Contest Eligibility

1. The contest is limited to senior 4-H members. The contestant must be 14 years old on January 1 of the current year but not have had his or her 19th birthday as of January 1 of the current year.

2. Any 4-H member whose name is entered by his or her county extension agent will be eligible to enter this contest and compete as an individual; unless, they have competed at the National 4-H Livestock Skillathon Contest then they are ineligible from competition. Contest officials will create teams out of individuals who are not already on a team.

3. For a county to be eligible for team competition, it will have to have at least three individuals to comprise the team. A county may enter four individuals, but only the top three scores will count toward the winning team.

4. If individuals from counties where a team is not represented choose to compete, they will be assigned to a team upon arrival at the contest.

Contest Method of Conduct

1. The contest will be divided into two rounds. In the first round of the contest, one group will participate in the team oriented classes while the other group will complete the individual competitor classes of the contest. In the second round, the two large groups will switch areas of competition.

2. During the individual competition round of the contest, contestants will be further divided into groups and will remain with that assigned group throughout that contest 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. Contestants will be allowed 15 minutes to complete each individual competition class.

3. Team members will complete one official answer sheet for each team effort class representing the combined effort of all team members. After all individual participants have signed in for the competition and are not on a team, contest officials will divide individuals into teams for this portion of the contest. Teams will be allowed 20 minutes to complete the group assignment for each class and turn in their answer sheet. During the team competition round of the contest, contestants will be allowed to confer only with team members during the time period allowed for each class.
4. Contestants should bring a clipboard, small pocket calculator (programmable calculators will not be permitted), and 2-3 pencils. The contestants are not allowed to bring books, notes, pamphlets, or other reference material into the contest area. Contest officials reserve the right to check all contestants’ clipboards to make sure they are blank just prior to the contest. Violators are subject to contest dismissal.

5. Contestants are not to pick up or touch any item that is being identified or evaluated in the individual competition classes unless otherwise directed by contest officials.

6. Coaches are invited to review contest materials in the contest area at the conclusion of the contest.

**Contest Classes**

**Classes competed as an Individual**

1. **Livestock Breed Identification**: (40 possible points) Identify from photographs 20 livestock (beef cattle, swine, sheep, and goat) breeds. Contestants must also match the breed with the most appropriate description supplied for each breed. (A list of breeds will be provided.)

2. **Livestock Equipment Identification**: (30 possible points) Identify the proper name for 30 pieces of equipment used in livestock production. (A list of equipment will be provided.)

3. **Retail Meat Cut Identification**: (45 possible points) Identify 15 beef, lamb, and/or pork retail cuts from photographs. Contestants will identify the cut by species, primal cut name, and retail cut name. (A list of species, retail cut names, and wholesale cut names will be provided.)

4. **Hay and Wool Judging**: (150 possible points) Rank a class of four hay (50 points) and four wool (50 points) samples with analysis information. Answer questions about the classes (50 points).

5. **Quality Assurance Exercise**: (55 points) Demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.

6. **Quiz**: (60 points) Complete a 30 question multiple choice quiz concerning the total livestock industry.

**Total Possible Individual Class Points = 380**

Tie breakers for individual skills:
   1. Quiz
   2. Retail Meat Cut Identification

**Classes completed as a Team**
1. **Quality Assurance Exercise**: (100 possible points) Demonstrate how to read an animal health product label, calculate dosage rates and withdrawal times, complete a treatment record, be familiar with administration routes, animal identification and restraint methods, and make responsible management decisions regarding quality assurance. (This will involve live animals.)

2. **Meat & Carcass Evaluation**: (125 possible points) Rank one class of four similar retail cuts (50 points). Evaluate photos of a carcass and also price carcasses using a grid (75 points).

3. **Animal Breeding Scenario and Exercise**: (100 possible points) Team members will evaluate a breeding/marketing animal scenario and make animal selection/marketing decisions based upon performance/visual data to rank breeding animals or market them for use within the situation.

4. **Evaluation of Performance & Marketing Information**: (100 possible points) Evaluate performance information on a group of livestock and then use the information given to make the best marketing decisions.

5. **Livestock Feeding**: (100 possible points) Identify the proper name for livestock feeds and identify each corresponding nutrient group. Feed samples and lists of feed names and nutrient groups will be provided. Utilizing feed ingredients given, formulate a ration for a group of livestock.

**Total Possible Team Class Points = 525**

Tie breakers for team skills:
1. Meat & Carcass Evaluation
2. Evaluation of Performance & Marketing Information

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

**Total Possible Team Points = 905**

High individual scoring will only come out of the individual class skills portion.

**Total High Individual Points = 380**

**Awards**

- High Point Team – Plaques, Boot Bags, Rosettes, and stipend to cover the costs to attend the National 4-H Livestock Skillathon Contest in Louisville, Kentucky.
- 2nd-3rd Place Team - Rosettes
- High Point Individual – Belt Buckle, Rosette
- 2nd-3rd Place High Point Individual - Rosette
Livestock Equipment Identification List

The list below includes potential pieces of equipment to be used in the contest.

- Cattle Clippers
- Comb & Cutter
- Balling Gun
- Automatic Balling Gun
- Paint Branding Iron
- Freeze Branding Iron
- Heat Branding Iron
- Suture Needle
- Ralgro Implant Gun
- OB Chain & Handle
- AI Gun
- Insemination Sheath
- Barnes Dehorner
- Electric Dehorner/Disbudder
- Tube Dehorner
- Scrotal Circumference Tape
- Ear Notcher
- Nose Lead
- Electric Prod (hot shot)
- Drench Gun
- Hoof Trimmers
- Elastrator
- Elastrator Ring/Band
- Burdizzo
- Ear Tag Pliers
- Ear Tag
- Hog Snare
- Marking Harness
- Pig Nippers/Pliers
- Nipple Waterer
- Scotch Comb
- Sorting Paddle
- Tattoo Pliers

- Swine Breeding Spirette
- Pistol Grip Syringe
- Ewe Prolapse Retainer/Ewe Spoon
- Disposable Syringes
- Emasculator
- Lamb Tube
- Electronic ID Tag
- Wool Card
- Nasal Cannula
- Heat Detection Patch
- Beef Cattle Frame Stick
- Breeding Catheter
- Ring Retainer
- Test Tube
- Smoke Stick
- Straw Cutter
- Hoof Block
- Needle Holder
- Teat Cutter/Opener
- Knot Comb
- Identification Reader
- Lamb Grid
- CIDR Applicator
- Ear Tag Remover
- AI Assist
- Forage Probe
- Deep Uterine Catheter
- Weigh Tape
- Pelvimeter
- Paint Stick
- Emasculator
- Rectal Ring

Additional Resources:
University of Kentucky Equipment Identification Pictures
http://www2.ca.uky.edu/agripedia/agmania/EQUIPID/EQUIP1.asp
Livestock Breed Identification List

The list below includes potential breeds of livestock to be used in the contest.

**Beef Cattle**
- Angus
- Beefmaster
- Belgian Blue
- Belted Galloway
- Brahman
- Brangus
- Charolais
- Chianina
- Galloway
- Gelbvieh
- Hereford
- Limousin
- Maine Anjou
- Piedmontese
- Red Angus
- Red Poll
- Salers
- Santa Gertrudis
- Shorthorn
- Simmental
- Tarentaise
- Waygu

**Sheep Breeds**
- Border Leicester
- Cheviot
- Columbia
- Corriedale
- Dorper
- Dorset
- Finnsheep
- Friesian
- Hampshire
- Katahdin
- Lincoln
- Merino
- Montadale
- Oxford
- Polypay
- Rambouillet
- Romney
- Shropshire
- Southdown
- Suffolk
- Targhee

**Goat Breeds**
- Angora
- Boer
- Cashmere
- Kiko
- Myotonic
- Nubian
- Pygmy
- Savanna
- Spanish

**Swine Breeds**
- Berkshire
- Chester White
- Duroc
- Hampshire
- Hereford
- Landrace
- Pietrain
- Poland China
- Spot
- Tamworth
- Yorkshire

**Additional Resources:**
Oklahoma State University Livestock Breed Pictures and Descriptions
http://www.ansi.okstate.edu/breeds

University of Kentucky Breeds of Livestock
http://www2.ca.uky.edu/agripedia/agmania/BREEDS/index.asp
# Arkansas 4-H Skillathon

## Retail Meat Cut Identification

### Additional Resources:
- Texas A&M University Meat Identification Pictures
- Texas Tech University Retail Identification
- University of Nebraska Meat Identification [http://ansc-cpanel.unl.edu/meats/id/](http://ansc-cpanel.unl.edu/meats/id/)

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### Species

<table>
<thead>
<tr>
<th>B Beef</th>
<th>P Pork</th>
<th>L Lamb</th>
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### Primal Cuts

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<tr>
<th>A Breast</th>
<th>H Rib or Rack</th>
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<tr>
<td>B Brisket</td>
<td>I Round</td>
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<td>C Chuck</td>
<td>J Shoulder</td>
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<td>D Flank</td>
<td>K Side (Belly)</td>
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<td>E Ham or Leg</td>
<td>L Spare Ribs</td>
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<td>F Loin</td>
<td>M Variety Meats</td>
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<tr>
<td>G Plate</td>
<td>N Various Meats</td>
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</tbody>
</table>

### Roasts/Pot Roasts

1. American Style
2. Arm Picnic
3. Arm Roast
4. Arm Roast (b/ls)
5. Back Ribs
6. Blade Roast
7. Blade Boston
8. Bottom Round Roast (b/ls)
9. Bottom Round Rump Roast (b/ls)
10. Brisket White
11. Center Loin Roast
12. Center Rib Roast
13. Eye Roast (b/ls)
14. Eye Round Roast
15. Flat Half (b/ls)
16. Frenched Style
17. Fresh Side
18. Leg Roast (b/ls)
19. Loin Roast
20. Mock Tender Roast
21. Petite Tender
22. Rib Roast
23. Rib Roast (Frenched)
24. Ribs (Denver Style)
25. Rump Portion
26. Seven (7) Bone Roast
27. Shank Portion
28. Short Ribs
29. Shoulder Roast (b/ls)
30. Sirloin Roast
31. Sirloin Half
32. Spare Ribs
33. Square Cut (Whole)
34. Tenderloin (Whole)
35. Tip Roast (b/ls)
36. Tip Cap Off Roast
37. Top Loin Roast (b/ls)
38. Top Loin Roast (b/ls)
39. Top Round Roast
40. Tri-Tip Roast

### Chops

65. Arm Chop
66. Blade Chop
67. Blade Chop (b/ls)
68. Butterflyed Chop (b/ls)
69. Country Style Ribs
70. Loin Chop
71. Rib Chop
72. Rib Chop (Frenched)
73. Sirloin Chop
74. Top Loin Chop
75. Top Loin Chop (b/ls)

### Variety Meats

76. Heart
77. Kidney
78. Liver
79. Oxtail
80. Tongue
81. Tripe

### Various Meats

82. Beef for Suet
83. Cubed Steak
84. Ground Beef
85. Ground Pork
86. Hocks
87. Sausage Link/Pattie
88. Shank

### Smoked/Cured

89. Brisket, Corned
90. Center Slice
91. Ham (b/ls)
92. Hocks
93. Loin Chop
94. Picnic (Whole)
95. Rib Chop
96. Rump Portion
97. Shank Portion
98. Slab Bacon
99. Sliced Bacon

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### Scoring Table

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### Points Off

45 - X1 X1 X1

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### Final Score

Total Points Off | Final Score
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Feed Identification List

The list below includes potential feeds to be used in the contest.

- Rice Bran
- Distillers Dried Grains
- Cottonseed Meal
- Cracked/Chopped Corn
- Limestone
- Soybean Hulls (Pelleted)
- Corn Gluten Feed Pellets
- Corn Gluten Meal
- Ground Corn
- Cottonseed Hulls
- Rice Mill Feed
- Soybean Meal
- Soybeans
- Trace Mineralized Salt
- Wheat
- White Salt
- Whole Corn
- Molasses
- Dried Molasses
- Grain Sorghum (aka Milo)
- Hominy
- Wheat Midds (Middlings)
- Oats (Crimped)
- Oats
- Rice (Rough Rice)
- Cottonseed
- Forage, hay
- Alfalfa Pellets
- Dicalcium Phosphate
- Fish Meal
- Blood Meal
- Linseed Meal
- Dried Brewer’s Grains
- Poultry Litter
- Beet Pulp
- Fat
- Meat and Bone Meal
- Dry Whey

Additional Resources:
UAEX Feed Kit

University of Kentucky Feed Identification
http://www2.ca.uky.edu/agripedia/Agmania/feedid/index.asp
Additional Resources

Quizlet
https://quizlet.com/ChelseyAhrens

Past National 4-H Skillathon Contest Materials

University of Illinois Livestock eQuiz
http://web.extension.illinois.edu/equiz/

University of Minnesota General Livestock Sample Questions
http://www.extension.umn.edu/youth/mn4-H/events/project-bowl/docs/PB-GeneralLivestockSampleQuestions.pdf

Texas FFA Livestock Quiz
http://www.texasffa.org/docs/Livestock+Exam+Key.pdf

YouTube video on how to flip a sheep
https://www.youtube.com/watch?v=Oo841e5BQDk

USDA AMS Method for Grid Assessment of Beef Carcass Ribeye Area
http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5090712

How to Calculate Yield Grade - Dr. Janeal Yancey YouTube Video
https://www.youtube.com/watch?v=oaP0xeBS8vQ&feature=youtu.be

South Dakota State University Beef Grading
https://www.sdstate.edu/ars/students/activities/judging/evaluation/beef-grading.cfm

Colorado State University Beef Grading

University of Georgia Extension Understanding Beef Carcass Reports
http://extension.uga.edu/publications/detail.cfm?number=B1326

U.S. Premium Beef USDA Quality Grades and Yield Grades

Understanding Expected Progeny Differences (EPDs) – Cattle
http://www.extension.umn.edu/agriculture/beef/components/homestudy/mlesson3.pdf

EPD and $Value Definitions – American Angus Association
http://www.angus.org/Nce/Definitions.aspx

Swine EPD Terminology

Understanding and Using Performance Data in Swine Judging Classes – Extension
Understanding Sheep Expected Progeny Differences (EPDs) – Virginia Tech

Understanding Sheep Estimated Breeding Values – North Dakota State University

Goat Reproduction Selection Genetic Animal Evaluation EPDs – Extension
http://www.extension.org/pages/63284/goat-reproduction-selection-genetic-animal-evaluation-epds#.VY1oKRTvhBc

EPDs – Kiko EPD Program
http://www.kikogoats.com/EPDs.pdf

Wool Judging