

Join the national conversation!



Word Generation - Unit 3.17

## Focus Words

distribution | outweigh | anecdotal | front | sought

### Weekly Passage

Danny Miller was 14 years old when he was diagnosed with leukemia, a kind of cancer. He could not sleep or eat because of the pain. He had to take strong medicine to fight the cancer. The medicine made him vomit for hours on end. Danny lost his appetite and became dangerously thin. Doctors tried to make Danny more comfortable by giving him painkillers, but nothing seemed to work. Danny's mom was so concerned about Danny's nausea and weight loss that she suggested to her husband that they give Danny some marijuana. She had heard that it not only reduced nausea but helped give patients their appetites back. Danny's father was shocked. Using marijuana is illegal, and the doctors at the hospital might report them to the police. Danny's mother was so desperate that she sought out organizations that would help her acquire some marijuana without getting into trouble. She found such a group in Oregon.

Marijuana has been used as a medicine for about 4,000 years. The debate about the use of marijuana as a medicine is an ongoing one. Medicinal marijuana is legal in California and in a few countries like Canada, Holland, and Spain, but there are laws in these places about its distribution. It generally requires a prescription from a doctor.

Supporters argue that both anecdotal evidence and research evidence show that medical marijuana is beneficial to some patients. They say that marijuana easily meets the government criteria

that a medicine's "benefits to users will outweigh its risks." They say that marijuana can be used to ease the discomfort of many illnesses ranging from AIDS to cancer. Supporters point out that some legal prescription drugs have caused the death of some patients; there have been no reported cases of medical marijuana causing death.

Organizations against the use of medical marijuana state that the government has not approved the drug because it is too dangerous. People who oppose medical marijuana also worry that even medicinal use of the drug sends the wrong message to kids. They say marijuana is addictive and can lead to other drug use. They remind us that marijuana injures the lungs and harms the immune system. They argue that the medical marijuana initiative is a front for people who are really just using marijuana for fun. They believe that other medications can have the same healing effects as medical marijuana without the dangers.

What do you think? Should marijuana be recognized as proper medical treatment?

#### TEACHER: Discussion Questions

- ▶ Is medical marijuana illegal everywhere?
- ▶ Why do some people think medical marijuana should be legal? Why are some people against the use of medical marijuana?
- ▶ What is medical marijuana used for?
- ▶ How long has marijuana been used as a medicine?



## Unit 3.17 - Should marijuana be allowed as a medical treatment?

### Focus Word Chart (teacher version)

Word	Meaning	Forms			Related Words
		Inflectional	Basic Word Classes	Prefixes/ Suffixes	
sought	(v.) - looked for	seeks seeking	seek (v.)	seeker	beseech besought
distribution	(n.) - the act of giving out	distributes distributing distributed	distribute (v.)	distributional distributive	contribute attribute
anecdotal	(adj.) - related to a brief story about something in a person's life, usually interesting or amusing		anecdote (n.)	anecdotally anecdotes anecdota	
outweigh	(v.) - to be greater than	outweighs outweighed outweighing	weigh (v.)		overweight underweight
front	(n.) - pretended appearance	fronts (n., pl.) front (v.) fronted (v.) fronting (v.)		frontal	frontage confront frontier forefront

# Unit 3.17 - Should marijuana be allowed as a medical treatment?

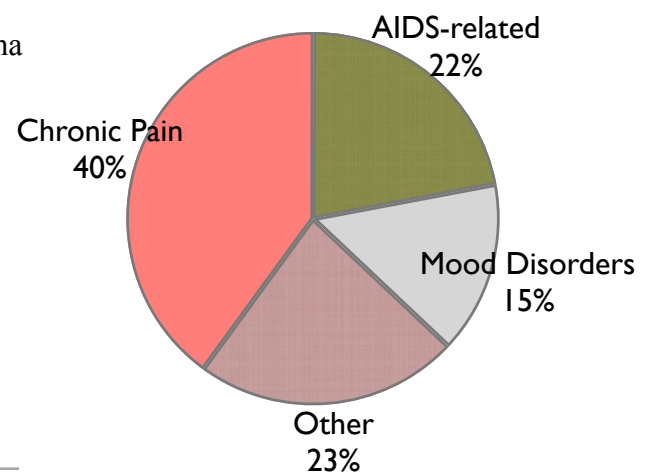
## Problem of the Week



**Option 1:** Medical marijuana is legal in California. Legislators or lawmakers looked at empirical (concrete or hard) evidence and **anecdotal** evidence of marijuana's benefits for sick people. They also considered the fact that some people might pretend to be sick as a **front** in order to obtain marijuana for recreational use. The legislators decided that the benefits of providing medical marijuana **outweighed** the risks of possible drug abuse.

People who **seek out** medical marijuana fall into several different categories. This graph shows the **distribution** of medical marijuana users. Forty percent of people use medical marijuana for chronic pain. This includes people with arthritis, multiple sclerosis (or M.S), and migraine headaches. What fraction is equal to 40%?

California Medical Marijuana Use



A)  $\frac{1}{4}$

B)  $\frac{4}{9}$

C)  $\frac{2}{5}$

D)  $\frac{40}{10}$

**Option 2:** After California legalized medical marijuana, stores called “dispensaries” now **distribute** marijuana to people who have a doctor's prescription for the drug. Occasionally, government agents have **sought** to enforce federal anti-marijuana laws by raiding dispensaries and making arrests. The Drug Enforcement Agency (DEA) cited **anecdotes** of doctors who wrote thousands of marijuana prescriptions. Federal officials claimed these medical dispensaries were a **front** for selling a drug that was being used recreationally most of the time. They said that the need to enforce federal laws banning marijuana **outweighed** the benefits of marijuana to legitimate medical users.

One expert estimated that in 2006, Californians grew 20 million marijuana plants. He estimated the street value of the crop at 14 billion dollars. If he is correct, about how many dollars worth of marijuana does each plant produce? (Hint: use exponents!)

14,000,000,000 (or $14 \times 10^9$ )	
Answer: _____	$= 7 \times 10^2$ or \$700
20,000,000 (or $2 \times 10^7$ )	

**Math Discussion Question:** People who **seek** to buy medical marijuana range from cancer patients who are truly suffering to people who pretend to have headaches as a **front** to get a recreational drug. What do you find more troubling: **anecdotes** about suffering people who are denied the marijuana that could make them feel better, or anecdotes about people who lie to get marijuana that they use for fun? Should doctors who **distribute** thousands of medical marijuana prescriptions be investigated? Do the abuses of the system **outweigh** the benefits that medical marijuana can provide?

# Should marijuana be allowed as a medical treatment?

## Debating the Issue



# GO!

## 1. Get ready...

Pick one of these positions (or create your own).

**A** Medical marijuana should be made completely legal just like aspirin. It has been used as a treatment for the symptoms of many diseases from AIDS to cancer.

**B** Medical marijuana should not be legal. There are other legal drugs available that can be used.

**C** Medical marijuana treatments should be legal and carefully controlled just like other prescription drugs. Thousands of people die from prescription drugs each year but there has not been a single report of a death caused by the use of medical marijuana.

**D** Medical marijuana should not be legal. Smoking marijuana harms the lungs and the immune system and can also lead to the use of other drugs. It is too dangerous to be used.

**E** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 2. Get set...

Be ready to provide evidence to back up your position during your class discussion or debate. Jot down a few quick notes:

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Be a strong participant by using phrases like these.

*...because...*

*I disagree with part of that...*

*An example might help convince me. Can you give me an example?*

*What part of the passage makes you think that?*

### TEACHER

Whatever debate format you use in your class, ask students to use academically productive talk in arguing their positions. In particular, students should provide reasons and evidence to back up their assertions. It may be helpful to read these sample positions to illustrate some possibilities, but students should also be encouraged to take their own positions on the issue at hand.

# Unit 3.17 - Should marijuana be allowed as a medical treatment?

## Science Activity



This activity is designed to help you practice thinking like a scientist and to use this week's focus words. Sometimes the data are based on real research, but they should never be considered true or factual.

Professor Kahn knows that some people request medical marijuana to treat a real health problem, not as a **front** for wanting to get high. One of these people is her mother, who has fibromyalgia. Fibromyalgia is an illness that causes pain in people's joints and muscles. There are few treatments for fibromyalgia. It can make physical movement very painful for those who suffer from it.

THC, a chemical in marijuana, can block the processing of pain signals in the brain. Canadian doctors **seeking** a treatment for their patients with fibromyalgia **distributed** a pill that mimics the active ingredient in marijuana. Unlike medical marijuana that is smoked, the pill form does not cause lung damage. The invention of this safer form may cause opponents to change their opinion about medical marijuana. They may decide the benefits **outweigh** the risks.

Professor Kahn and her colleague, Professor Paul E. Seemy had heard **anecdotal** evidence of the pill's ability to reduce pain but decided to test it with their own scientific experiment.

### Question:

Do patients with fibromyalgia who take the marijuana pill experience less pain?

### Hypothesis:

A pill made from the marijuana plant will ease pain of patients with fibromyalgia.

**TEACHER:** Find pain scale on internet prior to lesson.

<http://ergonomics.about.com/od/ergonomicbasics/ss/painscale.htm>

### Materials:

- ▶ 12 subjects diagnosed with fibromyalgia
- ▶ 1-month supply of Nabilone (pill made of marijuana)
- ▶ 1-month supply of placebo (pill with no effect)
- ▶ Pain Scale

## Procedure:

1. Ask every subject to rate their pain using a scale from 0 – 10, with 0 meaning “no pain” and 10 meaning “agonizing pain.”
2. Divide the group in half randomly.
3. Give Group A Nabilone two times per day. Give Group B the placebo two times per day. Do not tell subjects which group they are in.
4. After 1 month, ask every subject to rate their pain using the same 0 – 10 scale.

## Data:

<b>Group A (Nabilone)</b>			<b>Group B (placebo)</b>		
	Pain level <b>before</b> experiment	Pain level <b>after</b> experiment		Pain level <b>before</b> experiment	Pain level <b>after</b> experiment
<b>Patient 1</b>	<b>8</b>	<b>3</b>	<b>Patient 1</b>	<b>7</b>	<b>8</b>
<b>Patient 2</b>	<b>4</b>	<b>3</b>	<b>Patient 2</b>	<b>4</b>	<b>4</b>
<b>Patient 3</b>	<b>5</b>	<b>1</b>	<b>Patient 3</b>	<b>5</b>	<b>4</b>
<b>Patient 4</b>	<b>7</b>	<b>4</b>	<b>Patient 4</b>	<b>3</b>	<b>5</b>
<b>Patient 5</b>	<b>6</b>	<b>4</b>	<b>Patient 5</b>	<b>7</b>	<b>7</b>

## Conclusion:

Is the hypothesis supported or not by the data?

Supported

What evidence supports your conclusion?

All of the patients who took Nabilone (the marijuana pill) experienced decreased pain. While some of the patients who took the placebo experienced decreased pain, some experienced increased pain, and some experienced no change. On average, patients who took Nabilone experienced a decrease in pain equivalent to three and two-thirds points on the pain scale. On average, patients who took the placebo experienced an increase in pain equivalent to one-sixth of a point on the pain scale.

How would you make this a better experiment?

Encourage students to consider sample size, number of trials, control of variables, whether the procedure is a true measure of the question, whether the experiment can be repeated by other scientists, data collection and recording systems, and other potential explanations for the outcome. Students should understand that these simple experiments represent the beginning of an exploration, not the end. If time permits, have students suggest how the experiment could be strengthened, emphasizing the use of the target words in the discussion.

<http://www.sciencedaily.com/releases/2008/02/080217214547.htm>



# Writing Prompt

Should marijuana be allowed as a medical treatment?

Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.

## Focus Words

distribution | outweigh | anecdotal | front | sought

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### TEACHER

Ask students to write a response in which they argue a position on the weekly topic.

Put the writing prompt on the overhead projector (or the board) so that everyone can see it. Remind students to refer to the word lists in their Word Generation notebooks as needed.

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### A tool to help you think about your own writing!

Remember you can use focus words from any of the WG Units.

Check off what you accomplished:

#### Good Start

- ☐ Stated my own position
- ☐ Included 1 focus word

#### Pretty Good

- ☐ Stated my own position clearly
- ☐ Included 1-2 arguments
- ☐ Included 1-2 focus words

#### Exemplary

- ☐ Stated my own position clearly
- ☐ Included 1-2 arguments
- ☐ Included 1 counterargument
- ☐ Used 2-5 focus words



### Source References:

- » Lindberg, M. (2008, May 2). Death claims medical marijuana user after denial for liver transplant. Message posted to <http://planetsave.com/blog/2008/05/02/death-claims-medical-marijuana-user-after-denial-for-liver-transplant/>
- » Common Sense for Drug Policy. (2007, May 24). Drug war facts: Medical marijuana. Retrieved January 2, 2010, from <http://drugwarfacts.org/cms/?q=node/54>
- » ProCon.org. (2007, September 19). Medical Marijuana: 1-minute overview “Should marijuana be a medical option?” Retrieved January 2, 2010, from <http://medicalmarijuana.procon.org/viewresource.asp?resourceID=140>

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.