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

**Careers and Professional Opportunities in Ag Mechanics**

**What is Agricultural Mechanics?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Agriculture is….**

* Historically, the word agriculture meant to farm or to grow \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_. Today, agriculture may be defined as those activities concerned with plants and animals and the related supplies, services, mechanics, products, processing, and marketing related to plants, animals, and the environment.

**Career Skills Needed for Employment in Agricultural Mechanics**

* Careers in Agricultural Mechanics require that employees have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in many of the broad areas. However, employers also want workers who have good habits, life skills and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ abilities.

**Characteristics Employees Look For…**

Academic and Basic Technical Skills Every Employee Should Have:

* Understand charts and graphs
* Understand basic math
* Use mathematics to solve problems
* Use research
* Use specialized knowledge and skills to get the job done
* Speak and write in the language in which business is conducted
* Use the scientific method

Personal Management Skills Every Employee Should Have:

* Meet work deadlines
* Know personal strengths and weaknesses
* Demonstrate self-control
* Pay attention to details
* Follow written and verbal instructions and directions
* Work without supervision
* Learn new skills
* Identify suggest new ways to get the job done
* Actively participate in a group
* Listen to the other groups members
* Express ideas to other group members
* Be sensitive to the groups members’ ideas and views
* Be willing to compromise if necessary to best accomplish the goal
* Work in changing settings and with people of different backgrounds

**The Role of Agricultural Mechanics**

* Mechanical applications are found all throughout the field of agriculture.
* Processing plants for field crops, livestock, poultry, fruits, and vegetables all have machinery.
* A lot of machinery requires designers, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, operators, maintenance, and repair personnel, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ workers.
* All are likely to use computers and computer applications in their work.

**The Influence of Mechanization**

* Over 90% of the American colonists were farmers, yet many of General George Washington’s troops at Valley Forge died for lack of food and clothing.
* Today, less than \_\_\_\_\_ of all Americans work in production agriculture.
* The ratio of farm workers to nonfarm workers in America has reversed in 200+ years.
* In 1776, the farm-to-nonfarm ratio was approximately 9 to 1. Today, the ratio is \_\_\_\_ to \_\_\_\_.
* Mechanization has played a major role in this rise in production efficiency.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – ability to produce with a minimum waste of time, energy, and materials.

America provided the inventors for many of the world’s most important agricultural machines.

* Cyrus McCormick –
* John Deere –
* Eli Whitney –
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has been fundamental to the development of the agricultural industry. Much the increase in the efficiency is due to the American producers with their innovations in mechanics.
* As further advances are made in the role of mechanics in agriculture will be prominent in the future as it has been in the past.

**Career Options in Agricultural Mechanics**

* Agriculture is America’s number one employer. Some estimate there are 23 million jobs in the broad field of agriculture.
* A large portion of these jobs are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agricultural jobs.
* The opportunities in agriculture are found at all levels of employment.

**Career Options in Agricultural Mechanics**

* First level –
* Requires the least amount of preparation
* Few laborer jobs require less than a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Additional training is needed for better paying jobs
* Other job levels include semiskilled, skilled, managerial, and professional.
* Some professional jobs, such as veterinarians and scientists, require \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Doctorate degrees require seven or more years of college.

It is important to decide on what you want to do early on so you can make the proper training as soon as possible.

**Agricultural Divisions**

Occupational Division – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

All jobs in agriculture are in one agricultural cluster grouped under the headings;

* Agribusiness and Agricultural Production (ag business, mechanics, production \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, etc.)
* Agricultural Sciences (\_\_\_\_\_\_\_\_\_\_\_, food, plant, soil, and agricultural sciences)
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(conservation, fishing/fisheries, forestry, wildlife, etc)

**How Can This Class Help YOU?!**

* Ag mechanics is an area that can lead to great specialization or it may provide supplemental skills for most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* It can lead to business and career opportunities locally or it can lead to international opportunities.
* Ag mechanics skills may be helpful in many career areas, or may be absolutely necessary, depending on the career choice.

Students planning a career in this field need to get prepared – HOW?

* Visit with people who have jobs in agriculture that use mechanical skills
* Prepare a list of questions to ask workers about their jobs
* Talk to as many people as possible about agricultural mechanics
* Plan to learn every skill possible in school, at home, and on the job
* Learn what and why in the classroom

