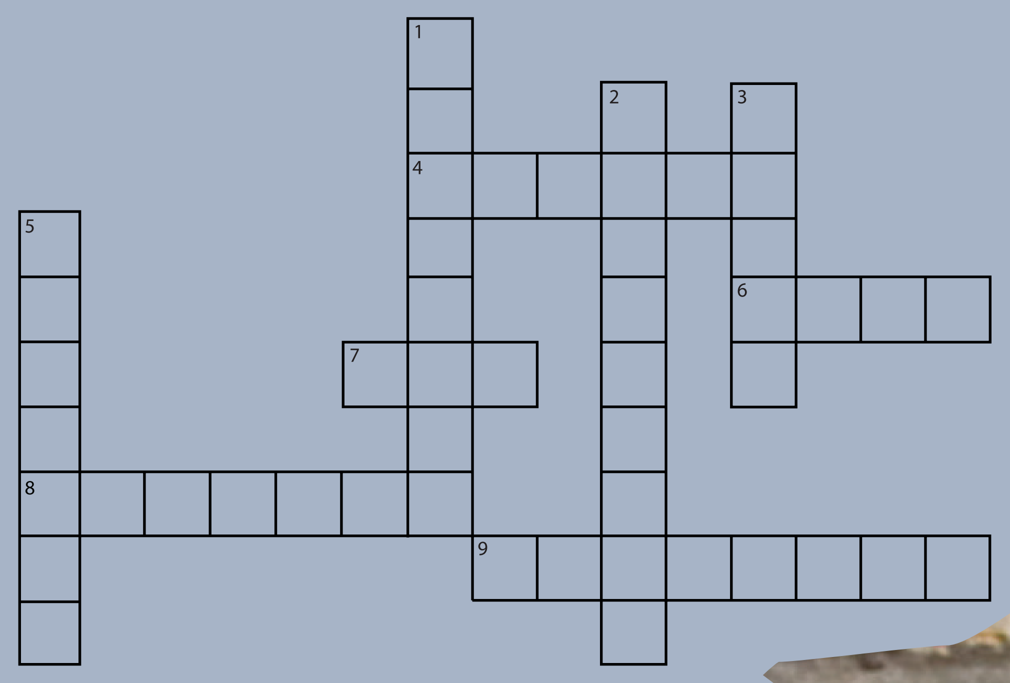
COCAINE CORNER

Across

4. A slang term for cocaine that also describes its consistency
6. Cocaine comes from the leaves of this plant
7. A drug user who shares injection needles is at risk for spreading or getting this disease
8. This is the space between neurons where neurotransmitters like dopamine are released
9. The way people use the powder form of cocaine

Down

1. This neurotransmitter is concerned with pleasure
2. Withdrawal, tolerance, and compulsive use are symptoms of this condition
3. The form of cocaine that is smoked
5. A side effect of cocaine that means "loss of memory"



HEROIN HIDEOUT:

A	R	V	C	D	W	Q	L	A	T	S	M	N	L	P
E	B	U	O	X	M	E	O	Y	O	U	E	J	Z	O
H	K	N	S	N	Q	K	C	N	R	R	D	M	P	P
R	H	L	E	H	E	L	Q	J	V	M	H	O	F	P
R	P	F	H	U	A	Q	I	O	W	C	H	Q	O	Y
A	C	B	E	G	W	N	U	U	N	K	R	M	S	P
I	S	S	E	N	S	S	E	L	T	S	E	R	N	L
D	P	L	D	O	S	D	R	O	W	S	Y	Q	I	A
C	L	E	M	Y	E	S	O	D	R	E	V	O	H	N
I	M	N	S	N	O	I	T	C	I	D	D	A	P	T
Y	I	T	W	I	T	H	D	R	A	W	A	L	R	L
A	E	R	K	Y	K	K	T	L	L	Q	J	F	O	Q
M	Z	Q	I	O	O	F	I	T	N	U	G	F	D	T
O	Z	G	B	K	A	P	F	W	E	Q	S	X	N	Y
C	E	D	O	P	A	M	I	N	E	C	T	V	E	X

Search for words in the Heroin Hideout. Make sure to look in all directions—up, down, and diagonally!

ADDICTION
DOPAMINE
DROWSY
ENDORPHINS
ILLEGAL
INSOMNIA
NERVOUS SYSTEM
OVERDOSE
POPPY
PLANT
RESTLESSNESS
RUSH
WITHDRAWAL

Compulsive Use: This occurs when a person has a very strong need to use a drug, caused by addiction.

Tolerance: This occurs when a person needs higher doses of a drug to have the same effect.

Withdrawal: Symptoms of withdrawal, such as feeling sick or unhappy, occur when an addicted person stops using a drug; the discomfort often leads people to seek the drug again.

BP Weekly

Brain Power! Challenge

DRUGS ON THE STREET

Science in the Spotlight:

The Brain, Pain, and Opioids

Even though we're not usually aware of it, our body does a lot of things to protect us.

- When we experience pain—like a cut or a burn—neurotransmitters in our brain are released to decrease the pain
- If a person is in severe pain, a doctor might prescribe an opioid—or manufactured endorphin such as morphine, codeine, methadone, or OxyContin—to relieve pain
- There is a risk of addiction with opioid use
- The neurotransmitters responsible for relieving pain are called endorphins, which both decrease pain and produce feelings of intense pleasure or euphoria
- If people are not in pain, opioids give them intense feelings of pleasure because the drug stimulates the brain's reward system
- Chronic abuse of opioids can have major effects on brain activity, tricking the brain into producing fewer natural endorphins

NIDA
NATIONAL INSTITUTE ON DRUG ABUSE

NATIONAL INSTITUTES OF HEALTH • U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Cocaine Stats & Facts

- Pure cocaine was first used in the **1880s** as a local anesthetic during surgery because it constricts blood vessels and limits bleeding
- **Cocaine kills** over **2,000** people per year!
- Cocaine-related deaths are often a result of **cardiac arrest** or **seizures**
- **Repeated snorting** of cocaine can **damage** the **membranes** in the **nose**
- On the street, cocaine is **diluted** or **"cut"** with other substances to **increase** the quantity and raise the **profits** of dealers
- Cocaine is **very addictive!** In studies, animals addicted to cocaine chose the drug over food—even when it meant they would starve
- Many people report being **hooked** on cocaine after only one use

Injection drug use often involves unsafe needle-sharing practices, which can lead to the exchange of blood-based viruses, such as HIV

Heroin Stats & Facts

In the early 1900s, before its dangers were understood, heroin was an ingredient in many home remedies

Cold flashes with goose bumps ("cold turkey") are a common withdrawal symptoms of heroin

Regular abusers may experience withdrawal as soon as a few hours after their last use—withdrawal symptoms are a sign of addiction

Approximately 3.7 millions Americans, aged 12 and older, have used heroin at least once

Cocaine Background

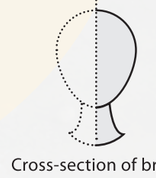
- Cocaine is made from leaves of the coca plant
- It can be used in powder or crystal (crack) form and snorted, injected, or smoked
- Cocaine is a central nervous system stimulant that causes sudden increases in heart rate, blood pressure, and breathing
- Cocaine disrupts neurotransmission in the brain, especially the neurotransmitter dopamine
- Cocaine is *very* addictive!

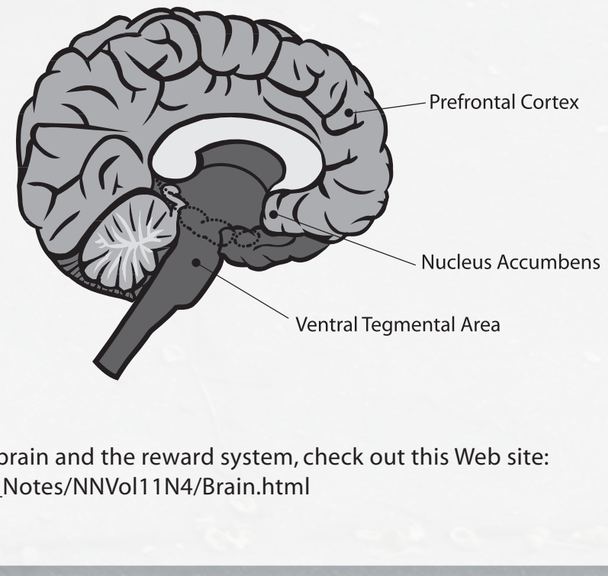
DO Try This At Home

Learn about Drugs in the Brain

Cocaine causes changes in the reward system of the brain. This part of the brain is responsible for feelings of pleasure, and is activated when a person is feeling good. For example, when you eat an ice cream sundae or see your best friend, neurotransmitters in your brain's reward system are released and you feel happy. Cocaine activates the brain's reward system much more than everyday events do.

Heroin also affects parts of the brain that release neurotransmitters and activate the brain's reward system. Scientists have identified the specific areas of the brain that work in the reward system, but understanding how drugs change the chemicals in the brain can tell us a lot about drug addiction. For instance, a person who uses cocaine or heroin is "rewarded" by feelings of pleasure, and therefore might want to repeat the act as a way of feeling good again. However, the brain changes as a result of drug use, and soon a person needs more of the drug just to keep from feeling bad. These changes in the brain are addiction.


Cross-section of brain



To learn more about the brain and the reward system, check out this Web site:
www.nida.nih.gov/NIDA_Notes/NNVol11N4/Brain.html

Heroin Background

- Heroin is a highly addictive illegal drug that is extracted from the seedpod of the poppy plant
- Heroin acts on the limbic system, which is responsible for feelings of pleasure; on the brain stem, an area that controls automatic body functions such as breathing; and on the cerebral cortex, where thought processes take place
- Heroin can block pain messages transmitted by the central nervous system from the body, which could cause a person not to react to dangerous situations because the nervous system is not receiving notice of pain
- At low doses, heroin triggers a dreamlike state with such side effects as constricted pupils, reduced appetite, constipation, low body temperature, itching, sweating, and stupor
- At higher doses, side effects of heroin include increased breathing and heart rate and a reduction in blood pressure. Very high doses can cause death

Cocaine Corner Answers:
1. Dopamine; 2. Addiction; 3. Crack; 4. Powder; 5. Amnesia; 6. Coca; 7. HIV; 8. Synapse; 9. Snorting