Alcohol: Knowing the Facts!

Summary
Students will identify the effects of alcohol on body organs and on performance, as well as identifying reasons for not using alcohol.

Main Core Tie
Health Education - 6th Grade
Strand 4: SUBSTANCE ABUSE PREVENTION (SAP) Standard 6.SAP.3:

Time Frame
1 class periods of 45 minutes each

Group Size
Large Groups

Materials
- Teacher Resource Sheet: "Alcohol's Effects on the Body"
  Soft sponge or yarn ball (or something similar)
  tennis balls
  gloves (one pair for each 5--6 member team)
  one bolt and corresponding nut (for each 5--6 member team)
  one pair of sunglasses with lenses that have been covered with petroleum jelly (one pair for each 5-6 member team)

Vocabulary
  depressant
  stimulant
  cirrhosis
  intoxicating
  impairment
  vasodilator
  cardiovascular
  simulation

Background for Teachers
Lesson at a Glance
Introduction
1. Alcohol Facts
Strategy
2. Impaired
3. Alcohol Ball
4. Liver Overload
Conclusion
5. Talk Show Skits

Instructional Procedures
1. Alcohol Facts
   True or false?
   Alcohol is a drug.
   True--alcohol is a drug that affects the way the body naturally functions. It is a depressant, which means that it slows down the body's processes.
   Alcohol is the oldest and most abused drug in the world.
   True
   Alcohol is addictive.
   True
   Ethyl alcohol is the intoxicating ingredient present in alcohol.
   True
   A 12-ounce can of beer, a 5-ounce glass of wine, and one ounce of whiskey all contain the same amount of alcohol.
   True
   Everyone who drinks alcohol experiences various physical effects. These vary from person to person.
   True
   Alcohol affects many of the body organs and their functions.
   True
   Only time will cause a person to become sober.
   True

2. Impaired
   The following activities are used by permission from the wonderful book, Activities That Teach, by Tom Jackson. Please refer to this book for many more similar activities. A full bibliography reference is in the references section of these Prevention Dimension lessons.
   This simulation activity demonstrates how alcohol use impairs ability to perform tasks that require manual dexterity.
   Divide the class into teams, with 5--6 students per team.
   Distribute a nut and bolt to each team. Explain that each person must thread the nut all the way onto the bolt and then off again. When the task is complete, pass the nut and bolt on to the next team member and repeat the process until the entire team has completed the task. Time this process and record each team's time.
   Distribute a set of gloves to each team and repeat the game using the gloves.
   Distribute a pair of sunglasses to each team and repeat process a third time, using the sunglasses.
   Continue to time and record each team's time.
   Discussion
   How hard was it to thread the nut when you were not wearing gloves? Wearing gloves? Wearing sunglasses?
   How were you impaired when wearing gloves? Sunglasses?
   How is this simulated impairment similar to someone under the influence of alcohol?
   Compare the times of each team. How does alcohol affect reaction time?
   What are tasks or jobs that would be negatively influenced by alcohol use?
   Some people may want to be impaired to escape certain bugs. How does the impairment affect other parts of their lives?

3. Alcohol Ball
   This simulation activity demonstrates how alcohol use can cause blurred vision and poor coordination. Several students volunteer to catch a ball tossed to them by the teacher.
   For practice, play catch with the students.
Spin students around fast, then instruct students to squint their eyes. After spinning, toss the ball to them and ask them to toss it accurately back.

Discussion
What effects of being under the influence of alcohol did the spinning and squinting eyes simulate?
People who drink too much alcohol have blurred vision and poor coordination. How might blurred vision and poor coordination be harmful to the person drinking as well as others?
Why wouldn't you want to ride in a car with a person who has these impairments?
What can you learn about the effects of alcohol from this activity?

4. Liver Overload
This simulation activity demonstrates how the liver becomes overloaded when too much alcohol enters the bloodstream.
Five students face the class, in a line, shoulder to shoulder.
Hand a soft sponge or yard ball to the first person in line. His or her job is to pass the ball down the line, hand to hand, until it reaches the "liver," who is the last person in the line. 
The "liver" will squeeze the tennis ball five times, then let it drop to the floor.
Begin by sending the balls down the line slowly. The "liver" should be able to handle his or her task.
Speed up the sending of the balls down the line. This will cause the liver to "fail" and the soft sponge or yarn balls will back up down the line and fall on the floor.

Discussion
What occurred when the tennis balls were introduced slowly into the bloodstream?
What happened when the tennis balls were sent more quickly?
What do you think would happen to a liver that experiences this very often?
What do you think this activity can tell us about alcohol and our bodies?

5. Talk Show Skits
Divide students into groups of five.
Have the students prepare a skit in a talk show format. Use the following parts: talk show host, a doctor, a drinker, a former drinker, and a nondrinker.
Instruct the groups to review and use the ideas about bugs from lesson 4 and I STOP'D from lesson 7.
Use the information in this lesson to prepare the skits.
Present the skits to the class.

Bibliography
This lesson is part of the Utah State Board of Education Prevention Dimensions program.

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