Meats Evaluation

Purpose

The meat industry is an important component in Missouri agriculture. The Meat Identification and Judging Career Development Event was developed to encourage secondary agriculture students to develop skills and abilities needed to enter and advance in careers in the meat industry.

Objectives

The State Agriculture Meat Identification and Judging CDE is designed to:

I.   Develop employment knowledge for students who are interested in exploring and pursuing a career in the meat industry.

II. Aid the local agriculture instructor in motivating students to become involved in the industry of animal marketing and merchandising.

III. Encourage the development of broader analytical skills, critical thinking strategies, and an understanding of appropriate meat terminology for high school students.

IV. Develop the students' 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.

Crosswalk with Show Me Standards

Objectives – Students participating in the Career Development Event should be able to:	Show-Me Standards	
	Knowledge Standards (Content Areas)	Performance Standards (Goals)
1. Develop employment knowledge for students who are interested in exploring and pursuing a career in the meat industry.	CA.3 MA.1, MA.3	1.5 3.5, 3.6, 3.8
2. Aid the local agriculture instructor in motivating students to become involved in the industry of animal marketing and merchandising.	SC.3 SS.4	4.4, 4.7, 4.8
3. Encourage the development of broader analytical skills, critical thinking strategies, and an understanding of appropriate meat terminology for high school students.		
4. Develop the students' 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.		

CORRESPONDING SECONDARY AGRICULTURE CURRICULUM			
Course and/or Curriculum:	Agriculture Science I	Unit(s):	Introduction to Animal Products
	Food Science and Technology		Unit II – Food Processing Lesson 6 – Products and By-Products from Meat Animals Lesson 7 – Processing Meat Animals Lesson 8 – Quality Grades, Inspections, and Brand Names in Meat Industry

Event Format

1. The Meat Evaluation CDE shall consist of the following four (4) components:

2. Identification of Retail Cuts of Meat -
   a. Forty (40) various retail cuts of meat and variety meats from Beef, Lamb, and Pork will be placed in a convenient manner and given an identification number.
   b. Contestants will identify the species, primal cut, and retail name of each cut as listed on Page 7 – Primal/Retail Cuts Coding.
   c. 45 seconds will be provided for each cut will be the time allowed for identification with 15 minutes to review cuts.
      There will be 10 minutes provided at the end of the CDE to complete the scantron (bubbling).
   d. Duplicate samples may not be used in any identification portion of the event.
3. Judging Classes of Meat -
   a. Four (4) classes will be judged, each consisting of four (4) samples.
   b. Classes may be carcasses of beef or pork; primal cuts of beef or pork; retail cuts of beef or pork.
   c. Primal cuts may include fresh hams, pork loins, pork Boston shoulders (butts), pork picnic shoulders, beef ribs, beef chucks, beef loins, beef rounds, beef strip loins, and beef rib eye roasts.
   d. Ten questions will be required on one of the judging classes. Students will be allowed to reference their notes when answering questions. The format will be a 50 point multiple choice/true-false test relating to placing the class.
      Example: Which rib eye has the highest degree of marbling?
                   a. 1   b. 2   c. 3   d. 4

4. Participants will quality grade and yield grade five beef steaks (20 points per steak).
   NOTE: Pictures **MAY** be used for this portion of the contest.

   - **Quality Grading:** Participants may use the worksheet provided for Beef Grading. The participant should complete the section of answers for quality grading on the computerized scorecard. Ten points are awarded for each correct grade. Each will be scored for the applicable adjacent grade as follows: 10, 8, 5, 1. However, in the case of "B" Maturity, Select High and Select Low will be awarded zero points.

   - **Yield Grading:** Participants may use the worksheet provided for Beef Grading. Participants are to calculate the final yield grade (FYG) to the nearest one-tenth of a grade. Ten points are awarded for each correct grade. The participant should complete the section of answers for yield grading on the computerized scorecard.

   Full points will be earned for every tenth (0.10) above or below official yield grade. A two-point deduction will be made for 2/10ths to 5/10ths (0.2 to 0.5) above or below the official yield grade. A five-point deduction will be made for 6/10ths to 9/10ths (0.6 to 0.9) above or below official yield grade. Zero points will be awarded for answers one yield grade above or below the official yield grade.

   Official United States Department of Agriculture Yield Grades are 1.0 to 5.9.

SCORING EXAMPLE

Official Yield Grade (FYG Official) = 2.2FYG
2.1–2.3 = full points (10)
FYG 1.7–2.0 or 2.4–2.7 = minus 2 points
FYG 1.3–1.6 or 2.8–3.1 = minus 5 points
Zero points for any FYG a full yield grade above or below official FYG.

5. Multiple Choice Exam - The test will consist of 20 multiple choice questions based on the test references. <u>All questions on the meats test should come from resource(s) found on page 6 in the "Test References" section of this bulletin.</u>

6. Meats Formulation Problem – Contestants will complete an industry-based practicum requiring them to select the lowest cost method of developing a further-processed meat product. Points will be earned for selecting the correct formulation and answering multiple choice questions relating to the data provided within the practicum. **<u>The Formulation Problem is to have a correct formulation solution that includes only two (2) ingredients.</u>**

⇒ The ingredients will be cuts on the CDE Event list, lean trimmings from any of the three species of animals included on the contest, variety meats, cheek meat & trim and course grinds from the species in the CDE Event.
⇒ This may include, but is not limited to, the following examples:
  o Fresh lamb shoulder
  o Beef Cheek Meat
  o Point Half Brisket
  o Pork Heart
  o 80/20 Beef fine grind
⇒ This list would not include cuts of:
  o Goose Neck Round
  o London Broil
  o New York Strip
  o ETC.

Event Scoring

Event	Points
Identification of Retail Cuts of Meat – 40 @ 6 points each	240 points
Judging Classes – 4 classes @ 50 points each	200 points
Beef Quality & Yield Grade	100 points
Questions on one Judging Class – 10 questions @ 5 points each	50 points
Written Test – 20 questions @ 3 points each	60 points
Meat Formulation Problem –	50 points
TOTAL	**700 points**

Time Rotation for the event as follows (45 minutes per section):

        ID (45 seconds per cut, with 15 minutes at the end for review)

        4 Judging Classes and Questions

        General Knowledge and Problem Solving Tests

        Quality & Yield Grade

1. Tie scores among teams will be broken using the high individual team member's score. In case the scores are tied, the scores of the second high individual on each team should be used.

Event Rules and Regulations

1. <u>Contestants must not communicate with each other while the event is in progress.</u>
2. All coaches, alternates, and others, except the superintendent, his/her assistants, contestants, and the judges will be excluded from the Meats Laboratory. Any assistance given a team member from any source during the contest will be sufficient cause to eliminate that team from the contest.
3. Official placing and discussion of classes will be held immediately following the event. Instructors, contestants, alternates and other interested persons are encouraged to attend.
4. **Contestants must come to the event prepared to work in a cold storage facility with a room temperature of 40ºF or lower.**
   A. ***Required attire includes:***
      1. **Closed-toed shoes,**
      2. **Clean head cover; which may include hard hats, clean baseball caps, or hairnets,**
      3. **Long pants or skirts that cover the entire leg.**
   B. **Suggested attire:**
      o **white lightweight frocks,**
      o **disposable frocks,**
      o **heavy sweaters, coats, and/or other warm clothes.**
5. Contestants will be allowed to bring steno-pads, but must be CLEAN or NOT WRITTEN ON prior to the start of the event.

Test References

ICEV Meat Science & Food Safety Lesson. CEV Multimedia, 1020 SE Loop 289, Lubbock, Texas 79404, (800) 922-9965. https://www.icevonline.com/curriculum

Training References

Introduction to Animal Products (1998). IML available via DESE website under the Animal Science Curriculum tab.

Meat Evaluation Handbook. Smith, Gary, et al. American Meat Science Association. July 17, 2013. http://www.meatscience.org/students/meat-judging-program/meat-judging-resources/meat-evaluation-handbook

Beef Marbling Cards. American Meat Science Association 301 N Neil St. Ste 400, Champaign IL Phone: 217-356-5370 www.meatscience.org

Beef Ribeye Cards (with PYG ruler and Required REA Chart) Art Design Services Company 4910 Decatur St. Ste. 104 Hyattsville, MD 20781 Phone: 301-982-7304 email: artserv@earthlink.net

National Association of Meat Purveyors (1988). The Meat Buyers Guide. 8365-B Greensboro Drive, McLean, VA 22102; Phone: (703) 827-5754. http://www.meatbuyersguide.com/Account/Login.aspx?ReturnUrl=/

Inteliprep Flashcards & Inteliprep Field Guide. National FFA www.ffa.org

Beef Yield Grading IDPix Card. www.onelessthing.net

National Cattlemen's Beef Association. The Guide to Identifying Meat Cuts. Research, Education, and Innovation Department, 9110 East Nichols Avenue, Suite 300, Centennial, CO 80112. www.beefresearch.org   www.beef.org

Forms

See the following: Training Reference, Contestant Reference Sheet, Formulation Problem Solving Instructions/Sample.

Training Reference

PRIMAL - RETAIL CUTS CODING

Species	Primal	Retail Cut	Species	Primal	Retail Cut
B	B	89	Beef	Brisket	Corned
B	B	15	Beef	Brisket	Flat Half, Bnls
B	B	10	Beef	Brisket	Whole, Bnls
B	C	26	Beef	Chuck	7-bone Pot-roast
B	C	03	Beef	Chuck	Arm Pot-Roast
B	C	04	Beef	Chuck	Arm Pot-Roast, Bnls
B	C	06	Beef	Chuck	Blade Roast
B	C	13	Beef	Chuck	Eye Roast, Bnls
B	C	45	Beef	Chuck	Eye steak, Bnls
B	C	20	Beef	Chuck	Mock Tender Roast
B	C	48	Beef	Chuck	Mock Tender Steak
B	C	21	Beef	Chuck	Petite Tender
B	C	29	Beef	Chuck	Shoulder Pot Roast (Bnls)
B	C	58	Beef	Chuck	Top Blade Steak (Flat Iron)
B	D	47	Beef	Flank	Flank Steak
B	F	49	Beef	Loin	Porter House Steak
B	F	55	Beef	Loin	T-bone Steak
B	F	34	Beef	Loin	Tenderloin Roast
B	F	56	Beef	Loin	Tenderloin Steak
B	F	59	Beef	Loin	Top Loin Steak
B	F	60	Beef	Loin	Top Loin Steak, Bnls
B	F	64	Beef	Loin	Top Sirloin Cap Steak, Bnls
B	F	63	Beef	Loin	Top Sirloin Steak, Bnls Cap Off
B	F	62	Beef	Loin	Top Sirloin Steak, Bnls
B	F	40	Beef	Loin	Tri Tip Roast
B	G	28	Beef	Plate	Short Ribs
B	G	54	Beef	Plate	Skirt steak, Bnls
B	H	22	Beef	Rib	Rib Roast
B	H	13	Beef	Rib	Ribeye Roast, Bnls
B	H	45	Beef	Rib	Ribeye Steak, Bnls
B	H	50	Beef	Rib	Ribeye Steak, Lip-On
B	I	08	Beef	Round	Bottom Round Roast
B	I	09	Beef	Round	Bottom Round Rump Roast
B	I	43	Beef	Round	Bottom Round Steak
B	I	14	Beef	Round	Eye Round Roast
B	I	46	Beef	Round	Eye Round Steak
B	I	51	Beef	Round	Round Steak
B	I	52	Beef	Round	Round Steak, Bnls
B	I	36	Beef	Round	Tip Roast – Cap Off
B	I	57	Beef	Round	Tip Steak – Cap Off
B	I	39	Beef	Round	Top Round Roast
B	I	61	Beef	Round	Top Round Steak
B	N	82	Beef	Various	Beef for Stew
B	N	83	Beef	Various	Cubed Steak
B	N	84	Beef	Various	Ground Beef
P	E	44	Pork	Ham/Leg	Pork Fresh Ham Center Slice
P	E	25	Pork	Ham/Leg	Pork Fresh ham Rump Portion
P	E	27	Pork	Ham/Leg	Pork Fresh ham Shank Portion
P	E	91	Pork	Ham/Leg	Smoked Ham, Bnls
P	E	90	Pork	Ham/Leg	Smoked Ham, Center Slice
P	E	96	Pork	Ham/Leg	Smoked Ham, Rump Portion
P	E	97	Pork	Ham/Leg	Smoked Ham, Shank Portion
P	E	35	Pork	Ham/Leg	Tip Roast, Bnls
P	E	38	Pork	Ham/Leg	Top Roast, Bnls
P	F	05	Pork	Loin	Back Ribs
P	F	66	Pork	Loin	Blade Chops
P	F	67	Pork	Loin	Blade Chops, Bnls
P	F	06	Pork	Loin	Blade Roast
P	F	68	Pork	Loin	Butterflied Chops Bnls
P	F	11	Pork	Loin	Center Loin Roast
P	F	12	Pork	Loin	Center Rib Roast

Species	Primal	Retail Cut	Species	Primal	Retail Cut
P	F	70	Pork	Loin	Loin Chops
P	F	71	Pork	Loin	Rib Chops
P	F	73	Pork	Loin	Sirloin Chops
P	F	53	Pork	Loin	Sirloin Cutlets
P	F	30	Pork	Loin	Sirloin Roast
P	F	93	Pork	Loin	Smoked Pork Loin Chop
P	F	95	Pork	Loin	Smoked Pork Loin Rib Chop
P	F	34	Pork	Loin	Tenderloin, Whole
P	F	74	Pork	Loin	Top Loin Chops
P	F	75	Pork	Loin	Top Loin Chops, Bnls
P	F	37	Pork	Loin	Top Loin Roast, Bnls
P	J	02	Pork	Shoulder	Arm Picnic, Whole
P	J	03	Pork	Shoulder	Arm Roast
P	J	41	Pork	Shoulder	Arm Steak
P	J	07	Pork	Shoulder	Blade Boston Roast
P	J	42	Pork	Shoulder	Blade Steak
P	J	94	Pork	Shoulder	Smoked Picnic, Whole
P	K	98	Pork	Side	Slab Bacon
P	K	99	Pork	Side	Sliced Bacon
P	K	17	Pork	Side/Belly	Fresh Side
P	L	32	Pork	Spareribs	Pork Spareribs
P	N	85	Pork	Various	Ground Pork
P	N	86	Pork	Various	Hock
P	N	83	Pork	Various	Pork Cubed steak
P	N	87	Pork	Various	Pork Sausage Links
P	N	87	Pork	Various	Sausage
P	N	92	Pork	Various	Smoked Pork Hock
P	N	69	Pork	Various	Country Style Ribs
L	A	24	Lamb	Breast	Ribs (Denver Style)
L	E	01	Lamb	Leg	American Style Roast
L	E	44	Lamb	Leg	Center Slice
L	E	16	Lamb	Leg	Frenched Style Roast
L	E	18	Lamb	Leg	Leg Roast, Bnls
L	E	73	Lamb	Leg	Sirloin Chops
L	E	31	Lamb	Leg	Sirloin Half
L	F	70	Lamb	Loin	Loin Chops
L	F	19	Lamb	Loin	Loin Roast
L	H	71	Lamb	Rib	Rib Chops
L	H	72	Lamb	Rib	Rib Chops Frenched
L	H	22	Lamb	Rib	Rib Roast
L	H	23	Lamb	Rib	Rib Roast, Frenched
L	J	65	Lamb	Shoulder	Arm Chops
L	J	66	Lamb	Shoulder	Blade Chops
L	J	33	Lamb	Shoulder	Square Cut
L	N	88	Lamb	Various	Shank
B	M	76	Beef	Variety	Heart
L	M	76	Lamb	Variety	Heart
P	M	76	Pork	Variety	Heart
B	M	77	Beef	Variety	Kidney
L	M	77	Lamb	Variety	Kidney
P	M	77	Pork	Variety	Kidney
B	M	78	Beef	Variety	Liver
L	M	78	Lamb	Variety	Liver
P	M	78	Pork	Variety	Liver
B	M	79	Beef	Variety	Oxtail
B	M	80	Beef	Variety	Tongue
L	M	80	Lamb	Variety	Tongue
P	M	80	Pork	Variety	Tongue
B	M	81	Beef	Variety	Tripe

MEATS FORMULATION PROBLEM SOLVING INSTRUCTIONS/SAMPLE

Students will be given a situational problem solving the least-cost formulation of a batch of particular meat products (hamburger, wiener, bologna, etc.). This problem will be worth 50 points and consist of procedural questions and the actual determination of the least-cost price.

GROUND BEEF FORMULATION PROBLEM TRAINING MATERIALS

Assume that you manage a meat plant that manufactures ground beef or a chain of retail stores. Your goal is to produce a fresh, wholesome product that complies with all meat inspection regulations and will have three days' shelf life in the meat case. The fat content must comply with the specifications of the stores. The cost of the product should be as low as possible.

Ground Beef Regulations (USDA)

GROUND BEEF: The terms "Ground Beef" and "Chopped Beef" are synonymous. Products so labeled must be made with fresh and/or frozen beef with or without seasoning, and without the addition of fat as such, and shall contain no more than 30% fat. It may contain added water, binders or extenders. It may contain beef cheek meat not to exceed 25%. Heart meat and tongue meat are not acceptable ingredients.

If the name is qualified by the name of a particular cut, such as "Ground Beef Round" or "Beef Chuck, Ground", the product must consist entirely of meat from the particular cut or part.

Industry Guidelines on Ground Beef Manufacture

1. To get the most desirable color and maximum shelf life, all boneless meats used to manufacture ground beef shall be fresh (not frozen), well chilled (temperature no higher than 35°F) and shall arrive at the plant within 96 hours of animal slaughter.

2. A least-cost determination shall be performed on acceptable meat ingredients to select those meats that produce the lowest-cost product that meets all ground beef guidelines.

3. To simplify the grinding and blending operation, only two meat ingredients will be used for each batch.

4. Rounding of decimals: 5-9 will be rounded up; 1-4 will be rounded down.

SAMPLE PROBLEM ONE

Use 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: 20%
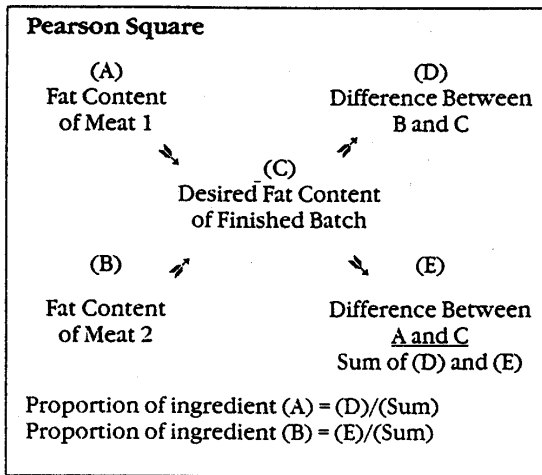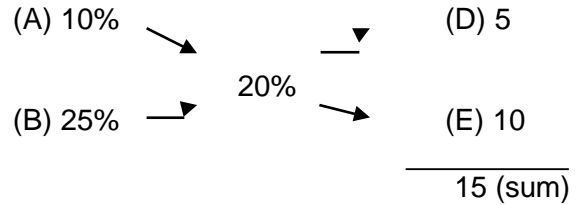   Batch Size: 1,000 lbs.

Determine:
    a.   The amounts of the two types of meat that must be blended together to give the desired fat content.
    b.   The meat cost of the finished product.*

NOTE: You will only be determining meat costs. In an actual situation overhead cost must also be added to the cost of the ground beef to account for labor, equipment, transportation, etc. In this exercise the student need not be concerned with these overhead costs.

To simplify this grinding and blending operation, only two meat ingredients will be used for each batch.

Rounding of decimals: 5-9 will be rounded up: 1-4 will be rounded down.

For Preceding Information:

(A) 10%   (D) 5

         20%

(B) 25%   (E) 10

                    15 (sum)

Pearson Square

    (A)   (D)
Fat Content   Difference Between
of Meat 1   B and C

           (C)
      Desired Fat Content
        of Finished Batch

  (B)   (E)

Fat Content   Difference Between
of Meat 2   A and C
             Sum of (D) and (E)

Proportion of ingredient (A) = (D)/(Sum)
Proportion of ingredient (B) = (E)/(Sum)

SAMPLE PROBLEM TWO

You must follow all government regulations and company policies listed in the training materials. Determine which available ingredients to use (and at what levels) to make the lowest-priced ground beef acceptable.

Specifications:

Desired fat content of finished product is 18%
Batch Size = 5,000 lbs.
Manufacturing date = February 10
No product over 5 days old may be used.
No; variety meats may be used.
No product over 35°F may be used.

Boneless Meat Ingredients Available

	Slaughter Date	Fat Temp	Cont.	Price
Bull meat	Feb.6	33°F	8%	$1.05
Boneless Chuck	Feb. 7	35°F	14%	$1.00
75% lean trim	Feb. 4	32°F	25%	$0.75
50% lean trim	Feb. 6	31°F	50%	$0.55
Beef chuck meat	Feb. 7	37°F	12%	$0.70
Beef hearts	Feb. 6	32°F	15%	$0.35

Solution:
Do all potential ingredients meet government regulations and company specifications?

Acceptable	Not Acceptable
Bull meat	75% lean trim (too old)
Boneless chuck	Chuck meat (too warm)
50% lean trim	Beef hearts (not allowed)

Therefore, to produce desired fat content, product could be made from either of the following two combinations:

(1) Bull meat and 50% lean trim
(2) Boneless chuck and 50% lean trim

Which combination results in the lowest meat cost?

(1) Bull meat   8% fat 32

18% fat (final)

50% trim   50% fat 10
                         42
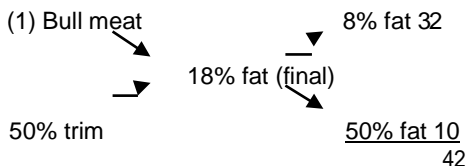
Proportions:
Bull meat = 32/42 =   0.76 or 3,800 lbs.
50% trim = 10/42 =   0.24 or 1,200 lbs.
                                 5,000 lbs.

Costs:
Bull meat 0.76 x $1.05 = $0.798
50% trim   0.24 x $.55 = $0.132
                         $0.93 or $.93/lb.

(2) Boneless Chuck   14% fat 32

18% fat (final)

50% trim   50% fat   4
                         36
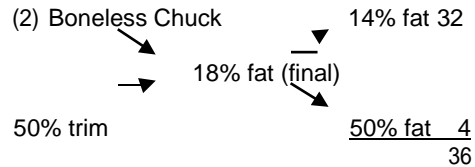
Proportions:
Boneless chuck = 32/36 = 0.89   or 4.450 lbs.
50% trim = 4/36 = 0.11   or   550 lbs.
                                 5,000 lbs.

Cost:
Bull meat 0.89 x $1.00 = $0.89
50% trim   0.11 x $.55 = $0.06
                         $0.95 or $.95/lb.

Final Solution --Meats to be Used:

Bull meat   3,800 lbs.
50% trim   1,200 lbs.

Meat costs: $0.93 per pound

Scoring:
The answer to the formulation problem will count ten points. There will be an additional eight questions, worth five points each. To facilitate computer scoring of this exercise, participants will be given a list of ten or more meat price combinations and be required to select the correct one, based on the above calculation. All problems will be worked to three decimal places and rounded to two places. If the third decimal is 5 or more, the number will be rounded up.

Answers to the eight additional questions will be selected from four choices.

SAMPLE TEST ITEMS FOR SAMPLE PROBLEM TWO
Check the correct solution:

1.	Bull and chuck meat	(0.89)
2.	Boneless chuck and 75% lean trim	(0.91)
3.	Bull meat and 50% lean trim	(0.93)
4.	Boneless chuck and 50% lean trim	(0.90)
5.	Bull meat and 50% lean trim	(0.88)
6.	Beef hearts and 75% lean trim	(0.68)
7.	Bull meat and 50% lean trim	(0.97)
8.	Beef chuck meat and bull meat	(1.04)
9.	75% lean trim and 50% lean trim	(0.67)
10.	50% lean trim and bull meat	(0.87)

Quality and Yield Grade Student Scorecard

Side A

Beef Quality Grade Practicum

Carcass #	Maturity Score	Degree of Marbling	Quality Grade
1			
2			
3			
4			
5			

Beef Yield Grade Practicum

PYG Est.	Carcass Weight	Required REA	REA Est.	REA Adj.	% KPH Est.	% KPH Adj.	FYG

Numbers to Know

Ribeye Adjustment Factor: _____

Base KPH%: _____

KPH Adjustment Facor: _____

Figuring Required REA

Carcass #1 _____

Carcass #2 _____

Carcass #3 _____

Carcass #4 _____

Carcass #5 _____

Adjusting for REA

Carcass #1 _____

Carcass #2 _____

Carcass #3 _____

Carcass #4 _____

Carcass #5 _____

Adjusting for KPH

Carcass #1 _____

Carcass #2 _____

Carcass #3 _____

Carcass #4 _____

Carcass #5 _____

Quality and Yield Grade Student Scorecard

Carcass Maturity and Quality Grades

Degree of Marbling	A	B	C	D	E
Abundant	Prime +	Prime +	Commercial +	Commercial +	Commercial +
Moderately Abundant	Prime o	Prime o	Commercial +	Commercial +	Commercial +
Slightly Abundant	Prime -	Prime -	Commercial +	Commercial +	Commercial o
Moderate	Choice +	Choice +	Commercial +	Commercial o	Commercial -
Modest	Choice o	Choice o	Commercial o	Commercial -	Utility +
Small	Choice -	Standard +	Commercial -	Utility +	Utility o
Slight +	Select +	Standard +	Utility +	Utility o	Utility -
Slight -	Select -	Standard +	Utility +	Utility o	Utility -
Traces	Standard +	Standard +	Utility o	Utility -	Utility -
Practically Devoid	Standard -	Standard -	Utility -	Utility -	Utility -

Required Ribeye Area for Hot Carcass Weights

HCW	REA	HCW	REA	HCW	REA	HCW	REA	HCW	REA
450	9.2	600	11	750	12.8	900	14.6	1050	16.4
475	9.5	625	11.3	775	13.1	925	14.9	1075	16.7
500	9.8	650	11.6	800	13.4	950	15.2	1100	17
525	10.1	675	11.9	825	13.7	975	15.5	1125	17.3
550	10.4	700	12.2	850	14	1000	15.8	1150	17.6
575	10.7	725	12.5	875	14.3	1025	16.1	1175	17.9

WT.	AREA
350	8.0
375	8.3
400	8.6
425	8.9
450	9.2
475	9.5
500	9.8
525	10.1
550	10.4
575	10.7
600	11.0
625	11.3
650	11.6
675	11.9
700	12.2
725	12.5
750	12.8
775	13.1
800	13.4
825	13.7
850	14.0
875	14.3
900	14.6
925	14.9
950	15.2
975	15.5
1000	15.8
1025	16.1
1050	16.4
1075	16.7
1100	17.0

This is an example of a Ribeye Grid

    Has PYG rule

    Cutline of Ribeye

    Required Ribeye area for Hot Carcass Weight

Actual Transparent Ribeye Grids should be provided for students during the Q/Y Grade Activity.

Students may bring their own Ribeye Grids as long as they have not been altered.

Provided Info for Quality and Yield Grade Practicums

CDE Proctors will provide students with the following:

5 Ribeye Lip-on, bone in steaks

Carcass Maturity for each steak

Hot Carcass Weight for each steak

KPH % for each steak

PYG Rulers

Ribeye Grids

Student Scorecard

  - Side A - Quailty and Yield Grade Worksheet

  - Side B - Quality and Required REA Charts

* A set of USDA Marbling Cards should be used to by proctor to determine the official degree of marbling

* These tags should be filled out and placed under each steak during the event

Carcass #1

Maturity	
HCW	
KPH %	

Carcass #2

Maturity	
HCW	
KPH %	

Carcass #3

Maturity	
HCW	
KPH %	

Carcass #4

Maturity	
HCW	
KPH %	

Carcass #5

Maturity	
HCW	
KPH %	