

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Hands-on Science/Critical Thinking

Activity Gone Bust

**Just how important is it to keep your brain healthy?
See for yourself.**

Abusing marijuana can make everyday tasks difficult. THC, the most powerful chemical in marijuana, interferes with normal functioning of the brain. Here are three ways THC can trip you up. 1) It acts on the receptors in the brain that are in charge of the five senses: touch, sight, hearing, taste, and smell; 2) THC affects the hippocampus, part of the brain's depot for sorting and forming memories; 3) the chemical interferes with the workings of the cerebellum, the part of the brain most responsible for coordinating balance.

The experiment below simulates how basic functions can become difficult under the influence of marijuana. Try it out!

YOU NEED

one deck of playing cards • very dark sunglasses • a radio • a timer • paper • a pencil

TO DO

- Find a flat work space.
- **Trial 1:** Have your partner shuffle a deck of cards and place the deck face down in front of you. Your objective is to sort the hearts and diamonds in to a pile on your left, and the spades and clubs to your right. Have your partner keep time and record how long it took you to finish sorting the entire deck.
- **Trial 2:** You're going to simulate what it would be like if marijuana messed with your eyesight. Put on a pair of sunglasses and repeat the exercise in **Trial 1**. Make sure your partner times you again.
- **Trial 3:** Imagine your hippocampus is under attack. You're getting forgetful. Repeat **Trial 2**. But this time, sort the hearts and diamonds in to a pile on your *right* and the spades and clubs in to a pile on your *left*. Also, have your partner turn on the radio to a station you don't like. Your partner should time you again.
- **Trial 4:** This activity will mimic the effect of a dysfunctional cerebellum, so you'll lose coordination. Repeat **Trial 3**. For this round, you can only use one hand. And you have to use the one you normally don't use. Lefties, use your right hand, and righties, use your left. Sit on your free hand. Again, make sure your partner is timing you.

CONCLUSION

Compare the results for each trial. How different are they? Why? How did you feel as the trials progressed?

THINK TANK

Imagine the card activity as your schoolwork, favorite hobby, or team sport instead. Now look at your performance records. Would you have gotten a bad grade, missed a goal, etc.? Discuss.

