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**Benefits of Hydraulic Fracturing**

**Directions:** Read the information and answer the question below.

**What is “fracking”?**

Hydraulic fracturing, or “fracking” is a process by which natural gas and oil are extracted from bed rock by opening and widening fractures below the earth’s surface by injecting a mixture of water, chemicals, and silica sand at high pressure into drilled wells in the earth. Though the procedure has been around since the late 1940’s, it is only recently that modern drilling techniques have made this process an economical method to get to this oil and gas. The recent widespread use of fracking to get to natural gas deposits in the United States, has led to increased awareness of fracking.

**There are a number of benefits associated with hydraulic fracturing. These include:**

**Providing energy to meet the needs of the U.S. population**

Natural gas is one of the most widely used fuel sources in this country, and accounts for roughly 25% of our nation’s fuel. Thanks to modern fracking techniques, natural gas is much more widely available. We now have enough fuel for nearly 100 years without importing any natural gas, reducing our dependence on foreign countries for fuel.

**Providing cleaner burning fuel**

Natural gas that is extracted through the use of hydraulic fracturing is a cleaner-burning fuel than either coal or petroleum, resulting in fewer emissions of pollutants and CO2. This means that there are fewer greenhouse gases put into the air. Also, hydraulic fracturing requires fewer drilling sites and wells than other methods, meaning that less area is needed to remove natural gas from the ground.

**Cheaper fuel and plenty of jobs.**

Due to the fact that modern fracking techniques have made it possible to efficiently extract more natural gas product domestically, the cost of natural gas has decreased. This savings has been passed onto the consumer, meaning people pay less for energy.

In addition, the hydraulic fracturing industry has created thousands of jobs, contributing to local and national economies.

**Considering only the information above, would you support fracking? Why or why not?**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_

**Dangers of Hydraulic Fracturing**

**Directions:** Read the information and answer the question below.

**What is “fracking”?**

Hydraulic fracturing, or “fracking” is a process by which natural gas and oil are extracted from bed rock by opening and widening fractures below the earth’s surface by injecting a mixture of water, chemicals, and silica sand at high pressure into drilled wells in the earth. Though the procedure has been around since the late 1940’s, it is only recently that modern drilling techniques have made this process an economical method to get to this oil and gas. The recent widespread use of fracking to get to natural gas deposits in the United States, has led to increased awareness of fracking.

**There are a number of drawbacks associated with hydraulic fracturing. These include:**

**Environmental risks.**

There are a number of environmental concerns related to hydraulic fracturing. One concern is the amount of water it takes to extract these resources–it involves millions of gallons of water! In drought prone areas of the country, this could create additional strain on the environment.

The chemicals involved in the process are also a danger. If spilled or mismanaged, these can seep into ground water and local drinking water.

The wastewater produced by fracking is also hazardous and must be disposed of properly so it does not contaminate the local environment.

Finally, the process of fracking itself, along with disposing wastewater (which is usually injected into deep wells) actually causes small earthquakes to occur.

**Human and animal health risks.**

The hazardous materials used in the fracking industry can seriously harm people living near these sites. If the chemicals used in the process are not managed properly, or there are leaks in the well and other incidents, these chemicals can end up in drinking water. People living nearby some of these sites have reported illnesses such as headaches, dizziness, liver and intestinal damage, and even cancer. Livestock on nearby farms, as well as fish in neighboring waterways have died near some sites.

Additionally, inhaling silica sand, which is used in the fracking process, is associated with a respiratory disease, Silicosis, which is associated with swelling in the lungs and difficulty breathing.

**Considering only the information above, would you support fracking? Why or why not?**