

Mini Cases in Psychoactive Drugs and Their Effects on the Brain



Scenario #1

by

Darlene A. Mitrano

Neuroscience Institute

Georgia State University, Atlanta, GA

Instructions:

The class will be divided into groups. Each group will be presented with a short scenario describing someone who is abusing a psychoactive drug. After reading this scenario, you and your group need to do the following:

1. Determine what drug the individual in your case has been using and what led you to believe this.
2. Determine what the subjective effects of the drug are (i.e., what has a person reported feeling after using the drug).
3. Determine what receptors, transporters, or neurotransmitters could be involved and how the drug affects these receptors, transporters, or neurotransmitters.
4. Create one PowerPoint slide that describes your findings on this drug.

You and your roommates have decided to go to a fraternity party on Saturday night. You arrive at the fraternity house and see another classmate, Jenn, from your psychology class. You go over to say hello and see what she thought of the first exam, but Jenn seems to be acting very strangely. She starts describing fantastic colors made by the lights and how the dance floor is a beautiful sea of diamonds. You take a look around and realize the lights are nothing special, while the floor is definitely made of wood. You take another look at Jenn; her pupils are dilated and she keeps hugging everyone. When she comes over to hug you and tell you how much she's missed you since yesterday, you observe that Jenn is sweating and clenching her teeth. Additionally, you can feel her heartbeat when she makes contact with you.

What drug has Jenn taken?

Mini Cases in Psychoactive Drugs and Their Effects on the Brain



Scenario #2

by

Darlene A. Mitrano

Neuroscience Institute

Georgia State University, Atlanta, GA

Instructions:

The class will be divided into groups. Each group will be presented with a short scenario describing someone who is abusing a psychoactive drug. After reading this scenario, you and your group need to do the following:

1. Determine what drug the individual in your case has been using and what led you to believe this.
2. Determine what the subjective effects of the drug are (i.e., what has a person reported feeling after using the drug).
3. Determine what receptors, transporters, or neurotransmitters could be involved and how the drug affects these receptors, transporters, or neurotransmitters.
4. Create one PowerPoint slide that describes your findings on this drug.

It seems that all your classes have tests and papers due on the same day. You don't know how you're going to get everything done before it's time to leave for spring break. You tell your friend Sam, and he tells you to speak to his "friend" Mike. Sam declares that "Mike just might have something that will help you out." You agree, although you aren't really sure what Sam is referring to. You meet up with Sam's "friend," and he seems to be bouncing off the walls, talking a mile a minute. He says he can offer you some stuff that will increase your alertness, help you pull a few all-nighters, and even put you in a much better mood. He drops some white powder onto a mirror and divides it into little lines and asks if you would like a sample. What drug is Mike abusing and offering you?

Mini Cases in Psychoactive Drugs and Their Effects on the Brain



Scenario #3

Instructions:

The class will be divided into groups. Each group will be presented with a short scenario describing someone who is abusing a psychoactive drug. After reading this scenario, you and your group need to do the following:

1. Determine what drug the individual in your case has been using and what led you to believe this.
2. Determine what the subjective effects of the drug are (i.e., what has a person reported feeling after using the drug).
3. Determine what receptors, transporters, or neurotransmitters could be involved and how the drug affects these receptors, transporters, or neurotransmitters.
4. Create one PowerPoint slide that describes your findings on this drug.

Your friend Jamie has been going out every night of the week. She comes home late and often sleeps through her classes in the morning, complaining of headaches and nausea. She has also put on some weight. Sometimes when she comes home, she has trouble getting to her room, knocking into furniture. It's hard to have a conversation with her at these moments because her breath is pungent and her speech is slurred. When you ask her questions about where she's been, she becomes agitated and sometimes aggressive. You worry about what might happen if she continues this behavior. What drug has Jamie been doing?

Mini Cases in Psychoactive Drugs and Their Effects on the Brain



Scenario #4

by

Darlene A. Mitrano

Neuroscience Institute

Georgia State University, Atlanta, GA

Instructions:

The class will be divided into groups. Each group will be presented with a short scenario describing someone who is abusing a psychoactive drug. After reading this scenario, you and your group need to do the following:

1. Determine what drug the individual in your case has been using and what led you to believe this.
2. Determine what the subjective effects of the drug are (i.e., what has a person reported feeling after using the drug).
3. Determine what receptors, transporters, or neurotransmitters could be involved and how the drug affects these receptors, transporters, or neurotransmitters.
4. Create one PowerPoint slide that describes your findings on this drug.

Your roommate Gretchen has had chronic pain issues since she broke her back in a car accident about a year ago. You know that she finished her prescription painkillers at least three months ago, but you're suspicious she's been taking something else. Quite frequently you find Gretchen passed out in her room, and when she is awake, she doesn't seem to care about much. She stopped going to class and says her pain is way better than it was a few months ago. You got really worried last week when you found a syringe laying on the bathroom floor and then found out from your landlord that Gretchen never paid her share of the rent. What drug is Gretchen on?

Mini Cases in Psychoactive Drugs and Their Effects on the Brain



Scenario #5

by

Darlene A. Mitrano

Neuroscience Institute

Georgia State University, Atlanta, GA

Instructions:

The class will be divided into groups. Each group will be presented with a short scenario describing someone who is abusing a psychoactive drug. After reading this scenario, you and your group need to do the following:

1. Determine what drug the individual in your case has been using and what led you to believe this.
2. Determine what the subjective effects of the drug are (i.e., what has a person reported feeling after using the drug).
3. Determine what receptors, transporters, or neurotransmitters could be involved and how the drug affects these receptors, transporters, or neurotransmitters.
4. Create one PowerPoint slide that describes your findings on this drug.

You made plans with your friend Jason to order some pizza and watch the new *Transformers* movie. When you arrive at Jason's apartment you smell a distinctive odor in the hall. When you open his door, a smoky cloud lingers in the living room. Jason has invited his cousin Max over and they seem to have been smoking something. Their eyes are red, they seem extremely relaxed, and there are food and candy wrappers all over the place. Jason says that he totally forgot you were coming over, but you should stay and hang out anyway. What have Jason and Max been smoking?