



Focus Words

analyze | factor | function | interpret | structure



Weekly Passage

Why do we go to school? Some people think the primary goal of education is giving knowledge to students. They feel there is specific information that all kids should know. For instance, they want kids to know what happened in the Revolutionary War and how the food chain works. Others <u>interpret</u> the main role of school as one of preparing students to earn a living. They are most concerned about students learning particular skills, such as reading, writing, and arithmetic.

Some argue that schools should introduce a set of shared values, including liberty and justice. They believe this will help students understand the <u>structure</u> of our democratic government. For example, they feel it is important for students to understand that while each of the three branches of government has a different function, the three work together to make sure we all enjoy certain freedoms and live by the same rules.

Some think schools should teach students to critically <u>analyze</u> what they see, hear, and read. They want students to be able to think carefully about different perspectives, to respect and challenge other viewpoints, and to form their own opinions about issues that affect them. Although many people say that they want kids to be able to think for themselves, students do not always have the freedom to do so in the classroom.

What do you think the <u>function</u> of school is? What do you consider the most important <u>factors</u> in providing a good education? Which ingredients are essential in your recipe for a good school?

Notes **Examples of Use** What is the purpose of school? (n.) – purpose; role; use (v.) – to examine; study influences the result of (n.) – way that parts of (v.) – to understand or (n.) – something that explain something's each other and work something relate to Meaning something else **Focus Word Chart** meaning together Word Unit I.01 structure analyze function interpret factor

What is the purpose of school? Problem of the Week



How do Americans view their public schools? **Analyze** the three graphs below. The information comes from a telephone survey taken in 1999.

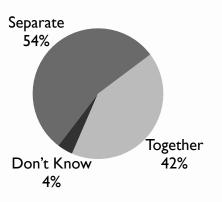
What is the proper **function** of American schools? Should they focus on giving students knowledge, or should they focus on teaching students to think critically?

Knowledge
56%
Neither
1%

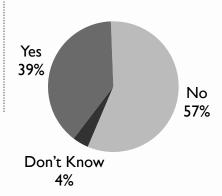
Critical Thinking
35%

Don't Know

What is the best class **structure** for elementary schools? Should top students, average students, and struggling students have separate classes, or should different ability levels be taught together?



Should standardized test scores be a **factor** in determining the level of funding a school receives?



Option 1: Which of the following is the best **interpretation** of the data shown in these three graphs?

- A) Americans disagree or are divided on major educational issues.
- B) Americans agree on major educational issues.
- C) Americans want all students to be equally well educated.
- D) Americans are disappointed with today's schools.

Option 2: Answer Option 1. Then determine:

What is the probability that a person responded YES to both questions: "Schools should focus on giving students knowledge," AND "Yes" to the question about making standardized test scores a factor in school funding?

Math Discussion Question: Many teachers believe that classrooms **function** more effectively when students are actively involved. In social studies, students might present an **analysis** of U.S. foreign policy and our relationship to other countries. In Spanish class, students might **interpret** and act out a play written by a Colombian author. Students prepare and present, while the teacher acts as a guide. Is this kind of **structure** realistic for a math class? Or, when you're learning how to multiply or **factor** numbers, is having a teacher give knowledge by explaining the facts the best option?

What is the purpose of school? Debating the Issue



I. Get ready...

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

The primary function of school is to prepare students for the work force. Therefore, knowing what jobs students expect to have is an important factor in determining what they need to know and to be able to do.

The primary function of school is to teach students how to think for themselves. Therefore, they should spend time in class learning how to learn, analyzing different perspectives, and defending their own positions.

The primary function of school is to prepare students for democratic citizenship. Therefore, students should learn how to actively participate in the structures of society and government that help to ensure life, liberty, and the pursuit of happiness.

The primary function of school is to make sure that all students have specific knowledge about history, science, literature, and mathematics. Therefore, students should spend more time learning accepted facts than making their own interpretations.

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. GO!

Be a strong participant by using phrases like these.

I believe that...

I agree with you because. . .

You make a good point, but have you considered...

Can you show me evidence in the text that supports what you said?

What is the purpose of school? Science Activity

Professor Kahn's 12-year-old daughter goes to a Montessori middle school. Montessori schools

have a unique **structure**. Students choose what to learn.

The teacher's **function** is to observe students as they work. Professor Kahn chose this school for her daughter because students there seemed happy. Happiness, Professor Kahn knows, is an important **factor** in school success.

But now that her daughter is getting older, Professor Kahn is beginning to worry. Do Montessori students really learn as much as traditional students?



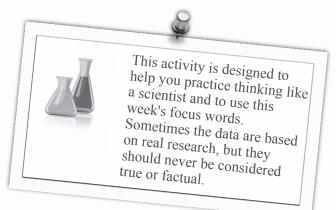
How will 12-year-old Montessori students compare with 12-year-olds from a more traditional classroom, like Professor Kahn's?

Hypothesis:

The students from Professor Kahn's traditional classroom will score at least 5 points higher on a math test than the Montessori students.

Materials:

- ▶ 30 12-year-old Montessori students
- ▶ 30 12-year-old students from Professor Kahn's class
- Math test



Procedure:

- 1. Give the math test to all 60 students.
- 2. **Analyze** the test results. How can you describe the data?
- 3. **Interpret** the data. What does it mean?

Data:

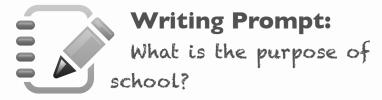
	Average Test Score	
	(out of 100)	
Montessori Students	82.7	
Traditional Students	82.9	

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?



Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.	Check off what you accomplished: Good Start				
	☐ Stated my own position ☐ Included 1 focus word				
Focus Words	Pretty Good				
analyze factor function interpret structure	☐ 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				

A tool to help you think about your

Remember you can use focus words from any of

own writing!

the WG Units.





Focus Words

context | indicate | variable | create | benefit



Weekly Passage

The former president of Harvard University upset many people when he explained why he thought there were fewer women than men in math and science jobs. He suggested that women may have less natural talent in these areas. He also argued that women spend more time with their families and fewer hours at their jobs than men do.

Why are women who enter careers in science and math more likely to leave than men? Many people argue that ability and family commitment have nothing to do with it. They think that the educational context in which students learn math and science plays an important role. For example, women in science, math, and engineering programs reported on a survey that their professors favored male students and preferred men's learning styles. Other studies show that in a typical science or math classroom, teachers call on male students more often.

Research <u>indicates</u> that men also respond to questions more confidently, quickly, and aggressively. Women say that, if called on at all, they are interrupted more often than men. Might social conditions like these <u>create</u> a context that drives women away from careers in the math and science fields? Some think that the most important <u>variable</u> affecting math performance is expectations. Both girls and boys <u>benefit</u> from teachers who believe in their math abilities and expect them to do well.

Why do you think there are more male scientists and engineers than female? Should something be done to promote gender equality in these fields? If so, what?

9

	Notes					
Unit 1.02 Where are the women in math and science? Focus Word Chart	Examples of Use					
nen in math	Forms					
ire the won d Chart	Meaning	(v.) - to gain, to be helped	(n.) - situation; environment	(v.) - to make; to build	(v.) - to show; to demonstrate	(n.) - factor, quality that changes or varies
Unit 1.02 Where are the Focus Word Chart	Word	benefit	context	create	indicate	variable

Where are the women in math and science? Problem of the Week



Option 1: Different students learn better in different educational **contexts**. One **variable** that affects the educational context is a teacher's gender. Some studies say female students **benefit** from having female teachers. However, in middle schools and high schools, many math and science teachers are male. In colleges, many math and science departments are made up of mostly male professors. For example, only 2 of the 26 senior professors in the Harvard University math department are women.

Part 1: What fraction of Harvard's senior math professors are women? Indicate your answer below.

- A) 3/13
- B) 2/13
- C) 1/13
- D) 3/26

Part 2: There are many fractions equal to the fraction you chose in Option 1. **Create** a list of these fractions. Could a larger department with many more professors have an equal fraction of women?

Option 2: If math and science departments hire more female teachers, will these traditionally male **contexts** become more supportive of female students? Or are the **benefits** unclear? This is a complicated question about social relationships in education. Mathematically, we know that the percentage of women in any group depends partly on the number of women, and partly on the number of men. For example, a math department with two women and two men would be 50% female, while a math department with two women and eight men would be 20% female.

Create an algebraic equation that **indicates** the relationship between the number of women in a group, the number of men in the group, and the percentage of women in the group. Use the following three **variables**: Let w = the number of women in a group, m = the number of men in the group, and p = the percentage of women in the group.

Math Discussion Question: Lawrence Summers, the former president of Harvard University, suggested that math and science ability is partly determined by natural talent. A few studies have **indicated** that, while most men and women have equal math and science talent, men are more **variable** – they are more likely to be very bad or very good in these areas. Summers said he suspected that, based on natural talent, the top scientists and mathematicians would always be men. Later, he said his remarks were taken out of **context**. He said he supported the **creation** of special **benefits** to encourage women in math and science. He was just, he said, posing good scientific questions. What do you think about these remarks? Is it okay for a university president to suggest that most of the best scientists and mathematicians will always be men? Why or why not?

Where are the women in math and science?

Debating the Issue: Why are there fewer women than men in these fields?



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

The most important variable affecting whether someone goes into a career in math or science is interest, and boys are generally more interested in these subjects than girls.

There are fewer women than men in math and science careers because girls do not have the benefit of high expectations and encouragement from teachers that boys have.

The way girls are treated in math and science classes helps to create a context that discourages girls from pursuing scientific careers

There are fewer women than men in science and engineering careers because the way these subjects are taught does not highlight how using math can benefit people, which is something that girls often indicate is important to them.

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:



Be a strong participant by using phrases like these.

1 believe that...

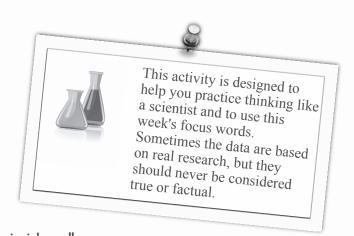
I agree with you because. . .

You make a good point, but have you considered...

Can you show me evidence in the text that supports what you said?

Where are the women in math and science? Science Activity

Professor Kahn overhears the eighth grade
English teacher in the hallway. "The boys in my
class are such poor writers," she sighs. "Males
are just worse than females at communicating their ideas."



"What?" Professor Kahn interrupts. "High expectations **benefit** students, but low expectations **create** a negative environment. No wonder your male students do poorly in that **context**!"

"But men are not as good at expressing themselves. It's a fact!" says the English teacher. "I just read the book *The Female Brain*. It **indicates** that women use 20,000 words a day, while men use only 7,000."

Professor Kahn wonders if this idea is right. The number of words that people use per day is a **variable** that she can measure by doing her own experiment.

Question:

Do women use more words per day than men?

Hypothesis:

Women and men use about the same number of words per day.

Materials:

- ▶ 100 females
- ▶ 100 males

Procedure:

- 1. For one week, ask all 200 subjects to record themselves and then count the number of words they use each day.
- 2. Calculate the average number of words that males and females used per day.

Data:

	Average Number of Words Per Day	
Males	12,700	
Females	12,650	

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Should there be more women in math and science?
Why are there fewer women than men in these fields?

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

Focus Words sontout indicate variable create benefit	☐ Included 1-2 arguments ☐ Included 1-2 focus words
context indicate variable create benefit	Exemplary
	☐ Stated my own position clearly ☐ Included 1-2 arguments ☐ Included 1 counterargument ☐ Used 2-5 focus words
	-

A tool to help you think about your

Check off what you accomplished:

☐ Stated my own position

Included 1 focus word

Remember you can use focus words from any of

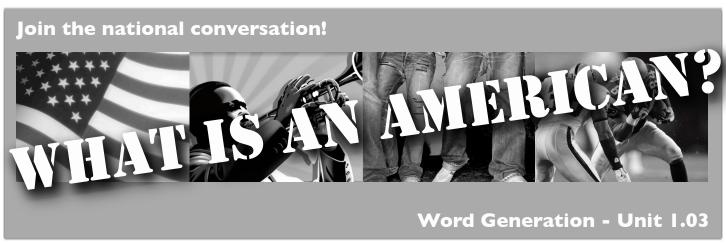
Good Start

Pretty Good

own writing!

the WG Units.





Focus Words

complexity | culture | element | resourceful | tradition



Weekly Passage

Does America have its own culture? Many foods, customs, traditions, values, fashions, musical and artistic styles, and other aspects of everyday American life have origins in other cultures. Some people believe that the unique combination of elements from other cultures defines American culture. For example, celebrating Thanksgiving, playing jazz music, and wearing jeans are shared American traditions with roots in other cultures. Others argue that there is really no such thing as American culture. They observe that people from different cultural backgrounds often live in segregated communities in the U.S. with their own traditional meals, music, holidays, and other customs.

But do these separate groups have anything in common? Some say that Americans are typically materialistic. Are people in the U.S. more interested in spending money and buying things than in spending time with family and learning about

their heritage? Is materialism – a desire to own more things – a shared American value? Other people view Americans as especially resourceful. Are people in the U.S. better than others at making do, and improving their lives? Perhaps resourcefulness is why Americans are traditionally good at taking advantage of what different ethnic groups have to offer. Does the success of the American fast food industry indicate materialism or resourcefulness? Does Taco Bell represent American culture? What about baseball, hip-hop, Nintendo, or Hollywood? Is America a "melting pot" with its own unique flavor, or a "salad bowl" made up of lots of different tastes? Might it be the complexity of America's cultural history that sets it apart from other nations? What do you think?

	Examples of Use Notes					
can?	Forms					
neri	Meaning	(n.) - having many interrelated parts; of a complicated nature	(n.) - way of life; group of people who share a particular way of life	(n.) - piece; part; component	(adj.) - inventive; capable	(n.) - a regular practice; custom that is repeated over time
What is an Ar Focus Word Chart	Word	complexity	culture	element	resourceful	tradition

What is an American?

Problem of the Week



Immigrants have built and shaped the United States. Through the years, these resourceful

Americans endured many hardships, from discrimination to the Great Depression. They brought cultural **elements** like food, dress, and religious **traditions** from around the world. The **complexity** of our national **culture** reflects the great diversity of our people. Let's think about that diversity mathematically.

This table shows the top ancestries reported on the 2000 U.S. Census.

Option 1: According to the table, which of the following statements is true?

- A) Most Americans have German ancestry.
- B) More Americans reported having African-American ancestry than Irish ancestry.
- C) More Americans reported having Mexican ancestry than English ancestry.
- D) More Americans reported having German ancestry than any other ancestry.

Top Reported Ancestries, by Percentage of U.S. Population		
German	15.2%	
Irish	10.8%	
African- American	8.8%	
English	8.7%	
American	7.2%	
Mexican	6.5%	
Italian	5.6%	
Polish	3.2%	
French	3.0%	
American Indian	2.8%	

Option 2: According to the table, an American chosen at random is how much more likely to have German ancestry than Mexican ancestry? Round your answer to the nearest hundredth.

Math Discussion Question: Our national culture blends elements from many different cultural traditions, and yet Americans feel great pride in being American. The responses to the question about ancestry on the U.S. Census hint at the complexity of Americans' cultural identity. For example, 7% of Americans, or over 20 million resourceful citizens, said their ancestry is "American" although the question was worded to encourage a different answer. What does this mean? Is it possible to have American ancestry? Or do these people just have such strong feelings about the U.S. that they consider themselves "American," regardless of their real ancestry? What do you think?

What is an American? Debating the Issue



I. Get ready...

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

America has its own unique shared culture that is different from others. American culture includes traditions that originate in America (e.g., Thanksgiving) and are common among those who live in the U.S., regardless of their original heritage.

America is a patchwork of different cultures. All elements of American culture can be traced to some other culture. There is nothing that is uniquely American, and there is no culture that is shared by all Americans.

People have multiple cultures. Americans transform what is brought from other cultures into a unique American brand of values, customs, traditions, etc. that is shared across ethnic groups, while also practicing customs that are specific to certain social or ethnic subgroups.

America does not have a single uniform culture. Each American develops an individual lifestyle that draws from many different cultures. There are American subcultures, such as hip-hop, that originate in America and can include people from different ethnic backgrounds.

E ----

GO!

Be a strong participant by using phrases like these.

I believe that...

I agree with you because. . .

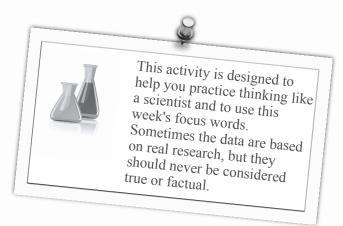
You make a good point, but have you considered...

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: Can you show me evidence in the text that supports what you said?

What is an American? Science Activity

Professor Seemy's class is watching a video about chimpanzees. Scientists used to think that only humans had **culture**, or behaviors that make one social group different from another. After all, animals don't have language, clothes, or religious



traditions, which are important **elements** of human culture. But chimps do pass on learned behaviors to their children, like using twigs to catch termites. These behaviors make one group of chimps different from another.

"Hey," Raquelle says. "If there's such a thing as chimp culture, is there such a thing as classroom culture?"

"Good question!" Professor Seemy says. Is there such a thing as classroom culture?

Question:

Will two classrooms have different cultures?

Hypothesis:

Students in the same classroom will develop and pass on unique behaviors – a classroom culture.

Materials:

- ▶ Two classrooms with the same rules
- Observers

Procedure:

- 1. For one week, send observers to write down what happens in the two classrooms.
- 2. Analyze and interpret the observations.

Data:

Both rooms had the same rule for using the bathroom. Students were supposed to raise their hands. Sometimes, the teachers were so busy that a raised hand went unnoticed. In Classroom A, students waited until the teacher noticed them. However, the **resourceful** students in Classroom B had developed behavior with more **complexity**.

The Classroom B bathroom-going behavior had three separate **elements**. First, students waited with raised hands for about one minute. Second, they got up and told a friend where they were going. Third, they went quickly and quietly to the bathroom. A new student appeared one day. After watching the other students, she quickly adopted their bathroom-going procedure.

Situation	Classroom A	Classroom B
Going to the bathroom	Students raise hands	Students raise hands, tell a friend, and then leave quietly

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt: What does it mean to be an American?

Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.	Check off what you accomplished: Good Start		
	☐ Stated my own position ☐ Included 1 focus word		
Focus Words complexity culture element resourceful tradition	Pretty Good		
7, 1 23.23.21, 23.23.21, 3.23.21, 3.23.21	☐ 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		

A tool to help you think about your

Remember you can use focus words from any of

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the WG Units.





Focus Words

design | feature | impact | potential | transfer



Weekly Passage

What makes you who you are? Both your genes and your experiences have an impact on your identity. Your genes contain information about your own unique <u>design</u>. They help determine many of your <u>features</u>, such as your eye color, your height, and which hand you use to write.

Scientists have invented a process called cloning that allows them to copy the genes of living things, or organisms. Scientists transfer some of an adult organism's genes to a new egg. After the transfer, a clone or copy of the original organism starts to develop. Researchers are using one type of cloning to study new treatments for diseases like cancer. They believe that cloning has the potential to help people with serious illnesses. Many farmers are cloning plants to produce crops featuring qualities that people like, such as juiciness in tomatoes. Some farmers are interested in cloning animals,

too. For instance, they want to clone cattle that produce particularly tasty and tender beef.

In the future, scientists may be able to clone a person. This process could create identical twins born at different times. But is that a good idea? Many people worry about how cloning will <u>impact</u> our lives. What would happen if people could design other people? What if, for example, leaders could choose the features they wanted their soldiers to have and then make an army of clones? What if parents could clone their children? Should people be allowed to clone their pets? How might we take advantage of the benefits cloning offers while preventing potential problems?

Unit 1.04 Cloning: Threat Focus Word Chart	Threat or	or opportunity?	~•	
Word	Meaning	Forms	Examples of Use	Notes
design	(n.) - plan; blueprint			
feature	(n.) - quality, trait, characteristic			
impact	(v.) - to affect or influence			
potential	(n.) - possibility			
transfer	(v.) - to move something from one place to another			

Cloning: Threat or opportunity? **Problem of the Week**

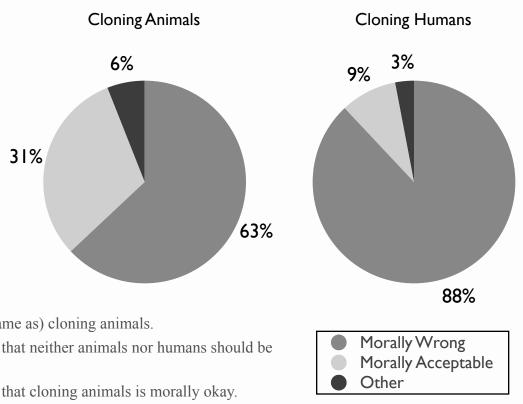
Cloning an organism means transferring its genes to a new egg, and allowing a copy to develop with the same **design** as the original. Scientists are already cloning cows for the beef industry. They choose

cows with especially tender meat, or other desirable **features**. There are many other potential applications of cloning. Should we clone endangered species? Many people need new organs to survive. Are human clones the answer? Despite the potential for good, many people worry about the **impact** of this new technology on our society.

Here are the results of a 2010 Gallup poll that told how Americans felt about cloning.

Option 1: Based on the graphs, which of the following statements is true?

- A) Most Americans think that cloning humans is morally okav.
- B) Most Americans believe that cloning humans is morally equivalent to (or the same as) cloning animals.
- C) Most Americans think that neither animals nor humans should be cloned.
- D) Most Americans think that cloning animals is morally okay.



Option 2: True or False: Based on the graphs, 25% of Americans believe that cloning animals is okay, but cloning people is not.

Math Discussion Question: Many people believe that each human being is uniquely designed by God. Our society is built on the idea that each human is a special creature with special responsibilities and rights. Are these ideas in danger? Are you a unique and special individual, or are you simply a collection of **features**, like hair color, height, and IQ? What **impact** would human cloning have on the idea of human rights? Would human rights **transfer** to human clones? Why do so many Americans think cloning is wrong? What are some **potential** problems with cloning humans?

Cloning: Threat or opportunity? Debating the Issue



I. Get ready...

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

Cloning of any kind should be forbidden.

GO!

Cloning of plants should be allowed, but cloning of animals should be forbidden.

forbidden.

Cloning of plants and farm animals should be allowed, but cloning of humans should be

Cloning should be allowed for research purposes related to treating disease (therapeutic cloning), but cloning of people (reproductive cloning) should not be allowed.

| 1 believe that...

I agree with you because.

Be a strong participant by using phrases like these.

E ----

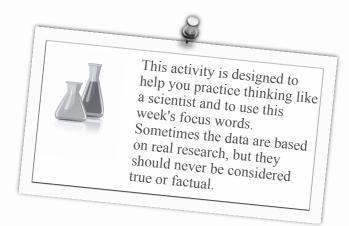
You make a good point, but have you considered...

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: Can you show me evidence in the text that supports what you said?

Cloning: Threat or opportunity? Science Activity

Professor Seemy just read a newspaper article about cloning expert Lou Hawthorne and his two cloned dogs. The dogs were both cloned from



Missy, a dog who died in 2002. Hawthorne **transferred** Missy's DNA to eggs taken from other dogs. The two clones have similar **features** and exactly the same genetic **design**. Hawthorne thinks dog cloning has the **potential** to be a big business.

"This could have a huge **impact** on the relationship between people and pets," thinks Professor Seemy. "But will people buy cloned dogs?"

Question:

Will people buy cloned dogs?

Hypothesis:

Most people will say that they would not buy a cloned dog.

Materials:

▶ 100 people

Procedure:

- 1. Ask 100 people if they would buy a cloned dog.
- 2. Tally results.

Data:

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Should cloning be allowed? What impact might it have on people's lives?

A tool to help you think about your

Check off what you accomplished:

☐ Stated my own position

☐ Included 1 focus word

Remember you can use focus words from any of

Good Start

own writing!

the WG Units.

Support your position with clear reasons and specific

Generation list in your response.	Pretty Good
Focus Words design feature impact potential transfer	☐ 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





Focus Words

considerable | contribute | demonstrate | sufficient | valid



Weekly Passage

Some people believe that rap music has had <u>considerable</u> influence on children and teenagers, most of which has been negative. They claim that the lyrics are often violent and especially insulting to women. Thus, they say, rap has <u>contributed</u> to aggression among young people and to behavior that disrespects women.

But is that a <u>valid</u> claim? Supporters of rap music say the songs <u>demonstrate</u> a different face of American culture than the one we usually see on television or in newspapers. They think it's important for rappers' voices to be heard. Other people argue that some individuals who listen to rap were probably violent before ever hearing this type of music. Thus we can't blame rap for their violent actions. Still others say that rap is a form of creative expression – this

generation's poetry. They point to rap artists who create positive images for today's youth.

However, some parents are worried about the messages conveyed by rap music and asked the music industry to label CDs with a warning. Many rap music fans consider this a form of artistic censorship that has no place in a free society.

Do you think that listening to rap leads to aggression? Should we have rules to prevent rap artists from talking about violence, especially violence against women? What would be <u>sufficient</u> evidence, in your view, to support the claim that rap has a negative impact on youth?

Notes Does rap music have a negative impact on youth? **Examples of Use** Forms (adj.) - large; important (v.) - to add (to); to (adj.) - convincing; defensible Meaning (v.) - to show; to display (adj.) - enough; **Focus Word Chart** adequate Word **Unit 1.05** considerable demonstrate contribute sufficient valid

Does rap music have a negative impact on youth?

Problem of the Week

Does rap music **contribute** to violence? A **considerable** number of rap songs talk about hurting and killing people, especially women. However, this is not **sufficient** to show that rap itself is dangerous. Researchers have tried to **demonstrate** connections between rap music and aggressive behavior in many different studies. They try to establish **valid** conclusions by keeping many possibilities in mind. For example, even if rap listeners exhibit violent behavior, the music itself may not be the cause.

One study compared two groups: students who watched rap music videos for 14 or more hours each week, and students who rarely or never watched them. The students who watched the videos for at least 14 hours each week showed the following characteristics.

- ▶ They were three times more likely to hit a teacher
- ▶ They were over 2.5 times more likely to get arrested.

Option 1: Based on the information above, is the following conclusion valid or invalid?

Students who watched 14 or more hours of rap music videos each week were more likely to hit a teacher than to get arrested.

- A) The conclusion is valid.
- B) The conclusion is invalid.

Option 2: Manny watches 7 hours of rap music videos each week. Based on the information above, is the following conclusion valid or invalid?

Manny is 1.5 times more likely to hit a teacher than students who rarely or never watch rap music videos.

- A) The conclusion is valid.
- B) The conclusion is invalid.

Math Discussion Question: What if researchers could demonstrate a valid cause-and-effect relationship between rap music and violent behavior? For example, what if researchers could show that non-violent teens became violent after listening to rap? Would this be **sufficient** reason for us to ban certain songs or artists? The Constitution gives **considerable** protection to free speech. However, not all speech is protected. Words that endanger others (such as, in one famous example, yelling "Fire!" in a crowded theater) can be banned. What can you **contribute** to this debate? Where should we draw the line between free speech and public safety?

Does rap music have a negative impact on youth?



Debating the Issue

Get ready...

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

Rap songs that promote violence, especially violence against women, should not be sold to minors because they set a bad example.

Freedom of speech is an important American right, so rap lyrics should never be censored, no matter what they say.

Rap artists should take some responsibility for setting a good example for young people, and promoting violence does not set a good example, but it is ultimately their choice to write about whatever they want.

Rap music is an important form of creative expression, and kids are smart enough to be critical of bad messages and make responsible decisions about how to behave toward each other.

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: GO!

Be a strong participant by using phrases like these.

I believe that...

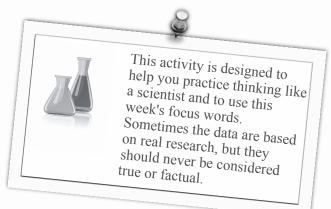
I agree with you because. . .

You make a good point, but have you considered...

Can you show me evidence in the text that supports what you said?

Does rap music have a negative impact on youth?

Science Activity



Professor Kahn and the principal, Miss Jackson, are talking about a group of eighth-grade boys. Their fighting has become a **considerable** problem.

"It's the music they listen to!" grumbles Miss Jackson. "Kids who listen to rap get in more fights."

Is this true? Professor Kahn decides to find out.

Question:

Do students who listen to rap get in more fights?

Hypothesis:

Students who listen to rap get in more fights than students who don't listen to rap.

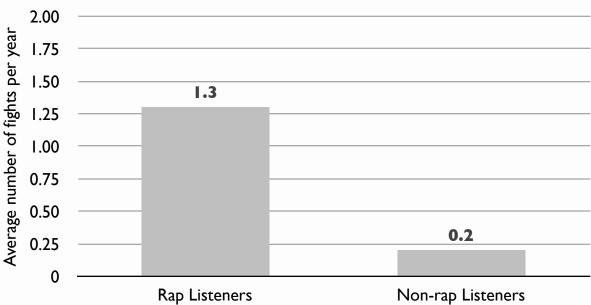
Materials:

▶ 100 students

Procedure:

- 1. Ask students what kind of music they listen to.
- 2. For one year, record how many fights these students get involved in.
- 3. Calculate the average number of fights for rap listeners and non-rap listeners.

Data:



Analysis:

"I knew it," says Principal Jackson. "Rap makes kids violent."

Professor Kahn disagrees. "That is not a **valid** conclusion," she says. "Kids who listen to rap music may get in more fights, but that's not **sufficient** evidence to **demonstrate** that rap music causes fighting. It may not **contribute** to fighting at all."

"What do you mean?" Miss Jackson asks.

"Just because two things are correlated, or happen together, doesn't mean that one thing causes the other," says Professor Kahn. "For example, people that live in New Orleans tend to eat gumbo. They also tend to like the New Orleans Saints football team. If we did a study, I bet we'd find that gumbo eaters are more likely to like the Saints than non-gumbo eaters. But eating gumbo doesn't cause people to like the Saints."

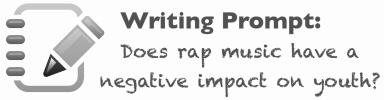
Principal Jackson is quiet. Then she says, "I see what you mean. We need to do more research on rap and violence before we draw conclusions."

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?



Support your position with clear reasons and specific	Check off what you accomplished: Good Start		
examples. Try to use relevant words from the Word Generation list in your response. Focus Words considerable contribute demonstrate sufficient valid	☐ Stated my own position☐ Included 1 focus word		
	Pretty Good		
considerable contribute demonstrate sumcient valid	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		

A tool to help you think about your

Remember you can use focus words from any of

own writing!

the WG Units.





Focus Words

rely | react | alternative | justify | proportion



Weekly Passage

Animals are used in research by scientists seeking cures for disease. They are also used by pharmaceutical and cosmetic companies to test drugs, makeup, lotions, soaps, and shampoos. Why do we rely on animals to test our products for safety? Because animals share many genes and organs with humans, scientists say that using them advances knowledge and protects humans from potentially harmful effects of new products.

If animal testing is designed to protect humans, then why do so many people <u>react</u> negatively to it? Today, more and more people will not buy products tested on animals because they consider animal testing cruel and unnecessary. Companies that use <u>alternative</u> methods of testing products are

advertising to people who don't mind buying shampoo or laundry detergent that is a bit more expensive in order to avoid products tested on animals.

Medical researchers say that only a small <u>proportion</u> of animals are used in painful or dangerous tests. Animal rights defenders say even one is too many.

Is it okay to test drugs or makeup on animals? Do humans have more rights than animals? Is animal testing justified because it helps humans?

	Notes					
	Examples of Use					
it necessary?	Forms					
<u>s</u>	Meaning	(v.) - to depend on	(v.) - to respond	(adj.) - other, different	(v.) - to show or prove to be right	(n.) - fraction; quantity; compared amounts
Unit 1.06 Animal testin Focus Word Chart	Word	rely	react	alternative	justify	proportion

Animal testing: Is it necessary? Problem of the Week



Many different groups, from makeup companies to cancer research labs, use animal testing. Some look for **alternatives** to animal tests. Others try to **justify** their work, saying that animal testing saves money and human lives. It is difficult to find **reliable** statistics about how many animals are used for testing in the U.S. each year. One estimate is 21 million animals.

Some people **react** differently to animal testing depending on what kind of animal is being used. Using dogs, for example, may seem worse than using rats. A large **proportion** of test animals are rats, mice, and other rodents. Some organizations have estimated that 90% of research animals in the U.S. are rodents.

Option 1: According to the estimates given above, how many of the 21 million test animals are rodents?

- A) 17,800,000
- B) 18,000,000
- C) 18,500,000
- D) 18,900,000

Option 2: The Humane Society estimates that 3.5 million cats and dogs are euthanized, or killed, each year due to overpopulation. According to the US Department of Agriculture, about 100,000 cats and dogs were used for animal testing in 2005.

Based on the information above, fill in the blank:

About _____ times as many dogs and cats are euthanized due to overpopulation as are used for animal testing each year. (Hint: to solve the problem quickly, use exponents.)

Math Discussion Question: When researchers estimated that 21 million animals are used for testing in the U.S. each year, they were not counting invertebrate animals, like shrimp, fish, worms, and flies. Some people say invertebrates aren't really animals. They think that although invertebrates can **react** to stimuli (a shrimp, for example, will move away from an electric shock), they cannot feel pain. Invertebrates make up a much larger **proportion** of test animals than even rats and mice. They are not covered by the rules that help protect vertebrates like cats, rats, and chimps. Is this unequal treatment **justified**? Many of us have a gut feeling that a rabbit is worth more than a fruit fly. We kill bugs, but when a pet dies, we cry. Can we **rely** on these feelings to help us make fair decisions about animal testing? Or should we develop an **alternative** system that treats all animals the same?

Animal testing: Is it necessary? Debating the Issue

Debacing the issue

I. Get ready...

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

Animal testing should be allowed for all drugs, makeup, lotions, soaps and shampoos. Because animals and humans share so many genes, this is the best way for scientists to predict the reactions that humans will have to these substances, and thereby prevent large numbers of people from becoming sick.

Animal testing should never be allowed. It is cruel to cause pain to innocent animals, and if scientists were not allowed to do it, they would rely on other ways to test drugs and cosmetics.

Animal testing should only be allowed for important drugs that could be used to treat serious diseases in humans. The pain that animals experience is justifiable if it saves human lives. Makeup, lotions, soaps, and shampoos should not be tested on animals because they do not benefit human health.

Animal testing that causes animals a lot of pain should never be allowed because the benefits to humans do not justify this. Animal testing should be permitted only in circumstances where the animals will not be seriously hurt.

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:



GO!

Be a strong participant by using phrases like these.

1 believe that...

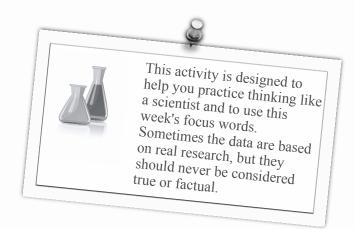
I agree with you because. . .

You make a good point, but have you considered...

Can you show me evidence in the text that supports what you said?

Animal testing: Is it necessary? Science Activity

For years, cosmetics companies have **relied** on animal testing to make sure products are safe. In Draize testing, makeup is applied directly to the eyes of a living rabbit. The rabbits are observed,



and then killed. When Professor Seemy's students hear about these painful tests, some **react** with horror.

"How can companies **justify** torturing rabbits to sell makeup?" Shawn asks. "I've heard about some **alternatives**, like testing on artificial human skin."

"That's not a good alternative," argues Marcelina. "Testing on a piece of fake skin can't give the same results as testing on a live animal."

Is Marcelina right? Professor Seemy decides to find out.

Question:

Will testing lipstick on artificial skin give the same results as Draize testing?

Hypothesis:

Testing lipstick on artificial skin will give the same results as Draize testing.

Materials:

- ▶ 5 kinds of lipstick that have been tested using the Draize method
- results from those 5 Draize tests
- ▶ 5 artificial skin samples
- Sterile lab
- ▶ Chemical MTT (a yellow chemical that turns blue when it is touching living tissue.)

Procedure:

- 1. Cover each skin sample with a different kind of lipstick.
- 2. Cover each skin sample with chemical MTT.
- 3. By looking at the color of the chemical MTT, calculate the **proportion** of each skin sample that is still alive.
- 4. Call a chemical "safe" if more than 50% of the skin sample is still alive. Call a chemical "unsafe" if less than 50% of the sample is still alive.
- 5. Compare the results with Draize test results.

Data:

Lipstick Type	Draize Results				ficial Resul	Skin ts	
A	Ø	safe		unsafe	safe safe		unsafe
В	Ø	safe		unsafe	safe safe		unsafe
С		safe	Ø	unsafe	safe	Ø	unsafe
D		safe	Ø	unsafe	safe	Ø	unsafe
E	Ø	safe		unsafe	safe		unsafe

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Is animal testing justified?

A tool to help you think about your

Check off what you accomplished:

Remember you can use focus words from any of

Good Start

own writing!

the WG Units.

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

response.	☐ Stated my own position☐ Included 1 focus word		
Focus Words	Pretty Good		
rely react alternative justify proportion	☐ 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		





Focus Words

access | civil | despite | integrate | promote



Weekly Passage

Each year, people try to keep certain books out of schools and libraries. They feel that students should not have <u>access</u> to literature about subjects they consider inappropriate for young readers. Many popular books have been challenged or banned in recent years. The list includes *To Kill a Mockingbird* by Harper Lee, *The Giver* by Lois Lowry, and *The Bluest Eye* by Toni Morrison. *Harry Potter* is even on the list.

Some people think that youth should be protected from difficult issues, such as racism or violence. They also think that books can give kids bad ideas. Other people suggest that youth are facing tough issues in their lives already. If those issues are integrated into meaningful stories, young people might find books helpful for understanding their own lives. For example, when a novel incorporates a problem such as

racism, it can help kids dealing with prejudice to feel less alone. It might also help them to see how their actions can affect other people.

Librarians and teachers try to <u>promote</u> positive attitudes toward reading. They like to see students fully engaged with relevant literature. Some librarians and teachers want censored books to be accessible to students because they are often interesting to read. Many American citizens argue that book banning and other types of censorship violate their <u>civil</u> rights.

Should students have the freedom to read anything they choose <u>despite</u> the possible risks?

Censorship: Who should decide what young people read? Notes **Examples of Use** Forms (adj.) - involving citizens (n.) - opportunity to use; (v.) - to make part of Meaning (prep.) - even with (v.) - to encourage **Focus Word Chart** right to use Word Unit 1.07 integrate promote despite access civil

Censorship: Who should decide what young people read?



Problem of the Week

The American **Civil** Liberties Union (ACLU) **promotes** individual rights and liberties. The ACLU believes that defending civil liberties is always important, **despite** the fact that people strongly disagree about certain situations. In 1999, the ACLU sued the town of Wichita Falls, Texas for restricting **access** to two children's books. The books, *Daddy's Roommate* and *Heather has Two Mommies*, have gay and lesbian characters. Some citizens had signed a petition complaining about the books. Then, the books were moved to the adult section of the library.

At the time, the move was legal. The law in Wichita Falls said that if 300 people signed a petition, a children's book could be moved to the adult section. ACLU members said moving the book was just like hiding it. All children's books, they said, should be **integrated** into the children's section of the library.

Option 1: The population of Wichita Falls is about 100,000. Which statement is true?

- A) 300 people is less than 1% of the population
- B) 300 people is about 3% of the population
- C) 300 people is more than a third of the population
- D) 300 people is about 5% of the population

Option 2: If 300 of 100,000 residents signed the petition against the two children's books, what is the probability that a resident chosen at random signed the petition?

Math Discussion Question: The **civil** code of Wichita Falls allowed a small percentage of the city's residents to control **access** to certain books. Some people said this was fair. They said that communities have a right to **promote** certain values, and that libraries should reflect these values. If a book offends people, it should be removed. Other people disagreed, saying that the library should **integrate** the views of all different groups, **despite** the fact that some groups might disagree with each other. Which view seems right to you?

Censorship: Who should decide what young people read? **Debating the Issue**



Get ready...

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

Students should be free to read anything they want to because books that deal with tough issues can help young people cope with these things in their own lives. Youth can learn better ways to respond to drugs or racism or violence if they can read about characters facing those issues.

Students should be free to read anything they want to because having access to censored books will promote reading. Censored books are often very interesting to read, and younger readers are more likely to become engaged in books that integrate issues relevant to their lives.

Adults should carefully select appropriate books to keep students from from being upset by books that deal with mature issues like drugs, racism, or violence. Young readers are not ready to handle these topics, so reading about such issues might make them depressed or frightened.

Adults should carefully select appropriate books for students so kids will not learn about harmful ideas or behaviors. Reading a book with violent or racist characters might lead young students to think that violence and racism are okay.

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:

Be a strong participant by using phrases like these.

In my experience .

that's similar to what I think too ...

What makes you think that?

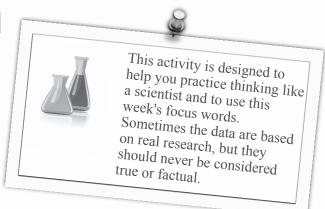
When I re-read the text, it reminded me...

Censorship: Who should decide what young people read?

Science Activity

The principal, Miss Jackson, has banned the book,

Bless Me, Ultima from the school library. Some
students are protesting. "We should have access to
this book," says Trey. "Schools should promote civil liberties, not censorship."



Despite the ban, Professor Kahn has begun seeing many of her students reading *Bless Me*, *Ultima* during study hall and at lunch. "Once I heard about the ban, I got curious," Jackie explains. "I had to know what was in that book, so I checked it out from our county library!"

Professor Kahn becomes curious herself. Students who want to read the banned book can still access it for free at the public library, or buy it from a bookstore. Therefore, did banning the book in school really decrease the number of students who read it? Another nearby school is also going to ban the book *Bless Me, Ultima* from their library. Professor Kahn decides to **integrate** the banned book debate into her class by studying what happens at the other school.

Question:

Do fewer students read a book after it has been banned in their school library?

Hypothesis:

Students can still get the banned book from other places. So, the number of students reading the book will stay the same even after it is banned.

Materials:

Students from a school where a book is going to be banned.

Procedure:

- 1. For 5 weeks before the book *Bless Me*, *Ultima* is banned, keep track of how many students are reading it.
- 2. For 5 weeks after the book *Bless Me*, *Ultima* is banned, keep track of how many students are reading it.
- 3. Calculate the total number of students in each category.

Data:

Time	Number of Students Who are Reading the Book Bless Me, Ultima
Weeks 1 - 5: <i>Bless Me, Ultima</i> is not banned	26
Weeks 5 - 10: <i>Bless Me</i> , <i>Ultima</i> is banned	14

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Should students have the freedom to read anything they want? Who should decide what young people read?

what young people read?	Check off what you accomplished: Good Start
Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.	☐ Stated my own position☐ Included 1 focus word
Concretion has in your response.	Pretty Good
Focus Words access civil despite integrate promote	☐ 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

A tool to help you think about your

Remember you can use focus words from any of

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the WG Units.





Focus Words

attribute | cycle | hypothesis | project | statistics



Weekly Passage

Global climate statistics suggest that the average temperature of the earth's surface is increasing. For example, the warmest ten years of the 20th century were between 1985 and 2000. Another statistic indicates that surface temperatures have risen by about 1°F since the late 1800s. Though this change may seem small, it has raised the ocean level by an estimated 4 to 8 inches. This is because more snow and ice are melting into the sea. Many scientists support the hypothesis that global warming is linked to heavier storms, floods, and other extreme weather. They attribute these changing environmental conditions to human activities like driving cars that use a lot of gas. Scientists believe that people contribute to global warming through burning fossil fuels (coal, oil, and

natural gas). Such activities increase certain gases that trap the sun's energy inside the atmosphere and warm the earth. This is called the greenhouse effect.

Scientists say that the current warm period is not just part of the earth's natural climate <u>cycle</u>. This trend does not fit the usual pattern of warm periods followed by cool periods. Scientists <u>project</u> that temperatures will keep rising if we continue to ignore the impact of our activities.

Should people be allowed to drive SUVs? Should companies be allowed to make them? Should the government invest in exploring other energy sources? Who is responsible for preventing future destruction?

	Notes					
l be done?	Examples of Use					
ng: What should be done?	Forms					
varming: V	Meaning	(v.) - to assign; to attach; to associate	(n.) - repeated pattern	(n.) - informed guess	(v.) - to predict; to estimate	(n.) - numerical information
Unit 1.08 Global warmin Focus Word Chart	Word	attribute	cycle	hypothesis	project	statistics

Global warming: What should be done? Problem of the Week



Scientists agree that global warming is a serious problem. They **attribute** rising temperatures to human activities such as driving cars, heating buildings, and cutting down forests. However, most Americans are not convinced. In 2010, only 50% of Americans agreed that global warming was caused by humans. An almost equal number, 46%, had a different **hypothesis**: they attributed higher temperatures to the earth's natural **cycle**.

Climate data helps us understand our climate and **project** what will happen to it in the future. The National Climatic Data Center began collecting climate data in 1880. Here are some **statistics**.

- ▶ The warmest years on record were 2010 and 2005, with a global temperature (land and ocean) of 58.12° Fahrenheit
- All 12 of the warmest years on record have occurred since 1997.
- ▶ The average global temperature for 1901–2000 was 57° Fahrenheit.
- ▶ The last time the yearly average was below 57° was 1976.

Option 1: Based on the statistics above, which of the following is true?

- A) Average yearly temperatures fell over the last two decades.
- B) Average yearly temperatures appear to be rising.
- C) Each year, the average yearly temperature increases.
- D) The average yearly temperature varied widely throughout the 20th century.

Option 2: Scientists project that temperatures will rise by 5.4° Fahrenheit by the end of the 21st century. Based on the statistics above, would this increase be more or less dramatic than the one we saw during the 20th century? Explain.

Math Discussion Question: Scientists around the world agree that global warming is a big problem. Climate **statistics** support the **hypothesis** that dangerously high temperatures are caused by humans. Experts **project** catastrophic flooding and famine if humans don't limit greenhouse gasses. Still, almost half of Americans believe that high temperatures are part of a natural climate **cycle**. To what do you **attribute** this gap between scientific evidence and people's beliefs? What would it take to convince Americans to take global warming seriously?

Global warming: What should be done? Debating the Issue

I. Get ready...

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

Individual people should take responsibility for reversing the effects of global warming. It is not the government's fault that people drive SUVs and waste electricity. People should buy better cars and more efficient electrical appliances in order to slow down or stop global warming.

The government should take responsibility for reversing the effects of global warming. Congress should pass laws making it illegal to drive SUVs and forcing companies to do everything they can to reduce greenhouse gas emissions. The government should also pay for research on alternative energy sources such as wind and solar power.

Big companies should take responsibility for reversing the effects of global warming. They are the ones who are burning most of the fossil fuels and producing SUVs and other vehicles that harm the environment. Companies should develop alternate sources of energy and produce vehicles and appliances that do not contribute to greenhouse gasses.

No one needs to take responsibility for global warming. Instead, we should be finding ways to adapt to the changes in our climate by preparing for big storms and moving houses and communities away from coastlines.

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: GO!

Be a strong participant by using phrases like these.

In my experience . . .

that's similar to what I think too ...

What makes you think that?

When I re-read the text, it reminded me...

Global warming: What should be done? Science Activity

Professor Kahn's students know that scientists **attribute** global warming to human actions. They know that conserving resources helps fight the problem. Jordyn is reading some **statistics** out

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.

loud."Turning off lights in empty rooms can cut energy use by 20%," she says.

"Wait," says Daniella. "I heard that lights need a big surge of energy to turn on. So if you're leaving a room for just a little while, the **cycle** of turning the light off and on again uses more electricity than just leaving the light on."

Is this true? Professor Kahn's class decides to find out.

Question:

What saves more energy: always turning lights off in empty rooms, or only turning them off if they will stay off for an hour or more?

Hypothesis:

The class **projects** that families who always turn lights off in empty rooms will save more energy.

Materials:

- ▶ 200 families
- ▶ Electric bills

Procedure:

- 1. After one month of normal electricity use, get the electricity bills from all 200 families.
- 2. For the next month, ask 100 families to always turn lights off when they leave a room.
- 3. For the next month, ask 100 families to only turn lights off if the light will stay off for an hour or more.
- 4. After one month of the experiment, get the electricity bills from all 200 families again.
- 5. Calculate the average electricity bill for each group before and after the experiment.

Data:

	Families who always turned lights off when leaving a room	Families that turned lights off if they will stay off for an hour or more
	Average bill amount	Average bill amount
Month 1 (before experiment)	\$112.88	\$115.15
Month 2 (after experiment)	\$91.04	\$100.30

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

What should be done to prevent global warming?

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

from the Word Generation list in your response.	☐ Stated my own position☐ Included 1 focus word
Focus Words attribute cycle hypothesis project statistics	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

A tool to help you think about your

Check off what you accomplished:

Remember you can use focus words from any of

Good Start

own writing!

the WG Units.





Focus Words

adjustment | exposure | modify | monitor | transition



Weekly Passage

Parents and their teenage children have always fought about the way young people dress. Some schools are taking on the battle by making rules about what students may wear. Many school officials want to reduce skin exposure and ban t-shirts with offensive language. They argue that this type of clothing can be distracting to other students. Some schools want to make even greater adjustments to their dress codes by requiring school uniforms. Many parents are in favor of this transition to stricter dress code policies. They think requiring uniforms reduces the pressure students feel to look like their peers. Some parents also believe that uniforms contribute to a more structured classroom environment and help students focus on their schoolwork instead of worrying about how they look.

Some teenagers don't want the dress code to be <u>modified</u> because they like to express themselves through their clothing choices. They think it's not the school's business to <u>monitor</u> what they wear. Other students who have been teased and criticized for wearing the "wrong thing" think stricter dress codes are a good idea.

What's your opinion? Should your school have a stricter dress code? How could a dress code have an impact on a school's culture?

Notes **Examples of Use** School dress codes: Not strict enough? Forms (v.) - to make changes in (v.) - to check; to keep track of (n.) - change process Meaning (n.) - small change (n.) - uncovering; display **Focus Word Chart** Word **Unit 1.09** adjustment transition exposure modify monitor

School dress codes: Not strict enough? Problem of the Week



In the early 1990s, Long Beach Unified School District in California was in trouble. Students in its schools were violent. District-wide test scores were low. School officials thought about different ways to **modify** the schools. They wondered what kind of **adjustments** would work best to fix their district. In 1994 they began a **transition** to school uniforms. Test scores improved. Violence decreased. Within a few years, school crime had dropped by 80%.

The uniform policy at Long Beach Unified got a lot of media **exposure**. President Bill Clinton praised school uniforms in his 1996 State of the Union Address. Groups that **monitor** education also took notice. The Broad Foundation, for example, awarded the school \$2.14 million in prizes.

Option 1: In Long Beach, school crime fell by 80%. Which of the following means the same thing?

- A) School crime fell by four-fifths.
- B) School crime fell by three-quarters.
- C) School crime fell by two-thirds.
- D) School crime fell by half.

Option 2: Each year, the average American school spends approximately \$10,000 per student. How many students could the Broad Foundation's \$2.14 million prize fund for one year? (Hint: to solve this problem quickly, use exponents.)

Math Discussion Question: The media **exposure** of school uniforms in Long Beach sparked a debate. Some researchers pointed out that requiring uniforms was not the only **adjustment** made by the district. The uniforms were just one part of a larger **transition**. When the district **modified** the dress code, it also began to improve school security and closely **monitor** school attendance, among other changes. Did the uniforms fix the schools? How could we find out?

School dress codes: Not strict enough?

Debating the Issue

. Get ready...

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

Schools should have rules against clothing that exposes too much skin or contains offensive language. This type of clothing is distracting to students and teachers and can be harmful to student learning.

Schools should require students to wear uniforms so that kids will not feel pressure to buy expensive clothes in order to look like their peers. Uniforms would keep kids from being teased and criticized for wearing the "wrong thing."

Schools should require students to wear uniforms because this will create a more structured classroom environment. Students who are dressed well will behave better, and this will allow everyone to focus on school work.

Schools should not monitor what students wear because students should be free to express themselves through their clothing. Choosing their own clothing lets students be individuals.

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:

Be a strong participant by using phrases like these.

In my experience . . .

that's similar to what I think too ...

What makes you think that?

When I re-read the text, it reminded me...

School dress codes: Not strict enough? 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.

Jacob walks into class wearing a T-shirt with a logo for Marlboro cigarettes.

"Your shirt makes me think we should **modify** the dress code," says Professor Kahn. "We **monitor** skin **exposure**, but what about exposure to dangerous advertising?"

"I disagree," says Jacob. "Making **adjustments** to the dress code is a waste of time. I hate deciding what to wear! We should just have uniforms."

"That's a good idea," says Anaya. "When kids wear uniforms, their test scores go up."

Is Anaya right? Professor Kahn investigates.

Question:

Do school uniforms improve students' grades?

Hypothesis:

Students' grades will improve after their school makes a **transition** to requiring uniforms.

Materials:

- ▶ 100 students
- Report Cards

Procedure:

- 1. Find 100 students in a school without uniforms.
- 2. Record and average their grades.
- 3. Start requiring uniforms at that school.
- 4. After all students are wearing uniforms, wait one year.
- 5. Record and average the grades from the same 100 students.

Data:

	Before Uniforms	After Uniforms
Average Grade	C+ (78.3)	C+ (78.2)

Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Should there be stricter dress codes in schools?

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

from the Word Generation list in your response. Focus Words adjustment exposure modify monitor transition	☐ 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 clearle ☐ Included 1-2 arguments ☐ Included 1 counterargument ☐ Used 2-5 focus words	

A tool to help you think about your

Check off what you accomplished:

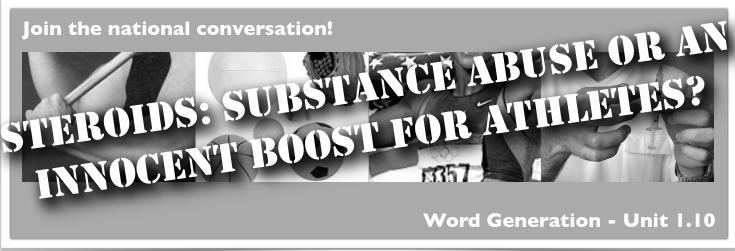
Remember you can use focus words from any of

Good Start

own writing!

the WG Units.





Focus Words

alter | compound | conflict | fundamental | substitute



Weekly Passage

After his success in the 1990s, the great homerun king, Barry Bonds, came under pressure. His fans began questioning whether he had been using steroids throughout his baseball career. Bonds has denied using any illegal chemical compounds to improve his athletic performance. However, a teammate wrote a book saying that Bonds used steroids to get stronger and bigger. Now that steroids have been declared illegal, many athletes are substituting new types of drugs that are hard to detect using traditional testing methods.

In 2001, Bonds reached a new record for the number of home runs in a single season. But sports writers and fans felt conflicted about recognizing the record. Did Bonds deserve recognition if he achieved his record with the help of drugs?

Many sports fans think steroid use is wrong. They believe that showing good sportsmanship is a <u>fundamental</u> part of athletic success. Some baseball greats like Babe Ruth, Roger Maris, and Mickey Mantle reached their home run records without drugs. If Bonds is eventually found guilty of steroid use, should his home run record be thrown out? Should the rules be <u>altered</u> to allow performance-enhancing drugs? What if athletes use vitamins to boost their health or pain relievers to help them play through injuries? Are some chemical compounds okay for athletes to use? How much chemical help is too much?

oost for	Notes					
an innocent boost for	Examples of Use					
	Forms					
Unit 1.10 Steroids: Substance abuse or athletes? Focus Word Chart	Meaning	(v.) - to change	(n.) - mixture	(adj.) – confused; undecided; having feelings that clash or conflict	(adj.) - central; essential	(v.) - to replace
Unit 1.10 Steroids: Subsathletes? Focus Word Chart	Word	alter	compound	conflicted	fundamental	substitute

Unit I.10

Steroids: Substance abuse or an innocent boost for athletes?



Problem of the Week

Barry Bonds holds Major League Baseball's record for career home runs. Many people have **conflicted** feelings about this fact. On one hand, Bonds is a great athlete and the record is a historic accomplishment. On the other hand, Bonds has been accused of using chemical **compounds** to illegally **alter** his body. This kind of chemical abuse goes against **fundamental** sports ideals, like sportsmanship and fair play. Before Bonds, Hank Aaron held the home run record. He was a role model to other athletes as well as one of the best players of all time. Some people think Barry Bonds is a poor **substitute** for Hank Aaron.

Here are the all-time, top five career home-run hitters:

Option 1: What percentage more home runs did Barry Bonds hit than Hank Aaron?

- A) 5% more
- B) 2% more
- C) 12% more
- D) less than 1% more

Barry Bonds	762
Hank Aaron	755
Babe Ruth	714
Willie Mays	660
Ken Griffey, Jr.	630

Option 2: A physicist at Tufts University estimated that steroids could help a person hit 50% more home runs. Let's assume he is right. If a player hit 762 home runs on steroids, how many home runs would he have hit without the 50% increase that steroids provide? (For example, we're assuming a person who hit 15 home runs on steroids would have hit just 10 home runs without steroids. Ten, increased by 50%, becomes 15.)

Math Discussion Question: Steroids **alter** the body in a **fundamental** way, by increasing muscle mass. Are they responsible for baseball's recent record-breaking performances? The list of great players caught up in the **conflict** over steroids is growing. Batting greats Jose Conseco and Mark McGwire have both admitted to using illegal **compounds**. Should Major League Baseball try to **substitute** clean players for the ones who built their bulk with the help of steroids? Or should we accept that steroids were part of this era, and focus on the future?

Steroids: Substance abuse or an innocent boost for athletes?



Debating the Issue

Get ready...

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

An athlete's records should be thrown out if he uses any chemical compounds to help him play the game, even pain relievers.

Be a strong participant by using phrases like these.

Athletes should be allowed to use pain relievers if necessary, but should not be allowed to use any drugs that will give them an advantage over other players.

Athletes should be allowed to use steroids and other compounds to improve their performance, as long as they are honest about what they have taken.

An athlete's records should not be thrown out if he uses steroids, because what is important is what he accomplished, not how he did it.

that's similar to what I think too...

In my experience

What makes you think that?

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: When I re-read the text, it reminded me...

Unit I.10

Steroids: Substance abuse or an innocent boost for athletes? 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.

Tufts University physicist Roger Tobin is interested in the **conflict** over illegal **compounds** used by some major league baseball players. Steroids and similar, **substitute** chemicals **alter** the body in a **fundamental** way.

They help athletes increase muscle mass. But what does this mean for baseball players? Will players on steroids hit more home runs?

Tobin says yes. Steroids can increase muscle mass over 10%. Tobin found that a 10% muscle mass increase could help a player hit 50% more home runs.

Major League Baseball began testing for steroids in 2003. Players who are caught using steroids are fined, suspended without pay, or banned from the major league. If baseball players before 2003 had help from steroids to hit home runs, then home run records should be higher before 2003 and lower after 2003.

Ouestion:

Did the yearly home run record decrease after 2003?

Hypothesis:

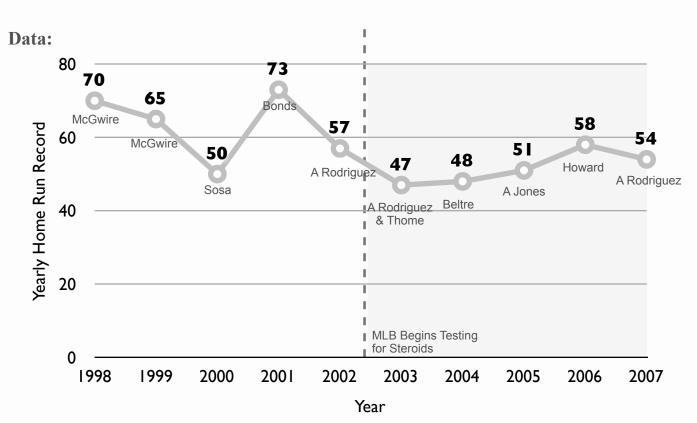
The average yearly home run record during the 5 years before 2003 will be higher than the average yearly home run record during the 5 years after 2003.

Materials:

Major League Baseball statistics

Procedure:

- 1. Calculate the average home run record from 1998 to 2002, before steroid testing began.
- 2. Calculate the average home run record from 2003 to 2007.
- 3. Compare the two averages.



Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:

Should an athlete's records be thrown out if he or she is guilty of steroid use? A tool to help you think about your

Check off what you accomplished:

Remember you can use focus words from any of

Good Start

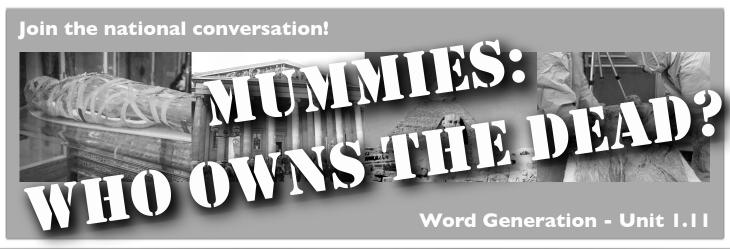
own writing!

the WG Units.

Support your position with clear reasons and specific

examples. Try to use relevant words from the Word Generation list in your response.	☐ Stated my own position☐ Included 1 focus word
	Pretty Good
Focus Words alter compound conflict fundamental substitute	☐ 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





Focus Words

diversity | enhance | migration | presume | reveal



Weekly Passage

Mummies are very old dead human bodies that still have flesh on their bones. Some cultures have a tradition of making mummies when people die. For example, ancient Egyptians preserved the bodies of dead kings and queens because they thought this would ensure a good afterlife.

In recent years, mummies that were created naturally have been discovered all over the world. One found in the Alps appears to have been accidentally frozen in a glacier. He is known as the Iceman and is presumed by scientists to be over 5000 years old!

We can learn a lot about human history from studying mummies. They can <u>reveal</u> clues about what people ate, the tools they made, what they wore, and how they lived and died. They can also help to <u>enhance</u>

archaeologists' understanding of human migration patterns. Scientific tests have provided information about where the Iceman might have traveled in his lifetime.

There is a <u>diversity</u> of perspectives about what to do with mummies when they are encountered. Should they be removed and examined, or should they be left where they are? Some think a mummy should stay in the country where it was first identified. Others believe it should go to the museum or university best equipped to study and protect it. Still others believe that removing a mummy from its burial place dishonors the dead.

What do you think?

	Notes					
¿þt	Examples of Use					
ho owns the dead?	Forms					
es: Who o	Meaning	(n.) - variety; range	(v.) - to improve	(n.) – movement	(v.) - to suppose; to guess	(v.) - to uncover; to show
Mummies: W	Word	diversity	enhance	migration	presume	reveal

Unit I.II

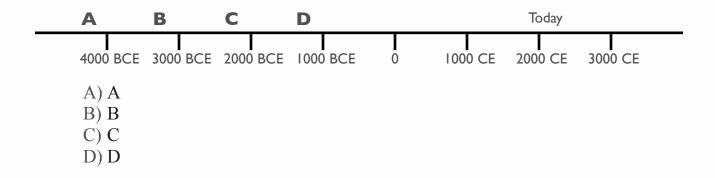
Mummies: Who owns the dead? Problem of the Week



When hikers first found the Iceman, they **presumed** that the body was fresh. Subsequent scientific study **revealed** that he had died over 5,000 years earlier.

Studies of the Iceman's body and clothing have **enhanced** our idea of what life was like long ago. Researchers learned about the **diversity** of his diet. Inside his stomach they found meat, grain, roots, and fruit. Researchers who study human **migration** were particularly interested in the Iceman's shoes. His shoes were sturdy and good for walking.

Option 1: The Iceman died about 5,300 years ago. Which letter represents the time frame of his death?



Option 2: Evidence from the Iceman's teeth and bones suggest that he spent his life in a region that measures 37 miles across. An average person can walk at a rate of 3.5 miles per hour. How long would it talk to walk from one end of the Iceman's domain to the other?

Math Discussion Question: When a modern person dies, we presume that the family has rights to the body. Many families want bodies disposed of quickly and respectfully. Although some people offer their bodies for scientific study, it is illegal to use a person's body in this way without their consent. When an ancient mummy is discovered, we think about the body very differently. We know that studying ancient remains may reveal new information that will enhance scientific knowledge. Ancient mummies may tell us new things about the diversity of human experience: where and how people migrated, what they ate, and how they lived. Is treating ancient mummies as scientific objects a form of disrespect? Or is the value to science more important? Or, could we say that scientific study itself is a way of respecting our ancient ancestors?

Mummies: Who owns the dead? Debating the Issue



I. Get ready...

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

Mummies should be left where they are. Moving them dishonors the dead.

GO!

Mummies should be moved to a university where scientists can study what they reveal about the past.

Mummies should be moved to a museum where people can come to see them and enhance their knowledge about the past.

Mummies can be moved as long as they do not leave the country in which they are found.

In my experience .

Be a strong participant by using phrases like these.

that's similar to what I think too ...

E —

What makes you think that?

2. Get set...

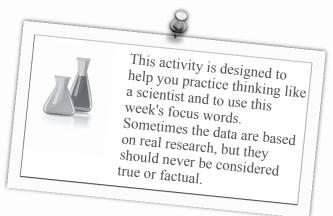
Be ready to provide evidence to back up your position during your class discussion or debate. Jot down a few quick notes: When I re-read the text, it reminded me...

Unit I.II

Mummies: Who owns the dead? Science Activity

Professor Kahn is spending her summer in

Germany studying ancient Egyptian mummies. Her
research team hopes to **enhance** what we know about a deadly disease: leishmaniasis (pronounced leash-man-eye-a-sis).



Scientists think leishmaniasis first appeared in ancient Nubia. In history, **migration** and trade have helped spread disease. When people moved, their diseases came with them. When people met to trade, they shared parasites and germs. Where there was **diversity** in terms of people, there was also **diversity** in terms of disease.

Egypt often traded with Nubia during the Middle Kingdom period (2050 – 1650 BC). Four of the Egyptian mummies Professor Kahn is studying are from this period. If the Nubians had leishmaniasis, then they could have given the disease to the Egyptians. The scientists **presume** these mummies will **reveal** evidence of leishmaniasis. Are they right?

Question:

Did the Middle Kingdom mummies have leishmaniasis?

Hypothesis:

Tests will **reveal** that all four Middle Kingdom mummies had leishmaniasis.

Materials:

- ▶ Bone samples from the Middle Kingdom mummies
- ▶ DNA testing equipment

Procedure:

- 1. Remove samples from the bones of the 4 mummies.
- 2. Test the samples for leishmaniasis.

Data:

Four Mummies from the Middle Kingdom period (2050 – 1650 BC)	Does the Mummy have Leishmaniasis?
Mummy 1	yes
Mummy 2	yes
Mummy 3	yes
Mummy 4	yes

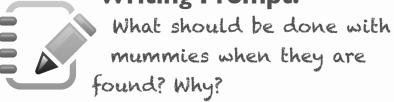
Conclusion:

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

Writing Prompt:



Support your position with clear reasons and specific

examples. Try to use relevant words from the Word Generation list in your response.	Included 1 focus word		
	Pretty Good		
Focus Words diversity enhance migration presume reveal	☐ Stated my own position clearly☐ Included 1-2 arguments☐ Included 1-2 focus words		
	Exemplary		
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A tool to help you think about your

Check off what you accomplished:

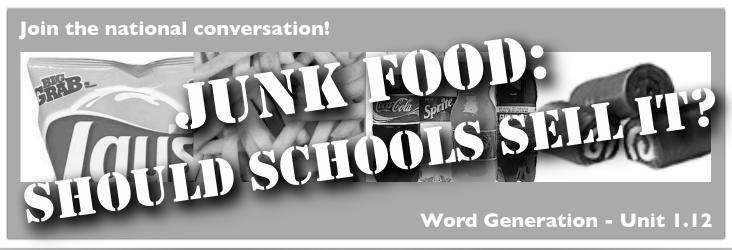
Remember you can use focus words from any of

Good Start

own writing!

the WG Units.





Focus Words

acknowledge | incidence | incorporate | initiative | transport



Weekly Passage

Many young people now <u>acknowledge</u> that eating too much junk food is not good for their health. They realize that soda, chips, and candy have little nutritional value. They know that these foods have too much sugar, salt, fat and refined starches. Yet they continue to eat junk food regularly.

Many also admit that they do not incorporate enough exercise into their daily routines. There is a higher incidence of type 2 diabetes among youth in recent years. This has been linked to rising obesity rates. Diabetes is a disease in which either the body's insulin levels are too low or the body does not respond to the insulin level that is present. The digestive system breaks down food to make glucose, which provides the body's energy. Insulin is an important hormone that helps the body utilize glucose. Insulin is needed to transport glucose to muscles and other tissues of the body.

Despite the link between diabetes and weight, some think that schools should keep selling soda and snacks. They argue that students should have a choice about what they eat. Selling snacks also generates money for schools. Other people think that schools make junk food too accessible. They believe that schools should cooperate with health professionals on <u>initiatives</u> aimed at changing kids' eating and fitness habits. For example, schools could fill snack machines with more nutritious foods.

Should schools sell the snacks students want, or do they have a responsibility to promote healthy habits?

Notes **Examples of Use** Junk food: Should schools sell it? (v.) - to recognize; to accept Meaning (n.) - new plans or strategies (n.) - occurrence (v.) – to include (v.) - to carry **Focus Word Chart** Word Unit 1.12 acknowledge incorporate incidence initiatives transport

Unit 1.12

Junk food: Should schools sell it?

Problem of the Week

As the **incidence** of Type 2 diabetes climbs, researchers are doing more and more studies on good nutrition. Food companies try to incorporate findings from these studies so that consumers will continue to buy their products.



Frito-Lay is a company that makes Doritos, Cheetos, and other snack foods. These snacks are tasty, cheap, and easy to transport. Frito-Lay acknowledges that many of its foods are high in fat and sodium. Over the years, it has sponsored different initiatives to make its food healthier. One fat-cutting initiative led the company to develop Baked Lay's potato chips.

Here is some nutritional information about Baked Lay's chips, Classic Lay's chips, and a fresh apple.

	Lay's Classic Potato Chips	Lay's Baked Potato Chips	Apple
Serving Size	l oz.	l oz.	I
Calories	150	120	116
Fat	10 g	2 g	0 g
Sodium	180 mg	180 mg	2 mg

Option 1: The American Heart Association recommends that Americans eat a maximum of 1500 mg of sodium each day. What percentage of a person's daily sodium intake is in one bag of Lay's Baked Potato Chips?

- A) 6%
- B) 8%
- C) 10%
- D) 12%

Option 2: A large apple weighs about 8 ounces. There are 16 ounces in a pound. Based on this information, how many pounds of apples would you have to eat to equal the sodium in one serving of Baked Lay's?

Math Discussion Question: People like bagged snacks because they are cheap, easy to store, and easy to **transport**. However, the high **incidence** of illnesses caused by unhealthy diets has become a national worry. Many different health initiatives call for kids to snack on fresh fruits and vegetables. Schools acknowledge that fresh fruits and vegetables are healthy, but they are expensive. How could your school encourage all students to eat fresh fruit each day? Incorporate what you know about day-to-day life in the classroom and the lunchroom. What would work best for your school?

Junk food: Should schools sell it? Debating the Issue



I. Get ready...

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

GO!

In my experience.

Schools should not sell junk food to kids or allow it on campus at all. The increase of the incidence of obesity and diabetes in kids is a major health problem.

Be a strong participant by using phrases like these.

Schools should sell junk food to kids.

They should acknowledge that junk food is what kids like best and allow students to make their own choices about what to eat.

that's similar to what I think too...

Schools should sell junk food to kids, but also incorporate healthy alternatives into the menu. They should also teach kids about nutrition.

What makes you think that?

Schools should sell junk food to kids on special occasions or allow students to bring it in themselves sometimes. Junk food should be a treat and not an everyday thing.

When I re-read the text, it reminded me...

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:

Unit 1.12

Junk food: Should schools sell it? Science Activity

Shobi has started a school-wide **initiative** to get rid of snack machines. "Obesity is a big problem," says Shobi. "Snack machines send the wrong mossage." Ms. Hamrah, the baskethall coach acknowledges.

message." Ms. Hamrah, the basketball coach, **acknowledges** the high **incidence** of obesity. But she disagrees with Shobi's **initiative**.

"We need the snack machines," says Ms. Hamrah. "They help us pay for equipment and busses. How will we buy uniforms and **transport** athletes? Besides," she continues, "the best way to lose weight is to work out. If kids exercised enough, we wouldn't have to worry about

snacks!"

Is Ms. Hamrah right? Is exercise the best way to lose weight?



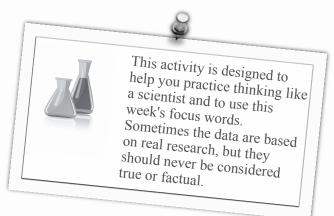
Does exercise really cause significant weight loss?

Hypothesis:

If subjects **incorporate** an hour of exercise into their schedules 5 times a week, they will lose an average of at least 10 pounds.

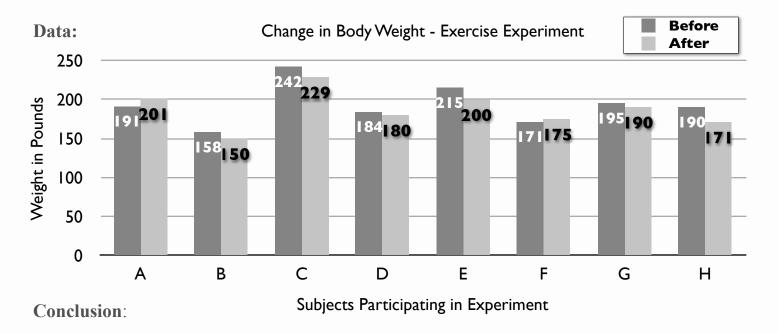
Materials:

- ▶ 8 overweight subjects
- Supervising doctors
- Exercise equipment
- Scales



Procedure:

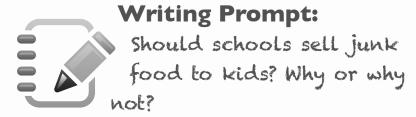
- 1. Weigh all 8 subjects.
- 2. Have subjects incorporate 5 one-hour exercise sessions into each week for 3 months.
- 3. Weigh all 8 subjects at the end of the 3 months.



Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?



Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.			
Focus Words acknowledge incidence incorporate initiative transport			

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
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