sure to include the alternative "right turn" hand signal.
- 2. Have the children demonstrate using the hand signals, making sure they are using the correct arm.
- 3. Explain the way the walking course has been laid out and that at each turn and the stop sign, they must use the correct hand signal before moving on. Also explain that as they approach the stop sign, they have to be careful not to run into the person in front of them who will be stopping.
- 4. Line the children up at the start of the course and have them start walking

- through it one at a time, leaving about 5 feet of distance between each child.
- 5. When each child reaches the end of the course, you can choose to have them come around to start again for a second (or third time) through.

Optional Activity for older children, grades 2 and 3:

For older children, have them put on their helmets and ride their bikes through the course, while practicing their hand signals.

Activity #6

Scanning: Stationary and Active

(adapted from the Florida Traffic and Bicycle Safety Education Program © 2001)

Grades: 2 and 3

Activity: Staying stable on your bicycle while scanning behind – 20 minutes

Objective: To teach children control of their bicycle while riding in a straight line and looking back over their shoulder to identify on-coming traffic.

Background Information: The second most prevalent cause of fatalities among adolescent cyclists is making left turns or swerving into traffic without looking back (failing to yield the right-of-way). Many cyclists have a problem with looking back (scanning) and keeping their bicycle straight. Learning this skill will help cyclists become confident and safe. We practice looking over your left shoulder because this is the primary side for traffic identification, since we ride on the right side of the road.

Preparation for activity:

- Ask all your students to bring their bikes and helmets to school. (Have extra bikes and helmets, in various sizes, available for those students who don't have their own.)
- 2. All the students will put on their helmets and then pair up with another student to check the fit.
- 3. Pass among the students to help each student attain a properly fitted helmet.

Activity Description:

Stationary Scan

Materials: Bicycles

Helmets

- 1. Students stay with the partners they had while fitting their helmets.
- 2. One partner holds the bicycle stationary from the front while the other partner sits on the bicycle as if they were riding.
- 3. The partner holding the bicycle tells the rider to scan.
- 4. The rider looks back over their left shoulder and verbally identifies an object behind them. (The objective for the cyclist is to keep their balance and their handlebars straight.)
- 5. Repeat this several times.

6. The partners switch positions (the rider becomes the holder and visaversa) and repeat.

Active Scan

Materials: Bicycles

Helmets Cones

Numbered poly spots (or cardboard cards with numbers)

Mock car signs (cardboard with the word CAR on one side and

blank on the other)

1. Set up your cones to form a five-foot wide and twenty-foot long passage.

- 2. The cyclist rides his or her bicycle in a straight line up the center of the cones while their partner follows slightly behind and to the left of the rider. The partner holds a numbered ploy spot.
- 3. The partner calls for a scan while holding the poly spot for the cyclist to read by looking over their left shoulder.
- 4. The cyclist needs to verbally identify the number on the poly spot, while keeping control of their bicycle.
- 5. A second variation of this is to have the teacher of volunteer in a stationary location holding a mock car sign. As the cyclists pass, the person holding the sign calls out "scan" and puts the mock car sign either CAR side up (for which the cyclists verbally call out "CAR" or "NOT SAFE") or BLANK side up (the cyclists identify this by calling out "NO CAR" or "SAFE"). The correct verbal answer is given while keeping the bicycle going in a straight line. Much practice is needed on this technique so it is recommended that several tries be given to the students.