

Agricultural Career Awareness

INTRODUCTION

Grade Level: 6-12th grade

Timeframe: 30-45 minutes

At the end of this lessons students will be able to:

1. Define more accurately the scope and depth of the field of agriculture.
2. Identify at least one connection between a personal interest or skill and a potential career in agriculture.
3. Understand the interconnectedness and complex contributions of the agricultural industry in today's society.

Materials/Resources Needed:

Notecards

Prizes

Scattergories Group Sheets

Ag Careers Handout



Class Warm Up [About 5 minutes]:

1. Give each student a note card. Have students write as many agricultural-related careers they can think of in 60 seconds. [Set a timer.]
2. Have students count their totals.
 - a. The 5 students with the highest numbers can bring their card up to be reviewed. Only correct careers count in this scoring round. The 2 students with the most correct careers get a small prize.

Use this warm up competition as a means of gauging the students prior knowledge. You may need to provide more support (guidance/hints) to students who struggled with this activity.

Instruction [about 5 minutes]:

1. Present information for students regarding the agricultural field and job possibilities using a brief presentation including slides, video clips, and/or Q&As.
2. Ask students to reflect on their earlier list of careers they knew. Can they add any new ones to their list?

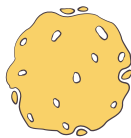
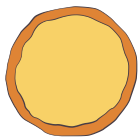
Agricultural Career Awareness ACTIVITY

Career Scattergories Activity [approx. 15 minutes]:

1. Divide into groups of 4-5 students.
2. Assign each group one pizza ingredient by distributing the Scattergories sheets.
3. Explain the rules:
 - a. Working with their group, students will have 10 minutes to find 12 unique careers that directly relate to their group's given ingredient.
 - b. They may search online or through provided materials.
 - c. They must also identify what personal interest or academic class aligns with each selected career.
 - d. The group will receive a point for each unique career--any overlap with other groups results in neither group being awarded that point.
4. After 10 minutes, the groups will share out careers they have found.
 - a. Share out in pizza construction order (crust, sauce, cheese, toppings)
5. Count up points. The group with the most points at the end wins a prize.

End of Class Reflection [approx. 5 minutes]:

1. On the reverse of their earlier notecard, have students write down 2-3 of their hobbies, interests, or favorite academic classes.
2. Have students write down a career in agriculture that aligns with each interest.
3. As you leave give each student a memento that reminds them of this connection to agriculture (or give to the teacher to pass out, if teacher prefers).



Agricultural Career Awareness

STUDENT RESOURCES

BE AGRICULTURE

- **How can you Be Business Minded in agriculture?**
 - Insurance Agent, Real Estate, Accountant, Safety Manager, Economist, Loan Officer.
- **How can you Be the Caregiver in agriculture?**
 - Livestock Hauler, Animal Nutritionist, Pet Groomer, Feed Mill Operator, Veterinary Services.
- **How can you Be Scientific in agriculture?**
 - Geneticist, Pathologist, Microbiologist, Chemist working with plants or animals.
- **How can you Be the Process in agriculture?**
 - Dietician, Chef, Food Inspector, Packaging Engineer, Meat Processor, Supply Chain Manager.
- **How can you Be Constructive in agriculture?**
 - Electrician, Mechanic, Equipment Operator, Welder, Construction Foreman, Engineer, Drone Technician.
- **How can you Be Grounded in agriculture?**
 - Plant Breeder, Landscape Designer, Entomologist, Florist, Seed Salesperson, Turf Manager, Greenhouse Operator.
- **How can you Be Resourceful in agriculture?**
 - Conservation Officer, Wind Turbine Technician, Aquaculturist, Waste Management Technician, Environmental Consultant.
- **How can you Be the Change in agriculture?**
 - Agriscience Educator, Legislative Aide, Politician, Extension Coordinator, College Professor.
- **How can you Be the Story in agriculture?**
 - Public Relations Specialist, Graphic Designer, Journalist, Web Designer, Marketing Manager, Web Designer, Social Media Strategist.

The links below contain lists of jobs categorized by level of education required, as well as information about high school and college courses to take.

Ag Communications: <https://miagclassroom.org/teacher-center/agriculture-careers/communications/>

Ag Education: <https://miagclassroom.org/teacher-center/agriculture-careers/education/>

Agribusiness: <https://miagclassroom.org/teacher-center/agriculture-careers/education/>

Food Science: <https://miagclassroom.org/teacher-center/agriculture-careers/foodscience/>

Livestock Careers: <https://miagclassroom.org/teacher-center/agriculture-careers/education/>

Natural Resources: <https://miagclassroom.org/teacher-center/agriculture-careers/naturalresources/>

Plant Science: <https://miagclassroom.org/teacher-center/agriculture-careers/plantscience/>

Processing Careers: <https://miagclassroom.org/teacher-center/agriculture-careers/processing/>

FFA Career Exploration: <https://agexplorer.ffa.org/career/> This site contains an interactive search engine for exploring ag careers by Focus Area, Environment (i.e. mostly inside, mostly outside, combination), and Education. Each job page includes a list of responsibilities, a rating of the future job market, typical employers, and professional organizations.

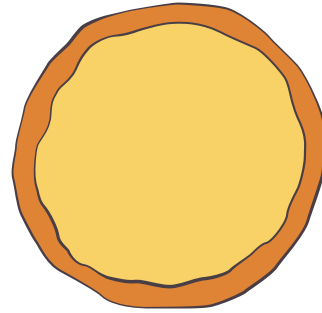
The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fuel, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Agriculture, Food & Natural Resources

<p>Sample Career Specialties / Occupations</p>	<p> Agricultural Sales • Agricultural Communications Specialists • Agricultural-Educators • Food Scientists • Meat Processors-Toxicologists • Biochemists-Nutritionists-Dieticians • Food Brokers-Food Inspectors • Meat Cutters-Meat Graders • Meat Science Researchers • Food Meal Supervisors • Cheese Makers • Microbiologists • Produce Buyers • Bacteriologists • Food & Drug Inspectors • Bioengineers • Biochemists • Food & Fiber Engineers • Food Processors • Storage Supervisors • Fieldman • Quality Control Specialists </p>	<p> Bioinformatics Specialists • Plant Breeders and Geneticists • Biotechnology Lab Technicians • Soil & Water Specialists • Crop Farm Managers • Agricultural Educators • Plant Pathologists • Aquaculturalists • Sales Representatives • Botanists • Tree Surgeons • Education & Extension Specialists • Agricultural Journalists • Commodity Marketing Specialists • Grain Operations • Hay/Silage Operators • Forest Geneticists • Golf Course Superintendents • Greenhouse Mangers • Growers • Farmers • Ranchers </p>	<p> Agricultural Educators • Livestock producers • AI Technicians • Aquaculturalists • Animal Caretakers-Poultry Managers • Equine Managers • Veterinarians • Veterinary Assistants-Feedlot Specialists • Animal Technologists • Embryo Technologists • Livestock Buyers • Feed Sales Representatives • Vivarian Technicians • Wildlife Biologists • Livestock Geneticists • Animal Nutritionists • Dairy Producers • Livestock Inspectors • Feed Sales Specialists • Animal Health Salespersons • Meat Science Researcher • Reproductive Physiologists • Embryo Transfer Technicians • Pet Shop Operators • USDA Inspectors </p>	<p> Machine Operators • Electronics Systems Technicians • Agricultural Engineers • Agricultural Extension Engineering Specialists • Heavy Equipment Maintenance Technicians • Recycling Technicians • Waste Water Treatment Plant Operators • Equipment/Parts Managers • Welders • Machinists • Communication Technicians • Agricultural Applications Software Developers/Programmers • Database Administrators • Computer Service Technicians • Technical Support Technicians • Information Lab Specialists • GPS Technicians • Remote Sensing Specialist • Agricultural Educator </p>	<p> Cartographers • Wildlife Managers • Range Technicians • Ecologists • Park Mangers • Environmental Interpreters • Fish and Game Officers • Loggers • Forest Technicians • Log Graders • Pulp and Paper Manager • Soil Geology Technician • Geologists • Mining Engineers • Fisheries Technicians • Water Monitoring Technician • Hydrologists • Fish Hatchery Manager • Commercial Fishermen • Fishing Vessel Operators • Vessel Crew • Agricultural Educator </p>	<p> Pollution Prevention and Control Managers • Pollution Prevention and Control Technicians • Environmental Sampling and Analysis Scientists/Technicians • Health and Safety Sanitarians • Environmental Compliance Assurance Managers • Hazardous Materials • Hazardous Materials Technicians • Managers • Water Environment Managers • Water Quality Managers • Waste Water Managers • Toxicologists • Solid Waste Disposal / Recyclers • Solid Waste Technician • Solid Waste Managers • Solid Waste Specialists • Agricultural Educator </p>	<p> Salesperson • Sales Manager • Banker/Loan Officer • Field Representative for Bank, Insurance Company or Government Program • Farm Investment Manager • Agricultural Commodity Broker • Agricultural Economist • Farmer/Rancher/Feedlot Operator • Farm Manager • Livestock Rancher/Breeder • Dairy Herd Supervisor (DHIA) • Agricultural Products Buyer • Animal Health Products Distributor • Livestock Seller • Feed and Supply Store Manager • Produce Commission Agent • Ag Lenders • Agricultural Chemical Dealer • Field Service Representative • Chemical Sales Representative • Agricultural Educator </p>
<p>Pathways</p>	<p> Food Products and Processing Systems (Food Processing and preserving, Packaging, Distribution, Government monitoring & regulation) </p>	<p> Plant Systems (Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.) </p>	<p> Animal Systems (Large animals, small animals, wildlife animals, and research animals) </p>	<p> Power, Structural & Technical Systems (Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.) </p>	<p> Natural Resources Systems (Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.) </p>	<p> Environmental Service Systems (Pollution Prevention, Water & Air Quality, Hazardous Materials, Solid Waste Management, Health & Safety Sanitation, etc.) </p>	<p> Agribusiness Systems (Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.) </p>
<p>CCCTC /Career Ready Practices</p>	<p> The Common Career Technical Core (CCTC) includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready. </p>						

1. Find 12 unique careers that directly relate to the production of pizza crust.

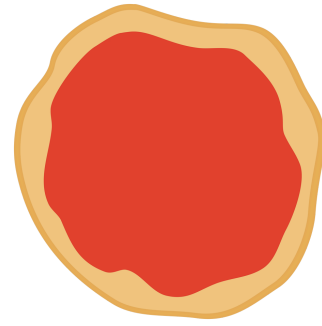
2. Identify an academic class or extra-curricular interest that supports each career.



Career	Class / Interest

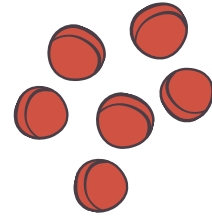
1. Find 12 unique careers that directly relate to the production of pizza sauce.

2. Identify an academic class or extra-curricular interest that aligns with each career.



Career	Class / Interest

1. Find 12 unique careers that directly relate to the production of pepperoni.



2. Identify an academic class or extra-curricular interest that supports each career.

Career	Class / Interest

