



Activity 1.2.2 Agriscience Careers and Me

Purpose

Science and technology are instrumental for producing and processing of food, fiber, and renewable natural resources, and are the basis for many careers in agriculture. Studying agriscience careers may help you identify an agriscience career right for you and guide you to the appropriate training and experience necessary for a successful and rewarding career.

An estimated 300 different careers await you if you chose a profession in the field of agriculture. There is a need for approximately 400,000 people to fill positions in agriscience careers each year. Of those positions, there are typically only 100,000 filled by people who are educated and trained in agriscience. The remaining openings go to people who are trained in fields outside of agriculture. Openings in agriscience include areas such as mechanics, sales, genetic engineering, nutrition, and extension.

Materials

Per student:

Computer with Internet access

Pencil

Agriscience Notebook

In this activity, you will explore the career opportunities awaiting you in the fields of agriculture and natural resources. First, you will need to access the www.careerwise.mnscu.edu website.

Part One – Careers in Agriculture

1. Go to www.careerwise.mnscu.edu.
2. Select **Explore Careers** at the top left of the screen.
3. Under **Research Careers**, select **Career Clusters and Pathways**.
4. Click on **Career Clusters** and then select **Agriculture, Food, and Natural Resources** from the choices in the center.
5. Read the introductory paragraph and select **Pathways in this cluster**.
6. Within the AFNR cluster, you will see seven career pathways. Take some time to explore each pathway by clicking on the pathway. On *Activity 1.2.2 Student Worksheet*, record the following information for each pathway in Table 1.
 - Brief overview
 - Interesting careers
 - Education requirements

Part Two – Finding Your Interests

1. At the top menu, select **Assess Yourself**.
2. Next select **Take an Assessment**.
3. Select **Interest Assessment**.
4. Read the information about the Interest Assessment and then select **Get Started**.

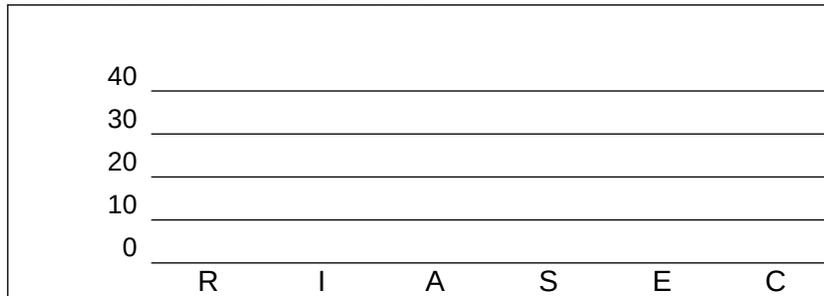
Activity 1.2.2 Student Worksheet

Table 1. Agriculture Pathways

Pathways	Overview	Careers	Education Requirements
Agribusiness Systems	The agribusiness systems pathway includes occupations involved in the coordination of all activities that contribute to the production, processing, marketing, distribution, financing and development of agricultural commodities, plant and animal products, and other natural resources.	-Farm and home management advisers	-general management
Animal Systems	The animal systems pathway includes occupations related to the raising and caring of animals and developing more efficient ways of producing and processing meat, poultry, eggs and dairy products. Workers study genetics, nutrition, reproduction, growth and care of domesticated farm animals. Includes workers who provide medical service to farm and nonfarm animals.	-Animal breeders -Veterinary technology and technicians -see other careers	-Natural resources systems -Science and mathematics
Environmental Service Systems	The environmental service systems pathway includes occupations involved in water and air pollution control, recycling, waste disposal and public health issues. Work includes hazardous-waste management, research, and quality control.	-Environmental scientist -see other careers	Health, safety, and environmental assurance
Food Products and Processing Systems	The food products and processing systems pathway includes occupations involved in bulk food production, the discovery of new food sources, the analysis of food content, and the development of ways to process, preserve, package or store food according to consumer needs, and. Includes those who monitor compliance with industry and government regulations.	-Food scientist -Validation engineers -see other careers	-production -restaurants and food and beverage services
Natural Resources Systems	The natural resources systems pathway includes occupations that develop, use, maintain, manage, and analyze natural resources. Includes catching and trapping various types of marine life. Work might relate to	-geoscientist -hydrologist -natural science majors -see other careers	-environmental service systems -maintenance and operations

	recreation, wildlife, conservation, mining, logging, or oil drilling.		
Plant Systems	The plant systems pathway includes occupations related to growing food, feed, and fiber crops, and the study of plants and their growth to help producers meet consumer demand while conserving natural resources and maintaining the environment. Work might include nutritional analysis or genetic engineering.	-farmers and researchers -see other careers	-agribusiness systems -natural recourse systems
Power, Structural and Technical Systems	Power, structural, and technical systems workers apply knowledge of engineering, hydraulics, pneumatic, electronics, power, structures, and controls to the field of agriculture. They design agricultural structures as well as machinery and equipment.	-see other careers	-maintenance, installation and repairs -maintenance and operations

Table 2. Interest Profile Results



R = Realistic	Total:
I = Investigative	Total:
A = Artistic	Total:
S = Social	Total:
E = Enterprising	Total:
C = Conventional	Total:

Top Letter:

Second Letter:

Third Letter:

Table 3. My Career Options

Child, Family, and School Social Workers	Art Directors	Adult Basic and Secondary Education and Literacy Teachers
<p>Collect information about clients. Interview clients to gather information about their backgrounds, needs, or progress.</p> <p>Research social issues.</p> <p>Collaborate with other professionals to assess client needs or plan treatments.</p>	<p>Design layout of art or product exhibits, displays, or promotional materials.</p> <p>Design layouts for print publications.</p> <p>Develop artistic or design concepts for decoration, exhibition, or commercial purposes.</p> <p>Draw detailed or technical illustrations.</p>	<p>Apply multiple teaching methods.</p> <p>Train staff members.</p> <p>Encourage students.</p> <p>Collaborate with other agencies and institutions to coordinate educational matters.</p>

Table 4. My College Major Interests

Criminal Justice and Corrections	English Language and Literature, General	Introduction
<p>Criminal justice and corrections programs prepare students to study the theories and principles of correctional science, organization management, and criminal justice.</p>	<p>General English language and literature programs focus on the English language and its history, structure, and the culture of English-speaking peoples.</p>	<p>Journalism programs explore the theory and practice of gathering, processing, and delivering news. Students are prepared to be print journalists, news editors, and news managers. Includes broadcast journalism and photojournalism programs.</p>