

## 2026 Junior Livestock Knowledge Challenge Study Guide

What are the four main parts of the digestive system?  
mouth, stomach, small intestine, large intestine

What is the liquid found in the mouth called? Saliva

What do the letters USDA stand for? United States Department of Agriculture

What are by-products? By-products are the products left over after processing the carcass such as the tongue, brains, hooves, and hide.

A feeding area constructed with an opening that permits only the babies (calves, pigs, lambs) to enter is called a? Creep feeder

What is dystocia? Problems during birth

What liquid should navel cords be dipped in after birth? 7% iodine solution

T or F A prolapse is a condition which allows an internal organ to protrude externally. True

What is the best USDA grade for meat quality? Prime

How many USDA yield grades are there and name them? 1 2 3 4 5

What is gestation? The time which the female animal carries its babies/Pregnancy

Animals which have no horns, or have been dehorned are called what? Polled

What is a mark indicating identity or ownership, burned, tattooed or painted on an animal's coat or hide? A brand

What does A.I. stand for? Artificial Insemination

What is the fat called within the meat? Marbling

What is the name of a race or variety of animals related by descent and similar in most characteristics? A breed

When a lamb or cow is found in labor, how long should you allow for normal delivery? 30 min- 1 hour

The period of time when an animal gives milk is called? Lactation

What does the term purebred refer to? An animal whose parents are of the same breed and are recorded with that breed registry association.

What is the male parent of an animal called? Sire

What is the female parent of an animal called? Dam

What is the most desired color of lean meat? Cherry red

What name is given to feeds that are high in fiber content and low in energy? Roughages

What is the name of the process by which a technician introduces semen into the female reproductive tract, thus causing the female to become pregnant, without having had contact with the male? (Wyoming 4-H Beef Manual) Artificial Insemination

What is weaning? (4A465 Wyoming Beef Report) The process of separating a calf/lamb/piglet from the cow/ewe/sow so it can no longer suckle

What does ADG stand for? (4HCCS BU-6367 Revised 2000) Average Daily Gain, the amount of weight an animal gains each day

Mating animals of different breeds is known as? (4A465 Wyoming Beef Report) A. Crossbreeding B. Inbreeding C. Linebreeding A. Crossbreeding

What animal hide is used to make leather? Leather is made from cattle hide

What is the term used to describe a specific animal's ancestry or lineage? Pedigree

What kind of injection is IM? Intramuscular

What kind of injection is IV? Intravenous

What kind of injection is Sub Q? Subcutaneous

What term is used to describe a measurement of daily body weight change in an animal on a feed or forage diet for a specific time? (Texas 4-H Quiz Bowl Sample Questions) Average Daily Gain (ADG)

What is the process in which the testicles are removed? Castration

What is it called when a ruminant animal has brought up feed from its rumen and is re-chewing? Chewing their cud

In animal reproduction, what do the letters ET stand for? Embryo Transfer

This is a health problem that can occur when the gas production in the rumen exceeds the animal's ability to remove the gas by belching. As this problem continues, both sides of the animal become distended and breathing becomes labored. What is this health problem? (Nebraska 4- H 2002 Livestock Quiz Bowl Questions) Bloat

“Finish” is a term used to describe what, in relation to market animals? (Nebraska 4-H 2002 Livestock Quiz Bowl Questions) A. Fatness of the animal B. Slaughter of the animal C. Accidental death of the animal A. Fatness of the Animal

Pregnancy testing by inserting the arm into the rectum and feeling the reproductive tract for pregnancy status is called ? (University of Arkansas Sample Beef Bowl Quiz Questions) Palpation

What is the term used to describe a nutritional ailment resulting from overeating? (Texas 4-H Quiz Bowl Sample Questions) Founder

What supplement is required for structure (hooves, bones, and teeth) and regulation of physiological processes in the body? (Texas 4-H Quiz Bowl Sample Questions) Minerals

T or F Feed intake decreases as energy content increases. (Texas 4-H Quiz Bowl Sample Questions) True

What term describes a type of feed that is added to an existing feed? (Texas 4-H Quiz Bowl Sample Questions) Supplement

What vein in the neck does a veterinarian draw blood from or put in fluids? (Kansas 4-H Sheep Quiz Bowl Manual) Jugular vein

The general term used to describe the way an animal is built is commonly referred to as. (Kansas 4-H Sheep Quiz Bowl Manual) Conformation

1. What is the name given to the management practice of making supplemental feed available only to nursing calves? Creep feeding

Bonus: Ruminant microbes are found primarily in the? Rumen

2. The top point on the head of the calf is known as the Poll

Bonus: Finish is a term used to describe the what of a steer. a. fatness b. muscling c. bloom d. Weight Answer= a. fatness

3. Name one of four factors used to calculate beef yield grades. Backfat thickness, ribeye area, % KPH (internal fat), hot carcass weight

Bonus: Which basic nutrient is found in the largest quantity in an animal's body? Water

4. Name one symptom of cattle grub infestation. • The hide on the back looks like it has marbles under it. • Animals look for shade or stand in water. • Cattle run blindly/wildly with tails in the air. • Severe symptoms: difficulty swallowing, drooling, bloat, wobbly walk, paralysis of hind leg

5. For all livestock species, which nutrient is considered the most important? Water

Bonus: What is the proper name for an animal's family tree? A pedigree

Name the practice of manipulating the reproductive processes of a group of cows so that a large number of cows all come into heat at the same time. Estrous synchronization

7. Which class of nutrients contains calcium, phosphorus and iron? Minerals

Bonus: A gene combination in which both genes are either dominant or recessive is called? Homozygous

8. Which beef carcass wholesale cut contains the femur bone? Round

Bonus: Which of the following is the time at which you would breed a heifer? a. Heat period\* b. Gestation period c. Lactation period d. Finishing period Answer = a. Heat period

9. Name one retail beef cut that comes from the short loin. Top loin (strip) steak, T-bone steak, porterhouse steak, tenderloin roast, tenderloin steak, filet mignon

10. What do we call the basic unit of heredity? A gene

Bonus: A feedstuff that is high in fiber content would be classified as an a. Protein supplement b. Roughage\* c. Concentrate d. Grain Answer= b Roughage

13. What are case-ready meat cuts? Meat cuts that are sent to the retailer ready to put into the retail case for sale without any further cutting or processing.

14. Name one of the four measurements taken during an ultrasound scanning session. Ribeye area, % intramuscular fat (IMF), rump fat, rib fat

Bonus: When referring to animal health, what does the acronym SSE stand for? Bovine spongiform encephalopathy

Bonus: If a grain crop is harvested with the stalk when still immature and the crop is allowed to ferment, the resulting product is known as a. Hay b. Silage\* c. Haylage d. Non-protein nitrogen Answer= B Silage

16. List, in order, the three best quality grades of beef determined by the USDA. Prime, choice, select

17. What is the proper approximate rectal temperature in cattle? 101 - 102 degrees Fahrenheit

Bonus: The mating of closely related individuals is called a. Grading up b. Inbreeding\* c. Outbreeding d. Crossbreeding Answer= b. Inbreeding

18. What is the term that describes gain from cattle that have been nutritionally deprived for part or all their life? Compensatory gain

Bonus: It is best to breed a heifer so that she will have her first calf at which age? a. 1 years b. 2 years\* c. 3 years d. 4 years Answer = b. 2 years

19. Which of the following feeds would have the highest protein content? a. Alfalfa cut at early bloom\* b. Alfalfa cut in full bloom c. Early bloom brome grass d. Full bloom brome grass Answer= a. Alfalfa cut at early bloom

20. Tyson Fresh Meats, formerly IBP, is an example of a. A stocker b. A seedstock producer c. A packer\* d. A retailer Answer= c. A packer

Bonus: What is an animal with a one-compartment stomach called? Monogastric

6. What is a heifer calf born as a twin to a bull calf called? Freemartin

8. Which of the following feedstuffs contains the most energy? A. Oats B. Barley C. Cotton seed D. Corn\* Answer= D. Corn

9. Which of the following are observable properties of an animal that result from a combination of its genes and environment? A. Phenotype\* B. Phylotype C. Genotype D. Benotype Answer=A. Phenotype

Bonus: If producers want to increase the chance of their cows calving during the day, when should they feed the cows that are close to calving? In the evening or at night.

10. Which of the following is an indicator of tenderness? A. Ribeye area B. Marbling\* C. KPH fat D. Dressing percentage Answer= B. Marbling

Bonus: What is the name of the organ that a cow expels after calving? Placenta

1. For what do the letters USDA stand? United States Department of Agriculture

Bonus: What do you call mating closely related individuals? Inbreeding

Bonus: Beef is high in three nutrients, and the acronym ZIP reminds us of them. What are the three nutrients? Zinc, iron, protein

7. Which compartment of the bovine stomach contains the ruminant microbes? Rumen

9. Which of the following describes colostrum? A. The first milk produced by a cow after calving that is high in antibodies\*. B. An udder disease found mostly in commercial dairies. C. A calcium deficiency found in newborn calves. D. The milk produced by first-calf heifers. Answer= A. The first milk produced by a cow after calving that is high in antibodies\*.

Bonus: What is a concentrate feed? A feed high in energy and low in fiber

2. How many days are in a beef cow's estrous cycle? Twenty-one (21)

5. Which of the following refers to the material that cattle regurgitate and re-chew during the digestion process? A. Feces B. Cud\* C. Saliva D. Rumen Answer=B Cud

Bonus: Name two of the four stomach compartments that cattle have. Rumen, reticulum, omasum, abomasum

6. When referring to "KPH fat," for what do the letters KPH stand? Kidney, pelvic, heart

Bonus: True or false? Ringworm can transfer from cattle to humans. True

7. What is a castrated male calf called? Steer

8. Which of the following is a method of dry cooking? A. Frying B. Baking\* C. Steaming D. Boiling  
Answer= B. Baking

Bonus: What nutrient, when fed to cattle, will increase their water consumption? Salt

2. Assuming a normal birth, what part of the calf would you see first? Front feet (legs)

3. Which of the following are producers protecting their cows against when they treat them with a pour-on, ivermectin product? A. Mastitis B. Hardware disease C. Lice, parasites or fungus\* D. Bloat  
Answer= C. Lice, parasites or fungus

Bonus: Cattle producers treat bloat by releasing gas from the rumen using a trocar. What is that process called? Aspiration

5. What is the process of removing certain animals from the herd if they do not meet required criteria? Culling

6. The carcass data for an 18-month-old steer shows he is practically devoid of marbling. Which of the following would be his quality grade? A. Prime B. Choice C. Select D. Standard \*  
Answer= D. Standard

8. Define immunity. An animal's ability to resist disease

Bonus: To ensure food safety, to what internal temperature should you cook ground beef? 165 degrees Fahrenheit

9. Which of the following is the highest point on a calf's head? A. Hock B. Poll C. Pastern D. Pin

Bonus: What do we call the basic unit of heredity? Gene

10. What does it mean to give an animal a shot subcutaneously? The shot should be given under the skin.

Bonus: Animals need minerals for normal metabolism and other physiological processes. What is the term for minerals that they need in small quantities? Trace minerals

1. What is the maximum percentage of fat that hamburger legally can contain? Thirty (30) percent

2. What roughage, when freshly cut or still green, can cause bloat? Alfalfa

On a beef carcass, the high value wholesale cuts come from the loin, the rib, the round, and the rump.

Coyotes are the number one animal that causes predator losses in sheep.

Which of the following sheep breeds are pure white? Suffolk, Hampshire, Dorset, or Dorper?  
Answer: Dorset

Many producers dock and castrate their ram lambs at the same time.

What can be used to determine the age of goats? Hair, hooves, horns, or teeth? **Answer: Teeth**

The physical appearance of an animal is referred to as its phenotype

Which hormone is responsible for the masculine appearance in animals? **Answer: Testosterone**

The release of the egg from the ovary is called what? Ovulation, fertilization, gestation, parturition? **Answer: Ovulation**

Which breed of beef cattle has been the leader on total number registered since 1970?  
**Answer: Angus**

Where did the Angus breed of beef cattle originate? **Answer: Scotland**

Markets where cattle are sold by public bidding, with the animals going to the highest bidder are called what? Terminal market, direct selling market, electronic market, auction market?  
**Answer: Auction market**

Which breed of swine has the highest litter size ratio? **Answer: Landrace**

Which breed of hog is black with a white belt that encircles the front part of the body? **Answer: Hampshire**

Which medium wool breed of sheep was developed in the United States? **Answer: Montadale**

Type is a term for the general build of a sheep.

Which breed of goat is primarily used for breeding meat goats? **Answer: Boer**

Sheep that are 7 to 12 months of age have the age classification of: Hothouse lambs, lambs, yearlings, muttons? **Answer: Lambs**

The retail cut of lamb identified as American-Style Roast comes from the: leg, loin, rack, or shoulder? **Answer: Leg**

1) Name 3 breeds of beef cattle A. Hereford, Shorthorn, Angus, Charolais, Limousin

2) T or F? You should dehorn your project steer or better yet buy a dehorned or polled steer. A. True

- 3) What should a finished steer ready to butcher weigh? A. 1250 to 1350 pounds
- 4) T or F? Fiber is hard to digest. A. True
- 5) What is Bull? A. A male cattle of any age, that is un-castrated.
- 6) What are young cattle of either sex under 1 year of age called? A. Calves
- 7) T or F? A female animal that shows evidence through age, weight, conformation, and udder of having produced one or more calves is called a cow. A. True
- 8) What does "polled" mean? A. Cattle born without horns
- 9) What is a male animal that has been castrated before sexual maturity called? A. Steer
- 10) If you see an animal scratching or rubbing, it is a good indication it may have what? A. Mites, Parasites, Flies, Ticks, grubs, or Lice
- 31) Name the 4 parts of a ruminant's stomach in order. (4 points available) A. Rumen, Reticulum, Omasum, Abomasum
- 32) Name two types or species of animals that are ruminants. (2 points available) A. Cattle, Sheep, Goats
- 33) Give an example of what an animal might be identified by. ( 1 point available) A. Brand, tattoo, number and neck chain, ear tag
- 34) Cattle grubs found on the back of an animal are the larvae of what? A. Heel Fly
- 35) Name three parasites which may affect cattle. (3 points available) A. Ticks, Lice, Horn Flies, Intestinal Worms, mites
- 36) Name a disease cattle may get. A. Blackleg, Leptospirosis, Influenza, Pneumonia, Pink eye, Hoof rot
- 37) T or F? An animal should clean-up the feed you have given it in ½ to 1 ½ hours. A. True
3. Mastitis is a respiratory disease. True or False (F)
4. If sheep are fed broiler litter, it may cause a mineral toxicity of which mineral? A. Sulfur C. Magnesium B. Selenium D. Copper (D) Answer= D. Copper
5. The average gestation length of a ewe is 9 months. True or False (F)
9. A lamb should be braced when the judge feels it. True or False (T)

14. The major source of income for sheep producers is the sale of market lambs. True or False (T)

24. Which will tend to be fattest at the same age? A. Gilt B. Barrow C. Boar D. No difference (B)  
Answer= B. Barrow

A castrated male pig is called an A. gilt B. Barrow C. Boar D. Sow (B) Answer= B. Barrow

A castrated male sheep is called an A. Ewe B. ram C. Wether D. Buck Answer = C. Wether

36. A two year sheep will have how many permanent front teeth? A. 2 B. 4 C. 6 D. 8 (B)  
Answer= B. 4

38. Which of the following will grow the fastest as a lamb? A. Wether B. Ewe C. Ram\* D. No difference Answer: C. Ram

54. Meat from sheep less than 12 months of age is called? A. Lamb B. Veal C. Mutton D. Steak (A) Answer= A. Lamb

55. What is the approximate length of gestation in the ewe? A. 1 month B. 3 months C. 5 months D. 9 months Answer= C. 5 months

56. Which term refers to sheep? A. Ovine B. Bovine C. Porcine D. Equine (A) Answer= A. Ovine

61. What is a castrated male sheep called? A. Steer B. Wether C. Gelding D. Buck (B)  
Answer = B Wether

110. A castrated male pig is called a? A. Steer B. Wether C. Barrow D. Gilt © Answer= C. Barrow

119. Providing extra feed for nursing lambs and calves is called: A. flushing B. foundering C. creeping © Answer= C. creeping

Q. What is a baby goat called? A. Kid

Q. What is an adult female goat called? A. Doe

Q. What is an adult male goat called? A. Buck Q. What is a castrated male goat called? A. Wether

Q. What is a Spanish word that is often used to mean goat meat? A. Cabrito Q. When should you disbud a kid? A. 4 - 7 days or as soon as you can feel the horn buds on top of the head

Q. Which goat breed is characterized by tiny ears? A. LaMancha

Q. The Boer goat originated in what country? A. South Africa

Q. What is the normal temperature of a goat? A. 101.5 – 104 degrees Fahrenheit

- Q. Name flaps of skin that hang from the necks of some goats. A. Wattles
- Q. What is a male pig that has been castrated before reaching breeding age called? A. A barrow
- Q. What is birthing of pigs called? A. Farrowing
- Q. What is a male breeding swine called? A. A boar
- Q. What is a female swine called that has farrowed a litter of pigs? A. A sow
- Q. What is a female pig that has no offspring called? A. A gilt
- Q. Which teeth should be clipped in baby pigs? A. Needle teeth
- Q. What is meat from swine called? A. Pork
- Q. A normal healthy sheep will do what when approached? A. Run away
- Q. What is the carcass from a young sheep less than 1 year called? A. Lamb
- Q. What is the carcass from an old sheep over 1 year called? A. Mutton
- Q. Are ticks an external or internal parasite? A. External
- Q. What is a bummer lamb? A. An orphaned lamb
- Q. What is an inflammation of the udder called? A. Mastitis
- Q. What is culling? A. Selling unproductive or unhealthy animals
- Q. What is a normal temperature for a sheep? A. 101-103°F
- Q. In sheep what is the practice of docking? A. Removing the tail
- Q. What is a female beef animal that has never had a calf called? A. Heifer
- Q. Once a heifer has a calf she is called what? A. Cow
- Q. Name a popular British beef breed that is black? A. Angus
- Q. What is the act of removing horns from cattle called? A. Dehorning

The term bovine relates to which animal? A. Cattle\* B. Sheep C. Swine D. Horses Answer= A. Cattle

Spell Boer (In reference to Goats)

A castrated pig is called a wether. – True or False (False)

When showing lambs, what is it called when you tense the muscles in the loin and leg? Bracing

What is the term in sheep that refers to a group of animals that live, travel or feed together?  
Flock

What does the term shearing refer to in sheep? To remove, fleece, wool or hair by cutting or clipping.

A female sheep or lamb is classed what? Ewe

What is the hair of a sheep that is cut off and made into cloth? Wool

What do you call the entire coat of wool shorn from the sheep at one time? fleece

Know the terms:

Ewe: A female sheep over one year

Ewe Lamb: A female sheep under 1 year

Ram: An intact male sheep. Can refer to an intact male goat.

Wether: A castrated male sheep or goat

Lambing: The act of having baby lambs

Buck: An alternate term for an intact male sheep or goat

Billy: An alternate term for an intact male goat

Kidding: The act of having baby goats

Sow: A mature female pig

Gilt: A female pig who has not been bred

Barrow: A castrated male pig

Boar: An intact male pig

Doe: A mature female goat

Doeling: a female goat under 1 year

Kid: A baby goat

Lamb: a baby sheep

Bull: An intact male bovine (cow)

Steer: A castrated bovine (cow)

Heifer: A female cow that has not been bred

Cow: A mature cow that has calved

Piglet: A baby pig

Calf: a baby cow

Farrowing: The act of having piglets

Calving: The act of having a calf