

Missouri 4-H Meats Judging Contest Preparation Packet

Adapted from the Wisconsin 4-H Meats Contest Reasons Resource and the Mississippi 4-H Meats Judging Manual

Divisions

- Junior (ages 8-13)
- Senior (ages 14-18)

Contest Set Up

Youth will judge six placing classes. To place classes, you essentially rank the items best to worst. The classes are made up of four retail cuts, carcasses, or whole sale cuts and placing is based on trimness, quality, and muscling. Juniors will give reasons for one class and seniors will give reasons for two classes. Youth will be given a placing card that contains a list of all the arrangements of the numbers 1, 2, 3, and 4. After deciding how a class should be ranked, select and mark that choice on the card. Cards are collected at the end of each class.

The image shows a '4-H Placing Card' form and a grid of 4-digit permutations. The form includes fields for Contestant number, Class number, Class name, Contestant, Address, County, and Club. It also has a 'Questions' section with 10 numbered lines. The grid lists all possible permutations of the numbers 1, 2, 3, and 4, labeled A through X.

Permutation	Letter
1 2 3 4	A
1 2 4 3	B
1 3 2 4	C
1 3 4 2	D
1 4 2 3	E
1 4 3 2	F
2 1 3 4	G
2 1 4 3	H
2 3 1 4	I
2 3 4 1	J
2 4 1 3	K
2 4 3 1	L
3 1 2 4	M
3 1 4 2	N
3 2 1 4	O
3 2 4 1	P
3 4 1 2	Q
3 4 2 1	R
4 1 2 3	S
4 1 3 2	T
4 2 1 3	U
4 2 3 1	V
4 3 1 2	W
4 3 2 1	X

Class	Number of Classes
Retail Cuts	3
Carcass	1
Wholesale cuts	2

Youth will also identify thirty retail cuts (broken into three groups of ten) based on species, primal cut, retail name, and cookery method. A scoresheet is provided for youth to use to identify the retail cuts. It lists the key to use for marking species, primal cuts, retail name, and cookery method.

Youth will have fifteen minutes to judge each class/ID group.

Things To Look For

- Muscling focuses on how much lean meat there is compared to the amount of fat. Different pieces of meat will have different amounts of lean.
- Trimness is the amount of fat on the outside of the cut and between the muscle systems.

- Quality is evaluated based on several factors – marbling, texture, firmness, color of lean, maturity, and color of fat.
 - Marbling – Fine flecks of fat should be distributed throughout the cut surface of the muscle. Coarse streaks of fat are less desirable.
 - Texture – The cut surface of the meat should be smooth in appearance indicating a firmer texture. Coarse and grainy textures are undesirable.
 - Firmness – The cut surface should look firm and not soft or soggy.
 - Color of Lean – Beef should be bright cherry-red and pork a bright reddish-pink. In cuts with more than one muscle visible, the muscles should be similar in color.
 - Maturity – The muscles of younger animals tend to be more tender. Maturity can be exhibited in the bones of an animal. Cuts from younger animals will have bones that are softer, redder, and rounder.
 - Color of Fat – Fat should be a creamy white in all species.

Evaluating Beef

- Quality
 - Characteristics
 - Primary importance due to largest impact on value
 - Look for the cuts with the most marbling
 - Firm, bright cherry-red colored lean
 - Useful Terms
 - High degree of marbling
 - Greater amount of marbling
 - More finely, dispersed marbling
 - Brighter, more cherry-red color
 - Firmer, finer textured lean
 - Harder, whiter fat
- Muscling
 - Characteristics
 - Look for the item with the heaviest muscling
 - Make sure you observe all possible dimensions – length, width, thickness, bone exposure
 - Useful Terms
 - Thicker
 - Meatier
 - Wider
 - Plumper
 - Heavier muscled
 - Fuller
 - Less exposed bone

- Trimness
 - Characteristics
 - Minimal amounts of seam fat and external fat on the outside of a cut or carcass
 - Useful Terms
 - Trimmer
 - Less external fat
 - Less seam fat
 - Less internal fat
 - Less wasteful
- Yield Statements
 - A good way to tie in several factors and sum up major differences.
 - More desirable yield grade
 - Higher percentage of boneless, trimmed retail cuts
 - Greater portion of edible product
 - Greater cutability
 - Higher yield of lean meat
 - Greater consumer appeal
 - Greater merchandising value

Evaluating Pork

- Quality
 - Characteristics
 - Fresh pork should be a bright reddish-pink color
 - Appears firm and moist (but not watery)
 - Some marbling on the surface
 - Uniform color in cuts with more than one muscle
 - Strongly criticize for PSE (pale, soft, and exudative lean) – meat that appears very pale, watery, and coarse textured
 - Useful Terms
 - Brighter reddish-pink lean
 - Firmer, finer-textured
 - More uniformly colored butt face
 - More marbling
- Muscling
 - Characteristics
 - Take priority over quality
 - Look for pork exhibits that are heaviest muscled
 - Useful Terms
 - A thicker, plumper ham

- Meatier
 - Fuller
 - Heavier muscled
 - Larger loin eye
 - More exposed lean in the butt face
 - Less exposed bone
 - Deeper
 - Wider
- Trimness
 - Characteristics
 - Takes priority over quality
 - Select carcasses and cuts that show the least amount of fat
 - Minimal seam fat present in cut surfaces
 - Useful Terms
 - Less backfat at the last rib
 - Trimmer
 - Less ham collar fat
 - Less seam fat
 - Less wasty
 - Less fat in the belly pocket
 - Less backfat from ham to shoulder
- Yield Statements
 - A good way to tie in several factors and sum up major differences.
 - Higher percentage of fat-free lean
 - Greater lean to fat ratio
 - Higher percentage muscle
 - Higher percentage of edible product
 - Greater consumer appeal

Online Resources

- [Retail ID Online Practice](#)
- [Meats Evaluation Curriculum](#)
- [Resources from Texas A&M](#)
- [American Meat Science Association](#)
- [Meats Judging Contest Resources](#)

Reasons Resource

Giving reasons is a part of most judging contests. It is a chance for you to share why you placed a class in a particular order. Typically, you should be able to share this in under 2 minutes for a single class. It can be hard to remember all the details of a class, so it is important to take notes. Notes are used to study before you give reasons, but it is not recommended to read them to the reasons taker. Take short, simple notes and use terms that help you make comparisons between items. A 6x9 steno notebook is recommended and you can divide the page like the example below.

Note:

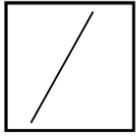
T = Trimness

M = Muscling

Q = Quality

Class Name:

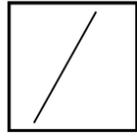
Placing



T

M

Q



T

M

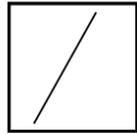
Q



T

M

Q



T

M

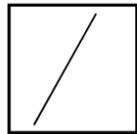
Q



T

M

Q



T

M

Q



T

M

Q

Criticisms:

T

M

Q

Sample Notes

Class Name: Beef Rounds	
Placing 4-2-3-1	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">4/2</div> <p>T less seam fat less cod fat</p> <p>M deeper center section Plumper cushion & heel</p> <p>Q more marbling in round face</p>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">2/4</div> <p>T less fat along flank edge</p> <p>M slightly larger tip</p> <p>Q</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;">2/3</div> <p>T less cod fat</p> <p>M deep, wider center section, plumper cushion</p> <p>Q more cherry-red color in round face</p>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">3/2</div> <p>T less seam fat less fat over round face</p> <p>M more exposed lean in round face</p> <p>Q more marbling in round face</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;">3/1</div> <p>T much trimmer over round face</p> <p>M meatier round face</p> <p>Q more marbling in round face</p>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">1/3</div> <p>T</p> <p>M slightly deeper, wider center section partially due to fat</p> <p>Q</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;">1/1</div> <p>Grants:</p> <p>T</p> <p>M</p> <p>Q acceptable amount of marbling & bright cherry red round face</p>	<p>Criticisms:</p> <p>T most fat over round face & center section. most cod fat</p> <p>M fattest center section tapering cushion & heel</p> <p>Q would yield lowest % trimmed steaks & roasts</p>



Sample Reasons – Beef Rounds

[Share your name and contestant number if you have one.]

I placed this class of beef rounds 4-2-3-1.

In my top pair, I placed 4 over 2 as 4 was a heavier muscled, trimmer round. 4 displayed a deeper center section, along with a plumper cushion and heel. 4 also had less seam fat and less cod fat. Furthermore, 4 revealed more marbling in the round face. I grant that 2 displayed a slightly larger tip. 2 also had less fat along the flank edge.

In a close decision, I placed 2 over 3 because 2 had advantages in muscling. 2 possessed a deeper, wider center section and a plumper cushion. 2 also had less cod fat. Additionally, 2 displayed a brighter cherry-red colored round face. I admit that 3 had more exposed lean in the round face. Furthermore, 3 displayed less fat over the round face and less seam fat. 3 also had more marbling in the round face.

For my bottom pair, I easily placed 3 over 1 as 3 was a much trimmer round that would yield a higher percentage of boneless, trimmed retail cuts. 3 was much trimmer over the round face, and had less seam fat and cod fat. 3 also had a meatier round face. In addition, 3 had more marbling in the round face. I acknowledge that 1 possessed a slightly deeper, wider center section, partially due to fat.

Finally, I realize that 1 displayed an acceptable amount of marbling in a bright, cherry-red colored round face; however, I placed 1 last as 1 was the fattest, lightest muscled round in the class. 1 had the fattest over the round face and center section, along with the most cod fat. Furthermore, 1 had the flattest center section and a tapering heel and cushion. Thus 1 would yield the lowest percentage of trimmed steaks and roasts in the class.

Thank you.

Retail Cut Identification

Youth will be asked to fill out a card using codes to identify the species, primal cut, retail cut, and cookery method of thirty cuts of meat. A full list of identification codes is shared below.

Size of Cut and Color of Lean

- Consider the size of the animal from which the cuts originated. Beef will be larger, lamb, will be smaller, and pork will be in the middle.
- Beef should be a bright cherry-red color, pork will be a lighter reddish-pink color; and lamb a slightly darker, pinkish-red color.

Identifying Primal and Retail Cuts

- Use muscle and bone structure
- Names of the cuts are related to the bone or muscle structure of origin
- Look at the number of muscles in an individual cut
- Note the color and texture of the muscle

Cookery Method

- Dry heat cookery is used for more tender cuts of meat.
 - Grilling, broiling, or pan-frying
- Moist heat cookery is used for less tender cuts of meat
 - Slow cookers or braising

American Royal National 4-H Retail Meat Identification Codes

Beef Primal	Retail Cut Name	Cookery Method	Species	Primal	Name	Cookery	
Brisket	Corned	Moist	B	B	89	M	
	Flat Half, Bnls	Moist	B	B	15	M	
Whole, Bnls		Moist	B	B	10	M	
	7-bone Pot-Roast	Moist	B	C	26	M	
Chuck	Arm Pot-Roast	Moist	B	C	03	M	
	Arm Pot-Roast, Bnls	Moist	B	C	04	M	
	Blade Roast	Moist	B	C	06	M	
	Eye Roast, Bnls	Dry/Moist	B	C	13	D/M	
	Eye Steak, Bnls	Dry	B	C	45	D	
	Mock Tender Roast	Moist	B	C	20	M	
	Mock Tender Steak	Moist	B	C	48	M	
	Petite Tender	Dry	B	C	21	D	
	Shoulder Pot Roast (Bnls)	Dry/Moist	B	C	29	D/M	
	Top Blade Steak (Flat Iron)	Dry	B	C	58	D	
	Flank Steak	Dry/Moist	B	D	47	D/M	
	Loin	Porterhouse Steak	Dry	B	F	49	D
T-bone Steak		Dry	B	F	55	D	
Tenderloin Roast		Dry	B	F	34	D	
Tenderloin Steak		Dry	B	F	56	D	
Top Loin Steak		Dry	B	F	59	D	
Top Loin Steak, Bnls		Dry	B	F	60	D	
Top Sirloin Cap Steak, Bnls		Dry	B	F	64	D	
Top Sirloin Steak, Bnls Cap Off		Dry	B	F	63	D	
Top Sirloin Steak, Bnls		Dry	B	F	62	D	
Tri Tip Roast		Dry	B	F	40	D	
Plate		Short Ribs	Moist	B	G	28	M
		Skirt Steak, Bnls	D/M	B	G	54	D/M
Rib	Rib Roast	Dry	B	H	22	D	
	Ribeye Roast, Bnls	Dry	B	H	13	D	
	Ribeye Steak, Bnls	Dry	B	H	45	D	
Ribeye Steak, Lip-On	Dry	B	H	50	D		
Round	Bottom Round Roast	Dry/Moist	B	I	08	D/M	
	Bottom Round Rump Roast	Dry/Moist	B	I	09	D/M	
	Bottom Round Steak	Moist	B	I	43	M	
	Eye Round Roast	Dry/Moist	B	I	14	D/M	
	Eye Round Steak	Dry/Moist	B	I	46	D/M	
	Round Steak	Moist	B	I	51	M	
	Round Steak, Bnls	Moist	B	I	52	M	
	Tip Roast - Cap Off	Dry/Moist	B	I	36	D/M	
	Tip Steak - Cap Off	Dry	B	I	57	D	
	Top Round Roast	Dry	B	I	39	D	
	Top Round Steak	Dry	B	I	61	D	
	Various	Beef for Stew	Moist	B	N	82	M
Cubed Steak		Dry/Moist	B	N	83	D/M	
Ground Beef		Dry	B	N	84	D	

Variety Meats	Retail Cut Name	Cookery Method	Species	Primal	Name	Cookery
Heart	Heart	Dry/Moist	B	M	76	D/M
	Heart	Dry/Moist	L	M	76	D/M
	Heart	Dry/Moist	P	M	76	D/M
	Kidney	Dry/Moist	B	M	77	D/M
	Kidney	Dry/Moist	L	M	77	D/M
	Kidney	Dry/Moist	P	M	77	D/M
	Liver	Dry/Moist	B	M	78	D/M
	Liver	Dry/Moist	L	M	78	D/M
	Liver	Dry/Moist	P	M	78	D/M
	Oxtail	Moist	B	M	79	M
	Tongue	Dry/Moist	B	M	80	D/M
	Tongue	Dry/Moist	L	M	80	D/M
	Tongue	Dry/Moist	P	M	80	D/M
	Tripe	Moist	B	M	81	M

Pork Primal	Retail Cut Name	Cookery Method	Species	Primal	Name	Cookery	
Ham/Leg	Pork Fresh Ham Center Slice	Dry/Moist	P	E	44	D/M	
	Pork Fresh Ham Rump Portion	Dry/Moist	P	E	25	D/M	
	Pork Fresh Ham Shank Portion	Dry/Moist	P	E	27	D/M	
	Smoked Ham, Bnls	Dry	P	E	91	D	
	Smoked Ham, Center Slice	Dry	P	E	90	D	
	Smoked Ham, Rump Portion	Dry	P	E	96	D	
	Smoked Ham, Shank Portion	Dry	P	E	97	D	
	Tip Roast, Bnls	Dry	P	E	35	D	
	Top Roast, Bnls	Dry	P	E	38	D	
	Loin	Back Ribs	Dry/Moist	P	F	05	D/M
		Blade Chops	Dry/Moist	P	F	66	D/M
		Blade Chops, Bnls	Dry/Moist	P	F	67	D/M
Blade Roast		Dry/Moist	P	F	06	D/M	
Butterflied Chops Bnls		Dry	P	F	68	D	
Center Loin Roast		Dry	P	F	11	D	
Center Rib Roast		Dry	P	F	12	D	
Loin Chops		Dry	P	F	70	D	
Rib Chops		Dry	P	F	71	D	
Sirloin Chops		Dry	P	F	73	D	
Sirloin Cutlets		Dry	P	F	53	D	
Sirloin Roast		Dry	P	F	30	D	
Shoulder	Smoked Pork Loin Chop	Dry	P	F	93	D	
	Smoked Pork Loin Rib Chop	Dry	P	F	95	D	
	Tenderloin, Whole	Dry	P	F	34	D	
	Top Loin Chops	Dry	P	F	74	D	
	Top Loin Chops, Bnls	Dry	P	F	75	D	
	Top Loin Roast, Bnls	Dry	P	F	37	D	
	Side/Belly	Arm Picnic, Whole	Dry/Moist	P	J	02	D/M
		Arm Roast	Dry/Moist	P	J	03	D/M
		Arm Steak	Dry/Moist	P	J	41	D/M
		Blade Boston Roast	Dry/Moist	P	J	07	D/M
	Spareribs	Blade Steak	Dry/Moist	P	J	42	D/M
		Smoked Picnic, Whole	Dry/Moist	P	J	94	D/M
Slab Bacon		Dry	P	K	98	D	
Various	Sliced Bacon	Dry	P	K	99	D	
	Fresh Side	Moist	P	K	17	M	
Various	Pork Spareribs	Dry/Moist	P	L	32	D/M	
	Country Style Ribs	Dry/Moist	P	N	69	D/M	
	Ground Pork	Dry	P	N	85	D	
	Hock	Moist	P	N	86	M	
	Pork Cubed Steak	Dry/Moist	P	N	83	D/M	
	Pork Sausage Links	Dry	P	N	87	D	
	Sausage	Dry	P	N	87	D	
	Smoked Pork Hock	Moist	P	N	92	M	

Lamb Primal	Retail Cut Name	Cookery Method	Species	Primal	Name	Cookery	
Breast	Ribs (Denver Style)	Dry/Moist	L	A	24	D/M	
	Leg	American Style Roast	Dry	L	E	01	D
		Center Slice	Dry	L	E	44	D
		Frenched Style Roast	Dry	L	E	16	D
	Loin	Leg Roast, Bnls	Dry	L	E	18	D
		Sirloin Chops	Dry	L	E	73	D
		Sirloin Half	Dry	L	E	31	D
	Rib	Loin Chops	Dry	L	F	70	D
		Loin Roast	Dry	L	F	19	D
		Rib Chops	Dry	L	H	71	D
	Shoulder	Rib Chops Frenched	Dry	L	H	72	D
		Rib Roast	Dry	L	H	22	D
Rib Roast, Frenched		Dry	L	H	23	D	
Various	Arm Chops	Dry/Moist	L	J	65	D/M	
	Blade Chops	Dry/Moist	L	J	66	D/M	
	Square Cut	Dry/Moist	L	J	33	D/M	
Various	Shank	Moist	L	N	88	M	

Revised For 2017 Contest