



# 2021 Arkansas 4-H Livestock Skillathon Contest Information & Resource Packet

## Contest Eligibility

1. The contest is open to both junior and senior 4-H members. Junior contestants must be 9-13 years old as of January 1 of the current year. Senior contestants must be 14 years old on January 1 of the current year but not have had his or her 19<sup>th</sup> 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 must 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 final team score.
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.
7. Electronic devices (cell phones, Apple watches, etc.) are strictly prohibited during the contest. If a contestant is caught using an electronic device, they will be subject to contest dismissal.

## Contest Classes

### Classes competed as an Individual

#### Junior Division

1. **Livestock Breed Identification:** (20 possible points) Identify from photographs 20 livestock (beef cattle, swine, sheep, and goat) breeds. (A list of breeds will be provided.)
2. **Livestock Equipment Identification:** (20 possible points) Identify the proper name for 20 pieces of equipment used in livestock production. (A list of equipment will be provided.)
3. **Retail Meat Cut Identification:** (30 possible points) Identify 15 beef, lamb, and/or pork retail cuts from photographs. Contestants will identify the cut by species and retail cut name. (A list of species and retail cut names will be provided.)
4. **Quality Assurance Exercise:** (20 points) Example tasks include: demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance. (Only one medicine label will be utilized.)
5. **Quiz:** (30 points) Complete a 15 question multiple choice quiz concerning the total livestock industry.

#### Senior Division

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:** (120 possible points) Rank a class of four hay (50 points) and four wool (50 points) samples with analysis information. Answer questions about the classes (20 points).
- 5. Quality Assurance Exercise:** (60 points) Example tasks include: 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.

### **Classes completed as a Team**

#### **Junior Division**

- 1. 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. Verbally defend decisions.
- 2. Livestock Feeding:** (100 possible points) Identify the proper name for livestock feeds. Feed samples and lists of feed names will be provided. Utilizing feed tags provided, answer questions.

#### **Senior Division**

- 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:** (100 possible points) Rank one class of four similar retail cuts (50 points). Evaluate photos of a carcass and also price carcasses using a grid (50 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. Verbally defend decisions.
- 4. Management, 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. A list of feed names will not be provided. Utilizing feed ingredients given, formulate a ration for a group of livestock.

## Scoring

### Junior Division

**Total Possible Individual Class Points = 120**

**Total Possible Team Class Points = 200**

### Senior Division

**Total Possible Individual Class Points = 355**

**Total Possible Team Class Points = 500**

- **Overall Individual Score** – Total of all individual competition class points.
- **Overall Team Score** – Determined by adding the highest three team member individual competition class totals with the total accumulated from the team competition classes.
- **Evaluation Individual Score (seniors only)** – Hay and Wool Judging Scores
  - Tie Breakers: 1. Wool Questions 2. Hay Questions 3. Individual Overall Score
- **Evaluation Team Score (seniors)** – Top 3 individual evaluation scores + Team Meat + Team MPM + Team Feeding + Team Animal Breeding
  - Tie Breakers: 1. Team Wool Questions Score 2. Team Hay Questions Score 3. Team Overall Score
- **Evaluation Team Score (juniors)** – Team Animal Breeding + Team Feeding
  - Tie Breakers: 1. Team Animal Breeding Score 2. Team Feeding Score 3. Team Overall Score
- **Identification Individual Score** – Equipment ID + Breeding ID + Retail Meat Cut ID
  - Tie Breakers: 1. Retail Meat Cut ID Score 2. Breed ID Score 3. Equipment ID Score
- **Identification Team Score** – Top 3 scores from individual identification
  - Tie Breakers: 1. Team Retail Meat Cut ID Scores 2. Team Breed ID Scores 3. Team Equipment ID Scores
- **Quality Assurance Individual Score** – Individual QA Score + Quiz
  - Tie Breakers: 1. Quiz Score 2. Individual QA Score 3. Overall Individual Score
- **Quality Assurance Team Score (seniors)** – Top 3 Individual QA Scores + Team QA Score
  - Tie Breakers: 1. Team Quiz Score 2. Team QA Score 3. Overall Team Score
- **Quality Assurance Team Score (juniors)** – Top 3 Individual QA Scores
  - Tie Breakers: 1. Team Quiz Score 2. Team QA Score (from individual QA scores) 3. Overall Team Score

## Awards

Individual and team awards will be given as follows:

- Top 5 Teams Overall
- Top 3 Teams in Quality Assurance
- Top 3 Teams in Identification
- Top 3 Teams in Evaluation
- Top 5 Individuals Overall
- Top 3 Individuals in Quality Assurance
- Top 3 Individuals in Identification
- Top 3 Individuals in Evaluation

The winning senior division team will be eligible to attend the National 4-H Livestock Skillathon Contest in Louisville, Kentucky. A stipend will be provided by the Animal Science Department to help with trip expenses.



## 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
- OB Saw and Handles
- 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/Emasculatome
- Ear Tag Pliers
- Ear Tag
- Hog Snare
- Marking Harness
- Pig Nippers/Pliers
- Nipple Waterer
- Scotch Comb
- Curry 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
- CIDR
- Ear Tag Remover
- AI Assist
- Forage Probe
- Deep Uterine Catheter
- Weigh Tape
- Pelvimeter
- Paint Stick
- Emasculator
- Rectal Ring
- Semen Cane
- Squeeze Chute
- Farrowing Crate
- Lambing/Kidding Jug
- Rope Halter
- Pig Resuscitator
- Vanometer
- Back Fat Ruler
- Ribeye Grid
- Scalpel
- Shearer Screwdriver
- Wool Card

### Additional Resources:

[University of Kentucky Equipment Identification Pictures](#)

# 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
- Braford
- Brahman
- Brangus
- Charolais
- Chianina
- Gelbvieh
- Hereford
- Limousin
- Maine Anjou
- Murray Grey
- Piedmontese
- Pinzgauer
- Red Angus
- Red Poll
- Salers
- Santa Gertrudis
- Scottish Highland
- Shorthorn
- Simmental
- Tarentaise
- Texas Longhorn
- Wagyu
- Watusi
- White Park

## Goat Breeds

- American Cashmere
- Angora
- Boer
- Kiko
- Myotonic
- Nubian
- Pygmy
- Savanna
- Spanish

## **Additional Resources:**

[Oklahoma State University](#)  
[University of Auburn](#)

## Sheep Breeds

- Boerder Leicester
- Cheviot
- Columbia
- Corriedale
- Dartmoor
- Dorper
- Dorset
- Finnsheep
- Hampshire
- Jacob
- Katahdin
- Lincoln
- Merino
- Montadale
- Oxford
- Rambouillet
- Romanov
- Romney
- Shropshire
- Southdown
- St. Croix
- Suffolk
- Targhee
- Texel
- Tunis

## Swine Breeds

- Berkshire
- Chester White
- Duroc
- Hampshire
- Hereford
- Landrace
- Mangalitsa
- Meishan
- Mulefoot
- Pietrain
- Poland China
- Red Wattle
- Saddleback
- Spot
- Tamworth
- Yorkshire

# Arkansas 4-H Skillathon

## Retail Meat Cut Identification

Total Score: \_\_\_\_\_

| Species |        |        |
|---------|--------|--------|
| B Beef  | P Pork | L Lamb |

| Primal Cuts  |                 |
|--------------|-----------------|
| A Breast     | H Rib or Rack   |
| B Brisket    | I Round         |
| C Chuck      | J Shoulder      |
| D Flank      | K Side (Belly)  |
| E Ham or Leg | L Spareribs     |
| F Loin       | M Variety Meats |
| G Plate      | N Various Meats |

| Retail Cuts   |  |
|---|--|
| <b>Roasts/Pot Roasts</b><br>1 American Style<br>2 Arm Picnic<br>3 Arm Roast<br>4 Arm Roast (Bnls)<br>5 Back Ribs<br>6 Blade Roast<br>7 Blade Boston<br>8 Bottom Round Roast (Bnls)<br>9 Bottom Round Rump Roast (Bnls)<br>10 Brisket, Whole (Bnls)<br>11 Center Loin Roast<br>12 Center Rib Roast<br>13 Eye Roast (Bnls)<br>14 Eye Round Roast<br>15 Flat Half (Bnls)<br>16 Frenched Style<br>17 Fresh Side<br>18 Leg Roast (Bnls)<br>19 Loin Roast<br>20 Mock Tender Roast<br>21 Petite Tender<br>22 Rib Roast<br>23 Rib Roast (Frenched)<br>24 Ribs (Denver Style)<br>25 Rump Portion<br>26 Seven (7) Bone Roast<br>27 Shank Portion<br>28 Short Ribs<br>29 Shoulder Roast (Bnls)<br>30 Sirloin Roast<br>31 Sirloin Half<br>32 Spareribs<br>33 Square Cut (Whole)<br>34 Tenderloin (Whole)<br>35 Tip Roast (Bnls)<br>36 Tip, Cap Off Roast<br>37 Top Loin Roast (Bnls)<br>38 Top Roast (Bnls)<br>39 Top Round Roast<br>40 Tri-Tip Roast | <b>Chops</b><br>65 Arm Chop<br>66 Blade Chop<br>67 Blade Chop (Bnls)<br>68 Butterflied Chop (Bnls)<br>69 Country Style Ribs<br>70 Loin Chop<br>71 Rib Chop<br>72 Rib Chop (Frenched)<br>73 Sirloin Chop<br>74 Top Loin Chop<br>75 Top Loin Chop (Bnls) |
|   | <b>Variety Meats</b><br>76 Heart<br>77 Kidney<br>78 Liver<br>79 Oxtail<br>80 Tongue<br>81 Tripe  |
|   | <b>Various Meats</b><br>82 Beef for Stew<br>83 Cubed Steak<br>84 Ground Beef<br>85 Ground Pork<br>86 Hocks<br>87 Sausage Link/Pattie<br>88 Shank   |
|   | <b>Smoked/Cured</b><br>89 Brisket, Corned<br>90 Center Slice<br>91 Ham (Bnls)<br>92 Hocks<br>93 Loin Chop<br>94 Picnic (Whole)<br>95 Rib Chop<br>96 Rump Portion<br>97 Shank Portion<br>98 Slab Bacon<br>99 Sliced Bacon                               |

- Steaks**
- 41 Arm Steak
  - 42 Blade Steak
  - 43 Bottom Round Steak
  - 44 Center Slice
  - 45 Eye Steak (Bnls)
  - 46 Eye Round Steak
  - 47 Flank Steak
  - 48 Mock Tender Steak
  - 49 Porterhouse Steak
  - 50 Ribeye, Lip-On Steak
  - 51 Round Steak
  - 52 Round Steak (Bnls)
  - 53 Sirloin Cutlets
  - 54 Skirt Steak (Bnls)
  - 55 T-Bone Steak
  - 56 Tenderloin Steak
  - 57 Tip, Cap Off Steak
  - 58 Top Blade (Bnls) Flat Iron Steak
  - 59 Top Loin Steak
  - 60 Top Loin (Bnls) Steak
  - 61 Top Round Steak
  - 62 Top Sirloin Steak (Bnls)
  - 63 Top Sirloin Cap Off Steak (Bnls)
  - 64 Top Sirloin Cap Steak (Bnls)



Contestant Number: \_\_\_\_\_

|                         | 1 pt                    | 1 pt   | 1 pt               | 3 pts |
|-------------------------|-------------------------|--------|--------------------|-------|
| ID #                    | Specie                  | Primal | Retail             | Score |
| 1                       |                         |        |                    |       |
| 2                       |                         |        |                    |       |
| 3                       |                         |        |                    |       |
| 4                       |                         |        |                    |       |
| 5                       |                         |        |                    |       |
| 6                       |                         |        |                    |       |
| 7                       |                         |        |                    |       |
| 8                       |                         |        |                    |       |
| 9                       |                         |        |                    |       |
| 10                      |                         |        |                    |       |
| 11                      |                         |        |                    |       |
| 12                      |                         |        |                    |       |
| 13                      |                         |        |                    |       |
| 14                      |                         |        |                    |       |
| 15                      |                         |        |                    |       |
| <b>Number Incorrect</b> |                         |        |                    |       |
|                         | X 1                     | X 1    | X 1                |       |
| <b>Points Off</b>       |                         |        |                    |       |
| <b>45 -</b>             |                         | =      |                    |       |
|                         | <b>Total Points Off</b> |        | <b>Final Score</b> |       |

**Additional Resources:**

[Texas A&M University Meat Identification Pictures](#)

[Texas Tech University Retail Identification](#)

[University of Nebraska Meat Identification](#)



## 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
- Ground Corn
- Cottonseed Hulls
- Rice Mill Feed
- Soybean Meal
- Soybeans
- Trace Mineralized Salt
- Wheat
- White Salt
- Whole Corn
- 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
- Barley

### **Additional Resources:**

UAEX Feed Kit

## **Additional Resources**

[Arkansas 4-H Livestock Skillathon Resources](#)

[Quizlet](#)

[Past National 4-H Skillathon Contest Materials](#)

[University of Illinois Livestock eQuiz](#)

[Cornell Cooperative Extension General Livestock Sample Questions](#)

[National Swine Registry Skillathon Quiz Resources](#)

[YouTube video on how to flip a sheep](#)

[USDA AMS Method for Grid Assessment of Beef Carcass Ribeye Area](#)

[How to Calculate Yield Grade - Dr. Janeal Yancey YouTube Video](#)

[South Dakota State University Beef Grading](#)

[Colorado State University Beef Grading](#)

[University of Georgia Extension Understanding Beef Carcass Reports](#)

[U.S. Premium Beef USDA Quality Grades and Yield Grades](#)

[Understanding Expected Progeny Differences \(EPDs\) – Cattle](#)

[EPD and \\$Value Definitions – American Angus Association](#)

[Swine EPD Terminology](#)

[National Sheep Improvement Program – Estimated Breeding Values \(EBVs\)](#)