



Exploring Agricultural Science – Middle Grades CDE

Purpose

The purpose of the Exploring Agricultural Science CDE is to provide a competitive event for agricultural education students, provide opportunities for participants to develop technical knowledge, and demonstrate practical skills in the field of agricultural science.

State Event Superintendent

The superintendent for this event is Mrs. Shelby Robertson, State FFA Coordinator, Department of Agricultural and Human Sciences, NCSU, Box 7654, Raleigh, NC 27695-7654. Phone: 919.513.0216
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Eligibility and General Guidelines

This event is open to all Middle Grades FFA chapters (6th–8th grade) and Middle Grades FFA members in good standing. Each chapter may send one team to compete at the state event. Members winning a previous state event in this area are ineligible.

Teams shall consist of three or four members. Four individual knowledge test scores and the team practicum score will count towards the team total (A three-member team will earn a zero for the 4th knowledge test score). No alternates are allowed in state events. Any alternate found participating in a state event will result in team disqualification.

At the middle grades rally, members may participate in only one career development event with the exceptions of Middle Grades Prepared Public Speaking and Middle Grades Parliamentary Procedure.

The use or possession of cellular phones or any other mobile electronic communication device is prohibited during any state-level career development event. Any violation of this rule will result in total disqualification.

Any member found cheating in any state-level career development event will result in total disqualification for that event.

The North Carolina FFA Association, in keeping with the FFA mission and purposes, does not permit the use of tobacco products, e-cigarettes, vapes, or Juuls at any FFA facility or at any FFA activity.

In compliance with the Americans with Disabilities Act, North Carolina FFA will honor requests for reasonable accommodations made by individuals with disabilities. Please direct accommodation requests through the CDE/LDE Accommodation Request [Form](#). If the accommodation can be made for all and/or doesn't provide an unfair advantage, then every effort will be made to provide the accommodation. Requests can be accommodated more effectively if notice is provided at least 10 days before the event.



Dress Code

Participants are required to follow the North Carolina FFA Career Development Event Dress Code. Participants in this event are allowed to wear long pants and an appropriate shirt with a collar or an appropriate FFA or school t-shirt. Students may also wear official dress.

The North Carolina FFA Association strives to promote a positive image at all Official FFA Events. The dress code policy was established to address the issue of appropriate attire at all Official FFA Events. Members should adhere to this policy for all events. A ten percent reduction will be applied to all individual scores from a chapter if a participant from that chapter violates the dress code during that career event.

Procedures for Administering the Event

The event coordinator shall be responsible for setting up the event, choosing event officials, and developing materials according to the criteria listed below.

Part I: Multiple Choice Exam - 100 Points

The written exam will be twenty-five (25) multiple-choice items designed to determine each team member's understanding of the Exploring Agricultural Science curriculum. All questions will come from the most current Exploring Agricultural Science Curriculum Guide on ncffa.org. **Students will have 30 minutes to complete the written exam.** Each student completes the written exam independently.

Part II: Team Activity Practicums – 100 Points

Each team of students will complete 2 practicum rotations that evaluate skills from a specific content area in the Exploring Agricultural Science course. Teams will have 30 minutes to complete each practicum rotation.

For each content area, the event superintendent will select 2 activities for the team to complete in the 30 minute time frame. Practicum activities for each content area will be selected from the list provided in the table below using an even and odd year rotation. Each activity will be worth 50pts.

Practicum Activities by Content Area

Animal Science (50 points): In even years, students will complete one of the following practicums: Interpreting and Demonstrating Ear Notching Technique; Visual Animal Breed and Terminology Identification; or Evaluating Egg Quality for Interior and Exterior Factors.

Environmental & Natural Resources (50 points): In even years, students will complete one of the following practicums: Interpreting DBH and Merchantable Height Values and Calculating Board Feet using a Biltmore Stick; Determining Soil Texture using the Soil Texture Triangle; or Using a Dichotomous Key to determine water quality levels by the presence of certain aquatic organisms.



Plant Science (50 points): In odd years, students will complete one of the following practicums: Plant Identification, Identifying parts of the flower, or identifying growing media components like perlite, vermiculite, moss, bark, etc.

Food Science (50 points): In odd years, students will complete one of the following practicums: Nutrition Facts Panel and Nutrition Problem; a Triangle Test; or Aroma Identification.

Practicum Year	Content Area Practicum Activities	Suggested Content Area Practicum Activities
Even Years	Animal Science	Ear Notching
		Breed and Terminology ID
		Egg Quality-Interior and Exterior
	Environmental & Natural Resources	Calculating Board Feet
		Soil Texture Triangle
		Tree ID
		Water Quality- Dichotomous Key
Odd Years	Plant Science	Plant Identification
		Flower Part ID
		Growing Media ID
	Food Science	Nutrition problem
		Triangle Test
		Aromas



Scoring

Maximum Score	200
Multiple Choice Exam	100
Practicum	100

Procedure for Determining the State Event Winner When Scores are Tied

In the event a tie score exists, apply the following methods in sequential order until the tie is broken:

1. Compare the total team scores for the written test and the higher scoring team is the winner.
2. Compare the total team scores for the practicum and the higher scoring team is the winner.
3. If the event remains tied, co-winners will be awarded.

State Awards

The awards for the state event will be presented annually at the conclusion of the NC FFA Middle School CDE Rally to include a team 1st, 2nd and 3rd place certificate. At the state FFA convention awards will be presented to include a team 1st, 2nd, and 3rd place plaque.

Primary References

Exploring Agricultural Science Curriculum Guide (latest edition), available on www.ncffa.org