

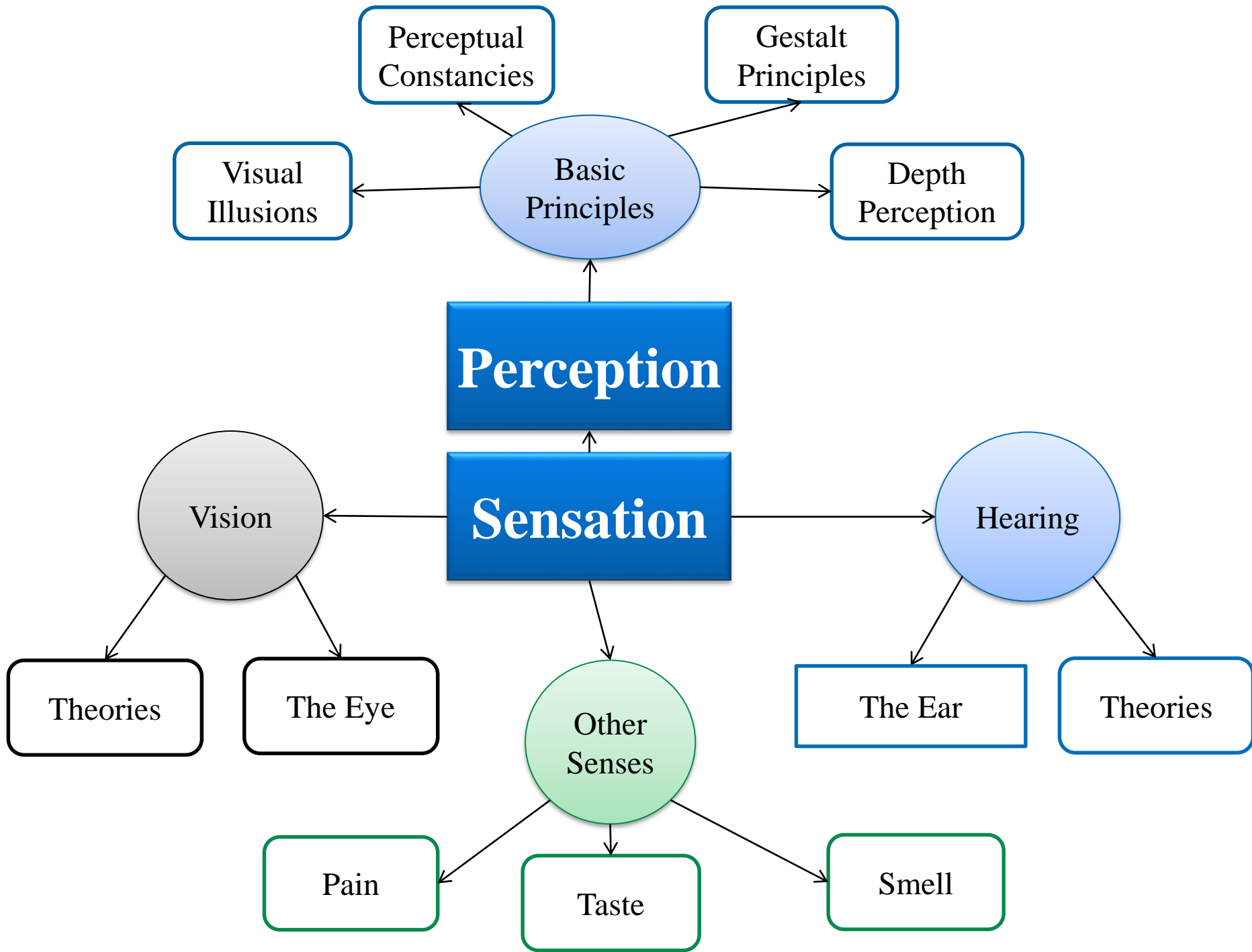


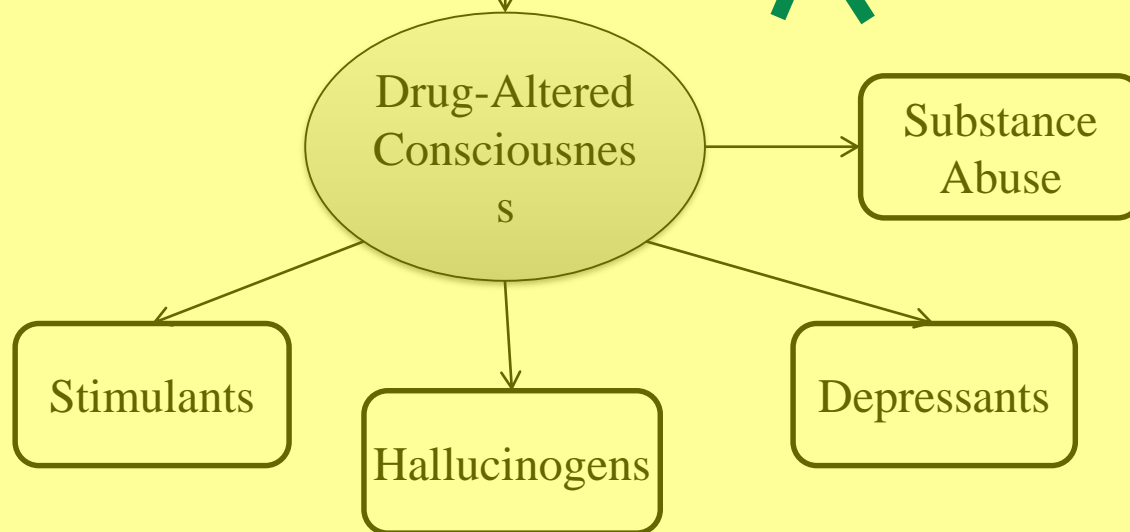
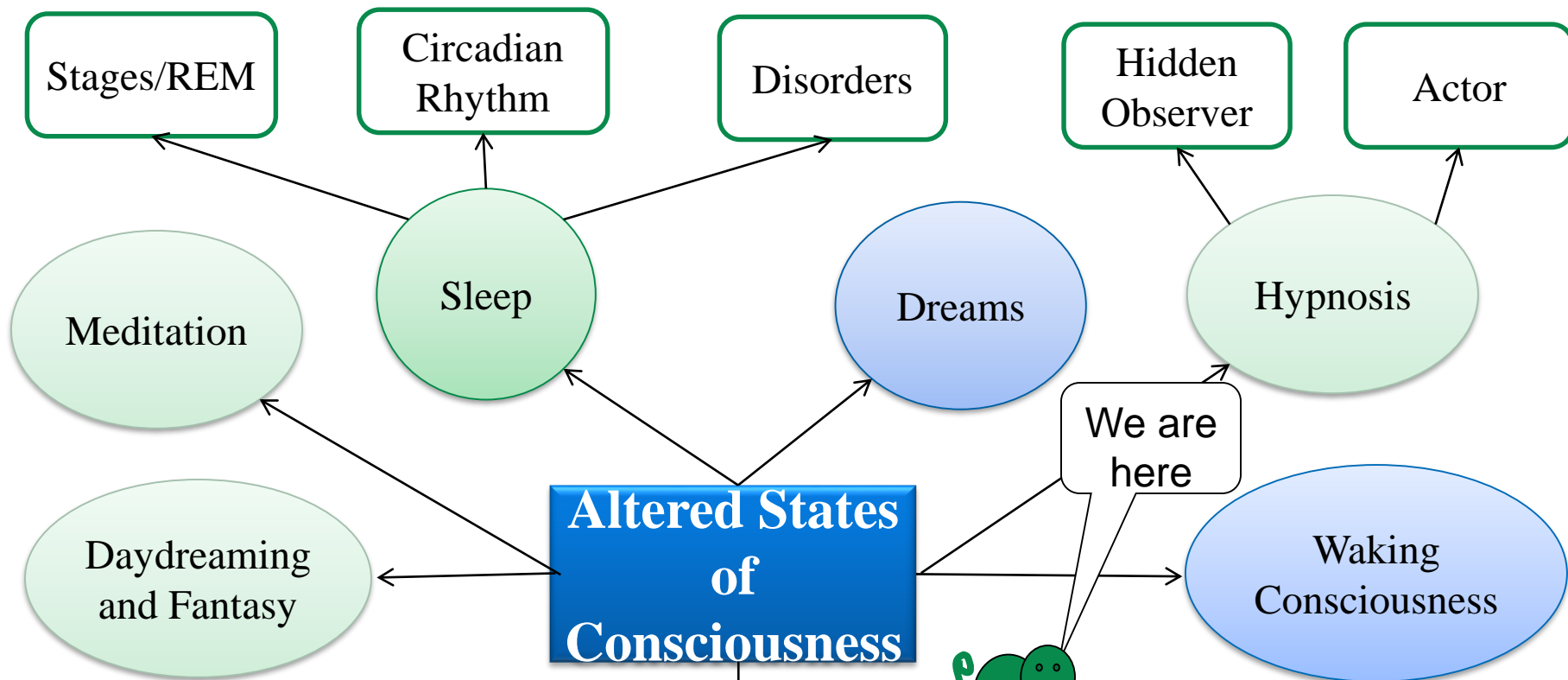
WHS AP Psychology



Unit 4: Sensation, Perception and States of Consciousness

Essential Task 4-10: Identify the major psychoactive drug categories (depressants, stimulants and hallucinogens) and classify specific drugs, including their psychological and physiological effects.







OA

1. In your opinion what are the symptoms or characteristics of addiction?
2. Why do some people become regular users of consciousness altering drugs? Tell me some influences that may make people more vulnerable to drug use.



Addiction:

- Compulsive engagement in rewarding stimuli, despite adverse consequences
1. Lack of control -- powerless to overcome addiction (delusions);
 2. Shame ;
 3. Effecting your life in profound ways (for you and those around you);
 4. Dependence on the behavior of substance.



Why use psychoactive drugs?

1. Biological influences

- Genetic predisposing
- adopted children are more susceptible to drug use if their biological parents are users.

2. Psychological influences

- Lacking sense of purpose
- Significant stress
- Psychological disorders like depression
- Risk taking personality



Why use psychoactive drugs?

3. Sociocultural influences

- Readily available in the neighborhood
- Opportunities due to living situations
- Cultural attitude towards drugs
- Peer influences

4. Biopsychosocial

- Influenced by genetics/emotional/social influences
- Combination of ALL the previous factors



Substance Use and Abuse

- Substance (drug) Use
 - Using a substance but it does not yet interfere with a person's life
- Substance (drug) Abuse
 - Pattern of drug use that diminishes one's ability to fulfill responsibilities
 - May result in repeated use in dangerous situations
 - May lead to legal difficulties related to drug use



Substance Use and Abuse

- **Dependence**
 - Compulsive (irresistible urge) use of a substance
 - Also known as addiction
 - Can be physical, psychological or both
- **Withdrawal**
 - After addiction, physical discomfort when the substance is stopped
- **Tolerance**
 - More substance is required to obtain the original effect



Dependence

- **Psychological addiction** is a intense desire to use a drug, particularly for relieving mental stress and negative emotions.
- **Physical addiction** is the need for a drug to alleviate physical pain and to avoid withdrawal symptoms.



Dependence

(4 of the following 7 symptoms)

- Developing a tolerance
- Experiencing withdrawal
- Using substance for a longer period or in greater quantities than intended
- Presence of a desire or repeated attempts to cut back on use
- Spending a lot of time using/obtaining the substance
- Reduction or cessation of usual activities
- Continued use despite awareness of drug's harmful effects



Essential Task 4-10:

[Outline](#)

- Major psychoactive drug categories
 - Depressants
 - Alcohol
 - Barbiturates
 - Opiates
 - stimulants
 - Caffeine
 - Nicotine
 - Cocaine
 - Ecstasy
 - Amphetamines
 - Methamphetamines
 - Hallucinogens
 - LSD
 - Marijuana



Drugs and Consciousness

Psychoactive Drug: A chemical substance that alters perceptions and mood (effects consciousness).

- I. Depressants
- II. Opiates (Narcotics)
- III. Stimulants
- IV. Hallucinogens



Caffeine

- The most used drug!
- Naturally occurring substance found in coffee, tea, cocoa, and chocolate
- Also added to soft drinks and pain medications
- Increases alertness
- In high doses, caffeine can cause anxiety, headaches, heart palpitations, insomnia, and diarrhea



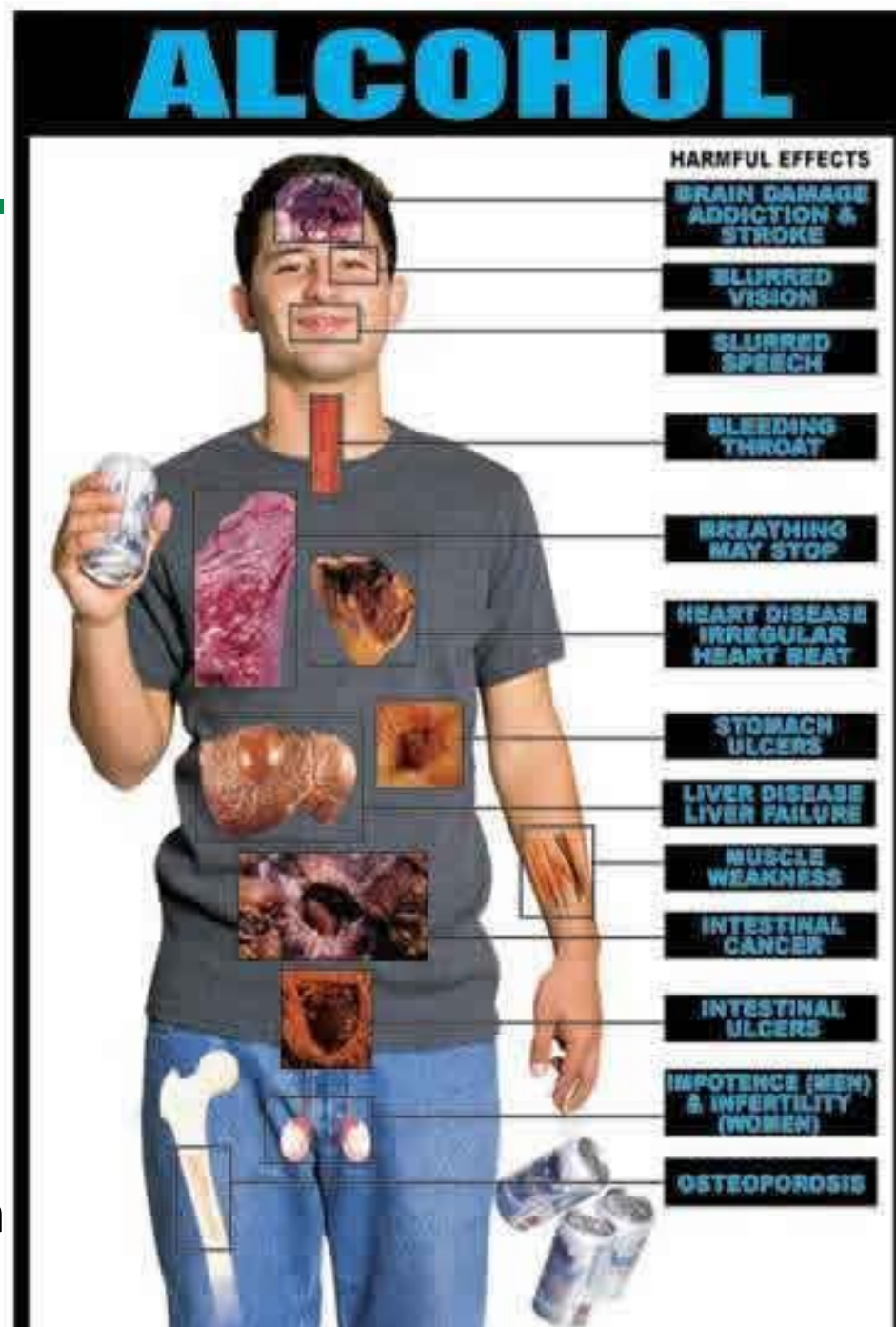
I. Depressants

- Depressant drugs (“downers”) reduce neural activity and slow body functions. They include:
- Common depressants are
 - Alcohol
 - Barbiturates



Alcohol

- Highly addictive
- Even moderate amounts can affect
 - Perception
 - Motor processes
 - Memory
 - Judgment
 - Visual acuity
 - Depth perception
 - Cognitive function





Alcohol

- Overall effect is to calm the nervous system
 - Sometimes perceived as a stimulant because it relaxes inhibitions
- It must be never mixed with sleeping pills (Barbiturates) – both depresses the nervous system.



Barbiturates

- “Downers”
- Often Used to treat insomnia
- “Truth serum”
- Can interfere with sleep patterns and cause dependence
- Effects are similar to alcohol
- MUST NEVER BE CONSUMED WITH ALCOHOL! (why?)



II. Opiates (Narcotics)

- Drugs that depresses neural activity; pain reliever.
 - Heroin; Morphine; Codeine
 - Derived from the opium poppy
- Includes opium, morphine, codeine, and heroin
- Opiates resemble mimic endorphins (agonists), the body's natural painkillers
 - Causes euphoria followed by clouded mental functioning
 - Brain stops producing natural endorphins
 - Withdrawal is extremely painful!





III. Stimulants

- (Uppers) Substances that excite the central nervous system
- Blocks; (antagonists) neurological receptors that would sedate the nervous system.
- Includes drugs such as
 - Caffeine
 - Nicotine
 - Cocaine
 - Ecstasy
 - Amphetamines
 - Methamphetamines



Cocaine

- Blocks reabsorption (reuptake) of dopamine
- Produces increased alertness, motivation, and euphoria
- Crash leads to anxiety, depression, and strong cravings
- Crack – more potent version of cocaine –symptoms are intensified!



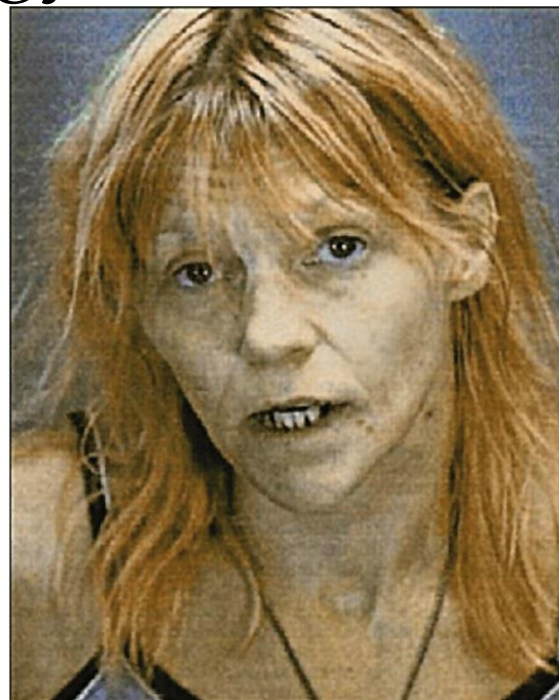
Nicotine

- Found in tobacco
- Considered by many to be the most addictive stimulant in use today
- Affects levels of several neurotransmitters
- Depending on amount and time smoked, can have either sedative or stimulating effects
- Can lead to numerous withdrawal symptoms, including nervousness, headaches, and irritability



Amphetamines

Amphetamines stimulate neural activity, causing accelerated body functions and associated energy and mood changes,



• National Pictures/ Topham/ The Image Works



Amphetamines

- Chemically similar to epinephrine, a hormone that activates the sympathetic nervous system
- Increase alertness as well as feelings of well-being
- Can cause euphoria followed by a crash, including severe depression
- Leads to cycle of addiction



Amphetamines

- **Methamphetamines** = super stimulant
 - Can cause irreversible change in mood
 - Cause physical changes (skin, teeth, internal organs)
- Forms can include methamphetamine and ecstasy (MDMA)
- Ecstasy acts as both a stimulant and hallucinogen
- Even short-term use of ecstasy may have long-term consequences



SKIN



FACIAL MUSCULATURE AND FAT



TEETH AND GUMS



INCREASING ESTIMATED AGE



3 AGE: 25



2 AGE: 25



1 AGE: 23

Methamphetamine Users

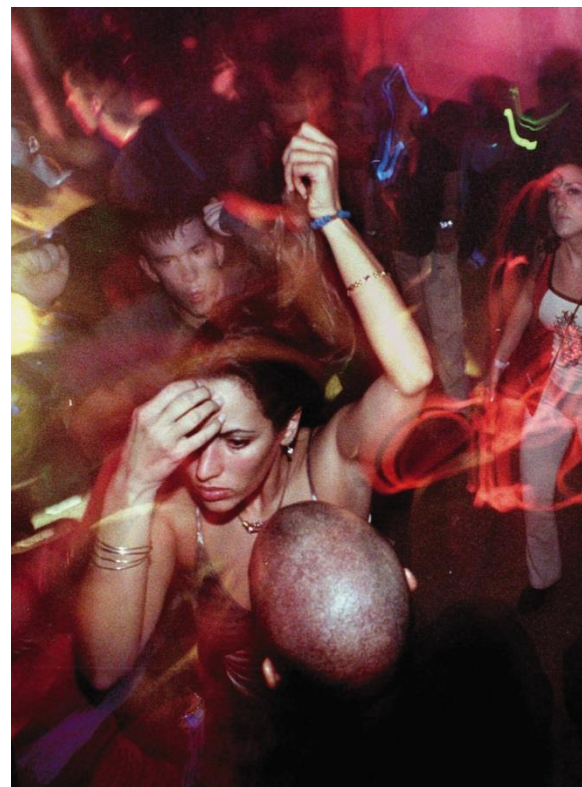




Ecstasy

Ecstasy or Methylenedioxymethamphetamine (**MDMA**) is a stimulant and mild hallucinogen. It produces a euphoric high and can damage serotonin-producing neurons, which results in a permanent deflation of mood and impairment of memory.

- Serotonin reuptake inhibitor



Greg Smith/ AP Photos



Rave Culture





IV. Hallucinogens

- (psychedelics) Substances that distort visual and auditory perception
- LSD
 - Produces hallucinations and delusions similar to a psychotic state
 - Can result in psychosis, memory loss, paranoia, panic attacks, nightmares and aggression



Marijuana

- THC, the active ingredient in marijuana, produces symptoms such as
 - Mild hallucinations
 - Euphoria
 - Enhanced sense of well-being
 - Relaxation
 - Distortion of time
- Some users may experience anxiety, paranoia, and it disrupts memory
- Medical Marijuana – Can be used for treatment (Cancer & Aids)



Mouse Party!



Brain Games

- Addition (Season 4)



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