# Lesson 7 Brain Drain Effects of Alcohol Use

#### **Rationale**

Alcohol use negatively affects the healthy development of the adolescent brain. Knowledge of the physical consequences of alcohol promotes a perception of harm related to underage alcohol use. Normative education methods effectively correct misconceptions about behavior.

## **Character Education**

This lesson promotes these character traits:

Responsibility Self-discipline Cooperation Integrity Fairness

## **Objectives**

Following this lesson, the student will be able to:

- List the harmful effects of alcohol use on the developing brain and on behavior
- Discuss the effect of alcohol use on the ability to reach one's goals
- Compare perceived norms to actual prevalence of alcohol use
- Demonstrate the effective use of peer-pressure refusal strategies in a variety of situations involving alcohol

#### **Activities**

1.	Thinking Clearly	5 minutes
2.	Thought Cloud	10 minutes
	That's Using Your Noggin	
4.	No Brainer	20 minutes

## **Before You Start**

- Distribute the Student Workbooks at the beginning of the lesson.
- Review the game materials, game instructions, and teacher's script on pages 124-125 prior to teaching the lesson.
- Make copies of the Question Cards, the No Brainer Gameboard, and the No Brainer Game Instructions for each group to be distributed with the No Brainer game materials in Section 4: No Brainer. Note: Each group will need only two game pawns and one die to play the game.
- To reinforce the skills taught in this lesson, prepare journal activities or lesson
  extenders from the Looking for More? section to assign at the beginning or end
  of your classes throughout the week.
- Make a copy of Home Workout 7 for each student. Distribute at the end of the lesson.

## **Materials**

To deliver this lesson, you will need:

- Student Workbook pages 20-22
- Game Pawns and Die (In your kit)
- Home Workout 7, Teacher's Manual page 128
- No Brainer Gameboard, Teacher's Manual page 129
- Team A and Team B Questions Card, Teacher's Manual pages 130-131
- No Brainer Game Instructions, Teacher's Manual page 132

# 1. Thinking Clearly



In last week's lesson, we learned six peer-pressure refusal strategies. Let's see if you can remember all six strategies without looking in your workbook. Raise your hand if you can name one of the strategies we learned. Call on six students to name a different peer-pressure refusal strategy. The strategies are Say "No," Walk Away, Ignore, Make an Excuse, Broken Record, and A Better Idea.

Very Good! Now that we have your brains working, let's try
another exercise to warm them up. Open your workbooks to
page 20 to the section titled "Brain Warm-Up." Let's look at
the first puzzle together. Notice how the word MAN is written
over the word BOARD. What is the answer to the first puzzle?
Man Overboard. That's right; the solution to this puzzle
is MAN OVERBOARD. Write down MAN OVERBOARD on the line
below the puzzle. I am going to put you in pairs to solve the rest

Put the students into pairs. Allow two minutes for the students to complete the activity. Then ask for volunteers to share their answers. Solutions: 1) Man Overboard 2) Bicycle or Recycle 3) Jack in the Box 4) Downtown 5) Waterfall 6) Crossroads.

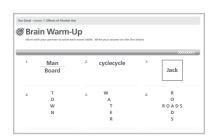
of the puzzles. You will have two minutes.

Excellent! What abilities did you need to solve these puzzles?
Seeing, thinking, speaking, and listening. Very good! You had
to see, think, and communicate to solve them. You need your
ability to see, think, and communicate to do most everything you
do. Today we're going to talk about a drug that can interfere with
those abilities. Using this drug can also interfere with reaching
goals, because it's hard to make good decisions when you can't
think clearly.

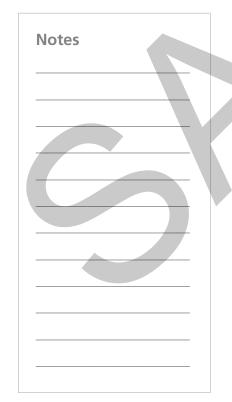
Before we go any further, who can tell me what a drug is?

A drug is something that people take to make them feel better when they are sick or to change the way they feel. A drug is a substance put into the body that changes the way the body or the mind works.

The drug we are going to talk about today is alcohol. There are three types of alcoholic beverages: beer, wine, and liquor. All three types of alcohol affect the mind and the body in the same way.



Workbook page 20 Brain Warm-Up



What is the legal age for drinking alcohol? 21 years old. That's right; the legal drinking age is 21, but no matter a person's age, drinking alcohol affects the normal functions of the brain. Drinking alcohol is especially harmful for young people under the age of 21, because your brains are still growing and developing. Alcohol use can slow down or stop the healthy development of the brain.

## 2. Thought Cloud

10 min

Let's take a closer look at the harmful effects alcohol use can have on the brain and its ability to function. Look at the next section in your workbooks titled "Thought Cloud." This diagram of the brain identifies the skills and abilities the brain controls and how alcohol use affects them.

Who can tell me how alcohol use impairs Decision Making?

Alcohol use affects a person's ability to think clearly. Impaired thinking can cause bad decision making. Very good! How does alcohol use affect Speech and Language?

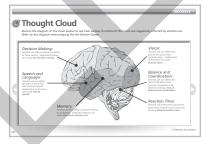
Alcohol use can affect the part of the brain that controls speech. Impairment in this area can cause slurred speech. Who can tell me how alcohol use affects memory?

Alcohol use can affect a person's ability to remember. Impaired memory can cause short-term memory loss. Excellent! Who can tell me how alcohol use affects Vision?

Alcohol use can affect the part of the brain this area can cause blurred vision. Very good! What about Balance and Coordination?

Alcohol use can affect the part of the brain that controls movement and balance causing a loss of balance and coordination.

Finally, alcohol use can affect a person's Reaction Time. What is Reaction Time? The amount of time it takes a person to respond to something. Very good! Reaction Time is the amount of time it takes for a person to respond to something. Who can tell me how alcohol affects reaction time? Alcohol use affects the part of the brain that controls motor functions, causing delayed reaction time. Excellent! Alcohol slows the brain's response to information, so it takes longer for a person to react.



Workbook page 20 Thought Cloud



Workbook page 21
Brain Power

The brain controls every part of the body. When the brain is impaired, the whole body is affected, making it difficult or even impossible to participate in activities and reach goals.

Let's take a closer look at how these skills and abilities help us participate in the activities we enjoy. Our friend, Griffin, is going to help us. Turn to page 21 in your workbooks to the section titled "Brain Power."

Griffin loves to play football, and he wants to play well so he can make the school team. To prepare himself for tryouts, he decided to review the skills and abilities he needed to master his game.

Let's review the skills and abilities Griffin needs to play football.

How does decision making help Griffin play football? Decision Making helps him choose the best plays to score a touchdown. How does speech and language help Griffin play football? Speech helps Griffin communicate with his teammates. Excellent! Now, read the rest of Griffin's review on your own. Then, pick an activity you love to do and write it down on the space provided in your workbooks. List how each brain function helps you perform your favorite activity by filling in the blanks. Allow time for the students to complete the activity.

Let's review how these skills and abilities help you in your favorite activities.

Allow time for several students to share their answers.

Excellent! These abilities help you participate in the activities you enjoy. Griffin will use this list as a reminder to stay drug free so his brain can continue to grow and develop into the healthy brain it should be. Use your list, like Griffin did, to remind you to stay drug free so your brains can continue to grow and develop into the healthy brains they should be.



# 3. That's Using Your Noggin



At some point, someone might pressure you to try alcohol. They might even say something like, "Come on, everybody does it." Do you think that's true? Does everybody drink alcohol? Probably not. Most people, including teenagers, do not drink alcohol. So, why do you think someone might try to convince you to try it by saying, "Everybody does it"? So we will join in. That's right; usually people are just trying to get us to join in on the negative activity so they are not alone.

Which peer-pressure refusal strategy could you use if someone says, "Come on, everybody drinks alcohol"? Encourage student response. For students who suggest Broken Record, Make an Excuse, or Better Idea, ask them to state what they would say.

Excellent! When faced with peer pressure, you need to be ready to respond to it. Let's practice refusing peer pressure in situations that involve alcohol. Look at the next section in your workbook titled "Practice Plan." Read each scenario and then decide the best way for the friends to refuse the peer pressure. Write down your answer in the space provided. Be prepared to share your answers.

Allow time for the students to complete the activity.

#### Let's review your answers.

- 1. Rusty and Jacob are playing basketball in Jacob's driveway. Jacob says, "I'm thirsty. Let's go grab a beer out of my dad's refrigerator." What could Rusty say or do to refuse the peer pressure? Call on several volunteers to respond. For students who suggest Broken Record, Make an Excuse, or Better Idea, ask them to state what they would say.
- 2. Gina is at a sleepover party at a friend's house when her friend tells everyone, "Hey, my brother sneaked in some beer. Who wants to try it?" What could Gina say or do to refuse the peer pressure? Call on several volunteers to respond. For students who suggest Broken Record, Make an Excuse, or Better Idea, ask them to state what they would say.



Workbook page 21
Practice Plan

## 4. No Brainer



Very good! Let's see how well your brains are still working. In a moment, I'm going to put you into groups to play a game called No Brainer. You and a teammate will decide the best peer-pressure refusal strategy used in situations or the best answers to questions involving brain functions and the harmful effects of alcohol use. The object of the game is to think clearly and think alike to get the most correct answers. The first team to complete a lap around the brain wins the game.

Once you are in your group, form two teams: Team A and Team B.

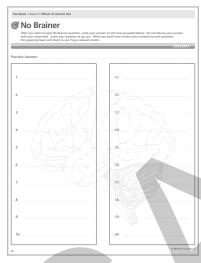
Groups of four people can make two teams of two. Groups of six people can make two teams of three. Your group will receive a gameboard, a questions card for each team, game pawns, and a die.

Look at workbook page 22 to the section titled "No Brainer."
On your turn, a member from the opposing team will read question one to you from his or her card. Do not discuss the answer with your teammate. Answer the question on your own on the line provided in your workbooks. Cover your answers as you go. When you both have written your answers to each question, the opposing team will check to see if your answers match.

Let's practice. Imagine the person sitting next to you is your teammate. I'm going to read a question to you. Do not discuss the answer with your teammate. Write your answer down on the line next to "Practice Answer." Here is the question...

Rebecca set a goal to remember the name of each person she meets on the first day of summer camp. Which harmful effect of alcohol use could prevent her from reaching her goal?

Use the diagram of the skills and abilities controlled by the brain on page 20 to help you. The "harmful effects of alcohol use" are described below each of the skills and abilities. Write down your answer on the line provided. \*\* Allow time for the students to write an answer. What is the correct answer? \*\* Short-term memory loss.



Workbook page 22 No Brainer

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The correct answer is short-term memory loss. If you and your teammate wrote the same answer and it matches the answer on the Question Card, roll the die and move forward on the gameboard the number of spaces indicated on the die. Then, it's the other team's turn.

If your answers do not match or your answers are not correct, you do not have a match. You may not advance on the gameboard. It's now the other team's turn.

Continue playing until one team reaches the finish space. If there is time, you may play another round. Once you are in your groups and you have set up your games, I will announce which teams will go first.

Put students into groups of 4-6 players. Distribute the Question Card sets. Once the groups are ready to play, announce which team (A or B) will take the first turn. Allow time for the students to play the game.

Excellent! Knowing the effects of alcohol on the brain and body and the negative consequences of its use will help you make healthy decisions, keeping you on track toward reaching your goals. Next week, we will discuss the negative effects of nicotine use on the body and the benefits of choosing a nicotine-free life.

- Collect the Game Materials.
- Collect the Student Workbooks.
- Distribute Home Workout 7.

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