1) Discuss careers and view video clips about careers in agriculture. Video clips may be found on the National Ag in the Classroom website by searching the curriculum matrix for careers.

2) Assign various careers to each student.

3) Students will research their career for the following information to create a report:
   - Description of job
   - Employment opportunities
   - Education required

4) After completing research, students will create a career collage using the person template. The collages should tell the story of their career. The pictures may be found on the internet, magazines, etc.

5) Once the career collages are complete, each student will present their research information and collage to the class.

6) Create a class bulletin board of all the career collages.

Extension:
Invite local people in an agriculture related careers to speak to the class

Credit: Dawn Williams, Acadia Parish, 2007 LA AITC Teacher of the Year
Person Template
Range Manager

Homes on the range for plants, animals, and people.

Range managers care for our country’s vast rangelands. From those lands, they produce a sustained yield of such things as plants for forage, wildlife for aesthetics and hunting, red meat, and clean water.

Range managers work for federal and state agencies, colleges and universities, private industry, environmental groups and on foreign assignments. Some range managers work for federal or state agencies, planning and directing public and private land use. Others are researchers, teachers, and extension agents with colleges and universities. Private industries hire range managers as ranch or land managers, agricultural product sales and service representatives, land reclamation specialists, and environmental consultants.

To be a range manager you need a bachelor’s degree in range science, management, natural resource management, or ecology. Take courses in range science, agronomy, animal sciences, biology, botany, chemistry, ecology, economics, forestry, hydrology, natural resource management, recreation, soils, statistics, and wildlife. You need a graduate degree if you plan to do research or to teach, and if you want to advance in some fields.
Climatologist

A job as changeable as the weather.

Are we in a drought? Could there be a flood? Ask a climatologist. Climatologists study climate change, climate variability, and the effects of climate on the biosphere. They use computers to predict the effect of weather or climate on the growth and development of grain, vegetables, fruit, and other crops.

Climatologists work for state and federal governments as weather station network supervisors, computer programmers, and supervisors of climate data publications. Some are private consultants that provide expert advice or testimony for clients, including companies involved in construction, litigation, insurance, utilities, and agribusiness. Climatologists at universities teach climate courses and participate in multi-disciplinary extension and research activities.

To be a climatologist, you need a strong background in math and physics. Courses in meteorology and climatology, as well as courses in agricultural, biological, computer, or natural sciences are part of the coursework. You need broad educational experience, because the users of climate information come from varied backgrounds. For most private consulting and many government jobs, you need a master's or doctoral degree.
Science Writer

*Stupendous science simply stated.*

Science writers must fit their writing styles to suit a variety of materials and audiences. They write news stories, manuals, and press releases for non-profit and for-profit corporations. Their main job is to describe science without using scientific terms.

Science writers can work for newspapers writing science and technology stories, environmental stories, or business stories about science-based corporations. Some write for magazines that cover medicine, the environment, natural science, academics, or business. Some are hired by medical software companies, universities, and other research institutions. Manufacturers hire science writers to produce copy for public relations, direct mail, and newsletters.

To be a science writer you should be curious about the biological and physical world and able to communicate with enthusiasm. In college, you need a combination of strong English and writing courses and a science background. An undergraduate major such as biological science, environmental science, agricultural science, or microbiology combined with a minor in English or communications is good preparation.
**Entomologist**

*Study what bugs us!*

An entomologist is a broadly trained and educated professional in a discipline that touches almost every aspect of our daily lives. Career opportunities are numerous and varied, so if you are interested in science and ready for a challenge, entomology is the career for you. As an entomologist, you can use your natural curiosity and enthusiasm to help solve some of the world's toughest problems. Entomologists are needed worldwide to help farmers and ranchers produce crops and livestock more efficiently by using sound pest management strategies; to produce information about endangered species, fragile ecosystems and our environment; and to help prevent the spread of serious diseases in plants and animals.

You can find entomologists in professions such as medicine, law, pharmacology, veterinary medicine, teaching, and research; in many aspects of agribusiness; in private pursuits such as consulting; and working for local, state, federal, or international agencies.

In college, a major in entomology is the best preparation for you; however, a well-rounded biological sciences program would be excellent preparation for graduate work. As an undergraduate you will take courses in biology, agriculture, chemistry/biochemistry, mathematics, and statistics, as well as computer science, English, history, and the humanities. As a graduate student you will get experience in taxonomy, physiology, morphology, behavior, and pest management.
Agronomist

Your field of dreams.

Agronomists deal with interactions among plants, soils, and the environment. They use sophisticated research tools and techniques to develop new crop hybrids and varieties that grow more efficiently and are more beneficial to society. Soils specialists conduct research in everything from the very basic to applied issues of soil and water management and land use. Agronomists research ways to produce crops and turf, and ways to manage soils in the most environmentally friendly way. Agronomists can be found teaching, conducting business, and doing research in food production and environmentally oriented industries around the world.

Agronomists work for USDA, State Departments of Agriculture, the Natural Resources Conservation Service, and as agriculturists in foreign countries. They work for banks; farm co-ops; seed, ag supply, and lawn care companies; and government agencies. Agronomists also are employed as weather forecasters, environmentalists, researchers, and teachers.

To be an agronomist, you should have an interest in science and environmental issues. A bachelor's degree is necessary to obtain a rewarding and productive job. In college you should enroll in agriculture, biology, chemistry, mathematics, physics, and statistics courses, as well as broad-based general education courses, including English and speech. You should enjoy working with people and should have a keen interest in applying science to practical feed and food production issues.
Veterinarian

*Healthy creatures great and small.*

Most veterinarians work in private practices where they diagnose, treat, and help prevent disease and disabilities in animals. The D.V.M. (Doctor of Veterinary Medicine) degree, however, opens up many career choices. Veterinarians can be practitioners, researchers, public servants, administrators, and teachers. They may work with one or more species of animal, or with additional training, in a clinical specialty such as cardiology, surgery, or neurology. Veterinarians safeguard human health by controlling diseases that can spread from animals to humans.

Veterinarians can start their own businesses or work with others in group practices. Some work for nutrition and pharmaceutical companies. Others do research or enforce regulations for state and federal government agencies. Some join the military, while others work as researchers, teachers, and clinicians in academic institutions. Some veterinarians get involved in international work. Others work at racetracks, zoos, and breeding farms.

To become a veterinarian, you need at least seven years of education beyond high school. You must complete at least three years in an accredited college or university undergraduate program before starting your four-year professional curriculum.
Wildlife Biologist

Walk on the wildlife side.

Wildlife biologists do research that helps us better manage our natural resources. They may specialize in fields such as physiology, genetics, ecology, behavior, disease, nutrition, population dynamics, land use, and pollution. They are curious, patient, and persistent. While they enjoy working out-of doors with wildlife, much of their job involves interactions with people. They collect, analyze, and interpret facts objectively and skillfully, and they can report them clearly to other people.

Traditionally, most wildlife positions were civil service jobs with state, provincial, or federal agencies. Many other opportunities are now available. Some city, town, and county agencies hire wildlife management specialists, and many parks hire them for wildlife interpretation (for example, leading nature walks). Universities and colleges offering wildlife curriculums hire wildlife professionals with advanced degrees to teach and do research. After the enactment of the National Environmental Policy Act of 1969, environmental and other consulting firms began employing more wildlife specialists to produce environmental impact statements and other planning documents. Private employment with large firms dealing in timber, ranching, mining, energy production, paper production, and chemical production is also increasing. Each year opportunities increase in community nature or conservation centers, zoos, and a growing number of private and public conservation-related organizations around the world.

To be a wildlife biologist, you need a college education. Since most wildlife resources and conservation problems relate to people, you need courses in English, history, geography, statistics, and economics, as well as in physical and biological sciences. Communication skills, especially speaking skills, must be part of your training.
Food Safety Specialist/ Inspector

Keeping Our Food Safe.

Food safety specialists preserve our food supply by assuring that it is wholesome, sound, and safe. They use their knowledge of food protection principles, food science, bacteriology, microbiology, and Hazard Analysis Critical Control Point (HACCP) theory. They understand and apply federal, state, and local laws, rules, and regulations governing food protection. They can work independently and are good observers who can think on their feet. They also are adept at working with others to solve problems.

Food safety specialists work for food services, hotels, resorts, restaurants, and government agencies. They conduct inspections and investigations of food products, and of storage and preparation facilities. They consult with the food industry and potential new businesses, and they train local health department food protection personnel.

To be a food safety specialist you should earn a bachelor's degree in food science. You will take courses such as bacteriology, biology, business, chemistry, epidemiology, food technology, management, mathematics, microbiology, physics, and statistics, as well as classes in food science. You will need to understand HACCP theory and how to apply it. You also must understand federal, state, and local laws, rules, and regulations that govern food protection..
Aquaculturalist

Make a big splash farming in water.

Aquaculturists raise a diverse array of aquatic plants and animals in controlled or semi-controlled settings. The goals of raising these organisms can be for production of food; for stocking public bodies of water, or public or home aquaria; or for biomedical applications. Regardless of your goal, in your first job you will probably stock production units (ponds or tanks), ensure adequate nutrition, monitor water quality, check for diseases, harvest plants or animals, and maintain equipment. If you become a manager, you will supervise workers, plan production schedules, purchase feed and equipment, and plan harvesting, processing, and marketing.

An aquaculturist can work for a corporation; an independent fish farmer; a city, county, state or federal government; or a biomedical research laboratory. Some large operations are vertically integrated and have their own feed mills and fish processing plants. Companies hire aquaculturists as technicians to test water quality or to examine fish for diseases. Feed companies and equipment manufacturers hire aquaculturists to market their products to fish farmers.

To be an aquaculturist you should be interested in agriculture, since aquaculture is a type of farming. An entry level position usually requires a high school education. Employees working on the pond bank need to know how to maintain and repair farm equipment. Managers of aquaculture operations often have college degrees, and need to understand water quality, nutrition, business, and economics.
Plant Pathologist

*Doctor Green.*

Plant pathologists deal with the symptoms, causes, damage, spread, and control of plant diseases. They can specialize in mycology, bacteriology, virology, nematology, physiology, genetics, molecular and cellular biology, epidemiology, biotechnology, or biochemistry. They study disease processes and look for genetic, biological, chemical, or cultural controls for diseases of the plants we use for food and fiber.

Plant pathologists are university research scientists, teachers, and research technicians. Some work as extension plant pathologists with the Cooperative Extension Service. Government agencies such as the U.S. Department of Agriculture and U.S. Forest Service hire plant pathologists as research scientists and technicians. Plant pathologists also work for companies that develop chemical and biological control products, companies that introduce new varieties of pest-resistant plants, and companies that provide disease control services.

To be a plant pathologist, you need a bachelor's degree in a biological science (preferably plant-oriented) and a master's degree in plant pathology. To be a research scientist, you need a doctoral degree in plant pathology or a related discipline (see the first paragraph).
Horticulturalist

Making food, medicine, and pleasure from plants.

The Latin words *hortus* (garden plant) and *cultura* (culture) together form horticulture, classically defined as the culture of garden plants. But today horticulture is more than garden plant culture. Horticulturists work in crop production; plant propagation; plant breeding; genetic engineering; plant physiology; plant biochemistry; landscape design, installation, construction, and maintenance; and storage, processing, and transit (of fruits, berries, nuts, vegetables, flowers, trees, shrubs, and turf). They improve crop yield, quality, nutritional value, and resistance to insects, diseases, and environmental stresses. They make plants more adaptable to different climates and soils and better fit for food uses or processes. And they grow and improve plants used for medicines or spices.

Horticulturists can work in industry, government, or educational institutions. They can be cropping systems engineers, wholesale or retail business managers, plant specialists in the landscaping industry, propagators and tissue culture specialists (fruit, vegetables, ornamentals, and turf), crop inspectors, crop production advisors, extension specialists, plant breeders, research scientists, and educators. You'll find horticulturists in offices, laboratories, greenhouses, and out in production or research fields.

In college take courses in biology, chemistry, mathematics, genetics, physiology, statistics, computer science, landscape design and construction, and communications to complement plant science and horticulture coursework. Plant science and horticulture courses include plant materials, plant propagation, tissue culture, crop production, post harvest handling, plant breeding, crop nutrition, entomology, plant pathology, economics, and business. For many careers you must have a master's or doctoral degree.
Florist

*It's a bloomin' business.*

A flower shop employee processes incoming flowers, designs floral arrangements, works with customers, and delivers flowers. Those in management positions develop advertising programs, determine what products they will sell, create display themes, and supervise employees. Managers conduct sales interviews to secure wedding, commercial, and special events accounts. Managers also make financial decisions based on their businesses' financial records and goals.

You'll find most employment opportunities in traditional retail florist businesses, which are still the backbone of the flower industry. A typical business is small and hires staff for designing and sales. Larger businesses hire managers to operate branch stores or to act as department managers in single large stores. Many florists start their own small businesses. Supermarkets, wholesale florists, large hotels, and resorts also hire florists.

Most successful florists like business, people, and design. Formal training isn't necessary for entry level positions. But to compete for owner or manager positions in today's market, you need a college degree. You should take courses in floral design, personnel, selling, finance, management, marketing, and foliage plants. Work experience is not just important, it is necessary for upper-level positions.
Forester

*Keepers of the forest.*

Foresters may spend one day in the laboratory and the next in the field. Some days they speak with executives in board rooms and other days they talk with tree farmers. Therefore, foresters must be highly trained technically, but they must also be good communicators. They must see themselves as stewards of forest resources and must be able to convince others that forests are vital to the welfare of humanity.

Our forests are owned and managed by a wide range of individuals, private organizations, and public agencies. Foresters may manage timberlands for private industry or may scout out and buy wood from other landowners for their companies. Some foresters are private consultants who advise landowners on the multiple-use management of their timberlands. Many work in management, administration, or research for public agencies such as the U.S. Forest Service.

Foresters have long-range views on environmental issues. They should be able to visualize a forest's development over many years. They must understand natural history and forest ecology. Basic college courses you should take to become a forester include: biology, chemistry, physics, mathematics, engineering, economics, communications, and computer science. You will also take professional courses in forest biology, forest resource measurement, forest management, and forest policy and administration. There are over forty accredited forestry programs in the United States.
Naturalist

*Interpreting the scheme of things.*

Naturalists are scientists and skilled communicators. They study the natural environment and enjoy sharing what they learn with other people. Naturalists are equally at ease narrating multi-projector slide programs for audiences of 500 and working one-on-one with school children to identify flowers. Naturalists help people learn to live more productively on earth without destroying the environment.

Naturalists teach, but rarely in formal classrooms. They work as interpretive naturalists for the National Park Service and as tour guides at zoos. Some teach school groups in outdoor classrooms, while others develop television and video programs, write magazine and news articles, and produce mass media programs on topics such as biological diversity and endangered species.

To be a naturalist you should earn a college degree in natural resources, environmental science, or a similar program that emphasizes the scientific aspects of relationships between humans and their environment. You must understand ecological sciences, communication theory, education principles, and resource management. Your education must include a balance between ecological and social sciences.
Turf Scientist

*Your championship course.*

Turf scientists must be skilled in science, business, and personnel management. In their first jobs, they often work outside caring for lawns, golf courses, park sites, athletic fields, or grounds around corporation headquarters. They use their scientific knowledge to maintain turf, as well as to operate computer-controlled irrigation equipment and highlytechnical machines. As turf scientists advance in their careers, they become coordinators, managers, or assistant or branch managers in corporations. In these positions, they still must rely on their scientific expertise to make good purchasing decisions and to explain tasks to their employees, but much of their time is spent creating and managing budgets, coordinating projects, and managing an organization with numerous employees.

Turf scientists can be golf course superintendents, turf managers for sports stadiums, park managers, grounds managers for corporate headquarters, sod producers, lawn care professionals, sales representatives for companies that produce turf care products, researchers, or teachers in colleges and universities.

To be a turf scientist, you need a college education. Take courses such as turf management, soil fertility, weed science, plant pathology, entomology, and horticulture. You should also take courses in chemistry, algebra and calculus, accounting, management, business and technical writing, and communications to improve your business and people skills.
Marine Scientist

*Sea...the possibilities.*

Marine scientists address problems and issues facing marine life. They systematically gather data in the field or laboratory with special sampling gear and monitoring equipment. They interpret and evaluate the data they collect, then write scientific reports for clients or supervisors. They may also help make decisions or solve problems. Sometimes they deal with problems of great economic or political importance.

A marine scientist may work as an independent consultant, for a consulting firm or a university system, or for a federal or state resource management agency. A few marine scientists conduct environmental studies for the petrochemical industry. New opportunities are available for jobs in bioengineering, aquaculture, and conservation biology.

To be a marine scientist you must be competent in biology, chemistry, and the physical sciences. You must have a good foundation in mathematics, computer skills, communication, and writing. You should have a keen interest in conservation and coastal and marine resources.
Teacher- Agricultural Science

Business Teacher

*Touching lives, teaching about life.*

Agricultural science and business teachers prepare middle and high school students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber, and natural resources systems. They develop and deliver curricula across a wide range of agricultural subjects.

Agricultural science and business teachers work in rural, suburban, and urban public schools. They serve as advisors of local FFA student organizations, emphasizing leadership, personal growth, and career success. They coordinate and supervise student agricultural experiences throughout the entire year. Some teachers work with adults in the community to teach them agricultural production, business, or mechanical subjects.

To be an agricultural science and business teacher, you should be interested in agricultural science and business, and in working with people. In college, you need a strong foundation in communication and science. An undergraduate major in agricultural education is excellent preparation for technical content and for getting your state teaching license.
Person Template