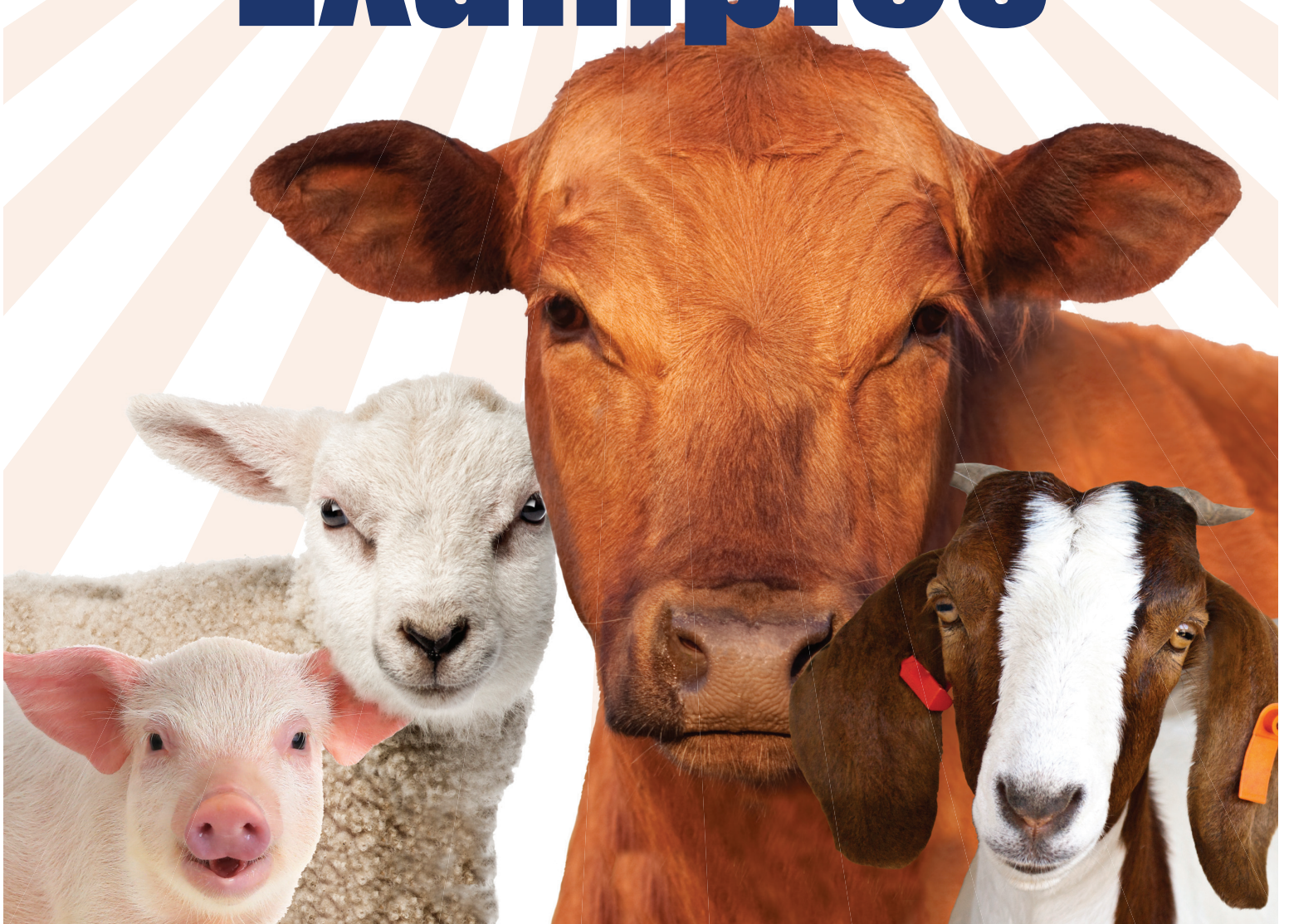


# **Livestock Skillathon Rules and Examples**



# Alabama 4-H Livestock Skillathon

## Rules and Regulations

### Team and Contestant Eligibility

- All Alabama 4-H age youth (9–18) in good standing are eligible to compete. Junior, Intermediate, and Senior contestants will compete in separate age divisions, and contestants must participate in their appropriate age division. The age breaks for the age divisions are as follows (age as of January 1 of the upcoming year):
  - » Junior: 9–11 years old
  - » Intermediate : 12–13 years old
  - » Senior: 14–18 years
- Teams may consist of up to four members, but only the top three individual overall scores will be included in the team overall score. Counties with more than four contestants in a particular age division may have multiple teams, but the number of contestants per team may not exceed four.
  - » All members of a four-person team will compete, but the member receiving the lowest overall score will automatically be declared the alternate. The alternate's scores will not be included in any of the team totals, but will be considered in making all individual awards.
  - » Teams consisting of three members will not have an alternate and all members' scores will count toward individual and team awards.
  - » Counties that have less than three individuals in a division (Junior, Intermediate, or Senior) may work with other counties to make a full team of three or four individuals.
- The high placing Senior team will be invited to represent Alabama at the National Skillathon Contest which will be held in November in Louisville, Kentucky. To represent Alabama at the National Skillathon Contest, a Senior team must have four team members.
  - » In the event a county with more than one Senior team competing at the State Skillathon Contest should win, that county may choose amongst all of its Senior age contestants in determining the youth that will compete at the National Skillathon Contest. Only youth from that county that competed at the State Skillathon Contest are eligible for selection.
  - » In the event a county with only three Senior contestants (one team of three Senior contestants) wins the State Skillathon Contest, that team must pick up a fourth team member from another county to be eligible for competition at the National Skillathon Contest. The added team member must be a Senior age youth and must have competed at the State Skillathon Contest.
- Registration for the event is through 4HOnline. You may obtain information regarding registration deadlines from your county 4-H Agent.
- No member may represent Alabama in an out-of-state National Skillathon event in which he or she has previously participated. This includes the National Skillathon Contest in Louisville. Additionally, a member may not participate in the National 4-H Livestock Skillathon Contest and the National 4-H Livestock Judging Contest held in conjunction with the North American International Livestock Exposition in Louisville the same year. Contestants in 4-H competitive events must not have participated in official postsecondary (university, college, junior college, or technical school) competitive events of a similar nature and in the same subject matter area.





- This contest covers the understanding and practical application and the principles of animal sciences related to beef, sheep, swine, and goats.
- Potential educational resources are included in this packet. In particular, the following resource should prove helpful. Kentucky 4-H Livestock Skillathon Information: <http://afs4hyouth.ca.uky.edu/skillathon>

### Skillathon Method of Conduct

- All 4-H Livestock Skillathon contestants will report promptly to the Skillathon testing location. The agenda for the event will be made available by the organizers to that contestants will arrive on time. Only contestants or those adults assisting with the contest (group leaders, card runners, contest officials, etc.) will be permitted in the competition area.
- Contestants will be allowed 15 minutes to complete each of the ten individual competition classes. Senior teams will be allowed 20 minutes to complete the team activities.
- During the individual competition round, contestants will be divided into groups and will remain with that assigned group throughout the round of classes. While completing the individual competition classes, there will be no conferring between contestants or between a contestant and anyone else except as directed by contest officials. The team competition round will follow the individual competition round.



- Team members will complete one official answer sheet for each team class representing the combined effort of all team members. Teams will be allowed 20 minutes to complete



the group assignment for each class and turn in an answer sheet. During the team competition round of the contest, contestants will only be allowed to confer with their own team members during the time period allowed for each class.

- Contestants shall not wear any hats.
- Contestants should bring a blank notepad, clipboard, blank paper, and writing instruments (pencil preferred). Contestants may not bring books, notes, pamphlets, reference materials, calculators (one will be provided if needed), or cell phones into the contest area. Contestants found in contempt of this rule will be disqualified.
- Contestants are not to pick up or touch any item that is being identified or evaluated in the individual competition classes.

### Skillathon Classes: Junior Division

#### Individual Classes

- Retail Meat Cut Identification: (50 possible points) From a provided list, identify from photographs or pictures the uniformly accepted name of a combination of ten beef, pork, and lamb retail cuts.
- Livestock Feed Identification (50 possible points): From a list provided, identify from actual samples the proper name for ten livestock feeds.
- Livestock Breed Identification (50 possible points): From a list provided, identify from photographs or pictures, ten livestock (beef cattle, swine, sheep, and goat) breeds.
- Livestock/Meat Equipment Identification (50 possible points): From a list provided, identify from photographs or pictures the proper name

for ten pieces of equipment used in livestock production or the meat industry.

- Meat Judging Class I (50 possible points): Rank one class of four similar retail cuts of meat.
- Meat Judging Class II (50 possible points): Rank one class of four similar retail cuts of meat.
- Hay Judging Class (50 possible points): Rank a class of four hay samples.
- Wool Judging Class (50 possible points): Rank a class of four samples of fleece.



- Quality Assurance Exercise (50 possible points): Demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.
- Quiz (50 possible points): Complete a quiz concerning the total livestock industry.



## Skillathon Classes: Intermediate Division

### Individual Classes

- Retail Meat Cut Identification (100 possible points): From a list provided, identify from photographs or pictures the uniformly accepted name of a combination of ten beef, pork, and lamb retail cuts, including the species.
- Livestock Feed Identification (100 possible points): From a list provided, identify from actual samples the proper name for ten livestock feeds and each corresponding nutrient group.
- Livestock Breed Identification (100 possible points): From a list provided, identify from photographs or pictures, ten livestock (beef cattle, swine, sheep, and goat) breeds, and the place of origin for the breed.
- Livestock/Meat Equipment Identification (100 possible points): From a list provided, identify from photographs or pictures the proper name for ten pieces of equipment used in livestock production or the meat industry and the use for the piece of equipment.
- Meat Judging Class I (50 possible points): Rank one class of four similar retail cuts.
- Meat Judging Class II (50 possible points): Rank one class of four similar retail cuts.
- Hay Judging Class (100 possible points): Rank a class of four hay samples and answer five questions on the class.
- Wool Judging Class (50 possible points): Rank a class of four samples of fleece.



- Quality Assurance Exercise (50 possible points): Demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.
- Quiz (50 possible points): Complete a quiz concerning the total livestock industry.

### Skillathon Classes: Senior Division

#### Individual Classes

- Retail Meat Cut Identification (150 possible points): From a provided list, identify from photographs or pictures the uniformly accepted name of a combination of ten beef, pork, and lamb retail cuts, including the species, wholesale cut from which each retail cut originates, and the retail cut.



- Livestock Feed Identification (150 possible points): From a provided list, identify from actual samples the proper name for ten livestock feeds, each corresponding nutrient group, and the unique characteristics or uses of the feedstuff.
- Livestock Breed Identification (150 possible points): From a provided list, identify from photographs or pictures ten livestock (beef cattle, swine, sheep, and goat) breeds, origin of the breed, and unique characteristics and important traits for the breed.
- Livestock/Meat Equipment Identification (100 possible points): From a provided list, identify from photographs or pictures the proper name for ten pieces of equipment used in livestock production or the meat industry and the use for the piece of equipment.
- Meat Judging Class I (100 possible points): Rank one class of four similar retail cuts of meat and answer five questions pertaining to the class.
- Meat Judging Class II (50 possible points): Rank one class of four similar retail cuts of meat.

- Hay Judging Class (100 possible points): Rank a class of four hay samples with forage analysis information, nutrient requirements of the species being fed, and a production scenario. Answer five questions pertaining to the class. Rank a class of four samples of fleece.
- Wool Judging Class (50 possible points): Rank a class of four samples of fleece.
- Quality Assurance Exercise (50 possible points): Demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.
- Quiz (50 possible points): Complete a quiz concerning the total livestock industry.

#### Team Exercises/Activities

Senior team members will confer as a group to complete the following exercises/activities. All team members must participate and have an active role. The specific components that are required for each activity/exercise will be age appropriate.

- Animal Breeding and Marketing Exercise (200 possible points): Team members will evaluate a breeding animal scenario and make animal selection decisions based upon performance data to rank breeding animals for use within the situation.
- Livestock Feeding and Performance Exercise (200 possible points): Team members will evaluate a number of feed rations and related information concerning the feed rations and rank the feed rations from most ideal to least ideal to meet a specific livestock production scenario.

Total team scores will be determined by adding the three highest individual team members' class totals with the total accumulated from the team's competition classes.



## Skillathon Retail Meat Cut Identification

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each retail meat cut. Use capital letters and write neatly. Juniors only provide answers for retail cut name from a list of ten answers. Intermediates provide answers for retail cut name and species of cut. Seniors provide answers for retail cut name, species of cut, and wholesale cut of origin. Each question is worth 5 points (50 points total for Juniors, 100 points total for Intermediates, 150 points total for Seniors).

	Retail Cut Name	Species of Cut	Wholesale Cut of Origin
Ex.	66	P	Q
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

### Retail Names to be used in answer column 1 by Juniors, Intermediates, and Seniors

#### BEEF RETAIL MEAT CUTS

1. Brisket, flat half	17. Sirloin steak, shell	32. Bottom round roast
2. Brisket, point half	18. Sirloin steak, boneless	33. Bottom round steak
3. Brisket, whole	19. Tenderloin steak	34. Eye round roast
4. Arm roast	20. Porterhouse steak	35. Eye round steak
5. Arm roast, boneless	21. T-bone steak	36. Heel of round roast
6. Arm steak	22. Top loin steak	37. Rump roast, boneless
7. Arm steak, boneless	23. Top loin steak, boneless	38. Round steak
8. Blade roast	24. Short ribs	39. Round steak, boneless
9. Blade steak	25. Skirt steak	40. Tip roast
10. 7-bone roast	26. Rib roast, large end	41. Tip roast, cap off
11. 7-bone steak	27. Rib roast, small end	42. Tip steak
12. Flank steak	28. Rib steak, small end	43. Tip steak, cap off
13. Sirloin steak, flat bone	29. Rib steak, small end, boneless	44. Top round roast
14. Sirloin steak, pin bone	30. Ribeye roast	45. Top round steak
15. Sirloin steak, round bone	31. Ribeye steak	46. Cross cuts
16. Sirloin steak, wedge bone		47. Cross cuts, boneless

#### LAMB RETAIL MEAT CUTS

48. Breast	54. Sirloin chop	60. Rib roast
49. Breast riblets	55. Leg sirloin half	61. Rib roast, boneless
50. American style roast	56. Loin chop	62. Shanks
51. Leg center slice	57. Loin double chop	63. Blade chop
52. French style roast	58. Loin roast	64. Neck slice
53. Leg shank half	59. Rib chop	65. Shoulder square cut

#### PORK RETAIL MEAT CUTS

66. Fresh ham center slice	73. Center rib roast	80. Arm roast
67. Fresh ham rump portion	74. Center loin roast	81. Arm steak
68. Fresh ham shank portion	75. Loin chop	82. Blade Boston roast
69. Fresh side pork	76. Rib chop	83. Sliced bacon
70. Blade chop	77. Sirloin chop	84. Smoked jowl
71. Blade roast	78. Top sirloin chop	85. Spareribs
72. Butterfly chop	79. Arm picnic roast	

### Species of Cut to be used in answer column 2 by Intermediates and Seniors

B. Beef	L. Lamb	P. Pork
---------	---------	---------

### Wholesale Cut of Origin to be used in answer column 3 by Seniors

BEEF WHOLESALE CUTS	LAMB WHOLESALE CUTS	PORK WHOLESALE CUTS
A. Brisket	I. Breast	O. Belly (Side, Bacon)
B. Chuck	J. Leg	P. Boston Butt
C. Flank	K. Loin	Q. Ham
D. Loin	L. Rack	R. Jowl
E. Plate	M. Shank	S. Loin
G. Round	N. Shoulder	T. Picnic Shoulder
H. Shank		

## Skillathon Livestock Feed Identification

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each livestock feedstuff. Use capital letters and write neatly. Juniors only provide answers for feedstuff name from a list of ten answers. Intermediates provide answers for feedstuff name and nutrient group. Seniors provide answers for feedstuff name, nutrient group, and characteristics/uses of the feedstuff. Each question is worth 5 points (50 points total for Juniors, 100 points total for Intermediates, 150 points total for Seniors).

	Feedstuff Name	Nutrient Group	Characteristics /Uses
Ex.	18	P	F
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

### Feed Names to be used in answer column 1 by Juniors, Intermediates, and Seniors

1. Alfalfa hay	26. Grain sorghum (whole)	52. Soybean meal
2. Alfalfa pasture	27. Ground ear corn	53. Soybeans (whole)
3. Barley (whole)	28. Ground limestone	54. Spray-dried animal plasma
4. Blood meal	29. Ground shelled corn	55. Spray-dried whey
5. Brewers dried grain	30. Kentucky bluegrass pasture	56. Steam flaked corn
6. Canola meal	31. L-lysine HCl	57. Steam rolled barley
7. Copper sulfate	32. L-threonine	58. Steam rolled oats
8. Corn distillers dried grain	33. L-tryptophan	59. Steamed bone meal
9. Corn distillers dried grain with soluble	34. Linseed meal	60. Sunflower meal
10. Corn gluten feed	35. Liquid molasses	61. Tall fescue hay
11. Corn gluten meal	36. Meat and bone meal	62. Tall fescue pasture
12. Cottonseed (whole)	37. Millet (whole)	63. Timothy hay
13. Cottonseed hulls	38. Oats (whole)	64. Timothy pasture
14. Cotton seed meal	39. Oat hulls	65. Trace-mineral premix
15. Cracked shelled corn	40. Orchardgrasses hay	66. Trace-mineralized salt
16. Crimped oats	41. Orchardgrass pasture	67. Triticale (whole)
17. Defluorinated rock phosphate	42. Oyster shells	68. Tryptosine
18. Dehydrated alfalfa meal	43. Peanut meal	69. Urea
19. Dicalcium phosphate	44. Red clover hay	70. Vegetable oil
20. DL-methionine	45. Red clover pasture	71. Vitamin premix
21. Dried beet pulp	46. Roller dried whey	72. Wheat (whole)
22. Dried molasses	47. Rye (whole)	73. Wheat bran
23. Dried skim milk	48. Salt, white	74. Wheat middlings
24. Feather meal	49. Santoquin	75. White clover hay
25. Fish meal	50. Shelled corn	76. White clover pasture
	51. Soybean hulls	

### Feeds Nutrient Groups to be used in answer column 2 by Intermediates and Seniors

C. Carbohydrate (energy)	M. Mineral	V. Vitamin
F. Fats (energy)	P. Protein	

### Important Characteristics/Uses of Feedstuffs to be used in answer column 3 by Seniors

- A. Most extensively produced feed grain in United States.
- B. Due to high fiber content, it is fed primarily to ruminant animals.
- C. Except when fed to poultry, it is typically ground or rolled prior to feeding.
- D. Grown primarily in dry regions of United States where there is not enough rain for corn production
- E. A synthetic cereal grain, derived by crossing wheat with rye
- F. Excellent feedstuff for horses and ruminants (high in protein, minerals, and vitamins). Sometimes used as a laxative in pre-farrowing sow diets.
- G. Widely grown source of protein. rarely fed in the whole, full-fat form, but can be if first heated to destroy antinutritional factors (trypsin inhibitor).
- H. Most widely used protein supplement in the United States.
- I. Not used in monogastric feeds due to toxicity problems associated with gossypol (a yellow pigment)
- J. A crop derived from rapeseed, but unlike traditional rapeseed is low in both erucic acid and glucosinates.
- K. Protein is somewhat low in digestibility due to tannins found in the skin and has poor amino acid balance.
- L. Good source of ruminant bypass protein and used in limited amounts in young pig diets.
- M. Primarily used in milk replacers and starter diets for young animals.
- N. By-product from making cheese that is produced by roller-drying the liquid that remains after the casein and most of the fat has been removed.
- O. Excellent source of digestible protein, B vitamins, and minerals.
- P. High in protein and contains active immunoglobulins.
- Q. By-product of the distiller's industry and consists of the dried, screened, coarse grain fraction that remains after the removal of the alcohol from a yeast fermented mash.
- R. Obtained by processing rock phosphates into phosphoric acid, which is then reacted with calcium carbonate (limestone).
- S. Included at high levels (250 ppm) in swine diets where it acts as a growth promotant.

## Skillathon Livestock Breed Identification

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each livestock breed. Use capital letters and write neatly. Juniors only provide answers for breed name from a list of ten answers. Intermediates provide answers for breed name and origin of breed. Seniors provide answers for breed name, origin of breed, and important characteristics/traits. Each question is worth 5 points (50 points total for Juniors, 100 points total for Intermediates, 150 points total for Seniors).

	Breed Name	Origin of Breed	Important Traits
Ex.	20	H	I
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

### Breed Names to be used in answer column 1 by Juniors, Intermediates, and Seniors

BEEF BREEDS	GOAT BREEDS	SHEEP BREEDS	SWINE BREEDS
1. Angus	17. Alpine	30. Cheviot	47. Berkshire
2. Brahman	18. American Cashmere	31. Columbia	48. Chester White
3. Brangus	19. Angora	32. Corriedale	49. Duroc
4. Charolais	20. Boer	33. Dorper	50. Hampshire
5. Chianina	21. Kiko	34. Dorset	51. Hereford
6. Gelbvieh	22. Lamancha	35. Finnsheep	52. Landrace
7. Hereford	23. Nubian	36. Hampshire	53. Pietrain
8. Limousin	24. Oberhasli	37. Katahdin	54. Poland China
9. Maine Anjou	25. Pygmy	38. Merino	55. Spotted
10. Polled Hereford	26. Saanen	39. Montadale	56. Tamworth
11. Red Angus	27. Spanish	40. Oxford	57. Yorkshire
12. Red Poll	28. Tennessee Fainting	41. Polled Dorset	
13. Santa Gertrudis	29. Toggenburg	42. Rambouillet	
14. Shorthorn		43. Romney	
15. Simmental		44. Southdown	
16. Tarentaise		45. Suffolk	
		46. White Dorper	

### Origins of Breeds to be used in answer column 2 by Intermediates and Seniors

A. Jeanerette, Louisiana	H. Africa	N. Berkshire County, England
B. Charolles, France	I. Oregon (U.S.)	O. North Carolina State University
C. Italy	J. Finland	P. Chester County, Pennsylvania
D. Bavaria, Germany	K. Hampshire County, England	Q. Iowa and Nebraska (U.S.)
E. Des Moines, Iowa	L. Oxford County, England	R. Pietrain, Belgium
F. Alps of Switzerland	M. Kent, England	S. Putnam and Hendricks County, Indiana

### Important Characteristics/Traits Origins of Breeds to be used in answer column 3 by Seniors

BEEF CATTLE CHARACTERISTICS/TRAITS	SHEEP CHARACTERISTICS/TRAITS
A. Disease resistance, heat resistance, hardiness, and maternal instincts	M. Carcass conformation, will breed out of season, and milking ability
B. Well defined muscling and good growth rate	N. Prolificacy, mothering ability, and wool production
C. Growth rate, muscling, early puberty, calving ease, and mothering ability	O. Carcass conformation, growth rate, feed conversion, and milking ability
D. Foraging ability, docile, and good fertility	P. Carcass conformation, heavy fleece, and lambing percentage
E. Heavily muscled, high carcass yield, growth rate, and feed efficiency	Q. Herding instinct and wool production
F. Excellent meat quality (nicely marbled), calving ease, and hardy	R. Carcass conformation, early maturity, and adaptability to varied climates
GOAT CHARACTERISTICS/TRAITS	SWINE CHARACTERISTICS/TRAITS
G. Hardy, adaptable animals that thrive in any climate while maintaining good health and excellent production	S. Aggressive breeder and high growth rate
H. Insulative properties of dual coat, hardy, and high health	T. Prolificacy (litter size), milking ability, mothering ability
I. Meat yield, growth rate, browsing ability, fertility, adaptability to wide climatic conditions, and extended breeding season	U. Extreme muscling and leanness
J. Milk yield, high butterfat, sturdy, hardy, and excellent temperament	V. Carcass quality (intramuscular fat)
K. High butterfat content, extended breeding season, best suited for hot conditions, and multipurpose use (milk, meat, and hide)	W. Excellent rate of gain and feed efficiency
L. Heavy milkers, rugged bone, and vigor. Saanens are sensitive to excessive sunlight and perform best in cooler conditions.	X. Conception rate and meat quality (intramuscular fat)



## Skillathon Livestock/Meat Equipment Identification

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each piece of equipment. Use capital letters and write neatly. Juniors will only be asked questions pertaining to the names of livestock/meat equipment a list of ten answers. Intermediates and Seniors provide answers for livestock/meat equipment names and equipment use. Each question is worth 5 points (50 points total for Juniors, 100 points total for Intermediates, and Seniors).

	Equipment Name	Equipment Use
Ex.	17	F
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

### Equipment Names to be used in answer column 1 by Juniors, Intermediates, and Seniors

LIVESTOCK EQUIPMENT		MEAT EQUIPMENT
1. All-in-one castrator/docker	26. Lamb tube feeder	43. Backfat ruler
2. Artificial insemination pipettes	27. Needle teeth nippers	44. Band saw
3. Bowl waterer	28. Nipple waterer	45. Bone dust scraper
4. Balling gun	29. Nose ring	46. Boning knife
5. Barnes dehorner	30. Nose ring pliers	47. Bowl chopper
6. Cattle clippers	31. Obstetrical (O.B.) chain	48. Deharing machine
7. Clipper comb	32. Paint branding iron	49. Electrical stunner
8. Clipper cutter	33. Pistol-grip syringe	50. Emulsifier
9. Currycomb	34. Ram marking harness	51. Ham net
10. Disposable syringes	35. Rumen magnate	52. Hand saw
11. Drench gun	36. Scalpels	53. Hard hat
12. Ear notchers	37. Scotch comb	54. Loin eye area grid
13. Ear tag pliers	38. Shearer's screwdriver	55. Meat grinder
14. Elastrator	39. Sheep shears (electric)	56. Meat grinder auger
15. Electric branding iron	40. Slap tattoo	57. Meat grinder knife
16. Electric dehorner	41. Tattoo pliers	58. Meat grinder plate
17. Electric docker	42. Wool card	59. Meat grinder stuffing rod
18. Emasculator (Burdizzo)		60. Meat hook
19. Emasculator		61. Meat tenderizer
20. Ewe prolapse retainer		62. Meat trolley
21. Fencing pliers		63. Metal knife scabbard
22. Foot rot shears		64. Rubber apron
23. Freeze branding iron		65. Sharpening steel
24. Hoof knife		66. Smoke house
25. Hog holder (snare)		67. Thermometer
		68. Tumbler
		69. Vacuum sausage stuffer
		70. Whale saw

### Equipment Uses to be used in answer column 3 by Seniors

- |  |   |
|--|---|
| <p>A. A device used to deposit boar semen into reproductive tract of a gilt or sow. The spiral tip or button end of the pipette is inserted into the cervix where the semen is deposited.</p> <p>B. Used to administer various pills (medications) to cattle and horses. It is placed down the throat to administer the pills.</p> <p>C. The part of cattle clippers that guides the hair towards the clipper cutter.</p> <p>D. Used to administer precise amounts of liquid medications to cattle, sheep, goats, and horses. The hooked portion is placed in the animal's mouth to administer the liquid medication.</p> <p>E. An instrument used for the bloodless castration (young male calves, lambs, and goats) and docking of tails (young lambs and goats). It is used to place a small rubber ring over the scrotum or tail to shut off circulation.</p> <p>F. Used to dock the tails of lambs and piglets. It cauterizes as it cuts the tail to eliminate excessive bleeding.</p> <p>G. An instrument used for the bloodless castration of young male calves, lambs, and goats by severing (crushing) the testicular cord.</p> <p>H. An instrument used to control vaginal prolapse in ewes.</p> | <p>I. Used to trim hooves of cattle, sheep, and goats to help prevent foot diseases.</p> <p>J. Used to restrain hogs that are too big to catch and hold by hand. The cable portion of the hog catcher (snare) is placed over the hog's snout to restrain the hog.</p> <p>K. An instrument used to assist in pulling lambs from ewes that are experiencing lambing difficulties (dystocia).</p> <p>L. Used to give vaccinations to multiple animals without needing to reload the syringe with more vaccine.</p> <p>M. Used to insert a RALGRO pellet (for growth promotion) under the loose skin and above the cartilage on the back side of a beef calf's ear.</p> <p>N. A nonrusting, round post electric fence insulator. Will work on round posts up to about 1/2-inch diameter.</p> <p>O. Used by shearers to quickly replace the clipper comb and clipper cutter on cattle clippers.</p> <p>P. Used to card (comb or rake) the wool on sheep prior to shearing.</p> |
|--|---|

## Skillathon Meats Judging

Junior contestants will be asked to rank two classes of four similar retail cuts of meat. Intermediate contestants will be asked to rank two classes of four similar retail cuts of meat. Senior contestants will be asked to rank two classes of four similar retail cuts of meat and answer five questions on one class.

Ranking a Class of Retail Meat Cuts	
The following criteria should be used when evaluating meat cuts:	
CRITERIA	DESCRIPTION
Muscling	Size of the lean portion (amount of muscle)
Leanness (plate loss)	Fat and bone lost as the cut is cooked and consumed
Quality	Amount of marbling (small flecks of fat within the muscle); firmness with no signs of dryness or excess juices
Color	Beef should be bright cherry red; pork should be bright grayish pink; lamb should be light pink
FOR EXAMPLE:	Heavy muscled, lean, high quality, correctly colored cuts should be placed high in the class Fat, light muscled, discolored cuts should be placed low in the class.

### Example Questions for Senior Contestants

- Which cut had the highest lean to fat ratio?
- Which cut had the least marbling?
- Which cut had the most correct beef color?
- Between cut 1 and cut 3, which cut had a finer texture?
- Which cut would have the greatest plate loss?

## Skillathon Hay Judging

Junior contestants will be asked to visually rank one class of four hay samples. Intermediate contestants will be asked to visually rank a class of hay samples and answer five questions on the class. Senior contestants will be asked to rank a class of four hay samples with forage analysis information, nutrient requirements of the species being feed, and a production scenario, and answer five questions on the class.

Ranking a Class of Hay on Visual Basis Only (Junior/Intermediates)	
The following criteria should be used when evaluating hay:	
CRITERIA	DESCRIPTION
Color	Bright green color is best; brown to dark brown color is poorest
Aroma*	Should be free from smell of mold, mildew, etc.
Leaf to stem ratio	High leaf to stem ratio is desirable; as stem size increases the leaf to stem ratio decreases
Purity	Should be free from weeds or other foreign plants which decrease the hay's value (i.e., alfalfa should be all alfalfa)
Softness*	Hay that has been properly cured and stored should be soft to the touch

\*When judging some hay classes, it may not be permitted to touch or smell the hay samples. In those cases, place the class using only color, leaf to stem ratio, and purity.

### Example Questions for Intermediate Contestants

- Which hay sample appears to have the finest stems?
- Which hay visually appears to have the highest percentage of alfalfa content?
- Which hay has the least desirable color?
- Which hay will likely result in the highest feeding loss when fed to sheep?
- Which sample will likely result in the lowest feeding loss when fed to sheep?

### Example Production Scenario, Nutrient Requirements, and Forage Analysis (Seniors)

#### Scenario

The hay being ranked will be fed to ewes during early lactation. Ewes with singles and those with twins will be sorted into two groups after lambing, with the hay being used primarily with ewes nursing twins. Any hay remaining will be marketed to other local sheep producers.

Nutrient requirements
(155 lb ewe nursing twins, first 6-8 weeks of lactation)
Dry Matter 6.0 lb
Crude Protein 15.0% (dry matter basis)
TDN 65.0% (dry matter basis)

Forage Analysis (dry matter basis)				
	HAY #1	HAY #2	HAY #3	HAY #4
Dry matter, %	88.6	88.4	88.6	87.9
Crude protein, %	16.8	18.2	20.5	18.1
Digestible protein, %	12.1	13.4	15.5	13.3
Acid detergent fiber (ADF), %	35.8	39.7	34.0	32.0
TDN, %	62.0	63.0	94.7	63.0



## Skillathon Fleece Judging

Junior, Intermediate, and Senior contestants will be asked to visually rank one class of four fleeces. The following criteria should be used when evaluating fleeces:

Visually Rank One Class of Four Fleeces	
The following criteria should be used when evaluating fleeces:	
CRITERIA	DESCRIPTION
Estimated clean wool content (yield and shrinkage)	High yield per fleece is desirable. Small amount of light-colored yolk as free from adhering sand, dirt, and vegetable matter as possible. Cut heavily if tied with any twine other than paper.
Length	Should be combing or staple length for the grade: i.e., fine, 3 in; ½ blood, 3½ in; ¾ blood, 3¾ in; ¼ blood, 4 in; low ¼ blood, 4¼ in; braid, 4½ in. Lengths more than ½ inch greater than this are of no additional value except increasing the yield and grease weight.
Quality or fineness	Should fall clearly in one of the grades according to fineness; i.e., fine, ½ blood; ¾ blood; ¼ blood; low ¼ blood; braid. Uniformity of fineness particularly desirable. Cut heavily for hairy britch.
Soundness (strength)	Fiber should be strong throughout and free from breaks.
Purity	Free from hair, kemp, black or brown fibers. Cut heavily for black or brown fibers and coarse, hairy britch.
Character and color (crimp)	Evenly crimped or wavy from base to tip. Crimp should be distinct. Free from frowsy wool. Soft and springy to the touch. White to cream, bright color most desirable. Should be free from stains and with an even distribution of yolk.

\*Taken from Judging Wool and Mohair by J.L. Groff and G. Ahlschwede (Texas A&M University).

## Skillathon Quality Assurance

When provided with a medication label/medication insert and a scenario, all Junior, Intermediate, and Senior contestants (with age appropriateness) should be able to demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance. An example medication label/insert (with the key parts labeled) is shown below.

**1 Swinibiotic**  
(Compicillin in Aqueous Solution) **2**

**Directions for use: See package insert**

**3** For use in Nonlactating Beef Cattle and Swine  
*Read Entire Brochure Carefully Before Using This Product*  
**For Intramuscular Use Only**

**Active Ingredients:** Swinibiotic is an effective antimicrobial preparation containing compicillin hydrochloride. Each ml of this suspension contains 250,000 units of compicillin hydrochloride in an aqueous base.

**4** **Indications: Beef Cattle** – pneumonia, bronchitis, mastitis, foot rot, wound infections.  
**Swine** – pneumonia, mastitis, wound infections, and other bacterial infections caused by or associated with compicillin-susceptible species.

**Recommended Dosage**

The usual dose is 2 ml per 100 lb of body weight given once daily for 3 days.  
Maximum dose is 12 ml/day.

<b>5</b> Body Weight	Dosage
100 lb	2 ml
300 lb	6 ml
500 lb	10 ml
600 lb or more	12 ml

**6** **Caution:** **1.** Do not mix Swinibiotic with other injectable solutions as this may cause precipitation of the active ingredients. **2.** Swinibiotic should be injected deep within the fleshy muscle of the neck. Do not inject this medication in the loin, hip, rump, subcutaneously, intravenously, or near a major nerve because it may cause tissue damage. **3.** If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. **4.** Treated animals should be closely observed for 30 minutes after treatment. Should an adverse reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. **5.** Swinibiotic must be stored between 2° and 8° C (36° to 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use. **7**

**9** **Warnings:** The use of this medication in beef cattle and swine must be discontinued for 28 days before treated animals are slaughtered for food. Do not use in lactating animals. **8**

**How Supplied:** Swinibiotic is available in vials of 50 ml. **10**

1. Name of Medication
2. Active Ingredient(s)
3. Species
4. Approved Uses
5. Dosage
6. Cautions
7. Route of Administration
8. Storage Requirements
9. Warnings (Withholding Times)
10. Sizes Available

## Skillathon Livestock Quiz

All Junior, Intermediate, and Senior contestants will complete a 25-question quiz of general animal science and livestock production information.

### Example Questions for Juniors and Intermediates

The following criteria should be used when evaluating fleeces:

1. Which of the following swine breeds was developed in Chester County, Pennsylvania?

- A. Chester White                      B. Duroc                      C. Spotted                      D. Poland China

2. The dressed body of a slaughtered meat animal is called the:

- A. Scale                      B. Carcass                      C. Breed type                      D. Dock

3. Which of the following is a form of identification for beef animals?

- A. Ear tagging                      B. Vaccination                      C. Dehorning                      D. Feeding

### Example Questions for Seniors

1. Which of the following factors has resulted in today's market hog being 50% leaner as opposed to hogs marketed in the 1960s?

- A. Improved Genetics                      B. America's pork producers                      C. Better feeding practices                      D. All of the previous

2. The amount of fat cover a market animal possesses is called:

- A. Finish                      B. Substance                      C. Balance                      D. Structural correctness

3. The comfortable space animals develop around them is called their:

- A. Point of balance                      B. Blind spot                      C. Comfort or flight zone                      D. Handler position

4. What is the average length of gestation for a pregnant sow?

- A. 180 days                      B. 114 days                      C. 90 days                      D. 150 days



## Skillathon Team Animal Breeding/Marketing Exercise

**Team activities are for Seniors only.** For this exercise, teams will demonstrate how to make sound animal breeding and marketing decisions.

### Example Exercise for Intermediates and Seniors

You are a commercial lamb producer and your primary target is fast growing lambs for slaughter. However, the neighbor kids like to get some 4-H lambs from you. You also prefer to keep replacements from your own flock.

Your ewe flock is mostly whiteface for an improved wool price. You currently have the four rams described below:

- **Rams 1 and 2** are big Suffolk whose lambs gain extremely well, but are course in their skeletal makeup.
  - **Ram 3** is a large Dorset whose daughters make good replacements and gain about 1 lb per day.
  - **Ram 4** is a medium frame blackface cross whose lambs are much smoother and make good show lambs.
- These four rams are starting to show some age. You have found the following replacement prospects:

EAR TAG	BREED	DNA	ADG (lbs)	DESCRIPTION	SCROTAL MEASUREMENT	PURCHASE PRICE
#1099	Suffolk	RRNS	1.34	Large frame, good terminal sire prospect	29 cm	\$300
#775	Dorset	QRNN	0.90	Medium frame, stylish design	32 cm	\$250
#1279	Blackface	QRNN	1.10	Medium frame, stylish design	30 cm	\$250
#44R	Suffolk	RRNN	1.00	Medium frame, very good conformation	30 cm	\$350
#659	Columbia	QRNS	1.10	Large frame, good wool	31 cm	\$300

You only have \$600 plus any salvage value (\$100 each) from selling all or some of your current rams to spend on the replacements. Using the scenario and the data in the table above, determine if you would keep any of your existing rams and which of the replacement prospects you would purchase. You can only maintain four total rams. Discuss with a contest official how you arrived at your decision and show how much money you would spend.

## Skillathon Team Livestock Feeding/Performance Exercise

**Team activities are for Seniors only.** For this exercise, teams will evaluate and rank a number of feed rations the most ideal to the least ideal to meet a specific livestock production scenario.

### Example Exercise for Intermediates and Seniors

You have 500 black hided steers in your feedlot weighing 950 pounds. You want to market this group of cattle 100 days from now at an average weight of 1,275 pounds. Rank theses feeds in the order that you would feed them for the remaining 100 days. All rations are balanced to meet mineral requirements.

However, no additional roughage will be offered. Your final 2 minutes will be used to explain the differences between your top and bottom choice to the contest official.

RATION NO.	INGREDIENTS IN RATION	% OF RATION AS FED	RATION PRICE/ POUND AS FED
1	Whole corn Corn silage Corn gluten	60% 25% 15%	\$0.06
2	Whole oats Cracked corn Beet pulp	34% 33% 33%	\$0.09
3	Whole corn Distillers grain Ground hay	75% 15% 10%	\$0.06
4	Cracked corn Ground corn Soybean meal	60% 25% 15%	\$0.07
5	Whole oats Whole corn Whole cotton seed	45% 45% 10%	\$0.10



4HYD-2280

**Brigid McCrea**, *Extension Specialist*, Auburn University.  
**Jason P'Pool**, *Extension Specialist*, Auburn University.

---

For more information, contact your county Extension office. Visit [www.aces.edu/directory](http://www.aces.edu/directory).

---

Trade and brand names used in this publication are given for information purposes only. No guarantee, endorsement, or discrimination among comparable products is intended or implied by the Alabama Cooperative Extension System.

---

The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) is an equal opportunity educator and employer. Everyone is welcome!

**Revised September 2017, 4HYD-2280**

© 2017 by the Alabama Cooperative Extension System. All rights reserved.  
[www.aces.edu](http://www.aces.edu)