

# 2002 Career Development Event Handbook Revisions

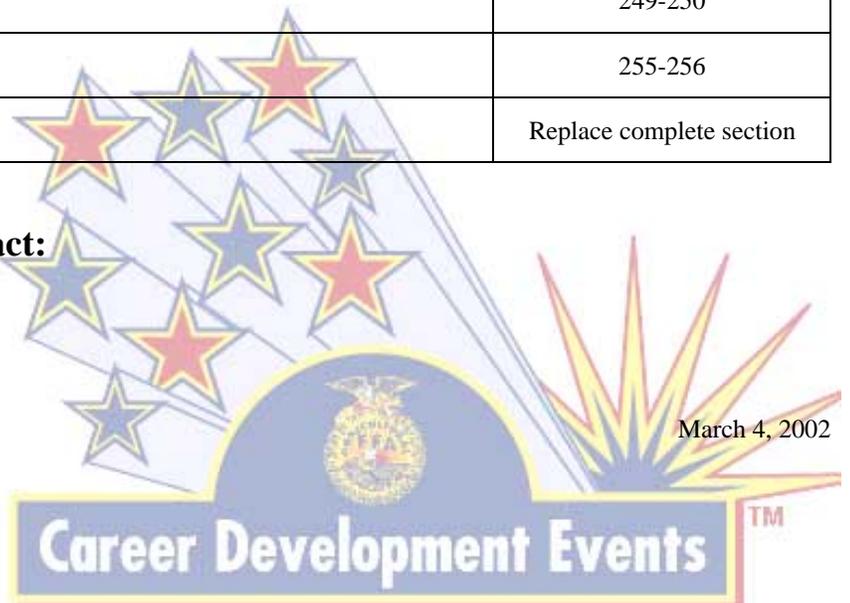
Enclosed are the CDE Handbook pages that contain corrections/revisions. If you currently have the 2001-2005 CDE Handbook in hardcopy form, or have downloaded pages from the 2001-2002 Local Program Success CD-ROM or FFA On-Line [www.ffa.org](http://www.ffa.org), you will need to remove these pages and **replace** with the correct ones. Below is an outline of the sections that contain changes this year.

<b>Handbook Sections</b>	<b>Pages to replace</b>
Introduction	1-10
Agricultural Communications	11-18
Agricultural Issues Forum	25-28
Agricultural Mechanics	31-36 and 41-42
Agricultural Sales	43-50
Environmental & Natural Resources	97-98, 100-101, 101.1-101.2 and 102
Food Science & Technology	155-158
Nursery & Landscape	219-228
Parliamentary Procedure	231-236
Poultry Evaluation	239-246
Prepared Public Speaking	249-250
Appendix Index	255-256
Appendix – Score Cards	Replace complete section

**If you have any questions please contact:**

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FFA's mission is to make a positive difference in the lives of students by developing their potential for **premier leadership, personal growth and career success** through agricultural education. National FFA Online, [www.ffa.org](http://www.ffa.org), FFA's internet web site, can provide information about the National FFA Organization.

Prepared and published by the National FFA Organization. The National FFA Organization is a resource and support organization that does not select, control or supervise state association, local chapter or individual member activities except as expressly provided for in the National FFA Organization Constitution and Bylaws. The National FFA Organization affirms its belief in the value of all human beings and seeks diversity in its membership, leadership and staff.

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The National FFA Career Development Events are educational activities organized by the National FFA Organization and sponsored through the National FFA Foundation and special industry sponsors.

This is your copy of the official rules and regulations for National FFA Career Development Events for 2001-2005. Please retain this manual throughout the five-year period. Supplementary sheets with changes may be provided annually. Changes will be sent to states through the annual summer mailing or electronically. In addition, the Career Development Event Handbook may be found on the Internet.

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## Philosophy for National FFA Career Development Events

Students are important customers of agricultural education and the FFA who recognize quality and value in products and activities. When provided an opportunity to fashion their educational experiences, they generally make wise decisions based on needs. Perceptions, image and the opinions of others influence students. They value change based on their perceived personal needs as well as the needs of others. They sometimes value change for the sake of variety. Adults are concerned about the experiences of students and want to help organize experiences that will meet the future needs of students while accomplishing the purposes of agricultural education and the FFA organization. The National FFA Organization should assume the leadership role in developing and continuously improving relevant FFA career development events and awards. Although the National FFA Organization should be aware of the needs of state associations and should react to those needs, it should help initiate opportunities that reflect relevant and emerging technology. National FFA Career Development Events and awards should be developed with significant input from FFA members, teachers, partners, respective industry sponsors, and others involved in agricultural education.

National career development events and awards should reflect instruction that currently takes place in the entire agricultural education program, including classroom instruction, laboratory instruction, individualized instruction, and/or supervised agricultural experience. However, it is appropriate for the national organization to develop career development events and awards that stimulate instruction in emerging areas that reflect both current and future community, national, and global work force needs. The authority for insuring the relevance of an FFA activity is ultimately vested in the National FFA Board of Directors.

The national organization should promote individual, chapter, and team career development events and awards. Chapter and team career development events and awards should be based on cooperation and teamwork while recognizing the value of competition and individual achievement. The role of career development events and awards is to motivate students and encourage leadership, personal growth, citizenship, and career development.

Students should be recognized for achievement in career development events and awards. Quality standards should be used as a basis for achievement. The national organization should ensure that the recognition is appropriate and meaningful. Recognition for achievement should be reflective of the total effort required by the chapter/team/individual and should take place at all levels of participation.

The National FFA Organization shall encourage accessibility and provide opportunities for achievement and recognition for students with diverse backgrounds. High expectations should be consistently communicated to those who are involved in career development events and awards.

## GENERAL RULES and OFFICIAL POLICIES

*Violations of any of the following rules may be grounds for the event superintendent to disqualify the participants.*

### TEAM ACTIVITIES

The primary goal of team career development events and awards is to develop individual responsibilities, foster teamwork, and promote communications while recognizing the value of ethical competition and the value of individual achievement. A team career development event/award requires two or more members from one chapter working cooperatively. Team career development events and awards are intended to be an outgrowth of instruction.

Team career development events and awards should:

- include problem solving and critical thinking.
- promote an appreciation for diversity by reducing barriers to participation.
- promote new directions and focus on future needs of members and society.
- include cooperative activities.
- encourage broad participation among members and recognize excellence within levels of experience.
- recognize individual and team achievement, develop general leadership, and recognize levels of ability.
- provide local recognition for superior performance at the state and national level.

## WRITTEN TESTS

All written tests used in National FFA Career Development Events will be available for sale through the National FFA Catalog effective the January following each career development event. Please request Item NCQ-## (year).

## ELIGIBILITY OF PARTICIPANTS

1. Each participant must be a current bona fide dues paying FFA member in good standing with the local chapter, state FFA association and the National FFA Organization at the time of his/her selection and at the time of the national career development event in which he/she participates.

In the event a participant's name is not on the chapter's official roster for the years in which the dues were payable to the National FFA Organization, a past due membership processing fee of \$25, in addition to the dues must be paid **prior** to certification.

2. The participant, at the time of his/her selection as a national team member, must be:
  - a. a High school FFA member, (a graduating senior is considered eligible to compete in state and national career development events up to and including their first national convention following graduation.) (High school refers to grades 9-12.)
  - b. have qualified as either a 7th, 8th or 9th grade member to compete in the creed speaking event
  - c. While in school, be enrolled in at least one agricultural education course during the school year and/or follow a planned course of study; either course must include a supervised agricultural experience program, the objective of which is preparation for an agricultural career. The National FFA Constitution provides flexibility to meet the needs of students enrolled in non-traditional programs. For this purpose a student needs to be enrolled in at least one agricultural education course during the year they qualified for the event.

d. qualified as a state representative in a respective career development event, if he or she moves to a different chapter or a different state, they may be allowed to compete in the national event with the school they qualified with during the qualifying year. Certification forms submitted to the national FFA will be the list that will be accepted.

3. A student may not participate more than once in the same official National FFA Career Development Event. No student may participate in more than one National FFA Career Development Event each year.
4. Each member participating in a National FFA Career Development Event must submit the proper Waiver, Release of Liability and Consent to Medical Treatment Form. The form must be sent to the National FFA Center within 30 days prior to the event. If a team does not qualify until after this deadline, the waiver form must be submitted with the certification form. Participants who do not submit this form will not be allowed to participate.

## SELECTION AND CERTIFICATION OF STATE TEAMS

Each state team may be composed of four members except for agricultural issues, floriculture, marketing plan and parliamentary procedure. The members of a state team must be from the same chapter. Members must qualify in the career development event in which they are to participate at the national level. See chart for number of team members and number of scores used to comprise the team score.

Teams must be selected at a state or interstate career development event held between the immediate previous National FFA Convention and prior to the National FFA Convention in which they are competing.

Each entry in team or individual career development events will be charged a \$25.00 entry-processing fee, payable at certification.

The state supervisor/executive secretary of agricultural education must certify that participants are eligible. If an ineligible student is entered in any career development event, the entire team of which that student is a member shall be declared ineligible.

Certification forms will be sent each year to state supervisor/executive secretary of agricultural education through the State Guide to National FFA Activities. States must certify to the National FFA Organization 110 days prior to the National Convention that they will have teams represented in specific National FFA Career Development Events, even though team members may have not been selected. The names of all participants and alternates may be submitted later, but must be in the National FFA Center at least ten days prior to the career development event in which they are to participate.

Any additions or deletions of participants less than ten days prior to the career development event must be done at the National FFA Convention one hour prior to the time of each respective career development event orientation meeting. To certify at this time, advisors are to complete an on-site add/delete form. Memberships of those participants listed on the on-site add/delete form will be verified after the convention. If at that time, a member is found to be inactive, the team maybe disqualified. These participants must also meet all other requirements of eligibility printed in this handbook.

### Official Dress Recommendations & Number of Participants

Event	Official Dress Appropriate	Number of Contestants Allowed (per team)	Number of Scores for Team Total
Agricultural Communications	Yes	4	4
Agricultural Issues Forum	Yes	3-7	Team Score Event
Agricultural Mechanics	No	4	Top 3 Scores
Agricultural Sales	Yes	4	4
Agronomy	Yes	4	4
Creed Speaking	Yes	1	N/A
Dairy Cattle	Yes	4	Top 3 Scores
Dairy Handler	Yes	2/state	N/A
Dairy Foods	Yes	4	Top 3 Scores
Environmental & Natural Resources	Yes	4	4
Extemporaneous Speaking	Yes	1	N/A
Farm Business Management	Yes	4	Top 3 Scores
Floriculture	Yes	3	Top 3 Scores
Food Science & Technology	Yes	4	4
Forestry	No	4	Top 3 Scores
Horse	Yes	4	Top 3 Scores
Job Interview	Yes	1	N/A
Livestock	Yes	4	Top 3 Scores
Marketing Plan	Yes	3	Team Score Event
Meats Evaluation	No	4	Top 3 Scores
Nursery & Landscape	Yes	4	Top 3 Scores
Parliamentary Procedure	Yes	6	Team Score Event
Poultry	Yes	4	Top 3 Scores
Prepared Speaking	Yes	1	N/A

Please remember that all participants are required to wear complete official dress, as outlined in the National FFA Official Manual, to all award functions.

**CHECK-IN**

Participants will check-in at the national FFA convention as indicated in the annual "Program for National FFA Career Development Events". Dates, hours and place of check-in will be sent annually to the state supervisor of agricultural education and to each team advisor. All participants will be given an identification number by which they will be designated throughout the event.

**ASSISTANTS, GROUP LEADERS AND OFFICIALS**

Each state agricultural education department is encouraged to provide staff and students to help administer and conduct specific National FFA Career Development Events. States with speaking participants must provide a judge. States entering a team may recommend a person or persons to serve as an assistant in the career development event in which a team will participate. These persons may be supervisors, teacher educators or teachers of agriculture or other qualified individual. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event, after qualification for nationals has occurred. If an individual wishes to train/coach their team/individual, they must excuse themselves from the committee and event preparation for that convention year.

1. Emergency Conditions: Under emergency conditions, a state team participating in a National FFA Career Development Event may be made up of less than the required members. States must still certify teams and alternates prior to the national FFA convention, but fewer than the required number could compete if an emergency condition such as illness, death in the family or an act of God would occur. Those individuals competing would still be eligible to qualify for individual awards.
2. Event committees will strive to divide teams into groups so that no two participants from a team will be in the same group. In any case, no two members will be placed side-by-side.
3. Disqualification:
  - a. Any communication, verbal or non-verbal between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communication between team members during the team activity portion of a given career development event.
  - b. Teams arriving after the career development event has begun may be disqualified or penalized. No member substitutions may be made after the career development event begins.
  - c. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.
  - d. Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such stoppage shall deem the individuals disqualified for that section of the career development event.
4. Participants are expected to observe the National FFA Code of Ethics and the Proper Use of the FFA Jacket during the career development events. (Please see the latest edition of the Official FFA Manual.)
5. Official FFA dress is highly recommended for all participants where appropriate and is required for the awards presentation and recognition.
6. Participants or advisors will not be allowed in the career development event area as designated in the specific career development event rules. Infractions of this statement may result in team disqualification.
7. Accessibility for all students- The event superintendent will be responsible for scheduling assistance from a different state association to assist participants with impairments or for those members with limited English speaking proficiency. States must report special assistance needs at least two weeks in advance to the general superintendent of National FFA Career Development Events. Refer to phone numbers of event

superintendents from the annually distributed update or call the Teacher Services Team.

8. Continuous revisions of scoring sheets, due to computer scoring, will be necessary. Copies of any revised sheets will be sent to the state supervisor/executive secretary of agricultural education 60 days prior to the career development event.
9. Results of all National FFA Career Development Events will be released through the Educational Division, National FFA Organization office at the appropriate event award ceremonies.
10. Any local chapter seeking a waiver of a National FFA Board Policy or Procedure must submit in writing to the chapter's state FFA association under the signature of the state FFA advisor or executive secretary, to the national FFA advisor. After study by the appropriate staff, the waiver request must be submitted to the national FFA staff at least 30 days prior to the scheduled event or due date for which the waiver is requested. This policy does not supersede any current FFA policy for appeals already established for a particular FFA program.

### TEAM AND INDIVIDUAL AWARDS

The ranking of teams and individuals in each of the career development events will be on the basis of three logical groups within the total range of scores. These groups will be designated as gold emblem, silver emblem, and bronze emblem. Teams and individuals participating in each of the career development events will be rated gold, silver and bronze emblem, through a specific procedure that will be predetermined. However, officials will honor natural breaks in scores. In the final written announcement of results, teams and individuals will be ranked from top to bottom in the order of their placing. Awards will be distributed to the winning teams and individuals at award programs following the completion of the career development events.

1. All awards will be provided by a cooperating industry sponsor(s) as a Special Project, and /or by the general fund of the National FFA Foundation.
2. The team having the highest ranking in each career development event will receive an award and members will receive individual high team awards provided they are present at the time of the awards ceremony.

3. The high individual in each of the National FFA Career Development Events will be announced at the time the awards are distributed and presented with a special award.

### CAREER DEVELOPMENT EVENT SCHOLARSHIPS

1. Scholarships may be awarded in the National FFA Career Development Events, as funding is available.

Scholarships will be held for a full year beyond the student's graduation date. If the scholarship is not requested within one year after graduation from high school, the scholarship will be forfeited. Information on availability of scholarships will be sent annually along with the "Program for National FFA Career Development Events" sent to state participating teams and state agricultural education officials. Only one career development event scholarship may be awarded per student per year.

2. Additional scholarships may be available to top FFA members who have participated in National FFA Career Development Events at local, state and/or national levels through the National FFA Collegiate Scholarship Program. Students must meet the criteria for each specific area as outlined in the national scholarship application and complete the application that is mailed to each chapter in order to be considered for these scholarships.
3. Farm Business Management Career Development Event Fellows Program is for the advisors of the top two National FFA Farm Business Management Career Development Event teams. The advisor of the first place team will receive a \$1,500 award and the advisor of the 2nd place team will receive a \$1,000 award. The advisors may use the awards for a) in-service or continuing education b) farm business management instructional materials, or c) a scholarship fund for the local FFA chapter. The Fellows Awards will be awarded on an "as available" basis. Fellow's Awards may only be awarded to a FFA advisor for a total lifetime amount of \$2,500. These awards are provided by the National FFA Organization through National FFA Foundation sponsorship by the career development event sponsor.

**CAREER DEVELOPMENT EVENTS  
ADDITIONS/DELETIONS**

1. National FFA staff in cooperation with the National FFA Board of Directors is expected to be proactive in developing new or initiating changes within existing career development events to insure they meet the needs of FFA members.
2. Three years following the initiation of a new career development event, fifteen states should be participating and twenty-six states should be participating after the next three year period, in order to retain the national career development event.
3. In addition, if fifteen state supervisors/executive secretaries develop a proposal for a new career development event, the national FFA staff would conduct a study for the validity of the career development event and make a recommendation to the National FFA Board of Directors. Representatives of these states must be from each of the FFA regions. The same process may be used to eliminate a national career development event.
4. The national organization will certify National FFA Career Development Event winners for international competition when states request, with the understanding that the state team will provide their own travel expenses.
5. The National FFA Board of Directors and national officers shall approve all changes in the general plan, rules and methods of selecting winners.

**NATIONAL FFA AWARDS AND CAREER  
DEVELOPMENT EVENT ADVISORY COMMITTEE**

Purpose: To advise the National FFA Board of Directors on issues impacting both National FFA Career Development Events and Awards to ensure:

1. all activities are consistent with industry needs
2. all activities are available to all members
3. all activities are conducted openly, fairly and in a quality manner

4. cooperation among various activities occurs, to the degree possible, to promote the interconnectedness of agriculture (i.e. forestry and agricultural mechanics or farm business management and dairy or livestock) and agricultural education (classroom, SAE, FFA)
5. new and innovative activities are being put forward for consideration
6. as many students as possible have the opportunity to participate
7. a constant process of local advisor in-service on proper use of these activities as tools for learning is being championed
8. all activities are operated consistently with national FFA board policy
9. activities are conducted within available budgets approved by the FFA board and, if appropriate, FFA foundation board

Membership

1. Two members of the National FFA Board of Directors, selected by the board, one of which will be a state supervisor (preference may be given for the second position to be held by the teacher acting as the USDE representative).
2. Two members, who are agricultural education instructors, selected by National Association of Agricultural Educators, (NAAE) through a process of their choosing.
3. Two members, who are state staff, selected by National Association of Supervisors of Agricultural Education, (NASAE) through a process of their choosing.
4. Two members, who are teacher educators, selected by American Association of Agricultural Education, (AAAE) through a process of their choosing.
5. Two FFA members who are or were delegates selected by the FFA national officers through a process of their choosing.
6. One member who is a career development event superintendent selected by the CDE superintendents through a process of its choosing.

Consultants

The current superintendent of each FFA career development event area will serve as consultants.

Term

Members serve a three-year term except for the two FFA member representatives who will serve a one-year term.

Chair

The chair of the national advisory committee on awards and career development events will be the state staff member selected by the National FFA Board of Directors.

Meeting Schedule

1. Annual national convention meeting to report on the completion of activities at convention and provide input into the winter meeting agenda.
2. The annual winter meeting will allow for most of the committee's work to be conducted as a whole group and in sub-groups focused on specific issues or specific types of activities (e.g. team career development events, individual awards, chapter awards).

Costs for all official members and consultants:

- convention meeting cost is borne by each participant.
- the winter meeting cost will be borne by the National FFA Organization (Teacher Services Team budget) and the National FFA Foundation Special Project budgets for career development events and awards.

**Rules Committee on National Career Development Events**

1. The committee will meet only when needed at the National FFA Convention and will make all final decisions on interpretation of the rules and regulations of the National FFA Career Development Events. The committee will be chaired by the Awards and Events Advisory Committee chairperson who will in turn appoint a representative of the each of the following organizations: National Association of Supervisors of Agricultural Education (NASAE), National Association of Agricultural Educators (NAAE), and the American Association for Agricultural Education, (AAAE). The Teacher Services Specialist responsible for career development events will also serve. All five committee members will have one vote each.

2. The committee will meet only when needed and will make all final decisions on interpretation of the rules and regulations of the National FFA Career Development Events or awards programs.
3. The committee will resolve detailed written appeals associated only with scoring errors. Official judges' decisions are final. The announced results are the official results and awards may be duplicated as a result of the appeal.

**National FFA Career Development Event Committee Responsibilities**

The National Career Development Event Committee should:

1. broadly represent agriculture teachers, agriculture educators, subject matter specialists, and industry personnel.
2. be appointed/confirmed by the chief operating officer with authority to manage the team activities and events.
3. build on the principles of volunteerism and individual members should be recognized for their contributions.
4. elect a superintendent to a five-year term that is confirmed by the FFA chief operating officer.
5. develop and propose a three-year budget to be approved by the appropriate FFA staff subject for submission to the National FFA Board of Directors.
6. develop committee assignments cooperatively with FFA staff.
7. be structured to encourage member development within the committee and be sensitive to, and represent the needs of diverse populations and cultures.
8. be large enough to adequately manage the team activities.
9. be responsible for the identification of the number of teams eligible to participate at the national level. They should encourage equal opportunity for members of teams to participate from across the states.

### Conflict of Interest

Any career development event committee member who has a team qualify for or choose to train a team that qualifies for national competition in the event related to their committee assignment shall excuse themselves from their committee duties and event preparation for that convention year to eliminate the conflict of interest. It is the committee member's responsibility to inform the event superintendent and national FFA staff of their involvement with a team that has qualified for national competition. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event, after qualification for nationals has occurred.

# AGRICULTURAL COMMUNICATIONS

## CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

### I. EVENT RULES

1. **Team Make-up-** The event will consist of a four member team.
2. Eligible participants in the National FFA Agricultural Communications Career Development Event will be students who are regularly enrolled in agricultural education during the calendar year, have a planned course of study, or who are still in high school, but have completed all the agricultural education offered. When selected, participants must be active members of a chartered FFA chapter and the National FFA Organization. Members representing a state association may participate in the National FFA Agricultural Communications Event only once.
3. Ten copies of the communications project proposal will be due to the National FFA Organization office on or before September 15.
4. It is highly recommended that participants be in official FFA dress in each event.
5. The National FFA Agricultural Communications Career Development Event will be limited to one team per state.
6. All material will be student produced and verified by the state FFA executive secretary and/or the state FFA advisor in each state.
7. The event will include both written as well as oral communications presentations.
8. The National FFA Officers and National Board of Directors will be in charge of this event.
9. The judges will be selected from print and broadcast media, agriculture producers and other members of the agriculture communications community.

### II. EVENT FORMAT

#### A. EQUIPMENT

**Materials students must provide-** pens and pencils

**Provided:** For team presentation- Overhead projector, slide projector, easel, VCR/TV monitor; For Practicums- PC computer, tape recorder, cassettes B & W or color photographs (5 X 8) prints), wax pencils, pica poles, paper. **Note:** Teams may bring additional equipment for project presentation as long as they are able to set up and tear down equipment in the time allowed for the presentation.

#### B. TEAM ACTIVITIES

##### **Communications Project Proposal and Presentation**

Each team will prepare a communications project proposal for their chapter. The proposal will explain the communications activities planned to publicize an event/issue.

Guidance on the event/issue is presented below. **Ten copies of the proposal will be due to the National FFA Organization office on or before September 15.** At the National FFA Career Development Event, the team will make an oral presentation of the proposal.

**1. Guidelines for Proposal**

The key to producing a good communications project proposal is to select a project that is specific enough that you will be able to do a good job with it.

- a. The proposal should be a maximum of 12 double-spaced typed pages on 8.5" X 11" white bond paper using 1" margins and 12-point Time New Roman or Times as the font.
- b. Staple the proposal in upper-left hand corner. DO NOT bind or place in folders, special binders, or covers.
- c. Follow style established in the Associated Press Stylebook and Libel Manual.
- d. A cover page should give the title of the communications proposal, state, chapter name, team member names, and date.
- e. The communications project proposal should include the following sections:

- 1. Rationale for selecting the project, including background information that helps provide judges with an understanding of the project and the situation or locale where it will be implemented.
- 2. Objectives of the project (what is the project to accomplish).
- 3. Audiences to be targeted with this project.
- 4. Key messages or themes to communicate to the audiences.
- 5. Media (brochures, newspapers, signage, radio, etc.) selected to accomplish the project.
- 6. Budget to produce and place communications materials.
- 7. Criteria upon which project will be evaluated (these criteria should result in some indication of how well the project accomplishes the stated objectives).

**2. Topic for communications project proposal and presentation**

The communications project proposal and presentation will be based on the same topic. The topic will be chosen by the team from a theme of possible topics provided by National FFA. The themes of topics will rotate from year to year (see table).

YEARS	PROJECT THEME	POTENTIAL TOPICS
2003	EXISTING CHAPTER ACTIVITY	PALS, SAE, FOOD FOR AMERICA, BANQUETS, ETC.
2000,2004	INNOVATIVE AGRICULTURAL PRACTICES, MANAGEMENT OR MARKETING TOOLS	FINANCIAL RISK MANAGEMENT USING OPTIONS AND OR FUTURES, EFFICIENT WATER USE WITH IRRIGATION SYSTEMS IN YOUR COUNTY, ROTATIONAL CROPPING SYSTEMS FOR PEST CONTROL, SUSTAINABLE AGRICULTURE, ETC.
2001,2005	LOCALIZED OR NATIONAL EVENTS	NATIONAL AG. WEEK, EARTH DAY, VOCATIONAL EDUCATION WEEK, FFA WEEK, ETC.
2002,2006	AGRICULTURE OR CONSUMER ISSUES	WATER QUALITY IN YOUR COUNTY AND AGRICULTURAL STRESSORS, SAFE FOOD HANDLING IN THE HOME, SAFE AGRICULTURAL PRACTICES AT HARVEST, PROMOTING AGRICULTURE LITERACY, ETC.

### 3. Communications project presentation

The team will be allowed 15 minutes to present their communications project to a panel of judges. Five points will be deducted for each major fraction of a minute, over the 15 minutes allowed for the presentation. Following the presentation, judges will be allowed five minutes to ask questions. When making the presentation to the judges, the team should present based on the following:

- The presentation should follow and cover all of the items listed in the Guidelines for Proposal.
- Include examples of materials prepared during the execution of the proposal (ex. brochures, newsletters, news releases, photos, graphics, videos, radio tapes, etc.)
- Team members should not rely solely on equipment. Each team member must participate in the presentation.

## C) INDIVIDUAL ACTIVITIES

### 1. Tests

#### a. Editing exercise

Because editing is a critical skill for all communicators, each team member will complete an editing exercise. They will be given a printed document that contains 25 mistakes. In correcting the mistakes, team members will be required to use correct proofreader's marks (see Associated Press Stylebook and Libel Manual). Style, grammar, punctuation and spelling mistakes will be included. Team members will NOT be able to use the style manual or a dictionary during this exercise.

#### b. Communications quiz

Each team member will complete a quiz that covers basic elements important to the skill areas of journalistic writing and broadcasting, public relations writing, and graphic design. Five questions will be written for each segment, which includes broadcast, public relations, news, visuals, and ethics of communication. Team members will NOT be able to use the style manual or a dictionary during this exercise.

### 2. Practicums

The practicums will consist of four individual events. Each team should assign a member to one of the following activities **PRIOR** to arriving at the national event:

1. Organizing and writing news story;
2. Organizing and writing a press release;
3. Developing and carrying out a broadcast; or
4. Preparing a graphic and photo editing for a news story.

All teams will meet in a central location for an orientation and press conference. Teams will be divided so that all broadcasters sit together, all news writers sit together, all press release writers sit together and all graphic designers sit together. All team members will be given an orientation at the beginning of the practicums to last no more than 10 minutes.

Following the orientation, the press conference will be held. Each team member will receive a press packet with background information on the agricultural topic and expert to use during the event. An expert will speak on a timely agricultural topic for 20 minutes. Students will be provided with paper to take notes if they wish. After the 20-minute presentation, the broadcasters and graphic designers will be dismissed to a different area to complete their assigned tasks. (See detailed descriptions of assignments below.)

The news writers and press release writers will then be involved in a 10-minute question and answer period with the expert (speaker). Only the news writers will be allowed to ask the questions. Each news writer will stand to be recognized before asking a question. News writers may ask more than one question however, the expert will attempt to address questions from as many different participants as possible. All news writers and press release writers may take notes during the question and answer period, but only news writers will be allowed to ask questions of the expert. Tape recorders will not be allowed during this portion of the event.

Upon completion of the 10-minute question and answer session, the news writers and press release writers will be dismissed to a computer room to complete their assigned tasks.

### Description of each team member's assignment

#### *News writers*

Students are to write a news story based on information gathered at the news conference. It should be written for an agriculture publication (agriculture producer) audience. The story should have a minimum of 250 words and follow news or inverted pyramid style. It should have a strong focus and lead (opening paragraph). The story should provide answers to who, what, when, where and why. Students also should write a headline for their story. Each writer can use notes from the press conference, the Q&A session and from information in the press packet. After writers arrive in their designated room, they will have 60 minutes to complete their task. The story will be word processed by the student on a computer, printed out and turned in to be scored.

Judging will be based on written communication skills, accuracy, organization, style, creativity and grammar.

**Press release writers**

Each press release writer will use the press packet and the information gathered in the press conference to write a 200- to 300-word press release excluding the words in the header. The release should be written as if the expert’s company or organization was distributing it. The release will be word processed on a computer, printed out and turned in to be scored. Once the press release writers arrive in the computer room, they will have 60 minutes to complete the task.

**Broadcasters**

Each broadcaster will use the press packet and information that was gathered in the press conference to write and carry out a two-minute radio broadcast. The message should be suitable to be aired on a radio station or radio network. After the participants has developed the story, he or she will use a standard cassette and tape recorder to broadcast the story. The cassette with the recorded broadcast will be turned in to be evaluated. Students will be able to listen to their recording prior to turning in the cassette if time allows. All tape recorders will be the same; therefore, recording quality will not be a factor in the evaluation process. Broadcasters will also develop and turn in five written questions that he or she would have asked the expert if they were given the opportunity to interview the expert after the press conference. These written questions will be turned in along with the cassette once the student has completed the tasks. After the broadcasters arrive in their designated room, they will have 60 minutes to complete their tasks.

**Graphic Designers**

Each graphic designer will complete a graphic art, photo editing and photo caption writing exercise. Effective communication or information sharing through visual tools is the objective. After graphic designers arrive in their designated room, they will have 60 minutes to complete their two tasks. Each of these tasks is described below.

Graphic art exercise--Each student creates a chart or table on a computer that illustrates numeric data from the press conference. A press packet (including news release and data) is provided for each artist. Students are judged on their graphic art skill, understanding and use of statistics and creativity. Students will receive 11

x 17 blue-line graph paper to layout their final design. The design should be constructed as a front-page newspaper layout.

Photo editing exercise--Students will receive a variety of black & white photos or color photos (5x7 prints) and will be asked to select the best photo to use in a story based on the news conference. Each student should make photo-cropping suggestions by marking the photo borders with a wax pencil. Each student is to give oral reasons on why they selected a particular photo. These reasons should include the photo's best qualities, its visual appeal to readers, and how it helps communicate the story's message.

Photo caption writing exercise--Students are to write a two-line caption (approximately 25 words) for their selected photo. Students will be judged on accuracy of information, grammar, brevity, clarity and creativity of captions.

**OVERALL CDE TIMELINE AND SCHEDULE**

*(Exact times will be provided prior to each convention)*

1. Communication plan presentation — 15 minutes
  2. Tests (editing exercise and quiz) — 30 minutes
  3. Practicum — 1 hour and 40 minutes
- Total = 2 hour 25 minutes

**Day 1 Schedule**

Coaches’ Orientation

**Day 2 Schedule**

Morning Schedule

Orientation  
 Communications Quiz  
 Editing Exercise  
 Press Conference  
 Rotating groups- Practicums

Afternoon Schedule

Communications Project Presentations

### III. SCORING

#### COMMUNICATION PROJECT PROPOSAL

Rationale	25
Objectives of project	25
Target audiences to address	20
Key messages	15
Media selection	20
Budget	10
Evaluation criteria	15
Grammar, punctuation, spelling, style	20
<b>TOTAL</b>	<b>150</b>

#### COMMUNICATIONS PROJECT PRESENTATION

Professionalism	10
appearance (official dress), poise and posture, attitude/confidence, demeanor, ethical concerns	
Knowledge of Subject	15
Power of Expression/Verbal Skills	30
directness, sincerity, emphasis, verbal communication with judges	
grammar, voice (quality, pitch, articulation, pronunciation, force)	
Presentation Skills	20
effectiveness of visual aids.	
use of visual aids, stage presence and organization of presentation following a logical order and flow.	
Questions and Answers	50
ability to answer questions on the presentations which are asked by judges indicating originality, familiarity with subject and ability to think quickly.	
Supporting Evidence	10
examples that document the materials used to develop the project	
Creativity and Innovation	15
<b>PRESENTATION TOTAL</b>	<b>150</b>

#### TESTS

Communications Quiz (25 points per team member)	100
Editing Exercise (25 points per team member)	100
<b>TEST TOTAL</b>	<b>200</b>

#### PRACTICUMS

##### News writer story

Lead/focus	20
Organization, brevity, conciseness and clarity	15
Correct style	10
Accuracy of information and quotes	20
Creativity	10
Headline	10
Grammar, spelling, punctuation, word choice	15
<b>SUBTOTAL</b>	<b>100</b>

##### Press release writer story

Lead/focus	20
Organization, brevity, concise and clarity	15
Correct style	10
Accuracy of information and quotes	15
Creativity	10
Header/headline	10
Grammar, spelling, punctuation, word choice	10
Company or product information	10
<b>SUBTOTAL</b>	<b>100</b>

##### Broadcaster recording

Voice quality	10
Power of expression	10
Lead/focus	15
Clarity of communication	10
Organization, concise and brevity	10
Creativity	10
Accuracy of information and quotes	15
Quality of five written follow-up questions	20
<b>SUBTOTAL</b>	<b>100</b>

##### Graphic Designer exercises

Graphic art skill	20
Understanding and use of statistics	15
Creativity	15
Photo editing	20
Reasons (critical thinking)	15
Photo caption-writing	15
<b>SUBTOTAL</b>	<b>100</b>

#### **TOTAL PRACTICUM SCORE** **400**

**TOTAL TEAM SCORE POSSIBLE**

Practicum scores	400
Communications project proposal	150
Project presentation	150
Test scores	200
<b>TOTAL POSSIBLE</b>	<b>900</b>

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**IV. TIEBREAKERS**

1. Team tiebreakers will be settled in the following order:
  - a. Proposal score
  - b. Practicum scores
  - c. Presentation score
  
2. Individuals tiebreakers will be settled in the following order:
  - a. Practicum score
  - b. Quiz score
  - c. Editing exercise score

**V. AWARDS**

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

**VI. REFERENCES**

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

*Associated Press Stylebook and Libel Manual*

Calver, P. (editor). *The Communicator's Handbook*. 4th edition. Maupin House, Gainesville, FL 32607  
<http://www.maupinhouse.com>

Strunk and White (1979), *The Elements of Style*, Allyn & Bacon.

Ability to use word processing and spreadsheet software

# Agricultural Communications

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

## Communication Project Proposal Scorecard

	Possible Score	Team Score
Rationale	25	
Objectives of project	25	
Target audiences to address	20	
Key Messages	15	
Media Selection	20	
Budget	10	
Evaluation	15	
Grammar, punctuation, spelling, style	20	
<b>Total Possible:</b>	<b>150</b>	

**Team Score:**

# Agricultural Communications

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

## Communication Project Presentation Scorecard

	Possible Score	Team Score
<b>Professionalism</b> Appearance, poise and posture, attitude/confidence, demeanor, ethical concerns	10	
<b>Knowledge of Subject</b>	15	
<b>Power of Expression/Verbal Skills</b> Directness, sincerity, emphasis grammar, voice (quality, pitch, articulation, pronunciation, force)	30	
<b>Presentation Skills</b> Effectiveness of visual aids. Use of visual aids, stage presence and organization; presentation follows a logical order and flow.	20	
<b>Questions and Answers</b> Ability to answer judge's questions on the presentation. Responses indicate originality, familiarity with subject and ability to think quickly.	50	
<b>Supporting Evidence</b> Examples that document the materials used to develop the project	10	
<b>Creativity and Innovation</b>	10	
<b>Gross Total Score:</b>	150	
Less 5 points per each major fraction of a minute over the 15 minute time limit		(                      )

Team Score:

# AGRICULTURAL ISSUES FORUM

CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

## I. OBJECTIVES

1. To provide an opportunity to expose a wide variety of students to the selection, research, planning and presentation of an agricultural issue.
2. To acquire knowledge and skills in community leadership for present and future use.
3. To become knowledgeable of, and familiar with a variety of local, state, national and international issues facing agriculture.
4. To understand the principles and fundamentals of agricultural issue analysis.
5. To further the awareness of agricultural issues in the local community.
6. To promote integration of agricultural issue analysis in local school academic subject matter areas.
7. To promote career choices by providing an opportunity for individuals to become acquainted with professionals in the industry.
8. To foster teamwork, leadership and communication skills.

## II. EVENT RULES

1. **Team make-up-** A minimum of three and a maximum of seven students who are actively participating, orally presenting, and available to answer judges' questions. To be eligible for scholarships and awards each student must take an active role in the oral presentation. This includes active participation in the oral presentation and making themselves available for questions from the judges in all rounds of competition.
2. Presentations may include official FFA dress, costumes, props, skits, and other creative paraphernalia.
3. Guidelines of eligibility for the Agricultural Issues Forum will be consistent with other National Career Development Events. Teams will be certified by respective state staff from authentic state guide forms. Signatures of community representatives must be on registration forms. If there is not a state qualifying event the date on which the state appoints the team to be the representative to the National FFA Agricultural Issues Forum will be considered as the state qualifying date. This must be substantiated by the State FFA Advisor or other authorized individual from the State FFA Association.
4. A minimum of three competent and unbiased judges will be provided. They will be instructed not to take sides on the issue(s). Professors and industry representatives are recommended. The superintendent of this CDE will adequately prepare the judges before the event competition.

5. Seating of teams in the preliminary rounds will be done by the event superintendent in a fair and impartial manner as determined by the event committee.

### III. EVENT FORMAT

1. **EQUIPMENT PROVIDED**- Equipment provided by the event superintendent includes: overhead projector, TV/VCR, easel, slide projector and screen. Other equipment is allowed, but the presenting team must provide it.

2. Each team will conduct a presentation on the issue developed and presented at the local level.

3. The issue will come from one of the following seven agricultural issue topic areas as listed in the Focusing on Agricultural Issues instructional materials:

- a. Environmental Issues
- b. Agricultural Technology Issues
- c. Animal Issues
- d. Agricultural Career Issues
- e. Economy and Trade Issues
- f. Agricultural Policy Issues
- g. Food Safety Issues

4. The same agricultural issue presentation and portfolio will not be used in subsequent years by the same chapter/advisor.

5. Research on the topic must be current and students must be involved in all the research of the topic and development of the portfolio.

6. The portfolio should include items described in a, b, and c below, and will be limited to ten pages single sided or five pages double sided maximum not including cover page. The cover page will include the title of the issue, name, address and phone number of the chapter. A maximum of ten (10) points will be deducted for exceeding the maximum amount of pages and/or for not including the cover page containing required information. Ten copies of the portfolio must be sent to the Career Development Event Specialist, National FFA Center by September 15th prior to the national FFA convention at which the issue is to be presented.

- a) A maximum of two pages of the portfolio will include a summary of the issue, answering the questions that are most relevant to your topic.

- List course(s) in which instruction occurred including the number of students involved in the instruction of the issue. (See Objective 6.)
- Why is this issue important now?
- What is the nature of the issue?
- Who is involved in the issue?
- How can the issue be defined?
- What is the historical background of the issue?
- What caused the issue?
- What are the risks?
- What are the benefits?
- Is there strong disagreement on how the issue should be solved?

- b) A bibliography of all resources and references cited which may include personal interviews and any other supporting material.

- c) Indicate date of state competition and provide documentation that local forum(s) occurred prior to state qualifying competition such as:

- Letters from organizations
- News articles
- Photos (3" x 5" or 4" x 6")
- Scrapbook

- Please state when, where and to whom the local forum(s) was presented to and indicate how many community members were in attendance at the local forum(s).
- Local forum presentations given after having won the state competition are encouraged, but will not count towards the portfolio score.
- Portfolio judges may take into consideration the quality and quantity of presentations made to audiences outside of the school. No points will be awarded for school presentations to teachers and students. In addition, no points shall be awarded for forums presented as any part of a local or state FFA competition.

7. **Time Limits:** Five minutes will be allowed for set up. The presentation will be a maximum of 15 minutes in length. The presenters will receive a signal at 10 minutes and at 14 minutes. At 15 minutes, the timekeeper will announce that time is up, and the presentation will

end. A maximum of 5 minutes for questions and answers will be allotted. Questions and answers will terminate at the end of 5 minutes. Five minutes will be allowed for take down.

8. The presentations will be designed to be viewed by the judges. The audience at-large will not be of concern to the presenters.
9. The judges may ask questions of all individuals of the presenting team. Each individual is encouraged to respond to at least one question from the judges.

#### **IV. SCORING**

1. Introduction, Pro, Con and Summary (20 points each, 80 points total)
2. Overall presentation (participation of each member of the team, quality and power of the presentations, creativity, stage presence) ( 20 points)
3. Questions (25 points)
4. Portfolio: 10 single sided pages maximum or 5 double sided pages. (Three parts, 25 points total)
  - Summary of the Issue, 2 pages maximum (5 points).
  - Bibliography (5 points).
  - Documentation of local forums (15 points).
  - Please state when, where, and to whom the local forum(s) was presented to.
  - Maximum of 10 points will be deducted for exceeding the maximum number of pages and/or not including cover page containing required information

Prior to the event the portfolios will be judged and scored by qualified individuals using the portfolio score sheet. Portfolio scores will be averaged and supplied to the presentation judges after they have scored the presentation. Portfolio comment cards will be completed by portfolio judges and presented to the teams at the awards function. Presentation judges will be furnished with copies of the team portfolio, which they will use to formulate questions.

5. Judges' ranking will be used to place teams.

6. Participants shall be ranked in numerical order on the basis of the final score to be determined by each judge without consultation. The judges' ranking of each participant then shall be added, and the winner will be that participant whose total ranking is the lowest. Other placings will be determined in the same manner (low rank method of selection)

#### **V. TIEBREAKERS**

Ties will be broken based on the greatest number of low ranks. Team low ranks will be counted and the team with the greatest number of low ranks will be declared the winner. If a tie still exists, then the event superintendent will rank the team's response to questions. The team with the greatest number of low ranks from the response to question will be declared the winner. If a tie still exists then the team's raw scores will be totaled. The team with the greatest total of raw points will be declared the winner.

#### **VI. AWARDS**

Awards will be presented at an awards ceremony. Plaques and scholarships will be awarded to the top four teams, based on the current year's availability. Plaques and medals will be presented to all teams participating, based on ranking. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation, Inc.

#### **VII. REFERENCES**

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

Focusing on Agricultural Issues Instructional Materials, Agricultural Education Resources Catalog, National FFA Organization

Global Vision Instructional Materials, Agricultural Education Resources Catalog, National FFA Organization

Agricultural Issues: Food Safety Video, Agricultural Education Resources Catalog, National FFA Organization

Agricultural Issues: Ground Water Safety Video, Agricultural Education Resources Catalog, National FFA Organization

## Agricultural Issues Forum

Name: \_\_\_\_\_ State: \_\_\_\_\_

The *Portfolio* should include items described in Section 3a, 3b and 3c of the Guidelines, and is limited to ten pages single-sided [5 pages double-sided] maximum.

Ten copies of the Portfolio must be sent to the National FFA Center **by September 15th**. Addressed to “**CDE Specialist – AI Portfolio**”.

### Portfolio

	Possible Points	15 – 11	10 – 6	5 – 1
1. Summary of the Issue (2 pages maximum)	5			
2. Bibliography	5			
3. Local Forums	15			
<b>Subtotal:</b>	<b>25</b>			

- Deduction for exceeding the maximum number of pages and incomplete cover page [10 pts. Max]:

Team Sub Total::
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Deduction: (                    )
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Team Score:
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Judge's signature \_\_\_\_\_

# AGRICULTURAL MECHANICS

CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

## I. PURPOSE

Technological advances in America continue to influence the way students must prepare for their futures. Students entering the workforce need a strong knowledge base and the ability to comprehend the interaction of complex systems. Employers want productive workers and managers that can access and use a broad range of information. The most sought after employees are those who communicate effectively, continue to stay current with modern technology, and work successfully as individuals and as team members. Students with these skills and abilities are more competitive in the job market, receive financial rewards, and are selected for advancement.

An agricultural mechanics education is comprised of strong technical content and complimented by the development of practical, hands-on skills. The subject matter areas and skill development practices have been grouped into five 'systems' areas, so named because of the complex interaction and synergistic processes common to agriculture mechanics. The term 'system' is used to emphasize the interactive relationship between each area of agricultural mechanics. These five systems areas are described and examples appear on the pages that follow.

Each agricultural mechanics activity is in response to a problem or need encountered in the workplace. The solving

of such problems is dependent upon how each decision or solution, imposed on one component, will influence the other system components. Solving one component of a problem without using a 'systems approach' can, and often does, result in additional problems. An example of where this has occurred is observed in the many obstacles that agricultural producers currently face regarding environmental pollution, ground water contamination, and stricter governmental regulations. Decisions and solutions made earlier in this century have impacted the environment negatively and resulted in a new set of problems.

The National FFA Agricultural Mechanics Career Development Event recognizes students with agricultural mechanics competencies important to the modern workplace. The technical content and required skills continue to include all traditional areas of agricultural mechanics. Additionally, the operation of modern equipment, the application of new management strategies, and the mastering of advanced technologies are increasingly emphasized. This career development event selects and awards those students and teams that demonstrate: (1) mastery of the subject matter and skills common to the systems areas, (2) effective communication skills, (3) superior problem solving techniques, (4) an understanding of modern technology, and (5) the ability to function as team members working together, and as individuals working alone.

**Information specific to each annual event is available on the National FFA Agricultural Mechanics Event web page at <<http://web.missouri.edu/~pavt0689/natcon.html>>. This web site is updated in June, August, and November of each year.**

## II. EVENT FORMAT

### A. TEAM MAKE-UP

Teams may consist of three or four members. Team ranking is determined by combining the scores of the top three students from each team. Teams that for whatever reason, have fewer than three members are not eligible for team awards, but students may receive individual awards.

### B. EQUIPMENT

#### 1. Needed- Safety Materials Students Must Provide

Each event participant must adhere to the safe practices and work habits appropriate when performing required activities. Participants are responsible and must provide all personal safety equipment including:

##### a. *Industrial-quality eye protection*

**INDIVIDUALS MUST WEAR STYLE B (SEE BELOW) INDUSTRIAL-QUALITY EYE PROTECTION during the team activity and the skill/problem solving activities.** Those with prescription eyewear that is not Style B must also wear safety glasses or goggles while participating in this event. Safety glasses do not have to be worn while completing the written exam. Acceptable spectacles or goggles must adhere to the American National Standard Practice for Occupational and Education Eye and Face Protection, Z87.1-1979 (or Z87.1-1968) and revisions approved by ANSI. Descriptions of style A, B, and C Industrial Quality Eye Protection are as follows:

**Style A are NOT ACCEPTABLE for use in this event.** These are safety spectacles without side shields. They are for limited-hazard use requiring only frontal protection. The addition of accessory side shields that are not firmly secured does not upgrade Style A to a Style B or C.

**Style B.** Safety spectacles with wire mesh, perforated plastic or non-perforated side shields. The side shields shall be tapered, with an anatomical periphery extending at least halfway around the circumference of the lens frame. Industrial-quality eye protection for those not wearing prescription glasses shall be Style B.

**Style C are NOT ACCEPTABLE for use in this event.** Safety spectacles with semi- or flat-fold shield that must be firmly secured to the frame. Style C glasses do not provide maximum protection from the top and bottom angles.

##### b. *Clothing*

Each individual shall furnish and wear appropriate clothing such as long pants and long sleeved cotton shirt, coveralls, etc. for this event. Clothing must be in good repair and fit properly. Oversized or loose fitting clothing is dangerous around agricultural equipment and is not allowed. Long-sleeves must be worn when welding or oxy-fuel cutting.

##### c. *Other Materials*

Each participant must have a clipboard, two sharpened No. 2 pencils, and an electronic calculator. Calculators used in this event should be battery operated and operate in silence.

#### 2. Provided- Specialized safety equipment

- a. Necessary equipment such as helmets, shields, gloves, welding leathers, hearing protection devices, etc. will be provided by the National FFA Agricultural Mechanics Career Development Event Committee.
- b. All tools and equipment will be furnished for the event. Individuals are allowed to use only the tools and equipment furnished by the national event committee. Personal computers will be provided for the team activity and occasionally for the problem-solving/skills activities. If a team member has special needs related to participation in event, it is the advisor/teacher's responsibility to contact the respective state FFA staff, to make arrangements for the necessary equipment or accommodations. It is then the responsibility of the state FFA staff to notify the National FFA Organization CDE staff, two weeks prior to the national event, in order to assure the special needs request is being accommodated. (i.e., "special" or "modified" equipment to accommodate a person who is very small or very large in frame size or has other physical needs that prevents traditional equipment from working/fitting properly.)

### C. EVENT AREAS

The National FFA Agricultural Mechanics Career Development Event is divided into the following five systems areas. Each system includes a broad range of information and performance skills common to agricultural mechanics.

1. Machinery and Equipment Systems: repair and maintenance, materials handling, processing, adjustments, fabrication, maintenance and repair
2. Industry and Marketing Systems: customer relations, accounting, communication, economics, service, sales, reading and interpreting regulations, safety, operating instructions, manufacturer's recommendations
3. Energy Systems: mechanical power, electrical power, chemical power, wind power, solar power, engine operation, maintenance, trouble-shooting, repair
4. Structural Systems: structures, storage, concrete, masonry, plumbing, construction, building materials, ventilation, heating, air conditioning
5. Environmental-Natural Resource Systems: water quality, sustainable agricultural practices, soil and water conservation, waste handling

### D. TEAM ACTIVITIES

#### Team problem solving activity

The individuals on each state team will work together and be evaluated as a team while solving complex, multi-system agricultural problems. The problem scenario is presented to the team on the day of the events and members utilize the materials and equipment provided to undertake and prepare a written, computer mechanics generated solution. Teams organize themselves, assigning duties and completing tasks together or separately depending on individual skills and abilities. Each team receives a score and each team member receives one-third of the total team score.

### E. INDIVIDUAL ACTIVITIES

#### 1. Individual problem solving and skill development activities

Each student is individually evaluated in each of the five systems areas. The specific activities occurring in each event are not publicized prior to the event. Each student is allowed 20 minutes to complete each of the five activities (100 minutes total).

#### 2. Written examination

Each student completes an examination that consists of 100 multiple-choice questions. There are 20 questions from each of the five agricultural mechanics systems areas. Students will have 70 minutes to complete this portion of the career development event.

### F. TIMELINE AND SCHEDULE

#### 1. This event is conducted on two consecutive days and activities are completed as follows:

##### Wednesday

Team problem solving activities	120 minutes
Written examination	70 minutes

##### Thursday

Problem solving and/or skills (5 activities, 20 minutes each)	100 minutes
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Team advisors and members must not plan other activities for Wednesday or Thursday. Students participate in the event a few hours each day, but teams must be available to complete the event activities throughout each day depending on the rotation schedule. If a team or team member has a schedule conflict because of a FFA recognition ceremony, the team advisor should notify the event superintendent during on-site registration.

### SCHEDULE OF THEME ANNOUNCEMENT

Agricultural mechanics theme for the career development event will be selected one year in advance. This information is published and distributed through the National FFA Organization, and posted at <http://web.missouri.edu/~pavt0689/natcon.html>, the agricultural mechanics web site. The theme for each year will be determined by the National FFA Agricultural Mechanics Career Development Event Committee. The event superintendent will notify National FFA Headquarters of the theme selected for the next year's event following the completion of the current year's event.

The specific theme for each year is posted on the web site during November of the previous year and information specific to each year's event is updated periodically throughout the year. Updates generally occur during June and August. The schedule for announcing event information and details on equipment selection is governed by equipment availability and late changes by equipment manufacturers, dealers, and contributors. It is the committee's hope that the theme examples listed below will provide direction for students

and their advisors. This short list should not stifle or limit the learning or instructional process as students and advisors prepare themselves to solve integrated system problems in the workplace of today and tomorrow.

### THEMES

The schedule for agricultural mechanics themes is:

Animal Production Systems	2001
Materials Handling Systems	2002
Processing Systems	2003
Plant Production Systems	2004
Integrated Pest Management	2005

An example of the integrated pest management theme appears on page 42. This example illustrates the complex interaction between systems in a typical theme. An individual solving a pesticide application problem must consider numerous variables and make a variety of decisions. The following list includes some of the systems competencies needed during the planning, preparation, and implementation of the problem solution. Many other competencies exist and identical competencies may be required in more than one system.

**Machinery and Equipment Systems-** application and equipment calibration, and nozzle selection, equipment testing and maintenance

**Industry and Marketing Systems-** mixing, loading, and transport safety, economics, understanding and following label instructions, governmental regulations

**Energy Systems-** power requirements, variable rate applications, and electronically controlled equipment, and valves, pumps, and pressure regulators

**Structural Systems-** storage, mixing and loading requirements, fire safety, temperature control, ventilation, construction requirements

**Environmental and Natural Resource Systems-** pesticide and pesticide container disposal, pesticide handling, drift control, impact on non-target plants, animals, and insects

### III. SCORING

Event participants are evaluated as follows:

#### INDIVIDUAL SCORING

Written examination	100
Individual activities (5 @ 30 points each)	150
Team activity (1/3 of total team score)	83.3
<b>Total Possible Individual Score</b>	<b>333.3</b>

#### TEAM SCORING

Top three written examinations	300
Individual activities for top three	450
Team activity	250
<b>Total Possible Team Score (top three)</b>	<b>1000</b>

### IV. TIEBREAKERS

The team score for the event will be determined by summing the points earned by the top-three team members. The following activities are used to break a tie between teams or individuals. The win goes to the individual or team with the highest written examination score(s). If still tied, the win goes to the highest problem-solving/skill scores. If still tied, the win goes to the highest team problem-solving score.

### V. AWARDS

The top five individuals and the top five teams in each of the five systems areas will be recognized with a certificate. The scores used to award this recognition include the exam questions and individual problem-solving/skill activity associated with each system area.

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

### VI. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The goal of the National FFA Agricultural Mechanics Career Development Event is to guide and promote quality instructional programs in agricultural mechanics. The following list contains references that may prove helpful during event preparation. The multiple-choice test questions are written to be generic in nature and are selected from a variety of sources. It is the intent of the national event committee to

reflect current technological practices, common to the agricultural production industry.

FOS. John Deere.

*Agricultural Power and Machinery.* McGraw-Hill.

*Mechanics in Agriculture.* Interstate Publishers.

*Agricultural Mechanics Fundamentals and Applications.* Delmar Publishers.

*Modern Agricultural Mechanics.* Interstate Printers and Publishers.

*Developing Shop Safety Skills.* American Association for Vocational Instructional Materials.

*Power Tool Safety and Operation.* Hobar.

*Agricultural Mechanics I Lesson Plans.* UMC-IML.

*Agricultural Mechanics II Lesson Plans.* UMC-IML

*Agricultural Buildings and Structures.* Reston Publications.

*Practical Farm Buildings.* Interstate Publishers.

*National Electrical Code (1993 edition).* NFPA.

*Agricultural Structures, Volumes I and II.* UMC-IML.

*National FFA Agricultural Mechanics web site:*

<http://web.missouri.edu/~pavt0689/natcon.html>

## VII. EXAMPLES

### 1. EVENT-RELATED COMPETENCIES

The following list of statements with specific understandings and performances are provided as examples for the systems areas identified. Examination questions are primarily developed from "problem solving" categories. The "skills" categories are the basis for performance activities. Problem-solving activities are developed from both "problem solving" and "skills" categories. In each systems area, the requirements for effective communication, problem solving activities, and the application of modern technology - specifically computers and computer software - are strongly emphasized. Industry has recently identified important skills, abilities and competencies needed by new employees. These important attributes are described following the list of system competencies

### MACHINERY/EQUIPMENT SYSTEMS COMPETENCIES

#### Problem Solving

1. Identify safe tractor operation practices for field and highway conditions.

2. Identify the recommended service and maintenance operations from the operator's manual.
3. Select lubricants for machinery and equipment.
4. Identify functions of machinery components.
5. Identify parts and functions of hydraulic systems.
6. Identify and compute harvest losses.
7. Prepare machinery for storage.
8. Identify and select reduced tillage and conservation tillage equipment.
9. Explain principles of machinery management.
10. Describe functions of chemical application, fertilizing, harvesting, materials handling, processing, planting, seeding, and tillage equipment.
11. Select arc welding machines and accessories.
12. Read drawings and welding symbols.
13. Control distortion in arc welding.
14. Select appropriate electrodes and wires.
15. Select hard surfacing alloys.
16. Prepare materials and equipment for arc welding.
17. Test weld quality and strength.
18. Select shielding gases.
19. Describe the science of the welding processes.
20. Select gas welding, plasma arc and cutting equipment and supplies.
21. Assemble gas welding, plasma arc and cutting equipment.
22. Check equipment for leaks.
23. Select welding rods and fluxes.
24. Select hard surfacing alloys
25. Start-up and shut down of welding equipment.
26. Select shielding gases.
27. Describe the science of welding and cutting processes.
28. Describe cylinder sizes and gas flow extraction rates. Calculate the volume of acetylene that can be delivered per cylinder per hour.
29. Explain the functions of flashback arresters and reverse flow check valves.
30. Identify appropriate shapes of tool and equipment cutting edges.
31. Select abrasives for grinding and sharpening.
32. Describe the application of simple machines to cutting edges.
33. Identify safe adjustment [level] on power equipment.
34. Identify kinds of metal used in tool construction.
35. Identify various types and shapes of metals.
36. Select soldering equipment and tools.
37. Prepare metals for soldering.
38. Identify hand metal working tools by types and sizes.
39. Determine tap and drill sizes.
40. Select files and saw blades.
41. Read metal working plans and prints.

42. Identify metal alloys and their strength.
43. Identify and select power shears, benders, brakes and saws.
44. Calculate materials costs.
45. Identify pipe, valves and fittings by type.
46. Select pipe threading and cutting tools.
47. Select types of pipe and tubing.
48. Calculate lengths of pipe.
49. Joining dissimilar plumbing materials.
50. Select pipe sizes to meet pressure and flow requirements.
51. Select valves and controllers for turf and drip irrigation systems.
52. Identify and select pipe sealants.
53. Identify characteristics and applications of fiberglass and plastic.
54. Identify types of damage that can occur to fiberglass and plastic.
55. Identify repair procedures and techniques.
56. Select repair material needed for specific jobs.
57. Identify the appropriate tools to use when welding plastics.
58. Identify the types and properties of plastics.

### Skills

1. Check and adjust driveline components.
2. Adjust equipment hitches and drives.
3. Install, adjust and service belt and chain drives.
4. Select and use test equipment including meters, tachometers and timing devices to determine proper machine operation.
5. Adjust and/or calibrate chemical application, seeding, fertilizing, harvesting, processing and materials handling machinery.
6. Operate, test, and maintain machine systems.
7. Install, adjust and evaluate machine systems.
8. Inflate tires to proper air pressure to carry the heaviest load.
9. Adjust equipment to field and crop condition.
10. Identify different types of metals.
11. Lay out and prepare metal for arc welding.
12. Recommending metals based on load bearing strength
13. Weld basic joints in all positions.
14. Join pipe for welding.
15. Prepare for and apply hard surfacing alloys.
16. Adjust cutting machines for different metals, joints and thickness.
17. Start-up and shut down for welding equipment.
18. Light and adjust the torch flame for specific welding or cutting operations.
19. Lay out and prepare metal for welding or cutting.
20. Fuse and braze welding basic joints on mild steel and cast iron.
21. Cut mild steel, including pipe, all shapes.
22. Join steel pipe, tubing or shapes by welding.
23. Estimate and calculate welding materials costs.
24. Adjust machines for various types of thickness of metal.
25. Identify the type of metals used in agricultural instruction.
26. Cut metal with plasma cutting unit.
27. Prepare grinding and sharpening equipment.
28. Recondition hand tools such as hammers, twist drills, chisels, punches and screwdrivers.
29. Recondition keen edge wood cutting tools.
30. Recondition keen edge metal cutting tools.
31. Recondition chain saw, horticultural and turf cutting tools.
32. Recondition rotary lawn mower blades.
33. Adjust bed knife on reel mowers.
34. Solder copper joints and sheet metal.
35. Solder electrical connections.
36. Join metals with appropriate fasteners.
37. Cut threads with taps and dies.
38. Lay out and drill holes with twist drill.
39. Operate power tools such as nibblers, drills, and saws.
40. Operate hand tools such as saws and files.
41. Bend sheet and strap steel to angles or shapes.
42. Repair damaged threads.
43. Select appropriate metals for projects (strength).
44. Shape hot and cold metals using power shears, benders, brakes and saws.
45. Cut and assemble plastic pipe.
46. Cut, thread and assemble steel pipe.
47. Connect flare and compression fittings.
48. Solder copper fittings and tubing.
49. Assemble dissimilar plumbing materials.
50. Installing and setting programmable timers.
51. Select tools and materials for specific repair jobs.
52. Repair structural or cosmetic damage using proper materials.
53. Select and use appropriate safety equipment.
54. Fuse plastic parts using plastic welding processes.
55. Construct plastic projects.
56. Compile thermoplastic welds.
57. Weld plastic using hot air method.
58. Identify the types of plastics to be welded.
59. Describe the methods of welding plastics.
60. Select and use plastic welding equipment.

6. Construct trusses with different building materials.
7. Install composition shingles, metal and fiberglass roofing materials.
8. Apply paint and other finishing materials.
9. Prepare a site for concrete and masonry construction.
10. Construct forms.
11. Calculate concrete or mortar mix.
12. Determine moisture content in sand.
13. Mix concrete or mortar on the job site.
14. Conduct and evaluate a slump test.
15. Place concrete or masonry reinforcement.
16. Lay out and make isolation, control and construction joints.
17. Place, consolidate, finish and cure concrete.
18. Place and finish concrete masonry units.
19. Produce special finishes on concrete.
20. Use and maintain concrete and masonry tools and equipment.
21. Calculate types and amount of concrete or mortar mix for a job.
22. Adjust ventilation air inlet openings.
23. Fabricate and install reinforcing steel bar and welded wire mesh.
24. Specify and use admixtures that entrain air, retard set, reduce water requirements and/or improve concrete mix workability in concrete mixes.
25. Set-up manufactured form systems for poured-in-place foundation walls.
26. Select and apply appropriate framing, siding, roofing, insulation and vapor barrier materials

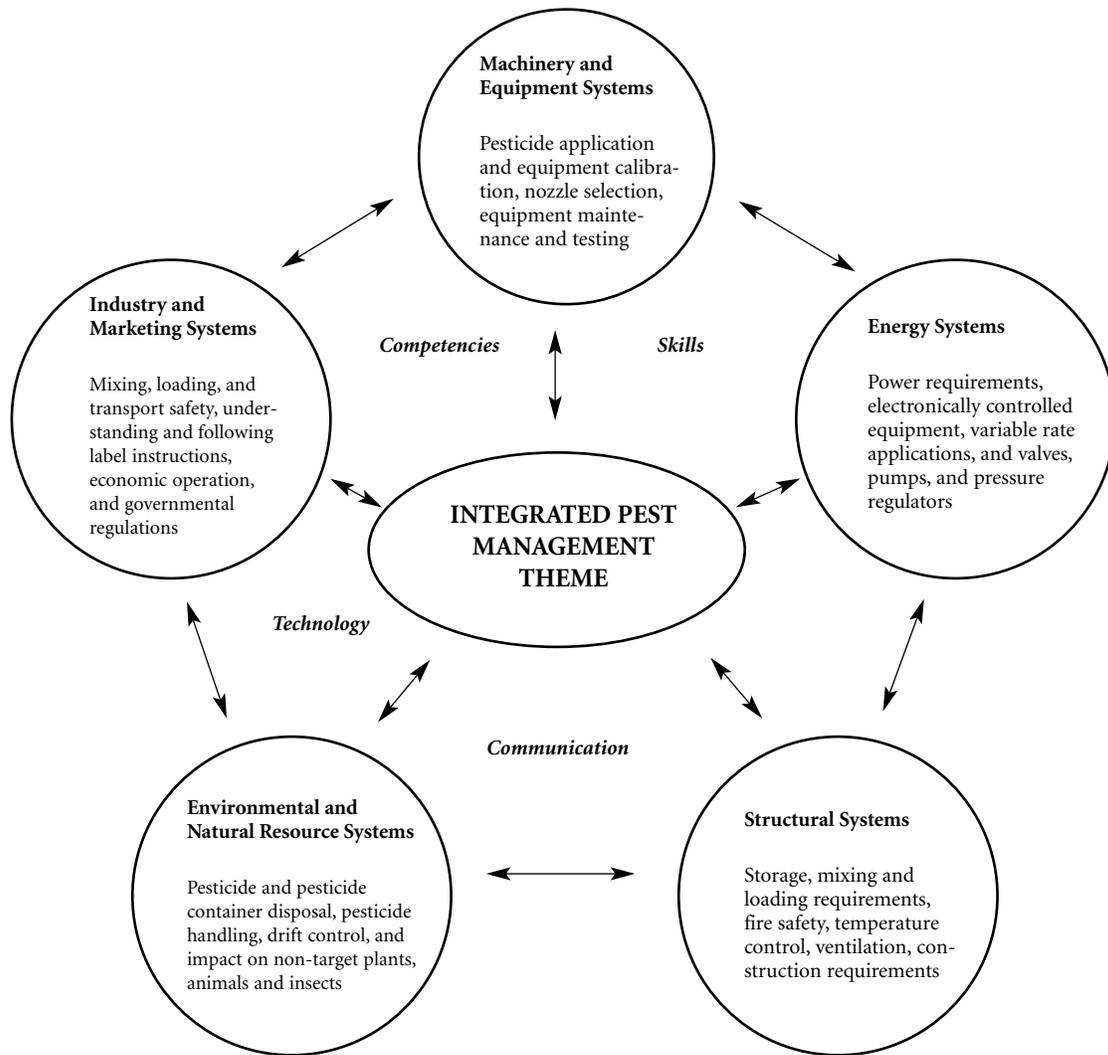
### GENERAL SKILLS

1. Strong interpersonal communication abilities
2. Knowledge combined with leadership qualities and the ability to delegate responsibilities
3. People skills to deal with customers, the public and large groups
4. Identify and interpret the correct resources to make an educated decision
5. Understand and apply principles of mathematics, economics, biology and physics
6. Have a high level of common sense, logic, and critical thinking skills
7. Be an independent thinker with an analytical mind
8. Ability to understand and follow detailed instruction - written and oral
9. Motivated to learn and having the ability to learn from

- various methods of instruction
10. Be literate and remain literate in current technologies - computers, electronics, mechanical systems, etc.
  11. Know how to calculate cost per units, per hour, per bushel, per acre, etc.
  12. Know how to estimate value of equipment and recommend future buying decisions.
  13. Know how to use technology to eliminate waste of time and resources
  14. Know about computer hardware, software, Internet, etc.
  15. Know how to be productive with time, money, and people
  16. Be knowledgeable with global agriculture - encompassing planning, production, marketing, and finance.
  17. Understand how cash flow is critical for business planning and operation
  18. Know how to measure and estimate costs and develop plans for business/industry improvements
  19. Be able to write annual goals with specific objectives and measurement tools for review
  20. Have skills in business operations and management
  21. Have experience with general accounting and cash flow management
  22. Be able to effectively implement the use of technology in the workplace
  23. Understand how to use a systematic approach to diagnose equipment problems
  24. Know how to service and maintain equipment so that productivity can be maintained
  25. Understand on-board computerized systems that monitor, test, store, and report equipment operation
  26. Be familiar with computerized recognition of crop productivity and quality, field conditions, and pests
  27. Understand electrical circuits - amperage, watts, voltage, resistance, and transistors
  28. Understand hydraulic system operation - flow, resistance, and temperature.
  29. Understand mechanical system operation - mechanical advantage, material specifications, and gear design
  30. Have experience in reading schematics, replacing components – including control modules.
  31. Know how to diagnosis electrical, computer, mechanical, and hydraulic systems
  32. Have experience in analyzing mechanical system failures
  33. Have experience with CAD software and know how to produce mechanical drawings

### National FFA Agricultural Mechanics Career Development Event Sample Theme

The following is an example of an event theme and serves as a model in which multiple agricultural mechanics systems are interrelated.



This chart illustrates an integrated pest management problem that depicts interaction between all five agricultural mechanics systems. Alternative themes would emphasize related competencies and other versions of a integrated pest management theme could include other competencies. Individuals and teams must possess knowledge and skills in all systems areas to determine acceptable problem solutions.

A number of other issues also influence the systems associated with integrated pest management. Such things as: turf verses agriculture applications, non-restricted verses restricted use pesticides and recent changes in governmental regulations are just a few of the additional concerns that effect the planning, preparation and completion of this activity. The complexity of this theme is further compounded by the number of competencies and skills involved in the solving of such intricate problems. Given the complexity of such problems, individuals are better prepared when they have information/knowledge, experience and expertise within several of the systems areas.

# AGRICULTURAL SALES

## CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

### I. PURPOSE

The purpose of the Agriculture Sales Career Development Event is to provide an individual with the basic skills to take advantage of the career opportunities offered in the sales field. Sales are an essential part of a market economy. Agricultural products benefit from sales skills, both for inputs for production and the marketing of the products.

### II. OBJECTIVE

The objective is to develop the skill sets necessary to be successful in sales. These would include the following:

#### A. COMMUNICATION SKILLS

1. Verbal Communication - both face to face and by telephone
2. Written Communication
3. Interactive Communication - to be able to listen and question in order to gather information.

#### B. PRODUCT KNOWLEDGE

1. Features and benefits of a product
2. Identifying potential customer objections
3. Knowledge of proper use of product

#### C. SALES PROCESS

1. Identifying prospective customers through marketing and historical data
2. Developing an approach that introduces your product to your prospective customer including but not limited to cold calling, advertising, and or internet applications
3. Develop an interactive, personal sales presentation that determines and addresses customers needs and objections
4. Attempt trial closes to close the sale and accurately take the order
5. Developing the basic business structure necessary to sell and deliver a product

#### D. MAINTAINING CUSTOMERS

1. Establish and build customer confidence in you and your product
2. Customer relations
  - a. Address customer complaints including:
    1. Return of merchandise
    2. Defective merchandise
    3. Lack of understanding in use of product
  - b. Correctly apply company policy to the complaints
  - c. Probe for cause(s) of customer dissatisfaction

3. Maintain customer contact and place additional orders for sales
4. Review product performance

### III. EVENT RULES

1. **Team Make-up-** The event will be a team event consisting of four students. A team may compete with less than four members. All students' scores (maximum of 4) count towards the team total.
2. Official dress is highly recommended for all participants during the event.
3. Each set of judges will event of two judges and their scores will be averaged.

### IV. EVENT FORMAT

The model agricultural sales event will consist of four parts:

Team Sales Situation  
Objective Written Test  
Oral Sales Presentation  
Practicums

All team members will participate in the written test and sales presentation components of the event. Using the team approach, each team competes as a group in the team sales situation. Four practicums will be conducted each year.

Those practicums are:

Customer Relations  
Telephone Order Taking / Customer Service  
Advertising and Promotion  
New Customer Prospecting

#### A. EQUIPMENT

**Materials student must provide-**Each participant must have a clean, free of notes clipboard, two sharpened No. 2 pencils, and an electronic calculator. Calculators used in this event should be battery operated, non-programmable, silent with large keys and large displays. Calculators should have only these functions- addition, subtraction, multiplication, division, equals, percent, square root, +/- key, and one memory register. No other calculators are allowed to be used during the event.

#### B. TEAM ACTIVITY

The Team Sales Situation is the team activity. The goal of the Team Sales Situation is to incorporate all the basic fundamentals of the event. Team members work together to demonstrate group dynamics, problem solving, data analysis, decision making, and oral and written communication skills. Team members will coordinate the sales skills they have learned along with the individual skills learned in the practicums.

The following information will be provided to the team as applicable:

1. A product (including features and price - if applicable)
2. Market situation (including competition)
3. Area demographics
4. Company information
5. Description of present and/or potential retail and/or wholesale outlets
6. Community information
7. Transportation, distribution and storage information
8. Existing marketing problems

All team members will be expected to participate. The judges will act as the audience, but will not engage in dialog during the presentation. Participants may utilize any materials provided in the team event for the presentation. It is important that all team members speak up during the entire process so that the judges can hear what is being said and so they can observe how the team is working together.

It is critical to remember that not only will the final presentation be judged, but also the teamwork and equal involvement of all team members. Also critical is not only stating what you chose to do, but why you chose to do it. In selling there are no absolute right or wrong answers.

Demonstrating the basic fundamentals necessary to accomplish your goal is essential.

The Team Sales Situation will be broken into following three components:

1. Introduction and initial development
2. Presentation development
3. Presentation

Each team will be given a minimum of five minutes (5) to read over the supplied information when they are called into the event area. Each team will then have twenty (20) minutes to develop the basic information and decisions necessary for the presentation to be built upon. This will occur while being observed by at least two judges. The basic information should include (at a minimum): selecting the demographic consumer group, identifying product features, identifying customer objections, and developing a plan so that all members of the team have definable goals and areas of responsibility. The team will be moved to another area to work unobserved and be allowed thirty (30) minutes to develop their presentation. Flipcharts and pens will be provided. Note: The event officials will have the option to provide access to Microsoft Power Point Software. The team will then be judged based on their presentation. Each team will have fifteen (15) minutes with a twelve (12) minute warning to make their presentation followed by a five (5) minute section for questions.

The team will develop a presentation that consists of the following:

1. Identify the demographic consumer group the product will be targeted for.
2. Identify the key features and benefits of the product.
3. Identify potential customer objections and develop strategies to address those objections.
4. Develop a team plan that utilizes all team members:
  - a. Establish a service center for your product to include:
    1. An order taking and processing department.
    2. A customer relations department to handle complaints, returns, product education, etc.
    3. Establish a marketing department to include an advertising program for both product introduction and ongoing promotion.

- b. Identifying and conducting several methods of prospecting for new customers within your targeted consumer group.

### Scoring Criteria for Team Sales Situation

1. **Teamwork Evaluation (25 points), 25%**
  - a. Leadership roles easily perceived
  - b. Participation by each member of the team
  - c. Member responsibilities outlined and defined
  - d. Members demonstrated effective listening and communication skills
  - e. Demonstrated a wise use of time
2. **Analysis of the information (20 points), 20%**
  - a. Clearly identify the product features and the market for that product.
  - b. Provided information and data is analyzed and utilized
  - c. Demonstrate the use of basic sales skills
  - d. Possible solutions are discussed and analyzed.
3. **Quality of the Team's Solution (35 points), 35%**
  - a. Identify the demographic consumer group the product will be targeted.
  - b. Develop a plan to introduce that product to those consumers.
  - c. Identify the key features of the product.
  - d. Identify potential customer objections and develop strategies to address those objections.
  - e. When applicable identify and select possible media utilization that would benefit sales.
  - f. Demonstrate a team plan to so that all team members are utilized.
  - g. Identify several methods of prospecting for customers within your targeted consumer group
  - h. Develop a plan to sell, supply, and maintain the product
4. **Presentation (10 points) 10%**
  - a. Presents team's solution
  - b. Overall delivery professional and well thought out
  - c. Presentation is clear and effective
  - d. All team members participated

**5. Questions are taken from: (10 points) 10%**

- a. Teamwork evaluation
- b. Analysis of the information
- c. Team Sales Solution content
- d. Presentation

**TOTAL = 100 points**

**C. INDIVIDUAL ACTIVITIES**

**1. Objective Written Test**

The objective test of the Agricultural Sales Career Development Event is designed to evaluate an individual participant’s knowledge of the basic sales skills. Using the listed references as a resource, a fifty- (50) question multiple choice test will be administered. Each participant will have fifty (50) minutes to complete the test with one point awarded for each correct answer for a possible score of fifty (50) points.

**2. Sales Presentation**

- a. The participant will select an agricultural product representing one of the seven instructional areas:
  - 1. Agricultural Mechanics
  - 2. Agricultural Production
  - 3. Agricultural Products and Processing
  - 4. Agricultural Supplies and Services
  - 5. Forestry
  - 6. Natural Resources and Rural Recreation
  - 7. Ornamental Horticulture
- b. Each participant may bring props and/or portfolios to the sales presentation event. These materials are not to be included in the project summary sheets. In the event more than one team member sells the same product, each individual team member must have their own props so all team members can compete at the same time.

**Note:** No flammable or corrosive materials can be brought into the event area. When selling a product of that nature utilize an empty container labeled with the product label.

- c. The participant will give three copies of the participant’s project summary sheet (see “d”) to the event coordinator at the coaches’ meeting. Each participant’s summary sheets should be placed in a 9 x 12 inch envelope. With the envelope flap at the top,

place the state, participant’s name, and the participant’s number in the upper left-hand corner of the envelope. **Please observe these guidelines.**

- d. Guidelines for the project summary sheet (**one page, single sided, typed and double spaced**). Participant’s name and state in the upper left-hand corner. **Statement of situation, circumstances, locations, etc.** (Participant should clearly state the role of the customer (event judge) Examples: dairy farmer, retail buyer, purchasing agent, etc. and whether this is a cold call or if the participant has made an appointment for this call. The summary sheet should include the following:

- Representation (company/chapter)**
- Product to be sold**
- Features of the product**
- Product structure**
- Warranty**
- Service availability**
- Demonstration of function**
- Competitors and pertinent information.**
- Price**
- Closing statement or method**

- e. Each participant will be allowed fifteen (15) minutes for his/her sales presentation with a time warning at twelve (12) minutes. The sales presentation will conclude at fifteen (15) minutes. The sales presentation will be interactive between the participant and all judges.
- f. No two team members will be judged by the same set of judges.

**Scoring Criteria for Sales Presentation**

**Pre-call Prep.....(30)**

- Project Summary Sheet
- Anticipating customer needs
- Product Knowledge

**Approaching the customer.....(10)**

- First Impression
- Create Customer Attention
- Determine Wants
- Establish Rapport
- Ask Leading Questions
- Demonstrate good listening skills

**Demonstration .....(30)**

- Product Features and Benefits relevant to customer's wants
- Allow Customer to Participate
- Confirming Customer Interest (trial close)

**Customer Objections .....(10)**

- Identify Customer Objections
- Handle Customer Objections

**Closure .....(20)**

- Recognize Closing Opportunities
- Ask For the Order

**Total Points .....100**

**3. Practicums**

Each participant will compete in one of four designated practicums in the event. Practicums to be conducted will follow the rotational schedule as listed below. Prior to the event, each participant will be assigned a practicum by the team coach. Please designate on the entry form which member will engage in which practicum. All materials used in the practicums will be furnished at the event site. Each practicum will be worth a total of fifty (50) points per team member. The practicums are:

**Customer Relations**

**Promotion & Advertising**

**Telephone Order Taking /Customer Service**

**Prospecting for New Customers**

**Practicums Theme Rotational Pattern**

- 2001 Horticulture Industry
- 2002 Animal Industry
- 2003 Crop Industry
- 2004 Natural Resources
- 2005 Horticulture Industry

**a. Customer Relations**

The event chairperson will select a realistic scenario portraying a customer relation's problem that may occur in agricultural sales. The participant will be evaluated primarily on their sales and human relation skills, and secondly on their technical knowledge of the subject matter. The sales person (participant) will be provided with the company policy or philosophy concerning merchandise return and refunds prior to performing the practicum. It is possible the salesperson will have to develop a solution independently if the company policy does not specify one for the particular scenario. In this case the salesperson will be evaluated on their creativity, judgment and application of the philosophy of the company. The participant will have to obtain the majority of the information necessary to solve the problem by interaction with the customer.

Types of problems that may be used are:

1. Return of defective merchandise sold
2. Lack of understanding in use of merchandise
3. Calming and regaining trust of a dissatisfied customer

The participant will be given a scenario containing the guidelines for the event. The participant will be allowed ten (10) minutes to look over the information. The participant may make notes as needed on the scenario and use the notes throughout the judging. They must return the scenario to the event staff before they exit the practicum area.

Ten (10) minutes will be allowed for the participant to demonstrate their customer relation' skills. There will be a seven (7) minute warning. Two judges will be used, and their scores will be averaged. One judge will serve as the customer.

**Scoring Criteria for Customer Relations Activity**

**Introduction** .....5  
 Identify yourself  
 Purpose of call (if applicable)  
 Professionalism  
 Empathy  
 Grammar

**Attitude** .....5  
 Pleasant  
 Friendly  
 Establish Rapport

**Information via Customer Interaction** .....20  
 Determine the Problem  
 Clarify the Problem

**Develop Solution**.....15  
 Evidence of Product Knowledge  
 Overcome customer objectives

**Closing** .....5  
 Get customer agreement  
 Review and closure

**TOTAL POINTS** .....50

**b. Promotion & Advertising**

Participants should be prepared to participate in one of the three options listed below as selected by the event coordinator

1. **Point-of-Purchase Advertising Sign**  
 Develop a sign to accompany an agricultural sales display. The participant will have twenty-five (25) minutes to prepare this sign. A warning will be given at twenty (20) minutes.
2. **Print Media: Newspaper or Magazine**  
 Prepare the “copy” and design the layout of an advertisement scheduled to appear in a designated newspaper or magazine. The participant will have twenty-five (25) minutes to prepare this advertisement. A warning will be given at twenty (20) minutes.
3. **Web-Page:**  
 Develop a web page from the provided information. The page can be for providing product information, for direct selling, customer service, or a combination of both. The participant will have twenty-five (25) minutes to prepare the page. A warning will be given at twenty (20) minutes.

All materials will be provided at the event site. Computers will be utilized at the discretion of event officials. The software utilized will be MS Publisher with any deviation noted in the Coaches Letter. The participant is responsible for assembly and presentation. In each option only the final product will be judged. At the designated time, final products will be collected or recorded to disk, then judged and scored.

**Scoring Criteria for Promotion & Advertising Activity**

**Knowledge of Selected Option**.....(10)  
 Proper advertising format  
 Headline  
 Sub Headline  
 Body Copy  
 Illustration

**Creativity**.....(10)  
 Use of Creative art  
 Use of Creative terminology  
 Creative Ad Design

**Effectiveness of Ad/P.O.P. Sign**.....(12)  
 Reaches the prospective customer  
 Clear message  
 Includes necessary product features

**Appropriateness**.....(10)  
 Appropriate for target audience  
 Meets the needs of the product being promoted

**Neatness/Clarity**.....(8)  
 Ad neatly laid out  
 Neat graphics  
 Neat copy  
 Clear and easy to understand message

**TOTAL POINTS** .....50

**c. Telephone Order Taking / Customer Service**

The participant will demonstrate the skills used when taking an order over the telephone and incorporating problem solving and/or suggestive selling of additional product(s).

The event officials will select a scenario typical for an agricultural supply company. The participant will be provided with a promotional flyer, catalog, or other promotional material that has been mass mailed to select agricultural prospects and customers. Participant will also be provided with an order form and any updated information since the mailing of the promotional material. This may include such information as out of stock or price reduction news.

Participant will be given the scenario and supportive materials ten (10) minutes before the event and will have ten (10) minutes to demonstrate the skills over the telephone to the judges with an seven (7) minute warning.

One judge will call the participant and place an order while the other judge listens on a phone extension.

**Scoring Criteria for Telephone Order Taking/ Customer Service**

- Greeting** .....(5)
  - Pleasant, Businesslike
- Clarify and confirm the order**.....(20)
  - Repeat each item
  - Include product numbers
  - If appropriate
  - Confirm availability
- Suggestive/consultative selling** .....(20)
  - Suggest related products
  - Note items on special
  - Offer substitutes for no stocks
- Close the order** .....(5)
  - Repeat the order
  - Ask for other needs
  - Confirm delivery date
- TOTAL** .....50

**d. Prospecting for New Customers**

The event officials will select a sales situation. The participant will be given a product description. The participant will then approach or place a telephone call to a customer, and by interaction with that customer determine if the customer is a prospect. The participant will then attempt to sell that product to the customer, or gain an appointment for a future sales call, whichever is appropriate for the scenario. The appropriate goal(s) will be clarified in the scenario. The participant will have ten (10) minutes to read over the product description and the sales situation. Ten (10) minutes will be allowed with an seven (7) minute warning to interact with the judges. Two judges will be utilized with one judge playing the role of the customer.

The emphasis of this event is on strong opening statements to get the prospect’s attention and asking good questions to evaluate the prospect’s needs.

**Scoring Criteria for Prospecting for New Customers**

- Greeting/opening statement** .....(15)
  - Clearly identify self and company
  - Build interest in product/service
- Qualify the prospect** .....(15)
  - Question for customer needs
  - Demonstrate good listening skills
- Provide features and benefits** .....(10)
  - Describe features and benefits appropriate to the prospects needs
- Close the interview or sale** .....(10)
  - Ask for the order
  - Ask for an appointment
  - Review the order or commitment
- TOTAL** .....50

**V. TIEBREAKERS**

Should a tie occur in the individual scores, the highest sales presentation score will break the tie. If the tie cannot be broke using the sales presentation score, the highest written test score will be used. If a tie still exists, the highest practicum score will be used to break the tie. Should a tie occur in the team scores, the highest team sales situation score will break the tie. If the score is still tied then (in order) the sales presentations, written test, and then the practicums will be used.

**VI. AWARDS**

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

## VII. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

Chris G. Yorke. *Agricultural Sales*. ACRO Press, 1925 Main Street, Vancouver, WA 98660 (360) 693-9101

Ron Schneiderheinze, Christina Wood. *Agribusiness Sales, Marketing and Management*. Instructional materials Laboratory, London Hall, University of Missouri, Columbia, MO 65211 (1-800-669-2456 or (573) 882-2883)

Ditzenberger and Kidney. *Selling- Helping Customers Buy*. South-Western Publishing Company, Cincinnati, Ohio, 1992, (1-800-543-7972) ISBN 0538605316

Seperich, Woolverton, Beierlein. *Introduction to Agribusiness*. Prentice Hall Career and Technology, 1994, Publisher's address: Englewood Cliffs, NJ 07632

CRISP Publications, 1200 Hamilton Court, Menlo Park, CA 94025-1427 (1-800-442-7477) (FAX 650-323-5800)

- Professional Selling, Rebecca L. Morgan  
ISBN 0-931961-42-4
- Sales Training Basics, Elwood N. Chapman  
ISBN 1-56052-119-8
- Closing, Virden J. Thorton  
ISBN 1-56052-318-2
- Effective Sales Management, Tom Johnson  
ISBN 1-56052-031-0
- Calming Upset Customers, Rebecca L. Morgan  
ISBN 1-56052-384-0
- Telephone Courtesy & Customer Service, Loyd Finch  
ISBN 1-56052-064-7
- Marketing Strategies for Small Businesses, Richard F. Gerson  
ISBN 1-56052-172-4

*Agri-Marketing Technology, Selling and Distribution in the Agricultural Industry*, Jasper Lee, James G. Leisning, David E. Lawver, Interstate Publishers, Inc., Danville, IL

# ENVIRONMENTAL/NATURAL RESOURCES

CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

## I. EVENT RULES

1. **Team Make-up-** Team size shall be four members. All four members will be scored and all scores will count towards the total team score. The team score is comprised of all four (4) members' exam and practicum scores as well as the team activity..
2. At the time of participation, a member must be a high school FFA member (a graduating senior is considered eligible to compete in state and national career development event up to and including his/her first national convention following graduation). High school refers to 9 -12 grades.
3. The National FFA Officers and National Board of Directors will be in charge of this event.
4. All general rules will apply to this event.
5. Under no circumstance will any participant be allowed to handle any of the items in the identification portion of the practicums. Any infraction of this rule will be sufficient to eliminate a team from the event.
6. No team, team member or team coach shall visit the event facilities to observe material and facilities after September 1st. Any team, team member or coach reported and proven to do so will cause the elimination of that team from competing in the National FFA Environmental/Natural Resource Career Development Event.
7. Participants will be assigned to group leaders who will escort them to various event-staging sites. Each participant is to stay with his or her assigned group leader throughout the event or until told to change leaders by the event superintendent.
8. All participants will be given an identification number by which they will be designated throughout the event.
9. Participants must come to the event prepared to work in adverse weather conditions. The event will be conducted regardless of the weather. Participants should have rainwear, warm clothes and appropriate footwear.
10. **Written Material:** All written material will be furnished for the event. No written materials such as tests, problems and worksheets shall be removed from the site.
11. The event will include:
  - a. Objective Written Exam
  - b. Team Activity
  - c. Identification of Material
  - d. Individual Practicums

## II. EVENT FORMAT

### A. EQUIPMENT

**Materials student must provide-** Each participant must have a clean, free of notes clipboard, two sharpened No. 2 pencils, and an electronic calculator. Calculators used in this event should be battery operated, non-programmable, silent with large keys and large displays. Calculators should have only these functions- addition, subtraction, multiplication, division, equals, percent, square root, +/- key, and one memory register. No other calculators are allowed to be used during the event.

**Equipment provided-** All other tools and equipment will be furnished for the event. Participants must use the tools and equipment furnished at the event.

### B. TEAM ACTIVITY (90 MINUTES IN LENGTH) (1000 POINTS TOTAL)

Students will be provided a scenario that deals with an environmental/natural resource problem.

#### Soils – (2001)

- \* Physical Properties
- \* Soil Erosion
- \* Soil Analysis
- \* Environmental Impact of Soil Degradation

#### Water-(2002)

- \* Importance of Water Quality
- \* Factors that Influence the Quality of Water
- \* Measure to Ensure Water Quality
- \* Management Practices Used to Ensure Water Quality

#### Air - (2003)

- \* Air Pollutants and Their Effects
- \* Quality of Life and Air Pollutants
- \* Acid rain
- \*Clean Air Act and Environmental Laws

#### Ecosystems - (2004)

- \*Basic Ecological Concepts
- \*Management of Eco--Systems
- \*Grassland Eco--Systems
- \*Forestry Eco--Systems
- \*Aquatic Eco--Systems
- \*Wetland Eco--Systems
- \*Non-Native Species effect on Eco--Systems

#### Waste Management - (2005)

- \*Preventing and Reducing Solid Waste
  - \*Disposing of Waste
  - \*Manure Management
  - \*Hazardous Waste
- Teams will be required to develop both an oral, as well as a written statement that addresses the questions in the annual scenario.
  - Teams will submit a written summary of their findings at the end of one hour. Summary is to be submitted on the disk provided to each team.
  - Teams will have ten (10) minutes of prep time prior to their oral presentation.
  - Teams will be required to give an oral presentation justifying the decisions made by the team. The team will have eight minutes to make the oral presentation.
  - Teams will be required to answer questions in regards to the decision reached by their team. Question period will be 5 minutes in length.

#### Team Activity Score Card

Oral presentation .....	500 points
Written presentation.....	300 points
Question .....	200 points
<b>TOTAL.....</b>	<b>1000 points</b>

### C. INDIVIDUAL ACTIVITIES

#### 1. Written Exam - Objective Test (100 points) (60 minutes)

50 questions submitted by the committee.

#### 2. Annual Practicums

Students will participate in the following three areas on an annual basis:

##### a. National/Global Issues Interview –

Students will participate in personal interviews dealing with environmental/natural resource issues by:

1. Explaining significance of environmental/natural resource issues.
2. Specify recommended practices for conservation of environmental/natural resources.

site. Additional species may be artificially introduced as mounted or preserved specimens.

2. Non-living components (shelter, nutrients) - students will inventory resources such as water, shelter, etc. upon which resident species depend for survival.
3. Food Web - students will define relationships among the plants and animal species that are found or introduced in the study area.
4. Ecological Succession - students will identify the stages of succession of various grasses, shrubs and trees. They will also identify causes of changes in succession patterns.
5. Situation Analysis - students will determine whether a healthy balance exists between the environment and the native species that depend upon it. They will also check remediation practices where needed.

#### e. Soil Profile

1. Students will be furnished with a scorecard; an interpretation guide and a pre-dug soil pit or core/monolith to judge. The participants will identify soil horizons, textures, percentage coarse fragments, pH, horizon colors, slope, geologic origin, soil permeability, irrigation suitability and soil structure types of the soil present in the given example.
2. Using the information from the score card and interpretation guide, the student will then identify the most appropriate use for the given area, and the erosion control practice that best fits the designated use for the land.

#### f. Waste Management

1. Participants will be presented with a scenario (ag producer, neighborhood, office building, manufacturing plant, etc.) that generates waste material creating differing environmental threats.
2. Participants will evaluate the nature of waste output to identify plausible options for reducing the rate of waste generation, recycling or providing potential alternative uses for the waste, treating the waste, or disposing of the waste.
3. Participants should be able to identify at least one benefit and one deterrent for each possible option that is offered.

### III. TIEBREAKER

**Team** - 1) Team with the highest individual score, 2) Team with the highest team activity score.

**Individual** - 1) Individual on the highest team, 2) Total practicum scores, 3) Current issues practicum, 4) Identification practicum

### IV. AWARDS

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

### V. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

National Council for Agricultural Education's material - "Applied Environmental Sciences"

- *Environmental Science and Technology*. Porter, Lee, Turner and Hillan. Interstate Publishers, Inc. 1997. PO Box 50 Danville, IL 61834-0050
- *Managing Our Natural Resources*. Camp and Daughtery. Delmar Publishers, Inc. 1988. Albany NY.
- *Wildlife Management*, Stutzenbaker, Scheil, Swan, Lee and Mattics, Interstate Publishers, Inc. 1999.
- *Natural Resources and Environmental Technology*, Lee, Interstate Publishers, Inc. 2000.
- *Environmental Science for Agriculture and the Life Sciences*. Albany, NY. Delmar Publishers 1994.
- *Our Natural Resources and Their Conservation*. Kircher, H.B., Wallace, D.L., & Gore, D.J. Danville, IL. Interstate Publishers, Inc. 1992.
- *Soil Science: Evaluation, Interpretation, and Management of Soil*. Columbia, MO. Instructional

Materials Laboratory, University of Missouri, phone:  
800-669-2465.

- *The Global Ecology Handbook. What You Can Do About the Environmental Crisis.* Courson, W.H. (Ed.). Boston, MA. Beacon Press 1990.
- *Biological Science, an Ecological Approach.* Dubuque, IA. Kendall Hunt Publishers, 1992
- *Introduction to Forestry Science.* L.DeVere Burton. Delmar Publishers, 2000.
- *Agriscience & Technology.* L. DeVere Burton. Delmar Publishers, 1992.

### Environmental/Natural Resources Event Equipment Identification List

#### *Water Quality*

- Dissolved Oxygen Meter
- pH Meter
- Conductivity Meter
- Hach Kit (for assessing a suite of water quality parameters)
- Thermometer
- Refractometer (for determining salinity)
- Secchi Disk (for measuring turbidity)
- Water Bottle Samplers (several types - see Forestry Suppliers Catalog)

#### *Aquatic Samplers*

- aquatic net
- plankton net
- bottom dredges
- sieves (wire mesh for washing bottom samples)
- seines
- fish measuring board
- stream bottom sampler (for aquatic insects and other organisms)

#### *Wildlife*

- binoculars
- mammal traps
- snake/reptile snare

#### *Weather*

- rain gauge
- wind speed meter

- max-min thermometer
- sling psychrometer
- barometer

#### *Forestry*

- tree increment borer
- Biltmore stick
- prism
- diameter tape (for measuring dbh)

#### *Predators*

- Horned owl
- Redtail Hawk
- Cooper's Hawk
- Sparrow Hawk
- Timber Wolf
- Bobcat
- Coyote
- Mountain lion
- Garter Snake
- King Snake
- Rat Snake
- Golden Eagle
- Bald Eagle
- Osprey
- Crocodile
- Alligator
- Red Fox

#### *Birds*

- Purple Martin
- Brown Pelican
- White Pelican
- Great Blue Herron
- Least Tern
- Canada Goose
- Wood Duck
- Mallard Duck
- Blue Jay
- Eastern Blue Bird
- Mountain Blue Bird
- Cardinal
- Ruby Throated Hummingbird
- Calliope Hummingbird
- Brown Thrasher
- Crissal's Thrasher

## Environmental & Natural Resources Identification List

### *Reptile/Amphibians*

- Rubber Boa Snake
- Copperhead Snake
- Corn Snake
- Coral Snake
- Cottonmouth
- Diamondback Rattle Snake
- Canebrake Rattle Snake
- Chained King Snake
- Ring Neck Snake
- Green Anole Lizard
- Fenceswift Lizard
- Collared Lizard
- Red Eared Turtle
- Alligator Snapping Turtle
- Common Snapping Turtle
- Bullfrog
- Green Tree Frog

### *Wildlife*

- Whitetail Deer
- Raccoon
- Gray Squirrel
- Fox Squirrel
- Rabbit
- Opossum
- Chipmunk
- Turkey
- Quail
- Chukar
- Ring Neck Pheasant
- Armadillo
- Beaver
- Cougar
- Muskrat
- Nutrea
- Jack Rabbit
- Antelope
- Elk
- Moose
- Buffalo
- Mountain Goat
- Feral Hog
- Hedge Hog
- Black Bear
- Brown Bear
- Grizzly Bear
- Polar Bear
- Weasel

- Badger
- Porcupine
- Skunk
- Mole
- Gopher
- Prairie Dog

### *Fish*

- Largemouth Bass
- Crappie
- Bream
- Channel Catfish
- Blue Catfish
- Smallmouth Bass
- Walleye
- Carp
- Yellow Catfish
- Trout
- Salmon
- Sturgeon
- Crab
- Lobster
- Crayfish
- Shrimp
- Freshwater Shrimp
- Tilapia
- Clam
- Zebra Mussel

### **Non-Native Species**

#### *Aquatic*

- Zebra Mussel
- Sea Lamprey
- Flathead Catfish
- Brown Tree Snake
- Green Crab
- Gold Fish
- Tilapia
- Piranha
- Chinese Mitten Crab

## Environmental & Natural Resources Identification List

### *Insects*

- Africanized Honeybee
- Argentine Ant
- Asian Long Horned Beetle
- Asian Tiger Mosquito
- Fire Ant
- Formosan Termite

### *Plants*

- Chinese Tallow
- English Ivy
- Himalayan Blackberry
- Hydrilla
- Kudzu
- Leafy Spurge
- Melaleuca
- Mimosa Tree
- Purple Loosestrife
- Saltcedar
- Yellow Star Thistle

### *Reptiles/Amphibians*

- marine toad
- brown tree snake
- gecko

### *Birds*

- cattle egret
- european starling
- house sparrow
- mute swan

### Non-Native (Invader) Resource List

- U.S. Fish and Wildlife Service
- U.S. Park Service
- U.S Dept. of Interior
- U.S. Dept. of Agriculture
- U.S. Forest Service
- State Department of Natural Resources
- Gulf of Mexico Program
- Minnesota Sea Grant  
2305 East 5th Street  
Duluth, Minnesota 55812-1445  
Phone: 218-726-6191  
Web Page: [www.ansc.purdue.edu/sgnis/](http://www.ansc.purdue.edu/sgnis/)  
Sea Grant has developed a CD titled "Your Exotic Species One-Stop Information Shop!" Price: \$14.00
- Internet Locations  
Search Engines: Type in "exotic species", "non-native species", "nonnative species", "invasive species", "non indigenous species". Make sure you include quotations in search.

[www.nbio.gov/invasive](http://www.nbio.gov/invasive)  
[www.glifwc.org](http://www.glifwc.org)  
[www.flmnh.ufl.edu/fnps/exotics](http://www.flmnh.ufl.edu/fnps/exotics)  
[www.gmpo.gov](http://www.gmpo.gov)

## Environmental & Natural Resources

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

Member No.: \_\_\_\_\_

### Environmental Analysis Scorecard

<i>Your assignment is to analyze the given ecosystem with the following four aspects in mind:</i>		
Question	Possible Points	Score
1. Identify and list as many organisms (both native and invader) that can be found within the marked boundaries of this site.	10	
2. Identify and list all non-living components found with the marked site.	10	
3. Describe the food web presented in this marked ecosystem.	10	
4. Identify the stages of succession of various grasses, shrubs, and trees.	10	
5. Determine whether a healthy balance exists and recommend remediation where needed.	10	
<b>Total Score:</b>		<b>50</b>

# FOOD SCIENCE AND TECHNOLOGY

CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

## I. PURPOSE

To stimulate learning activities in food science and technology related to the food industry and to assist students in developing a good working knowledge of sound principles used in a team decision-making process.

## II. OBJECTIVES

1. To encourage FFA members to gain an awareness of vocational and professional opportunities in the field of food science and technology, marketing and management occupations.
2. To give FFA members the opportunity to experience group participation and leadership responsibilities in a competitive food science and technology program.
3. To help FFA members develop technical competence and personal initiative in a food science and technology occupation.
4. To provide opportunities for FFA members to participate in activities where they gain an appreciation for cooperative effort in the food industry.

## III. EVENT RULES

1. **Team make-up** - The team will consist of four team members with all four members scores being totaled.
2. It is highly recommended that all participants be in official dress.

## IV. EVENT FORMAT

The food science and technology career development event will consist of four activities, 1) an objective test, 2) a team product development project, 3) a practicum in food safety and quality, and 4) a practicum in sensory evaluation. This career development event will be a four-person team activity. All team members will participate in all of the activities. This career development event will involve 1,000 total points per team. The team product development project will be worth 400 points, the objective test will be worth 300 points and each practicum will be worth 150 points.

Each year this career development event will focus on one food product category as a theme, e.g. ready-to-eat cereal, convenience food, etc. Each activity in this event will use the theme food product category to achieve the project objectives.

### A. EQUIPMENT

**Materials student must provide**-Each participant must have a clean, free of notes clipboard, two sharpened No. 2 pencils, and an electronic calculator. Calculators used in this event should be battery operated, non-programmable, silent with large keys and large displays. Calculators should have only these functions- addition, subtraction, multiplication, division, equals, percent, square root, +/- key, and one

memory register. No other calculators will be allowed during the event.

**B. TEAM ACTIVITY**

**Team Product Development Project**

Each team will receive a marketing scenario describing a need for a new or redesigned product that would appeal to a potential market segment. This scenario will contain a description of the existing marketing situation, competition and potential target market segment to be served by the new product. It is the task of the team to design a new or reformulated food product or reformulate an existing product.

The team will be responsible for understanding and using the following concepts:

- Formulation of product to meet specified market requirements
- New package design to reflect the developed product
- Nutritional label development and adjustments
- Equipment used to produce and package the product
- Provide quality control programs, i.e., good manufacturing practices (GMP) and hazard analysis critical control point (HACCP).

Each team will be provided with packaging materials, ingredients, and information necessary on each ingredient in order to develop a final product label.

The team will have sixty (60) minutes to respond to the marketing scenario and reformulate or develop a new product, calculate a nutritional label, develop the ingredient statement and educational panel and develop the front or principal display panel to reflect the new product and its market. After this time period, each team member will contribute in a ten- (10) minute oral product development proposal. Thereafter, there will be a ten- (10) minute question period from the judges in which each team member will be expected to answer questions about the development of their particular product.

Total time involved for each team will be 80 minutes. Total number of points possible for this activity will be 400 points.

**Possible Products** - A rotational list is being developed.

This list currently includes:

- Ready-to-Eat Cereal
- Breakfast Bars
- Candy
- Beverages (Sports Drinks)
- Pizza
- Processed Fruit Snacks
- Stir-Fried Vegetables
- Sandwich (RTE)

**Evaluation Criteria for Product Development**

**Presentation**

Product Development.....200 points

How does the product meet target market needs?  
The presentation should address the following product concerns:

- |                 |              |
|-----------------|--------------|
| Economics       | Equipment    |
| Nutrition       | Distribution |
| Quality Control | Formulation  |
| Product Safety  |              |

Package Design.....100 points

- Use, development and adaptation of nutritional label
- Use and development of the ingredient statement on educational panel
- Use of principle display panel to convey information

Response to judge’s questions .....100 points

**Total .....400 points**

**C. INDIVIDUAL ACTIVITIES**

**1. Test**

The objective questions administered during the Food Science and Technology examination will be designed to determine each team member’s understanding of the basic principles of food science and technology. It will encompass the knowledge required of the team event and the two practicums, i.e. food safety and quality and sensory evaluation, as well as material in the list of references.

Team members will work individually to answer each of the 50 questions. Each person will have fifty minutes to complete the examination. Each question will be worth 6 points

for a correct answer. The test will be based on the list of references.

**2. Practicums**

Each team member will compete in both practicums. The practicums will each be worth 150 points.

**a. Food Safety and Quality Practicum**

***1. Customer Complaint Letter***

Each participant will be given a representative consumer complaint letter received by a food processing company. In fifteen (15) minutes the participant must determine if the complaint involves a food quality problem, then ascertain the cause of the quality defect and a possible solution. If the participant identifies that the letter describes a food safety problem, he or she must determine whether the problem is biological, chemical or physical in nature and its possible mitigation. Regardless of the problem each participant will write out his or her answer using paper provided.

***2. Food Safety/Sanitation***

Each participant will be given ten (10) photos of potential food safety and/or sanitation problems. A numbered list of problems will also be provided at the beginning of this practicum segment. The list will contain more potential problems than the number of photographs. The list will contain such standards as good manufacturing practices (GMP) and hazard analysis critical control point (HACCP). Identify the type of problem in the photo sheet by recording the number from the list on a scantron sheet provided to each participant. Each participant will start at a station to view a photograph and record an answer. After one minute, the participants will be told to move to the next station. This will continue until each participant returns to his or her original station.

**Food Safety & Quality Practicum Scorecard**

Identification of Problem.....25 points

Solution to Problem .....25 points

Food Safety & Sanitation Problem

Identification .....100 points

**Total Points .....150 point**

**b. Sensory Evaluation**

Each participant will be asked to identify four different aromas from vials provided at each station and record the answer on the sheet provided. A list of potential aromas will be provided to each person. Each station is worth 15 points.

Three different triangle tests will be conducted.

Participants are expected to identify the different sample through aroma, visual cues or textural differences. Answers will be given on the sheet provided. No list will be provided for this segment of the practicum. Each test is worth 15 points.

Three samples will be tasted. Participants will be expected to discern the different taste of each sample when compared to a control or normal sample. Each station is worth 15 points.

Each participant will be given one minute at each station before being told to move to a new station. When each person returns to his or her original station this practicum is completed.

**Sensory Evaluation - Aromas**

1. Cinnamon
2. Peanut Butter
3. Chocolate
4. Maple
5. Oregano
6. Basil
7. Lemon
8. Lime
9. Orange
10. Vanilla
11. Almond
12. Smoke (liquid)
13. Cherry
14. Pine
15. Onion
16. Butter
17. Menthol
18. Grape
19. Garlic
20. Peppermint
21. Clove
22. Nutmeg

23. Ginger
24. Molasses
25. Wintergreen
26. Banana
27. Coconut
28. Lilac
29. Raspberry
30. Strawberry
31. Licorice (anise)

### **Sensory Evaluation Scorecard**

Aroma Identification .....	60 points
Difference Testing .....	45 points
Taste Testing .....	45 points
<b>Total Points .....</b>	<b>150 points</b>

### **V. TIEBREAKERS**

Should a tie occur in the overall team placing, the tie will be broken by the highest team product development project score. If this score does not break the tie, then the highest number of total points earned from the objective test (adding all four team member scores) will break the tie. If a third tiebreaker is needed the judges response to the Team Question period from the Team Product Development project will be used. To identify the high individual for this event in case of a tie, the highest examination score will be used as the first tiebreaker, followed by the highest Food Safety and Quality practicum score, as the second tiebreaker.

### **VI. AWARDS**

Awards will be presented at an awards ceremony. Awards are presented to teams and individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

### **VII. REFERENCES**

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

*Food Science, Safety and Nutrition* - a special project from the National Council of Agricultural Education.

*Food Science and Safety*, 1998, Seperich, Interstate Publishers, Inc.

*Principles of Food Sanitation*, 1999, Marriott, Aspen Publishers, Inc.

Institute of Food Technology, [www.ift.org](http://www.ift.org)

*Insects That Feed on Trees and Shrubs*. 2nd Edition, 1991. Warren T. Johnson and Howard H. Lyon. Comstock Publishing Associates, Ithaca, NY.

*Diseases of Trees and Shrubs*. 1987. Wayne A. Sinclair, Howard H. Lyon, and Warren T. Johnson. Comstock Publishing Associates, Ithaca, NY.

*Mathematics for Horticulture*. 1994. Ohio Agricultural Education Curriculum Materials Service, The Ohio State University, Columbus, OH.

*Care and Operation of Small Gasoline Engines*. 1990. American Association for Vocational Instructional Materials, Athens, GA.

*Reference Manual for Office Personnel*. 8th Edition, 1994. Clifford R. House and Kathie Sigler. South-Western Publishing Co., Cincinnati, OH.

### **Trade Periodicals**

*American Nurseryman*. American Nurserymen Publishing Co., Chicago, IL

*Nursery Business*. Brentwood Publications, Elm Grove, WI.

*Grounds Maintenance*. Intertec Publishing Corp., Overland Park, KS.

### **Catalogs**

Many horticultural supply company catalogs can be utilized for reference support on tools, equipment, and supplies that may not be illustrated in other sources. The following company has given permission for listing their catalog:

A.M. Leonard, Inc., 665 Spiker Road, Piqua, OH 45356 (513/773-2697)

### **Websites and Problem Samples**

Visit the national FFA website at <http://www.ffa.org/> for information on career development events, a sample Nursery/Landscape General Knowledge Exam self-test, and links to additional study aids. These include resources on Plant and Disorder Identification, the Nursery/Landscape CDE committee website with sample of the new Landscape Drawing practicum, and the FFA Supply Service for ordering prior year copies of the General Knowledge Examination key, Landscape Estimating plan and key, Team Event, and other components. Additional links and resources will be included as they are developed or identified.

### ***Special Note for State Events***

No national listings of plant materials and disorders can match perfectly the industry situation in every state due to the wide range of environments across the U.S. Thus, the national event committee recommends that state event coordinators, wherever feasible, modify both sections of the list to serve better their industry and student educational needs.

**NURSERY/LANDSCAPE PLANT IDENTIFICATION**

Participant Name/Number \_\_\_\_\_

**No. Botanical Name/Common Name**

- 101 *Abelia x grandiflora* / Glossy Abelia
- 102 *Abies concolor* / White Fir
- 103 *Acer palmatum* cv. / Japanese Maple
- 104 *Acer platanoides* cv. / Norway Maple
- 105 *Acer rubrum* cv. / Red Maple
- 106 *Acer saccharum* cv. / Sugar Maple
- 107 *Ajuga reptans* cv. / Carpet Bugle
- 108 *Aquilegia x hybrida* cv. / Columbine
- 109 *Amelanchier arborea* / Downy Serviceberry
- 110 *Astilbe hybrid* cv. / Astilbe
- 111 *Berberis x mentorensis* / Mentor Barberry
- 112 *Betula nigra* / River Birch
- 113 *Brassaia actinophylla* / Schefflera, Octopus Tree
- 114 *Buxus microphylla* cv. / Littleleaf Boxwood
- 115 *Camellia japonica* cv. / Common Camellia
- 116 *Cedrus atlantica* 'Glaucua' / Blue Atlas Cedar
- 117 *Cercis canadensis* / Redbud
- 118 *Chaenomeles speciosa* cv. / Japanese (Flowering) Quince
- 119 *Chrysanthemum x superbum* cv. / Shasta Daisy
- 120 *Cornus florida* cv. / Flowering Dogwood
- 121 *Cotoneaster dammeri* / Bearberry Cotoneaster
- 122 *Cotoneaster divaricatus* / Spreading Cotoneaster
- 123 *Crataegus phaenopyrum* / Washington Hawthorn
- 124 *Cynodon dactylon* cv / Bermudagrass
- 125 *Dieffenbachia maculata* cv. / Spotted Dumb Cane
- 126 *Dracaena deremensis* 'Warneckii' / Striped Dracaena
- 127 *Dracaena fragens* 'Massangeana' / Corn Plant
- 128 *Epipremnum* spp. / Pothos
- 129 *Euonymus alatus* / Winged Euonymus
- 130 *Euonymus fortunei* cv. / Wintercreeper
- 131 *Fagus sylvatica* cv. / European Beech
- 132 *Festuca* spp. and cv / Fescue
- 133 *Ficus benjamina* / Benjamin Fig
- 134 *Ficus elastica* 'Decora' / Decora Rubber Plant
- 135 *Forsythia x intermedia* cv. / Border Forsythia
- 136 *Fraxinus americana* cv. / White Ash
- 137 *Gardenia jasminoides fortuneana* / Common Gardenia
- 138 *Ginkgo biloba* / Ginkgo, Maidenhair Tree
- 139 *Gleditsia triacanthos inermis* cv. / Thornless Honeylocust
- 140 *Gymnocladus dioicus* / Kentucky Coffeetree
- 141 *Hedera helix* cv. / English Ivy
- 142 *Hemerocallis* spp. and cv. / Day lily
- 143 *Hosta x hybrida* cv. / Plaintain Lily
- 144 *Hydrangea quercifolia* / Oakleaf Hydrangea
- 145 *Ilex cornuta* cv. / Chinese Holly
- 146 *Ilex crenata* cv. / Japanese Holly
- 147 *Ilex x meserveae* cv. / Meserve Holly
- 148 *Juniperus chinensis* cv. / Chinese Juniper
- 149 *Juniperus horizontalis* cv. / Creeping Juniper
- 150 *Lagerstroemia indica* cv / Crape Myrtle

**No. Botanical Name/Common Name**

- 151 *Liquidambar styraciflua* / Sweet Gum
- 152 *Liriodendron tulipifera* / Tuliptree
- 153 *Lonicera japonica* 'Halliana' / Hall's Japanese Honeysuckle
- 154 *Magnolia grandiflora* cv. / Southern Magnolia
- 155 *Magnolia x soulangiana* cv. / Chinese (Saucer) Magnolia
- 156 *Mahonia aquifolia* cv. / Oregon Grape
- 157 *Malus* spp. and cv. / Flowering Crabapple
- 158 *Myrica pensylvanica* / Bayberry
- 159 *Nandina domestica* / Heavenly Bamboo
- 160 *Nyssa sylvatica* / Sour (Black) Gum
- 161 *Pachysandra terminalis* / Japanese Spurge
- 162 *Paeonia hybrid* cv. / Peony
- 163 *Parthenocissus tricuspidata* / Boston Ivy
- 164 *Philodendron scandens oxycardium* / Heartleaf Philodendron
- 165 *Picea abies* / Norway Spruce
- 166 *Picea pungens* cv. / Colorado (Blue ) Spruce
- 167 *Pieris japonica* / Lily-of-the-Valley Bush
- 168 *Pinus mugo* / Mugo Pine
- 169 *Pinus strobus* / Eastern White Pine
- 170 *Pinus sylvestris* / Scotch Pine
- 171 *Pinus thunbergii* / Japanese Black Pine
- 172 *Platanus x acerifolia* / London Planetree
- 173 *Poa pratensis* cv Kentucky Bluegrass
- 174 *Podocarpus macrophyllus* / Southern Yew
- 175 *Potentilla fruticosa* cv. / Shrubby Cinquefoil
- 176 *Prunus laurocerasus* cv. / Cherry Laurel
- 177 *Prunus serrulata* 'Kwanzan' cv. / Kwanzan Japanese Flowering Cherry
- 178 *Pyracantha coccinea* cv. / Firethorn
- 179 *Pyrus calleryana* / Callery Pear
- 180 *Quercus alba* / White Oak
- 181 *Quercus palustris* / Pin Oak
- 182 *Quercus rubra* / Red Oak
- 183 *Rhododendron x catawbiense* / Catawba Hybrid Rhododendron
- 184 *Rhododendron Hybrid* / Exbury Hybrid Azalea
- 185 *Rosa* spp. Class Hybrid Tea cv. / Hybrid Tea Rose
- 186 *Sedum spurium* cv. / Sedum
- 187 *Sorbus aucuparia* / European Mountain Ash
- 188 *Spiraea x bumalda* / Bumalda Spirea
- 189 *Syringa vulgaris* cv. / Common Lilac
- 190 *Taxodium distichum* / Bald Cypress
- 191 *Taxus* spp. and cv. / Yew
- 192 *Thuja occidentalis* cv. / American Arborvitae
- 193 *Tilia cordata* / Littleleaf Linden
- 194 *Tsuga canadensis* / Canadian Hemlock
- 195 *Ulmus parvifolia* / Chinese Elm
- 196 *Viburnum x burkwoodii* / Burkwood Viburnum
- 197 *Viburnum trilobum* / American Cranberrybush Viburnum
- 198 *Vinca minor* cv / Periwinkle
- 199 *Wisteria sinensis* cv. / Chinese Wisteria
- 200 *Yucca filamentosa* / Adam's Needle

**NURSERY/LANDSCAPE PESTS AND DISORDERS IDENTIFICATION**

No.	Item Name	No.	Item Name	No.	Item Name	No.	Item Name
<b><u>Insects</u></b>		<b><u>Diseases</u></b>		<b><u>Weeds</u></b>		<b><u>Physiological Problems</u></b>	
201	Aphid	211	Anthracnose	221	Annual Bluegrass	232	Frost/Freeze Injury
202	Bagworm	212	Apple Scab	222	Broadleaf Plantain	233	Iron Deficiency
203	Borer	213	Black Spot	223	Buckhorn Plantain	234	Leaf Scorch (drought/winter burn)
204	Leafhopper	214	Botrytis	224	Chickweed	235	Nitrogen Deficiency
205	Leaf Miner	215	Canker	225	Crabgrass	236	2,4-D Injury
206	Scale	216	Cedar-Apple Rust	226	Dandelion		
207	Spider Mite	217	Crown Gall	227	Henbit		
208	Snail/Slug	218	Fireblight	228	Nutsedge		
209	Whitefly	219	Powdery Mildew	229	Oxalis		
210	White Grub	220	Root Rot	230	Purslane		
				231	White Clover		

**NURSERY/LANDSCAPE EQUIPMENT AND SUPPLIES IDENTIFICATION**

No.	Item Name	No.	Item Name	No.	Item Name
237	aerifier	270	hoe	302	rotary mower
238	anvil-and-blade pruner	271	hook-and-blade pruners	303	rototiller
239	architects scale	272	hose-end repair fitting	304	round point shovel
240	ball cart (B&B truck)	273	hose-end sprayer	305	safety goggles
241	bark mulch	274	hose-end washer	306	sand
242	bark medium	275	hose repair coupling	307	scoop shovel
243	bow saw	276	impulse sprinkler	308	shade fabric
244	brick paver	277	landscape fabric	309	sharpening stone
245	broadcast (cyclone) spreader	278	leaf rake	310	siphon proportioner
246	bulb planter	279	loppers	311	snowfence
247	burlap	280	mattock	312	soaker hose
248	compressed air sprayer	281	maul	313	soil auger
249	chain saw	282	mist nozzle (mist bed)	314	soil sampling tube
250	duster	283	mower blade balancer	315	solenoid valve
251	dust mask	284	nursery container, 1 gal.	316	spark plug gap gauge
252	edger	285	nursery container, 2 gal.	317	sphagnum moss
253	edging	286	nursery container, 3 gal.	318	spray suit
254	engineers scale	287	nursery spade	319	square point (flat) shovel
255	erosion netting	288	oscillating sprinkler	320	string trimmer
256	fertilizer tablet	289	peat moss	321	tape measure
257	galvanized pipe	290	pick axe	322	thatch rake
258	garden (spading) fork	291	planting bar	323	time clock
259	garden (bow) rake	292	pole pruner	324	topsoil
260	garden spade	293	polyethylene film	325	tree caliper
261	gas mask	294	polyethylene pipe	326	tree wrap
262	grading rake (aluminum)	295	post-hole digger	327	trowel
263	grafting band	296	power blower	328	T-square
264	grafting tool	297	power rake	329	turf thatcher
265	granular fertilizer	298	pruning saw	330	vermiculite
266	gravity (drop) spreader	299	reel mower	331	verticut mower
267	grass shears	300	resin-coated fertilizer	332	water breaker
268	ground limestone	301	respirator	333	wire tree basket
269	hedge shears				

# Nursery/Landscape

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

Member No.: \_\_\_\_\_

## Potting Nursery Stock Practicum Scorecard

	Possible Points	Member Score
<b>POTTING PROCESS (35 POINTS)</b>		
<b>Preparation of Plants</b> <ul style="list-style-type: none"> <li>• Quickly selects quality plants</li> <li>• Inspects/prunes damaged parts</li> <li>• Prunes excess root length</li> <li>• Handles plants properly</li> </ul>	10	
<b>Placement of Plants in Containers</b> <ul style="list-style-type: none"> <li>• Plant centered and vertical</li> <li>• Roots carefully and properly spread</li> <li>• Plant at proper depth</li> </ul>	10	
<b>Media Filling and Settling</b> <ul style="list-style-type: none"> <li>• Sufficient media added</li> <li>• Media settled by bumping</li> <li>• Plant remains stable</li> </ul>	10	
<b>Labeling of Completed Units</b> <ul style="list-style-type: none"> <li>• Plant (variety) name and date</li> <li>• Legible</li> </ul>	2	
<b>Safety Practices Applied</b> <ul style="list-style-type: none"> <li>• Proper cutting technique</li> <li>• Tool closed when finished</li> <li>• Minimal clutter in work area</li> </ul>	3	
<b>POTTING PRODUCTIVITY (15 POINTS)</b>		
<b>Number of Units Completed</b> <ul style="list-style-type: none"> <li>• At 1 point per plant potted</li> </ul>	10	
<b>Quality of Units Completed</b> <ul style="list-style-type: none"> <li>• Overall quality and uniformity of lot</li> </ul>	5	
<b>TOTAL SCORE</b>	<b>50 POINTS</b>	

# Nursery/Landscape

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

Member No.: \_\_\_\_\_

## Propagating Nursery Stock Practicum Scorecard

	Possible Points	Member Score
<b>PROPAGATION PROCESS (35 POINTS)</b>		
<b>Removal of Cuttings</b> <ul style="list-style-type: none"> <li>• Quickly selects cutting points</li> <li>• Selects best sections from stock</li> <li>• Cuts at appropriate lengths</li> <li>• Makes clean cuts</li> <li>• Maximizes use of stock</li> </ul>	5	
<b>Preparation of Cuttings</b> <ul style="list-style-type: none"> <li>• Quality of cuttings</li> <li>• Uniformity of cuttings</li> <li>• Leaves stripped/trimmed as needed</li> <li>• Proximity of cuts to nodes</li> <li>• Angled or wounded basal cut</li> <li>• Cutting/buds not damaged</li> <li>• Sanitation</li> </ul>	10	
<b>Application of Proper Hormone</b> <ul style="list-style-type: none"> <li>• Sufficient applied and excess removed</li> <li>• Efficient handling</li> <li>• Hormone kept clean</li> </ul>	7	
<b>Placement of Cuttings in Media</b> <ul style="list-style-type: none"> <li>• Furrow cut in media</li> <li>• Proper sticking depth</li> <li>• Efficient row and cutting spacing</li> <li>• Firming of cuttings</li> </ul>	8	
<b>Labeling of Completed Units</b> <ul style="list-style-type: none"> <li>• Plant (variety) name and date</li> <li>• Legible</li> </ul>	2	
<b>Safety Practices Applied</b> <ul style="list-style-type: none"> <li>• Proper cutting technique</li> <li>• Tool Closed when finished</li> <li>• Minimal clutter in work area</li> </ul>	3	
<b>PROPAGATING PRODUCTIVITY (15 POINTS)</b>		
<b>Number of Units Completed</b> <ul style="list-style-type: none"> <li>• At 1 point per 2 cuttings completed</li> </ul>	10	
<b>Quality of Units Completed</b> <ul style="list-style-type: none"> <li>• Uniform size and placement</li> </ul>	5	
<b>TOTAL SCORE</b>	<b>50</b>	

# Nursery/Landscape

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

## Team Activity Scorecard

Team Preparation	Individual Possible Score	1	2	3	4	Team	Actual Team Score
• Team leadership roles established/evident						(10)	
• Project assignment and goal defined						(10)	
• Member responsibilities outlined and defined						(10)	
• Members effective in individual tasks	(10 pts each)						
• Members supportive of each other	(10 pts each)						
• Members interact in positive/constructive way	(10 pts each)						
Sub-Total (A)	(30 possible)						
• Agreement reached on individual evaluation						(10)	
• Presentation plan developed (who does what/when)						(10)	
Sub-Total (B)						(50)	
Team Presentation	Individual Possible Score	1	2	3	4	Team	Actual Score
• Positive voice, grammar, eye contact	(5 pts each)						
• Effective organization of information	(5 pts each)						
• Effective communication of information	(5 pts each)						
• Demonstrates knowledge of subject	(5 pts each)						
Sub-Total (C)	(20 possible)						
• Effective team interaction during presentations						(15)	
• Appropriate participation from each team member						(15)	
• Effective total team presentation						(10)	
• Team Assignments fulfilled						(10)	
Sub-Total (D)						(50)	
Total Team Member Points (A + C)	(50 possible)						
Total Team Points (B + D)						(100)	

## Nursery/Landscape

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

Member No.: \_\_\_\_\_

### Verbal Customer Assistance Practicum Scorecard

	Possible Points	Member Score
<b>Conversation (35 points)</b>		
<b>Approach</b>	4	
<ul style="list-style-type: none"> <li>• Effective greeting and offer to help</li> <li>• Positive, enthusiastic; not hesitant</li> </ul>		
<b>Personality</b>	7	
<ul style="list-style-type: none"> <li>• Pleasant, friendly manner</li> <li>• Not pushy in selling</li> </ul>		
<b>Voice</b>	7	
<ul style="list-style-type: none"> <li>• Easy to hear and understand</li> <li>• Proper grammar used; good speaking form</li> </ul>		
<b>Information Requested from Customer</b>	7	
<ul style="list-style-type: none"> <li>• Determines assistance needs</li> <li>• Effectively asks details/preferences</li> </ul>		
<b>Salesmanship</b>	7	
<ul style="list-style-type: none"> <li>• Effective; tries to expand sale</li> <li>• Develops customer confidence in product/service</li> </ul>		
<b>Closing</b>	3	
<ul style="list-style-type: none"> <li>• Repeats order, handles payment (as applicable)</li> <li>• Asks if instructions understood</li> <li>• Thank you close</li> </ul>		
<b>Product/Problem/Procedure Presentation * (15 points)</b>		
<b>Correct Product/Procedure/Selections</b>	6	
<b>Correct Product/Problem Information Provided</b>	6	
<b>Clarity of Information Provided to Customer</b>	3	
<b>Total Points (50 points)</b>		

\* Includes, as applicable, evaluation of order form for completeness, spelling and arithmetic accuracy, clarity.

# Nursery/Landscape

Name: \_\_\_\_\_ Chapter: \_\_\_\_\_

State: \_\_\_\_\_ Team No.: \_\_\_\_\_

Member No.: \_\_\_\_\_

## Written Customer Assistance Practicum Scorecard

	Possible Points	Member Score
<b>Customer Relations</b> <ul style="list-style-type: none"> <li>• Does the letter create/maintain goodwill (is it free of negative words that create an unpleasant tinge)?</li> <li>• Is the tone appropriate for the letter purpose?</li> <li>• Does the letter emphasize reader (you) rather than writer (I)?</li> <li>• Is the tone and reading level appropriate for reader?</li> </ul>	10	
<b>Business Letter Form</b> <ul style="list-style-type: none"> <li>• Is the letter written in acceptable business format including the date, inside address, salutation, body, complimentary close, signature and additional data (pc, enclosure, etc.)?</li> </ul>	10	
<b>Organization</b> <ul style="list-style-type: none"> <li>• Is the content organized in logical, coherent order?</li> <li>• Is the letter properly divided into paragraphs with topic sentences?</li> <li>• Is the letter divided into sentences which clearly convey key points?</li> <li>• Does the letter use short conversational words?</li> </ul>	10	
<b>Technical Information</b> <ul style="list-style-type: none"> <li>• Is the technical information provided in letter correct?</li> <li>• Is the information provided in simple, clear, concise manner?</li> <li>• Does the letter relate directly to the inquiry?</li> </ul>	10	
<b>Grammar/Punctuation</b> <ul style="list-style-type: none"> <li>• Is the letter free of grammatical, punctuation and spelling errors?</li> </ul>	10	

<b>Total Score:</b>	50	
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<b>Deduction:</b>	( - )
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<b>Grand Total:</b>	
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ing an FFA hayride.” These motions shall not be used unless they are a required motion. Unrealistic or canned debate on rescind or reconsider may be penalized at the judges discretion.

10. The top four debates per member will be tabulated in the presentation score. No more than two debates per member per motion will be tabulated.
11. A member’s required motion will not be counted as an additional motion for another member. The person who makes the assigned main motion will be given credit for an additional motion (20 pts). Credit for an additional motion will only be given one time (Example: Division of the Assembly can only be used once for credit). If an alternative main motion is used, the member will be given credit for an additional motion.
12. A team shall be allowed 10 minutes in which to demonstrate knowledge of parliamentary law. Thirty (30) sec-

Minutes	Points Deducted
10:00 - 10:30 .....	0
10:31 - 11:00 .....	50
11:01 - 11:30 .....	100
11:31 - 12:00 .....	150
12:01 - 12:30 .....	200
12:31 - 13:00 .....	250

onds past 10 minutes will be allowed without penalty. A deduction of 50 points will be made for every additional 30 seconds or major fraction thereof. A timekeeper will furnish the time used by each team at the close of the event.

**Oral Questions (100 points)**

Each of the six-team members will be asked a planned question relating to their assigned motion. No one may step forward to help correct answers on the first six questions at any time. Following these six questions, the judges will have two additional minutes to ask questions for clarification of the presentation, after which, time will be called.

**Presentation Minutes (50 points)**

Each team will have a secretary take minutes of the presentation. A possible score of 50 points will be allowed for the minutes. Pencils and paper will be supplied to take notes during the presentation. Following the presentation, the secretary in consultation with the chair, will have thirty minutes to prepare the official minutes. Notes taken by the secretary during the presentation must be turned in with the official copy of the minutes on Form 1. (The lowest possible score for the section is zero (0).) Event officials shall use Form 3 to score the official minutes of the presentation.

**Instructions on Minutes**

1. Use the example of proper minutes as illustrated in the Official FFA Secretary’s Book and/or outlined in Robert’s Rules of Order Newly Revised.
2. A dictionary will be permitted for writing the official minutes of the presentation.
3. The minutes will begin by recording the first item of business presented. Opening ceremonies and other preliminary information will not be used. Example: “It was moved by John Smith and seconded by Jill Jones to start the Food For America program on December 1.”
4. The chair and the secretary may consult in preparing the official minutes of the presentation. A total of 30 minutes will be allowed to prepare the minutes.
5. A judge will read, review and grade the official minutes of the presentation after completion of each round of the event. The scores will be provided to the presentation judges for use in computing final scores.

**B. INDIVIDUAL ACTIVITY**

**WRITTEN TEST (100 POINTS)**

A written test will consist of 25 objective-type multiple choice questions covering basic parliamentary law and information pertaining to minutes. Thirty minutes will be allowed to complete the test. Each participant may score a maximum of 100 points. Alternates do not take the written test. The average score of the six-team members will be used to compute the total team score in each round.

## V. SCORING

### Guidelines for Scoring Discussion

1. It is essential that each judge observes and maintains consistent criteria in scoring discussions for the duration of the event.
2. Judges must overlook personal opinions and beliefs and score discussion in an unbiased manner. All discussion should be scored at the time it is delivered.
3. Characteristics of effective discussion include a) completeness of thought, b) logical reasoning, c) clear statement of speaker's position, d) conviction of delivery, and e) concise and effective statement of discussion.
4. A suggested grading scale is as follows:
 

Excellent .....	16-20 points
Good .....	11-15 points
Average .....	6-10 points
Poor .....	0-5 points
5. An excellent discussion would be extremely unusual and would be characterized by a truly stirring delivery and brilliant in terms of information provided and/or suggestions for action offered. Poor discussion would be characterized by a lack of effective delivery, poor grammar, reasoning and substance. An example might be: "I think this is a good idea."

6. Most discussion would fall in the range of 8-15 points. An example of a discussion might be: "I think this is a very significant motion which should be passed for the following reasons (new, informative and logically related)." Each debate should have a logical conclusion. Good discussion would be characterized by effective delivery, substance, creative and visionary thought delivered in a convincing and compelling manner.
7. Each time a participant in the presentation discusses any motion, they may earn a score. However, an individual may never earn more than 60 points in a given presentation. Furthermore, no more than 20 points may be earned during one recognition by the chair.
8. The top four debates per member will be tabulated in the presentation score. No more than two debates per member per motion will be tabulated.

### Guidelines for Scoring the Chair

1. Ability to preside – handling of motions, keeping members informed, use of the gavel, distribution of discussion. (80 points)
2. Leadership – stage presence, poise, self-confidence, politeness and voice. (20 points)

The judges will use Form 2 to score the event. The top two teams will be ranked first and second based on the judges' lowest combined rank. The remaining teams will be designated silver or bronze awards.

## SCORING

Phase	Breakdown of Points	Section Points	Total Points
Written Test (average of 6 members scores)			100
Presentation			750
Total of 5 members on the floor			500
Required motion			20
Discussion (max. of 4 debates @ 20 pts. each)			60
Additional motion (incl. main or alternate main motion)			20
Chair			100
Ability to preside			80
Leadership			20
Teams's General Effect			150
Conclusions Reached by Team (Team's use of motions and discussion support disposal of the main motion)			50
Team Effect (Degree to which discussion was convincing, logical, realistic, orderly, and efficient)			50
Team's voice, poise, expression and appearance			50
Oral Questions			100
Total for members' questions (6x12 pts)			72
Additional clarification questions (2 min.)			28
Minutes of Presentation			50
Completeness and Accuracy			25
Format			10
Grammar, style, legibility			15
Deductions			
Deductions for parliamentary mistakes			5-20 pts/minor mistake
Deductions for omitting assigned motion			50
Deductions for going overtime			50 pts for every 30 seconds over 10:30
TOTAL			1,000

**VI. TIEBREAKERS**

Tiebreakers for teams will be:

1. the total presentation score,
2. the team's average score on the written test
3. the total score for questions.

**VII. AWARDS**

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

Each state will be provided a plaque for their state winning team. The first place national team will be presented a trophy plaque. Each member of the first place team will be presented an individual team member plaque. A national gold plaque and individual medals will be presented to the top 12 teams competing in the event; silver plaques and individual medals to the middle 18; and remaining teams and individuals competing will receive bronze. The top four teams will each receive a designated gold plaque.

Scholarships may be awarded as funded by special project sponsors. Collegiate scholarships awarded to FFA members competing at or above the local level in parliamentary procedure events may be available.

**VIII. REFERENCES**

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

The official text will be the latest edition of *Robert's Rules of Order Newly Revised* (currently 1990 edition).

Additional references may include *FFA New Horizons* magazine, the Official FFA Manual, the FFA Student Handbook and the Official Chapter Secretary's Book.

**CHART OF PERMISSIBLE MOTIONS FOR THE  
NATIONAL FFA PARLIAMENTARY PROCEDURE CAREER DEVELOPMENT EVENT**

Motion	Second Required	Debatable	Amendable	Vote Required	Reconsider
<b>Privileged Motions</b>					
Fix the Time to Which to Adjourn	Yes	No	Yes	Majority	Yes
Adjourn	Yes	No	No	Majority	No
Recess	Yes	No	Yes	Majority	No
Raise a Question of Privilege	No	No	No	Chair Grants	No
Call for the Orders of the Day	No	No	No	No vote, demand	No
<b>Subsidiary Motions</b>					
Lay on the table	Yes	No	No	Majority	Neg. only (3)
Previous Question	Yes	No	No	2/3	Yes
Limit or Extend Limits of Debate	Yes	No	Yes	2/3	Yes
Postpone to a Certain Time (or Definitely)	Yes	Yes	Yes	Majority	Yes
Commit or Refer	Yes	Yes	Yes	Majority	Yes
Amend	Yes	Yes (1)	Yes	Majority	Yes
Postpone Indefinitely	Yes	Yes	No	Majority	Affirm. Only
<b>Main Motion</b>	Yes	Yes	Yes	Majority	Yes
<b>Incidental Motions</b>					
Appeal	Yes	Yes (1)	No	Majority	Yes
Division of the Assembly	No	No	No	No vote, demand	No
Division of a Question	Yes	No	Yes	Majority	No
Objection to the Consideration of a Question	No	No	No	2/3	Neg. only
Parliamentary Inquiry	No	No	No	Chair answers	No
Point of order	No	No	No	Normally no vote Chair rules	No
Suspend the Rules	Yes	No	No	(2)	No
Withdraw a Motion	No (3)	No	No	Majority (3)	Neg. Only
<b>Motions That Bring a Question Again Before the Assembly</b>					
Reconsider (4)	Yes	Yes (1)	No	Majority	No
Rescind (4)	Yes	Yes	Yes	Majority with notice, 2/3, or majority of membership (3)	Neg. Only
Take from the Table (4)	Yes	No	No	Majority	No

(1) If applied to a debatable motion

(2) Rules of Order - 2/3 vote, standing rules - majority vote

(3) Refer to *Robert's Rules of Order* Newly Revised (10th edition) for rule(s)

(4) Refer to CDE rule #9 before using these motions in the demonstration

The parliamentary procedure career development event committee developed information on the chart by using *Robert's Rules of Order*.

For more information on parliamentary procedure, see the *FFA Student Handbook*, which contains a complete chapter on the subject.

Even more detail on the subject is available in parliamentary procedure books such as *Robert's Rules of Order*.

# Parliamentary Procedure

## National Parliamentary Procedure Event Official Minutes

Chapter: \_\_\_\_\_ Date: \_\_\_\_\_

State: \_\_\_\_\_ Place: \_\_\_\_\_

Chair's Signature: \_\_\_\_\_ Secretary's Signature: \_\_\_\_\_

Add Additional Pages if Needed

# POULTRY

## CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

### I. PURPOSE

The National FFA Poultry Career Development Event stimulates learning activities relative to production and management, processing, marketing, and consumption of poultry products.

### II. OBJECTIVES

The National FFA Poultry Career Development Event provides opportunities for the participant to:

- make accurate observations and logical decisions,
- discuss and justify decisions (orally and written),
- communicate industry and product terminology,
- promote USDA standards of product quality,
- identify consumer preferences for products,
- recognize economic importance of value-added products,
- collaborate with others for solutions to industry problems, and
- demonstrate the use of appropriate information technology used in the poultry industry.

Specifically, the participants will:

- evaluate and select live meat-type chickens for broiler breeding purposes and orally defend the selection,

- evaluate and place live egg-type chickens,
- grade ready-to-cook carcasses and parts of chickens and turkeys,
- grade and place ready-to-cook carcasses of turkeys and orally defend the placing,
- grade individual shell eggs for interior quality,
- evaluate and place cartons of shell eggs and indicate factors governing the placing,
- evaluate and place further-processed poultry meat products (e.g., precooked, breaded chicken meat patties, tenders, or nuggets) and indicate factors governing the placing,
- identify poultry carcass parts,
- complete a written examination on poultry production and management, and
- perform a team activity related to poultry production and management.

### III. EVENT RULES

1. **Team Make-up-** Teams may consist of three or four members. Team ranking is determined by combining the scores of the top three students from each team. Teams that for whatever reason have fewer than three members are not eligible for team awards, but students may receive individual awards.
2. It is highly recommended that participants be in official FFA dress during all events.
3. **Humane Treatment of Live Animals:** All live animals must be treated with the utmost care and respect. Violation of this rule will automatically disqualify an

offending team member from the event. The supervision, interpretation, and enforcement of this rule will be the responsibility of the Event Superintendent and/or their designee.

4. Each team will receive computer scan sheets during the National FFA Poultry Career Development Event Coaches' Meeting and Orientation.
5. Each team will report to the Event Superintendent for instructions at the specified time and place listed in the current year's "Program for National FFA Career Development Events." No participant, coach, or advisor may enter the event area before the specified time.
6. Each participant will have ten minutes to complete each class. A warning signal will inform the participants when time expires for each class. Participants will have one minute to move from class to class.
7. A reliable technique will be used to identify the poultry and poultry products in the placing, selection, grading, and identification classes.

#### IV. EVENT FORMAT

##### A. EQUIPMENT

**Materials students must provide-** Each participant must have two (2) clean, sharpened No. 2 pencils, and an electronic calculator. Calculators that are permissible for use in this event are those that are battery operated, non-programmable, and silent. A calculator may have the following functions- addition, subtraction, multiplication, division, equals, percent, square root, +/- key, and one memory register. Calculators that are capable of storing equations, definitions, and/or terms are not permitted. Participants attempting to use unauthorized calculators will be disqualified.

**Materials provided by the event officials-** Participants will be provided a clipboard for the purpose of providing a "backing" and protection while completing the event scan sheet and for storage of the scan sheet during the event. No other containers or devices (e.g., student provided clipboards, folders, or envelopes) will be permitted for participant use during the event. In addition participants will be provided a standard form ("Official Notes of National FFA Poultry

Career Development Event Placings/Grades") for recording decisions made during the event. This document will serve as a participant's personal record of decisions made during the event. NO OTHER MATERIALS will be permitted. Participants attempting to use unauthorized materials will be disqualified.

##### B. TEAM ACTIVITY

The team activity and the written examination will be administered at the beginning of the event. All members of a team will work collaboratively to perform an activity related to poultry production and management. Team members will observe **and/or** be provided information about a poultry industry situation or problem scenario. Team members will then answer 15 questions related to the information gained from the situation/scenario and from reference materials studied in preparation for the career development event. The team activity may require participants to use information technology that is appropriate for the poultry industry (e.g., computers, software applications, Internet resources, and related technologies).

Class #	Points
14. Team Activity	200

##### C. INDIVIDUAL ACTIVITIES

###### Live Poultry

1. Each participant will select the four best potential broiler breeders from a class of eight meat-type cockerels or pullets. The keep-cull birds may or may not have trimmed beaks. Each participant will be permitted to "handle" the birds, so long as the birds are inspected in a professional and humane manner. Following this class, the participant will have ten minutes to prepare oral reasons for presentation.
2. Each participant will present oral reasons for the selection class of broiler breeders. Participants will have two minutes to present their oral reasons. Reasons should include current USDA and poultry industry terminology and standards.
3. Each participant will place a class of four past production egg-type hens. The birds will be Single-Comb White Leghorns, or commercial strains of Leghorn-type (inbred cross). The birds may or may not have trimmed

beaks. Each participant will be permitted to “handle” the birds, so long as the birds are inspected in a professional and humane manner.

Class#	Points
1. Eight meat-type cockerels or pullets for broiler breeder selection	50
2. Oral reasons for Class 1	50
3. Four past production egg-type hens for placing	50

### Ready-to-Cook Poultry

- Each participant will grade a class of ten ready-to cook chicken and/or turkey carcasses and/or parts. Criteria for grading will be from USDA standards for chicken carcasses weighing two pounds to six pounds and for turkey carcasses weighing six pounds to sixteen pounds. The USDA quality grades will be A, B, and C. Participants may not touch any carcass or part; doing so will result in disqualification. If used, the shackle holding a carcass may be rotated to show the entire carcass.
- Each participant will place a class of four ready-to-cook turkey carcasses. Criteria for placing will be from USDA standards for turkey carcasses weighing six pounds to sixteen pounds. Participants may not touch any carcass; doing so will result in disqualification. If used, the shackle holding a carcass may be rotated to show the entire carcass. Following this class, participants will have ten minutes to prepare oral reasons for presentation.
- Each participant will present oral reasons for their placing of the class of ready-to-cook turkey carcasses. Participants will have two minutes to present their reasons. Reasons should include current USDA and poultry industry terminology and standards.

Class #	Points
4. Ten chicken and/or turkey carcasses and/or parts for quality grading	50
5. Four turkey carcasses for placing	50
6. Oral reasons for Class 5	50

### Shell Eggs

- Each participant will grade a class of ten white (or white-tint)-shelled eggs. Criteria for grading will be from USDA standards for interior quality of market eggs. The USDA quality grades will be AA, A, B, and Loss. Participants must candle the eggs to determine the appropriate USDA quality grade, but improper handling of eggs will result in disqualification.
- Each participant will place a class of four one-dozen cartons of chicken eggs. Criteria for placing will be from USDA standards for exterior shell soundness and cleanness (i.e., quality grades A, B, and Dirty), and will also include uniformity in size and color of eggs in the cartons. Participants may not touch any egg or carton; doing so will result in disqualification.
- Each participant will determine written factors for the placing of the class of cartons of chicken eggs. The written factors will relate to the criteria used for placing the cartons of eggs.

Class #	Points
7. Ten white-shelled eggs for interior quality grading	50
8. Four one-dozen cartons of chicken eggs for placing	50
9. Written factors for placing cartons of eggs	50

### Further Processed Poultry

- Each participant will place a class of four further-processed poultry meat products (e.g., precooked, breaded chicken meat patties, tenders, or nuggets). Criteria for placing will be batter/breading texture and color, meat color and texture, appropriateness of shape and size, and evidence of foreign material. Participants may not touch any product; doing so will result in disqualification.
- Each participant will determine written factors for the placing of the class of further-processed poultry meat products. Written factors will relate to the criteria used for placing the products.

- Each participant will identify ten poultry parts. Poultry parts to be identified will be randomly selected and consistent with those used in the chicken processing and merchandising industries. The participant may not touch any part; doing so will result in disqualification.

Class #	Points
10. Four further-processed poultry meat products (e.g., precooked, breaded chicken meat patties, tenders, or nuggets) for placing	50
11. Written factors for Class 10	50
12. Ten poultry carcass parts for identification	50

### Poultry Management Written Exam

- The written examination and the team activity will be administered at the beginning of the event.
- Each participant will complete a thirty-item written examination on poultry production and management. Five or more items will require mathematical calculations. Examination items will be developed from information found in the references (see Section VIII).

Class #	Points
13. Written Examination	150

## V. SCORING

**Point Value of 13 Classes/Individual**  
**750 (Total Possible Individual Points)**

**Point Value of 14 Classes**  
**(including the Team Activity)**  
**2,450 (Total Possible Team Points)**

## VI. TIEBREAKERS

If ties occur, the following events will be used in order to determine the ranking of award recipients:

- Written Management Exam
- Live Birds Evaluation

## VII. AWARDS

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a Special Project, and/or by the general fund of the National FFA Foundation.

## VIII. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

\*Available from Instructional Materials Service (IMS), Texas A&M University, 2588 TAMUS, College Station, TX 77843-2588 (Phone: 979-845-6601; FAX: 979-845-6608; [ims@tamu.edu](mailto:ims@tamu.edu); <http://www-ims.tamu.edu/>).

- Poultry Science Manual for National FFA Career Development Events.\* (Fourth edition) (IMS Catalog #0418-4)

For even-number years (2002 and 2004) examination items will be derived from this reference except for those sections related to poultry anatomy, physiology, health, waste, environment, and marketing.

For odd-number years (2001, 2003, and 2005) examination items will be derived from this reference except for those sections related to poultry hatcheries, broiler breeders, market broilers, and turkey breeders.

(Note: Reference b., c., and d. are additional sources for the examination items.)

- Evaluation of Precooked, Breaded Chicken Patties\* (14 color slides with four-page script) (IMS Catalog #5140)
- Poultry Grading Manual - Agriculture Handbook Number 31\* (latest USDA edition) (IMS Catalog #0414)

- d. Egg-Grading Manual - Agriculture Handbook Number 75\* (latest USDA edition) (IMS Catalog #0417)

The Hormel Computing Slide is available through the National FFA Agriculture Education Resources Catalog, Item #HCSS.

## IX. EXAMPLES

### SCORING FORMAT SUMMARY

#### Placing Classes

Class 3, 5, 8 and 10 are placing classes. Each class has a value of 50 points per participant.

The Event Superintendent obtains (from the judge) the “official placing” of the class and the “basis of grading” (numerical difference or “cut” between each of the three pairs—top, middle and bottom—in the placing class). The three “cuts” are totaled; the total cannot exceed 15 points.

From the judge’s information and the directions printed on the Hormel Computing Slide, the correct scores are obtained for all (24) possible placings (refer to REFERENCES section for the source of the computing slide). The computer scoring system uses the Hormel Scoring “format” when calculating a participant’s score for each placing class.

#### Selection Class

Class 1, a keep-cull class, has a value of 50 points per participant, which is the sum of the point values given by the judge to the four birds selected to be “kept.” A participant’s score is calculated from a scorecard, which designates the point value for each of the eight birds in the class.

#### Example Selection Class

8	7	6	5	4	3	2	1	Bird Numbers
(18)	(13)	(11)	(8)	(7)	(4)	(3)	(0)	Point Values[1]

[1] Adapted from information provided by Don Sheets, Retired, Kansas Board of Agriculture, Topeka, Kansas.

#### Oral Reasons Classes

Class 2 and Class 6 are oral reasons for Class 1 and Class 5 respectively. Each class has a value of 50 points per participant. The score is calculated from a scorecard (refer to the “Presenting Oral Reasons” section of the Poultry Science Manual for National FFA Career Development Events, Fourth edition.)

#### Grading Classes

Class 4 and Class 7 are grading classes. Each class has a value of 50 points per participant.

Participant’s OFFICIAL GRADE  
Grade

	A	B	C	NG
A	5	3	1	0
B	3	5	3	0
C	1	3	5	0

As shown above, Class 4 is scored based on the USDA quality grades A, B, C and NG. Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point.

Participant’s OFFICIAL GRADE  
Grade

	AA	A	B	Loss
AA	5	3	1	0
A	3	5	3	0
B	1	3	5	0
Loss	0	0	0	5

As shown above, Class 7 is scored based on the USDA quality grades AA, A, B and Loss. Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point. However, if the “Loss” line is “crossed” (i.e., an incorrect judgment) all five points are deducted to obtain a score of zero points.

**Written Factors Classes**

Class 9 and Class 11 are written factors for Class 8 and Class 10, respectively. Each class has a value of 50 points per participant.

For Class 9, each item is evaluated for three different quality factors. For Class 11, each item is evaluated for six different quality factors. Each item may be considered to have “no defect” or to have one or more defects.

For each correct match with the judge, zero points are deducted.

For each "no defect" missed or added three (3) points are deducted.

For each "critical factor (defect)," "major factor (defect)" or "minor factor (defect)" missed OR added, three (3) points are deducted.

No score will be less than zero.

**Identification Class**

Class 12 is an identification class consisting of ten poultry carcass parts. The class has a value of 50 points per participant. Each correct answer receives a score of five points.

**Written Examination Class**

Class 13 is an examination consisting of 30 multiple-choice items. The class has a value of 150 points per participant. Each correct answer receives a score of five points.

**Team Activity Class**

Class 14 is a team activity containing 15 questions. The class has a value of 200 points per team. Each correct answer receives a score of 13.33 points. (Note: This class does not apply to individual participant scores)

**SAMPLE SCORECARD FOR IDENTIFICATION OF PARTS**

Directions: Darken the poultry carcass part that you consider correct for each of the ten items.

<b>Part No.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Half	o	o	o	o	o	o	o	o	o	o
Front Half	o	o	o	o	o	o	o	o	o	o
Rear Half	o	o	o	o	o	o	o	o	o	o
Whole breast with ribs	o	o	o	o	o	o	o	o	o	o
Bnls., skinless whole breast with rib meat	o	o	o	o	o	o	o	o	o	o
Whole Breast	o	o	o	o	o	o	o	o	o	o
Bnls, skinless whole breast	o	o	o	o	o	o	o	o	o	o
Split breast with ribs	o	o	o	o	o	o	o	o	o	o
Bnls, skinless, split breast with rib meat	o	o	o	o	o	o	o	o	o	o
Split breast	o	o	o	o	o	o	o	o	o	o
Bnls, skinless split breast	o	o	o	o	o	o	o	o	o	o
Breast quarter	o	o	o	o	o	o	o	o	o	o
Breast quarter without wing	o	o	o	o	o	o	o	o	o	o
Tenderloin	o	o	o	o	o	o	o	o	o	o
Wishbone	o	o	o	o	o	o	o	o	o	o
Leg quarter	o	o	o	o	o	o	o	o	o	o
Leg	o	o	o	o	o	o	o	o	o	o
Thigh w/back portion	o	o	o	o	o	o	o	o	o	o
Thigh	o	o	o	o	o	o	o	o	o	o
Bnls skinless thigh	o	o	o	o	o	o	o	o	o	o
Drumstick	o	o	o	o	o	o	o	o	o	o
Bnls skinless drum	o	o	o	o	o	o	o	o	o	o
Wing	o	o	o	o	o	o	o	o	o	o
Drumette	o	o	o	o	o	o	o	o	o	o
Wing Portion	o	o	o	o	o	o	o	o	o	o
Liver	o	o	o	o	o	o	o	o	o	o
Gizzard	o	o	o	o	o	o	o	o	o	o
Heart	o	o	o	o	o	o	o	o	o	o
Neck	o	o	o	o	o	o	o	o	o	o

**SAMPLE SCORECARD FOR CARTON EGGS**

## CARTON EGGS FACTORS SCORECARD

**Directions:** Darken the exterior quality factors that you considered when placing the class.

<b>Carton No.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Soundness</b>				
Checked or Cracked Shell	o	o	o	o
Irregular Shape	o	o	o	o
Calcium Deposits (Rough, Elongated)	o	o	o	o
Definite Ridges	o	o	o	o
Body Check	o	o	o	o
<b>Cleanness</b>				
Adhering Dirt	o	o	o	o
Slight Stain	o	o	o	o
Prominent Stain	o	o	o	o
<b>Uniformity of Carton</b>				
Color	o	o	o	o
Size	o	o	o	o
<b>No Defect</b>	o	o	o	o

**SAMPLE SCORECARD FOR FURTHER-PROCESSED POULTRY MEAT PRODUCTS**

## FURTHER-PROCESSED POULTRY MEAT PRODUCTS FACTORS SCORECARD

**Directions:** Darken the quality factors that you considered when placing the products.

<b>Product No.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Batter/Breading</b>				
Texture	o	o	o	o
Meat Color	o	o	o	o
Meat Texture	o	o	o	o
Batter/Breading Color	o	o	o	o
Shape/Size/Completeness	o	o	o	o
Foreign Material	o	o	o	o
<b>No Defect</b>	o	o	o	o

# PREPARED PUBLIC SPEAKING

## CAREER DEVELOPMENT EVENT

A SPECIAL PROJECT OF THE NATIONAL FFA FOUNDATION

**IMPORTANT NOTE:** *Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.*

### I. PURPOSE

The National FFA Prepared Public Speaking Career Development Event is designed to develop agricultural leadership by providing for member participation in agricultural public speaking activities and stimulating interest in leadership and citizenship. The national event will be held in conjunction with the national FFA convention.

### II. EVENT RULES

1. The National FFA Prepared Public Speaking Career Development Event will be limited to one participant from each state association.
2. The National FFA Prepared Public Speaking Career Development Event will follow the general rules and policies for all National FFA Career Development Events. A participant cannot serve as a member of the national officer nominating committee.
3. Each participant's manuscript will be the result of his or her own efforts. It is expected that the participant will take advantage of all available training facilities at their local school in developing their speaking ability. Facts and working data may be secured from any source, but must be appropriately documented.

4. Participants will report to the event superintendent for instructions at the time and place shown in the current year's "Program for National FFA Events."
5. It is highly recommended that participants be in official FFA dress as defined in the current Official FFA Manual.
6. **Each state with a speaker shall provide a competent individual to judge the national event.** Judges for the final round will be representatives from agricultural education related organizations. Three to six competent and impartial persons will be selected to judge the event.
7. The Board of National Officers and National Board of Directors of the FFA will be in charge of this event.

### III. EVENT FORMAT

#### A. MATERIALS TO BE SUBMITTED BY AUGUST 15:

1. Fifteen double-spaced typewritten copies of the speech on 8 1/2" x 11" white bond paper with cover page that gives the speech title, participant's name, state and date. The body of the manuscript will have 1" margins, and 10-12 characters per inch. Follow APA style manual for developing references and bibliography. Do not bind, but place a staple in upper left corner. Manuscripts not meeting these guidelines will be penalized.

2. A signed statement of originality on the certification form provided through your state FFA association.
3. A complete and accurate bibliography used in writing the speech. All participants in the National FFA Prepared Public Speaking Career Development Event should give credit to others where any direct quotes, phrases, or special dates are used in the manuscript, in order not to be guilty of plagiarism. The Boards of National Officers and Directors of FFA at the October 1960 meeting in Kansas City, Missouri, adopted the following:

“A bibliography MUST be included as part of the public speaker’s manuscript, and direct quotes from any source of information must be marked in “quotes” on the manuscript and be identified in the bibliography. Failure to do so will automatically disqualify a participant. This applies to all events above the local level.”

## B. SUBJECTS

Participants may choose any current subject for their speeches, which is of an agricultural nature. This may include agriscience and technology, agribusiness, agrimarketing, international agricultural relations, and agricultural communications. Official judges of any National FFA Prepared Public Speaking Career Development Event shall disqualify a participant if he or she speaks on a non-agricultural subject.

## C. TIME LIMIT

Each speech shall be a minimum of six minutes in length and a maximum of eight minutes. Each participant will be allowed five minutes additional time in which he or she will be asked questions relating to his or her speech. Participants are to be penalized one point per second on each judge’s score sheet for being under six minutes or over eight minutes. No time warnings will be given.

## D. JUDGING

1. Event officials will randomly determine the speaking order. The program chairman shall introduce each participant by name in order of the drawing.

A participant will be permitted to use notes while speaking, but deductions in scoring may be made for this practice if it detracts from the effectiveness of the presentation. No props are to be used. Applause shall be withheld until all participants have spoken.

2. A timekeeper(s) shall be designated who will record the time used by each participant in delivering his or her speech, noting undertime or overtime, if any, for which deductions will be made. Timekeepers should be sitting together.
3. Prior to the event the content and composition of all manuscripts will be judged and scored by qualified individuals using the manuscript score sheet. Manuscript scores will be averaged and supplied to the presentation judges after they have scored the oral presentation. Manuscript comment cards will be completed by manuscript judges and presented to the contestants at the awards function. Presentation judges will be furnished with typewritten copies of the participants’ manuscripts, which they will use to formulate questions.
4. At the time of the event, the judges will be seated in different sections of the room in which the event is held. They will score each participant on the delivery of the production, using the score sheet provided. They will also complete a judge’s comment card, which will be presented to the participants at the awards function.
5. Each judge shall formulate and ask questions. Questions shall pertain directly to the speaker’s subject. Questions containing two or more parts should be avoided. Judges will score each participant on the ability to answer all questions asked by all judges. The full five minutes for questions should be used.
6. When all participants have finished speaking, each judge will total the score on composition and delivery for each participant. The timekeeper(s) record will be used in computing the final score for each participant. The judges’ score sheets will then be submitted to event officials to determine final rankings of participants.

**THE FOLLOWING SCANTRON SHEETS ARE USED BY THE NATIONAL FFA CAREER DEVELOPMENT EVENTS.**

Agricultural Communications – 228574	Environmental/Natural Resources – 105482	Livestock Evaluation – 239559-1 205948
Agricultural Issues – 205948	Extemporaneous Public Speaking – 205948	Marketing Plan – 205948
Agricultural Mechanics – 228574	Farm Business Management – 228574	Meats Evaluation and Technology – 239562-1
Agricultural Sales – 228574	Floriculture – 105482 205948	Nursery/Landscape – 228574 105482 205948
Agronomy – 105482	Food Science – 105482	Parliamentary Procedure – 228574 205948
Creed Speaking – None	Forestry – 239564-1 205948	Poultry Evaluation 239563-1 205948
Dairy Cattle Evaluation – 239560-1 205948	Horse Evaluation – 239559-1 205948	Prepared Public Speaking – 205948
Dairy Foods – 239561-1	Job Interview – 228574	

Please note form 105482 will be replaced by form 228576 when current supplies of 105482 have been exhausted.

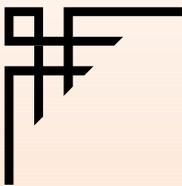












# Multi Purpose B

CDE form# 228576

Team Name

Incorrect Marks    Correct Mark



Team/Schl ID#	State	Full Name (Last name followed by a space followed by first name)
0 0 0 0		
1 1 1 1	A A	A A A A A A A A A A A A A A A A A A
2 2 2 2	B B	B B B B B B B B B B B B B B B B B B
3 3 3 3	C C	C C C C C C C C C C C C C C C C C C
4 4 4 4	D D	D D D D D D D D D D D D D D D D D D
5 5 5 5	E E	E E E E E E E E E E E E E E E E E E
6 6 6 6	F F	F F F F F F F F F F F F F F F F F F
7 7 7 7	G G	G G G G G G G G G G G G G G G G G G
8 8 8 8	H H	H H H H H H H H H H H H H H H H H H
9 9 9 9	I I	I I I I I I I I I I I I I I I I I I

Codes			
Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

J J	J J J J J J J J J J J J J J J J J J
K K	K K K K K K K K K K K K K K K K K K
L L	L L L L L L L L L L L L L L L L L L
M M	M M M M M M M M M M M M M M M M M M
N N	N N N N N N N N N N N N N N N N N N
O O	O O O O O O O O O O O O O O O O O O
P P	P P P P P P P P P P P P P P P P P P
Q Q	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
R R	R R R R R R R R R R R R R R R R R R
S S	S S S S S S S S S S S S S S S S S S
T T	T T T T T T T T T T T T T T T T T T
U U	U U U U U U U U U U U U U U U U U U
V V	V V V V V V V V V V V V V V V V V V
W W	W W W W W W W W W W W W W W W W W W
X X	X X X X X X X X X X X X X X X X X X
Y Y	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
Z Z	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z

Place	Class										Place		
	1	2	3	4	5	6	7	8	9	10			
1	1 2 3 4											1 2 3 4	1
2	1 2 4 3											1 2 4 3	2
3	1 3 2 4											1 3 2 4	3
4	1 3 4 2											1 3 4 2	4
5	1 4 2 3											1 4 2 3	5
6	1 4 3 2											1 4 3 2	6
7	2 1 3 4											2 1 3 4	7
8	2 1 4 3											2 1 4 3	8
9	2 3 1 4											2 3 1 4	9
10	2 3 4 1											2 3 4 1	10
11	2 4 1 3											2 4 1 3	11
12	2 4 3 1											2 4 3 1	12
13	3 1 2 4											3 1 2 4	13
14	3 1 4 2											3 1 4 2	14
15	3 2 1 4											3 2 1 4	15
16	3 2 4 1											3 2 4 1	16
17	3 4 1 2											3 4 1 2	17
18	3 4 2 1											3 4 2 1	18
19	4 1 2 3											4 1 2 3	19
20	4 1 3 2											4 1 3 2	20
21	4 2 1 3											4 2 1 3	21
22	4 2 3 1											4 2 3 1	22
23	4 3 1 2											4 3 1 2	23
24	4 3 2 1											4 3 2 1	24

Team Activity		
Team	Ind.	
0 0 0 0	0 0 0 0	
1 1 1 1	1 1 1 1	
2 2 2 2	2 2 2 2	
3 3 3 3	3 3 3 3	
4 4 4 4	4 4 4 4	
5 5 5 5	5 5 5 5	
6 6 6 6	6 6 6 6	
7 7 7 7	7 7 7 7	
8 8 8 8	8 8 8 8	
9 9 9 9	9 9 9 9	

Practicums (Judges)					
1	2	3	4	5	6
0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1
2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2
3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3
4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4
5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5
6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6
7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7
8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8
9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9

Exam					Exam 2/Team				
1	A B C D E	26	A B C D E	1	A B C D E				
2	A B C D E	27	A B C D E	2	A B C D E				
3	A B C D E	28	A B C D E	3	A B C D E				
4	A B C D E	29	A B C D E	4	A B C D E				
5	A B C D E	30	A B C D E	5	A B C D E				
6	A B C D E	31	A B C D E	6	A B C D E				
7	A B C D E	32	A B C D E	7	A B C D E				
8	A B C D E	33	A B C D E	8	A B C D E				
9	A B C D E	34	A B C D E	9	A B C D E				
10	A B C D E	35	A B C D E	10	A B C D E				
11	A B C D E	36	A B C D E	11	A B C D E				
12	A B C D E	37	A B C D E	12	A B C D E				
13	A B C D E	38	A B C D E	13	A B C D E				
14	A B C D E	39	A B C D E	14	A B C D E				
15	A B C D E	40	A B C D E	15	A B C D E				
16	A B C D E	41	A B C D E	16	A B C D E				
17	A B C D E	42	A B C D E	17	A B C D E				
18	A B C D E	43	A B C D E	18	A B C D E				
19	A B C D E	44	A B C D E	19	A B C D E				
20	A B C D E	45	A B C D E	20	A B C D E				
21	A B C D E	46	A B C D E	21	A B C D E				
22	A B C D E	47	A B C D E	22	A B C D E				
23	A B C D E	48	A B C D E	23	A B C D E				
24	A B C D E	49	A B C D E	24	A B C D E				
25	A B C D E	50	A B C D E	25	A B C D E				

Assessment and Solution									
1	A B C D E	11	A B C D E	21	A B C D E	31	A B C D E		
2	A B C D E	12	A B C D E	22	A B C D E	32	A B C D E		
3	A B C D E	13	A B C D E	23	A B C D E	33	A B C D E		
4	A B C D E	14	A B C D E	24	A B C D E	34	A B C D E		
5	A B C D E	15	A B C D E	25	A B C D E	35	A B C D E		
6	A B C D E	16	A B C D E	26	A B C D E	36	A B C D E		
7	A B C D E	17	A B C D E	27	A B C D E	37	A B C D E		
8	A B C D E	18	A B C D E	28	A B C D E	38	A B C D E		
9	A B C D E	19	A B C D E	29	A B C D E	39	A B C D E		
10	A B C D E	20	A B C D E	30	A B C D E	40	A B C D E		



# Horse & Livestock CDE form # 239559-1

Team Name/Additional Info

Incorrect Marks    Correct Mark



Team/Schl ID	State	Full Name (Last name followed by a space followed by first name)
0 0 0 0		
1 1 1 1	A A	A A A A A A A A A A A A A A A A A A
2 2 2 2	B B	B B B B B B B B B B B B B B B B B B
3 3 3 3	C C	C C C C C C C C C C C C C C C C C C
4 4 4 4	D D	D D D D D D D D D D D D D D D D D D
5 5 5 5	E E	E E E E E E E E E E E E E E E E E E
6 6 6 6	F F	F F F F F F F F F F F F F F F F F F
7 7 7 7	G G	G G G G G G G G G G G G G G G G G G
8 8 8 8	H H	H H H H H H H H H H H H H H H H H H
9 9 9 9	I I	I I I I I I I I I I I I I I I I I I

Codes			
Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

K K	K K K K K K K K K K K K K K K K K K
L L	L L L L L L L L L L L L L L L L L L
M M	M M M M M M M M M M M M M M M M M M
N N	N N N N N N N N N N N N N N N N N N
O O	O O O O O O O O O O O O O O O O O O
P P	P P P P P P P P P P P P P P P P P P
Q Q	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
R R	R R R R R R R R R R R R R R R R R R
S S	S S S S S S S S S S S S S S S S S S
T T	T T T T T T T T T T T T T T T T T T
U U	U U U U U U U U U U U U U U U U U U
V V	V V V V V V V V V V V V V V V V V V
W W	W W W W W W W W W W W W W W W W W W
X X	X X X X X X X X X X X X X X X X X X
Y Y	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
Z Z	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z

Placing	Class								Placing	
	1	2	3	4	5	6	7	8		
1	1 2 3 4								1 2 3 4	1
2	1 2 4 3								1 2 4 3	2
3	1 3 2 4								1 3 2 4	3
4	1 3 4 2								1 3 4 2	4
5	1 4 2 3								1 4 2 3	5
6	1 4 3 2								1 4 3 2	6
7	2 1 3 4								2 1 3 4	7
8	2 1 4 3								2 1 4 3	8
9	2 3 1 4								2 3 1 4	9
10	2 3 4 1								2 3 4 1	10
11	2 4 1 3								2 4 1 3	11
12	2 4 3 1								2 4 3 1	12
13	3 1 2 4								3 1 2 4	13
14	3 1 4 2								3 1 4 2	14
15	3 2 1 4								3 2 1 4	15
16	3 2 4 1								3 2 4 1	16
17	3 4 1 2								3 4 1 2	17
18	3 4 2 1								3 4 2 1	18
19	4 1 2 3								4 1 2 3	19
20	4 1 3 2								4 1 3 2	20
21	4 2 1 3								4 2 1 3	21
22	4 2 3 1								4 2 3 1	22
23	4 3 1 2								4 3 1 2	23
24	4 3 2 1								4 3 2 1	24

Female Selections			
Animal Number	Class 9 Keep Cull	Class 10 Keep Cull	Class 11 Keep Cull
1			
2			
3			
4			
5			
6			
7			
8			

Class 12 - Feeder Cattle Grading						
Animal Number	Frame Size				Muscle Thickness	
	Large	Medium	Small	Inferior	1	2
1						
2						
3						
4						
5						

Class 13 - Market Swine Grading						
Animal Number	Degree of Muscling			Average Backfat		
	Superior	Average	Inferior	.99" or less	1.00-1.24"	1.25-1.49"
1						
2						
3						
4						
5						

Reasons			
Class 16	Class 17	Class 18	Class 19
0 0	0 0	0 0	0 0
1 1	1 1	1 1	1 1
2 2	2 2	2 2	2 2
3 3	3 3	3 3	3 3
4 4	4 4	4 4	4 4
5 5	5 5	5 5	5 5
6 6	6 6	6 6	6 6
7 7	7 7	7 7	7 7
8 8	8 8	8 8	8 8
9 9	9 9	9 9	9 9

Class 14 - Slaughter Cattle Grading										
Animal Number	Quality Grade				Yield Grade (Cutability)					
	Prime		Choice		Select		Standard			
	High	Low	High	Low	High	Low	High	Low	1.0	
1										
2										
3										
4										
5										

Class 15 - Questions on Placing Classes															
1	1 2 3 4	11	1 2 3 4	21	1 2 3 4	31	1 2 3 4								
2	1 2 3 4	12	1 2 3 4	22	1 2 3 4	32	1 2 3 4								
3	1 2 3 4	13	1 2 3 4	23	1 2 3 4	33	1 2 3 4								
4	1 2 3 4	14	1 2 3 4	24	1 2 3 4	34	1 2 3 4								
5	1 2 3 4	15	1 2 3 4	25	1 2 3 4	35	1 2 3 4								
6	1 2 3 4	16	1 2 3 4	26	1 2 3 4	36	1 2 3 4								
7	1 2 3 4	17	1 2 3 4	27	1 2 3 4	37	1 2 3 4								
8	1 2 3 4	18	1 2 3 4	28	1 2 3 4	38	1 2 3 4								
9	1 2 3 4	19	1 2 3 4	29	1 2 3 4	39	1 2 3 4								
10	1 2 3 4	20	1 2 3 4	30	1 2 3 4	40	1 2 3 4								

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #



# Dairy Cattle

## CDE form # 239560-1

Team Name/Additional Info

Incorrect Marks    Correct Mark



Team/Schl ID	State	Full Name (Last name followed by a space followed by first name)
0 0 0 0		
1 1 1 1	A A	A A A A A A A A A A A A A A A A A A
2 2 2 2	B B	B B B B B B B B B B B B B B B B B B
3 3 3 3	C C	C C C C C C C C C C C C C C C C C C
4 4 4 4	D D	D D D D D D D D D D D D D D D D D D
5 5 5 5	E E	E E E E E E E E E E E E E E E E E E
6 6 6 6	F F	F F F F F F F F F F F F F F F F F F
7 7 7 7	G G	G G G G G G G G G G G G G G G G G G
8 8 8 8	H H	H H H H H H H H H H H H H H H H H H
9 9 9 9	I I	I I I I I I I I I I I I I I I I I I
	J J	J J J J J J J J J J J J J J J J J J
	K K	K K K K K K K K K K K K K K K K K K
	L L	L L L L L L L L L L L L L L L L L L
	M M	M M M M M M M M M M M M M M M M M M
	N N	N N N N N N N N N N N N N N N N N N
	O O	O O O O O O O O O O O O O O O O O O
	P P	P P P P P P P P P P P P P P P P P P
	Q Q	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
	R R	R R R R R R R R R R R R R R R R R R
	S S	S S S S S S S S S S S S S S S S S S
	T T	T T T T T T T T T T T T T T T T T T
	U U	U U U U U U U U U U U U U U U U U U
	V V	V V V V V V V V V V V V V V V V V V
	W W	W W W W W W W W W W W W W W W W W W
	X X	X X X X X X X X X X X X X X X X X X
	Y Y	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
	Z Z	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z

Placing	Placing Classes									Placing	
	1	2	3	4	5	6	7	8	9		
1	1 2 3 4									1 2 3 4	1
2	1 2 4 3									1 2 4 3	2
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4	1 3 4 2									1 3 4 2	4
5	1 4 2 3									1 4 2 3	5
6	1 4 3 2									1 4 3 2	6
7	2 1 3 4									2 1 3 4	7
8	2 1 4 3									2 1 4 3	8
9	2 3 1 4									2 3 1 4	9
10	2 3 4 1									2 3 4 1	10
11	2 4 1 3									2 4 1 3	11
12	2 4 3 1									2 4 3 1	12
13	3 1 2 4									3 1 2 4	13
14	3 1 4 2									3 1 4 2	14
15	3 2 1 4									3 2 1 4	15
16	3 2 4 1									3 2 4 1	16
17	3 4 1 2									3 4 1 2	17
18	3 4 2 1									3 4 2 1	18
19	4 1 2 3									4 1 2 3	19
20	4 1 3 2									4 1 3 2	20
21	4 2 1 3									4 2 1 3	21
22	4 2 3 1									4 2 3 1	22
23	4 3 1 2									4 3 1 2	23
24	4 3 2 1									4 3 2 1	24

Codes			
Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

Herd Record Judge																									
	1	2	3	4	5	6	7	8	9	10	11	12	13												
0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0											
1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1											
2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2											
3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3											
4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4											
5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5											
6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6											
7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7											
8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8											
9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9											
	14	15	16	17	18	19	20	21	22	23	24	25													
0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0												
1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1												
2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2	2 2 2 2												
3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3												
4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4												
5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5	5 5 5 5												
6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6	6 6 6 6												
7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7	7 7 7 7												
8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8												
9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9	9 9 9 9												

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #





# Dairy Foods

## CDE form # 239561-1

Team Name/Additional Info

Incorrect Marks    Correct Mark

Team/Schl ID	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9

State	Full Name (Last name followed by a space followed by first name)										
A	A	A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D	D	D
E	E	E	E	E	E	E	E	E	E	E	E
F	F	F	F	F	F	F	F	F	F	F	F
G	G	G	G	G	G	G	G	G	G	G	G
H	H	H	H	H	H	H	H	H	H	H	H
I	I	I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J	J	J
K	K	K	K	K	K	K	K	K	K	K	K
L	L	L	L	L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M	M	M	M	M
N	N	N	N	N	N	N	N	N	N	N	N
O	O	O	O	O	O	O	O	O	O	O	O
P	P	P	P	P	P	P	P	P	P	P	P
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
R	R	R	R	R	R	R	R	R	R	R	R
S	S	S	S	S	S	S	S	S	S	S	S
T	T	T	T	T	T	T	T	T	T	T	T
U	U	U	U	U	U	U	U	U	U	U	U
V	V	V	V	V	V	V	V	V	V	V	V
W	W	W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

Codes			
Sheet	Test	Team	Student
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Class 1 Milk Flavor	
Score	Sample Number
	1 2 3 4 5 6 7 8 9 10
1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
6	<input type="checkbox"/>
7	<input type="checkbox"/>
8	<input type="checkbox"/>
9	<input type="checkbox"/>
10	<input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10
Defects	Sample Number
	1 2 3 4 5 6 7 8 9 10
Acid	<input type="checkbox"/>
Bitter	<input type="checkbox"/>
Feed	<input type="checkbox"/>
Flat-watery	<input type="checkbox"/>
Foreign	<input type="checkbox"/>
Garlic or onion	<input type="checkbox"/>
Malty	<input type="checkbox"/>
No defect	<input type="checkbox"/>
Oxidized	<input type="checkbox"/>
Rancid	<input type="checkbox"/>
Salty	<input type="checkbox"/>
Unclean	<input type="checkbox"/>
	1 2 3 4 5 6 7 8 9 10

Class 2 Identification of Cheeses										
Varieties	Sample Number									
	1	2	3	4	5	6	7	8	9	10
1. Blue	<input type="checkbox"/>									
2. Brick	<input type="checkbox"/>									
3. Brie/Camembert	<input type="checkbox"/>									
4. Cheddar (mild)	<input type="checkbox"/>									
5. Cheddar (sharp)	<input type="checkbox"/>									
6. Colby	<input type="checkbox"/>									
7. Cream/Neufchatel	<input type="checkbox"/>									
8. Edam/Gouda	<input type="checkbox"/>									
9. Monterey (Jack)	<input type="checkbox"/>									
10. Mozzarella/Pizza	<input type="checkbox"/>									
11. Munster	<input type="checkbox"/>									
12. Processed American	<input type="checkbox"/>									
13. Provolone	<input type="checkbox"/>									
14. Swiss	<input type="checkbox"/>									
	1	2	3	4	5	6	7	8	9	10

Class 3 CMT								
	Sample Number							
	1	2	3	4	5	6	7	8
0	<input type="checkbox"/>							
2	<input type="checkbox"/>							
4	<input type="checkbox"/>							
6	<input type="checkbox"/>							
8	<input type="checkbox"/>							
	1	2	3	4	5	6	7	8

Class 4 Sediment Pads					
	Sample Number				
	1	2	3	4	5
0	<input type="checkbox"/>				
2	<input type="checkbox"/>				
4	<input type="checkbox"/>				
6	<input type="checkbox"/>				
8	<input type="checkbox"/>				
	1	2	3	4	5

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #

Class 5 Milker/Unit					
Score	Sample Number				
	1	2	3	4	5
0	<input type="checkbox"/>				
0.5	<input type="checkbox"/>				
1	<input type="checkbox"/>				
1.5	<input type="checkbox"/>				
2	<input type="checkbox"/>				
2.5	<input type="checkbox"/>				
3	<input type="checkbox"/>				
3.5	<input type="checkbox"/>				
4	<input type="checkbox"/>				
Defects	Sample Number				
	1	2	3	4	5
Rubber:					
dirty or milkstone	<input type="checkbox"/>				
checked or blistered	<input type="checkbox"/>				
leaky	<input type="checkbox"/>				
poorly fitted	<input type="checkbox"/>				
Metal:	1	2	3	4	5
dirty or milkstone	<input type="checkbox"/>				
dented or damaged	<input type="checkbox"/>				
pitted or corroded	<input type="checkbox"/>				
open seam	<input type="checkbox"/>				
No Defect	<input type="checkbox"/>				
	1	2	3	4	5

Part I Problem Solving										
Food Identification	Sample Number									
	1	2	3	4	5	6	7	8	9	10
Natural	<input type="checkbox"/>									
Artificial	<input type="checkbox"/>									

Part II					
1	<input type="checkbox"/>				
2	<input type="checkbox"/>				
3	<input type="checkbox"/>				
4	<input type="checkbox"/>				
5	<input type="checkbox"/>				
6	<input type="checkbox"/>				
7	<input type="checkbox"/>				
8	<input type="checkbox"/>				
9	<input type="checkbox"/>				
10	<input type="checkbox"/>				
11	<input type="checkbox"/>				
12	<input type="checkbox"/>				
13	<input type="checkbox"/>				
14	<input type="checkbox"/>				
15	<input type="checkbox"/>				
16	<input type="checkbox"/>				
17	<input type="checkbox"/>				
18	<input type="checkbox"/>				
19	<input type="checkbox"/>				
20	<input type="checkbox"/>				
21	<input type="checkbox"/>				
22	<input type="checkbox"/>				
23	<input type="checkbox"/>				
24	<input type="checkbox"/>				
25	<input type="checkbox"/>				

Part III Team Event Judge's Score	
<input type="text"/>	<input type="text"/>

Written Test					
1	<input type="checkbox"/>				
2	<input type="checkbox"/>				
3	<input type="checkbox"/>				
4	<input type="checkbox"/>				
5	<input type="checkbox"/>				
6	<input type="checkbox"/>				
7	<input type="checkbox"/>				
8	<input type="checkbox"/>				
9	<input type="checkbox"/>				
10	<input type="checkbox"/>				
11	<input type="checkbox"/>				
12	<input type="checkbox"/>				
13	<input type="checkbox"/>				
14	<input type="checkbox"/>				
15	<input type="checkbox"/>				
16	<input type="checkbox"/>				
17	<input type="checkbox"/>				
18	<input type="checkbox"/>				
19	<input type="checkbox"/>				
20	<input type="checkbox"/>				
21	<input type="checkbox"/>				
22	<input type="checkbox"/>				
23	<input type="checkbox"/>				
24	<input type="checkbox"/>				
25	<input type="checkbox"/>				

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #







# Poultry

## CDE form # 239563-1

Team Name/Additional Info

Incorrect Marks    Correct Mark



Team/Schl ID	State	Full Name (Last name followed by a space followed by first name)
0 0 0 0		
1 1 1 1	A A	A A
2 2 2 2	B B	B B
3 3 3 3	C C	C C
4 4 4 4	D D	D D
5 5 5 5	E E	E E
6 6 6 6	F F	F F
7 7 7 7	G G	G G
8 8 8 8	H H	H H
9 9 9 9	I I	I I
	J J	J J
	K K	K K
	L L	L L
	M M	M M
	N N	N N
	O O	O O
	P P	P P
	Q Q	Q Q
	R R	R R
	S S	S S
	T T	T T
	U U	U U
	V V	V V
	W W	W W
	X X	X X
	Y Y	Y Y
	Z Z	Z Z

Codes			
Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

Broiler Breeder Selection	
Bird Number	Class 1 Keep Cull
1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
6	<input type="checkbox"/>
7	<input type="checkbox"/>
8	<input type="checkbox"/>

Placing Classes						
Placing	Class			Placing	Placing	
	3	5	8 10			
1	1 2 3 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 3 4	1
2	1 2 4 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 2 4 3	2
3	1 3 2 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 3 2 4	3
4	1 3 4 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 3 4 2	4
5	1 4 2 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 4 2 3	5
6	1 4 3 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 4 3 2	6
7	2 1 3 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 3 4	7
8	2 1 4 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 1 4 3	8
9	2 3 1 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 3 1 4	9
10	2 3 4 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 3 4 1	10
11	2 4 1 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 4 1 3	11
12	2 4 3 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 4 3 1	12
13	3 1 2 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 1 2 4	13
14	3 1 4 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 1 4 2	14
15	3 2 1 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 2 1 4	15
16	3 2 4 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 2 4 1	16
17	3 4 1 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 4 1 2	17
18	3 4 2 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 4 2 1	18
19	4 1 2 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 1 2 3	19
20	4 1 3 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 1 3 2	20
21	4 2 1 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 2 1 3	21
22	4 2 3 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 2 3 1	22
23	4 3 1 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 3 1 2	23
24	4 3 2 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 3 2 1	24
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Reasons			
Class 2 Class 6			
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

Carcass/Part Grading				
Carcass/Part Number	Class 4 Quality			
	A	B	C	NG*
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Egg Interior Grading				
Egg Number	Class 7 Quality			
	AA	A	B	Loss
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cartoned Eggs Written Factors				
Defect	Class 9 Carton Number			
	1	2	3	4
Checked/Cracked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Body Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irregular Shape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calcium Deposits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Definite Ridges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adhering Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prominent Stain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slight Stain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mixed Color	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uneven Size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Further Processed Poultry Meat Products Written Factors				
Defect	Class 11 Sample Number			
	1	2	3	4
>1" Void Area (batter/breading)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3/4"-1" Void Area (batter/breading)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/4"-3/4" Void Area (batter/breading)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>1/2" Reddish to Pink area; Undercooked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>1" Meat Void	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/2"-1" Meat Void	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black or Burned Area (crumb size or larger)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very Light or Very Dark	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Broken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different Shape or Size; Malformed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bone Fragment; Non-food Item	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Defect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*NG = Nongradable

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SERIAL #

Identification of Carcass Parts										
Part	Class 12 Part Number									
	1	2	3	4	5	6	7	8	9	10
Half	<input type="checkbox"/>									
Front half	<input type="checkbox"/>									
Rear half	<input type="checkbox"/>									
Whole breast with ribs	<input type="checkbox"/>									
Boneless, skinless whole breast with rib meat	<input type="checkbox"/>									
Whole breast	<input type="checkbox"/>									
Boneless, skinless whole breast	<input type="checkbox"/>									
Split breast with ribs	<input type="checkbox"/>									
Boneless, skinless split breast with rib meat	<input type="checkbox"/>									
Split breast	<input type="checkbox"/>									
Boneless, skinless split breast	<input type="checkbox"/>									
Breast quarter	<input type="checkbox"/>									
Breast quarter without wing	<input type="checkbox"/>									
Tenderloin	<input type="checkbox"/>									
Wishbone	<input type="checkbox"/>									
Leg quarter	<input type="checkbox"/>									
Leg	<input type="checkbox"/>									
Thigh with back portion	<input type="checkbox"/>									
Thigh	<input type="checkbox"/>									
Boneless, skinless thigh	<input type="checkbox"/>									
Drumstick	<input type="checkbox"/>									
Boneless, skinless drum	<input type="checkbox"/>									
Wing	<input type="checkbox"/>									
Drumette	<input type="checkbox"/>									
Wing Portion	<input type="checkbox"/>									
Liver	<input type="checkbox"/>									
Gizzard	<input type="checkbox"/>									
Heart	<input type="checkbox"/>									
Neck	<input type="checkbox"/>									
	1	2	3	4	5	6	7	8	9	10

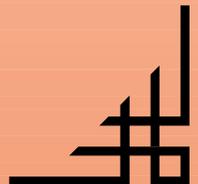
Written Examination Class 13											
1	A	B	C	D	E	16	A	B	C	D	E
2	A	B	C	D	E	17	A	B	C	D	E
3	A	B	C	D	E	18	A	B	C	D	E
4	A	B	C	D	E	19	A	B	C	D	E
5	A	B	C	D	E	20	A	B	C	D	E
6	A	B	C	D	E	21	A	B	C	D	E
7	A	B	C	D	E	22	A	B	C	D	E
8	A	B	C	D	E	23	A	B	C	D	E
9	A	B	C	D	E	24	A	B	C	D	E
10	A	B	C	D	E	25	A	B	C	D	E
11	A	B	C	D	E	26	A	B	C	D	E
12	A	B	C	D	E	27	A	B	C	D	E
13	A	B	C	D	E	28	A	B	C	D	E
14	A	B	C	D	E	29	A	B	C	D	E
15	A	B	C	D	E	30	A	B	C	D	E

Team Activity Class 14					
1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E
4	A	B	C	D	E
5	A	B	C	D	E
6	A	B	C	D	E
7	A	B	C	D	E
8	A	B	C	D	E
9	A	B	C	D	E
10	A	B	C	D	E
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E
14	A	B	C	D	E
15	A	B	C	D	E

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #



# Forestry

## CDE# 239564-1

Team Name/Additional Info

Incorrect Marks    Correct Mark



Team/Schl ID	State	Full Name (Last name followed by a space followed by first name)
0 0 0 0		
1 1 1 1	A A	A A A A A A A A A A A A A A A A A A
2 2 2 2	B B	B B B B B B B B B B B B B B B B B B
3 3 3 3	C C	C C C C C C C C C C C C C C C C C C
4 4 4 4	D D	D D D D D D D D D D D D D D D D D D
5 5 5 5	E E	E E E E E E E E E E E E E E E E E E
6 6 6 6	F F	F F F F F F F F F F F F F F F F F F
7 7 7 7	G G	G G G G G G G G G G G G G G G G G G
8 8 8 8	H H	H H H H H H H H H H H H H H H H H H
9 9 9 9	I I	I I I I I I I I I I I I I I I I I I
	J J	J J J J J J J J J J J J J J J J J J
	K K	K K K K K K K K K K K K K K K K K K
	L L	L L L L L L L L L L L L L L L L L L
	M M	M M M M M M M M M M M M M M M M M M
	N N	N N N N N N N N N N N N N N N N N N
	O O	O O O O O O O O O O O O O O O O O O
	P P	P P P P P P P P P P P P P P P P P P
	Q Q	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
	R R	R R R R R R R R R R R R R R R R R R
	S S	S S S S S S S S S S S S S S S S S S
	T T	T T T T T T T T T T T T T T T T T T
	U U	U U U U U U U U U U U U U U U U U U
	V V	V V V V V V V V V V V V V V V V V V
	W W	W W W W W W W W W W W W W W W W W W
	X X	X X X X X X X X X X X X X X X X X X
	Y Y	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
	Z Z	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z

Code			
Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

Exam					Mgmt/TSI				
1	A B C D E	26	A B C D E	1	A B C D E				
2	A B C D E	27	A B C D E	2	A B C D E				
3	A B C D E	28	A B C D E	3	A B C D E				
4	A B C D E	29	A B C D E	4	A B C D E				
5	A B C D E	30	A B C D E	5	A B C D E				
6	A B C D E	31	A B C D E	6	A B C D E				
7	A B C D E	32	A B C D E	7	A B C D E				
8	A B C D E	33	A B C D E	8	A B C D E				
9	A B C D E	34	A B C D E	9	A B C D E				
10	A B C D E	35	A B C D E	10	A B C D E				
11	A B C D E	36	A B C D E	11	A B C D E				
12	A B C D E	37	A B C D E	12	A B C D E				
13	A B C D E	38	A B C D E	13	A B C D E				
14	A B C D E	39	A B C D E	14	A B C D E				
15	A B C D E	40	A B C D E	15	A B C D E				
16	A B C D E	41	A B C D E	16	A B C D E				
17	A B C D E	42	A B C D E	17	A B C D E				
18	A B C D E	43	A B C D E	18	A B C D E				
19	A B C D E	44	A B C D E	19	A B C D E				
20	A B C D E	45	A B C D E	20	A B C D E				
21	A B C D E	46	A B C D E	21	A B C D E				
22	A B C D E	47	A B C D E	22	A B C D E				
23	A B C D E	48	A B C D E	23	A B C D E				
24	A B C D E	49	A B C D E	24	A B C D E				
25	A B C D E	50	A B C D E	25	A B C D E				

Chainsaw	
1	A B C D E
2	A B C D E
3	A B C D E
4	A B C D E
5	A B C D E
6	A B C D E
7	A B C D E
8	A B C D E
9	A B C D E
10	A B C D E

Map	
1	A B C D E
2	A B C D E
3	A B C D E
4	A B C D E
5	A B C D E
6	A B C D E
7	A B C D E
8	A B C D E
9	A B C D E
10	A B C D E

Tree Identification												
1	2	3	4	5	6	7	8	9	10	11	12	13
0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3
4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5
6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6
7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7
8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8
9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9

Forestry Products	
1	A B C D E
2	A B C D E
3	A B C D E
4	A B C D E
5	A B C D E
6	A B C D E
7	A B C D E
8	A B C D E
9	A B C D E
10	A B C D E

Mgmt	
1	A B C D E
2	A B C D E
3	A B C D E
4	A B C D E
5	A B C D E
6	A B C D E
7	A B C D E
8	A B C D E
9	A B C D E
10	A B C D E

14	15	16	17	18	19	20	21	22	23	24	25
0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3
4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5	5 5
6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6
7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7	7 7
8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8	8 8
9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9	9 9

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SERIAL #

Equipment Identification

	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9
	11	12	13	14	15	16	17	18	19	20
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9

Compass Practicum

	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9
	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9

Volume Calculation Space

Timber Cruising DBH & Height

DBH 1	Ht 1	DBH 2	Ht 2	DBH 3	Ht 3	DBH 4	Ht 4	DBH 5	Ht 5	DBH 6	Ht 6	DBH 7	Ht 7	DBH 8	Ht 8	DBH 9	Ht 9	DBH 10	Ht 10	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

Volume

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Forestry Disorders

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

Practicums

	1	2	3	4	5
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

# OF SPECIMEN PLEASE DO NOT WRITE IN THIS AREA

SERIAL #