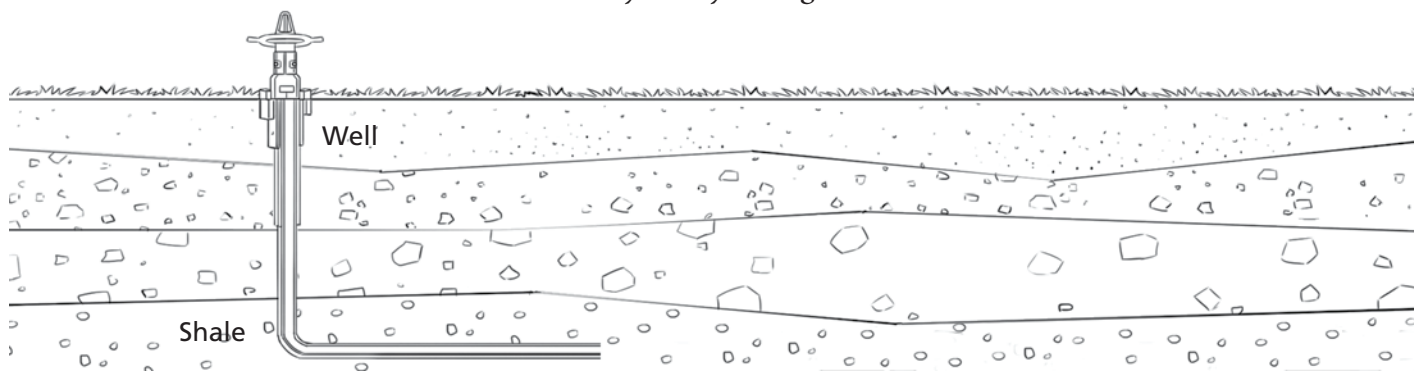




Read these two essays. Then answer the questions that follow.

## The Benefits of Shale Gas

by Henry Chang



In order to remove shale gas from the earth, gas companies drill wells deep into the earth's surface and pump fluid into them.

1 Shale gas is a type of natural gas found under shale rock, which is common throughout the United States. While people have known for a long time that shale gas existed, until recently there was no way to access it. However, modern technology has changed the situation. We can now tap into a vast supply of shale gas, which we can use to inexpensively heat homes, power automobiles, and produce electricity. Shale gas has become the fastest-growing energy source in the United States and is the cleanest of all fossil fuels. Burning shale gas releases less carbon dioxide into the air than burning coal or oil.

2 Despite its benefits, however, many people oppose the use of shale gas. They think that the process used to access shale gas, hydraulic fracturing, also called “fracking,” is harmful to people and the environment because it pollutes drinking water. These opponents are mistaken.

3 To access shale gas, gas companies drill wells several thousand feet into the earth. They pump fluid under high pressure into these wells. This fluid fractures, or breaks up, the shale rock, so the shale gas can be removed from the earth. While this fluid consists mainly of water and sand, it also contains a small amount of chemicals. Those who oppose hydraulic fracturing believe that these chemicals will contaminate drinking water, making it unsafe to drink. However, the risk of this happening is extremely small—and it can be eliminated completely if gas companies avoid drilling near drinking-water sources.

4 The benefits of hydraulic fracturing far outweigh the risks. For one thing, burning shale gas is good for the economy. The high cost of fuel in the United States has led many businesses to move to other countries. The affordability of shale gas will keep this from happening in the future. It may even encourage some of the businesses that have left the United States to return. Using shale gas also benefits homeowners because it reduces their heating and electricity bills.

5 Hydraulic fracturing also creates jobs. As the demand for shale gas increases, gas companies will need more employees. It is estimated that the use of hydraulic fracturing will create more than 500,000 high-paying, safe jobs. Americans need to embrace the use of shale gas. It is the solution to the energy crisis and the key to a productive future for our country.



# Stop the Fracking!

by Cynthia Martinez

1 Fracking is destroying the United States. As you may know, fracking is the process of extracting shale gas from the ground. Fracking pollutes rivers, lakes, and streams and contaminates drinking water. Contaminated water contains chemicals that are harmful to people and animals. Fracking also pollutes the air and destroys the land. Fracking even harms people. Reports show that more than 1,000 people have suffered serious illnesses and/or death from drinking water that was contaminated due to fracking.



Gas companies often set up rigs in farmland areas that are used to extract shale gas from the earth.

2 To extract shale gas from the ground, gas companies drill deep into the earth and force fluids into the ground under high pressure. These fluids break up shale rock and release shale gas. While this process might sound harmless, it is definitely not. Up to 8 million gallons of fluid are used each time shale rock is “fracked.” About 40,000 gallons of chemicals are mixed into this fluid. Some of these chemicals are carcinogens, or chemicals known to cause cancer in humans. These chemicals seep into the ground surrounding the well and contaminate groundwater. This has happened with nearly every well that gas companies have drilled. Gas companies also leave some of the leftover fluid from fracking in open pits, where it eventually evaporates and causes air pollution. This type of pollution damages the ozone layer and causes acid rain.

3 Truck traffic is another major problem associated with fracking. Up to 1,300 trucks may be needed to bring in enough fluid for a single well. These trucks are much too heavy for rural roads. They cause pollution and destroy roadways. Taxpayers may have to pay millions of dollars to repair roads damaged by these trucks.

4 Farmers who are struggling to pay their bills often welcome gas companies onto their land. They are eager to sign a lease from a gas company. And why shouldn't they? Gas companies may pay farmers a million dollars for the right to drill for shale gas on their land. However, these farmers often do not realize that fracking will destroy their land. Crops may not grow there for many years. Fracking will also pollute farmers' drinking water, making the water in their drinking wells smell like chemicals and gasoline. The open pits created by gas companies may cause livestock to become sick or die.

5 Supporters of fracking say that the process creates high-paying jobs. This is misleading. Fracking might create a few jobs, but these jobs do not pay well, and they are not safe. Many workers at drilling sites now have lung cancer. Are these really the types of jobs we want to create for Americans?

6 The dangers of fracking far outweigh the benefits. The Environmental Protection Agency (EPA) is investigating the effects of fracking. Oppose fracking and do your part to save our country!



Answer the questions. Mark your answers to questions 1–5 on the Answer Form to the right.

**Answer Form**

1 Ⓐ Ⓑ Ⓒ Ⓓ

2 Ⓐ Ⓑ Ⓒ Ⓓ

3 Ⓐ Ⓑ Ⓒ Ⓓ

4 Ⓐ Ⓑ Ⓒ Ⓓ

5 Ⓐ Ⓑ Ⓒ Ⓓ

**Number  
Correct****5**

- 1** Which statement supports the claim in the first essay that the benefits of hydraulic fracturing outweigh the risks?
- A** "To access shale gas, gas companies drill wells several thousand feet into the earth."
  - B** "Using shale gas also benefits homeowners because it reduces their heating and electricity bills."
  - C** "Hydraulic fracturing, also called 'fracking,' is harmful to people and the environment because it pollutes drinking water."
  - D** "These chemicals seep into the ground surrounding the well and contaminate groundwater."
- 2** The author of "Stop the Fracking!" would disagree with which statement from "The Benefits of Shale Gas"?
- A** "It may even encourage some of the businesses that have left the United States to return."
  - B** "The benefits of hydraulic fracturing far outweigh the risks."
  - C** "As the demand for shale gas increases, gas companies will need more employees."
  - D** "It is estimated that the use of hydraulic fracturing will create more than 500,000 high-paying, safe jobs."
- 3** Which piece of evidence is discussed only by the author of "The Benefits of Shale Gas"?
- A** truck traffic
  - B** the process of the use of hydraulic fracturing
  - C** the cleanliness of shale gas
  - D** open pits

**4** Read these sentences from “Stop the Fracking!”

Truck traffic is another major problem associated with fracking. Up to 1,300 trucks may be needed to bring in enough fluid for a single well. These trucks are much too heavy for rural roads. They cause pollution and destroy roadways. Taxpayers may have to pay millions of dollars to repair roads damaged by these trucks.

Do these sentences support the author’s main argument?

- A** No, because they do not have to do with the process of drilling for shale gas.
- B** Yes, because they point out another way that fracking affects taxpayers.
- C** No, because they do not have to do with the contamination of drinking water.
- D** Yes, because they point out another way that fracking harms the environment.

**5** Which of these **best** describes how the two authors support the claim that the chemicals in the fluid used in hydraulic fracturing are harmful to people?

- A** The author of “The Benefits of Shale Gas” says chemicals rarely contaminate water, while the author of “Stop the Fracking!” says that the chemicals almost always contaminate water.
- B** The author of “The Benefits of Shale Gas” says the fluid contains only a small amount of harmful chemicals, while the author of “Stop the Fracking!” says the fluid consists mostly of harmful chemicals.
- C** The author of “The Benefits of Shale Gas” says that gas companies do not drill near drinking-water sources, while the author of “Stop the Fracking!” says that gas companies almost always drill near drinking-water sources.
- D** The author of “The Benefits of Shale Gas” says that the water is still safe to drink, while the author of “Stop the Fracking!” says the water is not safe to drink.

**6**

Write a paragraph evaluating the evidence the author of “The Benefits of Shale Gas” uses to support his claim that burning shale gas is good for the economy. Is the evidence relevant and sufficient? Use details from the essay to support your answer.

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**7**

Below are three claims one could make based on the essay “Stop the Fracking!”

**CLAIMS**

	Fracking contaminates groundwater.
	Fracking increases truck traffic.
	Fracking creates high-paying jobs.

**Part A**

Put an “X” by the claim that is supported by the most relevant and sufficient facts in “Stop the Fracking!”

**Part B**

Write down **two** facts from “Stop the Fracking!” that **best** provide evidence to support the claim selected in Part A.

First fact: \_\_\_\_\_  
\_\_\_\_\_

Second fact: \_\_\_\_\_  
\_\_\_\_\_

[illegible]



The authors of “The Benefits of Shale Gas” and “Stop the Fracking!” present opposing viewpoints about the extraction of shale gas from the ground. Which author presents a stronger argument? Explain which specific claims and evidence make that argument stronger.

- identify the viewpoints the authors present about the extraction of shale gas
- identify which author makes the stronger argument
- explain which specific claims and evidence make that argument stronger
- use details from both passages in your response

Check your writing for correct spelling, grammar, capitalization, and punctuation.

[illegible]

206 Unit 5 Interim Assessment