

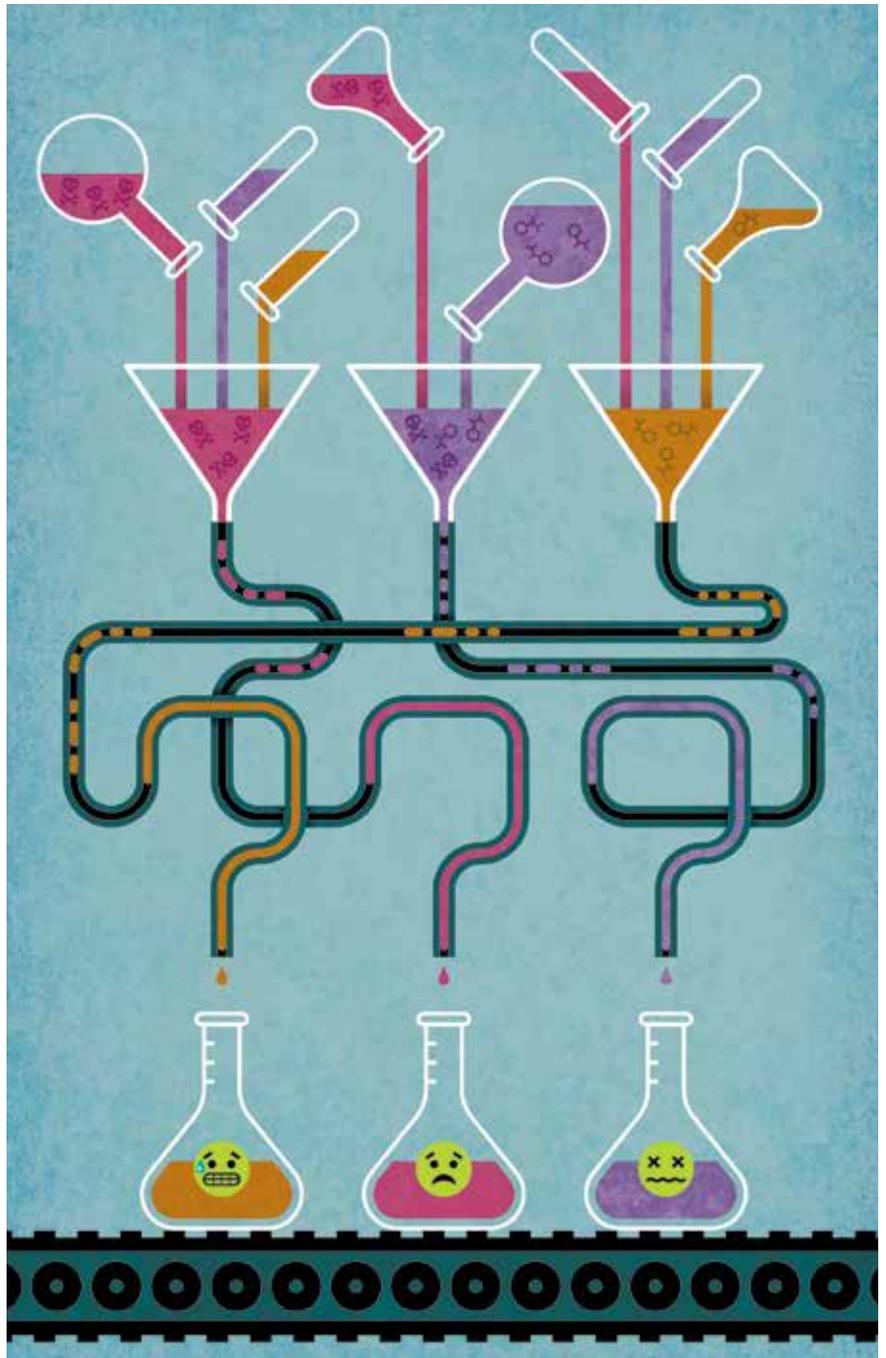
NOT FIT FOR HUMAN BODIES

You probably know that drugs that don't come from a pharmacy or your doctor can be dangerous. But they also may not be what they seem.

MOST DRUGS are synthetic, or man-made. They are made by mixing chemicals in laboratories. Some synthetic drugs help people. They are prescribed by doctors and bought in pharmacies. They are tested for safety.



Other synthetic drugs are counterfeit, or fake. They are made in illegal laboratories. The drugs are sold on the street, online, or in illegal stores. They often have misleading labels that claim these drugs will act like marijuana, prescription pain medications, or other drugs.



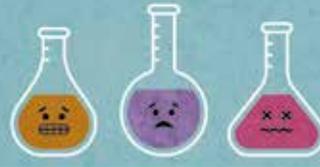
Misusing drugs can lead to addiction and overdose. But counterfeit drugs pose additional risks. A counterfeit pill may look exactly like a pill from a pharmacy. But it can contain completely different chemicals. These chemicals

can be much stronger or even deadly.

Read the sidebar. Learn about the dangers of counterfeit synthetic drugs.

Bottom line: Never take any drug that is not prescribed by your doctor and is not bought in a pharmacy.

DANGEROUS EFFECTS OF SYNTHETIC DRUGS



OPIOIDS

Example: Fentanyl

Opioids are powerful pain relievers. They can be **extremely addictive** and even **deadly** if they are misused. **Fentanyl** is a very strong synthetic opioid. Doctors prescribe it to patients that are in extreme pain.

There has been a recent rise in illegal fentanyl. This counterfeit drug is often mixed with other drugs or hidden in fake prescription medications that are sold on the street. Users may not know they are taking it.

An increase in deadly opioid overdoses has been linked in part to products with hidden fentanyl. Never take prescription drugs that are not prescribed by your doctor or that are not bought in a pharmacy. You don't know what chemicals they contain.

CANNABINOIDS

Examples: Spice, K2

Cannabinoids are often called "synthetic marijuana." They are made of dried plant material that is sprayed with chemicals called **synthetic cannabinoids**. These chemicals are similar to THC, the main active ingredient in marijuana. But cannabinoids are much stronger. The drugs can cause **unusual and violent behavior, seizures, heart attacks, and death**. Spice can also be **addictive**.

In 2016, 130 people **overdosed on synthetic cannabinoids** over three days in New York City. This was likely caused by a powerful batch of **K2**. These drugs are not tested for safety. Each batch can be very different, even if the packaging looks the same.

CATHINONES

Example: "Bath Salts"

Fake "bath salts" are not for your bathtub. These synthetic drugs contain chemicals called **cathinones**. They are similar to stimulants like amphetamine and MDMA (Ecstasy or Molly). But these drugs can have powerful effects. They can **increase heart rate and blood pressure**. They can also **cause unusual behaviors**.

People who use bath salts report **intense cravings**. This could mean they have become **addicted to the drug**. Makers of illegal drugs sometimes try to avoid the law. They label products "Not for Human Consumption" to make selling them easier. Many states have passed laws to stop this practice.

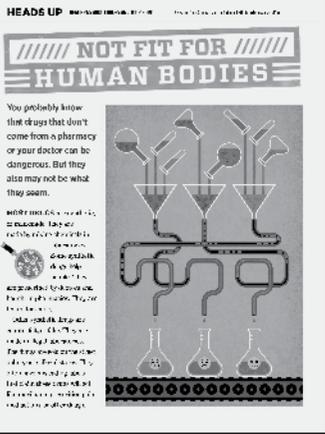
TAKE ACTION

>> If someone you know has a bad reaction to what you think is a synthetic drug, **call your local poison control center at 1-800-222-1222.**

>> If they stop breathing, collapse, or have a seizure, **call 911 immediately.**

MORE INFO: For additional facts about drugs and health, visit scholastic.com/headsup and teens.drugabuse.gov.

From Scholastic and the scientists of the National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services



Subjects

- Science Literacy
- English Language Arts
- Health/Life Skills

Common Core State Standards

- RST.6-8.1 / RST.9-10.1
- Cite specific textual evidence to support analysis of science and technical texts
- W.6-8.1 / W.9-10.1
- Write arguments to support claims, using valid reasoning and relevant and sufficient evidence

Next Generation Science Standards

- MS-PS1.A / HS-PS1.A
- Structure and Properties of Matter
- MS-LS3.B / HS-LS3.B
- Information Processing

National Science Education Standards

- Properties and Changes of Properties in Matter/ Structure and Properties of Matter
- Personal Health

National Council for the Social Studies

- 4. Individual Development and Identity
- 8. Science, Technology, and Society

Not Fit for Human Bodies

In recent years, there has been a rise in the number of health emergencies and overdoses related to drugs that are made illegally in laboratories. Synthetic, or man-made, drugs are created in these labs to mimic the effects of other, more commonly known substances, such as marijuana and prescription pain medications. But these unregulated drugs can be even more dangerous than their counterparts. In “Not Fit for Human Bodies,” students will learn what fake synthetic drugs are and why they are dangerous. You can help students stay safe by sharing the article and paired worksheet (see reverse side) and teaching the lesson below.



Critical-Thinking Questions

- 1) Why might a counterfeit, or fake, synthetic drug cause more health problems than a similar drug? Use evidence from the text to support your answer. *(Answers may include: Counterfeit synthetic drugs are made in illegal laboratories and are not tested for safety. Although they may be labeled that they will act like another drug, they may have different chemicals that make them more powerful or even deadly.)*
- 2) Officials try to reduce the misuse of drugs by making them illegal. Why is this approach difficult with counterfeit synthetic drugs? *(Answers may include that the makers of counterfeit synthetic drugs can add misleading labels to products, such as “Not Fit for Human Consumption,” to make selling them easier.)*
- 3) Why is it important to use only prescription medications that have been prescribed by a doctor for you and were bought from a pharmacy? *(Answers may include that medications such as pills bought on the street or online may be counterfeit. The effects of these medications can be unpredictable and may be deadly because they may contain hidden chemicals such as fentanyl. Prescriptions intended for other people could also have harmful effects on your body.)*

Writing Prompts

- **Grades 6–8:** Explain what a counterfeit synthetic drug is. Tell how it is different from the drug it is made to act like.
- **Grades 9–10:** The article explains that counterfeit synthetic drugs can cause dangerous health problems. Use evidence from the text to support this statement.
- **Grades 11–12:** The U.S. is currently experiencing an opioid overdose crisis. How might counterfeit synthetic drugs play a role in this crisis? Use evidence from the text to support your answer.

Student Worksheet

The worksheet on the reverse side includes fill-in-the-blank questions to reinforce comprehension of the article. It also includes a prompt for students to use the information they have learned to create a poster warning teens about the dangers of synthetic drugs.

Answers—Part 1:

1. Counterfeit; laboratories.
2. powerful; deadly.
3. Spice; K2; cannabinoids.
4. THC.
5. cathinones; stimulants.
6. Fentanyl; prescription.
7. misleading.
8. addiction; overdose.

Part 2: Each student poster, flyer, or meme should include elements that grab the reader’s attention, such as startling facts or statistics or eye-catching visuals. It should include facts about why synthetic drugs are dangerous and advice about how to stay safe.

Tiered Vocabulary Tools

Visit scholastic.com/headsup/not_fit_for_human_consumption for a vocabulary list to support this article.

Paired Reading

- “Drug Facts: Spice” (<https://teens.drugabuse.gov/drug-facts/spice>)
- **Writing Prompt:** Explain the dangers of the synthetic drug Spice. Include why it may affect a person’s body differently than marijuana. Use text evidence from “Not Fit for Human Bodies” and “Drug Facts: Spice” to support your answer.

Additional Teaching Resources

- headsup.scholastic.com/teachers
- teens.drugabuse.gov

HOW MUCH DO YOU KNOW ABOUT SYNTHETIC DRUGS?



Part 1: Use information from the article “Not Fit for Human Bodies” to answer the questions about synthetic drugs and their effects.

THC	cannabinoids	misleading	stimulants	counterfeit	prescription
K2	addiction	deadly	overdose	cathinones	powerful
Spice	laboratories	natural	“bath salts”	fentanyl	reduce

- _____, or fake, synthetic drugs are made in illegal _____.
- Fake synthetic drugs are dangerous. They often have added chemicals that make them more _____ or even _____.
- _____ and _____ are drugs made of dried plant leaves sprayed with synthetic _____. These drugs can cause health problems, including seizures and heart attacks.
- _____ is the main active ingredient in marijuana.
- “Bath salts” contain chemicals called _____ and are similar to _____. They can cause unusual behaviors, and can also increase heart rate.
- _____ is a powerful synthetic opioid that doctors prescribe for severe pain. The counterfeit version is often mixed with other drugs or hidden in fake _____ medications.
- The makers of illegal synthetic drugs sometimes package the drugs with _____ labels.
- Misusing both legal and illegal synthetic drugs can put you at risk for _____ and _____.

Part 2: Use the information in the article and your own Internet research from reliable sources to create a poster, flyer, or meme that warns other teens about the dangers of synthetic drugs.

Points to consider: What images can you use to grab the reader’s attention? What facts are important to share? What advice would you give teens about synthetic drugs?

VOCABULARY LIST

GRADES 6-12

Dear Teacher,

The vocabulary list on the following pages is drawn from the “Not Fit for Human Consumption” student article and “How Much Do You Know About Synthetic Drugs?” worksheet.

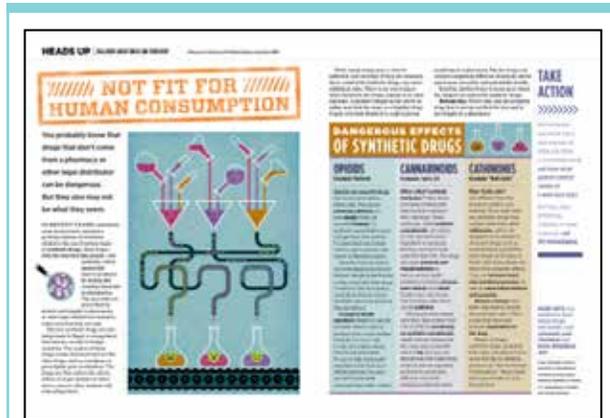
This vocabulary can be previewed with students prior to reading or reinforced with students afterward. Encourage students to incorporate these words into their writing and discussion of the article and worksheet.

The vocabulary list integrates vocabulary words that would be used across several content areas, such as *consumption*, *legitimate*, and *misleading*, and domain-specific words, such as *opioid*, *stimulant*, and *synthetic*.

Some suggestions for students to help their understanding include:

- organizing concept maps that include word parts, synonyms, antonyms, and examples;
- composing memory aids that explain the words or use them in a meaningful context;
- employing the words to create newspaper articles, stories, or poems.

Sources: Unless otherwise noted, definitions are sourced or adapted from: *Merriam-Webster Collegiate Dictionary* and *Scholastic Children's Dictionary*.



Supplement for “Not Fit for Human Consumption”

- Student Article: [scholastic.com/headsup/not_fit_for_human_consumption](https://www.scholastic.com/headsup/not_fit_for_human_consumption)
- Teacher's Guide (includes work sheet): [scholastic.com/headsup/teachers/not_fit_for_human_consumption](https://www.scholastic.com/headsup/teachers/not_fit_for_human_consumption)

Continue to vocabulary sheet on next page.

addiction (*noun*): a brain disorder or illness associated with compulsive (uncontrollable) behavior, such as drug use, despite negative consequences

addictive (*adjective*): something, such as a drug, that causes changes to the brain that result in compulsive (uncontrollable) behavior despite negative consequences

amphetamine (*noun*): a type of stimulant drug that increases certain brain activity

anxiety (*noun*): a feeling of fear or worry

“bath salts” (*noun*): a name given to a drug made from synthetic cathinones

cannabinoid (*noun*): a chemical that is found naturally in hemp plants and causes changes in the brain and behavior

cathinone (*noun*): a chemical found naturally in the leaves of the khat plant that increases certain activity in the brain and nervous system

chemical (*noun*): a substance, such as an element or a mix of elements (compound), that is made by a chemical process

consumption (*noun*): the act of eating, drinking, or using up something

counterfeit (*adjective*): made in imitation of something else with the goal of deceiving or cheating

craving (*noun*): an intense or abnormal desire for something

dependent (*adjective*): having a need for a drug because of repeated use so that physical withdrawal symptoms are experienced if the drug is removed

designed (*adjective*): created to have a certain purpose or function

disguised (*adjective*): having the true state or character concealed or hidden

distributor (*noun*): a company that buys products from one company and arranges for other companies or individuals to sell them

dose (*noun*): the measured amount of a chemical such as a drug to be taken at one time

ensure (*verb*): to make sure

fentanyl (*noun*): an opioid drug made in laboratories that is much stronger (50 to 100 times) than other legal opioids. It is prescribed only to treat very severe pain.

hallucination (*noun*): the perception of objects that are not real

hydrocodone (*noun*): an opioid drug that is used as a painkiller and prescribed by doctors for moderate to severe pain

illegal (*adjective*): against the law

ingredient (*noun*): something that is a part of a combination or mixture

K2 (*noun*): the name sometimes given to a drug made from dried plant leaves sprayed with synthetic cannabinoid chemicals that are similar to THC

laboratory (*noun*): a place where scientific experiments are done or products such as drugs are made

legal (*adjective*): allowed by the law

legitimate (*adjective*): being exactly as described, not false

marijuana (*noun*): dried leaves and flowers of the hemp plant which can be used as a drug

MDMA (Ecstasy or Molly) (*noun*): an illegal stimulant drug that gives feelings of pleasure and excitement

medication (*noun*): a chemical or substance that is used to treat a disease or medical condition

misleading (*adjective*): giving the wrong idea or inaccurate information about something, usually on purpose

misuse (*verb*): to use something in a way that is unintended or harmful, such as misuse of a prescription drug

morphine (*noun*): an opioid drug that is used as a painkiller and is prescribed by doctors for moderate to severe pain

natural (*adjective*): existing in or produced by nature

Norco (*noun*): a brand-name version of the drug hydrocodone

official (*adjective*): of or having to do with someone in a position of authority

opioid (*noun*): one of a group of drugs that produce relaxation, pleasure, and pain relief. Opioids can be addictive and potentially deadly due to overdoses.

overdose (*noun*): a lethal or toxic amount of a drug; (*verb*): to take a lethal or toxic amount of a drug

paranoia (*noun*): a tendency for extreme and unreasonable distrust or suspicion of other people

pose (*verb*): to present or create

potent (*adjective*): having a powerful effect

potentially (*adverb*): possibly, but not yet actual

prescribe (*verb*): to write or give medical instructions, such as regarding the use of certain medications

prescription drug (*noun*): a medication that must be ordered by a doctor before it can be dispensed

regulate (*verb*): to bring under control of the law or rules

regulation (*noun*): a rule that deals with details and procedures, such as those that are used to make sure something is safe

respond (*verb*): to react to something

retailer (*noun*): of or having to do with the sale of goods directly to customers

risk (*noun*): the possibility of loss or injury; danger

seizure (*noun*): a sudden attack caused by abnormal activity in the brain that causes convulsions or loss of consciousness

severe (*adjective*): of a great degree

Spice (*noun*): the name sometimes given to a drug made from dried plant leaves sprayed with synthetic cannabinoid chemicals that are similar to THC

stimulant (*noun*): a drug that causes a temporary increase in activity in parts of the brain and body

substance (*noun*): a material with a specific chemical makeup

surge (*verb*): to rise suddenly to an excessive or abnormal amount

synthetic (*adjective*): produced by a chemical process

THC (*noun*): a type of natural cannabinoid chemical that is the main active ingredient in marijuana

treat (*verb*): to care for or deal with medically; to act upon something with an agent such as a chemical to improve or alter

undergo (*verb*): to go through or experience

unpredictable (*adjective*): not able to be known in advance

unregulated (*adjective*): not controlled by rules or methods that are used to make sure certain standards of safety or quality are met

version (*noun*): a different form or type of something