Lesson 8 | Keep off the Grass!
Effects of THC and Marijuana Use

Rationale
Adolescents often overestimate the percentage of their peers who use marijuana and underestimate the negative effects of THC on the developing brain and body. Perception of harm is an important factor for mitigating risk. Normative education methods effectively correct misconceptions about behavior.

Objectives
Following this lesson, the student will be able to:
• List the effects of THC and marijuana use on the body and on behavior
• Determine the consequences of marijuana use on everyday activities
• Contrast perceived norms with actual prevalence of marijuana use
• Practice using peer-pressure refusal strategies in a variety of situations involving marijuana

Activities
1. Road Trip ........................................................................... 10 minutes
2. Nip It in the Bud ................................................................ 20 minutes
3. The THC Club..................................................................... 10 minutes
4. Signs of Use ...................................................................... 10 minutes

Before You Start
• Distribute the Student Workbooks at the beginning of the lesson.
• Ensure the Matters of Fact Game Cards are in numerical order, numbers 1-12.
• Make one copy for each team of the Matters of Fact Game Sheet, Teacher’s Manual page 158. These will be used in Section 2: Nip It in the Bud.
• Copy, cut, and display the Percentage Cards randomly in different areas of the room. These will be used in Section 4: Signs of Use.
• Find current statistics for marijuana use at monitoringthefuture.org. These will be used in Section 4: Signs of Use.
• 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 8 for each student. Distribute at the end of the lesson.

Materials
To deliver this lesson, you will need:
• Student Workbook pages 16
• Matters of Fact Game Cards (in your kit)
• THC Club Role-Play Scripts (in your kit)
• Game Pawns (in your kit)
• Scan of Healthy Brain (Underside) (in your kit)
• Scan of Brain Damaged by Marijuana Use (Underside) (in your kit)
• Home Workout 8, Teacher’s Manual page 157
• Matters of Fact Game Sheet, Teacher’s Manual page 158
• Percentage Cards, Teacher’s Manual pages 159-161
1. Road Trip

In our last lesson, we talked about the harmful effects of tobacco and nicotine use. How can nicotine use keep people from reaching their goals? Select several students to share their answers.

We’re going to start today’s lesson with a game. I need seven volunteers to play this game. It’s called “Going on a Road Trip.” Have the student volunteers line up at the front of the classroom. I will start the game by saying, “I’m going on a road trip, and I’m taking a map.” The map is just a suggestion. You may choose to take something else.

Then we will continue down the line of volunteers. Each of you will say, “I’m going on a road trip, and I’m taking...” and then you will recite what everyone said before you plus one thing you will bring on the road trip.

You can’t write anything down, so listen carefully to remember what everyone says. Have each student take a turn reciting the items the previous players added and adding their own item to the sequence. Once each volunteer has contributed, have the volunteers return to their seats.

What abilities did the volunteers need to play the game?
Vision, memory, reason, concentration.

Excellent! Today we’re going to talk about a drug that affects vision, memory, reason, concentration, and other abilities and skills. Can you guess the name of this drug? Marijuana.

Marijuana comes from a plant called cannabis sativa. It contains over 400 chemicals. One of these chemicals is responsible for most of the effects we’ll talk about today. This chemical is called tetra-hydro-cannabinol or THC for short. Write “THC” on the board. THC is a mind-altering substance and harmful to the developing brain and body. THC interferes with concentration, memory, thinking, and perception.
2. Nip It in the Bud

The legal status of marijuana is the subject of an ongoing debate. It is a federal offense to purchase, grow, carry, or use marijuana because of the harm it can cause.

In some states, marijuana use and limited possession is permitted under the guidance of a licensed medical professional and when dispensed from an approved and regulated dispensary.

Today, we will discuss recreational use of marijuana, not medical marijuana. What is recreational use? Use for the purpose of getting high.

While possession and use of marijuana are federal offenses, some states allow recreational use of marijuana, but just like alcohol, it is not legal for people under the age of 21 to use.

The national debate about marijuana can make it difficult to separate the myths from the facts about this drug. We are going to do an activity called “Matters of Fact” to settle the myths about marijuana and confirm the facts about the effects of THC.

Open your workbooks to page 16. In a moment, I will put you into groups. To set up the activity, place the Matters of Fact game sheet on the table where it is accessible to all players. Place the deck of Matters of Fact Cards face down in the center of the game sheet. Display the Matters of Fact Cards. Do not shuffle the cards; they are in numerical order corresponding to the statements on workbook page 16. Choose a game pawn and keep it off to the side until the activity begins.

To play, one person will read the statement from workbook page 16 aloud to the group. Each player will think about what they know about that statement. If you think the statement is a myth, place your game pawn on the Myth space. If you think it is a fact, place your game pawn in the Fact space. If you have not heard anything about the statement, place your game pawn where it says “I have no idea.” If you have heard conflicting information, place your game pawn where it says “Could be a myth; could be a fact.”
Then discuss with your teammates what you have heard. Draw the corresponding “Matters of Fact” card and read the answer aloud to the group. Write down the correct answer on the line provided in your workbook.

Repeat this process until you have gone through all of the cards.

Put the students into groups. Distribute the game pawns, Matters of Fact Game Sheet, and Matters of Fact Cards to each group. Allow time for the students to complete the activity.

Collect Game Materials.

THC, the mind-altering substance in marijuana, is responsible for many of the effects you discussed in the activity. Let’s take a look at how THC affects the brain.

Display the Scan of Healthy Brain (Underside) image and the Scan of Brain Damaged by Marijuana Use (Underside) image.

These scans view the underside of the brain and brain activity like the scans we looked at in the alcohol lesson. Refer to the image of the Healthy Brain. You can tell which one is the active, healthy brain and which one is not as active because of marijuana use. Refer to the image of the Brain Damaged by Marijuana Use.

The presence of the THC in the brain reduces or stops brain activity. The “holes” you see here in the scans are not actual holes in the brain. They represent damaged brain cells or cells that have no activity. Inflicting this kind of damage while the brain is still developing can delay or stop the development of healthy brain cells.

3. The THC Club

We have learned some of the effects of marijuana use on the brain and body. Now let’s explore its effects on behavior and other negative consequences of marijuana use.

We are going to meet up with a group called “The THC Club.” The club is made up of people who use marijuana. We’re going to learn the consequences of their decisions to use it.
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I need six volunteers who like to act. Select six student volunteers to play the roles of T-THC, Lazy Daisy, Major League, Fairly Fired, Ben Grounded, and Toby Smart. Give each student a copy of the THC Club script.

Listen carefully for the negative consequences of marijuana use.

T-THC: Welcome back to the THC Club! How’s it going, everybody?

Lazy Daisy: Well, I got suspended from school for repeated tardiness.

T-THC: What’s the big deal? Students get suspended all the time. You can’t blame that on the THC Club.

Lazy Daisy: I got kicked off the basketball team! Coach let me go ‘cause I kept missing practice. Ever since I joined the THC Club, I can’t remember when practice is scheduled.

T-THC: So what’s the big deal? It’s less effort to sit on the sidelines and watch the team, anyway.

Lazy Daisy: T, we’ve dealt with a lot of negative consequences since we started hanging out with you. It’s like we keep influencing each other to make bad decisions.

Major League: I’m the one who should be complaining the most. At least you aren’t walking around with a black eye.

T-THC: Ouch! That looks like it hurts! How did you get that black eye, Major?

Major League: When the baseball season started, I was the best player on the team. Lately I’ve been dropping a lot of fly balls, and my batting isn’t so good. The other day I didn’t move my mitt in time, and the ball hit me right in the eye. Splat!

T-THC: Well, that’s not my fault. You’re just slow.
Major League: That’s not all, T. Coach told me I was letting the team down and benched me until I can turn my game around and play like I used to.

T-THC: I don’t know why you are blaming me for your problems. What do you have to say, Fairly?

Fairly Fired: I lost my job delivering newspapers.

T-THC: Why did you lose your job?

Fairly Fired: My boss said customers were mad because I broke too many windows with the newspapers and I scratched a couple of cars with my bike.

T-THC: That’s not my fault. You’re just unlucky, that’s all. Hey Ben, we’re still good, right?

Ben Grounded: I forgot I was supposed to babysit my little sister. My mom grounded me because she couldn’t trust me anymore.

T-THC: Grounded? What about the party Friday night?

Ben Grounded: There’s no way I can go to the party, T. My mom is serious. This is the second time I let her down.

T-THC: The second time? What did you do the first time?

Ben Grounded: Last week I was cut from the school play because I couldn’t remember my lines.

T-THC: Toby, why are you here? You don’t even use marijuana.

Toby Smart: You’re right. I don’t use marijuana, but my older sister does. She’s in eighth grade.

T-THC: So what? That doesn’t explain why you’re here.

Toby Smart: She used to be fun to be with and have lots of friends. Now she sits on the sofa and spaces out all the time.

T-THC: So she lost a few friends. No big deal.
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Toby Smart:  She also argues with our parents and doesn’t do any of her chores. Her room is disgusting and she does not keep up with her personal hygiene.

Lazy Daisy:  Gross!

Fairly Fired:  So, what do you have to say for yourself now, T?

T-THC:  Okay, okay. I never realized I was responsible for so many negative consequences. It seems that I do have harmful effects on peoples’ lives. This meeting is officially O-V-E-R.

Thank the volunteers, and have them return to their seats.

The members of the THC Club discussed several consequences of using marijuana. Look at the section in your workbook titled “Consider the Consequences.” Review the THC effects and their consequences in the chart, and decide if the consequence is negative or positive. If a consequence is positive, put a check in the column under the plus sign. If a consequence is negative, put a check in the column under the minus sign.

Let’s do the first one together. Is getting “suspended from school for repeated tardiness” a negative or positive consequence?

Negative. Put a check in the minus column for number one.

Once you have finished sorting the consequences, add up the checks in the positive column, and write the total at the bottom of the plus column. Add up the checks in the negative column, and write the total at the bottom of the minus column.

Allow time for the students to complete the activity.

How many of you have more negative checks than positive checks?

Encourage the students to raise their hands. How many of you put all of your checks in the negative column?

Encourage the students to raise their hands.
4. Signs of Use

Which character did not use marijuana? Toby Smart. Why was he at the THC Club meeting? His sister uses marijuana.

Do you think Toby might get pressure from his sister or his friends to use marijuana? Yes. Toby doesn’t use marijuana so he must know how to refuse the pressure. Let’s think about how many students are like Toby and refuse the pressure to use marijuana. Let’s think about how many people are not like Toby and decide to use marijuana.

I’ve posted signs with percentages on them around the room. This is your chance to share with the class how many middle school students in the United States you think choose to use marijuana.

Before you move, let’s review how to interpret percentages. If you go to the sign marked 100%, that means you think every middle school student uses marijuana. If you go to 50%, that means you think half of all middle school students use marijuana.

There are specific rules for this activity. You will have 15 seconds to look at the numbers and select which percentage represents the proportion of middle school students who use marijuana. Once you have made your decision, stand quietly beside your desk. When I say, “Choose your answer,” move quietly, without talking or running, to the sign that represents your answer. Are there any questions? Allow time for the students to ask questions.

Okay, you have 15 seconds to consider your answer. Allow the students 15 seconds to decide. Quietly stand beside your desk. Now, choose your answer. Encourage the students to move to the sign representing their answer.

The correct answer is… Pause for effect. 10%. Only 10% of middle school students use marijuana. That means 90% choose not to use.

Have the students return to their seats.

Teaching Tip
Current marijuana use statistics can be found at monitoringthefuture.org.
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Media portrayals of marijuana use, whether in the news or in film, cause people to overestimate marijuana use. In fact, most middle school students are smart like Toby. They don’t fall for the line that “everybody does it.” If anyone tries to convince you that “everybody does it,” remember that most middle school students don’t.

We talked about how a decision to use marijuana can have many negative consequences. Remember to stop and think about how marijuana could be a roadblock on your journey to reaching your goals to becoming the happy, healthy, confident person you want to be.

- Collect Student Workbooks.
- Distribute Home Workout 8.