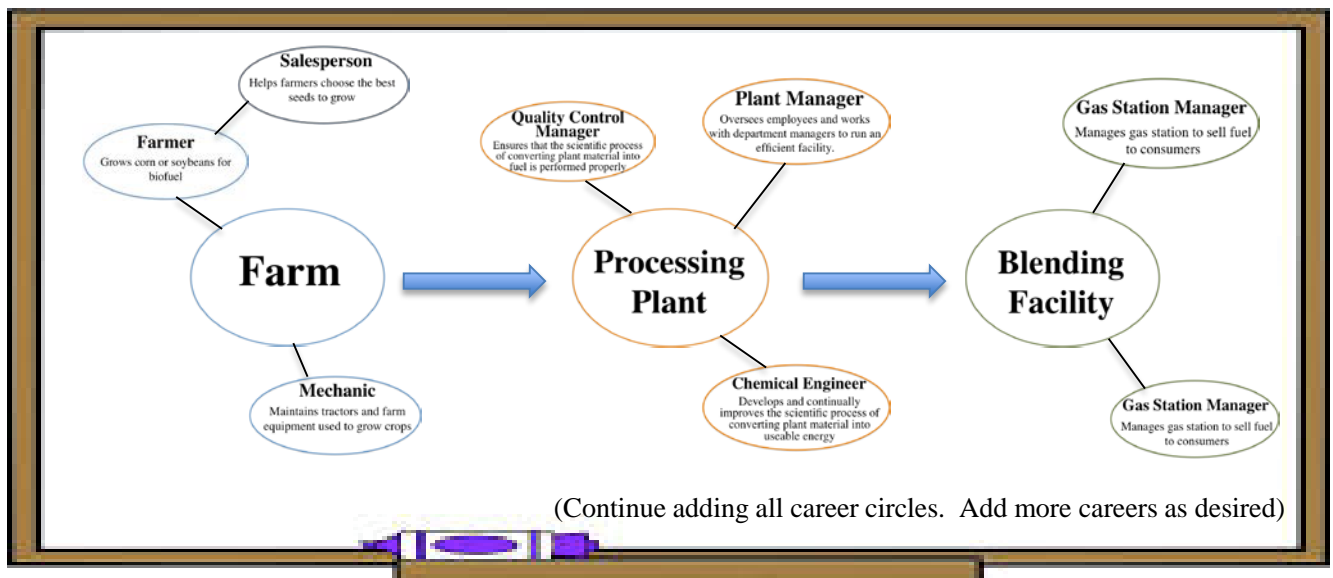


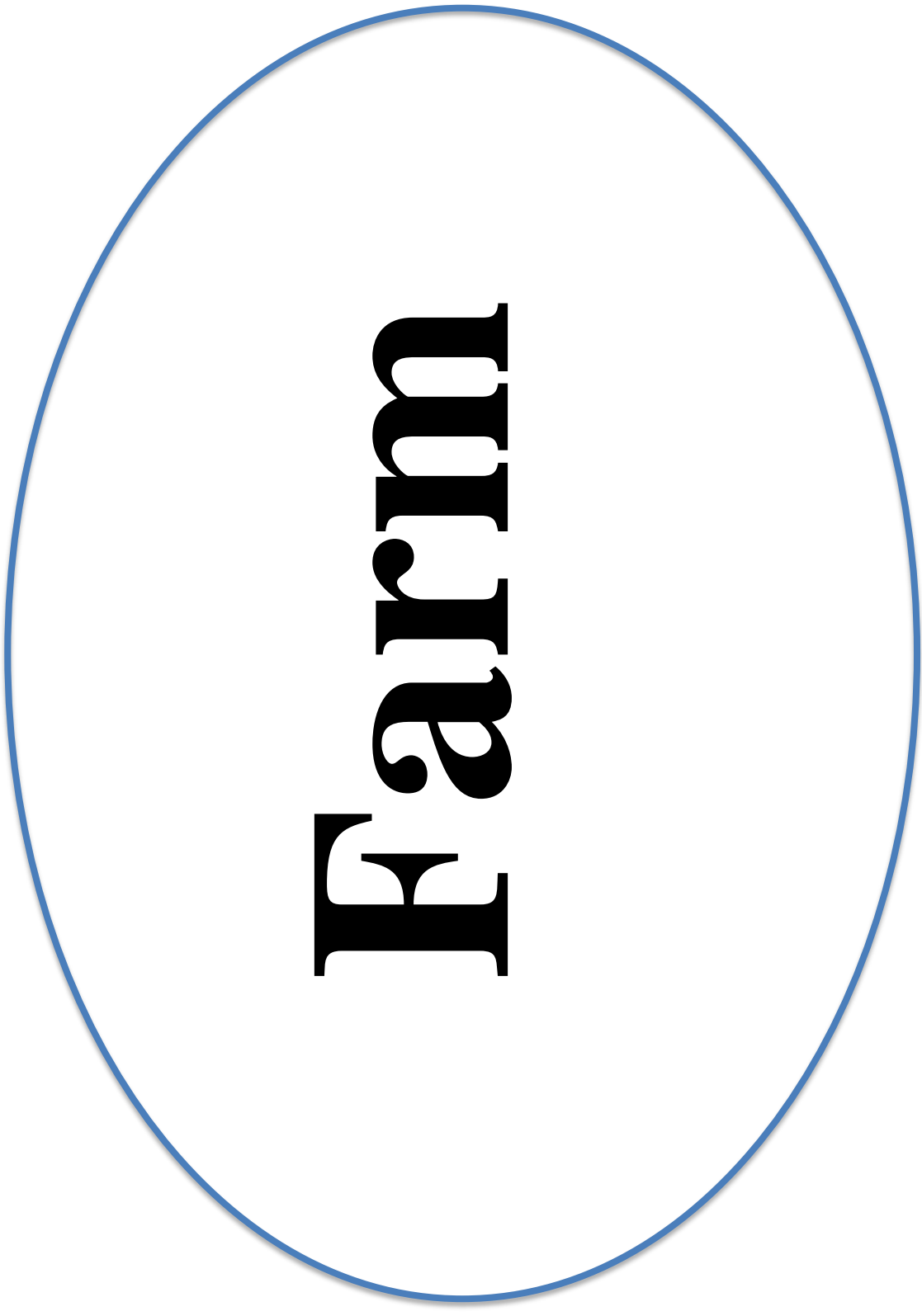
# Biofuel Career Web

*How many careers are within the biofuel industry?*

## Directions:

1. Print 1 copy of the “Biofuel Career Web.”
2. Cut out each circle and keep the circles together in categories:
  - All jobs associated with the farm are blue
  - All jobs associated with the processing plant are orange
  - All jobs associated with the blending facility are green
3. Begin your class activity by identifying the three primary locations of biofuel production. Use tape or a magnet to place the three location circles on the board as shown below. Biofuel production begins on a farm where corn and soybeans are grown. Next, the corn or soybeans are processed into ethanol or biodiesel. Last, the ethanol is mixed with gasoline in a blending facility where it is prepared to sell at gas stations.
4. Help students understand the variety of jobs required for successful and efficient production of biofuel by adding each of the career circles to the board and creating a career web.
  - For example, “A **Farmer** grows corn or soybeans. A **Salesperson** from a seed company will help the farmer choose the best variety of plant to grow. Farms require lots of machinery. A **Mechanic** maintains the tractors and equipment.” Continue until each career is included in the web.





**Farm**

# **Farmer**

Grows corn or soybeans for  
biofuel

# **Salesperson**

Helps farmers choose the best  
seeds to grow

# **Mechanic**

Maintains tractors and farm  
equipment used to grow crops

# **Biotechnologist**

Develops varieties of corn that yield a high starch content for ethanol production

# **Agricultural Engineer**

Develops new technology for farmers such as irrigation systems and harvesting equipment

# **Plant Breeder**

Uses selective breeding to develop varieties of plants that have high yields and resistance to pests and disease.

# **Truck Driver**


Transports harvested crops to processing facilities

# **Accountant & Book Keeper**

Manages the finances of the farm including paying bills, payroll, etc.

# **Plant Scientist**

Researches the best methods for crop production to help farmers use fertilizer and growing practices to their best advantage

The image features a large, orange-outlined oval centered on a white background. Inside the oval, the words "Processing" and "Plant" are written in a bold, black, serif font. "Processing" is on the top line and "Plant" is on the bottom line, both centered horizontally.

# **Processing Plant**

# **Quality Control Manager**

Ensures that the scientific process of converting plant material into fuel is performed properly

# **Plant Manager**

Oversees employees and works with department managers to run an efficient facility

# **Control Operator**

Manages the automated machinery in the energy plant

# **Secretary**

Answers the phone, maintains production records, and takes care of all paperwork

# **Chemical Engineer**

Develops and continually improves the scientific process of converting plant material into useable energy

# **Shipping Manager**

Manages the transportation, intake, and shipping of products to and from the processing plant



# **Safety Manager**

Provides training and policies to avoid injuries and hazards on the job

# **Mechanical Engineer**

Develops the machines and mechanical processes to process biofuels

# **Animal Nutritionist**

Uses the leftover corn and soybean products to make feed for livestock



**Blending**

**Facility**

# **Train Driver**

Transports ethanol and biodiesel from the processing plant to the blending facility

# **Truck Driver**

Transports gasoline and biodiesel from blending facility to gas station

# **Gas Station Manager**

Manages gas station to sell fuel to consumers