

DEMONSTRATIONS

CAREER DEVELOPMENT EVENT

I. OBJECTIVE:

1. Research various areas of agriculture to effectively develop an educational demonstration
2. Efficiently demonstrate knowledge in specific agriculture areas.
3. Teach agriculture skills in a step-by-step / how to process.
4. Build upon public speaking skills.

II. GENERAL EVENT OVERVIEWS:

1. The demonstration will be presented by a maximum of two students and include the areas of:
 - a. Agriculture & Farm Business Management Demonstration
 - b. Agriculture Mechanics and Technology Demonstration
 - c. Agriculture Sales Demonstration
 - d. Animal Science Demonstration
 - e. Food Science Demonstration
 - f. Horticulture Science & Landscape Management Demonstration
 - g. Natural Resources Demonstration
 - h. Plant & Soil Science Demonstration
2. Demonstrations shall not exceed 10 minutes, except Agriculture Sales Demonstration, which is 15 minutes. There will be a point deduction of 1 point for the first 30 seconds over the designated demonstration time and then 1 point for every 15 seconds thereafter. There will be 5 minutes at the conclusion of the demonstrations for judges to ask the students questions related to their demonstration topic.
3. The use of live animals is prohibited.
4. The use of weapons is prohibited. The list includes, but is not limited to guns, knives, bullets, bows, and arrows. Knives appropriate to the demonstration may be used. Example: grafting knives are acceptable, demonstration to sharpen a knife is inappropriate.
5. Each demonstrator will be responsible for providing his/her own materials and equipment to carry out the demonstration.
6. All demonstrations will be held in classrooms, except for Agriculture Mechanics and Technology, which will be held in an agriculture shop. Minimal properties (tables) will be provided.
7. Agriscience and biotechnology are exciting continuously growing career options; therefore more emphasis is being placed on these topics in the classroom. These topics fit within each individual demonstration area as there is not a designated biotechnology area. Please look at examples on the following pages of guidelines for suggestions.
8. The same demonstration and or topic may not be used in more than one category by the same chapter per year.

9. Official Dress is required, proper safety apparel is allowed during the demonstration.

III. SPECIFIC EVENT OVERVIEWS:

A. Agriculture & Farm Business Management Demonstration

1. DESCRIPTION:

FFA members should demonstrate the principles of farm organization and management with the utilization of technology or the concepts necessary for managing an agriculture-related business from a local and global perspective. Topics to be included but not limited to: economic principles, decision-making, methods for organizing and planning, starting a agriculture or farming business, farm record keeping, risk management, global visioning, safety management, entrepreneurship, the planning, organizing, controlling, and directing of an agribusiness, economic principles, credit, record keeping, budgeting, fundamentals of cash flow, taxation and the tax system, insurance, marketing, cooperatives, purchasing, the utilization of technology in agribusiness, human resource management, customer service, and employer-employee relations and responsibilities.

Examples:

- How to and the benefits of purchasing a hedge?
- Demonstrating the steps needed to lay the ground work for developing your own business.

2. GUIDELINES:

- a. Refer to general demonstration guidelines for further information

B. Agriculture Mechanics and Technology Demonstration

1. DESCRIPTION:

FFA members demonstrate the correct procedures, safety, and mechanical or technology skills in agriculture including but not limited to small and large gas and diesel engine repair, power transfer systems including hydraulic and pneumatic systems, arc, shielded gas and gas welding, concrete, wood, metal, electricity and electronics, recirculating aquaculture systems, hydroponics systems, precision farming equipment and global positioning systems equipment, agriculture related buildings and structures including greenhouses, agricultural industry communications and customer relations, safety and safety resources, and computer technology, welding, machinery maintenance, design and fabrication, agricultural equipment and technology systems.

Examples:

- Alternate energy source engines
- Utilization of Geographic Information Systems
- Establishment of a Hydroponics' System

2. GUIDELINES:

- a. Most events will be conducted in agriculture shop facilities; therefore, items such as bench space, grinders, and arc welders could be made available for use in demonstrations. Prior arrangements should be made with the coordinator where the

event is to be held if a welder, grinder, or other large equipment which cannot be transported from the demonstrator's school is needed.

- b. All demonstrators will provide their own small tools, supplies, materials, and other items used in the demonstration.

C. Agriculture Sales Demonstration

1. DESCRIPTION:

To experience the preparation and presentation of a professional interview. To improve communication skills useful in selling products and ideas. To learn how sales skills are applied in a realistic selling situation.

2. GUIDELINES:

- a. Students will complete a prospect profile description, which they will review with the judge prior to the start of the demonstration. This document is included in the Demonstration Guidelines.
- b. Contestants will sell an agriculture related product and must furnish their own merchandise. Assortment of the product, if desired. Items suitable for suggestive selling
- c. Students will have 15 minutes to complete the sale including filling out the student generated sale bill.
- d. Prospect sheets are to be given to the judges to help them understand the role in which they are to play in the demonstration.

D. Animal Science Demonstration

1. DESCRIPTION:

FFA members demonstrate effective, current, and safe practices in the industry of food production, including science, processing and use of biotechnology. Topics to be included but not limited to: anatomy and physiology, genetics, reproduction, nutrition, aquaculture, common diseases and parasites, social and political issues related to the industry, and management practices for the care and maintenance of animals

Examples:

- Proper Grooming of Dogs
- How to properly draw blood
- How to properly AI (insert animal)
- Explanation of Expected Progeny Difference or Predicted Transmitting Ability and its purpose and benefits to the owner.
- Nutrient levels and how they effect Animal Growth
- Growth hormone in meat and milk production
- Estrous synchronization on ovulation

2. GUIDELINES:

- a. Refer to general demonstration guidelines for further information

E. Food Science Demonstration

1. DESCRIPTION:

FFA members demonstrate effective principles of food processing, food chemistry, nutrition, food packaging, food commodities, food regulations, and help students understand the role that food science plays in the securing of a safe, nutritious and adequate food supply. This area will primarily involve consumable food and its products.

Examples:

- Yeast fermentation
- Molds
- Determine the calories in a food
- Helping a consumer determine the difference between a prime and choice steak
- Differences between Organic and Conventional foods
- Deboning a roast

2. GUIDELINES:

- a. All materials should be provided by contestants, unless prior arrangements have been made with site coordinator.
- b. Refer to general demonstration guidelines for further information

F. Horticulture Science & Landscape Management Demonstration

1. DESCRIPTION:

FFA members demonstrate skills learned in their horticulture and landscape training including the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, floriculture, management practices for field and greenhouse production, marketing concepts, production of herbaceous, woody, and nursery stock, fruit, nut, and vegetable production, and pest management. As well as the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications and management skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers.

Examples to include but not limited to:

- Plant growth hydroponics vs. conventional
- Build a terrarium
- Developing a compost pile
- Research and Development of new Turf Grass Hybrids
- Grafting, extracting DNA and/ or Developing new hybrids of fruits and vegetables

2. GUIDELINES:

- a. Refer to general demonstration guidelines for further information

G. Natural Resources Demonstration

1. DESCRIPTION:

FFA members give a presentation demonstrating natural resource management or a related industry, Forest policy, the importance and uses of forest plants, factors that influence the development of forests, forest improvement and best management practices, proper care and use of forest tools and equipment, effects of management practices on the environment, soil conservation practices, water and its importance, hazardous waste management, native wildlife, waterfowl, wetlands, and pond management, surveying and map use, management of recreational areas, outdoor safety, and weather. Investigate areas of environmental concern including: identification and management of ecosystems, management of waste, chemicals and the environment, soil conservation, land uses, regulations and ordinances, water quality, and air quality.

Examples to include but not limited to:

- Water quality standards
- Planning and how to implement grassed waterways
- Explanation of conservation farming practices and their benefit to the environment
- Explaining demonstrating the making of alternative fuels (Examples: ethanol, solar, wind, and cellulose)

2. GUIDELINES:

- a. Refer to general demonstration guidelines for further information

H. Plant & Soil Science Demonstration

1. DESCRIPTION:

FFA members demonstrate skills learned about Plant & Soil Science training. Topics to be included: the taxonomy of plants, the various plant components and their functions, plant growth, plant reproduction and propagation, photosynthesis and respiration, environmental factors affecting plant growth, diseases and pests of plants and their management, biotechnology, the basic components and types of soil, calculation of fertilizer application rates and procedures for application, soil tillage and conservation, irrigation and drainage, land measurement, cropping systems, precision agriculture, principles and benefits of global positioning systems, in the field of plant and soil science.

Examples:

- Compare water movements through different soil types
- Soil Sampling
- Nutrient levels and how they effect plant growth
- Testing soil to determine proper soil amendments needed
- Propagation and Reproduction of Agronomic Crops

2. GUIDELINES:

- b. Refer to general demonstration guidelines for further information

Name: _____ Chapter: _____

Agriculture Sales Demonstration

Composition	Possible Points	Score
Opening	5	
Probing for customer needs	20	
Features and benefits of product	20	
Handling objections	20	
Close	20	
Product Knowledge	5	
Professionalism	5	
Filled out proper sales receipt	5	
Time Deductions		
Grand Total	100	

Name: _____ Chapter: _____

**Agriculture & Farm Business Management,
Agriculture Mechanics & Technology, Animal Science,
Food Science, Horticulture Science & Landscape,
Natural Resources, and Plant & Soil Science Demonstration'**

Composition	Possible Points	Score
Organization and content	10	
Introduction of demonstration	15	
Effectiveness of demonstration	40	
Summary	15	
Voice Strength and Clarity	5	
Poise	5	
Response to questions	5	
Utilization of materials/visuals	5	
Time Deductions		
Grand Total	100	

Name: _____ Chapter: _____

Agriculture Sales Demonstration *Prospect Profile Worksheet*

1. Name Age (Approx.)
2. Address Phone
3. Family Situation
4. Personality Description
5. Interests, Hobbies, etc.
6. Educational Background
7. Situation: Describe in detail important background information:

8. Current Supplier
Years with Current Supplier (s)
Problems with Current Supplier
9. Factors likely to be important to this prospect in purchasing:
10. Past Experience with prospect:
11. Anticipated problems in selling and servicing this prospect:

TO BE FILLED OUT BY THE STUDENT(S), AND GIVEN TO THE JUDGES TO HELP THEM UNDERSTAND THE ROLE IN WHICH THEY ARE TO PLAY IN THE DEMONSTRATION.