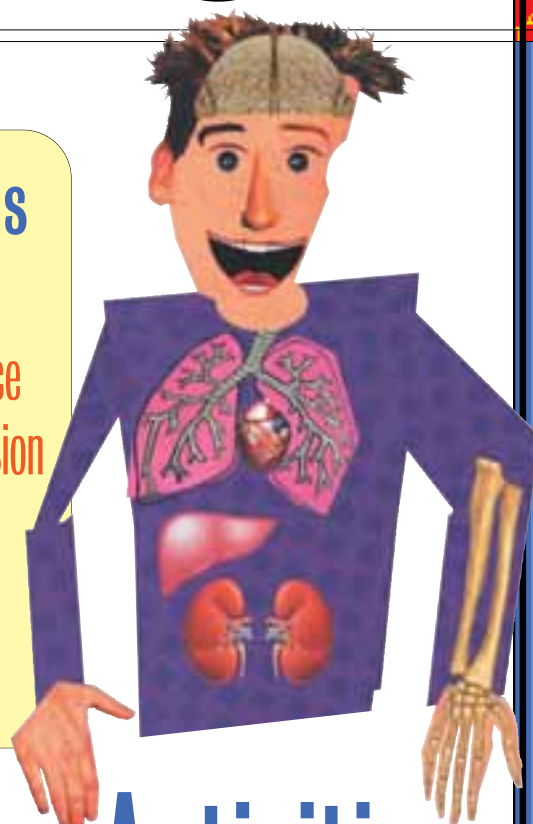


HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Reproducible Skills
Pages, Including:

- » Body & Brain Science
- » Reading Comprehension
- » Graphs, Charts
- » Critical Thinking
- » Sequencing



14 Drug Education Activities

FROM SCHOLASTIC AND THE SCIENTISTS OF THE NATIONAL INSTITUTE ON DRUG ABUSE,
NATIONAL INSTITUTES OF HEALTH, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Dear Teacher,

One of the most important things you can do as a teacher is to give your students information about the health effects of drug abuse. Together with the National Institute on Drug Abuse (NIDA), we've put together this 16-page book of reproducibles, full of facts and activities on drugs of abuse. This book is just one component of our ongoing drug education program, "Heads Up: Real News About Drugs and Your Body," a partnership between NIDA and Scholastic Inc. These skills pages can be used alone or to support and extend the feature articles that appeared in your classroom magazine in the 2002-2003 school year and are continuing this year.

This book includes an introduction to the brain, that crucial organ so vulnerable to drugs of abuse. Then, we focus on the health effects of specific drugs, including marijuana, inhalants, nicotine, steroids, prescription drugs, club drugs, heroin, and cocaine.

While you can use these reproducibles to support a drug education, health, or human-body science curriculum, the activities extend into other areas. In order to complete the activities, students must read charts and graphs and complete diagrams. They must read and practice universal skills such as critical thinking, pre- and post-reading strategies, inferencing, and recall. We hope you find these pages useful across your curriculum.

—The Editors

● For past and current articles in the Heads Up series, as well as activities and teaching support, go to: www.Scholastic.com/HEADSUP

● For free reprints of the 2002-2003 Heads Up series, call 1-800-729-6686 and refer to NCADI MS927; the accompanying Teacher's Edition is NCADI MS928.

● For free copies of the 2002-2003 Heads Up poster, call 1-800-729-6686 and refer to NCADI AVD165.

ANSWER KEY

Brain, p. 2: Cerebral cortex: thinking, seeing, hearing, and sense of touch; Limbic system: produces feelings and emotions; Cerebellum: coordinates movements involved in everyday tasks; Brain stem: controls breathing, food digestion, and heart beat; Nucleus accumbens: involved in reward and feelings of pleasure. Students' responses to how they've used each part of the brain will vary.

Marijuana, p. 3: 1. hemp; 2. joint; 3. blunt; 4. THC; 5. cannabinoid; 6. neurons; 7. hippocampus; 8. cerebellum; 9. cortex; 10. dopamine.

Inhalants, p. 4: True; False; False; True; False; False; True; False; False; True.

Nicotine, p. 6: 1. b; 2. a; 3. c; 4. a; 5. c.

Steroids, p. 7: Hair—male-pattern baldness; Bones—stunted growth; Brain/limbic system—roid rage; Arm/needle injection site—HIV/AIDS; Heart—heart attack; Liver—cysts and liver cancer.

Club Drugs, p. 9: Answers can include any of the effects listed on page 10 under the respective drugs.

Cocaine, p. 10: Student answers will vary.

Heroin, p. 13: For the correct order of the sentences, start from "What is heroin?" and go counter-clockwise. Answers for "Draw Your Own Conclusion" may vary.

What's the Question? p. 15: 1. What are steroids, heroin, and cocaine? 2. What is a hollowed-out cigar filled with marijuana? 3. What are MDMA, inhalants, and marijuana? 4. What is a street name for MDMA? 5. What are MDMA, cocaine, and/or LSD? 6. What are cocaine, heroin, and marijuana? 7. What are LSD, MDMA, and marijuana?

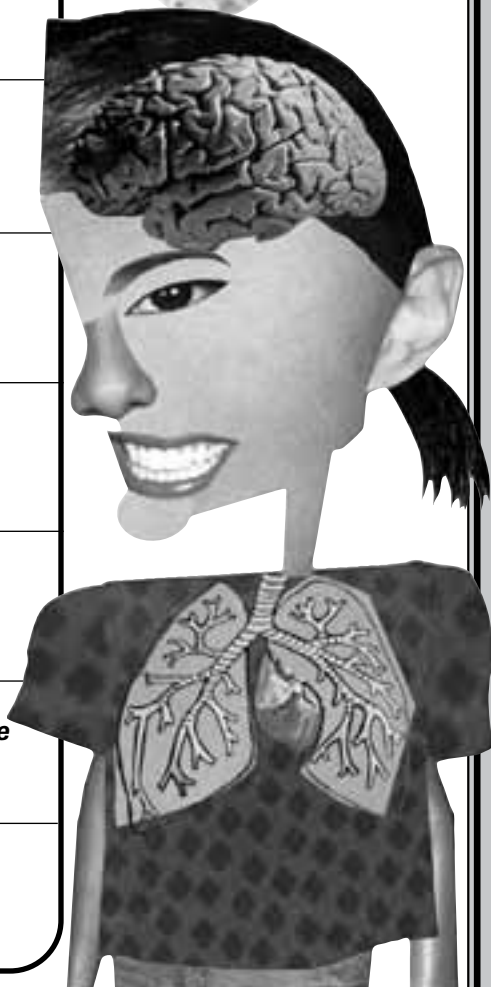
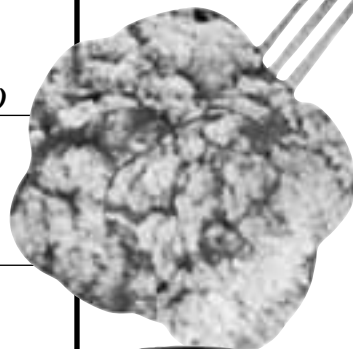
Prescription Drugs, p. 16: 1. F; 2. T; 3. F; 4. F; 5. T.



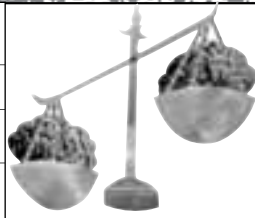
Contents



PAGE	CONTENT
2	YOUR BRAIN AT-A-GLANCE <i>An introduction to the parts of the brain</i> ACTIVITY: Parts of the Brain: What Are They Good For? <i>(Skills: Recall, reading comprehension, inferencing)</i>
3	THE WORD ON MARIJUANA <i>A glossary of terms</i> ACTIVITY: Fill-in-the-Blank <i>(Skills: Recall, reading comprehension, inferencing)</i>
4-5	THE TOP 10 THINGS YOU NEED TO KNOW ABOUT INHALANTS <i>A list of facts about inhalants</i> ACTIVITY: True or False Quiz <i>(Skills: Recall, reading comprehension)</i>
6	NICOTINE NEWS <i>A line graph shows the decline in teen nicotine use</i> ACTIVITY: Multiple Choice Quiz <i>(Skills: Graph reading)</i>
7	STEROIDS: ALL-OVER HORROR <i>How anabolic steroids affect the body and brain</i> ACTIVITY: The Body on Steroids <i>(Skills: Recall, completing a diagram)</i>
8-9	RAVE REALITIES: THE TRUTH ABOUT CLUB DRUGS <i>A fact sheet on club drugs</i> ACTIVITY: Club Drug Cheat Sheet <i>(Skills: Completing a graphic organizer)</i>
10-11	THE COCAINE COURSE <i>Frequently Asked Questions about cocaine</i> ACTIVITY: The Cocaine Course <i>(Skills: Pre- and post-reading strategies)</i>
12-13	MIXED-UP ABOUT HEROIN <i>An out-of-order report on heroin</i> ACTIVITY: Draw Your Own Conclusion <i>(Skills: Sequencing, drawing conclusions)</i>
14-15	OUTSMART THE CHART <i>A comprehensive chart on the common drugs of abuse</i> ACTIVITY: What's the Question? <i>(Skills: Reading a chart, recall, comprehension)</i>
16	A PRESCRIPTION FOR PAIN <i>A bar graph of statistics on prescription drug abuse</i> ACTIVITY: True or False Quiz <i>(Skills: Reading a bar graph)</i>



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Your Brain At-a-Glance

Using drugs changes the way the brain works. The brain is very important. It controls body functions such as breathing, walking, and thinking. Discover the different parts of your brain and the jobs they do. Then, learn how drugs can get in the way. After reading, complete the diagram activity below.

The largest part of your brain is the **cerebral cortex**. When it's functioning normally, this section takes care of thinking, seeing, hearing, and the sense of touch.

Next is the **cerebellum**. The cerebellum coordinates movements you do everyday, such as brushing teeth and riding a bike.

Just above the spinal cord, a small section of your brain called the **brain stem** controls basic functions, such as breathing, digesting food, and maintaining your heartbeat.

Then, there's the **limbic system**, also known as the emotional brain. This is where feelings like fear and passion are born.

Scientists have identified a "reward pathway" in the brain that includes the **nucleus accumbens**. When we do something that is key to survival, such as eating when we are hungry, the reward pathway is stimulated. Most addictive drugs also stimulate this reward pathway, often more than natural rewards, such as food.

How do drugs affect your brain? Once in the brain, drugs of abuse are similar in size and shape to brain chemicals called neurotransmitters. Brain cells release and absorb these natural chemicals in order to send and receive messages to and from each other. Drugs disrupt this delicate communication system, and can hurt your brain.

PARTS OF THE BRAIN: WHAT ARE THEY GOOD FOR?

For each brain part, write one of the functions it performs. Plus, include one way you've used this part of your brain recently.

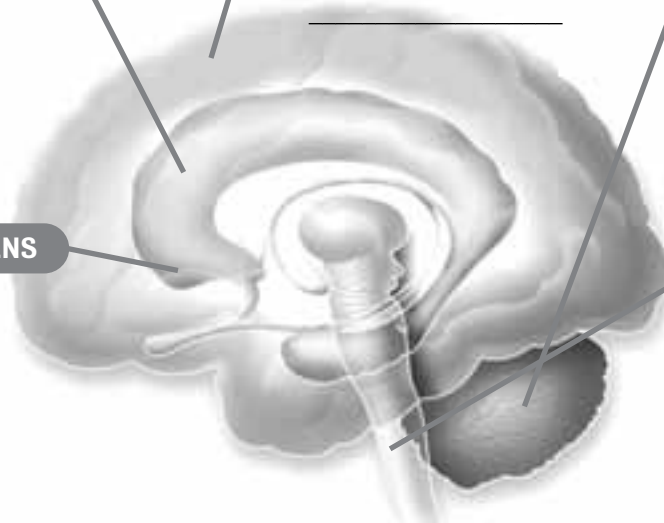
LIMBIC SYSTEM

CEREBRAL CORTEX

CEREBELLUM

NUCLEUS ACCUMBENS

BRAIN STEM



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



The Word on Marijuana



Here are some of the key words you need to understand to discuss the drug marijuana and its effects. Review the glossary. Then, fill in the blanks in the article below.

GLOSSARY

Blunt: slang term for a cigar filled with marijuana

Cannabinoid Receptors: sites on the surface of brain cells where the active ingredient in marijuana attaches to produce the drug's effects

Cerebellum: part of the brain involved in body movement

Cerebral Cortex: part of the brain involved in higher thinking

Dopamine: a brain chemical (or neurotransmitter) that helps nerve cells communicate

Hemp: the plant marijuana comes from

Hippocampus: part of the brain's limbic system that helps with learning and memory

Joint: slang term for marijuana rolled into a cigarette

Neurons: cells in the brain; also found in the spinal cord and other organs

THC: tetrahydrocannabinol, the main active ingredient in marijuana

WHAT IS MARIJUANA? WHAT DOES IT DO TO THE BRAIN?

The drug marijuana is the dried, shredded leaves of the _____ plant. While there are several methods of use, marijuana is often rolled into a cigarette, called a _____, or stuffed into a hollowed-out cigar, called a _____, and smoked.

The drug's effects on the brain are caused by the main active ingredient, tetrahydrocannabinol, or _____. This chemical attaches to specific receptors in the brain called _____ receptors. When it binds to these receptors, it interferes with the normal communication between brain cells, or _____.

Several parts of the brain have a lot of these receptors, including the _____, which deals with learning and memory; the _____, which helps with body movement; and the cerebral _____, which is in charge of higher thinking.

Finally, research shows that THC triggers the release of _____, a chemical that helps nerve cells communicate.



Top 10 Things You Need to Know About Inhalants

Educate yourself about this dangerous class of drugs with our Top 10 list below. Then, complete the true/false activity on the next page.

1

Household products can be dangerous.

Inhalants are breathable chemical vapors that produce mind-altering effects. Some of these come from everyday household products like spray paint, glues, and cleaning fluids. But these toxic chemicals were never meant to be inside a human body!

2

Using inhalants just one time can kill you.

Sniffing highly concentrated amounts of the chemicals in solvents or aerosol sprays can cause heart attacks and even death within minutes. Known as "Sudden Sniffing Death," this can happen the first time you use inhalants or anytime after. You can also die from lack of oxygen, since you are filling your lungs with chemicals instead of air.

3

No matter how inhalants are taken, they still spell danger.

Inhalants are breathed in through the nose or mouth in a number of ways, variously called sniffing, snorting, huffing, or bagging. But there is no safe way to breathe toxic fumes.

4

Your brain may never be the same again.

The poison in inhalants can kill so many brain cells that brain tissue actually shrinks. People who abuse inhalants may have difficulty with memory, learning, and thinking.

5

When you hurt your brain, you hurt your body.

Inhalants dissolve the protective coating called myelin on neurons, or brain cells. Myelin helps messages travel rapidly along nerve cells. When myelin is damaged, messages move too slowly—resulting in muscle spasms, tremors, and even difficulty walking and talking.

6

By using inhalants, you risk depression.

Inhalants can affect an abuser's mood even when he or she is not huffing. The sniffer can fall into a gloomy mood where nothing about life seems good or hopeful—a condition doctors call depression.

7

You can lose your hearing for good. Use of toluene (a chemical found in spray paints and glues) and trichloroethylene (a chemical found in cleaning fluids and correction fluids) can cause hearing loss.

8

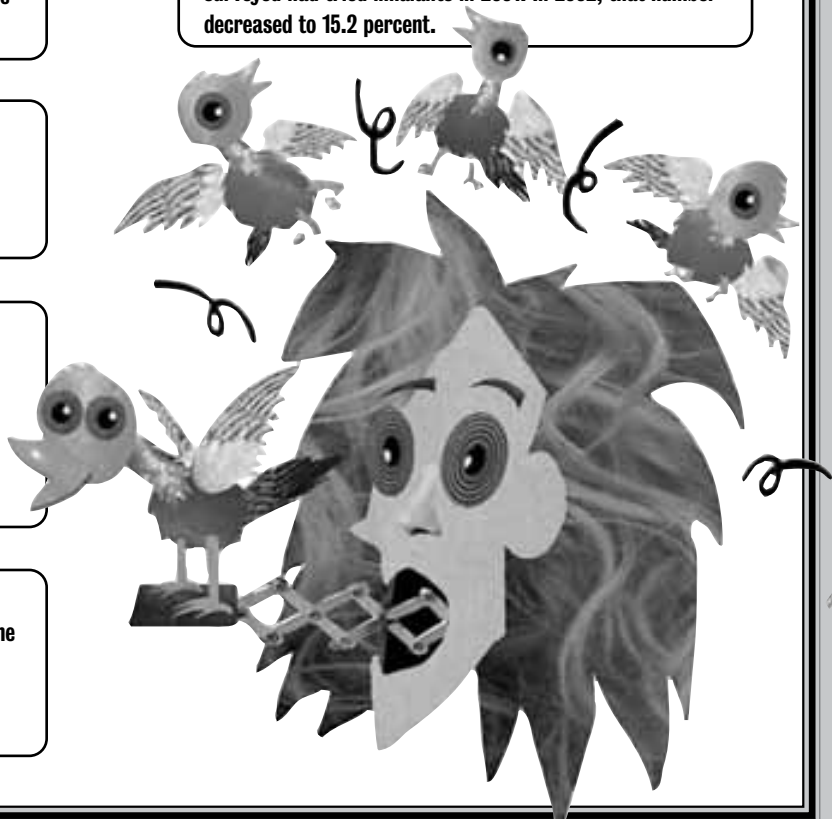
The destruction could go as deep as inside your bones. Use of benzene (or gasoline) can damage bone marrow.

9

Damage can go beyond your brain and bones. Chronic exposure to inhalants can lead to significant damage to the heart, lungs, liver, and kidneys.

10

Fewer teens are trying inhalants. According to a recent NIDA-funded study, 17.1 percent of 8th-graders surveyed had tried inhalants in 2001. In 2002, that number decreased to 15.2 percent.



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



True or False?

● What's the truth? Read these statements about inhalants. Mark "T" for statements you think are true, and "F" for statement you think are false. Then, double-check your answers by reviewing what you read in "Top 10 Things You Need to Know About Inhalants."

___ Inhalants can cause heart attacks.

___ Aerosol sprays are not toxic.

___ Toluene (a chemical found in spray paints) is the only harmless inhalant.

___ Inhalant abusers are at risk for depression.

___ According to a 2002 study, more than 50% of 8th-graders surveyed had tried inhalants.

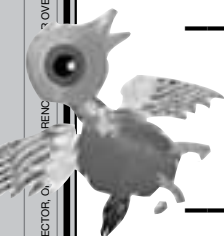
___ Inhalants help speed messages through nerves by building myelin.

___ Inhalants can cause permanent hearing loss.

___ Sniffing chemicals through the nose is safe; inhaling through the mouth is not.

___ "Huffing" refers to a safe method of inhaling chemical fumes.

___ Inhalants can cause kidney damage.

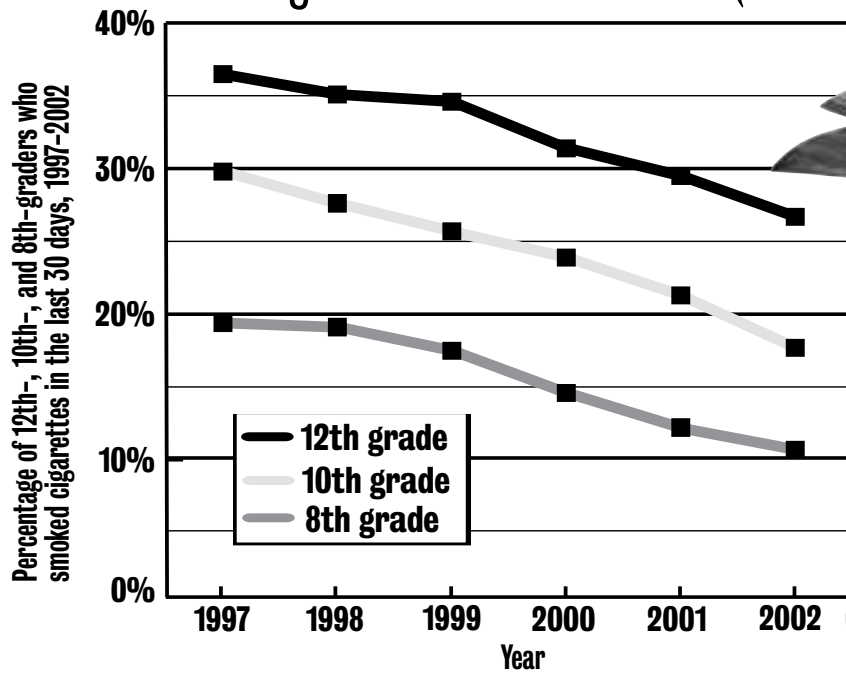




Nicotine News

There's good news about cigarettes and teens. Fewer 12th-, 10th-, and 8th-graders smoked cigarettes in 2002 than in 2001. Teen smoking has gone down in popularity for five years in a row. Check out the line graph below. Then, take the multiple-choice quiz that follows.

Percentage of Teens Who Use Nicotine (1997-2002)



MULTIPLE CHOICE QUIZ

- What does this graph show?
 - What percentage of students in 8th, 10th, and 12th grade did their homework in the year 2002.
 - What percentage of students in 8th, 10th, and 12th grade smoked in the last month, for the years 1997-2002.
 - Reasons teens give for smoking.
- From 1997-2002, how has the percentage of teen smokers changed?
 - It's gone down every year in each grade.
 - It's gone down every year, except for 2000.
 - It went down for only 8th- and 10th-graders.
- Which grade of students, in which year, has the least percentage of smokers?
 - 10th-graders, 1997
 - 12th-graders, 2000
 - 8th-graders, 2002
- From 1997 to 2002, how much of a percentage drop has there been for 12th-graders who say they have smoked in the last month?
 - about 10 percent
 - about 5 percent
 - about 30 percent
- What grade students were part of this survey?
 - Middle school students
 - 9th- and 11th-grade students
 - 8th-, 10th-, and 12th-grade students

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Steroids: All-Over Horror

Some people take drugs called steroids illegally as a way to build their muscles. But steroids affect more than muscles. Read below how steroids mess with your brain and body. Then, finish the diagram. Write either how steroids affect the body part indicated by an arrow, or the name of the body part affected.

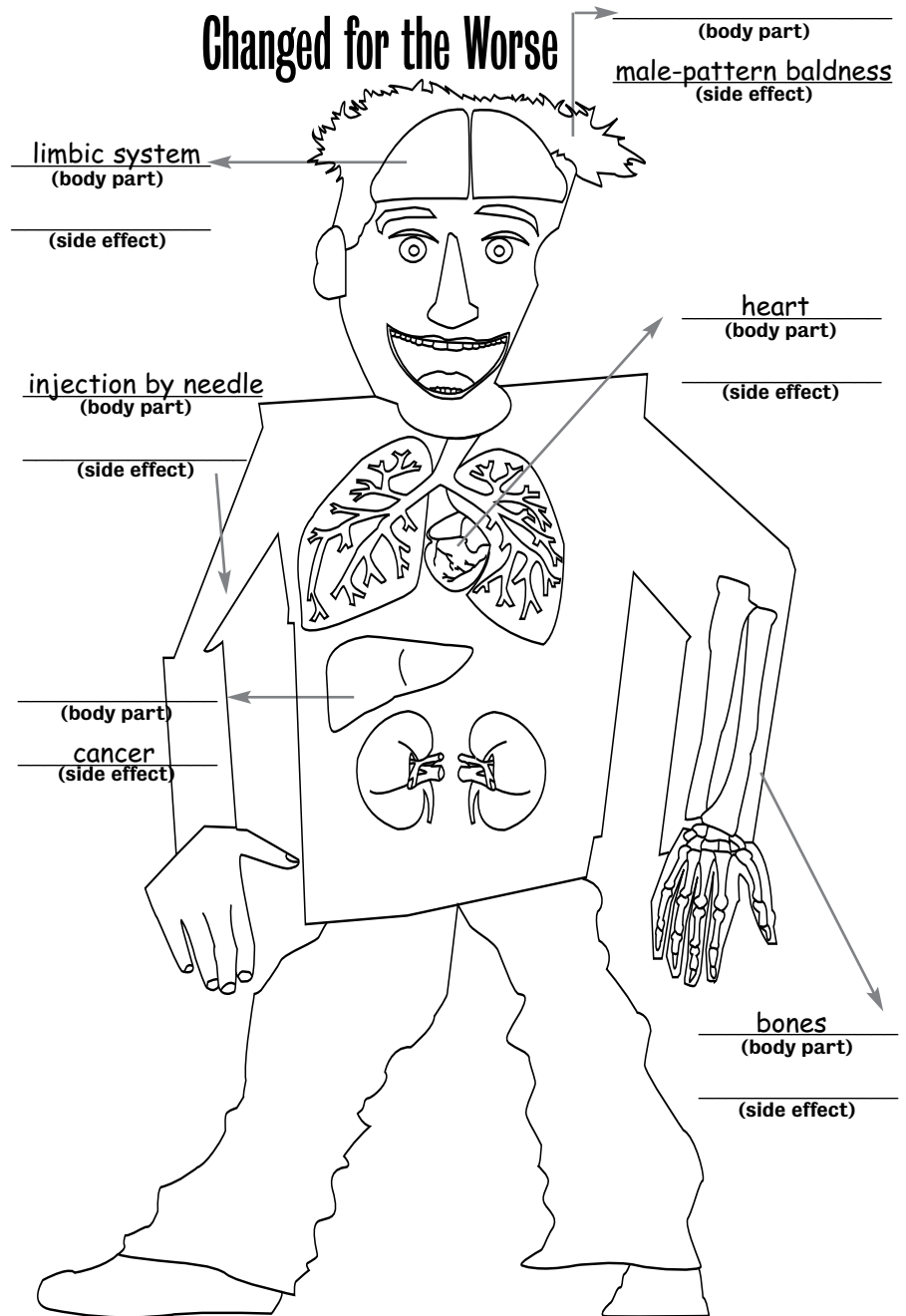
- Anabolic steroids are artificial versions of the male sex hormone testosterone. Artificial hormones affect the body in several ways. Men, for example, can grow breasts. And women can grow facial and excessive body hair, and get deep voices. Both sexes can experience **male-pattern baldness**.

- The drugs may also cause **stunted growth** in teens. When the brain senses too much of a hormone, it signals the bones to stop growing, even at a young age.

- Anabolic steroids cause problems in the brain, as well. They affect the **limbic system**, a part of the brain connected with mood. Some users experience very violent feelings. This condition is known as **roid rage**.

- Most steroid users pop pills but some inject the drugs. When they share needles, this can lead to the spread of **HIV** and **AIDS**.

- Finally, steroids make their way to the heart, causing potentially fatal **heart attacks**. They also pass through the liver, causing cysts and possibly **liver cancer**.





Rave Realities: The Truth About Club Drugs

Some teens go to all-night dances, called raves or trances. Some like to party at clubs. Many of the young people who are into the club and dance scene don't do drugs. But some do. They may be attracted to club drugs like MDMA (ecstasy) because they promise increased stamina for hours of dancing and intoxicating highs. But what these teens don't know may hurt, or even kill, them. Here are the facts on club drugs.

MDMA (Ecstasy)

The so-called "love drug" can cause psychological problems like confusion, depression, sleep problems, and severe anxiety. MDMA can also cause physical difficulties, such as faintness, nausea, muscle tension, blurred vision, involuntary teeth clenching, and chills or sweating. MDMA can also cause severe overheating. In rare cases, this has led to death in MDMA users. Some side effects of MDMA don't go away when the drug wears off. Depressed feelings can emerge several days after MDMA is taken. Animal studies show that MDMA can cause brain damage; this may also occur in people.

LSD

A hallucinogen, LSD causes extreme changes in sensory perceptions. Also known as acid, the drug produces physical effects including tremors, sleeplessness, dry mouth, dilated pupils, loss of appetite, and increased heart rate and blood pressure. People taking LSD may also lose touch with reality. For example, they may see or hear things that aren't there (hallucinations). They may also have bizarre or paranoid thoughts and act on them, causing injury to themselves or others. Users may also have perception problems, sometimes called flashbacks, that may come and go for a long time after they take LSD. For example, they may see trails of lights that aren't there or feel like the room is spinning.

Methamphetamine

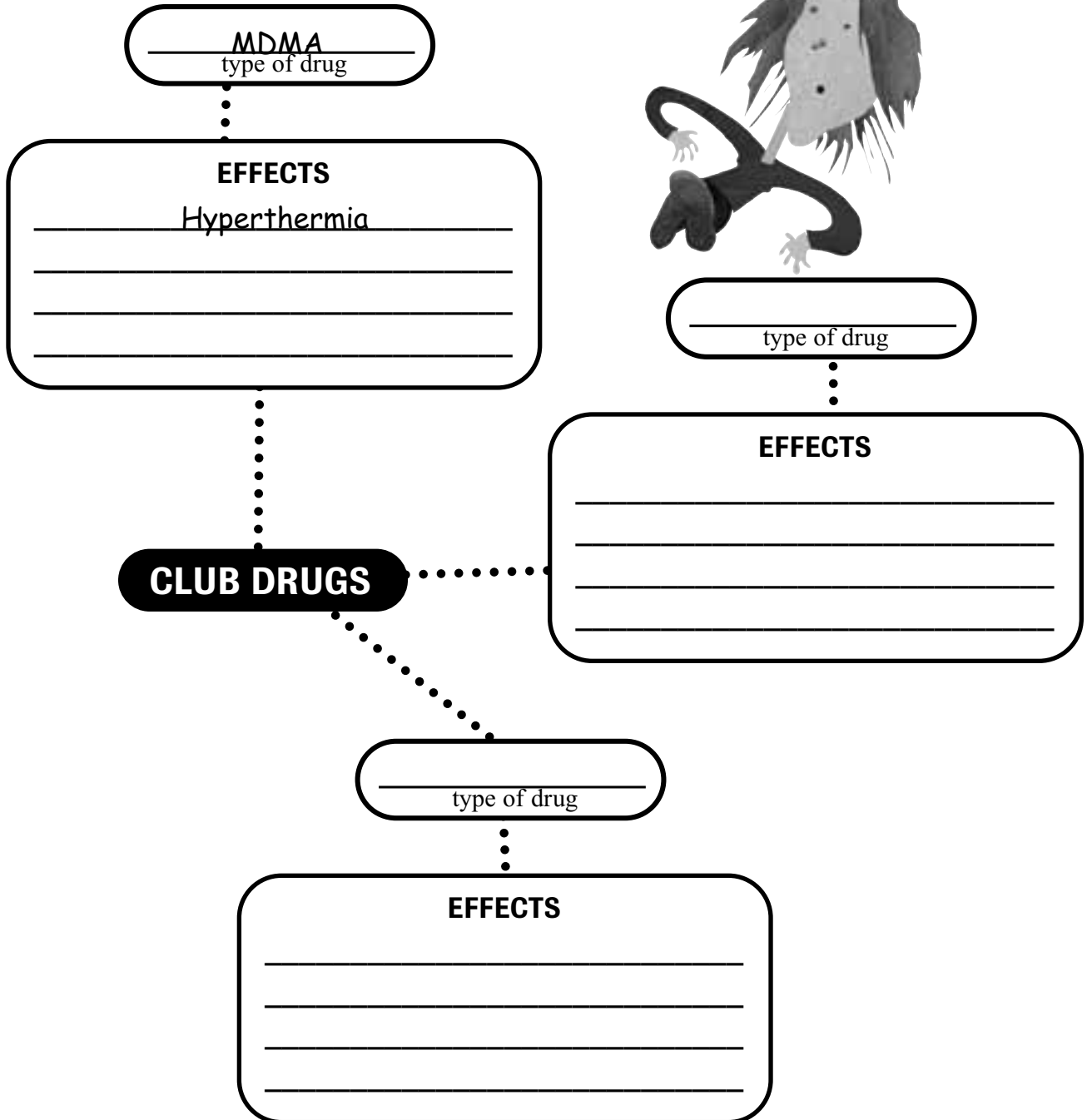
This highly addictive drug has many street names—speed, ice, chalk, meth, crystal, crank, fire, and glass. It's a stimulant with many serious health risks. Methamphetamine can cause memory loss, aggression, violence, psychotic behavior, heart problems, brain damage, stroke, and extreme anorexia. Scientists are investigating whether heavy, long-term methamphetamine use contributes to a permanent loss of muscle control that includes shakes and tremors. This drug can kill in many ways; for example, by causing convulsions, dangerously high body temperature, and disabling heart and lung function.





Club-Drug Cheat Sheet

Now that you've read the facts on club drugs, how will you remember them? One helpful way to process new information is to use a graphic organizer, called a web. Use the Rave Realities page to fill in the specific types of club drugs and their effects.



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



The Cocaine Course

Your teacher is about to give you as many important facts about the drug cocaine as can fit on one page. But first, write down what you already know about the drug in the first column of the chart below. Some sample facts are already listed. Then, write any questions you have about this drug. Some examples of questions are also provided. Leave the last column blank until after you've read the "Frequently Asked Questions" page that your teacher provides. Then, fill in three new things you learned.

WHAT I KNOW

It's also called coke.

It can kill you.

WHAT I'D LIKE TO KNOW

Why is it dangerous?

How is crack different
from cocaine?

WHAT I LEARNED

1. _____

2. _____

3. _____



FAQs on Cocaine

1. WHAT IS COCAINE?

Cocaine is a very addictive drug that is sold illegally in form of a fine, white, crystalline powder. This drug's many street names include coke, snow, blow, toot, and rock.

2. WHERE DOES IT COME FROM?

Cocaine is made from the leaves of the coca plant.

3. HOW IS IT USED?

It is snorted through the nostrils in powder form. It may also be injected into the veins in a liquid form.

4. HOW IS CRACK DIFFERENT FROM COCAINE?

Crack is the crystallized or freebase form of cocaine, and it is usually smoked in a pipe.

5. WHY IS COCAINE DANGEROUS?

Cocaine is an addictive stimulant that speeds up your heart and causes your blood vessels to narrow. Cocaine use can cause heart attacks, stroke, dangerously high body temperature (hyperthermia), and serious breathing problems—any of which can result in death.

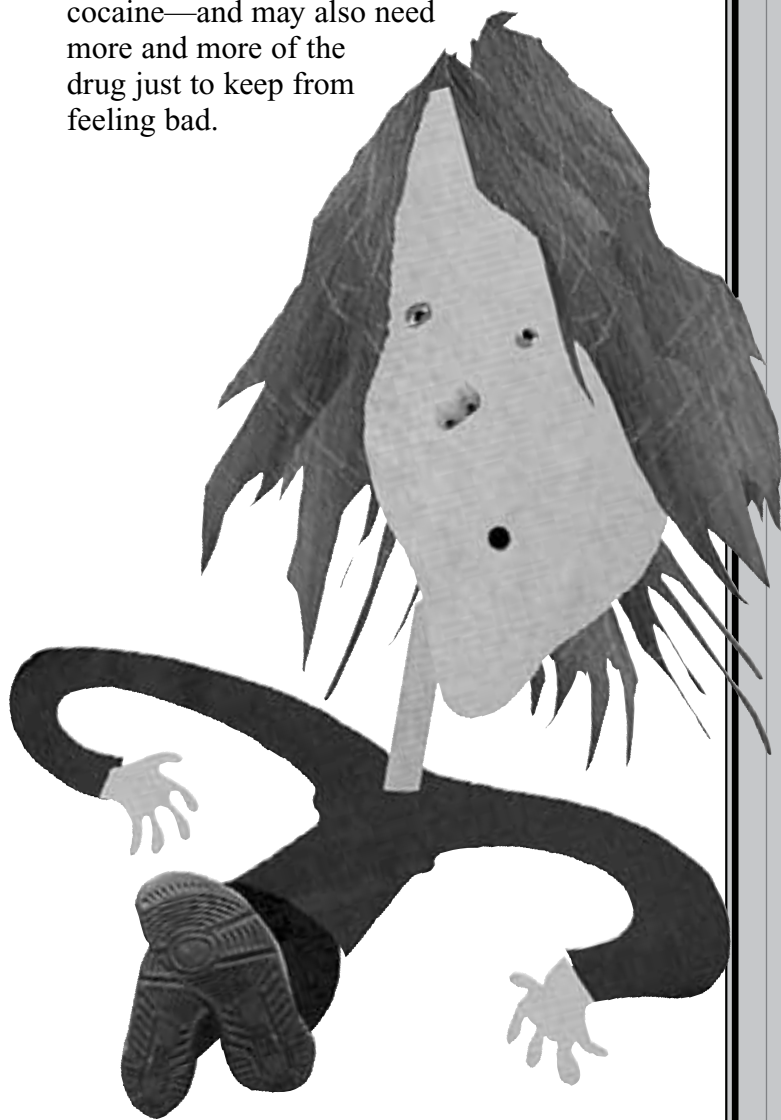
6. WHAT DOES COCAINE DO TO YOUR BRAIN?

Dopamine is one brain chemical or neurotransmitter that stimulates the brain reward pathway, which makes a person feel pleasure. When cocaine gets in the brain, it causes a buildup of dopamine.

7. WHAT'S WRONG WITH A BUILDUP OF DOPAMINE?

The buildup of dopamine is bad because it causes an extra sense of pleasure for a short time. This leads to two problems. First, your brain is wired to want to repeat activities that lead to pleasure.

Second, users may lose the ability to experience pleasure without cocaine—and may also need more and more of the drug just to keep from feeling bad.





Mixed-up About Heroin

Read the directions on how to build a paragraph on this page and look at the example. Then, on the next page, look at the notes for a paragraph on the drug heroin. Can you put them into an order that makes sense? Number the notecards from 1 to 4. Then, write your own concluding sentence.

HOW TO BUILD A 4-SENTENCE PARAGRAPH

1. Introductory sentence

This sentence tells the reader what your paragraph will be about.

1. When heroin users inject the drug and share needles, they put themselves at risk for many diseases.

2 and 3. Supporting sentences

These sentences tell the reader the information about the subject that you think they should know. Just like when you're explaining something out loud, you want to start with a general statement, and follow up with specific details and examples.

2. Shared needles can carry HIV, the virus that causes AIDS.

3. Needles can also carry hepatitis B and C, diseases that can damage the liver.

4. Concluding sentence

This sentence sums up the point of your paragraph.

4. Addiction isn't the only thing heroin users have to worry about.

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Mixed-up About Heroin, continued

It is an opiate, or drug that comes from opium, the white liquid produced by the poppy plant.

What is heroin?

Heroin is highly addictive and it carries serious health risks.

Heroin abuse can also lead to collapsed veins, bacterial infections of the blood vessels and heart valves, as well as liver or kidney disease.

DRAW YOUR OWN CONCLUSION

Now that you've put the notes for this paragraph in the correct order, write a concluding sentence to the paragraph about the dangers of heroin in the space below.



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Outsmart the Chart

Use the chart below to review the facts about major drugs of abuse. Then test your knowledge with the accompanying *Jeopardy*-style quiz.

NAME OF DRUG	STREET NAMES	HOW IT'S USED	SHORT-TERM EFFECTS	HEALTH RISKS
Cocaine	Coke, blow, bump, C, candy, Charlie, flake, rock, snow, toot, crack	Smoked from a pipe (crack); snorted through the nose; or injected into veins with a hypodermic needle	Increased heart rate; high blood pressure; irregular heart beat; alertness and euphoria (extreme happiness); decreased appetite	Irregular heartbeat; reduced appetite; weight loss; chest pains; headaches; malnutrition; dangerously high body temperature (hyperthermia); heart attack; slow or stopped breathing; stroke; seizures; HIV/AIDS; death
Heroin	Brown sugar, dope, H, horse, junk, skag, skunk, smack, white horse	Injected directly into veins; smoked; snorted through the nose	Pain relief; euphoria; nausea; drowsiness	Confusion; constipation; staggering gait; slowed or stopped breathing; HIV/AIDS; unconsciousness; coma; death
Inhalants	Laughing gas, poppers, snappers, whippets	Inhaled through nose or mouth	Loss of inhibition; headache; nausea or vomiting; slurred speech; loss of coordination	Muscle spasms and weakness; unconsciousness; depression; memory and learning impairment; cardiovascular and nervous system damage; sudden death
LSD	Acid, blotter, boomers, cubes, microdot, screaming yellow sunshine	Swallowed or absorbed through the mouth	Altered states of perception and feeling; nausea	Loss of touch with reality; ongoing perception problems ("flashbacks"); increased body temperature, heart rate, and blood pressure; sleeplessness; weakness; tremors
Marijuana	Pot, dope, ganja, grass, herb, Mary Jane, reefer, skunk, weed	Smoked in a pipe, a cigarette or joint, or a cigar called a blunt; eaten in food; brewed as tea and drunk	Euphoria; altered perceptions; slowed thinking and reactions; impaired coordination; increased appetite	Cough; weight gain; respiratory infections; increased heart rate; anxiety; panic attacks; problems with memory and learning
MDMA	Ecstasy, E, Adam, hug, beans, love drug, X	Swallowed (pills)	Increased heart rate and blood pressure; euphoria; mental alertness; altered perception; increased tactile sensitivity; feelings of empathy	Dangerously high body temperature (hyperthermia); liver and kidney damage; heart damage; learning and memory problems
Steroids	Roids, juice	Injected; swallowed; applied to skin	Over time, anabolic (muscle-building) effects; no intoxication effects	Hostility and aggression; acne; stunted growth in teens; high blood pressure; kidney damage; liver disease; baldness; in males, breast enlargement; in females, facial hair and deepened voice; HIV/AIDS

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



What's the Question?

For each answer, create the correct question. The information you need is in the chart. We've done the first one for you. There might be more than one right question for some answers.

1. Answer: Drugs that are sometimes injected
Question: What are steroids, heroin, and cocaine?

2. Answer: A street name for this drug is "blunt."
Question: _____

3. Answer: Health risks for these drugs include memory and learning problems.

Question: _____

4. Answer: A street name for this drug is "the love drug."

Question: _____

5. Answer: Health risks for these drugs include hyperthermia.

Question: _____

6. Answer: These drugs are sometimes smoked.

Question: _____

7. Answer: Short-term effects include altered perception.

Question: _____



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



A Prescription for Pain

Most people who take prescription drugs do so in a form and dose that a doctor orders. But some people take medicine for non-medical purposes. That's drug abuse, and it can have serious health consequences. Here's some info on a few commonly abused prescription drugs. Once you've reviewed it, complete the true/false quiz based on the graph at right.

- **OxyContin** and **Vicodin** are painkillers. They belong to the same class of drugs as heroin. When used for non-medical purposes, OxyContin and Vicodin can cause addiction, slowing or stopping of breathing, and death.
- **Tranquilizers** and **barbiturates** are used to treat anxiety, panic attacks, and sleep disorders. They are depressants, which means they slow down brain activity. This produces a calming effect. When they're abused, they create the potential for addiction.
- Methylphenidate, also known as **Ritalin**, is a stimulant used to treat Attention Deficit Hyperactivity Disorder (ADHD). Stimulants increase brain activity and can lead to greater alertness and attention. If used inappropriately (not as medically prescribed), stimulants can cause dangerously high body temperatures, irregular heartbeat, seizures, and heart attack.

TRUE/FALSE QUIZ

- The graph shows the percentage of 10th graders who abuse prescription drugs.

TRUE	FALSE
------	-------
- Of all of the prescription drugs shown on the graph, Vicodin has the greatest percentage of users.

TRUE	FALSE
------	-------
- More than five percent of 12th-graders surveyed in 2002 said they'd abused Ritalin in the past 30 days.

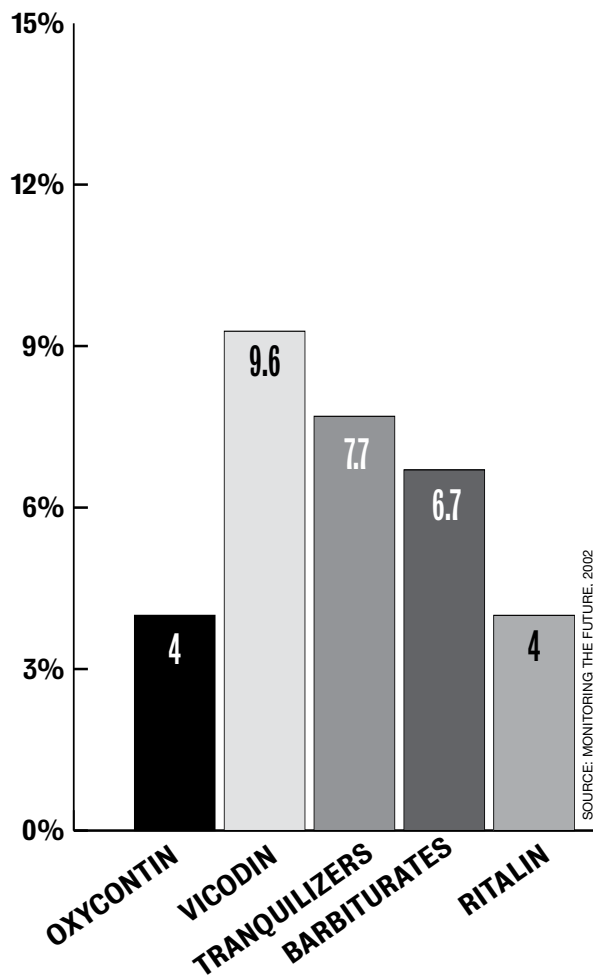
TRUE	FALSE
------	-------
- More 12th-graders surveyed said that they have abused OxyContin rather than Vicodin.

TRUE	FALSE
------	-------
- OxyContin and Ritalin show the same percentage of abusers.

TRUE	FALSE
------	-------

PAST 30-DAY ABUSE BY 12TH-GRADERS, 2002

The bar graph below shows the percent of 12th-graders who had abused different prescription drugs during a 30-day period in 2002.





**HEADS UP
REAL NEWS
ABOUT DRUGS
AND YOUR BODY**

Web Resources

This book of skills pages is a useful introduction to drugs' effects on the brain and body. Teachers, students, and parents looking for more information will find the Web a helpful resource. Here are some good places to start.

>> www.scholastic.com/HEADSUP

- close-ups on common drugs of abuse
- pop-up diagrams exploring the brain and the effects of drugs on the body
- teaching support, including printable skills pages

>> www.drugabuse.gov

- the latest scientific information on drug abuse and addiction from the National Institute on Drug Abuse (NIDA)
- fact sheets, statistics, and links to special sites on marijuana, steroids, and club drugs

>> www.BacktoSchool.drugabuse.gov

- NIDA's site for teachers and students in all grades—and for parents, too
- science-based information on drugs of abuse

>> www.Sarasquest.org

- NIDA's middle-school curriculum
- on-line magazine
- comprehensive teacher's guide

>> www.teens.drugabuse.gov

- the NIDA for Teens Web site on the science of drug addiction and the brain
- on-line activities for fun and learning

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