**5th Grade – UNIT 3**

**Opinion Writing Task**

***Alternative Energy Source***

**STUDENT PACKET:**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Directions:**

**1. Read Article #1:** *Is Corn the Answer?*

**2. Read Article #2:** *Heating with Corn*

**3. Write an opinion essay.**

**Your Writing Task:**

**Do you think corn should be used as a source of energy? Why or why not? State your opinion (claim) and provide logically ordered reasons that are supported by facts and details from the texts.**

**ARTICLE #1:**

Retrieved from Newmark Learning: Common Core Writing to Text (2014)

***Is Corn the Answer?***

Corn can be used as a source of energy. It is a renewable resource that is grown with solar energy, or the energy from the sun. Corn is processed to produce different energy products. For example, corn can be used to create a product called ethanol.

This colorless liquid can be added to gasoline to reduce the amount of gasoline burned by vehicles. Shelled corn can be dried and formed into pellets. These pellets can be burned in special stoves to heat homes.

Many groups oppose the use of corn as fuel. Agricultural specialists say that using corn for fuel does not really save Americans money. Instead, it causes the prices of all foods to go up. Corn is used in so many food products that when its price rises, the cost of using it in other food products rises, too. For example, a higher price for corn means that prices for cattle and chicken feed go up.

In turn, consumers are then charged more for eggs, milk and meat. Additionally, farmers who choose to plant corn for profit will plant fewer other crops. That means shortages – and price increases – can occur with those crops, too.

Scientists say that another problem is that ethanol may reduce the efficiency of fuel. This means cars will burn more fuel on ethanol than they do when using just gas. Some experts also think that ethanol causes problems with car engines. Consumers will have to spend even more money repairing and replacing their vehicles.

Corn is a good heating agent. However, to use it as a heating source, consumers must purchase a special type of stove. These stoves are costly and require a great deal of upkeep. For example, the storage hopper must be filled with pellets on a daily basis. Then the stove itself needs to be maintained regularly so that it continues to operate as it should.

Finally, some researchers question why we should use food crops for fuel when so many people – especially in undeveloped countries of the world – are facing food shortages. These researchers believe it is unethical for food to be used for fuel when it should be used to feed the hungry.

**Article #2:**

Retrieved from Newmark Learning: Common Core Writing to Text (2014)

***Heating with Corn***

Despite recent advances in technology, the United States continues to face an energy crisis. This crisis is driven by the amount of fuel Americans burn each year to heat their homes. Historically, Americans have relied on fossil fuels for this type of fuel – especially coal, oil, and natural gas.

Burning fossil fuels is a problem for several reasons. Fossil fuels are nonrenewable resources. They take millions of years to form and are difficult to replace. Fossil fuels also cause us to rely too much on other countries. Although some of the fuel we burn for energy comes from the United States, much of it comes from other nations. This makes American too reliant on foreign suppliers. Finally, fossil fuels are known to create environmental problems. They release carbon dioxide, a greenhouse gas, into the air. This substance warms the surface of Earth and is considered one of the main causes of global warming.

A better choice is to burn shelled corn, or maize, for fuel. Corn is a renewable resource because more corn can be grown all the time. In fact, corn is very efficient as an energy source because it grows quickly. A corn crop can be brought from seed to harvest in only 180 days. Compare that to the millions of years it takes Earth to form coal!

Choosing a heating option like corn has some real benefits. It is much cheaper than traditional fuel sources, so consumers will pay less for the same heat. It also reduces our reliance on foreign suppliers. Because we can grow our own corn, we do not have to buy it from other countries. Also, the money America currently spends purchasing fuel from other nations will be kept in this country instead. This benefits everyone, but is especially important for farmers and agricultural workers.

Finally, unlike fossil fuels, corn burns “clean.” It does not release carbon dioxide into the atmosphere. It does not contribute to environmental problems such as global warming. And, when corn is grown, it absorbs some of the extra carbon dioxide in the atmosphere. This means that growing more corn can help us to clean up problems already in the environment.

Some people oppose the use of corn for fuel because they think food suppliers should be used only for food. Global hunger is a big problem. However, using corn for fuel does not impact this problem. Most issues with the food supply have to do with being able to store and deliver food to the hungry. These issues are not really related to the growth of food.

**Opinion Essay**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Be sure to revise and edit your work!**