

America's Alternative Energy Source / Alternative Energy Needed

Read the passage and answer the following question(s).

America's Alternative Energy Source

These two texts offer different viewpoints on obtaining shale gas, a natural energy resource, through hydraulic fracturing.

America's Alternative Energy Source

- 1 Horizontal hydraulic fracturing, or "fracking," is a drilling method commonly used in the United States. It helps release shale gas from shale deposits deep below Earth's crust. High-powered drills push deep into the ground. Just before they reach the thick layers of shale, the drills turn and dig horizontally through the shale. After that, small underground explosions are created to fracture or make small cracks in the shale. Then, large amounts of water and a 1percent mixture of sand and chemicals are forced into the holes. The sand and water keep the cracks open to release the natural gas. Fracking has many benefits, and the United States should continue to use it to produce natural gas.
- 2 Fracking is commonly used to retrieve shale gas. Natural gas, including shale gas, is the cleanest of all the fossil fuels. When burned, natural gas releases nearly 50 percent less carbon dioxide than coal and 30 percent less than oil. The government wants to cut the amount of carbon dioxide and other gases released into the atmosphere. Reducing the amount of gases released into the atmosphere will help control Earth's changing climate. In order to reduce the amount of carbon released into the air, we must use natural gas instead of coal and oil.
- 3 Using more natural gas will not only reduce the gases that go into the atmosphere, it will also reduce the amount of oil we need to buy from other countries. The United States currently gets most of its oil from Saudi Arabia. Saudi Arabia produces a great deal of the world's oil. In fact, it has about 2.6 trillion barrels of oil saved. There are about 1.8 trillion barrels of shale gas available in the United States. There is a large supply of natural shale gas currently in Texas and several northeastern states. According to a professor at Pennsylvania State University, the United States has enough natural gas to last for more than twenty years. Fracking helps the United States obtain its natural gas quickly. It will help the United States rely less on other countries for energy sources like oil.
- 4 The United States has used fracking since the 1940s. According to the U.S. Energy Department, the gas industry will continue to grow over the next twenty-five years. This means there will be more jobs. Many Americans have been out of work for a long time. Continuing and expanding the use of fracking to grow the natural gas industry will put many people to work. Furthermore, the natural gas industry keeps a great deal of money in the United States. Why should the United States buy oil from other countries when it can pay Americans to use fracking to obtain natural gas from its own soil?

Alternative Energy Needed

- 1 Shale gas is a type of natural gas found deep below the ground. Shale gas is produced using a drilling method, which combines horizontal drilling and hydraulic fracturing to produce shale gas. The method is also called “fracking.” Used in Texas for more than ten years, fracking not only produces shale gas but also harmful effects.
- 2 Fracking requires large amounts of chemically treated water containing a small amount of sand. Companies do not have to state which chemicals they use in the water mixture they inject into the drilled wells. The mixture fills small cracks in the shale about 7,000 feet underground. Because the cracks fill with water, they remain open, and shale gas is easily released. The chemically treated water can contaminate residential drinking water. Duke University did a study, which showed that there were more cases of contaminated water in fracking areas. Additionally, each time a well is “fracked,” it requires 4 to 7 million gallons of water. Using so much water from local sources greatly reduces the amount of water available to local residents.
- 3 Most of the water used in fracking is pumped out and returned to the surface. The contaminated water is discarded in special disposal wells, which are thousands of feet underground. The United States Geological Survey proved that this process causes earthquakes. Because the water is sealed in cement deep underground, geologists found that the pressure builds up over time, causing earthquakes. In recent years, parts of Texas have experienced more earthquakes. Studies show that there is a direct relationship between the increased earthquake activity and fracking disposal wells.
- 4 Earthquakes are not the only activity that is increased by fracking—traffic and pollution are increased, too. Large trucks haul vast amounts of sand, cement, and fluids to nearby fracking sites. This increases traffic and pollutants in fracking areas. The fracking process itself also releases chemicals into the air. Many people do not realize this, but a mayor in Texas did. In fact, he moved his family from a fracking area because nearby gas wells were releasing benzene, a cancer-causing chemical.
- 5 The benefits of fracking do not outweigh its harmful effects. The United States needs to find alternative energy sources to reduce its dependence on other countries, but it does not need to put its citizens at risk for an unproven, short-term solution.

1. Read this sentence from paragraph 2 of "America's Alternative Energy Source."

Natural gas, including shale gas, is the cleanest of all the fossil fuels.

Select the TWO sentences from the text that best support this statement.

Pick up to 5 answers.

- A. Reducing the amount of gases released into the atmosphere will help control Earth's changing climate.
- B. The government wants to cut the amount of carbon dioxide and other gases released into the atmosphere.
- C. Fracking has many benefits, and the United States should continue to use it to produce natural gas.
- D. In order to reduce the amount of carbon released into the air, we must use natural gas instead of coal and oil.
- E. When burned, natural gas releases nearly 50 percent less carbon dioxide than coal and 30 percent less than oil.

Read the passage - 'America's Alternative Energy Source / Alternative Energy Needed' - and answer the question below:

2. In "America's Alternative Energy Source," how is paragraph 2 MAINLY organized and why is it organized that way?
- A. comparison-and-contrast; to compare natural gas to coal and oil
 - B. cause-and-effect; to analyze the effects of burning coal and oil
 - C. description; to describe how to use natural gas, coal, and oil
 - D. persuasion; to list the advantages of burning coal and oil

3. Read this sentence from the last paragraph of "Alternative Energy Needed."

The benefits of fracking do not outweigh its harmful effects.

Which meaning of the word effects is being used in the sentence?

- A. illusions
- B. property
- C. impressions
- D. results

Read the passage - 'America's Alternative Energy Source / Alternative Energy Needed' - and answer the question below:

4. Which sentence states a claim made by the author of "America's Alternative Energy Source"?
- A. Fracking has been a source of energy since the 1940s.
 - B. Fracking is a good way to obtain energy.
 - C. Fracking releases shale gas from underground.
 - D. Fracking involves drilling deep into the ground.

Read the passage - 'America's Alternative Energy Source / Alternative Energy Needed' - and answer the question below:

5. Read this statement from paragraph 3 of "America's Alternative Energy Source."

[T]he United States has enough natural gas to last for more than twenty years.

Is this fact relevant to the argument in the text?

- A. Yes, because the text builds an argument that the amount of natural gas realized from fracking will help the U.S. depend less on foreign fuel.
- B. Yes, because the argument in the text depends on proving that the value of fracking will last at least ten years.
- C. No, because the argument in the text is that fracking is a great source of natural gas,

6. Read the sentence from paragraph 1 in "America's Alternative Energy Source."

Just before they reach the thick layers of shale, the drills turn and dig horizontally through the shale.

What does the word horizontally mean in the sentence?

- A. delicately
- B. parallel
- C. diagonal
- D. gradually

Read the passage - 'America's Alternative Energy Source / Alternative Energy Needed' - and answer the question below:

7. In "America's Alternative Energy Source," what is the benefit of the information by the professor in paragraph 3?
- A. It shows the United States has enough natural gas for almost twenty years.
 - B. It demonstrates the need to purchase additional oil from other countries.
 - C. It describes how the country will be changing soon to using oil as a source of energy.
 - D. It encourages people to use more oil in their homes than natural gas.

Read the passage - 'America's Alternative Energy Source / Alternative Energy Needed' - and answer the question below:

8. Select ONE sentence from below that BEST shows the author's main purpose for writing the text.

America's Alternative Energy Source

;(A) Horizontal hydraulic fracturing, or "fracking," is a drilling method commonly used in the United States. ;(B) It helps release shale gas from shale deposits deep below Earth's crust. ;(C) High-powered drills push deep into the ground. ;(D) Just before they reach the thick layers of shale, the drills turn and dig horizontally through the shale. ;(E) After that, small underground explosions are created to fracture or make small cracks in the shale. ;(F) Then, large amounts of water and a 1-percent mixture of sand and chemicals are forced into the holes. ;(G) The sand and water keep the cracks open to release the natural gas. ;(H) Fracking has many benefits, and the United States should continue to use it to produce natural gas.

9. Which THREE sentences should be included in a summary of the text "Alternative Energy Needed"?

Pick up to 5 answers.

- A. Used in Texas for more than ten years, fracking not only produces shale gas but also harmful effects. (paragraph 1)
- B. Because the cracks fill with water, they remain open, and shale gas is easily released. (paragraph 2)
- C. The contaminated water is discarded in special disposal wells, which are thousands of feet underground. (paragraph 3)
- D. The benefits of fracking do not outweigh its harmful effects. (paragraph 5)
- E. The United States needs to find alternative energy sources to reduce its dependence on other countries. (paragraph 5)

Read the passage - 'Hope for Hannah / The Industrial Revolution' - and answer the question below:

Hope for Hannah / The Industrial Revolution

Read the passage and answer the following question(s).

Hope for Hannah

New York City, 1864

- 1 Hannah Oglemeyer jumped as the factory bell loudly proclaimed the end of another long work shift. Placing her hand on her back, she cringed as she felt her muscles stretch painfully. It was the end of another 14 hours hunched over a sewing machine, and she closed her eyes and sighed with the knowledge that it would begin all over again tomorrow.
- 2 "Hannah!"
- 3 Hearing her friend's cheerful voice, Hannah reluctantly opened her eyes. Muriel stood in front of her, smiling as always as she straightened her kerchief and wiped her oil-stained hands on her apron.
- 4 "You be sure to wish Alfred a happy birthday for me, Hannah." Muriel's smile broke for a moment as she added, "How I wish I could have gotten the boy something. It's just been so rough this month, what with Henry sick and all."
- 5 Muriel's husband had been ill for two months now, and Hannah knew that her friend was barely able to buy him soup, let alone purchase a gift for Alfred.
- 6 "But he's doing better every day. That he is," Muriel continued with conviction as she nodded and smiled. "I just know he'll be back to work soon. You tell Alfred that I'll give him something next month. I'm sure things will be better by then."

- 7 Hannah placed a hand on her friend's arm and squeezed it reassuringly. She knew all too well that it would not be better next month; in fact, it seemed these days that it would never get better. Ever since her family had moved to New York City two years ago to be a part of this new industrial "revolution," they had suffered terrible living and working conditions and earned hardly any money. Some days, Hannah was amazed at Muriel's ability to continue to find a silver lining in every cloud.
- 8 But as she collected her meager earnings and descended the factory steps with the other female workers, Hannah felt her spirits begin to lift. Separating herself from the group, she pulled out a pouch that she had hidden in the lining of her skirt and added the day's wages to it.
- 9 On the crowded, dirty street, she hurried about her errands. First, she stopped at the butcher, for tonight she would surprise Alfred with meat for dinner. Then, she visited the grocer for some bread before finally stopping somewhere she hardly ever entered—the toy-maker's store. Awkwardly, she stepped inside and searched for the item she had been watching in the window for weeks. Bringing the toy to the counter, she pulled out her money pouch with trembling hands. Would she have enough to pay for it?
- 10 Hannah held her breath as she slowly counted out the coins, one by one. With a soaring heart, she handed the clerk her very last coin, knowing that it was just enough to buy Alfred the little tin soldier in front of her. She smiled at the clerk with a mixture of relief and joy. She had saved for months, but she was able to give her son a birthday gift that he would truly love. She couldn't wait to see the look on his face!
- 11 As Hannah left the store, she held the wrapped package tightly to her chest. Suddenly, the endless work shifts and miserable living conditions all seemed worth it, just to have the opportunity to hand her son a simple toy. She couldn't help but smile at the idea as she entered the broken-down tenement where they lived and climbed the stairs with anticipation for the evening and renewed hope for tomorrow.

The Industrial Revolution

- 1 The Industrial Revolution was a time of enormous growth in industry, primarily due to the invention of machines that could produce goods faster and better than ever before. This revolution began in Europe in the eighteenth century when machines for the textile and iron industry were first invented and with the development of the steam engine. Factories were built to help create goods in a timely and efficient manner. As a result, people began to move away from farms and into cities, where they could obtain reliable work and wages. This revolution in industry later extended to the United States as well.
- 2 The Industrial Revolution included innovations in several different areas. Steam-powered ships and railroads made transportation faster and more reliable. Communication also improved with the invention of the telegraph. This device transmitted messages across the country in a fraction of the time that it took to send a letter. In addition, the financial industry boomed with the establishment of the London and New York stock exchanges.
- 3 In general, people benefited greatly from this time. The upper and middle classes made fortunes from investments and new business opportunities. Their standard of

living increased as the introduction of mass-produced goods provided more options and availability of items. The working class did not experience as many benefits at first. They received low wages in return for working long hours in factories, and they lived in overcrowded and unsanitary apartments. However, the conditions of the working class improved in the late 1800s with the establishment of unions and laws to improve factory conditions.

- 4 Overall, the Industrial Revolution was a time of significant achievement and the beginning of a new and improved manufacturing age. This time period improved the quality of life for society and helped to develop the modern world we know today.
10. Which sentence in "Hope for Hannah" BEST shows how Hannah's point of view differs from Muriel's?
- A. "You be sure to wish Alfred a happy birthday for me, Hannah."
 - B. "It's just been so rough this month, what with Henry sick and all."
 - C. She knew all too well that it would not be better next month; in fact, it seemed these days that it would never get better.
 - D. But as she collected her meager earnings and descended the factory steps with the other female workers, Hannah felt her spirits begin to lift.

Read the passage - 'Hope for Hannah / The Industrial Revolution' - and answer the question below:

11. Which of the following words BEST takes the place of the word rough in the last sentence of paragraph 4 of "Hope for Hannah"?
- A. difficult
 - B. coarse
 - C. violent
 - D. unpolished

Read the passage - 'Hope for Hannah / The Industrial Revolution' - and answer the question below:

12. What is the central idea of "Hope for Hannah"?
- A. The Industrial Revolution included hardships for many.
 - B. The Industrial Revolution was a time of important change.
 - C. The Industrial Revolution caused a major global depression.
 - D. The Industrial Revolution presented interesting opportunities.

13. Select the correct choice for each drop-down menu.

Hannah realizes that Muriel feels 1 - (A) creative (B) angry (C) hopeful (D) confused as she deals with her troubles, but that her life 2 - (A) is not as bad as Hannah's (B) had been ruined by carelessness (C) would soon experience change (D) is unlikely to improve .

14. Read the sentence from paragraph 6 of "Hope for Hannah."

"But he's doing better every day. That he is," Muriel continued with conviction as she nodded and smiled.

What does the word conviction mean in the passage?

- A. growing fear
- B. strong belief
- C. quick decision
- D. gentle action

Read the passage - 'Hope for Hannah / The Industrial Revolution' - and answer the question below:

15. Select the TWO choices that describe how Alfred's birthday influenced the other characters in the text "Hope for Hannah."

Pick up to 6 answers.

- A. It prompted Muriel to purchase a gift.
- B. It prompted Muriel to reveal a secret about her spouse.
- C. It caused Hannah to question her friend's outlook on life.
- D. It prompted Hannah to purchase bread.
- E. It prompted Hannah to visit a toy store.
- F. It caused Muriel to feel a sense of guilt.

16. Read the first sentence of "Hope for Hannah."

Hannah Oglemeyer jumped as the factory bell loudly proclaimed the end of another long work shift.

The phrase loudly proclaimed MOST characterizes the factory bell as

- A. dictating the daily schedule.
- B. creating a celebratory mood.
- C. interfering with the daily routine.
- D. warning of dangerous situations.

Read the passage - 'Hope for Hannah / The Industrial Revolution' - and answer the question below:

17. Read the sentence from paragraph 3 of "The Industrial Revolution."

However, the conditions of the working class improved in the late 1800s with the establishment of unions and laws to improve factory conditions.

Now read the dictionary entry.

condition n. 1. way of living 2. requirement 3. social position
4. state of physical fitness

Which definition of condition is used in the sentence from paragraph 3?

- A. definition 1
- B. definition 2
- C. definition 3
- D. definition 4