**Student Guide: Green Gasoline**

**Before reading** the article, choose ‘Agree’ or ‘Disagree’ for each statement.

|  |  |  |
| --- | --- | --- |
|  | Agree | Disagree |
| 1. Green gasoline is a nonrenewable source of energy. |  |  |
| 2. When hydrocarbons burn, carbon dioxide and waterare produced and a small amount of energy isreleased. |  |  |
| 3. Gasoline derived from crude oil is a renewable source of energy that is safe the environment.  |  |  |

**After reading** the article answer these questions:

**Green Gasoline: Student Questions**

1. What are three advantages to using green gasoline?

2. Why is green gasoline preferred over other biofuels, such as ethanol

3. Why has gasoline been the transportation fuel of choice for the past century?

4. What is a hydrocarbon?

5. What gases are heated in the internal combustion engine?

6. Why does green gasoline help reduce the problem of global climate change?

7. Why can’t wood be used to fuel cars?

8. Why are carbohydrates poorer fuels than their corresponding hydrocarbons?

9. What is meant by the term, plant ‘leftovers’? What are some examples?

10.What is the role of a zeolite catalyst?

11.What logistical problems face the production and use of green gasoline?

12. **After reading** the article, correct these incorrect statements:

1. Green gasoline is a nonrenewable source of energy.

correct: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. When hydrocarbons burn, carbon dioxide and water are produced and a small

 amount of energy is released.

correct: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Gasoline derived from crude oil is a renewable source of energy that is safe the environment.

correct: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_