

Meats Evaluation and Technology

Academic Content Area: Mathematics – Grade 11

Career Development Event Content

1. Become knowledgeable consumers of meat and meat animal products and/or involved in the industry of meat animal marketing and merchandising.
2. Develop analytical skills, critical thinking strategies and an understanding of appropriate meat terminology.
3. Develop ability to evaluate meat animal products in order to optimize economic returns to producers and industry as well as to meet the needs of the consumer.
4. Develop good cooperation and communication skills in working together to accomplish a goal.
5. Fulfill a beef carcass order.
6. Complete a meat formulation problem-solving and written exam.
7. Identify retail meat cuts.
8. Determine beef quality and yield grade.
9. Create written reason for placing and answer reason questions from judges.

Related Academic Standards/Anchors

Objectives 1-9: 2.2.11.A,B; 2.3.11.A; 2.5.11.A,B

Connecting Examples: CDE Objectives and Standards/Anchors

Ex. 1 – Related to 2.2.11.A: Develop and use computation concepts, operations and procedures with real numbers in problem-solving situations. **Students must be able to use a variety of computation concepts, operations, and procedures with real numbers throughout the career development event. For example, students must calculate percentages, proportions and costs.**

Ex. 2 – Related to 2.5.11.A: Select and use appropriate mathematical concepts and techniques from different areas of mathematics and apply them to solving non-routine and multi-step problems. **Students will exhibit their ability to use appropriate mathematical concepts to solve non-routine and multi-step problems by utilizing Pearson Square to formulate a batch of ground beef to the desired fat content. For example, utilize the Pearson Square to formulate a batch of ground beef to the desired fat content. Meats: (1) Boneless cow meat (10% fat - \$.99/lb.), (2) 75% lean beef trimmings (25% fat - \$.79/lb.), desired final fat content is 20%. Batch size is 1,000 lbs.**

Meats Evaluation and Technology

Academic Content Area: Reading, Writing, Speaking and Listening – Grade 11

Career Development Event Content

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Related Academic Standards/Anchors

Objectives 1-9: 1.1.11.A,C,E,F; 1.2.11.A; 1.4.11.B,C; 1.5.11.A,B,C,D,F; 1.6.11.A,C,D,E

Connecting Examples: CDE Objectives and Standards/Anchors

Ex. 1 – Related to 1.1.11.E: Establish a reading vocabulary by identifying a correctly using new word acquired through the study of their relationships to other words. Use a dictionary or related reference. **Students are required to have a proficient understanding of the terminology used within the meat industry and to be able to demonstrate their knowledge of such terminology and vocabulary.**

Ex. 2 – Related to 1.4.11.C: Write persuasive pieces. Unique to the other judging career development events, the meat evaluation and technology career development event evaluates each student's ability to write well organized, grammatically correct and easy to read, both from the standpoint of sentence structure and penmanship reasons.

Ex. 3 – Related to 1.6.11.C: Speak using skills appropriate to formal speech situations. **Students are required to answer questions on their placing of the class and the class in general. They should answer the questions using a variety of sentence structure to add interest, pace the presentation according to the judges and adjust stress, volume and inflection to provide emphasis to ideas or to influence the audience.**

Meats Evaluation and Technology

Academic Content Area: Science and Technology – Grade 10

Career Development Event Content

1. Become knowledgeable consumers of meat and meat animal products and/or involved in the industry of meat animal marketing and merchandising.
2. Develop analytical skills, critical thinking strategies and an understanding of appropriate meat terminology.
3. Develop ability to evaluate meat animal products in order to optimize economic returns to producers and industry as well as to meet the needs of the consumer.
4. Develop good cooperation and communication skills in working together to accomplish a goal.
5. Fulfill a beef carcass order.
6. Complete a meat formulation problem-solving and written exam.
7. Identify retail meat cuts.
8. Determine beef quality and yield grade.
9. Create written reason for placing and answer reason questions from judges.

Related Academic Standards/Anchors

Objectives 1-9: **3.1.10.A; 3.2.10.B,D; 3.6.10.A; 3.7.10.A**

Connecting Examples: CDE Objectives and Standards/Anchors

Ex. 1 – Related to 3.1.10.A: Discriminate among the concepts of systems, subsystems, feedback and control in solving technological problems. Sub-point, describe the interrelationships among inputs, processes, outputs, feedback and control in specific systems. Students must have a proficient understanding of the meat marketing system, which enables them to sufficiently identify meat cuts, grade, meat, fulfill a carcass order and execute a problem solving practicum.

Ex. 2 – Related to 3.2.10.B: Apply process knowledge and organize scientific and technological phenomena in varied ways. Sub-point, use process skills to make inferences and predictions using collected information and to communicate, using space/time relationships, defining operationally. Students are required to complete a beef carcass fulfillment practicum that requires them to understand the processing system of meat, beef quality and yield grading and meat cuts in order to fulfill the order. For example, using the information you as a team have accumulated during the beef carcass grading, which carcasses can be used to fill the below order? 1. 2 beef rounds – mid choice quality grade, yield grade 2 or 3, 2. 200 lbs., 15% fat ground beef, 3. 4 beef loins – high select to mid-choice quality grade, yield grade 1, 2, or 3, 4. 4 beef shoulders – quality grade, select yield grade 1 or 2.