## **STUDENT 1**

Biomass is an organic material made from \_\_\_\_\_ and \_\_\_\_\_. Plants absorb the sun's energy in a process called photosynthesis. Biomass is a \_\_\_\_ energy source because we can always grow more trees and crops, and waste will

always exist. Some examples of biomass fuels are wood, crops, manure, and some garbage. Biomass can be used in different ways:

- ✓ Biomass can be burned to produce \_\_\_\_\_\_ for making electricity, or to provide to industries and homes.
- ✓ It can also be converted to other usable forms of energy like methane gas (also called biogas or landfill gas).
- ✓ Today, new ways of using biomass are still being discovered.
  - One way is to produce \_\_\_\_\_, a liquid alcohol fuel. Ethanol can be • used in special types of cars that are made for using alcohol fuel instead of gasoline. The alcohol can also be combined with gasoline. This reduces our dependence on oil - a non-renewable fossil fuel.
  - Another way is to produce \_\_\_\_\_. It is a fuel made with vegetable oils, fats, or greases - such as recycled restaurant grease. Biodiesel fuels can be used in diesel engines without changing them. It is the fastest growing alternative fuel in the United States. Biodiesel, a renewable fuel, is \_\_\_\_\_, and reduces the emissions of most air

pollutants.

## **STUDENT 2**

Biomass is an organic material made from plants and animals. Plants absorb the sun's energy in a process called \_\_\_\_\_\_. Biomass is a renewable energy source because we can always grow more trees and crops, and waste will always exist. Some examples of biomass fuels are \_\_\_\_\_, \_\_\_\_, manure, and some garbage. Biomass can be used in different ways:

- ✓ Biomass can be burned to produce steam for making electricity, or to provide heat to industries and homes.
- ✓ It can also be converted to other usable forms of energy like methane gas (also called \_\_\_\_\_ or \_\_\_\_).
  ✓ Today, new ways of using biomass are still being discovered.
  - - One way is to produce ethanol, a liquid alcohol fuel. Ethanol can be used in that are made for using alcohol fuel instead of gasoline. The alcohol can also be combined with gasoline. This reduces our dependence on oil - a non-renewable fossil fuel.
    - Another way is to produce biodiesel. It is a fuel made with • , fats, or greases - such as recycled restaurant grease. Biodiesel fuels can be used in diesel engines without changing them. It is the fastest growing alternative fuel in the United States. Biodiesel, a renewable fuel, is safe, biodegradable, and reduces the emissions of most air pollutants.