

Food Science

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

Official Dress Appropriate: No

Regional Event: None

State Event: State FFA Convention

Pre-registration is required by April 1.

Food products used in this event may contain or come in contact with potential allergens. Advisors **must** notify the event official by May 1 of any participants with food allergies. The event committee will make all reasonable efforts to accommodate participants with food allergies.

EQUIPMENT

Equipment provided by student:

- Clipboard
- #2 Pencil
- Non-programmable Calculator

GENERAL KNOWLEDGE EXAMINATION (150 POINTS)

Participants will complete a 50 question, multiple choice exam.

The exam 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 practicums.

This component lasts 30 minutes.

The references used to prepare the examination are posted at www.kyffa.org



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FOOD SAFETY/SANITATION TEAM ACTIVITY (100 POINTS)

Each team will be given a situation (e.g., photos, videos, written scenarios, live demonstrations, or a combination thereof). The team will work together to evaluate the situation and complete a safety/sanitation report evaluation which will include observations, degree or concern, recommendations/corrective actions.

The rubric for the Food Safety/Sanitation Activity is posted at www.kyffa.org

This component lasts 30 minutes.

PROBLEM SOLVING (25 POINTS)

Participants will work individually to answer a series of five mathematical calculations based on common food science themes. Questions may include nutrition calculations, ingredient quantity, cost benefit analysis, estimation of cost/margin of goods sold, conversions, processing conditions, etc.

Each problem is worth five (5) points.

References related to Problem Solving are posted at www.kyffa.org

CUSTOMER INQUIRY (25 POINTS)

Each participant will be given five scenarios representing general consumer inquiries.

Participants must determine if the customer inquiry reflects a quality or safety issue (2 points per scenario) and if the scenario is a biological, chemical, or physical concern or hazard (3 points per scenario.)

This component lasts 15 minutes.

The rubric for the Customer Inquiry is posted at www.kyffa.org



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SENSORY EVALUATION (40 POINTS)

Each participant will complete four triangle tests. Participants will be expected to identify the samples through flavor, aroma, visual cues, and/or textural differences. Answers will be marked on a provided sheet. No list will be provided for this section. Each test is worth five points.

Each participant will identify four different aromas from vials provided and record the answers on the score sheet provided. A list of potential aromas will be provided. Each sample is worth five points.

Thirty minutes is allowed for this component.

Score sheets for the triangle test and aroma identification are posted at www.kyffa.org

- | | | |
|---------------|----------------------|--------------------|
| 10. Apple | 20. Garlic | 30. Orange |
| 11. Banana | 21. Ginger | 31. Oregano |
| 12. Basil | 22. Grape | 32. Peach |
| 13. Butter | 23. Lemon | 33. Peppermint |
| 14. Cherry | 24. Licorice (anise) | 34. Raspberry |
| 15. Chocolate | 25. Lime | 35. Sage |
| 16. Cinnamon | 26. Maple | 36. Smoke (liquid) |
| 17. Clove | 27. Molasses | 37. Strawberry |
| 18. Coconut | 28. Nutmeg | 38. Vanilla |
| 19. Coffee | 29. Onion | 39. Watermelon |
| | | 40. Wintergreen |

Scoring

Possible score for each participant is 240 points, with a possible team score of 1,060 points.

All team member's scores will count toward the team score.

Teams will be ranked in numerical order on the basis of the final team score.

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

TIEBREAKER

Ties will be broken based on the team with the highest total score on the General Knowledge Examination.

