

Agricultural Mechanics

Event Rules

All members participating in this Career Development Event must meet the eligibility requirements and adhere to the rules of the Kentucky FFA Association as outlined in the Rules Governing FFA Activities document.

Number of members on a team: Four (All scores count toward the team score.)

Official Dress Appropriate: No

Regional Event: Determined by the region

State Event: Kentucky State Fair (only the first place team from each region is eligible to compete.)

A theme will be designated each year for this event. Problem Solving and Skills Activities will relate to the theme. The sample activities listed for theme are samples only and do not represent an exhaustive list.

2023- Processing Systems- electric motors, grain auger systems, material handling equipment such as a skid steer loader

2024- Plant Production Systems- surveying, residue management, spraying equipment, harvesting or planting equipment

2025- Integrated Pest Management- residue management, spraying equipment

2026- Animal Production Systems- ventilation equipment, electrical systems, feed or manure handling equipment

2027- Material Handling Systems- electric motors, augers, conveyors

EQUIPMENT

Equipment provided by student:

- #2 Pencil
- Clipboard
- Safety glasses
- Non-programmable Calculator



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GENERAL KNOWLEDGE EXAMINATION (100 POINTS)

Participants will complete a 50-75 question multiple choice exam. This exam covers but is not limited to the following topics:

- Basic electricity
- Machine operation and management
- Agriculture mechanics math (field efficiency, board feet, cubic feet, etc.)
- Up to 10 questions related to the theme

References:

- Agricultural Mechanics: Fundamentals and Applications by Elmer L. Cooper
- John Deere Fundamentals of Service Machine Operation

PROBLEM SOLVING (100 POINTS)

Participants will complete two problem solving activities related to the theme.

Problem solving activities may require students to calculate area, volume, field efficiency, or complete other problems related to agricultural mechanics.

Problem solving activities may require students to read a chart or diagram provided.

SKILLS ACTIVITIES (100 POINTS)

Participants will complete two skills activities related to the theme.

Skills activities may involve identification of components or tools related to the theme. If identification is involved, a list of components will be provided at the contest site.

Skills activities may involve using an owner's or service manual to determine information for a piece of equipment.



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Scoring

Possible score for each participant is 300 points, with a possible team score of 1200 points.

All team members' scores will count toward the team score.

Teams will be rated blue, red, or white based on the total team score. Ribbon colors will be determined by the event officials.

Individuals will be ranked in numerical order on the basis of the final individual score.

TIEBREAKER

Ties will be broken based on the highest individual score on a team will be used to break the tie.

