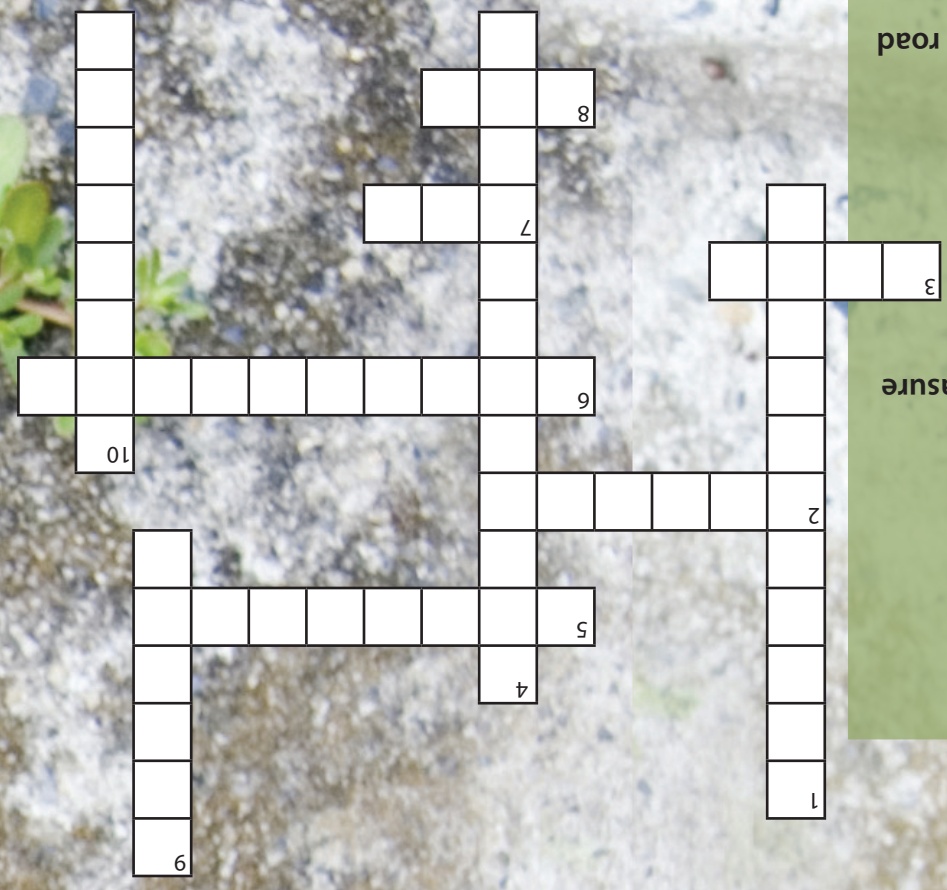


THE MEMORY THEIF



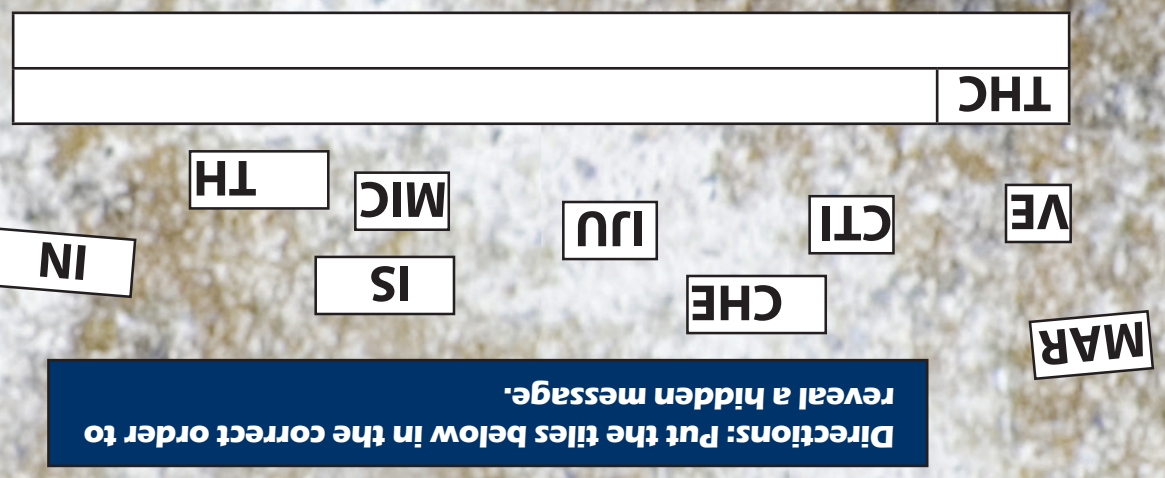
Marijuana Crossword Puzzle

Across:

- Marijuana is used to treat nausea in patients with this disease
- Effects of marijuana can last for at least this many hours after use
- Marijuana affects this neurotransmitter, which is associated with feelings of pleasure
- The uncomfortable feeling or symptoms that one experiences when abruptly stopping marijuana
- Main active ingredient in marijuana
- Slang for marijuana

Down:

- Damage to this part of the brain can cause memory problems
- Drivers who have used marijuana lack this, making them very dangerous on the road
- The most common way marijuana is used
- Marijuana comes from dried flowers and leaves of this plant



Unscramble the Tiles to Reveal a Message

Directions: Put the tiles below in the correct order to reveal a hidden message.

Science in the Spotlight:

Grass-Roots Research

The National Institute on Drug Abuse is a U.S. Federal Government agency that uses science to learn more about the harmful effects of drugs. Research on marijuana provides useful information about how the drug affects school, work, and social life. For example:

Social Life

Marijuana use is also linked to psychological problems, such as:

- Depression
- Anxiety

Social Life

Studies show that marijuana users can have fewer skills that:

- Help people maintain self-confidence
- Help people continue striving for goals

School

Students who smoke marijuana get lower grades than students who do not smoke. Marijuana users are less likely to graduate from high school than non-using students.

Work

Employees report that co-workers who use marijuana show more negative work behaviors, such as:

- Daydreaming
- Leaving work without permission
- Not working to their fullest

Social Life

Research on marijuana shows very clearly that use of the drug can cause problems in a person's daily life. The drug can also make problems that already exist even worse.

School

Heavy users of marijuana show great difficulty in:

- Holding or refocusing their attention
- Registering, organizing, and using information

School

Heavy users of marijuana have been shown to score lower on standardized tests that measure verbal and mathematical skills than non-users. Marijuana greatly affects a person's ability to learn and remember while that person is under the influence. This can last for days or weeks after use of the drug.

Work

Studies show that marijuana use affects many different aspects of working, including:

- Being late or absent for work
- Having accidents on the job
- Having to leave work

BP Weekly



Marijuana Stats & Facts

The active ingredient in marijuana is tetrahydrocannabinol, or THC

Road tests of drivers show that people who are high on marijuana have the same lack of coordination as people who have had too much to drink

Smoking marijuana can result in anxiety, panic attacks, depression, and paranoia

Marijuana has been linked to poor school performance and high dropout rates

Adolescents who smoke weed are 85 times more likely to use cocaine than their non-weed-smoking peers

Marijuana is the most frequently used illegal drug in the United States

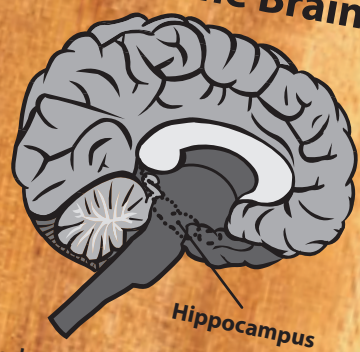
The amount of tar, carbon monoxide, and other cancer-causing chemicals can be greater in marijuana smoke than tobacco smoke

Smoking five marijuana joints a week is the equivalent of smoking a pack of cigarettes a day

The immediate effects of marijuana are slowed reaction time, poor physical coordination, and impaired concentration

Marijuana and the Effects on the Brain

The main active ingredient in marijuana is a chemical called tetrahydrocannabinol (THC). THC binds to neurons that have a receptor called the THC receptor. Certain parts of the brain have higher concentrations of THC receptors. These areas are the hippocampus, the cerebellum, and the cerebral cortex. Areas of the brain with higher levels of THC receptors are most affected by marijuana use.



The hippocampus is in charge of certain types of learning and memory. Disrupting the normal functioning of the hippocampus can lead to short-term memory loss and even lasting memory loss. Taking THC in large quantities over a long period of time can seriously affect neurons in the hippocampus, resulting in permanent damage and memory loss.

Slang names for marijuana

WEED

GANJA

HASH

CHRONIC

POT

HERB

GRASS

Marijuana Crossword Puzzle Answers:
1. hippocampus; 2. cancer; 3. four; 4. coordination; 5. dopamine; 6. withdrawal; 7. THC; 8. pot; 9. smoked; 10. cannabis
Scramble Answer: THC is the active chemical in marijuana.

DO Try This At Home

Become an expert on the truth of marijuana

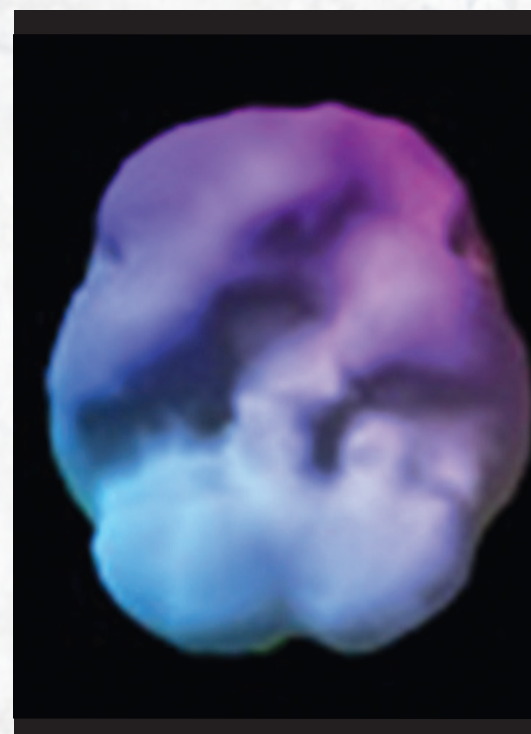
Marijuana is used more frequently in the United States than any other illegal drug. There are many misconceptions about the drug and how it affects a person. The large number of marijuana users does not mean that the drug is harmless: far from it, in fact. Despite what people say and think, there are many science-based facts about the drug. Find out for yourself. Become an expert on the truth of marijuana use by looking up these Web sites:

- www.drugabuse.gov
- www.ncadi.samhsa.gov
- www.freevibe.com*
- www.abovetheinfluence.com*
- www.justthinktwice.com

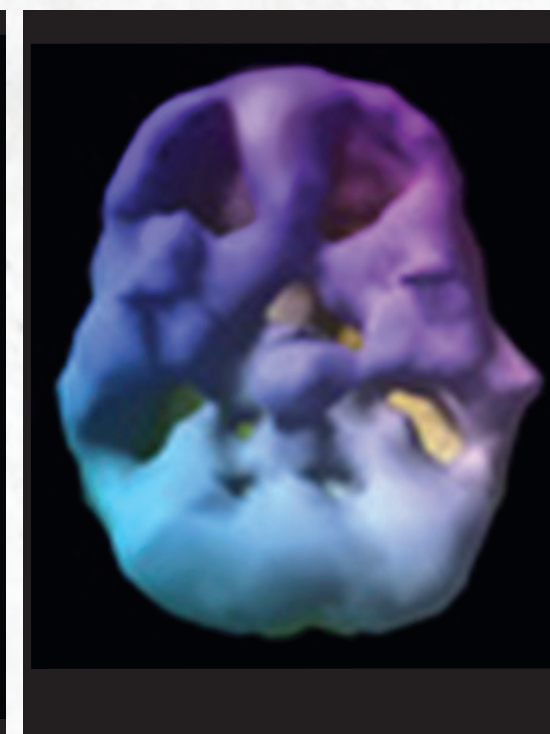
After you learn more for yourself about marijuana, watch television carefully for references to the drug. Because it is an illegal drug, TV cannot show use of the drug, but marijuana use definitely happens on various TV shows. How do they portray the drug? How does this compare to what you've learned about the science of marijuana?

* These sites were not developed by the Federal Government and the Federal Government does not endorse them.

Healthy Brain



Brain of an 18-year-old who has used marijuana 4 times a week for 3 years



Marijuana and the Brain The above pictures are Single Photon Emission Computed Tomography (SPECT) images, a type of brain imaging that allows doctors and scientists to look into the brain of a living person to see how it is working. The holes in the pictures are not actually holes in the brain. They show areas of the brain that should be working but aren't. The SPECT image of the marijuana abuser shows much less activity.