**Field to Fuel** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pre-Test

1. Because there is a finite supply of fossil fuels, crude oil is considered a:
   1. Renewable Natural Resource
   2. Non-Renewable Energy Resource
   3. Renewable Energy Resources
   4. Depleting Natural Resources
2. Which of the following is NOTE a non-renewable energy resource?
   1. Petroleum
   2. Natural Gas
   3. Coal
   4. Solar
3. Which is true of Renewable Energy Resources?
   1. They can be regenerated by natural processes.
   2. They include all types of oils
   3. They are more costly than non-renewable energy sources
   4. Both a and b
4. Hydroelectric power is considered renewable because:
   1. Water is a renewable natural resource
   2. The movement of the water generates energy
   3. The water is used up in the process of generating energy
   4. It relies on thermal energy to be converted to electricity
5. Biofuels are alternative fuels that come from:
   1. Plants and animals
   2. Fossilized life
   3. The sun
   4. Water
6. Biofuels are created by:
   1. Extracting energy from biomass
   2. Combustion of fossil fuels
   3. Consumption of corn
   4. Combining of fossil fuels with ethanol
7. Which of the following is not a viable source of biomass in North Carolina:
   1. Arundo Donax
   2. Switchgrass
   3. Woodlot debris
   4. Corn
8. Ethanol is a biofuel that is made by:
   1. Fermenting sugars in biomass
   2. Purifying petroleum oil
   3. Refining vegetable and animal fats
   4. Reactions between lipids and alcohols
9. Biodeisel is a biofuel that is made by:
   1. Fermenting sugars in biomass
   2. Purifying petroleum oil
   3. Refining vegetable and animal fats
   4. Reactions between enzymes and sugars
10. Which is an advantage of ethanol as a fuel?
    1. Damage caused to combustion engines
    2. Amount of land required to grow biomass
    3. Decreased carbon dioxide emissions
    4. Lower octane than petroleum
11. Cellulosic ethanol is different than corn ethanol because it uses sugars found in:
    1. Fruits and seeds
    2. Vegetables and peels
    3. Stems and leaves
    4. Roots and soil
12. Alternative energies are not dependent on:
    1. Non-renewable energy resources
    2. Renewable energy resources
    3. Biomass
    4. Natural resources
13. What is one advantage of fossil fuels?
    1. Supplies are limited
    2. Easy combustibility
    3. Stable hydrogen and carbon
    4. Decreasing prices
14. Explain why corn is not a viable option to be used as biomass in North Carolina. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. In your opinion, should land owners and farmers in our county choose to plant biomass crops such as Switchgrass and Arundo donax? Support your opinion with examples.