

# **Basic**

## **Junior**

**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 mark indicating identity or ownership, burned, tattooed or painted on animals 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.

**Of cattle, swine, and sheep which two are considered red meat animals?**

Cattle and Sheep

**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 breed 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 animals 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

## **Senior**

**What are the two main types of cuts when processing meat?**

Wholesale and Retail

**What are the two types of grades for carcasses?**

Yield grade and Quality Grade

**Urinary calculi is another name for.**

Water Belly

**What is a marking harness and when is it used?**

It is used during mating season, and it is used to visibly mark the females which have been rode or mounted by the male.

**Iron deficiency causes what?**

Anemia

**Lack of red blood cells is called?**

Anemia

**The first compartment in the stomach of a ruminant is the? Rumen**

**A definite quantity of feed allowed daily is called a.**

Ration

**A substance used to stimulate an animal to build up resistance to a disease is called what?**

A Vaccine

**What is mastitis?**

An inflammation of the mammary gland; usually halts production of milk in the infected area.

**What is a parasite?**

An organism that depends on another organism for its nourishment

**What abnormal condition is caused by animals standing in muddy pens or lake beds for too long?**

Foot rot

**What percent of a calf, lamb, or pig crop should you try to obtain?**

90-100% is acceptable

**The common name for “urinary calculi” is:**

- A. busted bladder
- B. water belly
- C. coccidiosis
- D. bloat

B. water belly



**A characteristic of an animal that can be seen and/or measured such as color, weight or presence or absence of horns is termed:**

- A. genotype
- B. phenotype
- C. prototype
- D. heritability

B. phenotype

**What type of animal is one that has a stomach divided into four components and chews a cud consisting of regurgitated partially digested food?**

Ruminant

**In what livestock species is a “hind feet first” birth presentation considered a normal delivery?**

Swine

**What is the condition that occurs when gas is trapped in the ruminant digestive tract causing rumen enlargement?**

Bloat

**Sire summaries generally report EPD’s on birth, growth, and maternal traits. What do the initials E.P.D. stand for? (Wyoming 4-H Beef Manual)**

Expected Progeny Difference

**What is a type of identification, used primarily on cattle intended for showing, that involves an ink imprint on a piece of paper? (BU-6352 Revised 1999)**

Nose Print

**What is the hormone produced by the cells of the testis that stimulates male sex drive, masculine characteristics, development of the male reproductive tract and spermatogenesis? (BU 6353 Revised 1999)**

- A. Estrogen
- B. Prostaglandin
- C. Testosterone
- C. Testosterone

**When the rear hocks have too much set, the hind legs are too far under an animal is is said to be. (4HCCS BU-6367 Revised 2000)**

- A. Cow hocked
- B. Pigeon toed
- C. Sickle hocked
- C. Sickle hocked

**What is a condition when the front knees are too close together? (BU-6352 Revised 1999)**

Knock-kneed

**When administering fluids through the mouth the piece of equipment used is often referred to as a \_\_\_\_\_ gun. (4H194R)**

Drench

**What animal do we get insulin, heart valves, second skin for burn victims, and heparin for heart patients from?**

Pigs

**What are the beneficial bugs in the rumen?**

- A. viruses and bacteria
  - B. viruses and fungi
  - C. bacteria and fungi
  - D. parasites
  - E. bacteria and protozoa
- E. bacteria and protozoa**

**What is a TMR?**

- A. Total Meal Ration
  - B. Total Mixed Ration
  - C. Total Mineral Ration
  - D. Tub Mixer Ration
- B. Total Mixed Ration**

**How long after the first vaccination does an animal start developing immunity to the disease?**

- A. about 1 week
  - B. about 2 weeks
  - C. about 3 weeks
  - D. about 1 month
- C. about 2 weeks**

**This is the act of giving birth.**

- A. dilation
  - B. capaciation
  - C. hemostatis
  - D. parturition
  - E. fertilization
- D. parturition**

**Which of the following would be expected to have the highest protein content?**

- A. Prairie hay
- B. Alfalfa hay
- C. Wheat straw
- D. Sorghum silage

**Intramuscular injections should only be given in what body part?  
(Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

Neck or front shoulder

**What common compound makes up most of the blood, carries nutrients to cell waste products away from cells and out of the body, helps to regulate body temperature, and acts as a lubricant? (Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

Water

**Persistent diarrhea in young animals is commonly called what?  
(Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

Scours

**What general term describes a ration that is low in energy, high in roughage and fiber and high in protein relative to the energy content?  
(Texas 4-H Quiz Bowl Sample Questions)**

Starter Ration

**What term describes a ration that typically consists of 12 percent protein, moderate fiber and moderate energy content?  
(Texas 4-H Quiz Bowl Sample Questions)**

Growing Ration

**What general term describes a ration that is utilized as the last stage of feeding and is very high in energy?**  
(Texas 4-H Quiz Bowl Sample Questions)

Finishing ration

**Define the term infusion as it relates to medicine.**  
(Texas 4-H Quiz Bowl Sample Questions)

The continuous slow introduction of a solution, especially into the vein.

**What causes warts?**  
(Texas 4-H Quiz Bowl Sample Questions)

a virus

**Ringworms can be spread from animal to animal. What type of infection of the skin causes them?**  
(Texas 4-H Quiz Bowl Sample Questions)

Fungus

**Referring to male livestock, what does B.S.E. stand for?**  
(Kansas 4-H Sheep Quiz Bowl Manual)

Breeding Soundness Examination

**What is a disease characterized by a hard, swollen udder. (Kansas 4-H Sheep Quiz Bowl Manual)**

Mastitis

**What is the greatest importance of salt in a livestock ration?**  
(Kansas 4-H Sheep Quiz Bowl Manual)

Stimulates appetite

**Hormones are carried in the \_\_\_\_\_ of an animal.**  
(Kansas 4-H Sheep Quiz Bowl Manual)

Bloodstream

## 2004 Quiz Bowl Questions - Junior

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
- 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 air.
- Severe symptoms: difficulty swallowing, drooling, bloat, wobbly walk, paralysis of hind leg

Bonus: An example of a monogastric animal is

- a. A bobcat
- b. A camel
- c. A moose
- d. A giraffe

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

*Estrous synchronization*

- Bonus: Weight per day of age is figured by
- Dividing days of age by weight
  - Multiplying days of age by weight
  - Dividing weight by days of age*
  - Multiplying weight by days of age

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?
- Heat period*
  - Gestation period
  - Lactation period
  - Finishing 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*

Bonus: Who is the current president of the North American Limousin Foundation?  
Dean Settje

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 a

- Protein supplement
- Roughage*
- Concentrate
- Grain

11. What is the address of NALF's website?

*www.nalf.org*

Bonus: Body condition scores range

*One to nine*

Who is the U.S. Secretary of Agriculture?

Ann Veneman

Bonus: The most desirable yield grade is

- a. 1
- b. 2
- c. 3**
- d. 4
- e. 5

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.*

Bonus: What is the name of NALF's e-mail newsletter?  
Partners

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*

15. What is the acceptable age range for ultrasound scanning of Limousin bulls and heifers?

*300-450 days*

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

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

Prime, choice, select

Bonus:

What percentage of Angus or Red Angus may be present in a registered Lim-Flex Calf? 25% to 75%

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



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

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

Bonus: Who is NALF's current Director of Communications?

*Laura Bodell*

20. Tyson Fresh Meats, formerly IBP, is an example of

- a. A stocker
- b. A seedstock producer
- c. *A packer*
- d. A retailer

Bonus: How many EPDs does NALF currently publish in its sire summary?

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## Senior

1. What does the term "70-70-0" mean?

*"70-70-0" applies to packers and feeders that ideally would like 70% of all fed cattle to grade Choice and higher with 70% YG 1s and 2s and zero outs.*

Bonus: Name two functions of water in the body.

*Digestion*

*Carrying food nutrients throughout the body*

*Carrying waste products out of the body*

*Cooling the body*

*Lubricating joints*

2. The cooking method that consists of browning meat in fat and then cooking it (covered) in a small amount of liquid is known as?

*Braising*

Bonus: What is the name for the rhythmic smooth muscle contractions that propel foodstuffs distally through the esophagus and intestines?

Peristalsis

3. Cattle *grubs* are part of the life cycle of which insect?
- a. Black fly
  - b. Deer fly
  - c. *Heel fly*
  - d. Horn fly

Bonus: What is the major difference between a bull carcass and a bullock carcass?  
*Maturity*

4. Which of the following is a synthetic hormone that is fed to feedlot heifers to keep them from coming into heat?
- a. *Melengestrol acetate (MGA)*
  - b. Rumensin
  - c. Synchronate-B
  - d. Progesterone

Bonus: What is the natural barrier in a cow's reproductive tract through which an AI rod must be passed before semen can be properly deposited?  
*Cervix*

5. What is preconditioning? Include two practices that are typically done in preconditioning.  
*Preparing feeder calves for market and shipment*  
*May include vaccinations, parasite control, weaning prior to shipment, castration, training cattle to eat and drink when in pens with other cattle*

Bonus: What is the primary filtering organ in a cow's body?

- a. Reticulum
- b. Pancreas
- c. *Liver*
- d. Kidney

6. Name two factors that can affect the quality of hay.  
*Kind of hay (i.e., prairie vs alfalfa), fertilizers, age/stage of maturity, how well it has been dried after being cut, storage and handling*

Bonus: What is the numerical range for an accuracy value associated with an EPD?  
0 to 1

7. Cuts of meat from some wholesale cuts of beef are best cooked by dry heat methods such as grilling and roasting. Name one of the wholesale cuts from which all of the meat should be cooked by dry heat methods.

Rib and loin (includes shortloin and sirloin)

Bonus: If you found a cow in your herd in heat one morning, when would be the optimal time to breed her?

- a. Right away
- b. In 3 hours
- c. *That evening*
- d. The next morning

8. Which nutrient supplies the materials necessary to make body tissues such as blood, muscle and skin?

Protein

Bonus: Which class of nutrients is used primarily to build bones and teeth, with smaller amounts used for energy utilization, milk production and basic body function?

Minerals

9. What are F1 crosses?

*Offspring resulting from the mating of parents of different breeds  
The first generation of crosses between two unrelated (though not necessarily purebred) populations*

Bonus: During times of abundant intake, which organ stores vitamin A?

Liver

10. Which of NALF's EPDs would you use to select sires that produce replacement heifers that give birth to their first calf easily?

Calving ease maternal

Bonus: The mock tender comes from which beef wholesale cut?

Chuck

11. Who was named NALF's 2004 Commercial Producer of the Year at the National Western Stock Show?

Dean and Bonnie Christensen of DBL, Inc.

Bonus: How many testicles have descended into the scrotum in a unilateral cryptorchid?

1

12. Define backgrounding

*Growing program for feeder cattle from time calves are weaned until they are on a finishing ration in the feedlot*

Bonus: A calf consists of approximately what percent water at birth?

- a. 30%
- b. 50%
- c. 70%
- d. 90%

13. Which of these drugs, used to relieve pain in humans, is made from the gallbladder of a cow?
- a. Tetracycline
  - b. Aspirin
  - c. *Cortisone*
  - d. Codeine

Bonus: A feedbunk for a market animal should be how far above the ground or floor?

- a. 6-10 inches
- b. 10-18 inches
- c. *18-24 inches*
- d. 24-36 inches

14. What is Cattle-Fax?

A market reporting organization that supplies information on cattle market outlook and inventory.

Bonus: Which tissue has the highest water content-fat, muscle or bone?  
Muscle

15. What is a naturally occurring enzyme that contributes a role in beef tenderness by weakening muscle fibers postmortem? What blocks this enzyme?

Calpain-calpastatin

Bonus: If an animal is 12% below the average in a particular trait, what is its trait ratio?  
88

16. Cattle usually enter feedlots weighing between 700 and 850 pounds and finish between what weights?
- a. 850 and 1,000 pounds
  - b. *1,000 to 1,300 pounds*
  - c. 1,300 to 1,600 pounds

Bonus: Feed costs represent what percent of the total cost to finish cattle?

- a. 55-65%
- c. **85-95%**
- b. *70-80%*

17. What performance measurement is used to calculate a bull's maternal milk EPD?  
Weaning weights of the bull's daughters' calves

Bonus: If the genetic correlation between two traits is close to zero, what type of effect would you expect one trait to have on the other?

Essentially no effect

18. What does beef yield grade predict?

*Percent yield of boneless trimmed retail cuts from major wholesale cuts (round, loin, rib and chuck)*

Bonus: In a sperm cell, genetic information is contained in the

- a. acrosome
- b. *head*
- c. tail

19. What would be the most appropriate percent protein of a ration for an 800 lb steer gaining 2.5 lbs/day?

- a. 6%
- b. 10%
- c. 16%

Bonus: Define percent calf crop.

The number of live calves born per number of cows exposed

20. What is a standard measure based on feed requirements used to combine various classes of livestock according to size, weight, age and use?

*An animal unit*

Bonus: USDA feeder cattle grades are based on what two characteristics?

- a. *Frame size and muscling*
- b. Age and weight
- c. Breed and sex
- d. Age and condition

2009 Junior Quiz Bowl Questions - Round 1

1. What is the 2009 birth-year letter code?

*W*

Bonus: Limousin cattle originated in which of the following countries?

- A. Germany
- B. Australia
- C. ***France***
- D. Great Britain

2. NALF suggests that heifers should calve for the first time at which of the following ages?

- A. ***24 months***
- B. 28 months
- C. 32 months
- D. 36 months

Bonus: How many directors from one state can be on the NALJA Board of Directors at one time?

***Two***

3. Name two beef wholesale cuts.

***Chuck, rib, short loin, sirloin, round, fore shank, brisket, short plate, flank***

Bonus: What is the one-time fee charged to become a NALJA member?

***\$50***

4. Which of the following feedstuffs is a byproduct of the ethanol industry?

- A. Beet pulp
- B. ***Dry distillers grain***
- C. Com silage
- D. Alfalfa

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

***Monogastric***

5. For which of the following do the letters BIF stand?

- A. Bovine Industry Foundation
- B. Beef Intake Formula
- C. Bovine Improvement Farmers
- D. ***Beef Improvement Federation***

Bonus: Where will the 2010 National Junior Limousin Show and Congress be?

***Hutchinson, Kansas***

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

**Freemartill**

Bonus: What were the Limi Boosters formerly known as?

**Limouselles**

7. Which yield grade indicates the greatest percentage of boneless, closely trimmed retail cuts?

**One (1)**

Bonus: True or false? A homozygous-polled bull can sire a homed calf.

**False**

8. Which of the following feedstuffs contains the most energy?

A. Oats

B. Barley

C. Cotton seed

**D. Corn**

Bonus: What is the name of the publication NALJA mails to all of its members twice a year?

**NALJANews**

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

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

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

**Placenta**

2009 Junior Quiz Bowl Questions - Round 2

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

Bonus: True or false? Fullblood Limousin cattle are black.  
***False***

2. NALF recently formed a partnership with Strauss Brands. Which of the following types of cattle does Strauss purchase?  
A. Cull cows  
**B. *Veal calves***  
C. Finished steers  
D. Brahmousin bulls

Bonus: Who is the current NALF president?  
***Robert (Bob) Millerberg***

3. The birth weight EPD is an indicator of which of the following?  
A. Docility  
B. Milk production  
C. Feed efficiency  
**D. *Calving ease***

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

4. Which country in North America was the first to import Limousin genetics?  
***Canada***

Bonus: What date does NALJA use to determine the age of members for their eligibility to Show?  
January 1 of the current year

5. According to NALJA's *Feed a Winner* publication, which of the following is the maximum amount of feed a heifer should receive each day?  
A. 10 pounds  
**B. *20 pounds***  
C. 45 pounds  
D. 50 pounds

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

***Zinc, iron, protein***



6. NALF considers a Limousin female purebred when she is at least what percentage Limousin blood?

**87 percent**

Bonus: True or false? Limousin is a *Bos indicus* breed.

**False**

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

**Rumen**

Bonus: What bacterial, chronic wasting disease in cattle is hard to detect due to its long incubation period?

**Johne's Disease**

8. Which of the following is the chance that a homozygous-black bull will sire a red calf?

- A. **Zero**
- B. 25 percent
- C. 50 percent
- D. 75 percent

Bonus: Beef carcass-quality grading is based on what two factors?

**Maturity and marbling**

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.

Bonus: What is the role of a recipient cow?

**To carry a transplanted (transferred) embryo through gestation**

10. In what unit are scrotal measurements taken?

**Centimeters**

Bonus: What is a concentrate feed?

**A feed high in energy and low in fiber**

2009 Junior Quiz Bowl Questions - Round 3

1. Which of the following breeds of cattle is most susceptible to cancer eye?
- A. **Hereford**
  - B. Gelbvieh
  - C. Limousin
  - D. Angus

Bonus: Name the three regional shows NALJA sponsors each summer.  
**Eastern, Heartland, Western**

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

Bonus: True or false? NALF approves of visually estimating a calf's birth weight.

**False**

3. In which of the following cities is the NALF office located?
- A. Dallas, Texas
  - B. Omaha, Nebraska
  - C. **Centennial, Colorado**
  - D. Atlanta, Georgia

Bonus: Name the three components of a Limousin animal's tattoo.  
**Herd prefix, animal identification (ID) number, birth-year letter code**

4. What is the most important nutrient in an animal's diet?
- Water**

Bonus: In NALF's recently completed, three-year advertising campaign, at what did the tag line promote the Limousin breed as being the best?  
**Best cross 011 Angus.**

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

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***

Bonus: From what country did U.S. producers first import Limousin cattle directly?

***Canada***

8. Which of the following is a method of dry cooking?

A. Frying

B. ***Baking***

C. Steaming

D. Boiling

Bonus: Lim-Flex is a hybrid that results from crossing Limousin with one of two other breeds. Name the two other breeds.

***Angus and Red Angus***

9. What is the official publication of the North American Limousin Foundation?

***Limousin World***

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

***Salt***

10. Which of the following feeds has 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***

Bonus: What is the acceptable age range for ultrasound-scanning Limousin bulls and heifers?

***300 to 450 days***

2009 Junior Quiz Bowl Questions - Round 4

1. Which of the following is the total number of EPDs and indexes NALF publishes in its sire summary?

- A. 5
- B. 9
- C. 14
- D. 23

Bonus: True or false? Only men may serve on the NALF Board of Directors.

**False**

2. Assuming a normal birth, what part of the calf would you see first?

**Front feet (legs)**

Bonus: In a normal birth, if the calf had to be pulled using a calf jack or other piece of equipment, where on the calf would you wrap the pulling chains?

**Front legs, right above the dewclaws**

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

Bonus: To calculate frame score, age and what other physical measurement are needed?

**Hip height**

4. Who is the current NALJA president?

**Mindi Ferguson**

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**

Bonus: Name the first Limousin bull imported into the United States.

**Prince Pompadour**

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**

Bonus: Limousin cattle can earn points at MOE shows. For what does MOE stand?  
**Medal of Excellence**

7. On what date each year is the NALJA activity fee due if NALJA members want to participate in NALJA activities?

**March 15**

Bonus: True or false? Corn silage has a greater dry-matter content than shelled corn has.  
**False**

8. Define immunity.

**An animal's ability to resist disease**

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

**160 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**

### Extra Questions for Tie Breaker Situations

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*
3. What is an F<sub>1</sub> cross?  
*The first crossbred generation of cattle born to a purebred dam and sire of different breeds.*
4. What is the address of NALF's Web site?  
*www.nalf.org*
5. Registered Lim-Flex cattle must be at least what percentage Limousin genetics?  
*Twenty-five (25) percent*

## Quiz Bowl Questions

### Senior Division

1. Brucellosis, also called Bang's disease, is a contagious bacterial disease that causes abortion in cattle. In terms of human health, this disease is important because this bacteria is responsible for this disease caused in man.
  - a. Scarlet Fever
  - b. Undulant fever
  - c. Typhoid fever
  - d. Rocky Mountain spotted fever
  
2. The average rectal temperature of a cow is
  - a. 98.6°F
  - b. 101.5°F
  - c. **104.3°F**
  - d. 107.1°F
  
3. \_\_\_\_\_ is an abnormal condition of cattle caused by excessive production of methane gas in the rumen. It is characterized by distention of the rumen and is usually seen on the animal's upper left side. Name this condition.
  
4. Forage preserved by anaerobic fermentation is known as
  
5. How many upper incisors does a mature cow typically have?
  
6. Upton Sinclair's book The Jungle depicted unsanitary conditions in the meat packing industry and was partially responsible for enactment of this federal law.
  - a. The Meat Inspection Act of 1906
  - b. The Humane Slaughter Act of 1958
  - c. The Wholesome Meat Act of 1967
  - d. The Processed Products Inspection Improvement Act of 1986
  
7. Which of these wholesale beef cuts contains the femur bone?
  - a. Chuck
  - b. Rib
  - c. Loin
  - d. Round
  
8. \_\_\_\_\_ is characterized by localized areas of dehydration and discoloration on meat surfaces and is caused by excessive loss of moisture during freezer storage.

9. NALF's new "Get More Muscle for Less" ad contains a chart depicting the Limousin breed's superiority over other beef breeds in four different muscle growth efficiency and red meat yield traits. Name one of these traits.
10. Limousin cattle are traditionally red in color, but the American Limousin population contains several black animals. Which of these mating systems is the primary cause of the infusion of black genetics into the American Limousin population?
  - a. Inbreeding
  - b. Linecrossing
  - c. Topcrossing
  - d. Outbreeding
11. Why doesn't NALF publish birth weight age of calf adjustment factors for steers?
12. Name the first president and executive vice president of the North American Limousin Foundation.
13. What is the name of NALF's commercial newsletter and how often is it published?
14. What organization was formed on February 1, 1968, as a means to standardize programs and methodology and to create greater awareness, acceptance and usage of beef cattle performance concepts?
15. What measure of accuracy given in NALF's Spring 2002 Sire Summary indicates the potential amount of future change in an EPD?
16. In mature cattle, the largest compartment of the stomach is the rumen. What is the largest compartment in newborn calves?

### **Junior Division**

1. The set of rules governing the North American Limousin Junior Association is called the
  - a. By-products
  - b. By-lines
  - c. By-laws
  - d. Bicycles
2. During any given year, the immediate past president of the NALJA board of directors is called the
3. NALF's current Director of Junior Activities is:  
A. Brett Begert      B. George Brett      C. George Strait      D. Jamie Straight



4. The NALF office is located in
  - a. Denver, Colorado
  - b. Keenesburg, Colorado
  - c. Aspen, Colorado
  - d. Englewood, Colorado
5. Name one of the two bulls in NALF's new "Get More Muscle for Less" ad.
6. Dried forage is commonly known as?
7. When feeding livestock, we should always supply fresh, clean, adequate amounts of this major nutrient. Name the nutrient.
8. When a cow digests her feed, she normally eructs. What is she really doing?
  - a. Chewing her cud
  - b. Lying down
  - c. Belching
  - d. Drooling
9. Just before parturition, a heifer calf is technically called
  - a. A heiferette
  - b. An embryo
  - c. A bolus
  - d. A fetus
10. Meat from very young cattle that are typically under three months of age is called
11. Meat from cattle that have been slaughtered according to Jewish law is called                    meat.
12. A group of cattle of the same sex and within the same percentage Limousin group that were born within a 90-day period, managed alike and weighed on the same date (except for birth weight) is called
  - a. A compensatory group
  - b. A contemporary group
  - c. A complementarity group
  - d. A rock group
13. Carriers of protoporphyria are considered to be    for the trait
  - a. Homozygous dominant
  - b. Homozygous recessive
  - c. Heterozygous

14. What do we get when we divide an animal's carcass weight by its live weight and multiply by 100?
15. List three of the 13 traits published in NALF's Spring 2002 Sire Summary.
16. Name the two USDA carcass grading systems.

## Quiz Bowl Answers

### Senior Division

1. Undulant *fever* (b)
2. 101.5°F (b)
3. Bloat
4. Silage
5. Zero, she has a dental pad instead. A mature cow typically has 8 lower incisors.
6. The Meat Inspection Act of 1906 (a)
7. Round (d)
8. Freezer burn
9. Efficiency of retail product production to 463 days, dressing percent, ribeye area, percent retail product
10. Topcrossing, also known as grading up [c]
11. First, steers are bulls when they're born. Second, all calves are zero days old at birth.
12. Bob Purdy, Dick Goff
13. The Bottom Line, quarterly
14. Beef Improvement Federation (BIF)
15. Possible change
16. Abomasum

### Junior Division

1. By-laws [c]
2. Ex-officio
3. Brett Begert (a)
4. Englewood, Colorado (d)
5. The red bull is Carrousel's Jolt. The black bull is Anders Jag.
6. Hay
7. Water
8. Belching [c]
9. A fetus (d)
10. Veal
11. Kosher
12. A contemporary group (b)
13. Heterozygous [c]
14. Dressing percent
15. GL, BW, WW, YW, MA, TM, SC, ST, DC, CW, RE, FT, MS
16. Quality and yield

***4-H BEEF QUIZ BOWL QUESTIONS  
(WITH ANSWERS FOR JUDGING)***

- 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
- 11) The grades of beef for young market animals are.  
A. Prime, Choice, Select, Standard
- 12) The grades of beef for old market animals are.  
A. Commercial, Utility, Cutter, Canner
- 13) What is the length of the gestation period of a cow?  
A. 285 days (9 months and 7 days).
- 14) What feed helps your animal grow and build muscle?  
A. Proteins

- 15) Name two feeds for cattle that are a good source of protein.  
A. Cottonseed, Soybean, Linseed, Alfalfa Hay
- 16) What do you call high energy source feeds?  
A. Carbohydrates
- 17) Name 3 carbohydrate type energy feeds.  
A. Barley, Corn, Oats, Wheat, Milo, Beet Pulp, Molasses
- 18) What is the Food Conversion Ratio; FCR?  
A. FCR is the amount of grain you get from every pound of grain you feed.
- 19) What is the Food Conversion Ratio for cattle?  
A. The Food Conversion Ration for cattle is 8:1
- 20) Feed that is low in digestibility and high in fiber is called what?  
A. Roughage
- 21) Give an example of roughage or high fiber feed.  
A. Hay or Pasture
- 22) A feed that is highly digestible and low in fiber is called what?  
A. Concentrate
- 23) What is the term “finish” describing?  
A. Degree of fatness and readiness for market.
- 24) What is the term used for describing the process of fattening, training, and grooming an animal for show or sale called?  
A. Fitting
- 25) What is a beef animal that has one or both parents not registered with a breed association called?  
A. Grade Animal
- 26) A table that gives a line of ancestors for an animal; a genealogical tree, is called what?  
A. Pedigree
- 27) T or F? Genetics is the study of how an animal processes its food.  
A. False. Genetics is the study of how animal or plant characteristics are passed from parent to offspring.
- 28) T or F? A small amount of marbling is necessary for juiciness and flavor of meat.  
A. True

29) T or F? Yield (Dressing Percent) is the weight (yield) of the carcass as a percent of live weight.

A. True. Example: A 1000 lb. live steer yields a 600 pound carcass. The “dressing percent” is 60% (600 divided by 1000x100%=60%).

30) T or F? A “Rib Eye” is a cross section of the loin muscle (longissimus dorsi). The large muscle of a rib steak or loin chops.

A. True

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 means 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

## **Showmanship**

1) T or F? You should have a scotch comb.

A. True, (Comb: Scotch or flat.)

2) T or F? Circle the ring clockwise at a brisk walk

A. True

3) T or F? While leading the calf, the showmen walks to the left of the calf’s head, so the judge will have a full front view of the animal.

A. True

4) T or F? The halter shank needs to be loose at all times, so the animal can move freely about.

A. False. The halter shank needs to be tight at all times, so the exhibitor can feel all movements of the calf.

5) T or F? You must keep your eyes on the judge at all times, besides to look where you are going and to set up your animal

A. True

6) T or F? You can “Place the animals feet” with pressure on the halter, combined with the use of the show stick.

A. True

7) T or F? After the judge moves on to the next animal, comb your animals hair back in place, if it was touched, and make sure the animal is reset properly.

A. True

8) T or F? When instructed to change place in line, lead out forward and turn the animal to the right (clockwise). Keep the calf between the judge and yourself. Lead back through the spot you just left and lead to the proper place. Avoid making very short turns as this detracts from the animal’s appearance.

A. True

9) T or F? The judge's first lineup is generally their final placing. You can relax now and quit “showing”.

A. False. The judge's first lineup is generally not their final placing, and so you shouldn't become discouraged or quit showing until the class is dismissed.

10) T or F? Part of having “Good Ethics” is having a good attitude only if you win.

A. False. A good showman will always be courteous and maintains a sportsmanlike attitude throughout the show, whether winning first or not.

11) T or F? You do not need to shave/ clip your animal, that’s for swine only.

A. False. You do clip your animal before showing it.

12) T or F? It does not matter whether you get your calf used to being tied. It is only important to train it to wear a halter and walk.

A. False. It has to be tied up at the fair for the whole week.

1. Name three general categories of beef cattle production.
  - a. Backgrounding or stocker cow-calf and finish
2. Name two important factors that affect the profitability of cow-calf enterprise.
  - a. Calf crop percentage and calf weaning weight
3. Arkansas forage resources made it well suited for backgrounding cattle, name the top three grasses.
  - a. Wheat, rye and ryegrass
4. Name the five basic segments of the beef cattle industry.
  - a. Purebred breeder, commercial producer, cattle feeder, beef packer and retailer
5. Fertility is commonly measured as.
  - a. calf crop percentage
6. Common measurements of cattle are.
  - a. Backfat height at the shoulder, height at the hips length, of body and pelvic size
7. \_\_\_\_\_ is a performance trait to the extent that it contributes to carcass desirability and feeding efficiency.
  - a. Conformation
8. A selection for one trait at a time.
  - a. Tandem
9. Marbling texture color and firmness with maturity determines what.
  - a. Beef quality
10. What is the most important decision that a cattleman makes.
  - a. Buying a bull
11. Name the three phases of the Arkansas Beef cattle improvement program.
  - a. Cow herd testing, central station bull testing and on-the-farm bull testing
12. Cattle have how many chromosomes
  - a. 30 pairs
13. The proportion of the differences between animals that are transmitted to the offspring.
  - a. Heritability
14. The difference between selected individuals and the average of all animals from which they were selected.
  - a. Selection Differential
15. The nutrients utilized by beef cattle are.
  - a. Protein, carbohydrates, fats, minerals, vitamins and water
16. What is the most important nutrient.
  - a. Water
17. Minerals are classified into two general categories
  - a. Macro and trace
18. The feed remaining after all water is removed
  - a. Dry matter
19. Term used as a measure of energy (calorie content of feedstuffs)
  - a. Total digestible Nutrients (TDN)
20. The greatest single cost in beef cattle production
  - a. Feed
21. Two main problems in feeding cattle are
  - a. 1. Determine the amount of each nutrient the animal needs
  - b. 2. How much and what kind of feed should be fed to cattle to supply their nutrient needs



22. Name three energy feeds.
  - a. Milo wheat, wheat bran, and rice bran, Soybean hulls, Soybean meal and cottonseed meal and brewers grain
23. Name three roughages
  - a. Alfalfa meal, cottonseed hulls, bermudagrass, fescue, johnsongrass
24. It is best if calf's are born within a how many days period
  - a. 60 to 90
25. The manipulation of the reproductive processes so that all females can be bred during a short, predefined interval with normal fertility.
  - a. Estrous synchronization
26. How is semen scored?
  - a. Motility and morphology
27. Name two basic ways to synchronize estrous in cattle.
  - a. Prostaglandin or a prostaglandin analogue which breeds down or destroys the corpus luteum second progestin and a luteolytic agent. Synchro mate b is also one
28. The cow should normally calve within how long after the first sign of attempted delivery.
  - a. 1-3 hours
29. A normal calf should stand and nurse how long after birth.
  - a. 30-45 minutes
30. Name three forms of castration
  - a. Surgical, emasculating or clamping elastration
31. Name three forms of dehorning
  - a. Genetic chemical dehorning, Spoon or tube dehorner, hot irons or Barnes type dehorner
32. Lean meat is a healthful source of what
  - a. Protein and other important nutrient
33. Fat within the muscle is
  - a. Marbling
34. How are hormones administered in beef
  - a. Under the skin of the ear
35. Name the five approved hormones
  - a. Estradiol, testosterone, progesterone, trenbolone acetate and zeranol
36. Who approves the potential use of all humans and livestock drugs
  - a. Food and drug administration

## Marketing

1. A good cattle marketing system should be efficient in 2 areas what are they?  
**operation and pricing**
2. How well the system performs the functions of assembling, processing, packaging and distributing cattle to the new owners may be judged by what marketing system? **operational efficiency**
3. How well the system reflects supply conditions and buyer demands may be determined by what marketing system? **pricing efficiency**
4. What are the 2 most used marketing methods used by cattle producers in Arkansas? **weekly auction markets and selling direct**
5. Which marketing method is used most in Arkansas? **weekly auction method**
6. There are approximately how many livestock auction markets in the state of Arkansas? **approximately 36**
7. On a future price outlook, prices for cattle are determined jointly by what 2 things? **supply and demand**
8. Cattle supplies and prices tend to move in rather regular cycles, a cycle consists of approximately how many years? **approximately 10 to 12 years**
9. Cattle inventory usually increases or decreases when prices are at a profitable level? **increases**
10. There are 8 quality grades for slaughter cattle (steers, Bullock, and Heifers) what are they? **Prime, Choice, Select, Standard, Commercial, Utility, Cutter, and Canner**
11. There are 3 frame sizes for stocker and feeder cattle and calves, what are the 3 frame sizes? **large, medium, and small**
12. There are 5 factors that affect the market value of cattle, what are they? **sex, weight, grade, breed, and condition**
13. Give me the definition of a steer? **a young castrated male**

14. Give me the definition of a heifer? young females before calving
15. What is a bullocks? a young bull under 24 months of age
16. What are the 5 market classes for cattle?. steer, bullock, heifer, cow and bull
17. Consumer demand is greater for what grade of beef? choice
18. Yield grades 1, 2, 3, 4, and 5 identify the differences in what? cutability
19. Cutability is the ratio of what? fat to lean
20. Who is in charge of regulating the livestock and meat industry?  
the secretary of agriculture

## HERD HEALTH

1. List 2 suggested herd health practices during calving time.
  1. Observe cows closely
  2. The pasture is the best calving area
  3. Keep animals due to calve soon where handling facilities are available
  4. Have your vet instruct you on how to handle maternity cases
  5. First calf heifers need closer observation and more assistance
2. What common diseases in cattle should all heifer calves be vaccinated against between 4 and 12 months of age?
  1. Brucellosis (Bang's Disease)
3. What is the name of a protozoan disease that affects the red cell, causes severe anemia and is most prevalent in the southern and rice producing areas of Arkansas?
  1. Anaplasmosis
4. What disease produces a gas gangrene in the muscle tissue?
  1. Blackleg
5. According to the health calendar, when should heifers be bred?
  1. March 26 – May 25
6. According to the health calendar, when should cows be bred?
  1. April 25 – June 23
7. At what age should calves be vaccinated for anthrax?
  1. 1 month
8. At what age should IBR vaccine be given?
  1. 4 months
9. Name two reasons well planned working facilities and well designed equipment will pay for itself.
  1. Fewer injuries to cattle and people
  2. Less stress on cattle and people
  3. Prevent cattle working from becoming a dreaded job
  4. A total cattle management program can be easily carried out
10. What two points should be considered when planning working facilities such as pens, gates, chute, alleys, and restraint equipment?
  1. Location and design
11. When designing pens to hold cattle for working which is more desirable?
  1. Several small pens to hold the herd in groups **OR**
  2. One big pen to hold the whole herd
12. How high should fences be to hold docile cattle?
  1. 4 ½ - 5 feet (hard to work – 6 feet)
13. What is a crowding pen used for?
  1. To crowd cattle into the working chute or the squeeze chute
14. Why should crowding chute have solid sides?
  1. To prevent cattle from seeing out and balking because of activities or movement around the working area
15. What is another name for a crowding pen?
  1. Sweep tub

16. Why should concrete flooring be considered for use in the working area?
  1. Provide better footing and prevent mud holes
17. In cow calf operation or cattle over 1200 lbs., how many square feet per head should be in the holding area?
  1. 20 square feet
18. In a working chute with straight sides in a herd of 600 – 1200 lb calves, how wide should the chute be?
  1. 22 inches
19. Name 3 recommended vaccinations.
  1. IBR, BVD, PI3, Leptospirosis, Blackleg, 7-way
20. Name 2 optional vaccinations.
  1. Pinkeye, E. coli, BRSV, Haemophilus somnus
21. What is campylobacter fetus?
  1. Vibriosis – venereal infection causes temporary sterility with few abortions, extended breeding season and poor conception

## Nutrition and Management

1. What nutrient inadequacy is one of the greatest causes of low fertility?
  - a. Energy (TDN)
2. Name 4 macro minerals.
  - a. Calcium, phosphorous, sodium, chlorine, sulfur
3. Name 4 trace or micro minerals.
  - a. Iron, Manganese, Copper, iodine, cobalt, zinc, selenium
4. What is the major element of bones?
  - a. Calcium (also necessary for blood clotting)
5. What is the recommended ration of calcium to phosphorous?
  - a. Ca: P ration of 1:1 to 5:1
6. What is necessary to prevent salt toxicity?
  - a. Abundant supply of fresh water
7. The condition grass tetany is related to what mineral deficiency?
  - a. Magnesium (Mg)
8. Name the fat soluble vitamins.
  - a. A, D, E, K
9. What is TDN?
  - a. Total digestible nutrients – a measure of energy
10. How do you calculate protein from nitrogen analysis
  - a. Multiply N x 6.25 gives total protein content
11. The greatest single cost in beef cattle production is what?
  - a. Feed
12. What effect does cold or cold and wet weather have on the cow's energy requirements?
  - a. Increase 20% or more
13. What minerals are known to be deficient in some parts of Arkansas?
  - a. Cooper, selenium, zinc, magnesium
14. Name 2 examples of legumes used in Arkansas.
  - a. Clover, alfalfa, lespedeza
15. Name the most nutritious high-quality grass available to Arkansas producers.
  - a. Ryegrass
16. Which small grain provides the most winter grazing?
  - a. Rye
17. Name two factors which affect forage quality.
  - a. Age at harvest, soil fertility
18. What is the best way to determine nutritive content for feeding purposes?
  - a. Forage analysis
19. What documents are usually necessary to obtain a loan?
  - a. Net worth statement, cash flow statement, profit and loss statement
20. What is an enterprise budget?
  - a. An organized list of direct income and expenses associated with the enterprise
21. Name two types of cattle loans.
  - a. Annual operating and intermediate



14. The major source of income for sheep producers is the sale of market lambs.  
True or False **(T)**
15. Which is the most serious hoof problem in sheep?  
A. Clogged oil duct  
B. Foot scald  
C. Foot rot  
D. Thrush **(C)**
16. Which class of animal is currently selling for the lowest price per pound?  
A. Choice  
B. 750 lb. M1 steer  
C. Choice market lamb  
D. #1 market hog **(D)**
17. Which of the following is not a legume?  
A. Alfalfa  
B. Bluegrass  
C. Clover  
D. Soybeans **(B)**
18. What are the top 5 USDA beef carcass cutability grades, from leanest to fattest?  
A. Prime, choice, select, standard, utility  
B. 1, 2, 3, 4, 5  
C. Utility standard, select choice, prime  
D. 5, 4, 3, 2, 1 **(B)**
19. Which sheep breed is actually a composite?  
A. Suffolk  
B. Southdown  
C. Dorset  
D. Polypay **(D)**
20. Your steer has gained 100 pounds in the last 30 days, consuming 750 pounds of feed which costs a total of \$50. What was the steer's average daily gain?  
A. .50 lb.  
B. 3.0 lb.  
C. 3.3 lb.  
D. 7.5 lb. **(C)**
21. Using the information in question #20, what was the steer's feed conversion per pound of gain?  
A. 3.3 lb.  
B. 7.5 lb.  
C. 15 lb.  
D. 30 lb. **(B)**
22. Which breed of bull would be most appropriate to use as a terminal sire on mature black baldie cows to maximize weaning weights?  
A. Angus  
B. Hereford  
C. Longhorn  
D. Charolais **(D)**
23. "Spider lamb" is a problem most often associated with which breed?  
A. Finn  
B. Dorset  
C. Suffolk  
D. Polypay **(C)**
24. Which will tend to be fattest at the same age?  
A. Gilt  
B. Barrow  
C. Boar  
D. No difference **(B)**
25. When feeding corn silage to lactating beef cows, which two nutrients are usually deficient?  
A. Calcium & phosphorous  
B. Calcium & protein  
C. Protein & energy  
D. Protein & phosphorous **(B)**



26. During the production cycle of a cow, mare, ewe or sow, when are their nutritional demands the highest?
- A. Early gestation  
B. Late gestation  
C. Early lactation  
D. Late lactation (C)
27. If we are to give a steer an intramuscular injection of a product which causes tissues irritation, which is the preferred injection site?
- A. Rump  
B. Quarter  
C. Loin  
D. Neck (D)
28. Which of the following requires the least amount of feed to produce a pound of gain?
- A. Steer  
B. Lamb  
C. Barrow  
D. Broiler (D)
29. Which of the following is not a factor in determining beef yield grade?
- A. Rib eye area  
B. Backfat  
C. Hot carcass weight  
D. Live weight (D)
30. If a heifer appears to be low headed, "broken" behind her shoulder and moves with a short stride, what is the most likely structural defect?
- A. Sickie hocked  
B. Droopy rump  
C. Shoulder too straight  
D. Ugly (C)
31. Which swine breed could be added to a rotational crossbreeding program to improve maternal traits?
- A. Duroc  
B. Yorkshire  
C. Hampshire  
D. Spot (B)
32. When selecting a bull to breed to heifers, which piece of information would be helpful in predicting the birth weight of his calves?
- A. his birth weight  
B. his sire's birth weight  
C. his birth weight EPD  
D. his frame size (C)
33. The average weaning weight of your cow her is 500 pounds. Cow X75 weaned a calf that weighed 550 pounds. What was this cal's weaning weight ratio?
- A. 90 B. 100 C. 110 D. 150 (C)
34. What type of lamb would have the highest dressing percent?
- A. Large, fat lamb  
B. Large, trim lamb  
C. Small, trim lamb  
D. Large, trim, long tailed lamb (A)
35. Which of the following chemicals would not be used in a foot bath to treat foot rot?
- A. Copper Sulfate  
B. Formaldehyde  
C. Wormer  
D. All of the above (C)
36. A two year sheep will have how many permanent front teeth?
- A. 2 B. 4 C. 6 D. 8 (B)

37. The time between estrous or heat periods in a ewe is roughly how many days?

- A. 147 days
- B. 30 days
- C. 21 days
- D. 17 days **(D)**

38. Which of the following will grow the fastest as a lamb?

- A. Wether
- B. Ewe
- C. Ram
- D. No difference **(C)**

39. Which two types of twine should not be used to tie wool bags?

- A. Jute and sisal
- B. Plastic and Sisal
- C. Plastic and cotton
- D. Jute and Cotton **(B)**

40. Which meat type breed has a white face and erect ears?

- A. Southdown
- B. Dorset
- C. Rambouillet
- D. Suffolk **(B)**

41. What is another name for white muscle disease?

- A. Grass Tetany
- B. Bloat
- C. Hypomagnesia
- D. Stiff lamb disease **(D)**

42. Which of the following growth implants may be used on feeder lambs?

- A. Ralgro
- B. Compudose
- C. Synovex S
- D. Steer-oid **(A)**

43. Which of the following is not an example of internal parasites

- A. Lung Worms
- B. Ticks
- C. Tape Worms
- D. Flukes **(B)**

44. Which of the following is a legume?

- A. Orchardgrass
- B. Roughages
- C. Soybean meal
- D. Concentrates **(C)**

45. What is the main source of antibodies for a young lamb?

- A. vitamin A
- B. calcium
- C. protein supplement
- D. colostrum **(D)**

46. Which breed of sheep would have the finer wool?

- A. Suffolk
- B. Dorset
- C. Rambouillet
- D. Columbia **(C)**

47. The loin and leg of the lamb carcass is also called the

- A. Hindsaddle
- B. American style leg of lamb
- C. French style leg of lamb
- D. Rear quarter **(A)**

48. The average market age of a lamb is:

- A. 5 months
- B. 3 months
- C. 8 months
- D. 1 year **(A)**



61. What is a castrated male sheep called?  
A. Steer  
B. Wether  
C. Gelding  
D. Buck **(B)**
62. Shelled corn is used in rations primarily as a source of?  
A. Protein  
B. Fat  
C. Energy  
D. Minerals **(C)**
63. A typical lamb carcass generally weighs about how many pounds?  
A. 25 pounds  
B. 50 pounds  
C. 90 pounds  
D. 110 pounds **(B)**
64. What is the name of the method of selling livestock at auction over the telephone?  
A. Direct Auction  
B. Telo-auction  
C. Regular Auction  
D. Telo-Sell **(B)**
65. What is the major “sire” breed of sheep in the US today?  
A. Dorset  
B. Finn  
C. Suffolk  
D. Rambouillet **(C)**
66. At what stage of growth does grass have the lowest protein?  
A. Full bloom  
B. Mid-bloom  
C. Early bloom  
D. Pre-bloom **(A)**
67. Which of the following occurrences can be prevented by vaccination?  
A. Foot Rot  
B. Founder  
C. Bloat  
D. Overeating Disease **(D)**
68. What is the normal body temperature of a sheep?  
A. 98.6  
B. 100  
C. 101  
D. 102.5 **(C)**
69. Fescue pasture growth that is accumulated from August until it is grazed in early winter is called?  
A. Gleaning  
B. Crop Residue Grazing  
C. Stockpiled fescue  
D. Saved-up fescue **(C)**
70. TDN or Total Digestible Nutrients is a measure of what in a feed?  
A. Protein  
B. Energy  
C. Feed Consumption **(B)**
71. Which of the following grasses is not commonly grown in Southwest Virginia?  
A. Orchardgrass  
B. Fescue  
C. Bluegrass  
D. Bluestem **(D)**
72. What time of year are lamb prices usually highest in Virginia?  
A. May  
B. July  
C. September  
D. November **(A)**





97. What is the common name for the disease listeriosis which appears in cattle and sheep?  
A. bloat  
B. circling disease  
C. foot rot  
D. overeating **(B)**
98. What 2 breeds of cattle were used to develop the Santa Gertrudis breed?  
A. Angus and Murrey Grey  
B. Shorthorn and Brahman  
C. Brahman and Limosin  
D. Shorthorn and Angus **(B)**
99. Which of the following is an implant which increases the growth rate in market beef animals and in lambs?  
A. Rumensin  
B. Ralgro  
C. Tramisol  
D. CoRal **(B)**
100. Which breed of swine has erect ears?  
A. Tamworth  
B. Poland China  
C. Chester White  
D. Landrace **(A)**
101. A feed low in fiber and high in food value is?  
A. Roughage  
B. Silage  
C. Haylage  
D. Concentrate **(D)**
102. The average dressing percent of a market hog is?  
A. 40%  
B. 50%  
C. 60%  
D. 70% **(D)**
103. Cattle should be treated annually for cattle grubs before what date in Virginia?  
A. November 1  
B. December 1  
C. January 1  
D. February 1 **(A)**
104. The largest compartment of the 4-part stomach of cattle or sheep is the?  
A. Cecum  
B. Reticulum  
C. Abomasum  
D. Rumen **(D)**
105. Which of the following forages is a legume?  
A. Fescue  
B. Alfalfa  
C. Timothy  
D. Orchardgrass **(B)**
106. The slaughter weight of market hogs is?  
A. 100-200 lbs.  
B. 220-240 lbs.  
C. 150-160 lbs.  
D. 280-300 lbs. **(B)**
107. The most desirable color for retail beef is?  
A. Cherry Red  
B. Grayish Pink  
C. Pink  
D. Dark Brown **(A)**
108. Match the average dressing percent with the species it belongs to  
A. Cattle C 50  
B. Swine A 60  
C. Lamb B 70

109. To increase fall lambing rates which breed would you include in your flock?

- A. Suffolk                                      B. Hampshire                                      C. Dorset    **(C)**

110. A castrated male pig is called a?

- A. Steer      B. Wether      C. Barrow      D. Gilt    **(C)**

111. How old should a gilt be when she first farrows?

- A. 6 months      B. 1 year      C. 2 years    **(B)**

112. If you were to go out into a lush green pasture and see a cow with her left side all bulged out what would you suspect?

- A. overeating      B. bloat      C. grass tetany    **(B)**

113. How does an elastrator work?

- A. clamps & crushes cord                      B. cuts off circulation  
C. cuts scrotum on one side    **(B)**

114. Wool removed from a carcass several days after death is called?

- A. clear wool  
B. dead wool  
C. grease wool    **(B)**

115. Breeds such as angus and hereford are?

- A. british breeds  
B. exotic breeds    **(A)**

116. A good source of protein for beef and sheep rations is:

- A. corn    B. trace mineral salt  
C. soybean meal    **(C)**

117. What does the term intradermal mean:

- A. Under the skin                              B. In the Vein                              C. In the skin    **(C)**

118. Why would we flush ewes?

- A. to rid them of parasites    B. To stimulate estrus and increase ovulation rate  
C. to increase feed efficiency    **(B)**

119. Providing extra feed for nursing lambs and calves is called:

- A. flushing      B. foundering      C. creeping    **(C)**

120. When the term burly is used in livestock judging it means:

- A. Close at the knees                              B. Upstanding  
C. Rugged and masculine                      D. More feminine    **(C)**

121. What frequent drought problem do we have with feeding green-chop corn silage:

- A. bloat    B. prussic acid poisoning  
C. white muscling disease                      D. nitrate poisoning    **(D)**







144. The information on a product label says it can be given either Subcutaneously or Intramuscularly. Where do you give it?  
A. Deep in the muscle of the neck                      B. Under the skin of the neck  
C. Deep in the muscle of the hip                         D. It doesn't matter, so any of these is OK **(B)**
145. What type of grade or score is not related to fatness of the animal?  
A. Condition Score    B. Yield Grade  
C. Quality Grade    D. Frame Score **(D)**
146. If you want your steer or lamb to grow faster and finish more quickly, which nutrient do you need to increase in the ration fed?  
A. Energy    B. Protein  
C. Vitamin A    D. Calcium **(A)**
147. A pig grew from 40 pounds to 240 pounds in 100 days and ate 600 pounds of feed. What was his Average Daily Gain (pounds per day)?  
A. 100    B. 200  
C. 6.0    D. 2.0 **(D)**
148. A calf is having trouble being born. What piece of equipment do you need?  
A. Esophageal Feeder                                      B. Obstetrical Chain  
C. Emasculator    D. Drench Gun **(B)**
149. Yes or No? Virginia is home to the largest pork producer and packing company in the United States? **Yes**
150. Which factor is most closely related to whether a beef carcass grades Choice or Select?  
A. Backfat    B. Amount of muscle  
C. Whether it's a steer or heifer                         D. amount of marbling **(D)**
151. A cow in heat today would be expected to be in heat again  
A. 17 days from now                                        B. 21 days from now  
C. 283 days from now                                        D. 365 days from now **(B)**
152. What method is used to administer dewormers?  
A. Oral    B. Poured on the back  
C. Put in Feed     D. Injected    E. All of these **(E)**
153. Maternal milk EPD is a measurement of  
A. Pounds of milk produced                                B. Pounds of weaning weight that is due to milk production **(B)**
154. What wholesale cut corresponds to the shoulder of cattle?  
A. Shoulder    B. Chuck  
C. Round    D. Plate **(B)**
155. Which market animal now sells for the highest price per pound (live basis)?  
A. Hog    B. Steer  
C. Lamb     D. Steers and Lambs are the same **(B)**

156. Which breed is tolerant of high temperatures, resistant to parasites, but is late maturing and has lower quality beef?
- A. Brangus  
B. Angus  
C. Simmental  
D. Limousin (A)
157. The time between when a drug is administered and the animal can safely be sold for slaughter is called
- A. Waiting Period  
B. Withdrawal Period  
C. Medicinal Interval  
D. Safety Period (B)
158. What disease resulted in the slaughter of many thousands of livestock in England this year?
- A. Foot Rot  
B. Soremouth  
C. Foot and Mouth  
D. Crazy Cow Syndrome (C)
159. From the side view an animal is straight in the hock and walks with a short, stiff stride. What's the problem?
- A. Cow Hocked  
B. Stiff Legged  
C. Sickle Hocked  
D. Post Legged (D)
160. What technology is used to measure fat and amount of muscle in the live animal?
- A. Magnetic Resonance Imaging  
B. Ultrasound  
C. Endoscopy  
D. Ultraviolet (B)
161. Which vitamin is related to green forage consumption by cattle and sheep?
- A. Vitamin A  
B. Vitamin C  
C. Vitamin D  
D. Vitamin B-6 (A)
162. Which of the following is a major problem with quality of pork?
- A. EPD  
B. PSE  
C. ESP  
D. SPI (B)
163. After calving, the cow expels the afterbirth. What's another word for that?
- A. Pasturella  
B. Progesterone  
C. Placenta  
D. Platypus (C)
164. On average, when a black cow that carries the horned gene is mated to a black bull that is polled, a polled calf will be produced how often?
- A. All the time  
B. Half the time  
C. 25% of the time  
D. None of the time (A)
165. Implants **do not** make cattle do what?
- A. Grow faster  
B. Eat more feed  
C. Have more marbling  
D. Produce leaner carcasses (C)
166. A pig grew from 40 to 240 pounds in 100 days. He has eaten a total of 600 pounds of feed. What is his feed efficiency, also known as Feed to Gain Ratio?
- A. 2  
B. 3  
C. 4  
D. 6 (B)

167. What is the cause of death of a lamb or calf with a case of the scours?  
A. Gut upset  
B. Dehydration  
C. Pneumonia  
D. Kidney blockage **(B)**
168. If you want to select highly productive replacement gilts that excel in the maternal traits, which piece of data is most useful?  
A. Dam's SPI  
B. Days to 250  
C. Backfat depth  
D. Number born alive in her own litter **(A)**
169. Yes or No? A normal non-pregnant ewe will continue to come into heat every 17 days all year round? **No**
170. Where do we measure backfat thickness and ribeye area on beef and lamb carcasses?  
A. Between 4<sup>th</sup> and 5<sup>th</sup> ribs  
B. Between 10<sup>th</sup> and 11<sup>th</sup> ribs  
C. Between 12<sup>th</sup> and 13<sup>th</sup> ribs  
D. Any of these are acceptable locations **(C)**
171. We want to feed a group of calves 300 pounds of dry matter from corn. High moisture corn is 75% dry matter. How much high moisture corn should be fed to these calves?  
A. 225 pounds  
B. 300 pounds  
C. 400 pounds  
D. 450 pounds **(C)**
172. Which structure is not a part of the reproductive tract of a female?  
A. Ovary  
B. Esophagus  
C. Cervix  
D. Uterus **(B)**
173. What is a problem that can result from lambs being docked very close to the body?  
A. Internal parasites  
B. Limp when they walk  
C. Meat quality is reduced  
D. Rectal prolapse **(D)**
174. What's the problem with extremely large framed steers in the industry?  
A. Produce carcasses that are too big  
B. Take a long time to finish properly  
C. Have a low average daily gain  
D. Both a and b **(D)**
175. Farmers often add urea to corn silage as it goes from the field into the silo. Why?  
A. Increase protein content  
B. Increase energy content  
C. Adds calcium and phosphorous  
D. Keeps it from spoiling **(A)**
176. Which hormone is associated with females showing standing heat?  
A. Progesterone  
B. Prolactin  
C. Prostaglandin  
D. Estrogen **(D)**
177. Ultrasound technology cannot determine which meat characteristics?  
A. Firmness and color  
B. Marbling Score  
C. Backfat thickness  
D. Loineye Area **(A)**
178. Which view is best to determine if an animal is too straight in the shoulder?  
A. Rear View  
B. Side View  
C. Front View  
D. Looking down from above **(B)**

179. Which of the following diseases is very contagious, meaning that it can be spread from one animal to others in the same group?
- A. Listeriosis, also known as circling disease  
B. Hypothermia, or low body temp.  
C. Foot Rot  
D. Enterotoxemia, overeating disease (C)
180. Which retail cut contains a piece of spine?
- A. Porterhouse steak  
B. Ribeye steak  
C. Top Round steak  
D. Flank Steak (A)
181. A pork carcass weighs 135 pounds, has 0.7 inch of backfat and a loineye area of 6.5 square inches. This carcass is
- A. Too fat  
B. Too light muscled  
C. Too light  
D. Very desirable (C)
182. Which important things are contained in colostrum?
- A. Antibodies  
B. Fat  
C. Protein  
D. All of these (A)
183. Which feed can be used as a protein source for cattle and sheep, but provides no energy at all?
- A. Urea  
B. Corn gluten feed  
C. Soybean Meal  
D. Cottonseed meal (A)
184. What does the term gestation mean? Example: Cattle
- A). The time that cow will allow the mating process to take place.  
B). The time after the cow has weaned her calf.  
C). The time from conception to birth of the calf.  
D). The amount of time it takes for the birthing process to be completed. (C)
185. The process of giving birth is referred to as which of the following:
- A). Gestation B). Parturition C). Vaccination D). Intrastation (B)
186. The good pre-breeding reproductive management tool for the ewe flock and ram involve which of the following:
- A). Flushing B). Washing C). Castrating D). Cleaning the lambing barn (A)
187. Which of the following sheep breeds is most likely to used for out-of-season breeding and early fall lambing?:
- A). Hampshire B). Dorset C). Columbia D). Suffolk (B)
188. The ability of an animal to pass their genetic traits on to their offspring is called what?
- A). Heterosis B). Genealogy  
C). Heritability D). Backgrounding (C)
189. The small flecks of fat in a cut of beef which gives meat its flavor and is also one of the factors indicating quality is called
- A). Seam fat B). Marbling  
C). External fat D). Speck fat (B)

190. Shelled corn is used in rations primarily as a source of  
 A). Protein B). Fat  
 C). Energy D). Minerals (C)
191. Which is the smallest framed breed of the following?  
 A). Southdown B). Suffolk  
 C). Dorset D). Hampshire (A)
192. When does a ewe have the highest feed requirements?  
 A) Pregnancy B) When nursing one lamb  
 C) Just after shearing D) When nursing twins (D)
193. When is grass at its most nutritious stage?  
 A. Vegetative B. Early bloom  
 C. full bloom D. mature (A)
194. Feed additives are put in rations to  
 A. increase rate of gain B. improve feed efficiency  
 C. Treat diseases D. all of these (D)
195. Which of the following vitamin-mineral combination is associated with stiff lamb disease?  
 A. calcium, phosphorus, vitamin D B. selenium, vitamin E  
 C. sodium, vitamin C D. potassium, vitamin B-12 (B)
196. Which of the following would be considered a concentrate feed?  
 A. alfalfa hay B. corn silage  
 C. ryegrass pasture D. shelled corn (D)
197. Which breed of sheep would most likely produce fall born lambs?  
 A. Hampshire B. Suffolk  
 C. Columbia D. Dorset (D)
198. A sheep producers has a 125% lamb crop. If he has 100 ewes, how many lambs did his ewes have?  
 A. 100 B. 125  
 C. 150 D. 50 (B)
199. In order to increase the number of lambs each ewe will have, our best practice would be to:  
 A. Breed them during the hottest weather  
 B. Increase the number of ewes that we put with a ram  
 C. Flush the ewes  
 D. Flush the rams (C)
200. When we slaughter a lamb, approximately how much backfat should the carcass have?  
 A. None B. .15 inch  
 C. .5 inch D. 1 inch (B)
201. A sheep farmer notices that his ewes have blisters and sores on their udders and that the lambs have sores on their mouths. What do you suspect to be the problem?  
 A. Allergy B. Copper poisoning  
 C. Overeating D. Sore Mouth (D)





213. Match the term for the process of giving birth with the correct species.  
 A). Mare - **C** Choices: a). farrowing  
 B). Ewe - **D** b). calving  
 C). Cow - **B** c). foaling  
 D). Sow - **A** d). lambing
214. When cattle twins are born and they are of different sex, the female is called a:  
 A). Cryptorchid B). Freemartin C). Hermaphrodite D). Mulefoot **(B)**
215. Pigs born at the same time from the same sow are called:  
 A). Piglets B). Shoats C). Feeder Pigs D). Littermates **(D)**
216. Which of the following products is used to synchronize cattle:  
 A). Bovatec B). Synovex C). Invomec D). Lutalyse **(D)**
217. What type of examination is used to determine if heifers are big enough to breed?  
 A). Pregnancy Exam B). Blood Pressure Test C). Pelvic Exam  
 D). Soundness Exam **(C)**
218. Match the species name with the scientific name  
 Choices: a). Porcine b). Equine c). Bovine D). Ovine  
 A). Horse - **B**  
 B). Cattle - **C**  
 C). Sheep - **D**  
 D). Swine - **A**
219. What does EPD stand for?  
 A). Early Pregnancy Diagnosis B). European Popular Demand  
 C). Expected Progeny Difference D). Eastern Police Department **(C)**
220. What does heterosis refer to in a crossbreeding program?  
 A). Heredity B). Hybrid Vigor  
 C). Genealogy D). Hypertension **(B)**
221. The ability of an animal to pass their genetic traits on to their offspring is called what?  
 A). Heterosis B). Genealogy  
 C). Heritability D). Backgrounding **(C)**
222. Which of the following chemicals would not be used in a foot bath to treat foot rot?  
 A). Copper Sulfate B). Formaldehyde  
 C). Laxon D). All of the above **(C)**
223. Which of the following is not considered to be a British Breed?  
 A.) Hereford B.) Shorthorn  
 C.) Angus D.) Chianina **(D)**
224. TDN or Total Digestible Nutrients is a measure of what in a feed?  
 A). Protein B). Energy  
 C). Palatability D). Feed Consumption **(B)**





248. Which is the main source of disease-protection for the newborn animal?  
A. vaccination  
B. colostrum milk  
C. vitamin injection  
D. creep feed **(B)**
249. Which of these bulls is most likely to cause calving difficulty?  
A. bull with an actual birthweight of 85 lbs.  
B. Bull whose mother was a first-calf heifer  
C. Bull with a yearling weight of 1150 pounds  
D. Bull with a birthweight EPD of +8.6 pounds **(D)**
250. Ear notching of swine is used to identify  
A. the breeder  
B. the litter number  
C. pig number within the litter  
D. both b and c **(D)**
251. Grass hay cut at which stage of maturity would be least likely to meet a beef cow's protein requirements  
A. prebloom  
B. early bloom  
C. mid bloom  
D. full bloom **(D)**
252. In normal slaughter operations, which specie does not have the skin removed from the carcass  
A. cattle  
B. pigs  
C. sheep  
D. all have it removed **(B)**
253. Which of the following lamb cuts comes from the same part of the carcass as a porterhouse steak of beef  
A. blade chop  
B. rib chop  
C. loin chop  
D. sirloin chop **(C)**
254. Your pig has eaten 450 pounds of feed and has gained 150 pounds. What is his feed efficiency (pounds of feed per pound of gain)?  
A. 450  
B. 150  
C. 3.0  
D. need more information **(C)**
255. With which specie are the following terms associated: percent muscle, days to 230, litter size, needle teeth?  
A. cattle  
B. pigs  
C. sheep  
D. horse **(B)**
256. Giving injections in which way causes the greatest problem for the beef industry with injection site reactions?  
A. intravenous  
B. intramuscular  
C. subcutaneous  
D. intradermal **(B)**
257. When should a cow be artificially bred if she is seen in "standing heat" tomorrow morning?  
A. tomorrow morning  
B. tomorrow evening  
C. the day after tomorrow  
D. Sunday night **(B)**

258. A lamb carcass weighs 60 pounds, has a 3.0 square inch loin eye, has 0.30 inch backfat and grades Choice+. The carcass is

- A. too light
- B. light muscled
- C. Too fat
- D. real good (C)

259. If you want your steer or lamb to grow faster and finish more quickly, which nutrient do you need to increase in the ration fed?

- A. Energy
- B. Protein
- C. Quality Grade
- D. Frame Score (A)

260. Match the desirable birth weight with the specie:

- B** - Cattle
- A**. 3 lbs..
- C** - Sheep
- B**. 80 lbs.
- A** - Hogs
- C**. 12 lbs.

261 Meat from sheep less than 12 months of age is called:

- A. Lamb
- B. Veal
- C. Mutton
- D. Steak (A)

262. The amount of lamb eaten per person in the United States is approximately:

- A. 2 pounds
- B. 5 pounds
- C. 10 pounds
- D. 25 pounds (A)

263. Match with the protein amounts

- A. 18-20%
- C-Soybean Meal
- B. 10-14%
- D-Cottonseed Meal
- C. 44%
- B-Clover Hay
- D. 33%
- A-Alfalfa Pellets

264. How much should each specie gain per day

- A. more than 1 lb.
- D-sheep
- B. 2lbs.
- C-cattle
- C. 3lbs
- B-hogs
- D. less than 1 lb

265. List these grades from the fattest to leanest

- 2-Choice
- 3-Select
- 1-Prime
- 4-Standard

266. Match the term for a castrated male with the appropriate species.

- A. gelding
- B-Swine
- A-Horse
- B. barrow
- D-Cattle
- C-Sheep
- C. wether
- D. steer

267. What breed or breed-cross makes the typical "black-baldie" (black body, white face) beef calf?

- A. Angus X Hereford
- B. Angus X Charolais
- C. Hereford X Charolais
- D. Purebred Hereford (A)

268. In using livestock medications you should:
- Read and follow label instructions
  - Obey withdrawal requirements
  - Use the proper dose or amount
  - All of the above **(D)**
269. Feeds which build bones and teeth and are necessary for important body processes are:
- Protein
  - Fats
  - Minerals
  - M & M's **(C)**
277. What type of examination is used to determine if heifers are big enough to breed?
- Pregnancy Exam
  - Blood Pressure Test
  - Pelvic Exam
  - Soundness Test **(C)**
270. In what season are sheep most apt to breed?
- October-January
  - May – August
  - January – May
  - There are no seasonal differences **(A)**
271. When your steer weighed 600 pounds he was fed a ration containing 13% protein. He now weighs 1000 pounds. What protein level should he be fed now?
- more
  - less
  - the same
  - it doesn't matter **(B)**
272. You take the temperature of your ewe and find the temperature to be 106 degrees, what does this mean?
- the ewe is probably sick
  - the ewe is chilled
  - the ewe needs to be fed more
  - everything is normal **(A)**
273. You sold a market hog that weighed 220 pounds, what would you expect the carcass weight to be?
- 100 lb.
  - 150 lb.
  - 180 lb.
  - 200 lb. **(B)**
274. You want to improve milking ability in your beef herd. What trait should you select for?
- birth weight
  - weaning weight
  - yearling weight
  - mature weight **(B)**
275. Which specie has a digestive system most like a human?
- pig
  - sheep
  - cow
  - horse **(A)**
276. Which is a likely problem with corn silage?
- high nitrate levels
  - fescue toxicity
  - high energy levels
  - low dry matter levels **(A)**
284. Wheat is higher in protein than corn True or False True
285. A desirable beef carcass with a modest amount of marbling would be choice True or False True
286. Urea or anhydrous ammonia are used as protein supplements for cattle True or False True

287. Mature Suffolk sheep normally produce 15 pounds of wool each year True or False     False
288. Match the sheep breed with the appropriate characteristics:
- |   |                    |                   |
|---|--------------------|-------------------|
| A. Prolific   | <b>D-Dorset</b>    | <b>C-Columbia</b> |
| B. Developed from Finn, Dorset, Rambouillet, Targee | <b>A-Finnsheep</b> | <b>B-Polypay</b>  |
| C. Developed from Lincoln and Rambouillet           |                    |                   |
| D. Year round breeding, meat type                   |                    |                   |
289. What compounds are called the building blocks of protein
- |                  |                       |
|------------------|-----------------------|
| A. Carbohydrates | B. Amino acids        |
| C. Fatty Acids   | D. Dominos <b>(B)</b> |
290. The judge has just handled your steer and the steer moved his feet. What should you do first?
- |                       |                                      |
|-----------------------|--------------------------------------|
| A. Fix steer's hair   | B. Keep eyes on judge                |
| C. Reset steer's feet | D. Leave everything alone <b>(C)</b> |
291. What weight is usually considered "a load" for a tractor trailer load of feeder cattle?
- |                |                           |
|----------------|---------------------------|
| A. 10,000 lbs. | B. 25,000 lbs.            |
| C. 50,000 lbs. | D. 80,000 lbs. <b>(C)</b> |
292. Which factor is not used in determining beef yield grades?
- |                |                         |
|----------------|-------------------------|
| A. live weight | B. rib eye area         |
| C. backfat     | D. % KPH fat <b>(A)</b> |
293. Your market hog has just gained 45 pounds in the last 30 days while consuming 135 pounds of feed. What was his feed conversion rate during that period?
- |        |                   |
|--------|-------------------|
| A. 1.5 | B. 3.0            |
| C. 4.5 | D. 135 <b>(B)</b> |
294. Match the cattle breed with its description
- |  |                          |
|--|--------------------------|
| A. British breed noted for marbling    | <b>B Limousin</b>        |
| B. French breed - high cutability      | <b>A Angus</b>           |
| C. High growth and milk Austrian breed | <b>D Santa Gertrudis</b> |
| D. Cross of Brahman and Shorthorn      | <b>C Simmental</b>       |
295. Which lamb will have the lowest dressing percentage?
- |   |
|---|
| A. 110 lb. ram lamb with .15 inch backfat                       |
| B. 100 lb. wether lamb with tail and less than .10 inch backfat |
| C. 115 lb. wether lamb with .15 inch backfat                    |
| D. 120 lb. wether lamb with .25 inch backfat <b>(B)</b>         |
296. Which of the following breeds would you expect to have the smallest diameter wool fibers?
- |                |                         |
|----------------|-------------------------|
| A. Rambouillet | B. Columbia             |
| C. Dorset      | D. Hampshire <b>(A)</b> |
297. What daily rate of gain might you expect when finishing lambs on a high grain ration?
- |            |                   |
|------------|-------------------|
| A. .6 lb.  | B. 1.25 lb.       |
| C. 1.5 lb. | D. 5.0 <b>(A)</b> |

298. Which of the following will produce the most grazing in August?  
A. Millet  
B. Timothy  
C. Bluegrass  
D. Red Clover (A)
299. Which factor is most important in determining beef quality grade?  
A. muscling  
B. backfat thickness  
C. carcass length  
D. marbling (D)
300. Which of the following diseases is prevented with a 7-way clostridium vaccine?  
A. overeating disease  
B. shipping fever  
C. tetanus  
D. bloat (A)
301. When feeding a ration high in corn, what mineral will need to be fed in the highest amount?  
A. selenium  
B. iron  
C. phosphorous  
D. calcium (D)
302. When a calcium supplement is needed, which supplement should be purchased?  
A. trace mineral salt  
B. limestone  
C. dicalcium phosphate  
D. copper sulfate (B)
303. Which specie has the lowest average dressing weight?  
A. cattle  
B. swine  
C. sheep  
D. they're all the same (C)
304. What is a good value for pounds of feed per pound of gain for a growing-finishing hog?  
A. 2.5  
B. 5.0  
C. 7.5  
D. 10.0 (A)
305. What does an antibiotic do?  
A. treats disease  
B. prevents disease  
C. kills worms  
D. fertilizes grass ((A)
306. Your corn silage is 33% dry matter. It is recommended that you feed 21 pounds of dry matter to your cow. How much corn silage should you feed?  
A. 21 pounds  
B. 63 pounds  
C. 7 pounds  
D. not enough information to answer (B)
307. You can buy oats and corn at the same price per pound, which is a less expensive source of energy?  
A. oats  
B. corn  
C. they are equal  
D. not enough information to answer (B)
308. The label on an antibiotic says follow a 20-day withdrawal. They means:  
A. Wait 20 days after buying the drug to use it  
B. Wait 20 days after giving to sell the animal for slaughter  
C. Wait 20 days after buying the animal to use it  
D. Don't turn the animal out for 20 days after using it (B)
309. A 170 pound pork carcass has .7 inches of fat and a 6.0 square inch loineye. This is:  
A. too fat  
B. too light muscles  
C. too small a carcass  
D. real good (D)





321. What product is recommended for use in dipping baby lamb navel cords?  
A. formaldehyde  
B. alcohol  
C. zinc sulfate solution  
D. iodine (D)
322. In which region of the U. S. is the most lamb consumed by people (not coyotes)?  
A. Southeast  
B. Northeast  
C. Midwest  
D. Northwest (B)
323. Which of the following diseases would be of the least concern to you as you feed your market lambs for show?  
A. overeating disease  
B. sore mouth  
C. footrot  
D. vibriosis (D)
324. If you breed a Hereford bull to homozygous black Angus cows, what percent of the calves will be red?  
A. 0%  
B. 25%  
C. 50%  
D. 100% (A)
325. You have just had 2 feedlot lambs die. Several lambs have dark scours. Lambs are able to stand in the feed troughs. You have given two clostridial C & D vaccinations. What problem do you suspect?  
A. overeating disease  
B. coccidiosis  
C. shipping fever  
D. tapeworms (B)
326. The initials PSE refer to which swine problem?  
A. reproductive  
B. respiratory  
C. neurological  
D. pork quality (D)
327. Which lamb will have the highest dressing percentage?  
A. wooled, trim, ram  
B. wooled, fat, wether  
C. shorn, fat, wether  
D. wooled, muddy, pregnant ewe (C)
328. In addition to age, muscle color and texture, which trait primarily determines beef quality grade?  
A. marbling  
B. ribeye area  
C. backfat  
D. conformation (A)
329. Which forage species can become infested with an endophyte fungus which depresses livestock performance?  
A. bermudagrass  
B. fescue  
C. bluegrass  
D. orchardgrass (B)
330. Which amino acid is usually most limiting in swine rations?  
A. Lysine  
B. cystine  
C. citric  
D. none are required (A)
331. Which beef carcass trait would be out of the mainstream of industry demand for fed steers?  
A. .32 in. backfat  
B. 750 lb. carcass  
C. low choice  
D. 19 sq. in. ribeye (D)

332. Which is the most serious contaminant of U. S. wool?  
A. manure  
B. plastic twine  
C. burs  
D. dead sheep (B)
333. During which season do orchardgrass, fescue and bluegrass make the most growth?  
A. late April-early June  
B. late June- Aug  
C. Late June-Aug  
D. June-July (A)
334. Which retail cut could not come from a wholesale cut called the loin?  
A. rib chop  
B. T-bone steak  
C. loin chop  
D. rib steak (D)
335. Which product would not have much use in estrous synchronization in heifers?  
A. MGA  
B. Lutalyse  
C. Synovex  
D. Synchronate B (C)
336. Which dewormer has a longer effectiveness in the animal?  
A. Tramisol  
B. Ivomec  
C. Synanthic  
D. Safeguard (B)
337. White swine breeds are generally noted for what?  
A. Carcass merit  
B. Growth rate  
C. Maternal traits  
D. Sire traits (C)
338. It is late March and your cows have one month old calves on them. You are providing the cows first cutting orchardgrass hay, lush green grass, and trace mineral salt. Two acted sort of crazy and then died. What do you suspect is the problem?  
A. Bloat  
B. milk fever  
C. Acorn poisoning  
D. Hypomagnesia (D)
339. Who is the current secretary of the USDA?  
A. Albert Gore  
B. Clinton Turner  
C. George Bush  
D. Anne Venneman (D)
340. Which cattle type should not be implanted with growth promotant implants?  
A. Yearling replacement heifers  
B. Suckling feeder calves  
C. Feedlot heifers  
D. Yearling steers (A)
341. You visit your neighbor's hog finishing floor. You hear some sneezing and notice some twisted snouts. What do you suspect is wrong?  
A. need new air freshener  
B. pneumonia  
C. atrophic rhinitis  
D. circling disease (C)
342. Which grass can provide the highest quality grazing in December?  
A. millet  
B. bluegrass  
C. orchardgrass  
D. fescue (D)

343. Which industry does not have a national producer funded check-off program to fund research and product promotion?  
 A. beef  
 B. sheep  
 C. swine  
 D. horse  
**(D)**
344. Which breed was not developed from crossing other breeds?  
 A. Santa Gertrudis  
 B. Columbia  
 C. Beefmaster  
 D. Arabian  
**(D)**
345. Which disease problem causes the nutrient problem of founder?  
 A. Energy excess  
 B. energy deficiency  
 C. selenium deficiency  
 D. magnesium deficiency  
**(A)**
346. Match the sheep breed with the best description  
**B** Finnsheep  
**D** Polypay  
**C** Dorset  
**A** Hampshire  
 A. Meat type, growth and carcass  
 B. Noted for prolificacy  
 C. Meat type, fall lambing  
 D. Composite breed, made from four breeds
347. Which are the top four quality grades of beef in descending order?  
 A. Choice, Select, Prime, Standard  
 B. Standard, Select, Choice, Prime  
 C. Choice, Prime, Select, Standard  
 D. Prime, Choice, Select, Standard  
**(D)**
348. When feeding a ration high in corn silage to cattle which mineral will need to be supplemented in the highest amount?  
 A. Selenium  
 B. Calcium  
 C. Potassium  
 D. Magnesium  
**(B)**
349. Which swine breed might best be described as a “White duroc”?  
 A. Yorkshire  
 B. Chester White  
 C. Landrace  
 D. Vietnamese Potbelly  
**(B)**
350. Four bulls have the following EPD’s for birth weight. Which bull would be best to use on heifers?  
 A. -2 lbs.  
 B. 0 lbs.  
 C. +2 lbs.  
 D. +5 lbs.  
**(A)**
351. As pigs grow from 50 pounds to 230 pounds what should happen to the protein percent of the ration?  
 A. increase  
 B. decrease  
 C. stay constant at 16%  
 D. Stay constant at 12%  
**(B)**
352. You are finishing a group of lambs which have been regularly dewormed, but notice that the rear ends of many lambs are messy and a few lambs have died. What might be the problem?  
 A. Listeriosis  
 B. Coccidiosis  
 C. Energy in ration too low  
 D. Clean the pen  
**(B)**
353. Which factor does not affect beef carcass quality grades?  
 A. Marbling  
 B. Color of lean  
 C. Muscling  
 D. Maturity  
**(C)**

354. Which animal can routinely carry the thickest backfat and still produce an acceptable carcass?  
 A. Steer  
 B. Hog  
 C. Chicken  
 D. Lamb (B)
355. Your market hog has put on 45 pounds in the last 30 days, while eating 35 pounds of feed. What was his average daily gain?  
 A. .3 lbs.  
 B. 1.5 lbs.  
 C. 3 lbs.  
 D. 4.5 lbs (B)
356. Which of the following is not one of the “Big Three” in beef packing?  
 A. Con-Agra  
 B. IBP  
 C. Excel  
 D. Moyer (D)
357. Which breed is noted for its carcass quality?  
 A. Angus  
 B. Chianina  
 C. Hereford  
 D. Limousin (A)
358. Match the mineral deficiency with the problem it causes  
 C Selenium A. Baby pig anemia  
 D Magnesium B. Urinary calculi  
 A Iron C. White muscle disease  
 B Calcium Phosphorous ratio D. Grass tetany
359. Match the feed additive with its function.  
 A MGA A. Prevent heifers from coming into heat  
 D Bovatec/Rumensin B. Increase protein level of ration  
 B Urea C. Increase rumen pH, prevent acidosis  
 C Bicarbonate of Soda D. Improve feed efficiency by 10%
360. Match the products with their use  
 B Ralgro, Synovex, Compudose A. Estrous synchronization  
 D Warbex, Spotton B. Growth promotant implant  
 C Tramisol, Ivomec C. Dewormer  
 A Lutalyse, Synchronate B D. Control cattle grubs
361. Which animal is most efficient in converting forage into human food?  
 A. steer  
 B. hog  
 C. chicken  
 D. no difference (A)
362. Which factor is most important in determining beef yield grades?  
 A. hot carcass weight  
 B. rib eye area  
 C. backfat thickness  
 D. % kidney, pelvic, heart fat (C)
363. The highest concentrations of cholesterol are found in  
 A. bone  
 B. connective tissue  
 C. muscle  
 D. fat (D)

364. Which of the following problems can be caused by low energy intake late in a ewe's gestation?  
 A. pregnancy toxemia  
 B. milk fever  
 C. grass tetany  
 D. mastitis (A)
365. Which swine breed is noted for carcass cutability?  
 A. Landrace  
 B. Hampshire  
 C. Yorkshire  
 D. Chester White (B)
366. In Virginia, what percent of clear wool price does lamb's wool bring?  
 A. 100%  
 B. 85%  
 C. 75%  
 D. 50% (B)
367. A hog carcass length is measured from the first rib to  
 A. last lumbar vertebra  
 B. last rib  
 C. hock  
 D. aitch bone (D)
368. Who is the executive secretary of the Virginia Cattlemen's Association?  
 A. Roy Meek  
 B. Jimmy Osborne  
 C. Joe Meek  
 D. Reggie Reynolds (D)
369. Match with product with use  
 D Ivomec  
 C Lutalyse  
 A Bovatec  
 D Synovex  
 C Synchronate B  
 A Rumensin  
 D Tramisol  
 E or C MGA  
 A. Feed additive – increase efficiency  
 B. Growth promotant implant  
 C. Used in estrous synchronization  
 D. Deworming product  
 E. Feed additive – prevents estrous
370. Which crop will produce the most total pounds of TDN?  
 A. Alfalfa  
 B. Corn grain  
 C. Corn silage  
 D. Buttercups (C)
371. Which performance information would be useful in selecting replacement gilt?  
 A. SPI (Sow productivity index)  
 B. 21 day litter weight  
 C. Both A & B  
 D. Neither A or B (C)
372. With which species can the most rapid genetic change be made in a given time period?  
 A. Bovine  
 B. Porcine  
 C. Equine  
 D. Ovine (B)
373. A final swine finishing ration should have about what percent crude protein?  
 A. 22%  
 B. 20%  
 C. 15%  
 D. 12% (D)
374. in feeding your heifers you want 10 pounds of dry matter in the ration to come from your corn silage which tested 40% dry matter. How many pounds of silage should you feed?  
 A. 40 lbs.  
 B. 25 lbs.  
 C. 20 lbs.  
 D. Not enough information (B)



386. Which source provides the best indication of a market price 6 months from now.  
A. 5-year average prices                      B. futures market  
C. today's cash prices                         D. your Extension Agent     **(B)**
387. Which specie is most apt to come into heat before the young animal is weaned?  
A. cow    B. sow  
C. ewe     D. none                             **(A)**
388. Which breed of cattle is most apt to produce fast gaining, lean, heavily muscled steers?  
A. Shorthorn                                      B. Charolais  
C. Polled Hereford                             D. Holstein                         **(B)**
389. At what weight does the highest protein requirement (% of the ration) of a beef animal occur?  
A. 400 lbs.                                         B. 700 lbs.  
C. 1000 lbs.                                       D. 1200 lbs.                       **(A)**
390. In the swine business, what does PRV mean?  
A. pig riot victim                                B. porcine round virus  
C. pale, rotten and vile                         D. pseudorabies virus         **(D)**
391. If rate of gain, leanness, and muscling are important, then which breed should you use?  
A. Landrace                                       B. Duroc  
C. Yorkshire                                       D. Saddleback                   **(B)**
392. If a packer wants carcasses weighing 60-65 pounds, then what weight of finished lamb is desired?  
A. 85-90    B. 110-115  
C. 95-100    D. 120-130                       **(D)**
393. Which feed grain is normally harvested in July?  
A. corn    B. barley  
C. milo     D. soybeans                       **(B)**
394. Which is the largest meat packer in Virginia?  
A. Smithfield                                      B. VPI Meats Lab  
C. Valleydale                                       D. IBP                                 **(A)**
395. A 160 pound pork carcass has .8 inches of fat and 6.0 square inch loineye. This is:  
A. too fat    B. too light muscled  
C. too small a carcass                           D. real good                       **(D)**
396. Which factors are important in allowing cows to come back into heat after calving?  
A. time after calving                            B. cow body condition  
C. level of feeding                                D. all of these                     **(D)**
397. Which poultry industry byproduct is most used in beef production?  
A. feather meal                                    B. broiler litter  
C. squawks and clucks                         D. egg shells                       **(B)**









442. The normal body temperature for cattle, sheep and pigs is around 101 degrees Fahrenheit – True or False **(True)**
443. A castrated pig is called a wether. – True or False **(False)**
444. The rumen is the largest capacity part of a sheep or goat digestive system – True or False **(True)**
445. All breeds of swine whose name ends in “shire” have erect ears – True or False. **(True)**
446. Match the following disease s with an appropriate description
- |   |                 |
|---|-----------------|
| A. gut disease caused by a bacteria that can be fatal | D pneumonia     |
| B. parasitic disease of the gut                       | B coccidiosis   |
| C. reproductive disease most often affecting cattle   | A enterotoxemia |
| D. infection in the lung                              | C leptospirosis |
447. Which of these would be the best terminal cross breeding system?
- A. Using Hereford bulls on Angus cows  
 B. Using Angus bulls on Hereford cows  
 C. Using Charolais bulls on black baldie cows **(C)**
448. Which of these are **not** used in beef cattle synchronization?
- A. GNRH  
 B. MGA  
 C. Lutalyse  
 D. All are used **(D)**
449. What is the difference between a Junior and Senior bull in a BCIA test?
- A. Who his sire is  
 B. Age  
 C. What part of the state he is from  
 D. Who the owner is **(B)**
450. Semen used for artificial insemination in cattle is frozen and stored in what?
- A. Ice  
 B. Dry Ice  
 C. Liquid Nitrogen  
 D. Liquid Helium **(C)**
451. Which animal should be the leanest if all weighs the same and all are the same frame size?
- A. Steer  
 B. Heifer  
 C. Bull  
 D. All will be equal **(C)**
452. Which of these can impair a bulls reproductive performance?
- A. Warts on his penis  
 B. Very little body condition  
 C. Small scotal circumference  
 D. None of these  
 E. All of these **(E)**
453. If a Red Angus bull is mated to Hereford cows what percentage of his calves will be red?
- A. 50%  
 B. 100%  
 C. 75%  
 D. 0% **(B)**
454. What normally happens to the price per pound of cattle as they get heavier?
- A. Price goes up  
 B. Price goes down  
 C. Depends what breed  
 D. None of these **(B)**





476. Why is it a good idea to vaccinate ewes and cows for certain diseases about 4 to 6 weeks before the end of pregnancy?  
A. Protect mother from critical diseases  
B. She's easier to catch then  
C. Make antibodies to the disease and pass them to the fetus before it is born  
D. Make antibodies to the disease and pass them to the newborn in the colostrum (D)
477. Which grade or score is most closely related to the mature size of an animal?  
A. Yield Grade  
B. Quality Grade  
C. Condition score  
D. Frame Score (D)
478. Which of the following diseases is not contagious, meaning that it cannot be spread from one animal to another in the same group?  
A. Foot rot  
B. Sore mouth  
C. Pinkeye  
D. Enterotoxemia, known as overeating disease (D)
479. Which breed is noted for muscling, growth, and high milk production?  
A. Angus  
B. Charolais  
C. Limousin  
D. Simmental (D)
480. A Lamb carcass weighs 62 pounds, has 0.3 inch of backfat, a 3.0 square inch loineye, and grades U. S. Choice." This lamb is  
A. Real good  
B. Light muscled  
C. Low quality  
D. Too fat (D)
481. What procedures are appropriately done with a Burdizzo emasculator?  
A. Castration  
B. Dehorning  
C. Tail docking  
D. Both a & c (D)
482. The carcass from which species must be ribbed (cut in the middle of the back to expose a large muscle) before it can be graded?  
A. Pork  
B. Beef  
C. Lamb  
D. All of them (B)
483. Spell the breed names of sheep, cattle, and swine.
484. Ralgro should be given to replacement heifers.  
A. True  
B. False (B)
485. Which feed contains the lowest protein content?  
A. Corn  
B. Oats  
C. Alfalfa Meal  
D. Soybean Meal (A)
486. Which of the following would not commonly be used in a sheep foot bath?  
A. Iron Sulfate  
B. Copper Sulfate  
C. Zinc Sulfate  
D. Formaldehyde (A)
487. What is the desirable birth weight for a pig?  
A. 1 pound  
B. 3 pounds  
C. 6 pounds  
D. 10 pounds (B)

488. Match the breed with the most appropriate description

- |   |              |
|---|--------------|
| A. British breed noted for marbling               | D Charolais  |
| B. Light muscled noted for calving ease           | B Longhorn   |
| C. Composite Breed                                | A Angus      |
| D. High growth French breed, noted for cutability | C Beefmaster |

489. Match the mineral with the condition it is associated with:

- |                         |                         |
|-------------------------|-------------------------|
| a. white muscle disease | C Copper                |
| b. grass tetany         | D Calcium & Phosphorous |
| c. dead sheep           | B Magnesium             |
| d. urinary calculi      | A Selenium              |

490. Match the nutritional disease with the cause

- |                               |                        |
|-------------------------------|------------------------|
| A. Calcium: Phosphorous ratio | D Grass tetany         |
| B. Low energy level           | C White muscle disease |
| C. Selenium deficiency        | B Pregnancy toxemia    |
| D. Magnesium deficiency       | A Milk fever           |

491. Match the product on the left with its use on the right. (Place the letter of the correct use on the right in the corresponding blank on the left column).

- |  |                   |
|--|-------------------|
| A. Use to synchronize estrus               | <b>B</b> Bovatec  |
| B. Feed additive, improves feed efficiency | <b>C</b> Synovex  |
| C. Growth promotant implant                | <b>D</b> Ivomec   |
| D. Systemic dewormer                       | <b>A</b> Lutalyse |



# Beef Quiz Bowl Questions

## BEEF 1 – Bite into Beef

### BEEF 1 – QUIZ BOWL QUESTIONS

1. **What beef breed was developed at the King Ranch in Texas?**  
Sante Gertrudas
2. **What solid black polled breed originated in Scotland**  
Angus – weights bull 1,600 – 2,000 Cow – 1,000 – 1,400
3. **What is the middle joint of the rear leg of a calf called?**  
Hock
4. **Where are the pin bones located?**  
Bone by Tailhead
5. **What is an example of a comparative judging term describing the finish of a steer?**  
Cleaner, trimmer, more optimally conditioned, longer bodied, more extended – page 11
6. **When should you start halter breaking a calf?**  
Several months before the show when they are still calves
7. **What are four pieces of equipment used to fit a steer?**  
Adhesive, scotch comb, flathead clippers, sheep head clippers, spray bottle, blower
8. **How do you set up the legs of a beef animal when showing?**  
The legs need to be square under the animals body.
9. **What approximately percent crude protein should growing cattle be fed?**  
12 – 16%
10. **What are three signs of a sick calf?**  
humped back, snotty nose, yellow runny feces, slow moving, doesn't come to feeder
11. **What are three examples of feed ingredients used as protein sources in a ration?**  
Cottonseed meal, soybean meal, distillers grain, brewers grain, corn gluten meal, urea
12. **What do feed ingredients like hay, barley and oats supply in a ration?**  
Energy
13. **What is the name of the bone found in a chuck roast?**  
Blade and arm bone
14. **What are the names of three retail cuts of beef?**  
Round steak, rib eye roast, arm pot roast, t-bone steak, skirt steak, brisket, sirloin steak  
short ribs, back ribs, chuck eye roast.
15. **What is a bovine male called?**  
Bull

### IDENTIFYING BEEF BREEDS – Page 6-7

1. **Name the white faced, red cattle that have horned or polled bloodlines.**  
Hereford – 2<sup>nd</sup> most numerous breed in US  
Originated in England
2. **What breed of cattle were originally called Durhorns and this British breed is red, white or roan in color?**  
Shorthorn – Originally British breed
3. **What large cattle breed originated in the French Maine and Anjou river valleys?**  
Maine – Anjou
4. **Which large muscled, red to gold breed originated in the French regions of Limousin and Marche?**  
Limousin      Weights – Bull 2000 - 2200      Cow 1200 – 1400
5. **Which breed of cattle has a solid frame, is solid white and know for their fast growth rates?**  
Charolais – French Breed
6. **Name this breed that is white faced, red or yellow from the Simme Valley in Switzerland.**  
Simmental      Weights – Bull 2300 – 2400      Cow 1600 – 1700
7. **Name this cherry red colored breed from the French Salers Valley.**  
Salers      Weights – Bull 2400 – 2600      Cow 1400 – 1600
8. **What cattle breed was developed in the wild in dry, harsh conditions which they have to constantly worry about predators?**  
Their most important traits are calving ease, hardiness, good feet and legs and speed.  
Texas Longhorn
9. **What cattle breed is the largest cattle breed in the world that was developed as a draft animal?**  
Piedmontese
10. **What cattle breed was developed in Scotland's cold, rocky, harsh environment and it's most important traits are small frame size, calving ease, and cold weather tolerance?**  
Highland
11. **What cattle breed was developed as a pure meat animal to produce the largest possible cuts of meat?**  
Chianina      Weights – Bull 3500 – 4000      Cow 2000 – 2400
12. **What cattle breed was developed as a draft & Milk breed which is known for its strong feet and legs, large capacity and milking ability?**  
Fleckvich
13. **What cattle breed was developed in a hot environment and has important traits of disease resistance, teat tolerance and hardiness?**  
Brahman

## **BEEF CATTLE PARTS – Page 8**

1. **Area along the tope from the point of shoulders to the last rib.**  
Back or top

2. **What is the chest of the calf called?**  
Brisket
3. **What is the bone called from knee to pastern and from hock to pastern?**  
Cannon Bone
4. **Where is the dewlap located?**  
Back of hoof.
5. **What is the dewlap?**  
Flap of skin on the throat.
6. **What joint is in the front legs at the fore flank region?**  
Elbow
7. **What area is from knee to elbow of the front leg?**  
Fore leg
8. **Where is the fore rib?**  
Right behind the shoulder
9. **Where is the rear flank?**  
In front of the rear leg
10. **What is the middle joint of the rear leg?**  
Hock
11. **Where does the line tie into the hip?**  
Hook or hip bone
12. **Where is the loin muscle?**  
From the last rib to the start of the hip
13. **What is the area along the belly line behind the front legs?**  
Lower fore rib (Heart Girth)
14. **What is the pastern?**  
Joint right above the hoof
15. **What is the pin bone?**  
Bone by the tail head
16. **What is the poll?**  
Top point of the head
17. **What is the area where front legs meet along the top line?**  
Point of shoulder
18. **What is the stifle?**  
A muscle at rear flank
19. **What is the tail head?**  
Where tail attaches to animal
20. **Where is the cod?**  
Between the rear legs of a steer

## **FITTING AND SHOWING – page 12 – 13**

- 1. For the proper fit of a halter on cattle where should the nose piece be?**  
Up on the nose just under the eyes
- 2. Why would allowing the animal to drag a dead rope on the ground help break a calf to lead?**  
Teach the calf to respond to pressure
- 3. Name one thing *not* to do when breaking a calf to lead:**  
Tie calf behind a vehicle and pull  
Hit the calf with a stick or whip  
Pull on the halter with hard jerks  
Use an electric prod

## MANAGEMENT & HEALTH PRACTICES – pages 19, 20, 23

1. **About what % of water will a calf drink of its body weight in cold weather?**  
8%  
**and in hot weather?**  
19%
2. **About how many pounds of dry feed do you need to feed to beef steers for every 100 pounds of body weight each day?**  
2.5 lbs.
3. **How often should you at least check for injuries, sickness, unusual things or changes in behavior?**  
Daily to twice a day.
4. **Why should you bush cattle?**  
To calm them and clean, and train hair.

### Page 20

1. **What is a syringe for?**  
Administering medicine or vaccines i.e. IM, IV or SQ
2. **What are ear tags for?**  
Identifying cattle
3. **Name 3 ways of castrating:**  
Banding, cutting, and buriduzzo
4. **What would be used to administer colostrum or fluids to a weak newborn calf?**  
Calf feeder bag

### Page 23

1. **Name 3 of the five basic nutrients?**  
Protein, energy, minerals, vitamins, water
2. **What is excess energy stored as?**  
Fat
3. **What nutrient provides supplies for making body tissues like muscle, bones, blood, skin?**  
Fat
4. **What is the most important nutrient?**  
Water
5. **A 500 lb. calf will drink how much water?**  
5-12 gallons  
**750 lb calf?**  
7-18 gallons  
**1,000 lb calf?**  
10-24 gallons

6. **Name two forage products used in a beef cattle ration:**  
Alfalfa, hay, ground alfalfa, leaf meal, ground grass
7. **Name two roughage products used in a beef cattle ration:**  
beet pulp, cottonseed hulls, oat hulls, straw ground

#### **BEEF PRODUCTS – Page 24**

1. **Where does the Retail Cut come from in the wholesale cut?**

**Round steak** – Round

**Rib Eye roast** – Rib

**Arm Pot Roast** – Chuck

**T-bone steak** – Short loin & sirloin

**Skirt steak** – Short Plate

**Brisket** – Fore shank and Brisket

**Sirloin Steak** – Short loin & sirloin

**Short ribs** – Chuck and Short Plate

**Back Ribs** – Rib

**Chuck eye roast** – Chuck

#### **Page 27**

1. **What types of beef cuts are best suited to dry heat methods such as grilling, stir-frying, roasting or broiling?**  
Tender cuts
2. **What types of beef cuts are best suited to moist heat methods such as braising or simmering?**  
Less tender cuts

#### **Page 29**

1. What is live quality grade based on?  
Evaluation of fatness on an animal (conditioning)
2. What is carcass quality grade based on?  
Evaluation of degree of marbling and degree of maturity
3. Name 3 of the 5 quality grades for young cattle:  
Prime, Choice, Select, Standard, Utility

#### **BEEF TALK 1**

1. **What is backfat?**  
Amount of fat over the animal's back,
2. **Where is backfat measured?**  
usually measured between the 12<sup>th</sup> and 13<sup>th</sup> rib
3. **What are by-products?**  
Products made by further processing of leftovers after the primary
4. **What is the term used to describe the # of % of calves produced within a herd in a given year relative to the # of cows & heifers in the breeding herd?**  
Calf crop

5. **What is parturition?**  
Giving birth
6. **What is the first milk given by a female following delivery of her calf, which is high in antibodies that protect the calf from invading microorganisms?**  
Colostrum
7. **What is concentrate?**  
Feed high in energy, highly digestible and low in fiber
8. **What is a crossbred?**  
Animal produced by crossing 2 or more breeds
9. **What is the bolus of feed that cattle regurgitate for further chewing?**  
Cud
10. **What is culling?**  
Removing an animal from a herd due to poor production, type, or health
11. **What is a dam?**  
A female parent
12. **What is dual purpose?**  
Animal used for both meat and milk
13. **What are cattle that need further feeding for the period from weaning to finish prior to slaughter?**  
Feeder cattle
14. **An animal that doesn't have horns because of its genetic traits is called what?**  
Polled
15. **What is a male parent called?**  
Sire
16. **What is a steer?**  
Bovine male castrated before puberty
17. **What are the first cuts that a beef carcass is broken into?**  
Primal Cuts
18. **What are cuts of beef in sizes that are purchased by the consumer?**  
Retail Cuts
19. **What is a purebred?**  
Animal eligible for registry with a recognized breed association.
20. **What are steers or heifer calves run on grass before going to feed lot?**  
Stockers

## **BEEF 2 – Here's the Beef**

### **BEEF 2 – QUIZ BOWL QUESTIONS**

1. **What is a good example of ideal feet and legs on a beef animal?**  
Correct set of rear and front legs with rear legs set far apart. Legs should appear straight, slightly hocked when viewed from rear. Front legs should not be knock kneed or bowlegged when viewed from the front.

2. **How does feed move through a ruminant's digestive system?**  
Esophagus, Rumen, Reticulum, Omasum and Abomasum then small intestines, large intestines
3. **How do microbes (bugs) in the rumen help digest feed?**  
Digest low-quality feces that other animals can not  
Digest large amounts of grass and hay – use many types of feeds
4. **What type of feed ingredients in the ration are required for good skeletal growth in beef animals?**  
Calcium
5. **What insect attaches itself to the skin and sucks blood from its host?**  
Lice
6. **What's another name for buffalo gnats?**  
Black Flies
7. **What is a good electronic source of beef project information?**  
Ohio State
8. **How should the hair be clipped on a show steer's legs?**  
Four areas of the leg will be short; the back of the hock bone, the front of the hind leg below the flank, the inside of the hock and the front of the pastern or knuckle
9. **What does it mean to practice ethical behavior in the beef project?**  
Wrongly tampering with the animal's nature (ie. color, size or use of injections.)
10. **How is yield grade determined?**  
Yield grade is based upon the yield of boneless, closely trimmed retail cuts from the round, liver, rib and chuck, is referred to as "carcass cutability"

## **FEEDING, MANAGEMENT AND HEALTH PRACTICES**

### **Page 11**

1. **What part of the digestive system functions as a storage area for food and aids in the breakdown of coarse particles through bacterial action?**  
Rumen
2. **What part of the digestive system has honeycomb-like walls retain foreign materials that could injure the digestive system?**  
Reticulum
3. **What part of the digestive system removes liquid from the feed by muscle contractions and breaks up coarse particles in feed?**  
Omasum
4. **Which stomach compartment is the "True Stomach?"**  
Abomasum digestive juices break down food. Juices include hydrochloric acid, pepsin, renin and lipase.

### **Page 15**

1. **What is a flight zone?**  
An animal's own space in which it doesn't want any people or foreign objects.
2. True or **False** – Cattle are herd animals. They handle much easier by themselves.
3. **True** or False – Moving objects distract cattle.



4. **True or False** – Livestock have wide angle vision. They see almost except what is directly behind them.

### **Page 18 & 19**

1. **THESE SYMPTOMS DESCRIBE WHAT PARASITE IN BEEF CATTLE:**  
**Diarrhea, blood in urine and fever, losing weigh, poor appetite.**  
Worms  
**Scratching or rubbing, Loss of blood, loss of hair, weight loss**  
Lice  
**Back of animal looks like marbles under hide.**  
Grubs

### **BEEF PRODUCTS**

#### **Page 28 & 29**

1. **What grade identifies cattle for differences in yields of boneless, closely trimmed retail cuts from the round, line, rib and chuck?**  
Yield Grade
2. **What is another name for yield grade?**  
Cutability

#### **Page 30 & 31**

1. **What 2 grades are used to calculate carcass values?**  
Yield Grade & Quality Grade

### **BEEF TALK 2**

1. **What is the adjusted weaning weight?**  
Weight of a calf at weaning, adjusted to a standard 205 day weight.
2. **What is a sterile bovine female?**  
Freemartin
3. **What is the calf weight taken at birth?**  
Birth weight
4. **What disorder is characterized by gas distention in the rumen seen on the animal's left-side?**  
Bloat
5. **What is a male bovine with un-descended testes?**  
Cryptorchid
6. **What are fed cattle whose time in the feedlot is completed and are now ready for slaughter?**  
Finished cattle
7. **What nutritional ailment is due to overeating and causes animals to go lame with sore front feet and excessive hoof growth?**  
Founder

8. **What disorder is magnesium deficiency in grazing cattle?**  
Grassy Tetany
9. **What term refers to the amount of muscle an animal has?**  
Leanness
10. **What term is used to describe the small flecks of fat within a muscle?**  
Marbling
11. **What is palatability?**  
The degree to which a feed is liked or accepted by an animal
12. **What term is used to describe the measurement in square inches of a cross section of the loin muscle taken at the 12<sup>th</sup> rib?**  
Rib Eye Area
13. **What are the internal organs & cavities of an animal called?**  
Viscera

## **BEEF 3 – LEADING THE CHARGE**

### **QUIZ BOWL QUESTIONS**

1. **How is the frame score of a steer determined?**  
Determine hip height, know age of animal, use frame score table to determine animal's frame score.
2. **What does EPD stand for when selecting cattle?**  
Expected Progeny Differences
3. **What is something that effects the quality of hay?**  
Fertilizers, age or stage of maturity, how well it is dried after being cut, storage and handling
4. **What is the crude protein content of corn grain?**  
9.8%
5. **What are 3 careers related to the beef industry?**  
Cow/Calf Rancher  
College researcher/teacher  
Feeder cattle buyer  
Breed Representative  
Extension/Consultant
6. **What is a symptom of a beef animal with laminitis?**  
Lameness in cattle where lamina hoof wall and sole become very sore, overgrown and malformed hooves often result.
7. **What is a name of a contagious skin disease of cattle?**  
Warts, ringworm
8. **What are the names of 3 parts of a beef cow's reproductive tract?**  
Vulva, vagina, cervix, uterus, uterine horn, oviduct, ovaries
9. **What are three things that should be considered when selecting a beef sire?**  
birth weight, weaning weight, yearling weight, maternal milk, marbling
10. **How many days does a cow's estrous cycle?**  
21 days

**11. What does the term “cutability” refer to when evaluating a beef carcass?**  
Refers to the proportion of the carcass that is saleable as trimmed (boned or partially boned) retail cuts.

**12. What does it mean to “hedge risk”?**  
Hedging – risk management strategy that allows a producer to lock in a price for a given commodity at a specified time.

## **SELECTION AND JUDGING**

### **Page 11**

**Name 3 EPD’s that are posted on a SIRE SUMMARY or SIRE EVALUATION?**

Birth weight, weaning weight, yearling weight, maternal milk, marbling, etc.

## **FEEDS, FEEDING AND CAREERS**

### **Page 17**

**What are 4 key items that must be on a feed label?**

Net weight, product name & brand name, drug additives, guaranteed analysis of the feed, directions for use, and cautionary statements.

## **HEALTH AND REPRODUCTION**

### **Page 21**

**What is the disease name for a contagious skin disease of cattle that are 1 to 2 inches in diameter where hair is lost and a slightly raised crustiness appears? It is caused by a fungus.**

Ringworm

### **Page 23**

**Name 3 parts of a bull’s reproductive tract?**

Epididymis, penis, retractor penis muscle, scrotum, sheath, sigmoid flexure, and testicles

### **Page 25**

- 1. What is fertilization?**  
The union of sperm from the male with an ovum from the female
- 2. What is ovulation?**  
The release of an ovum from the follicle on the ovary.
- 3. About how long is gestation in beef cattle?**  
285 days
- 4. What reproduction tool manipulates reproductive processes so that female cattle will come into heat at a predicted time range?**  
Estrous Synchronizaton
- 5. What does A.I. stand for?**  
Artificial Insemination

### **Page 27**

## **What is a way to check that a cow is pregnant?**

Rectal palpation, ultrasound

### **Page 29**

#### **1. What are the 3 stages of parturition?**

Stage 1: Uterine muscle contracts, cervix dilates

Stage 2: Begins with the emergence of the feet or the water sac and eventually the calf moves from the uterus, through the cervix and through the birth canal.

Stage 3: The fetal membranes are passed.

#### **2. Describe 3 presentations that are difficult to deliver when a cow is calving:**

Head back, one leg back, upside down, or crosswise, both front legs back, backwards

#### **3. What is the safest way to remove a calf that is too large?**

Cesarean Section

## **MEATS AND MARKETING**

### **Page 31**

#### **1. What are 3 parameters that are considered when evaluating a carcass for muscling?**

Length, width, thickness, bulge, and plumpness of the round, width & fullness through the sirloin and short loin, size of the rib eye, width of the rib and muscle development in the chuck.

#### **2. What are 3 quality attributes to be considered in grading quality?**

Maturity, marbling, firmness of the lean, texture of the lean, and lean and fat color.

#### **3. Why is marbling important to a piece of meat?**

Important for flavor and it influences juiciness.

## **BEEF TALK 3**

#### **1. What is the procedure called where semen is manually placed into the reproductive tract of the female with the purpose of getting a pregnancy?**

Artificial Insemination

#### **2. Line breeding or inbreeding, mating of related animals is also called?**

Close breeding

#### **3. What is the term used to refer to a disease that can be readily transmitted from one animal to another?**

Contagious

#### **4. What is another name for 'heat'?**

Estrus

#### **5. What is the term used to refer to the amount of feed it takes to gain one pound of weight?**

Feed efficiency

6. **What is the ability of an animal to reproduce called?**  
Fertility
7. **What is the market price?**  
The price paid by the packer for cattle.

**4-H BEEF QUIZ BOWL QUESTIONS  
(WITH ANSWERS FOR JUDGING)**

- 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
- 11) The grades of beef for young market animals are.  
A. Prime, Choice, Select, Standard
- 12) The grades of beef for old market animals are.  
A. Commercial, Utility, Cutter, Canner
- 13) What is the length of the gestation period of a cow?  
A. 285 days (9 months and 7 days).
- 14) What feed helps your animal grow and build muscle?

A. Proteins

- 15) Name two feeds for cattle that are a good source of protein.  
A. Cottonseed, Soybean, Linseed, Alfalfa Hay
- 16) What do you call high energy source feeds?  
A. Carbohydrates
- 17) Name 3 carbohydrate type energy feeds.  
A. Barley, Corn, Oats, Wheat, Milo, Beet Pulp, Molasses
- 18) What is the Food Conversion Ratio; FCR?  
A. FCR is the amount of grain you get from every pound of grain you feed.
- 19) What is the Food Conversion Ratio for cattle?  
A. The Food Conversion Ratio for cattle is 8:1
- 20) Feed that is low in digestibility and high in fiber is called what?  
A. Roughage
- 21) Give an example of roughage or high fiber feed.  
A. Hay or Pasture
- 22) A feed that is highly digestible and low in fiber is called what?  
A. Concentrate
- 23) What is the term “finish” describing?  
A. Degree of fatness and readiness for market.
- 24) What is the term used for describing the process of fattening, training, and grooming an animal for show or sale called?  
A. Fitting
- 25) What is a beef animal that has one or both parents not registered with a breed association called?  
A. Grade Animal
- 26) A table that gives a line of ancestors for an animal; a genealogical tree, is called what?  
A. Pedigree
- 27) T or F? Genetics is the study of how an animal processes its food.  
A. False. Genetics is the study of how animal or plant characteristics are passed from parent to offspring.
- 28) T or F? A small amount of marbling is necessary for juiciness and flavor of meat.

A. True

29) T or F? Yield (Dressing Percent) is the weight (yield) of the carcass as a percent of live weight.

A. True. Example: A 1000 lb. live steer yields a 600 pound carcass. The “dressing percent” is 60% (600 divided by 1000x100%=60%).

30) T or F? A “Rib Eye” is a cross section of the loin muscle (longissimus dorsi). The large muscle of a rib steak or loin chops.

A. True

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 means 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

#### SHOWMANSHIP

1) T or F? You should have a scotch comb.

A. True, (Comb: Scotch or flat.)

2) T or F? Circle the ring clockwise at a brisk walk

A. True

3) T or F? While leading the calf, the showmen walks to the left of the calf’s head, so the judge will have a full front view of the animal.

A. True

4) T or F? The halter shank needs to be loose at all times, so the animal can move freely about.

A. False. The halter shank needs to be tight at all times, so the exhibitor can feel all



movements of the calf.

5) T or F? You must keep your eyes on the judge at all times, besides to look where you are going and to set up your animal

A. True

6) T or F? You can “Place the animals feet” with pressure on the halter, combined with the use of the show stick.

A. True

7) T or F? After the judge moves on to the next animal, comb your animals hair back in place, if it was touched, and make sure the animal is reset properly.

A. True

8) T or F? When instructed to change place in line, lead out forward and turn the animal to the right (clockwise). Keep the calf between the judge and yourself. Lead back through the spot you just left and lead to the proper place. Avoid making very short turns as this detracts from the animal’s appearance.

A. True

9) T or F? The judge's first lineup is generally their final placing. You can relax now and quit “showing”.

A. False. The judge's first lineup is generally not their final placing, and so you shouldn't become discouraged or quit showing until the class is dismissed.

10) T or F? Part of having “Good Ethics” is having a good attitude only if you win.

A. False. A good showman will always be courteous and maintains a sportsmanlike attitude throughout the show, whether winning first or not.

11) T or F? You do not need to shave/ clip your animal, that’s for swine only.

A. False. You do clip your animal before showing it.

12) T or F? It does not matter whether you get your calf used to being tied. It is only important to train it to wear a halter and walk.

A. False. It has to be tied up at the fair for the whole week.

# General Livestock Sample Questions from “Animals In Pursuit”

## **Beef**

- Q. When selecting a meat animal on structural soundness, special emphasis should be placed on what body parts?  
A. Feet and legs
- Q. What is the minimum recommended resting area for a market beef animal?  
A. 25 square feet
- Q. Corn silage, pasture, and hay are examples of what type of feed?  
A. Roughages
- Q. When is the best time to start training a beef calf to lead?  
A. At a young age
- Q. Name a piece of equipment used to dehorn a newborn calf.  
A. Caustic stick, tube calf dehorner or heat dehorning iron
- Q. What is a learn by doing non-competitive 4-H activity involving several mini learning stations called?  
A. Skillathon
- Q. What is the sheet that lists the sire and dam of a purebred animal called?  
A. Registration paper
- Q. What is the minimum area recommended for an outside exercise area for a market beef animal?  
A. 400 square feet
- Q. What grain raised on Minnesota farms is the most common concentrate in beef rations?  
A. Corn
- Q. What type of halter is best for breaking a beef calf to lead?  
A. Rope halter
- Q. When is the best time to dehorn a calf?  
A. From one day to three months of age
- Q. What is the event called that involves judges, several classes of 4 animals of beef, sheep and swine?  
A. Judging Contest
- Q. At what age should a beef heifer be bred?  
A. 15-18 months
- Q. A feed box or bunk for a market beef animal should be how far from the ground or floor?  
A. 18-24 inches
- Q. What is the most important vitamin for a breeding beef animal?  
A. Vitamin A
- Q. From what side do you lead a beef calf?  
A. Left side
- Q. What is the process called in which the testicles of male calves are removed?  
A. Castration
- Q. What is the name for a two minute presentation in a Judging Contest where the participant discusses a class of livestock?  
A. Oral Reasons
- Q. What is the amount of fat on a market animal called?  
A. Finish
- Q. How many linear feet of bunk space does a market beef animal require?  
A. 2 ½ to 3 feet
- Q. Calcium and phosphorous are examples of what type of nutrients?  
A. Minerals
- Q. What is the name of a tool used by beef showmen to adjust the legs on a beef calf?  
A. Show stick
- Q. What is a piece of equipment used for castrating a calf?  
A. Sharp knife, emasulator, burdizzo or elastrator
- Q. What are the birth dates, adjusted weaning weights, adjusted yearling weights called in a judging contest?  
A. Performance data
- Q. By what date each year must market beef steers in Minnesota be weight and identified?  
A. February 15

Q. How many gallons of water will a 1000 pound steer drink per day if the outside temperature is 50°F?  
A. 8-10 gallons

Q. What feed ingredient is normally fed free-choice to beef cows on pasture?  
A. Salt or mineral

Q. If a show stick is used by a beef showmen to apply pressure behind the dew claw, what direction will the calf likely move his foot?  
A. Forward

Q. What is a common parasite of cattle?  
A. Fly, grub, lice or worm

Q. In a class of 4 animals in a judging contest, how many possible placings are there?  
A. 24

Q. What is a beef animal that naturally lacks horns called?  
A. Polled

Q. How many gallons of water will a 100 pound steer drink per day if the outside temperature is 90°F?  
A. 17-19 gallons

Q. Besides a balanced ration, a clean, fresh supply of this item is essential in feeding market beef?  
A. Water

Q. When a beef showmen uses a show stick to press back between the toes in the left of the foot, the calf will likely move the foot what direction?  
A. Backwards

Q. What are two causes of scours?  
A. Soured feed, feed too finely ground, too much protein, or overfeeding of legume hays

Q. What is the maximum length of time a set of oral reasons should be?  
A. 2 minutes

Q. Name a popular British beef breed that is black?  
A. Angus

Q. What season of the year do most beef cows calve?  
A. Spring

Q. What is a commercial feed used to raise the protein level of beef ration called?  
A. Protein Supplement

Q. Doing things such as brushing, washing and clipping are referred to as what in a beef project?  
A. Grooming

Q. What is the act of removing horns from cattle called?  
A. Dehorning

Q. How far should a person stand from the judge when presenting oral reasons?  
A. 6-8 feet

Q. How many animals are in a class at most judging contests?  
A. 4

Q. How many months after calving will a beef cow normally come into heat?  
A. 1 ½ to 2 months

Q. A normal beef steer will consume what percent of its body weight in feed each day?  
A. 2.5 to 2.5%

Q. What is the main reason for good grooming in a beef animal?  
A. To improve the appearance of the animal

Q. What is the normal temperature of a cow?  
A. 101.0°F or 38.3°C

Q. When giving oral reasons on a pair of animals, what are the merits for the second place animal in a pair called?  
A. Grants

Q. What causes dark cutting beef?  
A. A long term stress period prior to slaughter

Q. What piece of equipment is necessary to weight calves for performance records?  
A. Scale

Q. If a steer is fed too much roughage relative to grain, how may it's visual appearance change?  
A. He will become heavy middled or paunchy

Q. Ideally, how often should a beef calf be brushed and combed?  
A. Daily

- Q. What is the normal pulse rate for cattle?  
A. 60-70 beats per minute
- Q. What is meeting in a club or county in a specific project area called?  
A. Project meeting
- Q. Rump roast comes from what beef wholesale cut?  
A. Round
- Q. When figuring an adjusted weaning weight, name one of the adjustment factors.  
A. Age of calf; sex of calf; age of the Dam
- Q. What feed grain is the most common energy source in a market beef ration?  
A. Corn
- Q. How often should a beef calf be washed the final 2 months before a County Fair?  
A. Once per week
- Q. What is the normal respiration rate for cattle?  
A. 10-30 per minute
- Q. For most 4-H livestock project members the biggest livestock show held locally is what event?  
A. County Fair
- Q. Porterhouse steak comes from what beef wholesale cut?  
A. Loin or short loin
- Q. Once a heifer has a calf she is called what?  
A. Cow
- Q. Name a method used to get supplemental feed to beef calves on pasture prior to weaning?  
A. Creep Feeding
- Q. If all the soap is not rinsed out of a beef calf during washing it will result in what condition?  
A. Dandruff
- Q. What are two factors which may influence body temperature in a healthy animal?  
A. Weather, exercise, disease, excitement, time of day
- Q. What livestock group sponsors and coordinates the 4-H Livestock Auction at the Minnesota State Fair?  
A. Minnesota Livestock Breeder's Association
- Q. T-bone steak comes from what beef wholesale cut?  
A. Loin or short loin
- Q. What precautions can be taken with dehorning tools to prevent infections?  
A. Dip tools in a disinfectant solution prior to and between each use
- Q. Name 2 feed stuffs commonly used in creep feed for beef calves?  
A. Corn, oats, protein supplement
- Q. What is done to a beef calf to improve the way the calf stands and walks?  
A. Trim the hooves (feet)
- Q. Where is a cow's pulse taken?  
A. Outside of the jaw, just above its lower border
- Q. What is the name of an event where beef steers are weighed and identified?  
A. Beef Weigh-In

## GOAT QUIZ BOWL QUESTIONS

1. Goats can be bred by artificial insemination. True or False.

Answer: True

2. What were the first dairy goats to be cultivated widely in this country?

Answer: Toggenburgs

3. What are the four compartments of a goat's stomach?

Answer: Rumen, Reticulum, Omasum, Abomasum

4. How long is a doe's gestation period?

Answer: Approximately 5 months OR 145-155 days

5. What the proper term for a male goat?

Answer: Buck

6. You can make butter out of goat's milk? True or False.

Answer: True

7. Which of the following animals is not a ruminant?

a. sheep b. cows c. horses d. deer

Answer: C

8. Which of following does not cause a goat to have ketosis:

a. feeding an imbalanced diet

b. sudden dietary changes

c. feeding too many vitamins during pregnancy

d. underfeeding during advanced pregnancy

Answer: C

9. Which one of the following minerals is highly toxic for goats:

a) phosphorous; b) calcium; c) lead

Answer: (c) Lead

10. What is homogenization?

Answer: Breaking down and reducing size of fat globules in milk

11. A pH of 7 is considered:

a) acidic b) neutral or c) basic

Answer: B

12. What is goat meat called?

Answer: Chevon, Cabrito

13. What is the major physical difference between goat and cow's milk?

Answer: Natural Homogenization in goats milk

14. What kind of a doe has very small ears?

Answer: LaMancha

15. Spell Abomasum

16. What is the main food of a kid 0 to 3 days of age?

Answer: Colostrum

17. What bacteria causes brucellosis?

Answer: Brucella melitensis

18. What breed of goat is all white?

Answer: Saanen

19. A mature doe usually has two kids. True or False.

Answer: True

20. How often should you trim your goat's hooves?

a) once a year

b) every 3-6 weeks

c) once a week

Answer: B

21. Describe two symptoms of ketosis in a goat.

Answers: depressed, off-feed, wobbly gait, acetone odor on breath, constipation, mucouscovered feces, drop in milk production

22. Name three general types of internal parasites?

Answer: Coccidia, liver flukes, lungworm, intestinal roundworms and stomach roundworms

23. Name two external parasites of goats?

Answer: Lice, mange mites, ticks, fleas, flies screw worms, and fly maggots

24. What should a goat's navel be dipped in immediately after being born?

Answer: Iodine

25. What is a goat's normal heartbeat per minute?

Answer: 70-95

26. How much should a young doe weigh before it is bred?

Answer: 80-90 lbs.

27. What disease develops blisters on the lips and gums?

Answer: Contagious Ecthyma or sore mouth (orf)

28. Founder affects what part of the body?

Answer: Feet

29. What hormone begins and helps the process of birth?

Answer: Estrogen

30. Which of the following is not a symptom of foot rot?

a. lameness b. swelling of foot c. heat in foot d. runny nose

Answer: d

31. What does double-teated mean?

Answer: Two teats on the same half of the udder

32. What vitamin is essential for normal clotting of blood?

Answer: Vitamin K

33. What is the smallest breed of goat?

Answer: Pygmy

34. Which of the following is not a sign of parasitic invasion?

a. limping

b. general unthriftiness

c. rough hair coat

d. paleness of mucous membranes

e. weight loss

Answer: A

35. The period between heats in does is how many days?

Answer: 18-21 days

36. If the topline tends to dip, bringing the does hind legs closer to the front legs

will help raise it. True or False

Answer: True

37. What do the 4 H's stand for?

Answer: Head, Health, Hands, Heart

38. Young round worms reach maturity in about \_\_\_ weeks?

Answer: 2-6 weeks

39. The major cause of suppurative arthritis is

a. virus, b. yeast, c. bacteria, d. molds

Answer: C

40. Goats need what two minerals in the largest amounts?

Answer: Calcium and Phosphorus

41. What do you call a goat that naturally has no horns?

Answer: Polled

42. If the doe is a little steeper in the rump than is desirable, what will help conceal that fault?

Answer: Stretching the hind feet farther from the front feet

43. What is another name for Johne's Disease?

Answer: Paratuberculosis

44. What disease is treated using early doses of 2 - 3 ounces of propylene glycol given orally?

Answer: Ketosis

45. When showing dairy goats, walking backwards is acceptable.

Answer: False

46. Which is the largest of the four stomachs of a kid?

Answer: Abomasum

47. What do you call the "tassles" some goats have on their necks?

Answer: Wattles

48. Another word for afterbirth is \_\_\_\_\_.

Answer: Placenta

49. Which of the following is an internal parasite of goats?

- a. lungworm
- b. roundworms
- c. coccidia
- d. liver flukes
- e. all of the above

Answer: E

50. Which of the following items do not indicate your animal is ill:

- a. dull coat b. loss of appetite
- c. even gait d. diarrhea
- e. all of the above

Answer: C

51. How old should a buck be before he is used for breeding?

Answer: 6 months

52. Which of the following is not a trace mineral?

- a. copper b. iodine, c. phosphorus d. zinc

Answer: C



53. Which of the following flowering shrubs is harmful when eaten by goats?

- a. Roses
- b. Lilacs
- c. Rhododendron

Answer: C

54. A goat has how many dewclaws.

Answer: 4

55. What causes white muscle disease?

Answer: Selenium deficiency

56. Transmission of footrot is aided by

- a. wet bedding
- b. normal pasture conditions
- c. bedding with straw regularly

Answer: A

57. Ringworm is what kind of disease?

Answer: Fungal

58. Milk is at what temperature when it comes from the goat?

- a. 42 degrees F.
- b. 88 degrees F.
- c. 103 degrees F.
- d. 128 degrees F.

Answer: C

59. Milk is one of the best sources of what mineral for humans?

Answer: Calcium

60. Which of these is a hormone?

- a) iron; b) calcium; c) iodine; d) progesterone e) selenium

Answer: D

61. The thurl is located between what two bones?

Answer: Hip and pin

62. Suitable housing for a dairy goat should protect against drafts and rain. True or False.

Answer: True

63. Name two fat soluble vitamins.

Answer: A, D, E, K

64. A normal goat has how many ovaries?

Answer: Two

65. When entering the ring, which way do you circle the ring?

Answer: Clockwise

66. Goats are used to produce mohair. True or False.

Answer: True

67. What is laminitis?

Answer: Inflammation of the tissue of the feet.

68. Prostaglandin is a \_\_\_\_\_.

Answer: Hormone

69. What vitamin deficiency is associated with white muscle disease?

Answer: Vitamin E

70. What is another name for a twisted stomach?

Answer: Displaced abomasum

71. When kidding, which legs of the kid usually come first.

Answer: Front

72. When in the show ring, it is unacceptable to ask the judge to repeat a question or maneuver request.

True or False.

Answer: False - if you are not clear on the question, ask to have it repeated.

73. What ligament supports the udder?

Answer: Medial (Median) suspensory

74. What vitamin is required for normal vision?

Answer: Vitamin A

75. The Chine is located in front of, or in back of the loin?

Answer: In front

76. Another name for Type D Enterotoxemia is \_\_\_\_\_.

Answer: Overeating disease or pulpy-kidney disease

77. Urinary calculi is caused from a excess of what mineral in the diet?

a. iron b. copper c. phosphorus d. zinc

Answer: C

78. Wilted wild cherry leaves, when eaten, can kill a goat. True or False.

Answer: True

79. What is the desirable pH level of the rumen?

Answer: 6.2 - 6.8

80. Lameness can be a disqualification in a showring. True or False.

Answer: True

81. Caseous Lymphadenitis produces abscesses internally which may result in chronic debilitating disease. True or False.

Answer: True

82. Goats, unlike humans, cows, chickens and swine, are immune to tuberculosis. True or False.

Answer: False

83. One aid for controlling parasites is to keep food and water from being contaminated by manure. True or False.

Answer: True

84. Which one of the following is not a roughage?

a) oat hay b) alfalfa c) grass; d) corn.

Answer: D

85. Which type of vitamins are Biotin and Riboflavin?

Answer: B Vitamins

86. Name six breeds of dairy goats.

Answer: a. Alpine b. LaMancha c. Nubian

d. Oberhasli e. Saanen f. Toggenburg g. Nigerian Dwarf

87. Lice are what kind of parasites?

Answer: External

88. What is a newborn goat called?

Answer: Kid

89. Some goats are naturally hornless. True or False.

Answer: True

90. Liver flukes are

a. external parasites b. internal parasites

c. bacteria d. protozoa

Answer: B

91. Can sore mouth be transmitted to humans from goats?

Answer: Yes

92. Can tetanus be prevented by vaccination:

Answer: Yes

93. What is inflammation of the mammary gland called?

Answer: Mastitis

94. What do the initials "AI" stand for?

Answer: Artificial insemination

95. Coccidiosis is caused by a microscopic protozoan which interferes with nutrient absorption of the intestinal tract, causing a reduction of rate and efficiency of gain.

True or False.

Answer: True

96. Are wattles a breed characteristic?

Answer: No, a family trait

97. Spell: OBERHASLI

98. What disease causes abortions and circling disease?

Answer: Listeriosis

99. Which is closer to the head?

a. loin b. thurl c. chine d. stifle

Answer: C

100. A lack of what nutrient will result in the death of an animal the quickest?

Answer: Water

101. Is selenium a vitamin, mineral, or a protein?

Answer: Mineral

102. Spell: RETICULUM

103. What is the normal temperature of a goat?

Answer: 101 to 104 degrees

104. The hock is above or below the pastern?

Answer: Above

105. Which stomach compartment is known as the fermentation vat?

Answer: Rumen

106. Which two minerals are important in building bones and teeth?

Answer: Calcium and phosphorus

107. Polioencephalomalacia is caused by what deficiency:

a) Vitamin A b) Thiamine c) calcium d) phosphorus

Answer: B

108. How many knees does a goat have:

Answer: Two

109. In which compartment of the ruminant stomach are we most apt to find hardware and small pebbles?

a. omasum

b. rumen

c. reticulum

Answer: C

110. The withers are located between the hipbones and the pin bones. True or False.

Answer: False

111. Pygmy goats cannot be milked. True or False

Answer: False

112. The poll is located just to the rear of the thurls. True or False.

Answer: False

113. The stifle joint is part of the front leg and shoulder region. True or False.

Answer: False

114. In a dairy goat, which compartment of the stomach has the greatest volume?

Answer: rumen

115. Metritis is an infection of what organ?

Answer: uterus

116. Which is longer, the small intestine or the large intestine?

Answer: Small

117. The true genetic merit of a sire can change greatly through his lifetime. True or False.

Answer: False

118. What compartment of a goat's stomach is the true stomach?

Answer: Abomasum

119. What do these symptoms indicate: progressive lameness - swollen foot up into the animal; cracking of tissue between claws.

Answer: foot rot

120. When e goat owner turns his goats on early spring pasture with a predominant clover stand. Before he does, he feeds his herd dry hay. Why does he do this?

Answer: Help prevent bloating

121. What is riboflavin?

a. A vitamin b. B vitamin c. protein

Answer: B

122. In the front of their mouths, goats have teeth

a) only on the top, b) only on the bottom, c) on both top and bottom.

Answer: B

123. What is another name for acetonemia?

Answer: Ketosis

124. Which ductless gland secretes the hormone thyroxine?

Answer: thyroid gland

125. Is the thyroid gland important in the control of growth in goats?

Answer: Yes

126. What is the name of the goat mohair comes from?

Answer: Angora

127. What is the name of the fourth section of the goat's stomach?

Answer: Abomasum

128. What two types of microorganisms are found in the rumen?

Answer: Bacteria and protozoa

129. Transmission of foot rot is aided by wet bedding. True or False.

Answer: True

130. The goat is thought to be the first domesticated animal. True or False.

Answer: True

131. Feet and legs are a part of which part of the goat judging scorecard?

Answer: General appearance

132. What would you treat with ivermectin?

Answer: Worms

133. Alfalfa has a high content of what major mineral?

Answer: Calcium

134. Which one of these is not a vitamin?

a. thiamine b. riboflavin c. selenium d. niacin

Answer: C

135. The green color of alfalfa hay suggests the presence of what vitamin?

Answer: Vitamin A

136. Which of the following is not a disqualification?

a) total blindness b) blind teat

c) pendulous udder d) double teats

Answer: C

137. What is the average length of life in a goat?

Answer: 6 years

138. Is a pH of 7.5 for the rumen normal?

Answer: No

139. Alfalfa hay is an excellent source of what nutrient for dairy goats.

Answer: Protein

140. Body fat is an excellent storehouse of:

- a) calcium
- b) fiber
- c) protein
- d) energy

Answer: D

141. When entering the show ring, in which direction do you walk?

Answer: clockwise

142. True or False. In the show ring it is OK to walk behind your goat.

Answer: False

143. True or False. In the show ring you should never look directly at the judge.

Answer: False

144. True or False. If your goat is acting up in the ring it is OK to pet it.

Answer: False

145. What is a main difference between a showmanship class and a breed class?

Answer: In showmanship both you and the goat are judged, in breed class only the goat is judged.

146. What should you do if the judge asks you to make a maneuver with your goat and you either don't hear or understand? Should you a) make a guess as to what the judge said; b) politely ask the judge to repeat the request; c) follow what everyone else is doing.

Answer: B

147. In showmanship why is it not a good idea to wear a lot of jewelry or makeup?

Answer: It draws attention to the exhibitor and away from the goat.

148. If the judge says your goat is not in show condition, what does that mean?

Answer: It means the goat is either too thin or too fat, neither of which is healthy for a goat, and your goat will not place well.

149. What is the purpose of the Dam and Daughter class?

Answer: To show the improvement in the daughter over the dam by breeding to a buck with better characteristics that the dam has.

150. How can you weigh your goat if you don't have a scale?

Answer: By using a cloth measuring tape around the heart girth and a conversion table that translates inches to pounds.

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## New Jersey 4-H Goat Quiz Bowl Sample Questions

4-H members competing in the Goat Quiz Bowl as part of the NJ 4-H Goat Extravaganza are encouraged to study the National 4-H Dairy Goat (\$11.55 for series of four books) and National 4-H Meat Goat (\$11.55 for series of four books) curriculum available at 4-hmall.org. For the 2013 event held January 5, most questions will come from the sample questions listed here.

Questions	Answers
What are the four compartments of a goat's stomach?	rumen, reticulum, omasum, abomasum
How long is a doe's gestation period?	approximately 5 months OR 145-155 days
What is the proper term for an uncastrated adult male goat?	buck
You can make butter out of goat's milk. True or False.	True
Which of the following animals is not a ruminant? a. sheep b. cow c. horse d. deer	c. horse
What is homogenization?	breaking down and reducing size of fat globules in milk
Goats can be bred by artificial insemination. True or False.	True
A pH of 7 is considered: a) acidic b) neutral or c) basic	b. neutral
What is goat meat called?	chevon, cabrito
What is the major physical difference between goat and cow's milk?	smaller fat globules in goat milk (natural homogenization in goats milk)
What kind of a doe has very small ears?	LaMancha
What kind of a doe has very long ears?	Nubian, Boer
What is the main food of a kid 0 to 3 days of age?	colostrum
Regular milking machines can be adapted for goats. True or False	True
How many times a year should a doe freshen?	once
What breed of goat is all white?	Saanen
Mature does most commonly have two kids. True or False.	True
How often should you trim your goat's hooves?	every 3-6 weeks
What temperature of water should be used to rinse milking equipment immediately after use.	110-120 F
If the topline tends to dip, should the doe's head be held a little higher or a little lower?	lower
Describe two symptoms of ketosis in a goat.	depressed, off-feed, wobbly gait, acetone odor on breath, constipation, mucous-covered feces, drop in milk production
Name two common types of goats other than dairy goats.	meat, fiber, companion/pet
What is the biggest cost item in producing milk?	feed
Name three internal parasites?	coccidia, liver flukes, lungworm, intestinal roundworms and stomach roundworms
Describe two areas on the goat involving "Dairy Character".	neck, withers, ribs, flank, thighs, skin
Why should you not feed strong flavored feeds such as onion or cabbage within four hours before milking?	milk picks up flavor - milk will pick up odor or taste
Name two external parasites of goats?	lice, mange mites, ticks, fleas, flies, screw worms, and fly maggots
What kind of doe comes from the French Alps?	Alpine
What should a goat's navel be dipped in immediately after being born?	iodine
What is a goat's normal heartbeat per minute?	70-95
How much should a young, standard-sized dairy goat doe weigh before it is bred?	80-90 lbs.
What is minimum recommended housing area per goat:	12-20 sq. ft.
Which of the following is not a symptom of foot rot? a. lameness b. swelling of foot c. heat in foot d. runny nose	d. runny nose
How many compartments does a goat stomach have?	four

Which nutrient is required in the largest amount?	water
What vitamin is essential for normal clotting of blood?	Vitamin K
Name one of the two smallest breeds of goats.	Pygmy or Nigerian Dwarf
If the topline tends to dip, bringing the does hind legs closer to the front legs will help raise it. True or False	True
What hormone is responsible for maintaining pregnancy?	progesterone
Why is it not good to use copper, iron or chipped enamel utensils with milk?	milk can acquire off flavors from metal
What is a test for determining internal parasite invasion?	egg count in stool specimen
Name a recommended method of identifying your goats.	ear tagging, tattooing, microchipping
What is the proper term for a female goat?	doe
What do the letters ADGA stand for?	American Dairy Goat Association
What is the milk producing gland of the doe?	udder
What word describes the time when a doe is in milk?	lactation
What do you call a goat that naturally has no horns?	polled
What word describes the doe when she is not milking?	dry
What muscle in the teat stops the milk from leaking out?	sphincter
How much does a gallon of goat milk weigh?	8.6 lbs.
Which is the largest of the four stomachs of a kid?	abomasum
What is the term used for removing a young kid's horns?	disbudding
What do you call the "tassles" some goats have on their necks?	wattles
Another word for afterbirth is _____.	placenta
What are the four major parts of the dairy goat scorecard?	general appearance; body capacity; dairy character; mammary system
What is meant by the initials DHIR?	Dairy Herd Improvement Registry
A goat has how many dewclaws.	four
What is the normal birth weight of a kid?	5-7 pounds
What causes white muscle disease?	selenium deficiency
Why doesn't a healthy goat require additional vitamin B and C supplements?	she can synthesize them in the rumen
Milk is at what temperature when it comes from the goat?	103 degrees F.
Milk is one of the best sources of what mineral for humans?	calcium
What is kidding?	female giving birth to young
The Nubian has upright ears. True or False.	False - it has pendulous ears
What is the best food for kids less than 4 months old?	whole goat's milk
What is the most obvious characteristic of the LaMancha?	short ears
Which breed of dairy goat is usually the largest?	Saanen
Give two reasons you should feed your goat a balanced ration.	to maintain health and efficient milk production
What is gestation?	the time in which the doe carries her young (pregnancy)
Mastitis is an inflammation of the _____.	udder
Name two fat soluble vitamins.	Vitamins A, D, E, K
Milk is a good source of what B vitamin?	riboflavin
What do the letters USDA stand for?	United States Department of Agriculture
What does "fitting" mean?	cleaning, trimming, clipping
What is laminitis?	inflammation of the tissue of the feet
Which state has the most goat dairies?	California
Which state raises the most meat goats?	Texas
When kidding, which legs of the kid usually come first.	front
What is a ruminant?	cud chewing animal with a 4-compartment stomach
Define a "kid".	young goat under 1 year of age

What color are the prescribed clothes for showing dairy goats?	white
What vitamin deficiency is associated with white muscle disease?	Vitamin E
Name two indicators of good quality hay:	a. leafiness, b. green color, c. softness, d. small stems, e. good smell
Butterfat percentage of average goats' milk is ____%.	3.5%
List two macro minerals.	calcium, phosphorus, sodium, chloride, magnesium, potassium and sulfur
Goats milk is normally what percentage water?	88%
The science that deals with inheritance is:	genetics
What is the first milk given after kidding?	colostrum
_____ are disease protection protein particles found in colostrum.	antibodies
What is the major cause of death in diarrhea cases?	loss of body fluids
What do we call a buck that has been castrated?	wether
Where is the poll located?	on top of the head
A pronounced Roman nose on any breed other than the _____ is a serious fault.	Nubian
What organization provided the uniform score card for judging?	American Dairy Goat Association
A good disinfectant, used liberally, is one way of guarding against spread of _____.	disease, mastitis, bacteria, etc.
Which one of the following is not a roughage? a) oat hay, b) alfalfa, c) grass, d) corn.	d. corn
The breed of dairy goat most common in the United States is _____.	Nubian
Name the town and state where the American Dairy Goat Association is located?	Spindale, North Carolina
In what part of the whole milk are most of the off flavors found?	fat
Name five breeds of dairy goats.	Alpine, LaMancha, Nigerian Dwarf, Nubian, Oberhasli, Saanen, Sable, and Toggenburg
What term describes the circumference of the chest measured behind the elbows?	girth
What term describes the highest part of the back, where the shoulder blades almost touch?	withers
What is another name of overeating disease?	Enterotoxemia
What term describes the mid section of the body referring to the rib cage area?	barrel
How many teats should a goat have?	two
What term describes the portion of the foot between the dewclaw and the hoof?	pastern
What term describes the projection of the leg behind the pastern?	dew claw
What is a record of a goat's family background called?	pedigree
Where is a goat tattooed?	in the ear or the hairless part of the tail
What do the initials "AI" stand for?	artificial insemination
What is another word for "heat" in goats?	estrus
What breed is known for their high butterfat?	Nubian
What is the accumulation of excessive amounts of gas in the rumen called?	bloat
What is the oldest registered breed of any animal in the world?	Toggenburg



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A lack of what nutrient will result in the death of an animal the quickest?	water
What two important factors are involved in proper pasteurization of milk?	time and temperature
The average length of a doe's estrus cycle is _____.	21 days
Which hormone is responsible for milk let down?	oxytocin
What liquid compound is used to freeze and store frozen semen?	liquid nitrogen
What do we mean by a cloven hoof?	split into two parts
Which stomach compartment is known as the fermentation vat?	rumen
One way to pasteurize milk is to heat it to 145 degrees F for _____ minutes.	30
Which two minerals are important in building bones and teeth?	calcium and phosphorus
Another name for kidding is _____.	parturition
Soybean oil meal and cottonseed meal are what kind of supplements?	protein supplements
How many knees does a goat have:	2
Name two feedstuffs that are high in protein.	cottonseed oil meal, soybean, linseed oil meal, canola meal, alfalfa
A doe will require less, more, or the same amount of feed after her kid is born.	more
When you enter the show ring, do you lead in a clockwise or counter-clockwise direction in the circle?	clockwise
What causes hardware disease?	goats eating sharp objects (nails, wire, etc.) that puncture the stomach wall
Name one meat breed of goat characterized by long pendulous ears?	Boer (another rarer breed would be Savanna)
The Boer goat originated in what country?	South Africa
Name three products made from goat milk.	cheese, ice cream, yogurt, fudge, butter, soap
Which breed of dairy goat produces the most milk?	Saanen
When showing meat goats, what kind of clothing should the exhibitor wear?	clean clothes, dark pants
During what season of the year are both dairy and meat does most likely to get pregnant?	Fall
When reproducing, the doe provides the egg cell. What does the buck provide?	sperm
When reproducing, the buck provides the sperm cell, what does the doe provide?	egg
What kind of digestive system does a goat have?	ruminant
What activity distinguishes a ruminant from a non-ruminant?	it chews its cud
What is often added to feed to control dustiness?	molasses

## SHEEP QUIZ BOWL STUDY QUESTIONS

1. Where did the sheep breed Columbia develop?  
A. U.S.A.
2. What sheep breed has the special qualities of being a sire breed and having a fast growth rate?  
A. Hampshire
3. What breed of sheep can breed out of season?  
A. Dorset
4. What all-white sheep breed was developed in Scotland and is known for easy lambing and good milking capabilities?  
A. Cheviot
5. This breed of sheep has the finest fleece and originated in Spain, what breed is it?  
A. Merino
6. Name the sheep breed from England that has a mouse-brown face.  
A. Southdown
7. What are white-face breeds known as?  
A. Ewe breeds
8. What are black-face breeds called?  
A. Ram breeds
9. Sheep growing diets have about what percent crude protein?  
A. 15% - 17%
10. Sheep finishing diets have about what percent crude protein?  
A. 12% - 14%
11. At market time a meat lamb should weigh how many pounds?  
A. 115 pounds – 135 pounds
12. Which type of lamb takes longer to grow, a market lamb or a wool lamb?  
A. Wool lamb
13. What is one sheep judging term?  
A. Stronger topped; Neater and leaner in the fore and rear flanks; Trimmer thru the throat; chest region along the underline; Longer thru the loin, etc.
14. How do you prevent pneumonia in sheep?  
A. Provide adequate ventilation, prevent drafts, and reduce stress

15. What is the main symptom of scours in sheep?  
A. Diarrhea (loose stool) that leads to dehydration
16. How long before lambing should ewes be sheared or crotched?  
A. 3 – 4 weeks
17. Why is shearing and crotching done in ewes?  
A. To allow for cleaner lambing and no dirty tags for lambs to suck on
18. What is the first thing that should be done when a lamb is born?  
A. Clean the nostrils and mouth of uterine membranes to allow newborn lamb to breathe.
19. Name 2 parts of a wool fiber?  
A. Tip, shaft, root, epidermis, cortex, medulla
20. What is the wool from one sheep called?  
A. Fleece
21. Which type of sheep, wool or market breeds, have their hair coat ‘slick shorn’ when they are shown?  
A. Market breeds
22. What is the condition called where a sheep has lost some, but not all, or its teeth?  
A. Broken Mouth
23. What is docking?  
A. Cutting the tails short on baby lambs
24. What is dual purpose sheep breed used for?  
A. Both wool and meat
25. What is a female sheep called?  
A. Ewe
26. What is a flock?  
A. Small group of sheep
27. What is mutton?  
A. The meat from mature sheep
28. What is an animal called that is born without horns in a species that sometimes has them?  
A. Polled

29. What are dung locks, floor sweepings or stained pieces of wool called?  
A. Tags
30. What is the major factor that affects cut ability in a carcass?  
A. Fatness
31. Where is fatness measured?  
A. At the 12th rib over the rib eye muscle.
32. When should lambs be introduced to creep or grain?  
A. When they begin nursing.
33. What are 2 signs of lambing?  
A. The udder will begin to fill, the ewe will go off by herself, the ewe is restless, the ewe will lie down and get up often, stretching
34. Name one tool used for docking tails on lambs  
A. Emasculator, burdizzo, elastic band
35. How long should the tail be left when docking?  
A. At least 2 tailbones long
36. What is a symptom of rectal prolapse?  
A. Rectum hangs out
37. What is the disease that causes a lamb to have stiff muscles and a hunched back?  
A. White Muscle Disease
38. What is the cause of White Muscle Disease?  
A. Lack of selenium and/or Vitamin E
39. What disease is the biggest problem in the sheep industry that affects the central nervous system and has no known cure?  
A. Scrapie
40. What term is used to describe practices that are done to ensure that only animals that will produce safe and wholesome meat are being set to market?  
A. Quality Assurance
41. How old are most lambs when they are harvested?  
A. 5 – 7 months of age
42. What is the oral administration of a liquid, usually medicine for internal parasites/  
A. Drenching

43. What is a written statement giving the record of an animal's ancestry?  
A. Pedigree
44. About how many different breeds of sheep are there in the world?  
A. 914
45. What is the practice of feeding and managing the ewes so that they are gaining weight when the breeding season begins?  
A. Flushing
46. What is refined wool grease?  
A. Lanoline
47. Name three \*types\* of sheep breeds.  
A. Fine wool, fiber, meat/mutton, hair, dual-purpose, dairy
48. If a person refers to the top side of a pedigree, they are referring to the \_\_\_\_\_ side.  
A. Paternal
49. What is the term used to describe the characteristics of an animal that can be seen or measured?  
A. Phenotype
50. What country has the most sheep in the world?  
A. Australia



## **Kansas 4-H Sheep Quiz Bowl Manual**

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## ANATOMY SECTION A

1. What are the nitrogen compounds called which make up proteins?  
A: *Amino acids*
2. Which color blood cells play the biggest role in prevention of disease in an animal?  
A: *White Blood Cells*
3. Substances produced from glands with no ducts that act as chemical messengers in the body are known as  
A: *Hormones*
4. Blood consists of two major components. These are \_\_\_\_\_ and \_\_\_\_\_  
A: *Blood cells and plasma*
5. Body cells are made up primarily of \_\_\_\_\_  
A: *Water*
6. When you study the structure of an animal you study its \_\_\_\_\_  
A: *Anatomy*
7. The \_\_\_\_\_ is the primary filtering point in an animal's body.  
A: *Liver*
8. Name two parts of the central nervous system.  
A: *Brain and spinal cord*
9. When discussing the nervous system, the letters "CNS" stand for \_\_\_\_\_  
A: *Central Nervous System*
10. The structures that consist of strong fibrous bands that hold muscle and bone together are called \_\_\_\_\_  
A: *Tendons*
11. Name the connective tissue that consists of strong fibrous bands that helps connect bone to bone at the joints.  
A: *Ligaments*
12. The area of an animal that is completely encircled by the vertebral column on the top, by the ribs on the sides, and the sternum on the bottom is known as the \_\_\_\_\_  
A: *Thorax or thoracic cavity*
13. Name two functions of skin.  
A: *Temperature regulation, protection of the internal organs*
14. One function of bones is to act as a \_\_\_\_\_ storage site for the body.  
A: *Mineral*
15. Which tissue has the highest water content?  
A. *Fat*  
\*B. *Lean*  
C. *Bone*
16. Name the four compartments of a ruminant's stomach?  
A: *Rumen, Reticulum, Omasum, Abomasum*
17. In a sheep, what is commonly known as the "hardware compartment" in the digestive system?  
A: *Reticulum*
18. In a sheep, which compartment of the stomach has the greatest volume?  
A: *Rumen*
19. How many compartments are there in a lamb's stomach?  
A: *Four (4)*

20. Name the thin membrane that lines the wall of the abdominal cavity.

A: *Peritoneum*

21. In a baby lamb, what is the name of the groove that allows milk to flow directly into the abomasum?

A: *Esophageal groove*

22. Name the blood vessel that drains the stomach and intestines and carries blood to the liver.

A: *Portal vein*

23. Bones grow in length from a cartilaginous area called the

A: *Epiphyseal plate*

24. Name the vessel that carries blood to the lungs.

A: *Pulmonary artery*

25. Name three divisions of the small intestine.

A: *Duodenum, Jejunum, Ileum*

26. Where are the testes located in a cryptorchid ram?

A: *Abdominal cavity*

27. What is the major function of the scrotum on a ram?

A: *To regulate the temperature of the gonad or testicle.*

28. Where is the poll located on a sheep?

A: *On the top of the head*

29. Which portion of a sheep's stomach is most similar to the human stomach?

A: *Abomasum (True stomach)*

30. Name another term for the reticulum, one of the four compartments of the lamb's stomach?

A: *Honeycomb or Hardware collector*

31. How many upper incisors does a ewe have?

A: *None (A ewe has an upper "pad", but no upper incisors)*

32. What anatomical structure in the sheep is comparable to the human knee?

A: *Stifle joint*

33. What vein in the neck does a veterinarian draw blood from or put in fluids?

A: *Jugular*

34. The organ that makes urine is called a

A: *Kidney*

35. The organ that receives the blood from the small intestine first is called the

A: *Liver*

36. Name the enzyme and acid secreting portion of the ruminant stomach.

A: *Abomasum*

37. Name the organ in which the embryo develops.

A: *Uterus*

38. What is the esophagus?

A: *The tube from the mouth to the stomach*

39. The honeycomb is another name for the

A: *Reticulum*

40. How many mammary glands does a ewe have?

A: *2*

41. When does a ewe lamb usually get her first pair of permanent incisor teeth?

A: *12-15 months of age*

42. Where is the stifle?

A: *The joint nearest the body on the hind leg*

43. The lining of the rumen is made up of what little projections?

A: *Papillae*

44. Which compartment of the ruminant stomach is known as the fermentation vat?

A: *Rumen*

45. What is the function of the omasum?

A: *Water removal*

46. What does the bronchi connect?

A: *The lungs to the throat*

47. What do we mean by cloven hoof?

A: *It is split in two parts*

48. Where is a lamb's naval?

A: *Midline on the belly*

## **BREEDS AND ASSOCIATIONS SECTION B**

1. What does the abbreviation K.L.A. stand for?

A: *Kansas Livestock Association*

2. What do the initials U.S.D.A. stand for?

A: *United States Department of Agriculture*

3. What do the initials F.D.A. stand for?

A: *Food and Drug Administration*

4. What do the letters A.S.I. stand for?

A: *American Sheep Industry*

5. What do the letters N.S.I.P. stand for?

A: *National Sheep Improvement Program*

6. What was the first breed of sheep to originate in the United States?

A: *Columbia*

7. Name four breeds of sheep that have originated in the United States.

A: *Columbia, Montadale, Polypay, Targhee, Debouillet, Katahdin, Navajo, Panama*

8. Where did the Corriedale breed originate?

A: *New Zealand*

9. Name four breeds of sheep that originated in England.

A: *Dorset, Hampshire, Lincoln, Oxford, Shropshire, Southdown, Suffolk, Border Leicester, Clun Forest, Cotswald, Romney*

10. Where did the Cheviot breed originate?

A: *Scotland*

11. Where did the Finnsheep breed originate?

A: *Finland*

12. What breeds were involved in the development of the Columbia breed?

A: *Lincoln and Rambouillet*

13. What breeds were involved in the development of the Hampshire breed?

A: *Southdown, Wiltshire Horn and Berkshire Knot*

14. What breeds were involved in the development of the Montadale breed?

A: *Cheviot and Columbia*

15. What breeds were involved in the development of the Oxford breed?

A: *Hampshire and Cotswold*

16. What breeds were involved in the development of the Polypay breed?

A: *Targhee, Dorset, Rambouillet and Finnsheep*

17. What breeds were involved in the development of the Suffolk breed?

A: *Southdown and Norfolk*

18. What breeds were involved in the development of the Targhee breed?

A: *Rambouillet, Columbia and Corriedale*

19. This classification of sheep breeds includes generally the white-faced breeds of fine-wool type, the breeds primarily from crosses of fine-wool and long-wool types and highly prolific breeds:

A. *Ram breeds*

B. *Dual purpose breeds*

\*C. *Ewe breeds*

20. This classification of sheep breeds includes meat-type breeds used primarily as terminal sires for market lamb production.

*\*A. Ram breeds*

*B. Dual purpose breeds*

*C. Ewe breeds*

21. Which breed of sheep found in the United States today originated in North Africa?

*A. Tunis*

22. Which breed of sheep renowned for its fine quality wool production originated in Spain?

*A. Merino*

23. Give an example of a hair sheep breed found in the United States today.

*A. Barbados, Katahdin, St. Croix*

24. Name a sheep breed found in the United States that originated in the U.S.S.R.

*A. Karakul, Romanov*

25. What breed of sheep originated in the Netherlands and was first imported into the United States in the 1980's?

*A. Texel*

## **BREEDING AND GENETICS**

### **SECTION C**

1. A first generation crossbred lamb is known as a

*A. F1 cross*

2. What is the term used to describe the taking of measurements of economically important traits in the live animal?

*A. Performance testing*

3. Sheep have how many pairs of chromosomes on each cell?

*A. 27*

4. Name a term used to describe a genetic combination where both genes are dominant or both genes are recessive.

*A. Homozygous*

5. Explain what is meant when you have a correlation value of "0" for two selected traits.

*A. Selecting for one trait will have absolutely no effect on the other selected trait.*

6. Name the process by which body cells divide and every cell from that division is identical.

*A. Mitosis*

7. If a lamb is heterozygous in its genetic makeup for a specific trait, what is the term used to describe the gene that causes the lamb's phenotype for that trait?

*A. Dominant gene*

8. Explain why more genetic progress can be made in a herd through selection of the ram versus the ewes.

*A. A ram will sire multiple progeny each year; whereas, a ewe in a normal breeding program can only give birth to a few lambs each year.*

9. What will the sex of a lamb carrying a combination of the XY sex chromosomes be?

*A. Male*

10. What is the term used to describe a genotype in which the heterozygous individual is superior to either the homozygous dominant or the homozygous recessive individual?

*A. Overdominance*

11. Name the biggest disadvantage associated with using progeny performance data for selecting herd sires.

*A. Length of time needed to gather data results in loss of production time.*

12. What is the term used to describe a trait that is determined by a gene carried on the X sex chromosome.

*A. Sex linked characteristic or trait*

13. Name the process by which germ cells divide and the resulting cells have only 1/2 the normal

number of chromosomes.

A: *Meiosis*

14. An individual's genotype is determined at

A. *Birth*

B. *Slaughter*

\*C. *Conception*

15. What is the term used to describe a mating system in which closely related ancestors are mated back to back to each other to increase the concentration of desirable and/or undesirable genes?

A: *Inbreeding*

16. Does the sire or the dam contribute the Y chromosome to a ram lamb?

A: *Sire*

17. An abnormality that is present in an individual at the time of birth is termed

A: *Congenital*

18. The structures in the cells that carry the genetic material are

A: *Chromosomes*

19. Fertility will \_\_\_\_\_ in sheep that have been inbred extensively.

A. *Increase*

B. *Stay the same*

\*C. *Decrease*

20. If a ram that is heterozygous for spider lamb syndrome is mated to a ewe that is heterozygous for spider lamb syndrome, what proportion of their offspring will be spider lambs?

A: *25%*

21. Superior performance in a trait be crossbred progeny over and above the average performance of their straight bred parents is termed

A: *Heterosis or hybrid vigor*

22. What is the proper term used to describe genetic changes, such as changes in certain horned breeds that causes their descendants to be polled?

A: *Mutations*

23. What is the term used to describe a specific trait that can only be seen in either males or females, but not in both sexes of a species?

A: *Sex linked characteristic*

24. If a person refers to the "top side" of an animal's pedigree, they are referring to which side?

A: *Paternal*

25. Of the total number of chromosomes found in any lamb's body cell, what proportion are maternal?

A: *One half*

26. As a ram matures and increases in size he will sire lambs with \_\_\_\_\_ birth weights.

A. *Heavier*

B. *Lighter*

\*C. *The same*

27. If a lamb is heterozygous in its genetic makeup for a specific trait, what is the term used for the gene that does not show up in the lamb's phenotype for that trait?

A: *Recessive gene*

28. What is the term used to describe a genetic combination of one dominant and one recessive gene?

A: *Heterozygous*

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

A: *Pedigree*

30. What is the term used to describe a mating system which involves mating unrelated families within the same breed?

A: *Outbreeding*

31. A characteristic of an animal that can be seen and/or measured such as color, weight, wool

length is called

A: *Phenotype*

32. The term used to describe the superiority of parent stock compared to the average of the herd from which they were selected is

A: *Selection differential*

33. What is the term used to describe a mating system where 2, 3 or more breeds are combined?

A: *Crossbreeding*

34. Which one of the following is a mating system which concentrates the inheritance of one or more outstanding ancestors?

A. *Outbreeding*

\*B. *Linebreeding*

C. *Backcross*

D. *Crisscross*

35. Which one of the following terms is used to describe the actual genetic makeup of an individual?

A. *Prototype*

B. *Karyotype*

\*C. *Genotype*

D. *Phenotype*

36. What does E.P.D. stand for in sire evaluation systems?

A: *Expected Progeny Difference*

37. What does a trait ratio of 112 mean?

A: *The animal is 12% above the average in that trait*

38. How is percent lamb crop weaned per ewe exposed calculated?

A: *Lambs weaned divided by the number of ewes exposed to rams multiplied by 100.*

39. What are half-sibs?

A: *Lambs having the same sire or dam*

40. Define contemporary group

A: *A group of animals of similar age, sex and management*

41. What two factors determine an animal's performance?

A: *Genetics and environment*

42. Which of the following would be the most accurate basis for selecting herd sires to increase growth rate?

A. *Pedigree*

B. *Visual appraisal*

C. *Individual performance records*

\*D. *Progeny performance records*

43. Traits that are \_\_\_\_\_ in heritability normally show the greatest response in crossbreeding.

\*A. *Low*

B. *Medium*

C. *High*

44. What is the paper called that lists the sire and dam of a purebred animal?

A: *Registration paper*

45. Why is it hard to recognize an animal that is a carrier of a recessive gene?

A: *There is no difference in appearance of an animal that carries two dominant genes for a trait versus an animal that carries one dominant and one recessive gene for that same trait.*

46. All inherited characteristics are contained in the fertilized

A: *Egg*

47. In general reproductive traits are \_\_\_\_\_ in heritability.

A. *High*

B. *Medium*

\*C. *Low*

48. Reproductive efficiency equals the number of \_\_\_\_\_ per ewe in the breeding flock.

A: *Lambs weaned*

49. Chromosomes and genes come in

A: *Pairs*

50. Entropion is a \_\_\_\_\_ trait.

A: *Heritable*

51. Sheep have \_\_\_\_\_ chromosomes.

A: *54 or 27 pairs*

52. The heritability estimate for multiple birth is

\* A. *Low*

B. *Medium*

C. *High*

53. Name two examples of jaw defects.

A: *Overshot, undershot, monkey mouth, parrot mouth*

54. Inbreeding usually \_\_\_\_\_ the likelihood that an undesirable recessive trait will show up in the flock.

A. *Reduces*

B. *Doesn't change*

\*C. *Increases*

55. What do the letters F.E.P.D. stand for?

A: *Flock Expected Progeny Difference*

56. What are a ram's progeny?

A: *His offspring*

57. What do the letters E.B.V. stand for?

A: *Estimated breeding value*

## **EVALUATION SECTION D**

1. A long toe on a lamb's foot accentuates a weakness in what part of the leg?

A: *Pastern*

2. What term is used to describe an animal that has too much set to the hock joint as viewed from the side?

A: *Sickle-hocked*

3. The general term used to describe the way a lamb is built is commonly referred to as

A: *Conformation*

4. When a ewe stands with her hocks close together when viewing her from behind, she is said to be

A: *Cowhocked*

5. Name a condition in sheep, when viewed from the front, the hooves turn out in opposite directions from each other.

A: *Splay footed*

6. What is the term that is used to describe the internal dimension on sheep through the thoracic and abdominal cavity?

A: *Capacity or volume*

7. When viewing a lamb from the rear, what should you look for to get a good indication of total carcass muscle?

A: *Thickness and width through the stifle area*

8. When evaluating a lamb, if it has a very square blocky appearance down his topline, it is an indication of

A: *Condition or fat*

9. When evaluating live sheep, what does spring and depth of rib indicate?



*A: Amount of internal capacity*

10. The area on a lamb's leg between the dewclaw and the hoof that should be set at a 45 degree angle is known as the

*A: Pastern*

11. When viewed from the front, a condition in sheep where the hooves turn in toward each other is known as

*A: Pigeon toed*

12. A lamb with .20 inches of fat thickness is considered to be

*A. Overdone with excess fat thickness*

*\*B. Relatively trim with high cutability*

*C. Underdone and in need of a longer feeding period*

13. The horny growths on the legs of sheep located just above the hooves are known as

*A: Dewclaws*

14. Will a lamb normally have more condition over his forerib or rear rib? Why?

*A: Forerib, because sheep normally fatten through their forequarter first*

## **HEALTH SECTION E**

1. A bone disease in young animals where there is weak and faulty bone formation because they did not receive enough Vitamin D is known as

*A: Rickets*

2. The blood condition in which the number of red blood cells is decreased below normal because of a deficiency of iron in the diet is called

*A: Anemia*

3. When a ewe eats stunted or frosted grain sorghum it can result in a disease which interferes with the utilization of oxygen by the body tissues. This disease is known as

*A: Prussic Acid Poisoning*

4. Which of the following is a condition in sheep that can occur if an animal happens to ingest some sharp metal object and that object punctures the digestive tract causing peritonitis?

*A. Vibriosis*

*\*B. Hardware Disease*

*C. Rumenitis*

*D. Brucellosis*

5. A profusion of water feces is known as

*A: Diarrhea or scours*

6. To prevent infections, a newborn lamb should have its navel dipped in what solution?

*A: Iodine*

7. Arthritis in animals is an inflammation of the

*A: Joints*

8. Eating moldy hay or clover can result in a disease condition known as  sweet clover disease  in which the major symptoms are

*A: Internal and external hemorrhaging*

9. Club lamb fungus is considered a zoonotic disease. This means that

*A: It is transmitted from animals to people*

10. What disease is caused by an organism commonly found in rivers, lakes, ponds and sewage?

*A: Leptospirosis*

11. Warts are caused by which of the following:

*\*A. Virus*

*B. Bacteria*

*C. Fungus*

*D. Genetic makeup of the animal*

12. What happens when a pregnant ewe is infected by leptospirosis?

A: *She aborts*

13. What is a serious lamb disease caused by a protozoa that is also common in poultry?

A: *Coccidiosis*

14. Overeating disease is more properly known as

A: *Enterotoxemia*

15. What type of organism causes ringworm?

A: *Fungus*

16. What is a common name for Tetanus?

A: *Lockjaw*

17. Name two reasons scours occur in lambs.

A: *Overeating, bacterial infection, viral infection, parasites*

18. What is the broad name used to describe udder infections in ewes?

A: *Mastitis*

19. Name a disease that may or may not cause problems in swine, but usually causes death in sheep.

A: *Pseudorabies*

20. If a veterinarian makes a ewe swallow a magnet, what disease is he attempting to treat?A:

*Hardware disease*

21. Grass tetany is a sign of what kind of mineral deficiency?

A: *Magnesium*

22. Name a disease that is also known as Wool Sorter \_s Disease.

A: *Anthrax*

23. What kind of injection is IM?

A: *Intramuscular*

24. What kind of injection is IV?

A: *Intravenous*

25. Where should IM injections be given?

A: *In the muscles of the neck or muscles between the ribs*

26. What kind of injection is SQ?

A: *Subcutaneous or under the skin*

27. Where should SQ injections be given?

A: *Under the skin in the axillary region, under the skin along the ribs or under the skin in the neck.*

28. The major cause of deaths in newborn lambs is

A: *Starvation*

29. Describe Clip, Drip, Strip and Sip.

A: *As soon after birth as possible clip the navel of the newborn, dip the navel in 7% iodine, strip the ewe \_s teats to insure that they are open and make sure the lamb gets a sip of colostrum.*

30. Describe a hypothermic lamb. (Must get 2 of 3)

A: *Listless, cold to the touch, temperature below 101 degrees F*

31. Toxoplasmosis is caused by a

A. *Bacteria*

B. *Virus*

\*C. *Protozoa*

D. *Fungus*

32. What young animal is often responsible for infecting sheep with Toxoplasmosis?

A: *Kittens*

33. Why is epididymitis more common in the western states?

A: *Because of the use of large numbers of rams in a group*

34. What part of the lamb is affected by septicemia?

*A: The bloodstream*

35. How can septicemia be prevented in baby lambs?

*A: By disinfecting the navel*

36. What part of an animal is affected by peritonitis?

*A: Abdominal cavity*

37. How can peritonitis be prevented in baby lambs?

*A: By disinfecting the navel*

38. At what age are lambs most often affected by E. coli scours?

*A: 1-3 days*

39. What are the most effective ways in which to treat E. coli scours? (Name 2 of 3)

*A: Immediate rehydration (Given IV if warranted), keeping the lamb warm, appropriate antibiotic*

40. What is the most effective navel disinfectant?

*A: 7% Iodine*

41. When should 7% iodine be applied to the navel?

*A: At birth*

42. What are the protective proteins in colostrum called?

*A: Antibodies*

43. Why is it important that a lamb receive colostrum during its first 12 hours of life?

*A: Antibodies will no longer pass through the intestinal tract and into the blood after 12 hours, they will be digested and treated like all other proteins in the animals diet*

44. Why must lambs receive colostrum antibodies?

*A: Lambs are born immunodeficient, the only way that they can be protected from the viruses and bacteria in their environment is via the absorption of the antibodies in colostrum*

45. Enterotoxemia is caused by what group of organisms?

*A: Clostridial bacteria*

46. Is there any effective treatment for Clostridial infections?

*A: Yes, if the infection is noted in its earliest stage and treatment is initiated immediately*

47. Why is treatment of Clostridial infections difficult?

*A: Because of the rapid progression of the disease*

48. What is the most effective preventative measures recommended to control Enterotoxemia?

*A: Vaccination of the ewe 30 days prior to lambing. Be sure lambs receive ample colostrum. Booster vaccine lambs prior to placing on full grain diet.*

49. What are the earliest clinical signs of tetanus?

*A: Stiffness of the limbs, stilted gait*

50. Which of the following procedures is most likely to happen before a case of tetanus?

*A. Castration with a knife*

*\*B. Castration and tail docking with a rubber band*

*C. Tail docking with a hot iron*

51. Is treatment with successful recovery realistic when dealing with tetanus?

*A: No*

52. What is the best method to prevent tetanus?

*A: Vaccination of the ewe 30 days prior to lambing. Be sure lambs receive ample colostrum. Booster vaccinate lambs at 3-4 weeks of age.*

53. What is another name for ORF?

*A: Soremouth or Ecthyma*

54. Soremouth scabs are infectious, what is the best method of disposing of them?

*A: Burning or disposal in a container where no animals will come in contact with them. You should wear gloves when working with sheep infected with soremouth and wash thoroughly when done.*

55. What is another name for Chlamydia arthritis?

*A: Polyarthritis or Stiff Lamb disease*

56. White Muscle disease is caused by a deficiency of

A: *Vitamin E and/or Selenium*

57. What part of the sheep is affected by upper respiratory infections?

A: *Nasal area*

58. Lower respiratory infections occur in what parts of the sheep?

A: *Lungs and bronchi*

59. What is the common aftermath of acidosis?

A: *Death, founder*

60. What do the letters E.A.E. stand for?

A: *Enzootic Abortion of Ewes*

61. Give a common name for E.A.E.

A: *Chlamydia*

62. Referring to rams, what does B.S.E. stand for?

A: *Breeding soundness examination*

63. How are susceptible ewes exposed to Chlamydia?

A: *They ingest the organism by licking an aborted fetus or eating contaminated feed*

64. What sheep abortion diseases can also cause human infections?

A: *Chlamydia, Toxoplasmosis, Salmonellosis, Listeriosis*

65. Name three sheep abortion diseases.

A: *Chlamydia, Toxoplasmosis, Salmonellosis, Listeriosis, Vibriosis, Brucellosis, Leptospirosis*

66. What is the protrusion of the vagina of a ewe called?

A: *Vaginal prolapse*

67. What problem is caused when ewes have a vaginal prolapse in the late stages of pregnancy?

A: *When the vagina is prolapsed the cervix is unable to dilate normally, when the vulva is sewn so that the vagina can no longer prolapse the lambs are unable to be delivered without the removal of the sutures*

68. Ketosis or pregnancy toxemia occurs in what term of gestation?

A: *Last trimester*

69. Hypocalcemia is symptomatic of what blood deficiency in pregnant and lactating ewes?

A: *Calcium*

70. What feed or mineral supplement should be provided to help prevent the problem of retained placenta?

A: *Selenium*

71. Name a viral disease in which the first signs observed are an increased body temperature and swollen ears and muzzle.

A: *Bluetongue*

72. What is a slow progressive disease of the central nervous system which requires necropsy and dissection of the brain to properly diagnose?

A: *Scrapie*

73. U.S.D.A. has an eradication program for the elimination of

A: *Scrapie*

74. What animal's intestinal tract is infected with toxoplasmosis?

A: *Cats. This makes them a possible carrier of the disease to sheep and humans*

75. The letters O.P.P. stand for

A: *Ovine Progressive Pneumonia*

76. Ovine Progressive Pneumonia is caused by a

A. *Bacteria*

B. *Protozoa*

\*C. *Virus*

D. *Fungus*

77. Footvax is a vaccine developed for help in control of

A: *Contagious Footrot*

78. Routine foot trimming may be used to help control and identify

A: *Footrot*

79. Uterine prolapse describes what condition?

A: *The expulsion of the uterus through the birth canal to the outside of the body after delivery of the newborn.*

80. Name the vitamin and mineral deficiency that causes white muscle disease.

A: *Vitamin E, Mineral-Selenium*

81. If you are vaccinating for overeating you will use

A: *Clostridial perfringens type C and D*

82. Name a substance that may be used in a foot bath to help prevent footrot.

A: *Zinc sulfate, formaldehyde, copper sulfate (last resort)*

83. Name a neurological disease with a long incubation period.

A: *Scrapie*

84. Name a condition of the abdomen that sometimes develops after an extended case of kidney stones.

A: *Water belly*

85. Sheep that walk in a circle should be suspected of having what disease?

A: *Listeriosis, encephalitis, circling disease, rabies*

86. A rigid saw-horse like stance, stiffness and contracted muscles are typical of what common disease?

A: *Tetanus or lockjaw*

87. \_\_\_\_\_ is a disease characterized by a hard, swollen udder.

A: *Mastitis*

88. What viral disease of sheep can be contacted by humans?

A: *Soremouth or ovine ecthyma*

89. Bluebag is another name for what?

A: *Mastitis*

90. What drug was cleared in 1984 for use in feedlot lambs for the prevention of coccidiosis?

A: *Lasalocid or Bovatec*

91. What do you call a disease that develops slowly and runs a prolonged course?

A: *Chronic*

92. What do you call a large protein molecule produced by the immune system as a result of vaccination or disease which protects the animal from that specific disease?

A: *Antibody*

93. What do you call a disease which affects only a certain portion of the body?

A: *Localized disease*

94. Enterotoxemia type C usually affects lambs at what stage of their lives?

A: *Within the first few weeks*

95. A dreaded respiratory disease in which affected animals become depressed, go off feed, may cough, show some respiratory distress, have an accumulation of nasal exudate and have an accompanying high fever is

A: *Pneumonia*

96. What is the normal body temperature of a sheep within 1 degree?

A: *102.3*

97. What common nutritional disease resulting from improper calcium and/or phosphorus levels ultimately causes rupturing of the bladder of the urethra?

A: *Water belly, urinary calculi, urolithiasis, calculosis*

98. The *Brucella ovis* organism is responsible for what venereal disease in rams?

A: *Epididymitis*

99. When ewes are fed too low an energy level in late gestation, what nutritional disease is likely to develop?

A: *Ketosis, pregnancy toxemia, twin lamb disease, pregnancy disease, lambing paralysis*

100. During what part of a lamb's life do the globulins in colostrum pass most rapidly across the wall of the gut?

A: *The first 1-2 hours of life*

101. Metritis is the infection of the

A: *Uterus*

102. If a ewe has mastitis, what type of sample will a veterinarian take to run a culture and sensitivity test on?

A: *Milk*

103. What is the correct name for a twisted stomach?

A: *Displaced abomasum*

104. Milk fever is the common name for a condition of hypocalcemia primarily due to the stress of

A: *Lactation*

105. Name two components found in colostrum that makes it good for the lamb.

A: *Antibodies, energy, protein, vitamins*

106. How do the antibodies in colostrum get into the lamb's bloodstream?

A: *They are absorbed through the intestinal wall without being digested*

107. Why must a lamb receive colostrum within the first hours of life?

A: *As the gut matures it cannot absorb the antibodies undigested*

108. What is a balling gun?

A: *Implement used to give sheep pills*

109. Zinc sulfate is recommended for the treatment of what disease?

A: *Footrot*

110. What is one rapid method to relieve a bloated animal?

A: *Stomach tube or ruminal incision*

111. What is a condition in which there is a build up of gases that are unable to escape the rumen, causing an extension on the left side of the sheep?

A: *Bloat*

112. Aureomycin is

A: *Chlortetracycline*

113. Rickets in lambs is caused by a deficiency in what vitamin?

A: *Vitamin D*

114. What is entropion?

A: *Inverted eyelids*

115. What happens in nitrate poisoning?

A: *Nitrates react, reducing the blood's ability to carry oxygen and the ewe suffers tissue suffocation*

116. What disease often develops when a sheep can't belch?

A: *Bloat*

117. What is pneumonia?

A: *Disease of the lungs*

118. What is one way to keep lambs from catching pneumonia?

A: *Keep them dry and out of drafts*

119. What is terramycin?

A: *An antibiotic*

120. What is an antibiotic?

A: *A product that is effective in killing bacteria*

121. What is a vaccine?

A: *A product that is given to an animal to stimulate the immune system so that the animal is protected from getting the disease.*

122. A disease prevalent in sheep grazing rapidly growing legumes and results in a distended rumen is called

A: *Bloat*

## MANAGEMENT SECTION F

1. What do you call a female sheep?

A: *Ewe*

2. What do you call an intact male sheep?

A: *Ram, Buck*

3. What do you call a castrated male sheep? Spell your answer.

A: *Wether*

4. A sheep that is one year old is known as a

A: *Yearling*

5. The method of fighting among rams is called

A: *Butting*

6. A cryptorchid is a ram with what characteristics?

A: *Failure of one or both testicles to descend into the scrotum*

7. What are the advantages for shearing lambs. List 3.

A: *Will stay cooler in the summer, will eat better, faster and easier to prepare for show, perform with better feed efficiency*

8. In months, what is the approximate normal weaning age of lambs in Kansas?

A: *2-3*

9. Other than providing a palatable, nutritious creep feed, what can you do to the creep area to entice usage?

A: *Provide a light or heatlamp, keep area dry and bedded*

10. ADG on a performance report means

A: *Average Daily Gain*

11. Comparing rams and wethers, which will have the higher rate of gain?

A: *Rams*

12. Name two management practices that may be performed prior to lambing which will give the lamb greater exposure to the udder and teats of a ewe.

A: *Shearing and crotching*

13. A tool used for docking and castrating that crushes and cuts at the same time is called an

A: *Emasculator*

14. How many lower incisor teeth does a 10-month old lamb have?

A: *4 pair (8 teeth)*

15. How many upper incisor teeth does a 10-month old lamb have?

A: *None, sheep don't have upper incisors*

16. At what age is a ewe likely to be the best milker?

A: *4 years*

17. How many permanent teeth does a 2-year old ewe have?

A: *2 pair (4 teeth)*

18. What is a *\_gummer\_* ewe?

A: *A ewe that has lost all its incisor teeth*

19. What are the normal dimensions of a *\_lambing jug\_*?

A: *4 - 5 foot by 4 - 5 foot*

20. What is meant by *\_stanchion\_* grafting a lamb to a ewe?

A: *Placing the ewe's head and neck in a set of stocks where she can eat and drink, but must allow lambs to nurse. It usually takes 3-5 days for the ewe to accept the lamb*

21. Before what age is it best to dock and castrate a lamb?

A: *2 weeks*

22. What is a fairly standard *\_pencil shrink percentage\_* that is deducted from the live weight of

lambs hauled a short distance to market?

A. 2%

\*B. 4%

C. 6%

D. 8%

23. Where is the best place for a ewe to lamb?

A: *Weather permitting in the pasture otherwise in a clean, dry, well bedded jug*

24. Name a tool used for docking and castrating that crushes.

A: *Burdizzo*

25. What piece of equipment is useful in foot trimming?

A: *Tilt cradle*

26. Name three methods of identification of sheep.

A: *Ear tags, ear notching, tattooing, paint branding, electronic microchips*

27. What are two benefits of creep feeding?

A: *Increased weaning weights, reducing weaning stress, lambs will be bunk broke at weaning*

28. Give three good reasons for culling a ewe.

A: *Poor performance by her offspring, bad mouth, bad feet, not pregnant, poor udder*

29. What is the process in which the testicles of ram lambs are removed?

A: *Castration*

30. Loss of weight during shipping is called

A: *Shrink*

31. Will sheep eat more or less than normal on a hot summer day?

A: *Less*

32. Underfeeding ewe lambs during their first year of life will \_\_\_\_\_ their first breeding.

A: *Delay*

33. What is the first requirement necessary to carryout a constructive flock improvement program?A: *Complete identification of all animals*

34. What is the National Sheep Improvement Program?

A: *A genetic evaluation system*

35. What do F.E.P.D. \_s do?

A: *Predict performance differences of lambs sired by different rams, they do not predict actual performances. They compare sheep born in different years, sheep of different sexes and under different management considerations.*

36. Name two things that F.E.P.D. \_s do not adjust for.

A: *Incorrect data, preferential treatment of individual lambs, incorrect pedigrees*

37. Name two things you must know in order to calculate an adjusted 60 day weight for a lamb. A:

*Dam \_s age, lamb \_s age at weighing, lamb \_s weight at weighing, lamb \_s status at birth and how it was raised, sex of the lamb*

38. The adjusted weights of all lambs raised by one ewe is

A: *A good indicator of the milking ability of that ewe*

39. What factors are involved in determining a contemporary group for lamb \_s at weaning?

A: *Contemporary groups are lambs of the same age and sex, raised under the same management considerations*

40. How do you figure a 60 day adjusted weaning weight for a lamb?

A: *(Actual Weight) Actual Age X 60 X Adjustment Factor*

41. Why is there no adjustment factor for a ewe that is 4 yearsold?

A: *Because the ewe is at the optimum age for milk production or mothering ability so no compensation factor is needed*

## MEATS SECTION G

1. A crown roast of lamb comes from what wholesale cut?



A: *Rib or rack*

2. Which part of a lamb carcass should make up the largest percent of the lamb?

A: *Leg*

3. How many calories does a 3 oz. roasted and trimmed serving of lamb contain?

A: *176*

4. About how many pounds of live lamb does it take to equal 1 pound of boneless, trimmed retail cuts?

A. *1.1*

B. *2.2*

\*C. *3.3*

D. *4.4*

5. External fat thickness of a lamb carcass is measured over the ribeye muscle between which ribs?

A: *12<sup>th</sup> and 13<sup>th</sup>*

6. Why do many in the sheep industry want to be paid on the basis of their yield grade?

A: *Yield grade is one method in which producers can be paid a premium for lean rather than fat*

7. Which of the following lambs is likely to have the highest dressing percentage? A lamb with:

A. *.1 inch fat*

B. *.2 inch fat*

C. *.3 inch fat*

\*D. *.4 inch fat*

8. A blade chop comes from which wholesale cut on the lamb carcass?

A: *Shoulder*

9. Traditionally speaking, which of the following has been the least important in establishing the sale price on a group of commercial slaughter lambs?

A. *Live weight*

\*B. *Amount of muscle*

C. *Fat covering*

D. *Dressing percentage*

10. How many ribs do lambs have?

A: *13 or 14 pairs*

11. List the four major primal cuts of lamb.

A: *Leg, loin, rack, shoulder*

12. What is the approximate per capita consumption of lamb in the United States?

A: *1.7 lbs of carcass weight or 1.5 lbs of retail weight*

13. Which of the following is the largest wholesale and retail cut in the lamb carcass?

A. *Loin*

\*B. *Leg*

C. *Rack*

D. *Shoulder*

14. What USDA yield grade would imply an extremely trim carcass?

A. *USDA Yield Grade 5*

B. *USDA Yield Grade 3*

\*C. *USDA Yield Grade 1*

15. Which of the following are three major factors used to determine lamb quality grade?

A. *Fat cover, loin eye area, kidney and pelvic fat*

\*B. *Conformation, flank streaking, maturity*

C. *Flavor, palatability, tenderness*

16. Which of the following will have a low dressing percentage?

A. *Lambs that are full*

B. *Lightweight, unfinished lambs*

C. *Sheep that are carrying heavy fleece*

*\*D. All of the above*

17. What is the approximate age of a lamb carcass?

*A: 2 to 14 months old*

18. What fat measurement is commonly used to help determine the total amount of fat in a carcass?

*A: Fat thickness at the 12<sup>th</sup> rib*

19. What are the USDA Yield grades for sheep?

*A: 1, 2, 3, 4, 5*

20. Where is the primary fat measurement usually taken on live sheep?

*A: Between the 12<sup>th</sup> and 13<sup>th</sup> rib*

21. How is a lamb carcass's yield grade calculated?

*A: Yield Grade = .4 + (Adjusted 12<sup>th</sup> rib fat thickness x 10)*

22. Name three factors that influence quality grade.

*A: Age (maturity), conformation (muscling) and fat streaking*

23. What is the normal range for dressing percent of choice lambs?

*A: 45% to 58%*

24. Which of the following refers to cutability?

*\*A. Proportion of the meat that is actually saleable at the meat counter*

*B. Amount of muscling in the leg*

*C. How hard the meat is to cut*

*D. The amount of kidney and pelvic fat*

25. An average ribeye area for a 100 lb. lamb would be

*A: 1.5 to 3.2 inches*

26. Name two primal cuts of sheep found in the hindquarter.

*A: Leg and loin*

27. The lamb carcass is ribbed between which ribs to determine ribeye size?

*A: 12<sup>th</sup> and 13<sup>th</sup> ribs*

28. What are variety meats?

*A: Edible organs and by-products*

29. What does it mean to exsanguinate a lamb?

*A: Bleed (Remove all the blood)*

30. What is K.P. fat?

*A: Kidney and pelvic fat*

31. What does it mean to eviscerate a lamb?

*A: Remove the entrails (guts)*

32. The grading system used to estimate the percentage of closely trimmed, boneless retail cuts from the four major primal cuts is called

*A: Yield grade*

33. What are the quality grades for lambs?

*A: Prime, Choice, Good, Utility*

34. Which of the following is not a factor in determining USDA sheep carcass yield grades?

*A. Conformation grade of the legs*

*\*B. Ribeye area*

*C. Percent kidney and pelvic fat*

*D. None of the above*

*E. All of the above*

35. Which of the following is not a factor in determining USDA sheep carcass quality grades?

*A. Conformation*

*B. Maturity*

*\*C. Carcass weight*

*D. Flank fat streaking*

36. Name two factors that influence dressing percentage.

*A: The amount of fill, degree of finish (fatness), weight of the pelt, muscling*

37. Tripe comes from what internal sheep organ?

A: *Stomach*

38. How many USDA yield grades are there?

A: 5

39. Name the five USDA yield grades in order from the fattest to leanest?

A: *USDA 5, USDA 4, USDA 3, USDA 2, USDA 1*

40. Name three of the four USDA quality grades of sheep.

A: *Prime, Choice, Good, Utility*

41. What is the average desirable market weight for slaughter lambs in the United States?

A: *120 - 140 lbs*

42. Name the greatest factor in determining the cutability of a lamb.

A: *The amount of condition or fat it possesses*

43. Name three methods most used for long term meat preservation.

A: *Freezing, curing, canning*

44. What must happen to meat before it can be USDA graded?

A: *It must first pass inspection*

45. What is the purpose of meat inspection?

A: *Eliminate diseased or contaminated meat from the consumer market*

46. What is the term used to describe the proportion of carcass on the rail after slaughter in relation to the live weight?

A: *Dressing percent*

47. What is the term that refers to the fatness of a lamb?

A: *Condition or finish*

48. Sheep should be held off of feed for at least how many hours prior to slaughter?

A: *20 to 25 hours*

## **NUTRITION SECTION H**

1. What are 2 feed ingredients that can aid in the prevention of urinary calculi?

A: *Addition of limestone, ammonium chloride or salt to the ration*

2. What mineral is toxic to sheep at doses appropriate for cattle?

A: *Copper*

3. Selenium and Vitamin E deficiencies can cause what disease?

A: *White muscle, stiff lamb*

4. What kind of poisoning is associated with the feeding of forage sorghums, corn stalks, oat hay and other cultivated fertilized forages?

A: *Nitrate, NO<sub>3</sub>*

5. Name the four stomach compartments of a sheep.

A: *Abomasum, Omasum, Rumen, Reticulum*

6. Name three types of protein supplements

A: *Soybean meal, Cottonseed meal, Sunflower meal, Linseed meal, Peanut meal, Fish meal*

7. What do the letters T.D.N. stand for?

A: *Total digestible nutrients*

8. What is the first milk from the ewe called?

A: *Colostrum*

9. In which form do mature feeder lambs least prefer to consume corn?

\*A. *Finely ground*

B. *Cracked*

C. *Whole*

10. The process in which regurgitation, resalivation and reswallowing occurs is called

A: *Rumination*

11. On which of the following diets will a 90 pound feeder lamb probably gain at the slowest rate in a typical Kansas July?

- A. 60% corn
- B. 60% wheat
- \*C. 60% oats
- D. 60% barley

12. What does it mean to creep feed lambs?

A: *Provide palatable feed for lambs where the ewes don't have access to it*

13. Grains are usually deficient in what mineral needed for growth and development?

A: *Calcium*

14. Name 3 of the 4 fat soluble vitamins that mature sheep are known to require.

A: *A, D, E, and K*

15. Name the stomach compartment where fermentation takes place.

A: *Rumen*

16. What class of drugs is commonly used in starter rations?

A: *Antibiotics*

17. Briefly explain the difference between the nutritional needs of young versus mature animals. A:

*Young animals need additional nutrients for growth, while mature animals just need enough nutrients to maintain body tissues already present*

18. If a 2 month old lamb receives a ration containing nutrients over and above his maintenance requirements, the excess nutrients will then go toward

A: *Growth*

19. Feed efficiency in feedlot lambs is described as pounds of \_\_\_\_\_ per pound of \_\_\_\_\_

A: *Feed, gain*

20. Balancing ration that contains all necessary nutrients at the proper requirement levels, at minimum cost to the shepherd is known as

A: *Least-cost ration formulation*

21. Nutrient requirements for the pregnant ewe are highest during which trimester?

A: *Last*

22. Name 3 high energy concentrates.

A: *Corn, milo, barley, oats, wheat*

23. Grains are higher in which mineral when compared to forages?

A: *Phosphorus*

24. Name the primary avenue of water intake, and the primary avenue of water loss in the normal animal.

A: *Drinking water and urinary loss*

25. The breaking down of feedstuffs by the body is known as

A: *Digestion*

26. What term describes the amount of feed a sheep will clean up each day?

A: *Full feed or ad-libitum*

27. Feeds that are high in fiber content and low in energy content are referred to as

A: *Roughages*

28. Corn is a poor source of what mineral?

A: *Calcium*

29. What mineral contains sodium and chlorine and is generally fed free choice to sheep?

A: *Salt*

30. What abundantly available feed grain typically has the highest energy value?

A: *Corn*

31. What nitrogen-containing compound can be fed to a sheep to meet up to 30% of its protein requirement, but can be toxic at higher levels?

A: *Urea*

32. What legume hay generally has the highest feeding value for sheep?

A: *Alfalfa*

33. What is the function of the rumen microbial population?

A: *Digest fiber, utilize non-protein nitrogen (NPN)*

34. What is one of the best choice of products given orally to supply the necessary energy to a pregnant ewe with signs of pregnancy toxemia?

A: *Propylene glycol*

35. What percent of their body weight will a lamb typically consume in dry feed each day?A:

3-5%

36. What mineral is found in abundance in bone meal and limestone?

A: *Calcium*

37. As a ruminant the sheep bases its diet on what class of feedstuffs?

A: *Roughages*

38. Name a common feed grain that is high in fiber and used for sheep>

A: *Oats*

39. Corn is a good source of

A: *Energy*

40. What is the name of the largest of the four compartments of a sheep \_s stomach?

A: *Rumen*

41. Name three of the nutrients required for sheep to maintain their bodies and grow.

A: *Protein, energy, vitamins, minerals, water*

42. The most limiting nutrient in ewe nutrition is

A: *Energy*

43. At what stage in the ewe \_s production cycle is protein the most critical?

A. *Open*

B. *Early gestation*

C. *Late gestation*

\*D. *Lactation*

44. If a ewe is underfed protein during lactation, what is the likely negative result?

A: *She will be a poor milker*

45. Increased salt intake requires an increase in the consumption of

A: *Water*

46. What are two minerals closely interrelated, particularly in the development and maintenance of normal bone structure?

A: *Calcium and Phosphorus*

47. The levels of which class of nutrients in feeds is largely determined by the level in the soil on which the feeds are grown?

A: *Trace minerals*

48. Under normal nutritional conditions, when is the ewe likely to weigh the least?

A: *Weaning time*

49. Excess fatness of replacement ewe lambs between birth and first lambing should be avoided for what major reason?

A: *Her future milk production is reduced*

50. On a ewe condition scoring system of 0-5, the desired condition score range to maintain the ewe year round is:

A. *1 ½ to 2 ½*

\*B. *2 ½ to 3 ½*

C. *3 ½ to 4 ½*

D. *4 ½ to 5*

51. A good quality commercially prepared lamb milk replacer will contain \_\_\_\_\_ % fat and \_\_\_\_\_ % protein.

A: *25-30, 20-25*

52. Give one reason why it is recommended to feed orphan lambs cold rather than warm milk replacer.

A: *Cold doesn't sour as quickly, lambs consume a smaller amount of cold milk replacer each time they nurse, but they nurse more often*

53. The trade name for the product lasalocid, an ionophore which is FDA approved for sheep is

A: *Bovatec*

54. What do the letters T.D.N. stand for?

A: *Total Digestible Nutrients*

55. What do the letters A.D.G. stand for?

A: *Average Daily Gain*

56. What is the name for the rhythmic muscular contractions which occur in the rumen?

A: *Peristalsis*

57. What is the greatest importance of salt in a livestock ration?

A: *Stimulates appetite*

58. What are two factors that influence nutrient requirements of an animal?

A: *Sex, weight, level of production, nutrient intake, environment*

59. What is feed efficiency?

A: *The amount of feed it takes for an animal to produce a pound of gain*

60. When lambs are maintained on a high concentrate diet, what mineral is more likely deficient?A:

*Calcium*

61. The raw source of Vitamin A found in a feedstuff is called

A: *Carotene*

62. Where do sheep store Vitamin A during times of abundant intake?

A: *Liver and body fat*

63. Rank the five nutrient groups from the one with the highest amount needed in the diet to the one with the lowest amount needed in the diet.

A: *Water, energy, protein, minerals, vitamins*

64. What is the function of the esophageal groove in a lamb?

A: *Allows milk to bypass the rumen and reticulum for digestion in the abomasum*

65. Which of the following minerals has been called the *\_master mineral\_* because it is involved in practically all of the metabolic processes in the body?

A. *Sodium*

B. *Iron*

\*C. *Phosphorus*

D. *Potassium*

66. Define ration.

A: *Feed given to an animal over a 24 hour period*

67. What mineral is likely to be deficient when sheep are maintained on a high roughage diet?

A: *Phosphorus*

68. Which of the following would be expected to have the highest protein content?

A. *Prairie hay*

\*B. *Alfalfa hay*

C. *Wheat straw*

D. *Sorghum silage*

69. Minerals, especially trace minerals such as selenium, are \_\_\_\_\_ at high levels of intake.

A: *Toxic*

70. Corn silage, pasture and hay are examples of what type of feed?

A: *Roughages*

71. Iron, phosphorus, calcium and magnesium are examples of which of the following types of nutrients?

A. Protein

\*B. Minerals

C. Vitamins

D. Energy

72. What are two ways that sheep usually receive adequate quantities of Vitamin D?

A: *By synthesizing it in their own bodies during exposure to direct sunlight or from sun cured hay*

73. When corn is overfed to lambs not used to concentrates, what is a common result?

A: *Acidosis, founder*

74. What type of sheep feed is most commonly high in Vitamin A?

A: *Green, leafy legume forage*

75. What enables sheep to eat and digest the cellulose in hay?

A: *Bacteria and other microbes in the rumen*

76. What do the letters N.P.N. stand for?

A: *Non-protein nitrogen*

77. Into what structure does the food pass when it leaves the stomach?

A: *Small intestine*

78. What is the most practical method you can use to measure a lamb's performance during the feeding period?

A: *Weighing him periodically*

79. Which basic nutrient is found in the largest quantity in an animal's body?

A: *Water*

80. What is the primary purpose of chewing food?

A: *Break feedstuffs into smaller particles, allowing better contact with the digestive enzymes*

81. The specialized system in which food is broken down is called the

A: *Digestive tract*

82. Flushing can help increase \_\_\_\_\_ efficiency in a sheep flock.

A: *Reproductive*

83. As ruminant animals, sheep utilize many plant materials which would otherwise be to humans.

A: *Inedible*

84. TDN is an indication of the \_\_\_\_\_ of a feed.

A: *Energy value*

85. Sheep are ruminant animals while pigs are monogastric animals. Briefly explain the difference.

A: *Ruminants have complex, 4 compartment stomachs while monogastrics have simple, 1 compartment stomachs*

86. Sunshine and sun-cured hay are good sources for Vitamin

A: *Vitamin D*

87. Which nutrient serves as the body's built in cooling system?

A: *Water*

88. Which nutrient serves as the body's built in heating system?

A: *Energy*

89. What do the letters I.U. stand for when applied to vitamins?

A: *International Units*

90. How much more energy does it take for a lamb to gain a pound of fat than a pound of lean muscle tissue?

A: *2.25 more energy needed for fat tissue gain*

91. When added to sheep rations, what is the primary function of molasses?

A: *To increase or improve palatability*

92. What is a common digestive upset that can occur in sheep if you feed them straight alfalfa hay?

A: *Bloat*

93. What is the function of the esophagus?

*A: Carries or provides a passageway for food from the mouth to the stomach*

94. Ruminants have the ability to synthesize the \_\_\_\_\_ vitamins in the rumen.

*A: B-complex*

95. The science of all processes which take place when feed is given to animals is called

*A: Animal nutrition*

96. Skin, hair, hooves and horns are made up primarily of what basic nutrient?

*A: Protein*

97. The colon is also known as the

*A: Large intestine*

98. Before formulating a ration you must know \_\_\_\_\_ and

*A: What feedstuffs you have available, the animal's nutrient requirements*

99. Explain briefly how rumen bacteria and the ruminant animal can benefit each other in their life cycles.

*A: Ruminants provide a home or good environment for bacteria to grow and develop whereas bacteria help ruminants digest fibrous feedstuff and synthesize some nutrients for the animal's use*

100. When sheep overeat a concentrate source, or go off feed then overeat when re-exposed to the feed source, a condition can result where there is an upset in the rumen pH. This is known as

*A: Lactic acidosis*

101. Cleaning out the feed bunk at least once a day will

*A: Encourage greater feed intake*

102. What is tocopherol?

*A. Vitamin A*

*B. Vitamin B*

*C. Vitamin C*

*\*D. Vitamin E*

103. What is ascorbic acid?

*A. Vitamin A*

*B. Vitamin B*

*\*C. Vitamin C*

*D. Vitamin D*

104. Why is salt iodized?

*A: To supply iodine which helps control goiter, a condition of the thyroid.*

105. Why is it important to change a sheep's ration slowly?

*A: To give the rumen bacteria time to adapt to a new feed*

106. Molasses is a good source of \_\_\_\_\_ and is used in many feeds to increase palatability.

*A: Energy*

107. The energy remaining after digestive losses, gas losses, urinary losses and the work of digestion are deducted is called which of the following?

*\*A. Gross energy*

*B. Net energy*

*C. Metabolizable energy*

108. Of the five basic nutrient groups, which is the cheapest in almost all cases?

*A: Water*

109. Are bacteria or protozoa usually present in the rumen in greater numbers?

*A: Bacteria*

110. Why is it important that the newborn lamb receive colostrum milk?

*A: To provide antibodies for immunity from disease. To provide Vitamin A.*

111. What happens when milk first gets into the abomasum?



*A: It coagulates, glabbers, or clots like cottage cheese*

112. What kind of gas is produced in the rumen?

*A: Methane, carbon dioxide*

113. The organ which secretes digestive enzymes into the small intestine is called the

*A: Pancreas*

114. How can you tell when the rumen is contracting?

*A: Watch the flank, in front of the left hook, listen at the left flank*

115. When a lamb nurses, into which compartment of the stomach does the milk enter?

*A: Abomasum*

116. Define a balanced ration.

*A: A ration which furnished all the nutrients in the proper amount and proportion to properly nourish an animal for 24 hours*

117. Which intestine comes first?

*A: Small intestine*

118. When a ewe belches, where does the gas go?

*A: 80% goes into the lungs to be exhaled, 2% goes out the mouth directly*

119. What is a cud?

*A: The feed the ewe has brought up from the rumen and is re-chewing*

120. Where does the lamb get the organisms that live in its stomach?

*A: From touching the mouths of other sheep*

121. What does urea substitute for in the diet?

*A: Protein*

122. The first milk from a ewe following parturition is called

*A: Colostrum*

123. What nutrient if left out of the diet will cause death first?

*A: Water*

124. What is ruminating?

*A: Chewing the cud*

125. Which is fermented in the rumen first, hay or corn?

*A: Corn*

126. What is the primary reason for considering urea as a nitrogen source in ruminant rations?

*A: Cost*

127. Roughages are \_\_\_\_\_ in fiber and \_\_\_\_\_ in energy compared to concentrates.

*A: Higher, lower*

128. List 4 macro minerals required by sheep.

*A: Calcium, phosphorus, magnesium, chloride, potassium, sulfur, sodium*

129. List 4 micro minerals required by sheep.

*A: Iron, manganese, zinc, cobalt, iodine, selenium, molybdenum*

130. List 2 specific functions of rumen microorganisms.

*A: Convert cellulose materials into digestible products; synthesis of B vitamins; synthesis of vitamin K; convert NPN to bacterial protein; produce unidentified factors essential for growth, fattening and reproduction*

131. Is a newborn lamb a functioning ruminant?

*A: No*

132. Why can a sheep utilize urea and other non-protein nitrogen compounds as a protein source?A:

*Because the rumen microorganisms convert NPN into microbial protein which is then used by the sheep*

133. Name 3 functions of water in the body.

*A: A medium to transport nutrient, to carry waste products to the point of excretion, to cool the body at high environmental temperature, functions as a universal solvent, serves as a fluid which lubricates joints, serves as a fluid base for milk, substrate for metabolic reactions*

134. When a ewe reswallows her cud where does it go?

A: *Rumen*

135. What is the primary advantage of a ruminant over a simple stomach animal with respect to diet?

A: *Ruminants can obtain much of their nutrients directly from roughages not directly convertible into food for human use, thereby not competing with man for food supplies*

136. What good is protein in the diet?

A: *It is used to build muscle or milk protein*

137. What term is applied to the total energy contained in a feedstuff?

A: *Gross energy*

138. What lives in the rumen that digests food?

A: *Bacteria and Protozoa*

139. In feeding sheep, the nutrient requirements are outlined in a N.R.C. publication. What do the initials N.R.C. stand for?

A: *National Research Council*

140. What does protein solubility refer to?

A: *The ability of protein in a feed to dissolve in a liquid*

141. Which is more digestible, very mature hay or corn?

A: *Corn*

142. Name a major volatile fatty acid produced in the rumen.

A: *Acetic, propionic, butyric*

143. The primary digestive activity that occurs in a sheep rumen is

A. *Water absorption*

B. *Mineral absorption*

\*C. *Feedstuff fermentation*

D. *Absorption of nutrients*

## **PARASITES SECTION I**

1. Live flukes affect the \_\_\_\_\_ of the liver.

A: *Bile ducts*

2. Which internal parasite that also infects dogs can be grown to lengths of three feet in sheep?A:

*Tapeworm*

3. What is *\_bottle jaw\_* in sheep an indication of?

A: *Severe internal parasite infestation*

4. Internal parasites are more likely to be a problem under \_\_\_\_\_ weather conditions.

A. *Dry*

\*B. *Wet*

C. *Doesn't matter*

5. The barber-pole worm feeds on the lining of which stomach compartment?

A: *Abomasum or true stomach*

6. Which internal parasite infestation is most commonly associated with scouring in lambs under stress?

A: *Coccidiosis*

7. What is a disease of lambs characterized by dark diarrhea?

A: *Coccidiosis*

8. Name a disease caused by a mite that has now been eradicated in this country.

A: *Psoroptic mange, scabies, sheep scab*

9. What is another name for the stomach worm *Haemonchus contortus*?

A: *Barber pole worm*

10. Feed or hay that is contaminated with cat feces may cause what disease that can result in abortion?

A: *Toxoplasmosis*

11. A sheep ked may also be referred to as a what?

A: Tick

12. What is an *\_anthelmintic\_*?

A: A *compound for deworming*

13. Give an example of an obligatory parasite.

A: *Screwworm, maggot*

14. Stomach worms can cause which of the following symptoms?

A. *Anemia*

B. *Diarrhea*

C. *Rough hair coat*

D. *Slow rate of gain*

E. *None of these*

\*F. *All of these*

15. What is the best prevention for flies?

A: *Sanitation*

16. Name three methods for giving wormers.

A: *Bolus, drench, feed additive, paste, gel, injection, drinking water, mineral (block or salt)*

17. What is a maggot?

A: *Immature or larval stage of a fly*

18. Face flies and horn flies develop as maggots in which of the following compounds?

\*A. *Freshly deposited sheep manure*

B. *Rotting grass clippings*

C. *Rotting or fermenting hay*

## **PHYSIOLOGY AND ENDOCRINOLOGY SECTION J**

1. Name the master gland controlling the estrous cycle.

A: *Pituitary*

2. Which ovarian hormone appears to be involved in the development of the duct system of the mammary gland?

A: *Estrogen*

3. Frightening a ewe will cause the release of what hormone?

A: *Adrenalin, norepinephrine*

4. The hormone responsible for interfering with milk ejection is

A: *Adrenalin, norepinephrine*

5. Which hormone is the one responsible for the ejection of milk?

A: *Oxytocin*

6. Name two hormones produced by the ovary.

A: *Estrogen, Progesterone*

7. What is the male hormone called?

A: *Testosterone*

8. What is the term used to describe the taking of oxygen from the atmosphere, and then the release of carbon dioxide back into the atmosphere by an animal?

A: *Respiration*

9. What role does the hormone vasopressin (ADH) have?

A: *Water reabsorption from the kidney back into the body*

10. Blood consists primarily of

A: *Water*

11. Insulin is produced by the

A: *Pancreas*

12. The nitrogenous waste product that is secreted by the kidney is called

A: *Urea*

13. The pH of the abomasum of a ruminant is very

\*A. Acidic

B. Alkaline

14. Hormones are carried in the \_\_\_\_\_ of an animal.

A: *Bloodstream*

15. Oxytocin is a hormone secreted from which endocrine gland?

A: *Posterior pituitary*

16. Estrogen is secreted from which endocrine gland?

A: *Ovary*

17. Another name for growth hormone is

A: *Somatotropin*

18. The hormone that moves calcium into bone is called

A: *Calcitonin*

19. Name the chemical messenger that causes a slightly higher body temperature?

A: *Adrenalin, norepinephrine*

20. What time of day will an animal have a slightly higher body temperature?

A: *Late afternoon*

21. When an animal becomes agitated or scared, a hormone known as \_\_\_\_\_ is released causing increased heart rate, respiration and blood pressure.

A: *Adrenalin, norepinephrine*

22. The movement of water across cell membranes to a high concentration of salt, in order to dilute that concentration is called

A: *Osmosis*

23. What are pheromones?

A: *Chemical messengers that aid in communication between animals*

24. Glucose levels are lower in sheep than in non-ruminants. What do they use for energy?

A: *Volatile fatty acids (VFA \_s)*

25. What endocrine gland in the body actually works to control the pituitary gland by sending out specific releasing hormones?

A: *Hypothalamus*

26. The study of the hormonal system is known as

A: *Endocrinology*

27. White blood cells are important for

A: *Protection against disease*

28. \_\_\_\_\_ is produced by the thyroid gland and works to increase body metabolism.

A: *Thyroxin*

29. In general, the smaller an animal the \_\_\_\_\_ its metabolic rate and the \_\_\_\_\_ its heart rate.

A: *Higher, faster*

30. Blood carries \_\_\_\_\_ from the lungs to the body tissues and \_\_\_\_\_ from the body tissues to the lungs.

A: *Oxygen, carbon dioxide*

31. The blood in the arteries has a \_\_\_\_\_ oxygen content than that in the veins.

A: *Higher*

32. Skin plays an active role in converting sunlight to Vitamin

A: *Vitamin D*

33. The \_\_\_\_\_ primary responsibility is to help the body handle short and long term stress.

A: *Adrenal gland \_s*

34. Younger animals normally have a \_\_\_\_\_ pulse than older animals.

A: *Faster*

35. Increased heart rate in an animal will result in \_\_\_\_\_ blood pressure.

A: *Increased*

36. The small intestine has a more \_\_\_\_\_ pH than does the abomasum of a ruminant.

A: *Alkaline*

37. As blood leaves the heart to go to the rest of the body, that blood will pass through the \_\_\_\_\_ system first.

A: *Arterial*

38. When both testicles fail to descent into the scrotum and remain in the body cavity, the male animal is:

A. *Fertile and shows normal sexual activity*

\*B. *Infertile and shows normal sexual activity*

C. *Fertile and does not show normal sexual activity*

D. *Infertile and does not show normal sexual activity*

## **REPRODUCTION SECTION K**

1. Cryptorchidism describes what condition?

A: *A male lamb that is born with one or both testicles still in the abdominal cavity.*

2. What is meant by the term *\_flushing\_* the ewe?

A: *Increasing the plane of nutrition prior to breeding*

3. What is the name of a procedure which is used to determine ram *\_s* sexual aggressiveness?

A: *Serving capacity test*

4. What is the name of the lip-curling reflex exhibited by rams when they smell a ewe in heat?

A: *Flehming reflex*

5. In sheep, estrus lasts how long?

A: *24 to 36 hours*

6. How many days are there between heat or estrous cycles?

A: *16 to 17 days*

7. What is the average length of gestation in sheep?

A: *148 days (144 to 150)*

8. What is a ewe doing when she is lactating?

A: *Producing milk*

9. Approximately 70% of fetal growth occurs during what period of gestation?

A: *The last 4 weeks*

10. Ewes with twin lambs produce \_\_\_\_\_ more milk than those sucking singles.

A: *20 to 40%*

11. What do the letters A.I. stand for?

A: *Artificial Insemination*

12. What do the letters P.M.S. stand for?

A: *Pregnant mare serum*

13. What is the function of the sheep *\_s* epididymis?

A: *Storage and maturation of sperm*

14. Prior to the normal birth of a lamb, the \_\_\_\_\_ must be fully dilated.

A: *Cervix*

15. The unborn lamb is linked to the placenta by the \_\_\_\_\_

A: *Umbilical cord, naval*

16. Does the ram or the ewe determine how many lambs the ewe will have?

A: *Ewe*

17. What is the normal presentation of the fetal lamb for delivery?

A: *Head between front legs (Diving position)*

18. What is a commercially available prostaglandin used to synchronize ewes?

A: *Lutalyse*

19. A naturally occurring compound used to superovulate donor ewes for embryo transfer is

A: *F.S.H. (Follicle stimulating hormone), P.M.S. (Pregnant mare serum)*

20. Dystocia is another word for

A: *Lambing difficulty*

21. Name the reproductive organ in the ram that produces sperm cells.

A: *Testes*

22. What structure forms on the ewes ovary that contains the egg?

A: *Follicle*

23. What term is used to describe the length of time from breeding to lambing?

A: *Gestation*

24. In delivering a lamb that is presenting breech, why should one deliver the lamb quickly after the legs are out?

A: *Because the lamb will take its first breath as soon as the umbilical cord breaks and the head may still be in fluid.*

25. What is a lamb called during its developmental stay in the uterus?

A: *Fetus*

26. What is the sac-like tissue that contains the fetus during its development?

A: *Placenta*

27. What is happening to day length during the time that ewes are generally more reproductively active?

A: *Day length is increasing*

28. Name two breeds of sheep that are most often considered to be highly prolific.

A: *Finnsheep, Booroola Merino, Romanov, Polypay*

29. What is *accelerated* lambing?

A: *Lambing more often than once every 12 months*

30. How often does the ideal ewe on the *Star* system lamb in three years?

A: *Five times*

31. Failure of the cervix to dilate may be caused by a condition called

A: *Ringwomb*

32. In the sperm cell, the genetic information is contained in which of the following locations?

A. *Acrosome or cap*

\*B. *Head*

C. *Tail*

33. When ewes are in standing heat what are they doing?

A: *Standing and letting other ewes or the ram ride her*

34. You breed a ewe during her \_\_\_\_\_ period.

A: *Estrus*

35. What do the letters E.T. stand for?

A: *Embryo transfer*

36. Estrous synchronization with prostaglandin works only on \_\_\_\_\_ ewes.

A: *Cycling*

37. Which hormone is responsible for male behavior and sex drive?

A: *Testosterone*

38. What is estrus synchronization?

A: *Causing females to express estrus at a predictable time, usually within a period of 1-4 days*

39. What hormone is responsible for follicle development on the ovary?

A: *F.S.H. (Follicle stimulating hormone)*

40. Name three signs of estrus.

A: *Standing while being mounted, roughed up wool over tailhead, mud on rumps or hip, swollen wet vulva, restlessness, bleating, fence walking*

41. What is the primary function of the uterus?

A: *Provides protection and housing for the fertilized egg to develop into a fetus, acts as womb*

42. What is the largest of the female reproductive organs?

A: *Uterus*

43. The common name for the expelled placenta following parturition is

A: *Afterbirth*

44. What are the primary sex organs of the male and female?

A: *Male - testes; female - ovaries*

45. What specific structure within the testicles is responsible for the production of sperm?

A: *Seminiferous tubules*

46. The testicles produce both \_\_\_\_\_ and \_\_\_\_\_

A: *Spermatozoa, testosterone*

47. What is the practice called that enables an entire flock of females to come into heat within a 1-4 day period?

A: *Estrus synchronization*

48. What is the function of the hormone relaxin during parturition?

A: *To widen the birth canal*

49. Odors that signal sexual readiness are caused by chemical messengers known as

A: *Pheromones*

50. A ram that is able to detect heat but is incapable of settling ewes is called a

A: *Gomer, teaser*

51. The vulva is the external opening to what part of the reproductive tract?

A: *Vulva*

52. What structure forms on the ovary and produces progesterone in early pregnancy?

A: *Corpus luteum*

53. What term is used to describe the sexual behavior or sex drive in rams?

A: *Libido*

54. The lamb is approximately \_\_\_\_\_ percent water at birth.

A: *70*

55. What enzyme in a lamb's stomach causes milk to form into curds?

A: *Rennin*

56. What is the endometrium?

A: *Layer of the uterus adjacent to the lumen*

57. What structure of the ram has the function of regulating the temperature of the gonad or testicles?

A: *Scrotum*

58. What is the benefit of ultrasonic pregnancy checking in the ewe?

A: *By identifying the number of embryos the ewes can be fed according to number of lambs they will have. This will help to prevent the incidence of pregnancy toxemia in ewes carrying multiple lambs.*

59. What is the natural barrier in a ewe's reproductive tract through which an artificial insemination rod must be passed before semen is properly deposited?

A: *Cervix*

60. Sexual receptivity in the female is primarily dependent on high levels of

A: *Estrogen*

61. Fertilization normally takes place in the

A: *Oviduct*

62. Prostaglandin is produced by the

A: *Uterus*

63. The process involving formation of the male gamete is called

A: *Spermatogenesis*

64. The term describing the release of an egg from the ovary is

A: *Ovulation*

65. The membranes which enclose the fetus in a fluid filled sac are called the

A: *Placenta*

66. What is a breech birth?

A: *When a lamb is presented tail first*

67. What hormone is known as the \_hormone of pregnancy \_?

A: *Progesterone*

68. What does gestation mean?

A: *Period of carrying a lamb, duration of pregnancy*

69. What is the thin membranous structure at the end of the oviduct which partially covers the ovary?

A: *Fimbria, infundibulum, funnel*

70. Prostaglandin can be used as an estrus synchronization agent by performing what action on the ovary?

A: *Causes regression of the corpus luteum (CL)*

71. The term to describe a difficult lambing is

A: *Dystocia*

72. During natural mating between a ewe and a ram, semen is deposited in the

A: *Vagina*

73. The scientific term for the birth process is

A: *Parturition*

74. What is the sac-like pouch called that is suspended from the ram and houses the testicles?

A: *Scrotum*

75. The oviduct carries the egg to what part of the ewe \_s reproductive tract?

A: *Uterus*

76. The male gonad is the

A: *Testicle*

77. The female sex cell is called the

A: *Egg, ovum*

78. Name the hormone that is produced from the ram \_s testicles.

A: *Testosterone*

79. Name the structure in the female that serves as a womb.

A: *Uterus*

80. What primary structure links the fetus to the placenta?

A: *Naval, umbilical cord*

81. What is meant when it is said that a ewe has failed to \_clean \_ following lambing?

A: *The ewe retains her placenta or afterbirth instead of shedding it as she should have within about 12 hours after birth.*

82. How many testicles should a ram have?

A: *2*

83. How many sperm cells are actually needed to fertilize an egg?

A: *1*

84. Endometritis describes what condition in a ewe?

A: *Uterine infection*

85. The uniting of the male and female sex cells is called

A: *Fertilization*

86. The male gamete is called the

A: *Sperm cell*

87. The eggs are produced by the \_\_\_\_\_, paired structures in the female reproductive tract.

A: *Ovaries*

88. Satisfactory sperm production in the ram requires the testicles to be \_\_\_\_\_ than normal body temperature.

A: *Cooler*



89. When both testicles fail to descend into the scrotum of a ram, he will retain his but lose his

A: *Sex drive, ability to fertilize eggs*

90. Name the hormone that triggers growth of a follicle on the female ovary.

A: *F.S.H. (Follicle stimulating hormone)*

91. The female gonad is the

A: *Ovary*

92. The unborn animal is nourished through the

A: *Placenta via the umbilical cord*

93. Name the hormone in the female that triggers ovulation and where it is produced.

A: *L.H. (Luteinizing hormone) from the anterior pituitary gland*

94. What are two primary factors affecting how easily a ewe lambs?

A: *Pelvic size, number of fetuses, size of fetuses, presentation of fetuses, sire selection*

95. Total sperm production in yearling rams can be directly related to

A: *Scrotal circumference*

96. What is the minimum acceptable scrotal circumference for a yearling ram?

A: *Centimeters*

97. Sperm is produced by what tissue in the testes?

A: *Interstitial*

98. Name two functions of the female ovary.

A: *Production of ova, secretion of hormones*

99. Following ovulation, a corpus luteum develops and produces

A: *Progesterone*

100. An embryo contains \_\_\_\_\_ water as a percent of the total body weight than an adult animal.

A: *More*

101. The fetus increases its size about how many times during the last month of pregnancy?

A: *Three*

102. A fertilized egg is called a

A: *Zygote*

103. The life of a sperm cell in the female reproductive tract is about \_\_\_\_\_ times as long as the life of an unfertilized ovum.

A: *Five*

104. What does the uterus of a pregnant ewe contain?

A: *Fetus, unborn lambs*

105. Name two hormones produced by the ovary.

A: *Estrogen, progesterone*

106. What is the period of pregnancy called?

A: *Gestation*

107. Proestrus, estrus, metestrus and diestrus are stages of the \_\_\_\_\_ cycle.

A: *Estrus*

108. What is diestrus?

A: *A period when the female is having regular estrus cycles. In the ewe this may be seasonal, due to pregnancy or due to some malfunction of the system.*

109. What does the term fertility refer to?

A: *Ability to produce young*

110. What is the primary female organ of reproduction?

A: *Ovary*

111. Name two ways that gomer rams may be used.

A: *To mark ewes that are in heat, to induce the onset of estrous cycles earlier in the season*

112. Name the condition occurring when a ewe expels a fetus prematurely.

A: *Abortion*

113. If a male sperm bearing the X chromosome fertilizes an egg, what sex will the resulting lamb be?

A: *Female*

## **AGRONOMY SECTION L**

1. If the recommended stocking rate for a given summer range is .6 AUM (Animal Unit Months) per acre, how many acres of rangeland would be required per animal unit for 3 months of grazing?

A: *5 (# months divided by rating of pasture)*

2. How many sheep make up 1 Animal Unit

A: *5 ewes and their offspring*

3. A forb is a broad-leafed, herbaceous plant which is commonly referred to as a

A: *Weed*

4. What is the standard test weight per bushel of milo?

A: *57 pounds per bushel*

5. In drought stressed sorghum, what part of the plant will contain the highest amount of nitrate?

A: *Stalks (lower 1/3)*

6. Hay can be a fire hazard when it is \_\_\_\_\_ percent moisture.

A: *30-40%*

7. What happens when silage or haylage is stored too wet?

A. *Loses nutrients*

B. *Improper fermentation*

C. *Lower palatability*

\*D. *All of the above*

8. What poisonous factor is associated with wilted sweet clover?

A: *Dicoumarin*

9. When a grain is harvested while still immature and the stalks are chopped and left with the grain allowing the product to ferment, the resulting feedstuff is known as

A: *Silage, ensilage*

10. Hay is costing \$60 per ton, and is fed at the rate of 5 lbs. per ewe per day. What is the daily feed cost?

A. *\$.80*

B. *\$.60*

C. *\$.30*

\*D. *\$.15*

11. Forage crops are commonly harvested as hay, haylage or silage. One criteria of deciding which class they fit into is dry matter content. Three crops have the following dry matter contents: 55%, 88% and 30%. Which one would be hay, silage and haylage?

A: *Hay - 88% dry matter, Silage - 30% dry matter, Haylage - 55% dry matter*

12. Dark color and burnt odor are general indicators of what problem in haylage?

A: *Heat damage*

13. What is the biggest advantage and disadvantage of baling hay in small bales?

A: *Advantage - less wastage due to storage losses; Disadvantage - high labor requirement*

14. What type of plant is commonly associated with nitrogen fixing bacteria?

A: *Legumes (alfalfa, soybeans)*

15. Spring top dressing of pasture land refers to what common pasture management practice?

A: *Applying fertilizer*

16. Mycotoxins come from

A: *Mold*

17. Applying ammonia fertilizers to the soil increases the level of

A: *Nitrogen*

18. If you wanted to kill thistles in a fence row you would use which of the following?

A. DDT

\*B. 2, 4-D

C. CMT

D. Copper sulfate

19. The most valuable constituent of manure is

A: Nitrogen

20. What percentage of the primary nutrients in manure are available to crops during the first year after application?

A: 50%

21. Which crop would respond most to the application of manure?

A. Alfalfa

\*B. Grass sod

C. Soybeans

22. Under drought conditions, certain crops may cause prussic acid poisoning. Name a crop you are likely to have this problem with.

A: Sorghum-sudan grass

23. Under what conditions do poisonous plants pose the most problems?

A: When animals are not fed and watered properly; after thirsty animals are watered, they readily eat plants they would otherwise avoid, starving animals will do likewise

## WOOL SECTION M

1. A lamb shorn 75 days before going to slaughter is likely to have what type of pelt?

A: Number 1

2. An extremely well-fed ewe flock will produce \_\_\_\_\_ pounds of wool that is grading than a marginally-fed flock.

A: More, coarser

3. Name the two layers of a sheep skin.

A: Dermis and epidermis

4. Name the two types of follicles that produce wool fibers.

A: Primary and secondary

5. Primary and secondary wool follicles have sebaceous glands. What do they produce?

A: Wax and grease

6. What type of string should be used to tie fleeces?

A: Paper

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

A: Fleece

8. What do you call purified wool grease?

A: Lanolin

9. What does it mean to skirt a fleece?

A: Remove the stained or inferior wool from it

10. The poorest quality wool is located on the \_\_\_\_\_ of the sheep.

A: Belly

11. What does carding do for a fleece?

A: Pulls out and straightens the ends of the wool

12. The natural waviness of wool fibers is called

A: Crimp

13. Wool that is 20 microns in diameter is considered:

A. Quarter blood

B. 3/8 blood

C. 1/2 blood

*\*D. Fine*

14. What causes a break in the wool fiber?

*A: Sickness (fever or very poor nutrition)*

15. What is tagging?

*A: Removal of the wool from the udder and vaginal area of the ewe prior to lambing*

16. How is wool graded?

*A: Based on crimp (waviness) and spin count (diameter)*

17. Skin folds are highly \_\_\_\_\_ in sheep.

*A: Heritable*

## **HANDLING SECTION N**

1. The field of vision for an average sheep is approximately how many degrees?

*A: 270*

2. To prevent sheep from being spooked by distractions outside the handling facilities, what type of fences should be used in chutes and crowding pens?

*A: Solid*

3. Which of the following breeds is generally more gregarious or has the greater flocking instinct?

*A. Hampshire*

*B. Dorset*

*C. Suffolk*

*\*D. Rambouillet*

4. Solid shades should be used over working, sorting and shearing facilities rather than materials such as snow fence. What is the sheep's likely reaction to the snow fence shade?

*A: They will balk because of the shadows or contrasting light levels*

5. Sheep move more readily:

*A. Uphill/with the wind*

*\*B. Uphill/toward the wind*

*C. Downhill/with the wind*

*D. Downhill/toward the wind*

6. A producer should provide how many square feet of building space per ewe with lamb at side on dirt floor?

*A: 15-20*

7. How much linear feeder space should a producer provide for each 80 pound feeder lamb on a self feeder?

*A: 1-2 inches*

8. Fences and gates of gathering pens should be \_\_\_\_\_ structure.

*A: Open*

9. A fairly standard minimum height of fences and gates for a gathering pen is \_\_\_\_\_ inches.

*A: 42 inches*

10. Unless the sheep are extremely large or prone to jumping, a standard working chute height is \_\_\_\_\_ inches.

*A: 36 inches*

## **PREDATOR CONTROL SECTION O**

1. What is the main wild predator of sheep?

*A: Coyote*

2. Name two predators, other than a coyote, that sometimes prey on sheep.

*A: Dog, fox, bobcat, bear, mountain lion, wolf, eagle*

3. Name two breeds of dogs that are commonly regarded as good guard animals to prevent predation.

*A: Great Pyrenees, Komondor, Anatolian Shepherd, Akbash, Moremma*

4. Name two animals other than guard dogs that are sometimes used to protect sheep from predation.

*A: Donkeys, goats, mules, ostriches, llama, sometimes cattle*

5. How does the evidence of a typical coyote attack differ from a dog attack?

*A: A coyote is usually efficient and kills one animal by strangulation. Dogs will generally mutilate a number of sheep.*

6. In Kansas, what is the single most effective management measure a sheep producer can incorporate to reduce coyote predation?

*A: Pen sheep at night*

7. Name two legal means of predator control.

*A: Guard animals, trapping, snaring, shooting, netting*

8. Coyote attacks are most likely to occur at

*A: Night*

## **CURRENT INFORMATION SECTION P**

1. Which state in the U.S. has the highest number of sheep and lambs?

*A: Texas*

2. Which state in the U.S. finishes more feedlot lambs than any other state?

*A: Colorado*

3. Which general area of the country produces a high percentage of the lambs to be placed in feedlots?

*A: Southwest or Northwest range*

4. What is one possible reason for a price dock on light weight lambs in the summer and a dock on heavy weight lambs in the winter?

*A: The market can handle a percentage of all weight lambs at all times of the year, but when the market is flooded with too high a percentage of lambs from one weight class, the price drops for that category*

5. What is the name of a contract signed by a farmer in which he agrees to deliver a quantity and quality of a commodity such as grain at a specified month and provides a hedge against market fluctuations?

*A: A futures contract*

6. Where should you look to find the latest recommendations on how to use an antibiotic?

*A: On the label*

7. What does drug withdrawal time mean in regard to marketing animals for slaughter?

*A: The amount of time prior to slaughter for which the animal must be off the drug*

8. What is the major problem associated with antibiotics turning up in the lamb on the consumer's table?

*A: Some people are allergic to them*

9. What Act of Congress regulates safety and health standards for agriculture, business, and industry?

*A: Occupational Safety and Health Act (OSHA)*

10. What is the current market prices for market lambs?

*A:*

# General Livestock Sample Questions from “Animals In Pursuit”

## Sheep

Q. A sound commercial ewe project should be evaluated on what basis?

A. Lamb production/ewe; profit/ewe

Q. How much space should be provided for each ewe?

A. About 20 square feet

Q. How many pounds of hay will a ewe eat in a 200 day winter period?

A. 650-750 pounds

Q. Small wired brushes used to fluff wool are called?

A. Wool cards

Q. What are 4 of the major diseases affecting sheep?

A. Parasites, pneumonia, pregnancy disease, vibrio, enterotoxemia, sore mouth, scours, mastitis, foot rot, and urinary culculi

Q. Name two lamb carcass quality grades.

A. Prime, choice, good, utility, cull

Q. Name seven of the approximately 21 sheep breeds in the U.S.

A. Suffolk, Dorset, Finn, Hampshire, Columbia, Corriedale, Rambouillet, Shropshire, Targhee, Border Lester, Cheviot, Panama, Lincoln, Oxford

Q. How much dry lot space should you have per ewe?

A. 30-50 square feet

Q. How many pounds of grain will a ewe lambing in February need a year?

A. 150-200 pounds

Q. What should you wash your sheep with?

A. Mild detergent

Q. What is a high temperature for a sheep?

A. 104-106°F

Q. Name two lamb carcass yield grades.

A. 1, 2, 3, 4, 5

Q. What are the two major economic traits to look for when selecting sheep?

A. Prolificacy, rate of gain, wool production, hardiness and longevity

Q. What is a lamb creep?

A. A small pen where lambs can eat, rest and be away from the ewes

Q. How many head of sheep can an acre of good pasture support?

A. 10-15 head/acre

Q. Name two basic equipment items for grooming.

A. Hand shears, wash brush, rope halter, blanket, feed pan and water pail

Q. What are two signs a sheep may be getting sick?

A. Laggard, off by itself, won't eat, manure not normal

Q. To measure the fat thickness of a lamb carcass, the carcass is ribbed between what ribs?

A. 12<sup>th</sup> and 13<sup>th</sup>

Q. What is fecundity?

A. Ovulate, conceive and raise high lamb number/ewe

Q. When is it best to shear?

A. Prior to lambing

Q. How many pounds should you feed ewes during early gestation?

A. 4-5 pounds of feed

Q. What is the stand called that is used when grooming?

A. Blocking stand

Q. A normal healthy sheep will do what when approached?

A. Run away

Q. What is the carcass from a young sheep called?

A. Lamb

Q. What factors influence milk yield of ewe?

A. Number of lambs, age, feed, udder soundness

Q. What should you do with sheared wool?

A. Bag immediately and store in clean, dry place

Q. Aside from grains and hay, what is essential to feeding sheep?

A. All the fresh clean water they want

- Q. How soon before the show should you trim the lamb's feet?  
A. 2 weeks
- Q. What should you first do with a sick sheep?  
A. Isolate immediately in a clean, dry stall; get a diagnosis from vet; follow treatment recommended
- Q. What is the carcass from an old sheep called?  
A. Mutton
- Q. At what age do the down breeds reach sexual maturity?  
A. 5-7 months
- Q. Name two factors that can adversely affect profits.  
A. Ewe depreciation, interest rates, barn and equipment costs, health and parasites
- Q. When lactating, how much grain should a ewe receive?  
A. 1-2 pounds
- Q. How should you position the lamb to trim the feet?  
A. Place lamb on its rump, hold between your knees with the lamb's head up
- Q. What is enterotoxemia?  
A. Overeating
- Q. What is the blood grade name of wool with the finest diameter?  
A. Fine (has at least 64 hanks per pound spinning count)
- Q. What is gainability?  
A. Weight per day of age
- Q. Name three factors aside from the capital costs that affect production costs.  
A. Feed costs, level of winter feeding, when your ewes lamb, pasture costs, average of weight per lamb sold, number of lambs
- Q. What should be the proportion of hay:grain for lactating ewes?  
A. 65:35 to 50:50
- Q. Which portion of the hoof should be trimmed?  
A. The excessive overgrown area
- Q. How can you prevent enterotoxemia?  
A. Vaccinate a month before lambing and then vaccinate lambs at 3-4 weeks of age
- Q. What sheep breed has all black head and legs?  
A. Suffolk
- Q. What is considered the third most important economic trait of sheep?  
A. Wool production
- Q. How many more non-lactating ewes can be grazed per acre than lactating ewes?  
A. Twice as many
- Q. How old before lambs begin to eat dry feed?  
A. 2-3 weeks of age
- Q. What can happen if you cut a hoof too deeply?  
A. Blood and lameness
- Q. What are sheep keds?  
A. Ticks
- Q. What two breeds were originally crossed to make the Suffolk breed?  
A. Norfolk and Southdown
- Q. What determines clean fleece weight?  
A. Breed, size, staple length, fiber density
- Q. Have ewe prices risen or declined since 1981?  
A. Declined
- Q. What are three of the feed ingredients in a well balanced ration?  
A. Shelled corn, Ammonium chloride, alfalfa, soybean meal, molasses, feeding limestone, salt, antibiotics, Bovatec
- Q. Can you wash all breeds of sheep?  
A. No – wool breeds should not be washed
- Q. Are ticks an external or internal parasite?  
A. External
- Q. What is the activity called where teams perform specific tasks at a series of stations?  
A. Skillathon
- Q. How many years does the average ewe remain productive?  
A. 5-6 years
- Q. Are April-born lambs more or less costly to produce than January born lambs?  
A. Less
- Q. In any ration how much salt is adequate?  
A. 5%
- Q. How long before the show should you shear a show wether?

A. 2 weeks

Q. What are internal parasites?

A. Intestinal worms of several species

Q. What is the minimum number of group 4-H project experiences each leader should have?

A. Five

Q. What are two factors that determine ease of lambing?

A. Weight of lamb, size and shape, pelvic room in the ewe, presentation normal

Q. Do lambs sold in June or July sell for more or less per 100 pounds than December sold lambs?

A. More

Q. What causes too much fat in sheep?

A. Fed too much, too long

Q. How much fleece should there be at show time on a Suffolk ewe lamb?

A. ½ to ¾ inch

Q. How can ticks be prevented?

A. By spraying shortly after shearing

Q. How are livestock classes in a judging contest numbered?

A. Left to right from behind

Q. Which type of ewes are more likely to have two or more lambs?

A. Mature ewes, flushed ewes, finn cross ewes

Q. What is an example of a pasture related death loss?

A. Bloat, maggots, parasites, toxic plants

Q. If a lamb is orphaned or rejected what should you feed a new lamb?

A. Milk replace

Q. Which area of a sheep should be sheared first?

A. Breast area, then belly, flanks

Q. Should ewes be treated for worms before breeding?

A. Yes

Q. If the cuts in a class of 4 animals were 1-1-1, what would this tell you about the class?

A. All the animals are almost the same

Q. When is the best to select open ewes?

A. Summer or early fall

Q. What is a bummer lamb?

A. An orphaned lamb

Q. How should the creep ration be ground?

A. Coarsely or pelleted

Q. How do you remove excessive dirt, straw and manure before washing a sheep?

A. Curry comb or stiff brush

Q. Are sheep more or less likely to have parasite problems on pasture than in confinement?

A. More likely

Q. In addition to two teams who else is involved in a project quiz bowl? (Name one)

A. Moderator, judge, score keeper and time keeper

Q. Name 3 desirable physical characteristics in a 4-H ewe for show.

A. Alert, good size, length, height, body width, muscled legs, substance bone, breed type

Q. Crossbreeding increases what?

A. Productivity

Q. How much soybean meal should be added to the sheep ration?

A. 15%

Q. What should you do with a sheep's ears while washing?

A. Hold closed

Q. What is an inflammation of the udder called?

A. Mastitis

Q. Name two feedstuffs used primarily as sources of energy.

A. Barley, oats, wheat, corn, hay

Q. Name one of the meat type breeds.

A. Hampshire, Oxford, Shropshire, Suffolk, Dorset

Q. What is culling?

A. Selling unproductive and unhealthy sheep

Q. What vitamins should be in sheep ration?

A. A, D, E

Q. How can you speed up drying sheep?

A. Blow dry

Q. What is a normal temperature for a sheep?



- A. 101-103°F
- Q. Name two feedstuffs used primarily as sources of protein.
- A. Cottonseed meal, soybean meal, linseed meal, corn gluten meal, meat meal, urea
- Q. How much should a Suffolk ram lamb weigh at 5-6 months?
- A. 150-190 pounds
- Q. What two factors determine the pounds of lamb produced?
- A. Number of lambs or weight of lamb
- Q. What percent of the total production cost is feed?
- A. 60-70%
- Q. What is the purpose of carding a Hampshire lamb's legs?
- A. Make appear heavier boned
- Q. What diseases cause abortions?
- A. Vibrio and Chlamydia, toxoplasmosis
- Q. What class of nutrients are needed for proper bone and tooth formation?
- A. Minerals
- Q. How far in advance of breeding period should a ram be selected?
- A. At least 1 month
- Q. What will lambing your flocks in two separate groups do for management?
- A. Doubles use of building, equipment, and reduces production costs
- Q. Corn silage and grass hay are good sources of what?
- A. Energy
- Q. At what angle should the edge of shears be held to the lamb's back?
- A. 45° angle
- Q. What contributes to vibrio?
- A. Too many sheep and contaminated feed
- Q. What class of nutrients are considered the body's fuel?
- A. Energy
- Q. Which has research shown to produce the most pounds of lamb per ewe, crossbred ewes or straight-breds?
- A. Crossbreds
- Q. Are sheep numbers at their highest or lowest level in history?
- A. Lowest
- Q. Name three minerals important to a sheep's diet.
- A. Salt, calcium and phosphorous, magnesium, potassium, sulfur, cobalt, zinc, and iron
- Q. Which end of a lamb should you start clipping if you are right handed?
- A. Rear to front on right side and left
- Q. When does pregnancy disease occur?
- A. Last 40 days gestation
- Q. Muscle and hair are made from what class of nutrients?
- A. Protein
- Q. Which breed of sheep is the most prolific?
- A. Finn
- Q. When should a lamb's tail be docked?
- A. 1-7 days old
- Q. What does trace mineral salt containing iodine eliminate?
- A. Goiter problems
- Q. What purpose does a blanket serve on a sheep?
- A. Keeps sheep clean, firm and neat
- Q. What is entropion?
- A. Turned under eyelids
- Q. What nutrient is the body's "cooling system" and "lubricant"?
- A. Water
- Q. Name one of the two breeds noted for the best gainability, muscling and carcass traits.
- A. Suffolk and Hampshire
- Q. When should castrating be performed?
- A. By 2 weeks of age
- Q. What is urea?
- A. The dominant source of non-protein nitrogen
- Q. How do you clean the lamb's ears and face?
- A. washcloth
- Q. Can entropion in lambs be treated? If so, how?
- A. Clip or sew down the eyelids
- Q. What typed of animal can utilize a high fiber content in their ration?

A. Ruminants (beef, sheep, swine)  
Q. Which breeds are considered having the best disposition?  
A. Hampshire, Columbia, Shropshire, Corriedale, Dorset  
Q. What should be done to sheep's feet?  
A. Keep trimmed  
Q. Name three commonly used grains in sheep rations.  
A. Oats, corn, barley, wheat, rye and sorghum  
Q. What can add to the appearance of blackfaced lambs?  
A. A mixture of 2/3 mineral oil and 1/3 rubbing alcohol used on bare face  
Q. Polyarthritis affects what joints?  
A. Leg joints  
Q. What may cause hay to be yellow or brownish in color?  
A. Bleached by sun, rained on or stored in the bale at too high moisture  
Q. Which breeds are noted for superior growth rate and carcass muscling?  
A. Suffolk, Hampshire, Columbia  
Q. What does shearing rams do?  
A. Increases vigor and activity, helps avoid sterility  
Q. Name three desirable roughages.  
A. Alfalfa, timothy, brome, orchard grass, canary, clover, haylage, corn silage  
Q. What kind of halter can be used when showing?  
A. Rope halter  
Q. What is rectal prolapse?  
A. Protruding rectum  
Q. What part of legume hay contains most of the protein?  
A. Two thirds of the protein found in the leaves  
Q. What is considered the longest living breed of sheep?  
A. Rambouillet  
Q. What is docking?  
A. Detailing  
Q. What must a ewe have in order to produce an adequate milk supply?  
A. Energy, protein, calcium, phosphorus, vitamins, water  
Q. What facts about your lamb should you know before entering the showring?  
A. Birthday, weight, breeding information, feeding management  
Q. What can cause prolapse?  
A. Overweight, coughing, short dock, too high gain ration, genetics  
Q. Name 2 of the five criteria used to judge hay?  
A. Stage of maturity, leafiness, color, foreign material, odor and condition  
Q. Name 2 breeds which are the earliest to develop sexual maturity.  
A. Finn, Dorset, Down breeds such as Hampshire, Suffolk and Shropshire  
Q. What should you do to mark and identify lambs?  
A. Ear mark, tags, paint, brand  
Q. What are four of eight factors you should keep in mind when selecting proper feed rations?  
A. Age and size of animal, production stage, production level desired, current conditions, environment and disease  
Q. How should your lamb stand in the showring?  
A. Squarely, legs not wide or stretched  
Q. What is one of the two breeds most susceptible to scrapie?  
A. North County Cheviot and Suffolk  
Q. How many permanent incisor teeth does a two year old ewe have?  
A. Four

# General Livestock Sample Questions from “Animals In Pursuit”

## Swine

- 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 two feeds are most Minnesota hogs fed?  
A. Corn and soybean oil meal
- Q. How soon before the swine show should you start preparing your pig?  
A. 102 months in advance
- Q. Name two common diseases that attach pigs.  
A. Erysipelas, rhinitis, virus pneumonia, scours, brucellosis, leptospirosis, pseudorabies, T.G.E
- Q. What is the activity called in which teams of 3-5 members perform tasks at a series of stations before being told or shown how?  
A. Skillathon
- Q. What is a male breeding hog called?  
A. A boar
- Q. How many pounds should an 8 week old litter farrowed by a gilt weigh?  
A. At least 275 pounds
- Q. How many hogs are raised each year in Minnesota?  
A. Approximately 6 million
- Q. What does brushing do for a pigs hair coat?  
A. Adds “bloom” and makes it lie down properly
- Q. What are the two general classes of parasites that injure pigs?  
A. Internal parasites and external parasites
- Q. Name the event where one team challenges a second team to see which team can respond to the most questions correctly.  
A. 4-H Project or Quiz Bowl
- Q. What is a female hog called that has farrowed a litter of pigs?  
A. A sow
- Q. How many pounds should an 8 week old litter farrowed by a sow weigh?  
A. At least 320 pounds
- Q. What vitamins are produced by the bacteria in stomachs of sheep and cattle but must be provided to swine?  
A. B vitamins
- Q. How long before the show should a pigs hooves be trimmed?  
A. At least 2 weeks before the show
- Q. What is one of the most troublesome internal parasites of hogs in the Corn Belt States?  
A. Roundworms
- Q. How many members actively participate at one time on a project bowl team?  
A. 4
- Q. What is a female pig that has no offspring called?  
A. A gilt
- Q. At what age should a market hog reach 220 pounds?  
A. 4 ½ to 6 months
- Q. What feed ingredient makes up the largest part of the ration fed to most Midwest swine?  
A. Corn
- Q. When showing a pig in the ring, where should the pig be in relation to the exhibitor and the judge?  
A. Between
- Q. What are the most troublesome external parasites of hogs?  
A. Lice and mange
- Q. Name three of the four individuals (positions) who conduct a quiz or project bowl.  
A. Moderator, judge, score keeper and time keeper (acknowledger optional)

- Q. Who determines what the “cuts” or margin of differences between the pairs in a judging class will be?  
A. The official judge
- Q. What is a group of baby pigs from the same mother called?  
A. Litter
- Q. Corn is high in energy but like most farm grains is low in what two nutrients?  
A. Protein and minerals (and some vitamins)
- Q. What is the best distance from the judge to show off a pig?  
A. 10-30 feet
- Q. What is meant by “standing heat” when referring to swine?  
A. The period during which the female will stand to be mounted
- Q. What is a pedigree?  
A. A record of an animal’s ancestors
- Q. If the cuts for a class of market barrows were 1-1-1 what would this tell you about the class?  
A. All four animals are essentially the same or the decision for placing each pair is very close
- Q. What is the money made on a hog after the purchase price and cost of raising is subtracted called?  
A. Profit
- Q. What are two mineral sources often included in protein supplements for swine?  
A. Limestone, dicalcium phosphate, trace mineralized sale, bone meal
- Q. When showing a pig, how is the pig turned to the left?  
A. By tapping the pig with a cane or whip on the right side of its head
- Q. Will the period for standing heat usually last longer for sows or for gilts?  
A. Sows
- Q. What is a purebred animal?  
A. An animal whose parents are of the same breed and are recorded with the swine registry association
- Q. What should your voice sound like when giving oral reasons?  
A. Voice volume should be at a conversational level – confident, but pleasant
- Q. What is a piglet born dead called?  
A. Stillbirth
- Q. What nutritional disease may result if zinc is not included in the swine diet?  
A. Parakeratosis
- Q. How can a pig be stopped in the show ring?  
A. By crouching in front of the pig or placing the cane or whip in front of its snout
- Q. Up to 50% of all sows and gilts in heat will not show “standing heat” unless what is present?  
A. A boar
- Q. How old should gilts be when they are bred?  
A. 8-9 months
- Q. How close should you stand to the person to whom you are giving oral reasons?  
A. Approximately 6-8 feet away
- Q. When should sows and boars be wormed?  
A. Prior to breeding
- Q. What are two important reasons antibiotics are fed to growing swine?  
A. Help control disease, increase gains and improve feed efficiency
- Q. What does a swine showperson use to move the hog about the show ring?  
A. Cane or whip (or other similar equipment)
- Q. What are the advantages of crossbreeding swine?  
A. To combine the best traits of different breeds and to capitalize on heterosis (hybrid vigor)
- Q. How much should a gilt weigh when she is bred?  
A. 275-300 pounds
- Q. How long should the oral reasons presentation take for experienced judges?  
A. 1 ½ to 1 ¾ minutes
- Q. What temperature should baby pigs be kept at for the first 10 days?  
A. 85-90°F
- Q. How much feed will a 200 pound pig eat each day?  
A. Approximately 6-8 pounds
- Q. What should a person showing swine keep in a pocket?  
A. A small brush

Q. What is heterosis (hybrid vigor)?

A. When the crossbred offspring perform above the average of their purebred parents' breeds

Q. What is a crossbred animal?

A. An animal with two or more breeds in its ancestry

Q. What four points is the judge listening for in a set of oral reasons?

A. Accuracy, thoroughness, organization and smoothness of delivery

Q. Which teeth should be clipped in baby pigs?

A. Needle teeth

Q. A 100 pound pig eating 5-6 pounds of feed per day should gain how many pounds per day?

A. Approximate 1.5 – 1.6 pounds per day

Q. What is the person called who places the class in a show ring?

A. The judge

Q. What is heritability?

A. The proportion of total variation (or difference in a herd for a given trait) that is passed on directly from parents to offspring

Q. The most genetic improvement for growth, efficiency and carcass merit will come from what animal(s) in the swine herd?

A. The boar

Q. What is the maximum number of points you can receive in a judging class?

A. 50 points

Q. How soon should a baby pig's tail be clipped?

A. Within 24 hours after birth

Q. What percent should be fed to a pig from weaning to 100 pounds?

A. 16%

Q. What is the person called who keeps track of the showring placings?

A. Clerk

Q. Name a basic crossbreeding system frequently used with swine.

A. Rotational, terminal, rota-terminal

Q. What is a breed of animals?

A. Animals which look alike, have similar color markings, and the same origin

Q. What breed of hogs originated in Pennsylvania?

A. Chester White

Q. What should be applied to the cut tails and also the navels to prevent infection?

A. Tincture of iodine, antiseptic or other disinfectant

Q. What percent protein does corn contain?

A. 8.5%-9.0%

Q. What material is frequently used on the floor of the showring?

A. Shavings

Q. What is the most popular – a 2-breed or 3-breed rotational crossing system?

A. 3-breed rotational

Q. What is meat from hogs called?

A. Pork

QUIZBOWL



# INTERMEDIATE QUIZBOWL

## Swine Knowledge

- How old should gilts be before their first breeding?  
 A. 6-8 weeks  
 B. **7-12 months**  
 C. 2 years  
 D. 5 years
- How many white points is a Poland China supposed to have?  
 A. Four  
 B. **Six**  
 C. Eight  
 D. Ten
- What is the name for the sire's dam?  
 A. paternal grand sire  
 B. maternal grand dam  
 C. **paternal grand dam**  
 D. second generation
- Which breed is best known for being good mothers?  
 A. **Chester White**  
 B. Poland China  
 C. Berkshire  
 D. Spotted
- Keeping pigs separated from other pigs from another farm in order to prevent the spread of disease is called?  
 A. Presentation  
 B. Selection  
 C. **Isolation**  
 D. None of the above
- Pigs carrying one copy of the stress gene are classified as:  
 A. stress positive  
 B. stress negative  
 C. **stress carriers**  
 D. sick pigs
- What does CPS stand for?  
 A. Chester Poland Spot Association  
 B. Cool People Showing  
 C. **Certified Pedigreed Swine**
- Which of the following hormones causes "heat"?  
 A. Growth hormone  
 B. Oxytocin  
 C. Progesterone  
 D. **Estrogen**
- A subcutaneous shot is given:  
 A. Under the skin  
 B. In the vein  
 C. **In the muscle**  
 D. In the mouth
- How many total notches are required to identify a pig as 85-13?  
 A. 5  
 B. **6**  
 C. 9  
 D. 13
- What state is home of the National Pork Board?  
 A. Illinois  
 B. **Iowa**  
 C. Indiana  
 D. Nebraska
- Using the purebred system what do the notches in the left ear stand for?  
 A. Dam number  
 B. Litter Number  
 C. Sire Number  
 D. **Pig Number**
- When does the mature sow have the lowest nutrient requirement?  
 A. **gestation**  
 B. lactation  
 C. estrus  
 D. requirements don't change
- Rank from highest to lowest cattle, sheep and swine in terms of dressing percentage.  
 A. **swine, cattle, sheep**  
 B. cattle, sheep, swine  
 C. sheep, swine, cattle  
 D. swine, sheep, cattle
- A boar begins to produce sufficient sperm to impregnate a female when he is how old?  
 A. 3-4 months  
 B. 2-5 months  
 C. 90 days  
 D. **7-9 months**

(continued)





QUIZBOWL



# INTERMEDIATE QUIZBOWL

## Swine Knowledge

(page 3)

32. What is the swine breed that originated in Canada and consists of 55% Landrace, 23% Berkshire, and 22% Chester White?

- A. Lacombe**                      B. Blue Butt  
C. Poland                          D. Hereford

33. True or false. Oil should always be used to brighten black or red pigs for a show, especially on really hot days.

**False. Oil may be used during cool weather, but water serves the same purpose and should be used exclusively on hot days.**

34. Minimum ventilation is most important during which season of the year?

**Winter**

35. There are three sources of odor found on most hog farms - buildings, manure storage, and manure application. Which has the largest potential for odor complaints from neighbors?

**Manure Application**

36. All-in all-out management is a strategy to keep pigs from picking up diseases from other groups of pigs. Describe all-in all-out management.

**A room or building of pigs is completely emptied of pigs, (washed and disinfected) before the next group is moved in. (NOTE: Use your judgment on this one)**

37. The international swine industry trade show held annually in Des Moines, Iowa is called \_\_\_\_\_ ?

**The World Pork Expo**

38. True or False. Pigs should be moved and sorted with hurdles (sometimes called boards or sorting panels) that have openings that the pig can see through.

**False. Hurdles should be solid.**

39. Which state on the East Coast ranks second in the nation in hog production?

**North Carolina**

40. **True** or False. Dust accumulation on fan blades can reduce the amount of air the fan moves.

41. True or **False**. During a showmanship competition, you should always watch your parents outside the ring in case they have any advice to offer.





# SWINE QUIZ BOWL QUESTIONS

## Swine 1 – Questions

1. Name this black bodied pig that has six white points, including their nose, tail and feet. They have erect ears and dished snouts.
  - a. Berkshire
2. Name this white pig with long droopy ears and that is known for its mothering ability
  - a. Chester White
3. What breed of pig is red with drooping ears and is the second most recorded breed in the United States?
  - a. Duroc
4. Which breed of swine is black with a white belt across the shoulders and has erect ears?
  - a. Hampshire
5. Which breed of swine is white with drooping ears and the sows are know for their ability to produce large litters over an extended amount of time?
  - a. Landrace
6. Which breed of swine is black and white bodied and had medium sized droopy ears?
  - a. Poland China
7. Which breed of swine is white bodied with black spots and medium sized, droopy ears?
  - a. Spot
8. Which breed of swine is the most popular breed of swine in the United States and Canada? They have erect ears and white bodies.
  - a. Yorkshire
9. About how many pounds of feed are required to raise a 260 pound market hot?
  - a. 875 pounds
10. What are two symptoms of overcrowding?
  - a. Reduced gain, increased feed consumption, tail biting, cannibalism
11. About how many square feet does a 40-100 pound pig need?
  - a. 4 sq ft/pig minimum
12. About how may square feet does a 100-150 pound pig need?
  - a. 6 sq ft/pig minimum
13. About how many square feet does a 150-260 pound pig need?
  - a. 8 sq ft/pig minimum
14. True or **False**: Pigs are ruminants.

15. What is another name for the “blind gut”?
  - a. The cecum
16. Where are most of the nutrients absorbed in the digestive system?
  - a. Small Intestine
17. What part of the digestive system leads to the opening through which the undigested portion of the feed is eliminated?
  - a. Rectum
18. What is a young female pig called?
  - a. Gilt
19. What are swine offspring called?
  - a. Piglets
20. What is an adult female pig called?
  - a. Sow
21. What is a group of pigs born to a sow called?
  - a. Litter
22. What is an adult male pig called?
  - a. Boar
23. What nutrients do pigs, sheep, and cattle all need most of?
  - a. Water
24. What are three things you would find in a swine show box?
  - a. Cane, show schedule, spray bottle, water bucket, health papers, feed pan
25. Where should the pig be in relation to you and the judge in the show ring?
  - a. The pig should always be between the show person and the judge
26. How far should you be from the judge in order to show your pig to the best of its advantage?
  - a. 15-20 feet away
27. What is the typical carcass weight of a market pig?
  - a. 184 pounds
28. What is the typical weight of the lean meat in a market pig?
  - a. 88.5 pounds
29. What is a castrated male pig called?
  - a. Barrow
30. What is a swine creep diet?
  - a. Diet provided to nursing pigs from about 3 days old until weaning

31. What is the birth process in swine called?  
a. Farrowing

32. What is the meat from hogs called?  
a. Pork

## **Swine 2 - Questions**

1. What is one thing that should be done with a baby piglet within the first couple of days?
  - a. Iron shots, clipping needle teeth, identifying pig, dock tail, castrate males
2. Where should an iron shot be given to a baby pig?
  - a. In the neck muscle
3. How long is a sow's gestation?
  - a. 3 months, 3 weeks, and 3 days; 114 days
4. What is gestation?
  - a. The time that a sow is pregnant
5. Why should boars be placed next sows before breeding?
  - a. So the sow starts cycling
6. About how much feed will a 1500-pound pig eat per day?
  - a. About 6 lbs.
7. Name one disease symptom of an external parasite.
  - a. Itching, rough skin, decreased feed intake
8. What is the swine disease that causes poor conception rates, reabsorbed litters, mummies and small litters?
  - a. Parvovirus
9. What is the swine disease that causes a sow to abort mid-pregnancy or have weak litters and nursing pigs suddenly die?
  - a. Leptospirosis
10. What swine disease causes 1-8 day-old pigs, watery diarrhea, high death rates and vomiting?
  - a. TGE (Transmissible Gastroenteritis)
11. What swine disease causes no energy, sleepy, rough hair coat, wrinkled skin, hard breathing, and poor growth in piglets?
  - a. Baby pig anemia (iron deficiency)
12. What swine disease causes infertility and abortions 15 days after breeding?
  - a. Brucellosis
13. What swine disease causes worms in the feces, decreased food intake, and slow growth?
  - a. Internal parasites

14. What swine disease has symptoms of infection of the mammary gland, udder is hard and hot to the touch, the sow is also off feed?
  - a. Lactation Failure – Mastitis
15. What swine disease causes sneezing, tearing of eyes, snorting, coughing, the twisting of the nose?
  - a. Atrophic rhinitis
16. What swine disease causes blood and mucus in diarrhea, pigs to be off feed, and death in pigs under 3 weeks of age?
  - a. Swine dysentery
17. What swine disease and reproductive disease causes abortions, mummies and weak pigs?
  - a. PRRS (Porcine Reproductive & Respiratory Syndrome)
18. What swine disease causes reduced gain, poor growth, and reproductive failures in the breeding herd?
  - a. Pseudorabies (Aujeszky's disease)
19. About what percent of US agricultural production is sold to other countries?
  - a. 30-40%
20. What medication, such as streptomycin or penicillin, is used to destroy or inhibit the growth of microorganisms, specifically bacteria?
  - a. Antibiotic
21. What is a farrowing crate?
  - a. Stall in which the sow is confined during farrowing and lactation periods to prevent her from turning around
22. What is resistance to disease, usually created through vaccination?
  - a. Immunity
23. What is the term used to describe pigs born discolored and shriveled or decomposed that died sometime during gestation?
  - a. Mummified pigs
24. What is the area called where pigs are moved following weaning and they are kept there until they are about 40-50 lbs.?
  - a. Nursery
25. What are progeny?
  - a. Offspring of an animal
26. What is separating sick or new animals from a herd to ensure the health of the rest of the herd called?
  - a. Quarantine

27. What is a gilt of superior quality selected to become part of the breeding herd called?
  - a. Replacement Gilt
28. What type of farms involve all stage of production from breeding through finishing to market weights?
  - a. Farrow to Finish Farms
29. What type of farms sell 40-60 pound feeder pigs to grow-finish farms?
  - a. Farrowing – Nursery Farms
30. What type of farms sell 10-15 pound weaned pigs to nursery – grow – finish farms?
  - a. Farrow to Finish Farms
31. About what percent of feed costs account for all of production expenses?
  - a. 65%
32. Young pigs are fed a diet containing what percent of crude protein?
  - a. 20 – 22 %
33. Finishing pigs are fed a diet containing what percent of crude protein?
  - a. 13 – 15 %
34. **True** or False Compared to 50 years ago, pigs today are leaner.
35. About how many pigs are born in a litter?
  - a. 9 – 10 practical range 6 – 13
36. When are the highest death losses of the entire pork production process?
  - a. First 3 – 4 days after birth
37. What is the current system used for payment of pork?
  - a. Low amounts of fat (leanness) and high amounts of muscle
38. Name one way that producers can manage the prices they receive for their hogs?
  - a. Hedging with future or options contracts or forward contracting

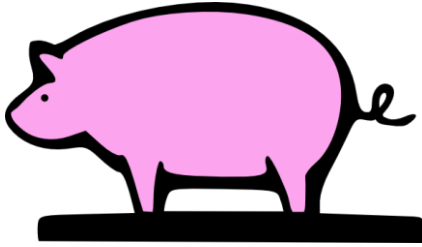
### Swine 3 – Questions

1. At what phase of production is a pig most efficient at converting feed to muscle?
  - a. Nursing pig
2. What is the feed efficiency of a finishing pig?
  - a. 2:1
3. What is the term used to describe the degree to which crossbred hogs deviate from the performance of average hogs of the parental breeds?
  - a. Heterosis or Hybrid Vigor

4. What does EPD stand for?
  - a. Expected Progeny Difference
5. What is the management practice in which a facility is filled and emptied of hogs all at once called?
  - a. All in, All out system
6. What is an unborn mammal that is growing in the uterus before birth?
  - a. Fetus
7. What an animal that is unable to reproduce offspring?
  - a. Infertile
8. What is tendency of animals to behave in a social dominance order?
  - a. Social Order

<http://www.pork.org/youth-and-education/skillathon-quiz-bowl/>

See this site for sample quiz questions for swine - not used in 2016 but good source of information



### **SWINE QUIZ BOWL QUESTIONS**

- 1) T or F? The words "swine," "hogs," and "pigs" refer to animals of the porcine family or pig family. The term swine can also refer to the pig family in a general way, and "pig" can be used in referencing young animals.  
A. True
- 2) T or F? The term "Buck" means a neutered male pig.  
A. False, "Barrow" is the correct term.
- 3) What is the length of estrus in swine?  
A. 24-72 hours.
- 4) How long is the gestation period in swine?  
A. 112 to 116 days. (3months, 3weeks, 3days)
- 5) T or F? A young pig weaned from the sow should weigh 35 to 40 pounds, and be about 8 weeks of age.  
A. True.
- 6) Which one of these breeds has erect ears: Yorkshire, Landrace or Chesterwhite?  
A. Yorkshire
- 7) What is the purpose of ear notching?  
A. To identify each individual piglet.
- 8) How often should fresh water be given to a pig?  
A. Daily
- 9) What does A. I. stand for?  
A. Artificial Insemination
- 10) When does the first heat occur after a sow has farrowed?  
A. 3-5 days after the piglets are weaned.
- 11) What three things are needed to complete percent lean?  
A. Market weight, backfat thickness, and loin eye area.

12) How many functional teats do gilts need to be registered?

A. At least six on each side.

13) What is the average dressing percent on market swine?

A. 75%

14) In commercial hog farms, tails are docked to prevent what?

A. Injury from tail biting.

15) What mineral do baby pigs raised on concrete need to have added to their diet?

A. Iron

16) T or F? You should provide a heat lamp in cold weather to keep your piglets from getting cold?

A. True

17) Name four breeds of swine.

A. The five dark breeds: Berkshire, Duroc, Hampshire, Poland China, and Spot. The three white breeds: Chester White, Landrace, Yorkshire Mulefoot.

18) What is a boar?

A. A male hog that has not been castrated.

19) T or F? Hampshire coloring can be described as black with six white points, the nose, tail and feet.

A. False, that would be Berkshire coloring.

20) Name the top swine producing state in the United States.

A. Iowa

21) What are the vital signs?

A. Temperature, respiration rate, and pulse rate.

22) T or F? To read the pulse rate in swine, the heartbeat must be felt directly because an arterial pulse cannot be felt.

A. True

23) What is the most recorded breed of swine in the United States and Canada?

A. Yorkshire

24) Can the Pseudo Rabies virus survive outside the pig?

A. Yes, up to three weeks.

25) T or F? You should make sure your pig has been vaccinated and wormed early into the feeding program.

A. True

26) What is a daily ration?

A. Total feed given in a 24 hour period.

27) An acute disease the spread is so dramatic in onset and clinical effects, it spreads so



quickly across all ages that little else can be confused with it. Which disease is it likely to be?

A. Swine flu (or Swine Influenza)

28) Where is the carcass length measured from?

A. From the front side of the first rib, to the back side of the aitch bone.

29) What is the coloring of a Hampshire hog?

A. Black with white belt behind the front legs.

30) What is the coloring of a Durocs?

A. Various shades of red.

31) T or F? Swine are susceptible to high temperature and can easily die if worked in the sun and midday heat of summer.

A. True

32) What is a gilt?

A. A female pig that has not had a litter.

33) T or F? The amino acid Lysine is commonly supplemented in swine rations.

A. True

34) Can your pig get Pseudo Rabies from feral pigs or A.I.?

A. Yes, either. A.I. if the boar was infected.

35) T or F? Porcine Parvovirus Infection (PPV) is the most common and important cause of infectious infertility.

A. True

36) Can sunburn affect your sow's fertility?

A. Yes (Ultra violet radiation not only damages the skin but also has an effect on the reproductive system and the maintenance of pregnancy. Re-absorption of embryos can occur as well as irregular returns, abortions, and sows not accepting boars at mating.)

37) T or F? You can overfeed a sow.

A. True

38) On breeding swine, which baby teeth should be cut?

A. The needle teeth.

39) T or F? Individual mating involves one sow and one boar in a pen, and the mating is generally unobserved.

A. True.

40) What is the average normal pulse rate of swine?

A. 60-80 rate/min. Deviations in pulse rate: Rates will be higher in younger, smaller, and more nervous animals. Rates will increase with exercise, excitement, digestion, and high outside temperature.

41) What is the respiration rate in swine?

A. 8-13 rate/min. Can be increased by recent exercise, excitement, hot weather or stuffy buildings. Respiration is accelerated in pain and in feverish conditions.

42) What is the preferred site for intramuscular injections?

A. Intramuscular injections in swine should be made by directing the needle of suitable gauge and length into the fleshy part of a thick muscle in the neck region; avoid blood vessels and major nerves. Before injecting the solution, pull back gently on the plunger. If blood appears in the syringe, a blood vessel has been entered; withdraw the needle and select a different site. No more than 5ml should be injected at any one site in adult swine; rotate injection sites for each succeeding treatment.

43) Name one advantage of A.I. in swine production.

A. Don't have to keep a boar, or don't have to be concerned that your sow or boar may be injured during breeding. You can get A.I. from far away places for more genetic variety or more choice in parentage.

### SHOWMANSHIP

44) T or F? A show cane or show stick should be used in directing the pig around the holding pen or in the show ring.

A. True

45) T or F? The pig's direction can be changed by touching the pig's neck or face on the same side as you wish the pig to turn.

A. False. The opposite side you wish the pig to turn.

46) T or F? The show cane can be used to position the feet when the animal is being posed for the judge. Position the feet spread as far out as possible, without making the pig fall over.

A. False. Position the feet squarely under the pig.

47) T or F? In showing how well you can control the pig, it does not matter how well trained the pig is, it is a matter of you showing the pig who is "boss" in the ring, so the judge may see your control skills at work.

A. False. Make sure the animal is clean, well-groomed, and well trained.

48) T or F? In showing swine, kneel or crouch while you describe the parts of the swine.

A. False, The show person stands or walks close to the animal at all times. Do not kneel or crouch when showing swine, except when necessary to bring the animal to a halt.

49) T or F? You should watch the judge for instructions.

A. True

50) In showing swine does it matter if you keep the pigs head up at all times?

A. Yes

1. A cattle ration with an addition of molasses is used for what?
  - a. Palatability, minimize dust and fines.
2. Gestation is the name of the period from conception to what?
  - a. Calving
3. The release of the egg is known as what?
  - a. Ovulation
4. How many ounces of beef is in a standard serving, according to most nutritionists?
  - a. 3 ounces
5. Ricketts is a bone disease resulting in weak and faulty bone formation found in young animals not receiving enough of which vitamin?
  - a. Vitamin D
6. A contemporary group is a term used to describe a group of calves of the same sex that are within how many days of the same age, and have all been managed in the same manner?
  - a. 90 days
7. A heifer begins a normal estrous cycle during what point?
  - a. Puberty
8. In what county was the Brangus developed?
  - a. United States
9. The breed of beef cattle that is a cross between a Brahman and Angus is known as what?
  - a. Brangus
10. The Santa Gertrudis is a composite breed formed by the combination of the Brahman and what other breed of beef cattle?
  - a. Shorthorn
11. **What is the breed of beef cattle that was originated in, and near, the county of Aberdeen in Scotland?**
  - a. **Angus**
12. What condition score should calving cows be at?
  - a. 5 or 6
13. What is a good predictor of calving difficulty or dystocia?
  - a. Birth weight
14. What is the term for an animal that has their feet turn outward at an extreme angle?
  - a. Splay footed
15. **The advantage of a crossbred individual relative to the average of purebred individuals is called \_\_\_\_\_.**
  - a. **Heterosis or hybrid vigor**
16. What is an offspring of a parent?
  - a. Progeny
17. What is the period of pregnancy?
  - a. Gestation
18. In November, cattle have an increase in hair growth. What is the cause of this?
  - a. Decreased day length

19. An insect that consumes tears, sweat, nasal discharge and other liquids on an animal's face is called a \_\_\_\_\_?
  - a. Face fly
20. Confidence or reliability in an expected progeny difference is measured with the \_\_\_\_\_.
  - a. Accuracy
21. Progesterone is a hormone that prevents the cow from doing what?
  - a. Coming back into heat
22. Hip bones are also referred to as what?
  - a. Hooks
23. T/F – Daughters of bulls with *smaller* scrotal circumferences are likely to have lowered or decreased age at puberty.
  - a. False, they have greater scrotal circumferences
24. A cow has what type of digestive system?
  - a. Ruminant
25. T/F- You would use a 22-gauge needle to give an eyelid treatment for pink eye?
  - a. True
26. Beef cattle sire summaries are published by what type of organization?
  - a. Breed associations
27. Where is the loin located?
  - a. From the last rib to the hip bone
28. Weight divided by days of age is calculated to determine what?
  - a. Weight per day of age
29. Name one defining characteristic of a Belted Galloway.
  - a. Long, very curly hair; black; white stripes
30. A calf coming backwards is called what?
  - a. Breech presentation
31. Cattle in eastern and southeastern Oklahoma have a tick problem called what?
  - a. Lone Star Tick
32. People for the Ethical Treatment of Animals is more commonly known by its acronym of what?
  - a. PETA
33. In carcass data, R.E.A. stands for what?
  - a. Rib eye area
34. **What does subcutaneous mean?**
  - a. **Under the skin**
35. What is a pedigree?
  - a. A listing of an animal's sire, dam, grandparents and other ancestors
36. T/F- The front feet and nose should appear first in a normal calving presentation.
  - a. True
37. What trait is routinely reported at 205 days?
  - a. Weaning weight
38. The rumen is the largest compartment of what part in a beef cow?

- a. Stomach
- 39. Small flecks of fat within beef muscle tissue is called what?
  - a. Marbling
- 40. 18-23 days is the standard time of what cycle in cattle?
  - a. Estrous
- 41. What does scrotal circumference measure directly?
  - a. Testicular development
- 42. The National Western Livestock Show is held during what month in Denver?
  - a. January
- 43. Meat from young calves is called veal. What is meat from mature cattle called?
  - a. Beef
- 44. What is the normal diploid chromosome number of cattle?
  - a. 60
- 45. If a cow is having difficulty calving, what is this called?
  - a. Dystocia
- 46. 0-3% protein is the protein content of dormant native grass in what season?
  - a. Winter
- 47. *Bos indicus* is the species name for what breeds of beef cattle?
  - a. Brahman and other Zebu cattle
- 48. Scurs are a horn like tissue or rudimentary horns that are attached to what?
  - a. Skin
- 49. A subcutaneous vaccination is given where in relation to the skin?
  - a. Underneath
- 50. Chuck, loin, brisket, and flank are all examples of what?
  - a. Wholesale cuts of beef
- 51. What is a feed additive used to treat or prevent coccidiosis?
  - a. Deccox
- 52. What happens when too much gas is built up in the rumen?
  - a. Bloat
- 53. T/F – At 44 F, straws of semen should be thawed.
  - a. F, 37 C
- 54. A sire used when all calves are marketed and none saved as replacements is known as what?
  - a. Terminal sire in a crossbreeding program
- 55. What are offspring with both of the same parents?
  - a. Full-sibs
- 56. What is a good source of protein, iron and B vitamins?
  - a. Beef
- 57. The letter “H” stands for what in KPH?
  - a. Heart
- 58. Quality grade measures what?
  - a. The amount of marbling within the muscle
- 59. Hip height, which is taken from the top of back of the hooks to the ground, is measured in what measurement?
  - a. Inches

60. What is it called when the rear legs slant inward to the hocks, then outward to the hoof?
  - a. Cow hooked
61. Simmental originated in the Simme Valley of what country?
  - a. Switzerland
62. What is the term that means without horns?
  - a. Polled
63. Alfalfa hay contains how much protein?
  - a. 17% (accept 16-20%)
64. Rear legs that are overly straight at the hocks are known as what?
  - a. Post legged
65. Chuck is a wholesale cut of beef that comes from what part of the cattle's body?
  - a. Shoulder area
66. What is a carcass merit prediction tool used for in cattle?
  - a. Ultrasound
67. What is linebreeding?
  - a. Mating of related individuals
68. Bos Taurus is the species name for what breed of cattle?
  - a. Angus
69. A deficiency of Magnesium causes what disease?
  - a. Grass tetany
70. The Shorthorn is a breed of beef cattle that originated in the Yorkshire or Teeswater area of what country?
  - a. England
71. T/F – Ferment fibrous feeds is a function of ruminal bacteria.
  - a. True
72. The 3 values that are needed to calculate 205-day weight are weaning weight, age of the calf, and what other value?
  - a. Birth weight
73. 283 days or 9.5 months is the average length of what in cattle?
  - a. Gestation
74. A feed additive used to improve feed efficiency of feedlot cattle is known as what?
  - a. Rumensin or Bovatec or Zilmax
75. A cow's stomach has how many compartments?
  - a. 4
76. What is the name of the major livestock show held in Denver?
  - a. National Western Livestock Show
77. A bovine is the scientific name of what species?
  - a. Cattle
78. Who is the current Oklahoma Secretary of Agriculture?
  - a. Jim Reese
79. What is colostrum?
  - a. Cow's first milk

80. T/F – Cattle that are transported across state lines must be accompanied by a state approved health paper.
- True
81. Brucellosis is the technical name for what disease?
- Bang's disease
82. **What is the average dressing percentage for a choice grade steer?**
- 62% (accept 60-65)**
83. Dehydration in the freezer or poor wrapping leads to what?
- Freezer burn
84. Prime, Choice, Select, and Standard are examples of what identified by the USDA?
- 4 Highest Quality Grades of Beef Carcasses
85. What vitamin is deficient in an unsupplemental human diet that does not contain meat?
- Vitamin B12
86. At 4 years old, what happens to a cow?
- She gets a full mouth of adult teeth
87. Hereford, Shorthorn, and Angus all originated in what country?
- Great Britain
88. **What will be the quality grade of an 18 month old steer with abundant marbling?**
- Prime**
89. T/F – Protein, B-vitamins, iron, cobalt, manganese, and zinc are all nutrients found in beef?
- True
90. Scott Dewald represents what organization in Oklahoma and what is his title?
- Executive Director of the Oklahoma Cattlemen's Association
91. Hip height measures what in beef cattle?
- Skeletal size
92. Where are hormones carried through in the animal?
- Blood stream
93. What is a freemartin?
- A heifer born twin to a bull
94. T-bone steaks are obtained through which wholesale cut?
- Loin
95. **Which university has won more National Championships in Livestock Judging than any other university since fielding it's first team?**
- Oklahoma State University**
96. What is the term defined by hot carcass weight divided by live weight?
- Dressing percentage
97. The backside of middle third of ear is the proper place to put what in beef cattle?
- Implants
98. To promote healthy skin and hair what is done to show cattle?
- Rinsing the calf daily

99. **Spell Piedmontese**

- a. **PIEDMONTESE**
- 100. Why is an ultrasound used?
  - a. Used to estimate fat thickness and rib eye area in live cattle or predict pregnancy
- 101. A condition score evaluates what in a mature cow?
  - a. General degree of fatness
- 102. A recipient cow is another name for what in the embryo program?
  - a. Surrogate mother
- 103. **What do the letters NCBA stand for?**
  - a. **National Cattlemen's Beef Association**
- 104. **Iron, copper, phosphorus, calcium and magnesium are examples of what type of nutrient?**
  - a. **Mineral**
- 105. **Other than salt, what mineral is most commonly deficient for cattle grazing dormant native grass?**
  - a. **Phosphorus**
- 106. **Spell Barzona**
  - a. **BARZONA**
- 107. Every 21 days what happens to a normal, non-pregnant cow?
  - a. The cow comes into heat
- 108. **What is the percentage of true protein in urea?**
  - a. **0%**
- 109. A showstick should be held in what hand when leading an animal?
  - a. Left
- 110. Weight per day of age is represented by what acronym?
  - a. W.D.A.
- 111. **T/F, if false why? Prior to vaccination the needle and syringe should be disinfected with a chemical disinfectant?**
  - a. **False, the disinfectant will destroy many vaccines. Sterilize in boiled distilled water.**
- 112. What is the small intestine primarily responsible for in the digestive tract of cattle?
  - a. Absorption of nutrients into the body of cattle
- 113. **How much of an adult male's required daily allowance for iron is provided by a 3-ounce serving of fresh cooked lean beef?**
  - a. **26%**
- 114. What should be done to milo before feeding to cattle?
  - a. It should be processed (ground or rolled or flaked)
- 115. What is a donor cow?
  - a. A cow that produces the egg in the embryo program
- 116. **What do the letters EBV stand for?**
  - a. **Estimated breeding value**
- 117. **What do the letters EPD stand for?**
  - a. **Expected progeny difference**
- 118. What type of fly can congregate around the horn area of beef cattle



- and on the back, sides, and belly?
119. a. Horn flies  
Why is colostrum important?
    - a. It contains antibodies
  120. T/F – Swine sweat more than cattle  
a. False; Cattle sweat more
  121. Corn is the most common feed grain used in what type of rations?
    - a. Feedlot rations
  122. The percentage of calf crop weaned is most important for determining what?
    - a. Profitability in a cow-calf operation
  123. What provides cattle with enough of Vitamin D?
    - a. Exposure to direct sunlight
  124. **T/F – Birth weight is used in the calculation of 205-day weight.**
    - a. **True**
  125. The Longhorn is a breed of beef cattle that developed from the Spaniards and brought to what country in the 16<sup>th</sup> century?
    - a. America
  126. **What does ET stand for in the cattle industry?**
    - a. **Embryo type, embryo transfer or embryo transplant**
  127. **Name the highest USDA Quality Grade.**
    - a. **Prime**
  128. **Spell Salers**
    - a. **S A L E R S**
  129. Beefmaster, Santa Gertrudis, Brangus, and Charbray are all examples of what based breed of cattle developed in the United States?
    - a. Brahman
  130. **What is the average body temperature of cattle?**
    - a. **102.5**
  131. At 2 years old, you should calve first-calf heifers to increase what?
    - a. Total lifetime productivity
  132. **What is the average duration of standing heat in beef cattle?**
    - a. **6-18 hours**
  133. What does the term “polled” mean?
    - a. Naturally having no horns
  134. Liver, tongue, kidney, and brains are all examples of what kind of meats?
    - a. Variety meats
  135. **What is the optimum calcium to phosphorus ration for most beef cattle rations?**
    - a. **About 2:1**
  136. **T/F – The nutrient requirements of a breeding bull are similar to that of a lactating cow.**
    - a. **True**
  137. **What is the average weight of a calf at birth?**
    - a. **80-100 lbs.**

1. **Implants are used in beef production to:**
  - a. **Improve feed efficiency**
  - b. **Improve average daily gain**
  - c. **Improve profitability**
  - d. **All of the above \*\*\***
2. The Charlois, which is known for fast growth lean meat and are large and white were developed in what country?
  - a. France
3. Ear notching, ear tattooing, hot iron branding, freeze branding, and chemical branding are all common techniques for what procedure with cattle?
  - a. Permanent identification
4. What is a number used to suggest the relative fatness or body composition of a cow?
  - a. Body Condition Scores (BCSs)
5. T/F – The target body condition score for a cow prior to calving is 5-6.
  - a. True
6. **Most thin cows will not re-breed if they are exposed to the bulls.**
  - a. True
7. **To ensure high pregnancy rates, the lowest body condition score that a cow should have is \_\_\_\_?**
  - a. Five
8. **A cow with a body condition score of 9 would be considered \_\_\_\_**
  - a. Extremely Fat
9. **A cow with a body condition score of 1 would be considered \_\_\_\_**
  - a. Very Thin
10. T/F The most prudent and effective way to reduce birth weight is to use a bull that is known to sire calves with low birth weights.
  - a. True
11. **Bos Taurus and Bos indicus breeds, which group will reach puberty first and are considered early maturing?**
  - a. Bos Taurus
12. T/F **A mature cow that has consistently calved throughout her life and is unexpectedly found open can be retained in the herd.**
  - a. True
13. The backside of middle third of ear is the proper place to put what on cattle?
  - a. Implants
14. T/F If you implant at any location other than the backside middle of the ear does not violate federal law.
  - a. False
15. T/F **Many implants are available, but selection of an implant is less critical than the decision on whether to implant or not.**
  - a. True
16. When feeding a concentrate feed, you should increase hay (roughage) upon the first signs of what problem?
  - a. Digestive problems
17. What is acidosis?

- a. Term used to describe a digestive ailment often caused by cattle eating rations too high in grain; especially common when starting on feed.
18. Molasses is a feedstuff that is added to help prevent what?
- a. Feed separation and settle dust in a mixed feed
19. Cattle that are exposed to sunlight typically have adequate amounts of what vitamin?
- a. Vitamin D
20. T/F Excessive fattening of heifers at old ages diminishes future milk production potential.
- a. False; young ages
21. Cattle should be fed how many times a day to consume more feed and have fewer digestive problems?
- a. More than twice a day
22. To promote healthy skin and hair, what is done to show cattle?
- a. Rinse the calf daily
23. T/F Beef is the #2 agricultural commodity in Oklahoma.
- a. False; #1
24. What is a characteristic of the Brahman breed of cattle?
- a. Lump between the shoulders; large folds of loose skin; developed in southern US from stock originating in India.
25. **T/F Breeding bulls should be kept very fat to improve breeding performance during the breeding season.**
- a. **False**
26. Double muscling is the term used to describe abnormally large, bulging muscles in what part of a beef animal?
- a. The rear quarter and forearm
27. **The average age that a heifer will be bred for the first time is:**
- a. **15 months**
28. What is heat (or estrus) in relation to a cow or heifer?
- a. The time period that a cow or heifer will stand to be receptive to a bull
29. **What is the average body temperature of cattle?**
- a. **102.5**
30. A deficiency of this mineral causes grass tetany, a condition in which cattle appear nervous, lack muscle coordination, and have muscle twitch?
- a. Magnesium
31. If cattle are over 300 lbs, where would one perform an intramuscular injection?
- a. Neck
32. Bovine is the scientific name for what species?
- a. Cattle
33. T/F Loss of weight during shipping is called shrink.
- a. True
34. **Where is the brisket of a calf?**
- a. **Between the front legs**

35. Grass tetany is a disease caused by a deficiency of what mineral and is sometimes seen in grazing cattle?
- Magnesium
36. What is estrous synchronization?
- The reproductive processes of a group of cows that are manipulated so that a large number of cows all come into heat at the same time.
37. Characteristics such as cows/heifers tend to group together, ride each other, exhibit standing heat/stand to be ridden, mucous discharge from vagina all signs of what?
- That a cow/heifer is in heat
38. **Describe how a calf will be presented, (i.e., in what position are its various body parts) in a normal delivery.**
- Front legs first with head resting between legs, calf is right side up.**
39. What is the dewlap on a beef animal?
- The flap of skin on the throat of a beef animal
40. Seedstock are cattle registered with a breed association and are used to establish what type of herd?
- Breeding herd
41. **What do the letters NCBA stand for?**
- National Cattlemen's Beef Association**
42. **Protein and energy should be in proper balance. If protein is in excess compared to the level of energy, what will happen to the excess protein?**
- The protein will be used for energy**
43. **Heifers should weigh what percent of their mature weight at their first breeding?**
- 65-70%**
44. If you want to calve first-calve heifers to increase total lifetime productivity, what is the recommended age to do this?
- 2 years old
45. Testosterone is the major hormone produced by what part of the bull?
- Testicle
46. 30-60 days prior to the breeding season, bulls should be evaluated for what?
- Breeding soundness
47. The ovaries are reproductive organs that produce what during estrus?
- Ovum or egg
48. An experienced palpator with skill and practice can detect pregnancy how early in a cow?
- 30 days
49. T/F Hip height and age of animal are two criteria used to determine frame scores.
- True
50. Name 3 measured factors used to formulate yield grades.
- Fat thickness, ribeye area, carcass weight, kidney, pelvic, and heart fat
51. Ribeye measurements are taken between what ribs?

- a. 12<sup>th</sup> and 13<sup>th</sup>
- 52. Protein, minerals, vitamins, water, sugar, starch, cellulose, and fat are 8 basic what that are required by cattle?
  - a. Nutrients
- 53. What is maintenance in relation to cattle?
  - a. The term used to describe the activity that ensures the body is getting its requirement to function properly.
- 54. **What additive is used in feeds to help prevent some feedlot stress problems and control low-level infections but has little effect on increasing weight gain?**
  - a. **Antibiotics**
- 55. **What percent of body weight can cattle consume daily in dry matter?**
  - a. **2-3%**
- 56. Brucellosis is another name for what disease?
  - a. Bangs Disease
- 57. What can Brucellosis cause in cattle?
  - a. Abortion and infertility

### **BONUS QUESTIONS**

1. Name 3 important traits for a terminal sire.
  - a. Growth rate, YW, WW, Fat thickness, REA, marbling (5 pts each)
2. Name 3 methods of dry heat cooking for beef.
  - a. Roast, broil, panbroil, panfry, stirfry, grilling (5 pts each)
3. Name 3 feedstuffs or ration ingredients that would be considered high-energy feeds.
  - a. Any cereal grain, fat, whole cottonseeds or soybeans, etc. (5 pts each)
4. Name 4 methods for deworming cattle.
  - a. Bolus, injection, drench, feed additive, paste, gel, topical (pour on)
5. T/F, if false why? Livestock production is the major cause of topsoil loss in the U.S.
  - a. False, grazing land conserves topsoil and less than ¼ of tilled land is used for feed grain production.
6. What are 3 of the 4 items used in determining yield grade?
  - a. Fat thickness, rib eye area, %KPH, hot carcass weight (5 pts each)
7. List 3 symptoms of fescue toxicity.
  - a. Lameness, rough haircoat, poor growth, elevated body temperature, poor reproduction. (5 pts each)
8. Name 2 observable signs that a cow/heifer is in standing heat?
  - a. Tend to group together, ride each other, mucous discharge from vagina, stand to be ridden
9. Which is higher, the protein requirement of an 1100 lb lactating cow or an 1100 lb dry, gestating cow?
  - a. The 1100 lb lactating cow requires 2.0 lb protein/day while the dry

- cow requires only 1.6 lb protein/day.
10. Name 5 of the 6 nutrient classes.
    - a. CHO, water, fat, protein, vitamins, minerals (3 pts each)
  11. T/F, if false why? Brucellosis bacteria can thrive in summer pastures for as long as three months?
    - a. False, sunlight and heat will usually kill the organism within a few hours.
  12. Should newly-received feeder cattle be fed a silage ration?
    - a. No, cattle unfamiliar with silage will not eat it very well. Start them on hay and slowly switch to the silage.
  13. "Mulefoot" in cattle is caused by a recessive gene. If a normal bull is mated to a normal cow and the resulting calf has "mulefoot" what is the probability that the next calf will also be "mulefoot"?
    - a.  $\frac{1}{4}$  or .25. Both normal parents must be heterozygous
  14. Spell "Tarentaise"
    - a. T A R E N T A I S E
  15. T/F, if false why? The darker, purplish red color of vacuum packages beef is perfectly normal.
    - a. True
  16. Give 3 examples of a non-protein nitrogen source for cattle rations.
    - a. Urea, biuret, ammonium sulfate, ammonium chloride, poultry waste, etc. (5 pts each)
  17. Why are nutrient requirements for a 900 lb lactating first-calf heifer higher than for a 900 lb lactating mature cow.
    - a. First-calf heifers have not reached their mature size so require nutrients for growth as well as maintenance and lactation
  18. T/F, if false why? Water used in production of cattle is lost to the environment.
    - a. False, water is recycled as part of the hydrologic cycle.
  19. Rank the following (highest to lowest) for cholesterol: shrimp, flounder, lean beef.
    - a. 1. Shrimp, 2. Lean beef, 3. Flounder
  20. How does protein supplementation increase or decrease forage intake?
    - a. Increases forage intake 10 to 30%
  21. Name the breed of beef cattle that originated in the province of Tuscany in the Chiana Valley of Italy.
    - a. Chainina
  22. Name 3 of the 4 items to consider when including traits for a selection program.
    - a. Economic importance, heritability, relationship with other traits and ease of measurement. (5 pts each)
  23. As the digestibility of a forage decreases, will cows eat more or less? Why?
    - a. Less. Decreased digestibility decreases passage rate and intake.
  24. Spell "Pinzgauer"
    - a. P I N Z G A U E R

25. Are recommended age of dam adjustments for weaning weight additive or multiplicative?  
a. Additive
26. Name a breed of beef cattle that was developed in the West-Central French province of Limousin.  
a. Limousin
27. Name a breed of beef cattle that was developed at Nevers and Charolles in France.  
a. Charolais
28. What hormone-like substances are useful for estrous synchronization?  
a. Prostaglandins
29. If a bull which is homozygous for the polled trait is mated to 100 horned cows, what percentage of the calves would you expect to be horned?  
a. 0%, all heterozygous and polled
30. How is immunity against disease transferred from a cow to her calf?  
a. Colostrum
31. T/F, if false why? A cow with brucellosis that calves normally poses little danger to the rest of the herd.  
a. False, she still sheds bacteria in the afterbirth.
32. What do the letters TDN stand for?  
a. Total digestible nutrients
33. What is the most common cause of death in calves after birth?  
a. Scours
34. Name 3 feedstuffs or ration ingredient that have more than 40% protein.  
a. Soybean meal, cottonseed meal, blood meal, meat meal, urea, etc. (5 pts each)
35. Name 3 classes of organisms that populates the rumen.  
a. Bacteria, protozoa, fungi (5 pts each)
36. What is the current President of the United States?  
a. President Barack Obama
37. What do the letters BIF stand for?  
a. Beef Improvement Federation
38. How does grain supplementation affect utilization?  
a. Decreases. Starch in grains decrease ruminal pH which decreases the activity of forage-digesting bacteria.
39. If a vaccine says it should be administered I.M. What does that mean?  
a. Intramuscular injection
40. Name one EPD value trait for which there is always on in sire evaluation summaries.  
a. Birth weight, weaning weight, yearling weight and milk
41. T/F, if false why? Carbohydrates are a good sources of digestible protein.  
a. False, CHO and protein are differential classes of nutrients.
42. Immature or larval stages of warble or heel flies are commonly called \_\_\_\_  
a. Cattle grubs
43. What does ADG stand for?  
a. Average daily gain

- 44. Which cow consumes more forage, a dry or lactating cow?**  
a. Lactating. Dry cows will consume about 1.5% of their body weight while lactating cows consume about 2.0% of their body weight.
- 45. The snail serves as an intermediate host for what parasite of cattle?**  
a. Liver fluke
- 46. T/F, if false why? Consumption of "fast-food" beef is a major factor in destruction of the tropical rain forest.**  
a. False, fresh beef is not imported from South American countries and the major fast food companies use only domestic beef.
- 47. What are "camel hair" artist brushes made from?**  
a. Hair from the ears of cattle



# General Livestock Sample Questions from “Animals In Pursuit”

## **Beef**

Q. When selecting a meat animal on structural soundness, special emphasis should be placed on what body parts?  
A. Feet and legs

Q. What is the minimum recommended resting area for a market beef animal?  
A. 25 square feet

Q. Corn silage, pasture, and hay are examples of what type of feed?  
A. Roughages

Q. When is the best time to start training a beef calf to lead?  
A. At a young age

Q. Name a piece of equipment used to dehorn a newborn calf.  
A. Caustic stick, tube calf dehorner or heat dehorning iron

Q. What is a learn by doing non-competitive 4-H activity involving several mini learning stations called?  
A. Skillathon

Q. What is the sheet that lists the sire and dam of a purebred animal called?  
A. Registration paper

Q. What is the minimum area recommended for an outside exercise area for a market beef animal?  
A. 400 square feet

Q. What grain raised on Minnesota farms is the most common concentrate in beef rations?  
A. Corn

Q. What type of halter is best for breaking a beef calf to lead?  
A. Rope halter

Q. When is the best time to dehorn a calf?  
A. From one day to three months of age

Q. What is the event called that involves judges, several classes of 4 animals of beef, sheep and swine?  
A. Judging Contest

Q. At what age should a beef heifer be bred?  
A. 15-18 months

Q. A feed box or bunk for a market beef animal should be how far from the ground or floor?  
A. 18-24 inches

Q. What is the most important vitamin for a breeding beef animal?  
A. Vitamin A

Q. From what side do you lead a beef calf?  
A. Left side

Q. What is the process called in which the testicles of male calves are removed?  
A. Castration

Q. What is the name for a two minute presentation in a Judging Contest where the participant discusses a class of livestock?  
A. Oral Reasons

Q. What is the amount of fat on a market animal called?  
A. Finish

Q. How many linear feet of bunk space does a market beef animal require?  
A. 2 ½ to 3 feet

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. Calcium and phosphorous are examples of what type of nutrients?  
A. Minerals
- Q. What is the name of a tool used by beef showmen to adjust the legs on a beef calf?  
A. Show stick
- Q. What is a piece of equipment used for castrating a calf?  
A. Sharp knife, emasulator, burdizzo or elastrator
- Q. What are the birth dates, adjusted weaning weights, adjusted yearling weights called in a judging contest?  
A. Performance data
- Q. By what date each year must market beef steers in Minnesota be weight and identified?  
A. February 15
- Q. How many gallons of water will a 1000 pound steer drink per day if the outside temperature is 50°F?  
A. 8-10 gallons
- Q. What feed ingredient is normally fed free-choice to beef cows on pasture?  
A. Salt or mineral
- Q. If a show stick is used by a beef showmen to apply pressure behind the dew claw, what direction will the calf likely move his foot?  
A. Forward
- Q. What is a common parasite of cattle?  
A. Fly, grub, lice or worm
- Q. In a class of 4 animals in a judging contest, how many possible placings are there?  
A. 24
- Q. What is a beef animal that naturally lacks horns called?  
A. Polled
- Q. How many gallons of water will a 100 pound steer drink per day if the outside temperature is 90°F?  
A. 17-19 gallons
- Q. Besides a balanced ration, a clean, fresh supply of this item is essential in feeding market beef?  
A. Water
- Q. When a beef showmen uses a show stick to press back between the toes in the left of the foot, the calf will likely move the foot what direction?  
A. Backwards
- Q. What are two causes of scours?  
A. Soured feed, feed too finely ground, too much protein, or overfeeding of legume hays
- Q. What is the maximum length of time a set of oral reasons should be?  
A. 2 minutes
- Q. Name a popular British beef breed that is black?  
A. Angus
- Q. What season of the year do most beef cows calve?  
A. Spring
- Q. What is a commercial feed used to raise the protein level of beef ration called?  
A. Protein Supplement
- Q. Doing things such as brushing, washing and clipping are referred to as what in a beef project?  
A. Grooming

## **General Livestock Sample Questions from “Animals In Pursuit”**

- Q. What is the act of removing horns from cattle called?  
A. Dehorning
- Q. How far should a person stand from the judge when presenting oral reasons?  
A. 6-8 feet
- Q. How many animals are in a class at most judging contests?  
A. 4
- Q. How many months after calving will a beef cow normally come into heat?  
A. 1 ½ to 2 months
- Q. A normal beef steer will consume what percent of its body weight in feed each day?  
A. 2.5 to 2.5%
- Q. What is the main reason for good grooming in a beef animal?  
A. To improve the appearance of the animal
- Q. What is the normal temperature of a cow?  
A. 101.0°F or 38.3°C
- Q. When giving oral reasons on a pair of animals, what are the merits for the second place animal in a pair called?  
A. Grants
- Q. What causes dark cutting beef?  
A. A long term stress period prior to slaughter
- Q. What piece of equipment is necessary to weight calves for performance records?  
A. Scale
- Q. If a steer is fed too much roughage relative to grain, how may it's visual appearance change?  
A. He will become heavy middled or paunchy
- Q. Ideally, how often should a beef calf be brushed and combed?  
A. Daily
- Q. What is the normal pulse rate for cattle?  
A. 60-70 beats per minute
- Q. What is meeting in a club or county in a specific project area called?  
A. Project meeting
- Q. Rump roast comes from what beef wholesale cut?  
A. Round
- Q. When figuring an adjusted weaning weight, name one of the adjustment factors.  
A. Age of calf; sex of calf; age of the Dam
- Q. What feed grain is the most common energy source in a market beef ration?  
A. Corn
- Q. How often should a beef calf be washed the final 2 months before a County Fair?  
A. Once per week
- Q. What is the normal respiration rate for cattle?  
A. 10-30 per minute
- Q. For most 4-H livestock project members the biggest livestock show held locally is what event?  
A. County Fair
- Q. Porterhouse steak comes from what beef wholesale cut?  
A. Loin or short loin

## General Livestock Sample Questions from “Animals In Pursuit”

Q. Once a heifer has a calf she is called what?

A. Cow

Q. Name a method used to get supplemental feed to beef calves on pasture prior to weaning?

A. Creep Feeding

Q. If all the soap is not rinsed out of a beef calf during washing it will result in what condition?

A. Dandruff

Q. What are two factors which may influence body temperature in a healthy animal?

A. Weather, exercise, disease, excitement, time of day

Q. What livestock group sponsors and coordinates the 4-H Livestock Auction at the Minnesota State Fair?

A. Minnesota Livestock Breeder's Association

Q. T-bone steak comes from what beef wholesale cut?

A. Loin or short loin

Q. What precautions can be taken with dehorning tools to prevent infections?

A. Dip tools in a disinfectant solution prior to and between each use

Q. Name 2 feed stuffs commonly used in creep feed for beef calves?

A. Corn, oats, protein supplement

Q. What is done to a beef calf to improve the way the calf stands and walks?

A. Trim the hooves (feet)

Q. Where is a cow's pulse taken?

A. Outside of the jaw, just above its lower border

Q. What is the name of an event where beef steers are weighed and identified?

A. Beef Weigh-In

### Sheep

Q. A sound commercial ewe project should be evaluated on what basis?

A. Lamb production/ewe; profit/ewe

Q. How much space should be provided for each ewe?

A. About 20 square feet

Q. How many pounds of hay will a ewe eat in a 200 day winter period?

A. 650-750 pounds

Q. Small wired brushes used to fluff wool are called?

A. Wool cards

Q. What are 4 of the major diseases affecting sheep?

A. Parasites, pneumonia, pregnancy disease, vibrio, enterotoxemia, sore mouth, scours, mastitis, foot rot, and urinary culculi

Q. Name two lamb carcass quality grades.

A. Prime, choice, good, utility, cull

Q. Name seven of the approximately 21 sheep breeds in the U.S.

A. Suffolk, Dorset, Finn, Hampshire, Columbia, Corriedale, Rambouillet, Shropshire, Targhee, Border Lester, Cheviot, Panama, Lincoln, Oxford

Q. How much dry lot space should you have per ewe?

A. 30-50 square feet

Q. How many pounds of grain will a ewe lambing in February need a year?

A. 150-200 pounds

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. What should you wash your sheep with?  
A. Mild detergent
- Q. What is a high temperature for a sheep?  
A. 104-106°F
- Q. Name two lamb carcass yield grades.  
A. 1, 2, 3, 4, 5
- Q. What are the two major economic traits to look for when selecting sheep?  
A. Prolificacy, rate of gain, wool production, hardiness and longevity
- Q. What is a lamb creep?  
A. A small pen where lambs can eat, rest and be away from the ewes
- Q. How many head of sheep can an acre of good pasture support?  
A. 10-15 head/acre
- Q. Name two basic equipment items for grooming.  
A. Hand shears, wash brush, rope halter, blanket, feed pan and water pail
- Q. What are two signs a sheep may be getting sick?  
A. Laggard, off by itself, won't eat, manure not normal
- Q. To measure the fat thickness of a lamb carcass, the carcass is ribbed between what ribs?  
A. 12<sup>th</sup> and 13<sup>th</sup>
- Q. What is fecundity?  
A. Ovulate, conceive and raise high lamb number/ewe
- Q. When is it best to shear?  
A. Prior to lambing
- Q. How many pounds should you feed ewes during early gestation?  
A. 4-5 pounds of feed
- Q. What is the stand called that is used when grooming?  
A. Blocking stand
- Q. A normal healthy sheep will do what when approached?  
A. Run away
- Q. What is the carcass from a young sheep called?  
A. Lamb
- Q. What factors influence milk yield of ewe?  
A. Number of lambs, age, feed, udder soundness
- Q. What should you do with sheared wool?  
A. Bag immediately and store in clean, dry place
- Q. Aside from grains and hay, what is essential to feeding sheep?  
A. All the fresh clean water they want
- Q. How soon before the show should you trim the lamb's feet?  
A. 2 weeks
- Q. What should you first do with a sick sheep?  
A. Isolate immediately in a clean, dry stall; get a diagnosis from vet; follow treatment recommended
- Q. What is the carcass from an old sheep called?  
A. Mutton

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. At what age do the down breeds reach sexual maturity?  
A. 5-7 months
- Q. Name two factors that can adversely affect profits.  
A. Ewe depreciation, interest rates, barn and equipment costs, health and parasites
- Q. When lactating, how much grain should a ewe receive?  
A. 1-2 pounds
- Q. How should you position the lamb to trim the feet?  
A. Place lamb on its rump, hold between your knees with the lamb's head up
- Q. What is enterotoxemia?  
A. Overeating
- Q. What is the blood grade name of wool with the finest diameter?  
A. Fine (has at least 64 hanks per pound spinning count)
- Q. What is gainability?  
A. Weight per day of age
- Q. Name three factors aside for the capital costs that affect production costs.  
A. Feed costs, level of winter feeding, when your ewes lamb, pasture costs, average of weight per lamb sold, number of lambs
- Q. What should be the proportion of hay:grain for lactating ewes?  
A. 65:35 to 50:50
- Q. Which portion of the hoof should be trimmed?  
A. The excessive overgrown area
- Q. How can you prevent enterotoxemia?  
A. Vaccinate a month before lambing and then vaccinate lambs at 3-4 weeks of age
- Q. What sheep breed has all black head and legs?  
A. Suffolk
- Q. What is considered the third most important economic trait of sheep?  
A. Wool production
- Q. How many more non-lactating ewes can be grazed per acre than lactating ewes?  
A. Twice as many
- Q. How old before lambs begin to eat dry feed?  
A. 2-3 weeks of age
- Q. What can happen if you cut a hoof too deeply?  
A. Blood and lameness
- Q. What are sheep keds?  
A. Ticks
- Q. What two breeds were originally crossed to make the Suffolk breed?  
A. Norfolk and Southdown
- Q. What determines clean fleece weight?  
A. Breed, size, staple length, fiber density
- Q. Have ewe prices risen or declined since 1981?  
A. Declined
- Q. What are three of the feed ingredients in a well balance ration?  
A. Shelled corn, Ammonium chloride, alfalfa, soybean meal, molasses, feeding limestone, salt, antibiotics, bovatoc

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. Can you wash all breeds of sheep?  
A. No – wool breeds should not be washed
- Q. Are ticks an external or internal parasite?  
A. External
- Q. What is the activity called where teams perform specific tasks at a series of stations?  
A. Skillathon
- Q. How many years does the average ewe remain productive?  
A. 5-6 years
- Q. Are April-born lambs more or less costly to produce than January born lambs?  
A. Less
- Q. In any ration how much salt is adequate?  
A. 5%
- Q. How long before the show should you shear a show wether?  
A. 2 weeks
- Q. What are internal parasites?  
A. Intestinal worms of several species
- Q. What is the minimum number of group 4-H project experiences each leader should have?  
A. Five
- Q. What are two factors that determine ease of lambing?  
A. Weight of lamb, size and shape, pelvic room in the ewe, presentation normal
- Q. Do lambs sold in June or July sell for more or less per 100 pounds than December sold lambs?  
A. More
- Q. What causes too much fat in sheep?  
A. Fed too much, too long
- Q. How much fleece should there be at show time on a Suffolk ewe lamb?  
A. ½ to ¾ inch
- Q. How can ticks be prevented?  
A. By spraying shortly after shearing
- Q. How are livestock classes in a judging contest numbered?  
A. Left to right from behind
- Q. Which type of ewes are more likely to have two or more lambs?  
A. Mature ewes, flushed ewes, finn cross ewes
- Q. What is an example of a pasture related death loss?  
A. Bloat, maggots, parasites, toxic plants
- Q. If a lamb is orphaned or rejected what should you feed a new lamb?  
A. Milk replace
- Q. Which area of a sheep should be sheared first?  
A. Breast area, then belly, flanks
- Q. Should ewes be treated for worms before breeding?  
A. Yes
- Q. If the cuts in a class of 4 animals were 1-1-1, what would this tell you about the class?  
A. All the animals are almost the same

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. When is the best to select open ewes?  
A. Summer or early fall
- Q. What is a bummer lamb?  
A. An orphaned lamb
- Q. How should the creep ration be ground?  
A. Coarsely or pelleted
- Q. How do you remove excessive dirt, straw and manure before washing a sheep?  
A. Curry comb or stiff brush
- Q. Are sheep more or less likely to have parasite problems on pasture than in confinement?  
A. More likely
- Q. In addition to two teams who else is involved in a project quiz bowl? (Name one)  
A. Moderator, judge, score keeper and time keeper
- Q. Name 3 desirable physical characteristics in a 4-H ewe for show.  
A. Alert, good size, length, height, body width, muscled legs, substance bone, breed type
- Q. Crossbreeding increases what?  
A. Productivity
- Q. How much soybean meal should be added to the sheep ration?  
A. 15%
- Q. What should you do with a sheep's ears while washing?  
A. Hold closed
- Q. What is an inflammation of the udder called?  
A. Mastitis
- Q. Name two feedstuffs used primarily as sources of energy.  
A. Barley, oats, wheat, corn, hay
- Q. Name one of the meat type breeds.  
A. Hampshire, Oxford, Shropshire, Suffolk, Dorset
- Q. What is culling?  
A. Selling unproductive and unhealthy sheep
- Q. What vitamins should be in sheep ration?  
A. A, D, E
- Q. How can you speed up drying sheep?  
A. Blow dry
- Q. What is a normal temperature for a sheep?  
A. 101-103°F
- Q. Name two feedstuffs used primarily as sources of protein.  
A. Cottonseed meal, soybean meal, linseed meal, corn gluten meal, meat meal, urea
- Q. How much should a Suffolk ram lamb weigh at 5-6 months?  
A. 150-190 pounds
- Q. What two factors determine the pounds of lamb produced?  
A. Number of lambs or weight of lamb
- Q. What percent of the total production cost is feed?  
A. 60-70%



## General Livestock Sample Questions from “Animals In Pursuit”

- Q. What is the purpose of carding a Hampshire lamb's legs?  
A. Make appear heavier boned
- Q. What diseases cause abortions?  
A. Vibrio and Chlamydia, toxoplasmosis
- Q. What class of nutrients are needed for proper bone and tooth formation?  
A. Minerals
- Q. How far in advance of breeding period should a ram be selected?  
A. At least 1 month
- Q. What will lambing your flocks in two separate groups do for management?  
A. Doubles use of building, equipment, and reduces production costs
- Q. Corn silage and grass hay are good sources of what?  
A. Energy
- Q. At what angle should the edge of shears be held to the lamb's back?  
A. 45° angle
- Q. What contributes to vibrio?  
A. Too many sheep and contaminated feed
- Q. What class of nutrients are considered the body's fuel?  
A. Energy
- Q. Which has research shown to produce the most pounds of lamb per ewe, crossbred ewes or straight-breds?  
A. Crossbreds
- Q. Are sheep numbers at their highest or lowest level in history?  
A. Lowest
- Q. Name three minerals important to a sheep's diet.  
A. Salt, calcium and phosphorous, magnesium, potassium, sulfur, cobalt, zinc, and iron
- Q. Which end of a lamb should you start clipping if you are right handed?  
A. Rear to front on right side and left
- Q. When does pregnancy disease occur?  
A. Last 40 days gestation
- Q. Muscle and hair are made from what class of nutrients?  
A. Protein
- Q. Which breed of sheep is the most prolific?  
A. Finn
- Q. When should a lamb's tail be docked?  
A. 1-7 days old
- Q. What does trace mineral salt containing iodine eliminate?  
A. Goiter problems
- Q. What purpose does a blanket serve on a sheep?  
A. Keeps sheep clean, firm and neat
- Q. What is entropion?  
A. Turned under eyelids
- Q. What nutrient is the body's "cooling system" and "lubricant"?  
A. Water

## General Livestock Sample Questions from “Animals In Pursuit”

Q. Name one of the two breeds noted for the best gainability, muscling and carcass traits.

A. Suffolk and Hampshire

Q. When should castrating be performed?

A. By 2 weeks of age

Q. What is urea?

A. The dominant source of non-protein nitrogen

Q. How do you clean the lamb's ears and face?

A. washcloth

Q. Can entropion in lambs be treated? If so, how?

A. Clip or sew down the eyelids

Q. What typed of animal can utilize a high fiber content in their ration?

A. Ruminants (beef, sheep, swine)

Q. Which breeds are considered having the best disposition?

A. Hampshire, Columbia, Shrophshire, Corriedale, Dorset

Q. What should be done to sheep's feet?

A Keep trimmed

Q. Name three commonly used grains in sheep rations.

A. Oats, corn, barley, wheat, rye and sorghum

Q. What can add to the appearance of blackfaced lambs?

A. A mixture of 2/3 mineral oil and 1/3 rubbing alcohol used on bare face

Q. Polyarthritis affects what joints?

A. Leg joints

Q. What may cause hay to be yellow or brownish in color?

A. Bleached by sun, rained on or stored in the bale at too high moisture

Q. Which breeds are noted for superior growth rate and carcass muscling?

A. Suffolk, Hampshire, Columbia

Q. What does shearing rams do?

A. Increases vigor and activity, helps avoid sterility

Q. Name three desirable roughages.

A. Alfalfa, timothy, brome, orchard grass, canary, clover, haylage, corn silage

Q. What kind of halter can be used when showing?

A. Rope halter

Q. What is rectal prolapse?

A. Protruding rectum

Q. What part of legume hay contains most of the protein?

A. Two thirds of the protein found in the leaves

Q. What is considered the longest living breed of sheep?

A. Rambouillet

Q. What is docking?

A. Detailing

Q. What must a ewe have in order to produce an adequate milk supply?

A. Energy, protein, calcium, phosphrum, vitamins, water

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. What facts about your lamb should you know before entering the showing?  
A. Birthday, weight, breeding information, feeding management
- Q. What can cause prolapse?  
A. Overweight, coughing, short dock, too high gain ration, genetics
- Q. Name 2 of the five criteria used to judge hay?  
A. Stage of maturity, leafiness, color, foreign material, odor and condition
- Q. Name 2 breeds which are the earliest to develop sexual maturity.  
A. Finn, Dorset, Down breeds such as Hampshire, Suffolk and Shropshire
- Q. What should you do to mark and identify lambs?  
A. Ear mark, tags, paint, brand
- Q. What are four of eight factors you should keep in mind when selecting proper feed rations?  
A. Age and size of animal, production stage, production level desired, current conditions, environment and disease
- Q. How should your lamb stand in the showing?  
A. Squarely, legs not wide or stretched
- Q. What is one of the two breeds most susceptible to scrapie?  
A. North County Chevoit and Suffolk
- Q. How many permanent incisor teeth does a two year old ewe have?  
A. Four

### Swine

- 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 two feeds are most Minnesota hogs fed?  
A. Corn and soybean oil meal
- Q. How soon before the swine show should you start preparing your pig?  
A. 102 months in advance
- Q. Name two common diseases that attach pigs.  
A. Erysipelas, rhinitis, virus pneumonia, scours, brucellosis, leptospirosis, pseudorabies, T.G.E
- Q. What is the activity called in which teams of 3-5 members perform tasks at a series of stations before being told or shown how?  
A. Skillathon
- Q. What is a male breeding hog called?  
A. A boar
- Q. How many pounds should an 8 week old litter farrowed by a gilt weight?  
A. At least 275 pounds
- Q. How many hogs are raised each year in Minnesota?  
A. Approximately 6 million
- Q. What does brushing do for a pigs hair coat?  
A. Adds “bloom” and makes it lie down properly
- Q. What are the two general classes of parasites that injure pigs?  
A. Internal parasites and external parasites

## General Livestock Sample Questions from “Animals In Pursuit”

Q. Name the event where one team challenges a second team to see which team can respond to the most questions correctly.

A. 4-H Project or Quiz Bowl

Q. What is a female hog called that has farrowed a litter of pigs?

A. A sow

Q. How many pounds should an 8 week old litter farrowed by a sow weigh?

A. At least 320 pounds

Q. What vitamins are produced by the bacteria in stomachs of sheep and cattle but must be provided to swine?

A. B vitamins

Q. How long before the show should a pigs hooves be trimmed?

A. At least 2 weeks before the show

Q. What is one of the most troublesome internal parasites of hogs in the Corn Belt States?

A. Roundworms

Q. How many members actively participate at one time on a project bowl team?

A. 4

Q. What is a female pig that has no offspring called?

A. A gilt

Q. At what age should a market hog reach 220 pounds?

A. 4 ½ to 6 months

Q. What feed ingredient makes up the largest part of the ration fed to most Midwest swine?

A. Corn

Q. When showing a pig in the ring, where should the pig be in relation to the exhibitor and the judge?

A. Between

Q. What are the most troublesome external parasites of hogs?

A. Lice and mange

Q. Name three of the four individuals (positions) who conduct a quiz or project bowl.

A. Moderator, judge, score keeper and time keeper (acknowledger optional)

Q. Who determines what the “cuts” or margin of differences between the pairs in a judging class will be?

A. The official judge

Q. What is a group of baby pigs from the same mother called?

A. Litter

Q. Corn is high in energy but like most farm grains is low in what two nutrients?

A. Protein and minerals (and some vitamins)

Q. What is the best distance from the judge to show off a pig?

A. 10-30 feet

Q. What is meant by “standing heat” when referring to swine?

A. The period during which the female will stand to be mounted

Q. What is a pedigree?

A. A record of an animal’s ancestors

Q. If the cuts for a class of market barrows were 1-1-1 what would this tell you about the class?

A. All four animals are essentially the same or the decision for placing each pair is very close

Q. What is the money made on a hog after the purchase price and cost of raising is subtracted called?

A. Profit

## General Livestock Sample Questions from “Animals In Pursuit”

- Q. What are two mineral sources often included in protein supplements for swine?  
A. Limestone, dicalcium phosphate, trace mineralized sale, bone meal
- Q. When showing a pig, how is the pig turned to the left?  
A. By tapping the pig with a cane or whip on the right side of its head
- Q. Will the period for standing heat usually last longer for sows or for gilts?  
A. Sows
- Q. What is a purebred animal?  
A. An animal whose parents are of the same breed and are recorded with the swine registry association
- Q. What should your voice sound like when giving oral reasons?  
A. Voice volume should be at a conversational level – confident, but pleasant
- Q. What is a piglet born dead called?  
A. Stillbirth
- Q. What nutritional disease may result if zinc is not included in the swine diet?  
A. Parakeratosis
- Q. How can a pig be stopped in the show ring?  
A. By crouching in front of the pig or placing the cane or whip in front of its snout
- Q. Up to 50% of all sows and gilts in heat will not show “standing heat” unless what is present?  
A. A boar
- Q. How old should gilts be when they are bred?  
A. 8-9 months
- Q. How close should you stand to the person to whom you are giving oral reasons?  
A. Approximately 6-8 feet away
- Q. When should sows and boars be wormed?  
A. Prior to breeding
- Q. What are two important reasons antibiotics are fed to growing swine?  
A. Help control disease, increase gains and improve feed efficiency
- Q. What does a swine showperson use to move the hog about the show ring?  
A. Cane or whip (or other similar equipment)
- Q. What are the advantages of crossbreeding swine?  
A. To combine the best traits of different breeds and to capitalize on heterosis (hybrid vigor)
- Q. How much should a gilt weigh when she is bred?  
A. 275-300 pounds
- Q. How long should the oral reasons presentation take for experienced judges?  
A. 1 ½ to 1 ¾ minutes
- Q. What temperature should baby pigs be kept at for the first 10 days?  
A. 85-90°F
- Q. How much feed will a 200 pound pig eat each day?  
A. Approximately 6-8 pounds
- Q. What should a person showing swine keep in a pocket?  
A. A small brush
- Q. What is heterosis (hybrid vigor)?  
A. When the crossbred offspring perform above the average of their purebred parents' breeds

## General Livestock Sample Questions from “Animals In Pursuit”

Q. What is a crossbred animal?

A. An animal with two or more breeds in its ancestry

Q. What four points is the judge listening for in a set of oral reasons?

A. Accuracy, thoroughness, organization and smoothness of delivery

Q. Which teeth should be clipped in baby pigs?

A. Needle teeth

Q. A 100 pound pig eating 5-6 pounds of feed per day should gain how many pounds per day?

A. Approximate 1.5 – 1.6 pounds per day

Q. What is the person called who places the class in a show ring?

A. The judge

Q. What is heritability?

A. The proportion of total variation (or difference in a herd for a given trait) that is passed on directly from parents to offspring

Q. The most genetic improvement for growth, efficiency and carcass merit will come from what animal(s) in the swine herd?

A. The boar

Q. What is the maximum number of points you can receive in a judging class?

A. 50 points

Q. How soon should a baby pig's tail be clipped?

A. Within 24 hours after birth

Q. What percent should be fed to a pig from weaning to 100 pounds?

A. 16%

Q. What is the person called who keeps track of the showing placings?

A. Clerk

Q. Name a basic crossbreeding system frequently used with swine.

A. Rotational, terminal, rota-terminal

Q. What is a breed of animals?

A. Animals which look alike, have similar color markings, and the same origin

Q. What breed of hogs originated in Pennsylvania?

A. Chester White

Q. What should be applied to the cut tails and also the navels to prevent infection?

A. Tincture of iodine, antiseptic or other disinfectant

Q. What percent protein does corn contain?

A. 8.5%-9.0%

Q. What material is frequently used on the floor of the showing?

A. Shavings

Q. What is the most popular – a 2-breed or 3-breed rotational crossing system?

A. 3-breed rotational

Q. What is meat from hogs called?

A. Pork

## Questions used for the written quiz on Friday morning, June 15, 2001

The correct answer is indicated by the " \* ".

These are not listed in strict numerical order.

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### Station 1 (red)

1. In cattle, parasites can cause \_\_\_\_\_.
  - a. hide damage
  - b. decreased nutrient utilization
  - c. decreased performance
  - d. all of the above\*
  - e. none of the above
  
2. In order for calves to comply with the IQ+BEEF requirements:
  - a. calves must receive the pasturella vaccination
  - b. scurs are acceptable
  - c. calves must be implanted
  - d. all bulls must be castrated and healed\*
  - e. all of the above
  
3. List the beef quality grades in order of decreasing value.
  - a. select, prime, choice, commercial standard, utility, cutter, canner
  - b. select, prime, choice, standard, commercial, utility, canner, cutter
  - c. standard, choice, select, prime, utility, commercial, cutter, canner
  - d. prime, choice, standard, select, commercial, utility, canner, cutter
  - e. prime, choice, select, standard, commercial, utility, cutter, canner\*

### Station 12 (red)

34. What best describes beef quality grade?
  - a. An estimate of the percent yield of boneless, closely trimmed retail cuts from the round, loin, rib and chuck.
  - b. The degree of maturity.
  - c. The degree of marbling.
  - d. An attempt to evaluate the factors that predict the palatability of meat.\*
  - e. None of the above.
  
35. What is the maximum amount for injection at any one site unless specified on the label?
  - a. 10 cc\*
  - b. 12 cc

- c. 15 cc
- d. 20 cc
- e. It does not matter.

36. When is the beef hot carcass weight (HCW) measured?
- a. Prior to going into the cooler, after harvest and before the carcass is shrouded.\*
  - b. Before harvest and before the carcass is shrouded.
  - c. Before harvest and after the carcass is shrouded.
  - d. Just after the carcass is shrouded.
  - e. None of the above.

Station 23 (red)

67. What factors are used to calculate a beef yield grade?
- a. ratio of fat to lean
  - b. ribeye area and fat thickness only
  - c. fat thickness, ribeye area, hot carcass weight and kidney, pelvic and heart fat\*
  - d. live weight, hot carcass weight, fat thickness and ribeye area
  - e. none of the above

68. At what age would you like a beef heifer to have her first calf?
- a. 3 years
  - b. 2 years\*
  - c. 18 months
  - d. 1 year
  - e. none of the above

69. What is the gestation length of a beef cow?
- a. 115 days
  - b. 151 days
  - c. 230 days
  - d. 284 days\*
  - e. 345 days

Station 34 (red)

100. In what weight range would you like a beef steer to finish?
- a. 800-900 lbs.
  - b. 900-1,000 lbs.
  - c. 1,000-1,100 lbs.
  - d. 1,150-1,350 lbs.\*
  - e. 1,350-1,450 lbs.

101. The compartment in the ruminant digestive tract with the largest capacity is the:
- a. omasum



- b. abomasum
- c. cecum
- d. reticulum
- e. rumen\*

102. The longissimus muscle in beef cattle is also called:

- a. stifle
- b. round
- c. tongue
- d. jumper muscle
- e. rib eye\*

Station 45 (red)

133. Bloat in cattle is caused by the accumulation of:

- a. carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>)\*
- b. excess protein and energy
- c. calcium and magnesium
- d. air and water
- e. carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>)

134. Identify this feedstuff.

- a. supplement
- b. oats
- c. barley
- d. corn
- e. corn gluten meal\*

135. Identify this feedstuff.

- a. oats
- b. soybean meal
- c. cracked corn
- d. shelled corn\*
- e. steam flaked corn

Station 56 (blue)

16. Identify this feedstuff.

- a. oats
- b. barley
- c. cottonseed hulls\*
- d. soybean meal
- e. cracked corn

17. Identify this legume.

- a. alfalfa
- b. ladino clover
- c. red clover\*
- d. orchard grass
- e. fescue grass

18. What segment of the beef industry has had the largest increase in retail profit over the last three years?

- a. heat and eat products\*
- b. hamburger
- c. steaks
- d. roasts
- e. none of the above

Station 67 (blue)

49. What scientific name refers to cattle?

- a. ovine
- b. porcine
- c. equine
- d. caprine
- e. bovine\*

50. How many chromosomes are present in cattle?

- a. 23
- b. 46
- c. 52
- d. 60\*
- e. none of the above

51. What is the average body temperature of cattle?

- a. 98.6°
- b. 100°
- c. 101°
- d. 102.5°\*
- e. none of the above

Station 78 (blue)

82. Which of the following is the best example of a protein source?

- a. tallow
- b. soybean meal\*
- c. corn

- d. orchard grass
- e. chopped corn silage

83. What mineral deficiency causes grass tetany, a condition in which cattle appear nervous, lack muscle coordination, and muscles twitch?

- a. magnesium\*
- b. calcium
- c. phosphorous
- d. selenium
- e. sodium

84. What best describes cold shortening?

- a. The condition when cattle shiver.
- b. The condition when the sarcomeres in the muscle shorten due to a rapid drop in temperature and meat loses some of its tenderness.\*
- c. The condition when carcasses are cooled rapidly in order to produce a more palatable product.
- d. Cold Crisco.
- e. None of the above.

Station 89 (blue)

115. Which of the following is an example of a legume?

- a. alfalfa
- b. clover
- c. soybeans
- d. all of the above\*
- e. none of the above

116. In beef, external fat thickness is measured over the ribeye muscle between the \_\_\_\_\_ ribs.

- a. 10th and 11th
- b. 12th and 13th\*
- c. 14th and 15th
- d. 15th and 16th
- e. 16th and 17th

117. Which is a structural fault in bulls?

- a. plow hocked
- b. shovel legged
- c. sickle hocked\*
- d. bow shouldered
- e. pseudohorned

Station 100 (blue)

148. Which organ in the cow produces the hormone secretin?

- a. pinna
- b. ovary
- c. cecum
- d. spleen
- e. small intestine\*

149. What is the toxin that is produced by a mold that commonly infests corn, peanuts and cottonseed?

- a. moldicides
- b. herbitoxin
- c. aflatoxin\*
- d. sarin
- e. acetatoxin

150. What mineral is needed for ruminant synthesis of Vitamin B12?

- a. sodium
- b. saline
- c. cobalt\*
- d. zinc
- e. salt

Station 2 (red)

4. What signs are not associated with a healthy goat?

- a. smooth, shiny coat
- b. eyes clear and bright
- c. good appetite
- d. alert attitude
- e. none of the above are correct\*

5. Body temperature of the goat ranges from \_\_\_ to \_\_\_ 0F.

- a. 98.6 to 99.0
- b. 100.0 to 102.0
- c. 102.5 to 104.0\*
- d. 105.0 to 106.0
- e. none of the above are correct

6. What is the length of pregnancy in goats?

- a. 115 days
- b. 282 days
- c. 336 days
- d. 60 days
- e. 150 days\*

Station 13 (red)

37. Where can the pulse be checked on a goat?

- a. the neck
- b. the tail
- c. the inner thigh\*
- d. the foreleg
- e. the mammary gland

38. What is a wether?

- a. immature female
- b. castrated male\*
- c. breeding male
- d. same as a kid
- e. same as a doe

39. How many times per year should goats be dewormed?

- a. once
- b. twice\*
- c. three
- d. four
- e. none of the above are correct

Station 24 (red)

70. Which is essential for raising healthy goats?

- a. vaccination program
- b. deworming program
- c. fresh, clean water
- d. quality hay and browse
- e. all of the above\*

71. Goats, like cattle and sheep are ruminants. What do they eat primarily?

- a. meat
- b. vegetables
- c. fruit
- d. forages\*
- e. none of the above

72. What are the beneficial bugs in the rumen?

- a. viruses and bacteria
- b. viruses and fungi
- c. bacteria and fungi
- d. parasites (worms)
- e. bacteria and protozoa\*

Station 35 (red)

103. How are volatile fatty acids or VFAs used by goats?

- a. protein source
- b. energy source\*
- c. vitamin source
- d. mineral source
- e. all of the above

104. Roughages are high in what nutrient that only ruminants and horses can use?

- a. vitamins
- b. protein
- c. energy
- d. minerals
- e. fiber\*

105. Which is not a legume?

- a. birdsfoot trefoil
- b. white clover
- c. orchard grass\*
- d. alfalfa
- e. red clover

Station 46 (red)

136. Where is the best place on the goat to assess body fat content?

- a. the back
- b. the sternal fat pad
- c. the ribs
- d. between the forelimbs
- e. b and d\*

137. What is the ideal body condition score for does at kidding?

- a. 3.0-3.5\*
- b. 2.5-3.0
- c. 4.0
- d. 5.0
- e. none of the above are ideal

138. What does colostrum contain that is important to disease prevention in newborn kids?

- a. fat
- b. vitamins
- c. protein
- d. water
- e. immunoglobulins or antibodies\*

Station 57 (blue)

19. Which is not considered a dairy goat breed?

- a. LaMancha
- b. Alpine
- c. Angora\*
- d. Nubian
- e. Saanen

20. What mineral must be supplemented in the diet of all animals in Indiana?

- a. copper
- b. selenium\*
- c. iron
- d. potassium
- e. calcium

21. What disease must goats be vaccinated for when undergoing castration or dehorning?

- a. Tetanus\*
- b. encephalitis
- c. bluetongue
- d. rabies
- e. foot and mouth disease

Station 68 (blue)

52. Which statement is true of foot and mouth disease?

- a. Affects all cloven hooved animals.\*
- b. Goats are not affected by the condition.
- c. Animals are vaccinated routinely in the U.S. for this disease.
- d. Does not need to be reported to the state/federal authorities.
- e. Highly fatal disease of humans.

53. Mastitis describes an infection of what organ?

- a. the heart
- b. the kidneys
- c. the lungs
- d. the mammary gland\*
- e. the liver

54. Which is not true for pregnancy toxemia of goats?

- a. Affects all goats regardless of body condition.\*
- b. It is a preventable condition.
- c. Affects does with twins or greater numbers of kids.
- d. Fat does are at high risk.
- e. It is a condition of late pregnancy.

Station 79 (blue)

85. Which is true about caprine arthritis encephalitis or CAE of goats?

- a. Affects goats of all ages.
- b. Causes arthritis in older goats.
- c. Causes nervous disease in younger goats.
- d. Transmitted in the colostrum of infected does.
- e. All of the above are correct.\*

86. Which is true with regards to preventing disease spread?

- a. Observe and handle sick animals last.
- b. Use separate clothes and shoes for handling sick animals.
- c. Always wash hands after working with animals.
- d. All of the above are correct.\*
- e. None of the above are correct.

87. Which is not one of the forestomachs of the ruminant?

- a. abomasum
- b. rumen
- c. reticulum
- d. omasum
- e. cecum\*

Station 90 (blue)

118. Which forage has the highest protein content?

- a. fescue
- b. orchard grass
- c. alfalfa\*
- d. timothy
- e. brome grass

119. Which organ in the dairy goat filters blood?

- a. anterior pituitary
- b. pineal gland
- c. stomach
- d. spleen\*
- e. pancreas

120. Which bone in the dairy goat is the thigh bone?

- a. foramen
- b. femur\*
- c. carpus
- d. T13
- e. tibia

Station 3 (red)



7. What is this?

- a. Sand Sieve
- b. Cheese Strainer
- c. Penn State Forage Particle Separator\*
- d. Wisconsin Forage Particle Separator

8. What units are used to calculate the price for milk produced at a dairy farm?

- a. Quarts
- b. Hundred weights (100 pounds)\*
- c. Tons (2,000 pounds)
- d. Gallons
- e. Tanker loads

9. Identify the following item.

- a. Liner
- b. Inflation
- c. Milk tube
- d. a or b\*
- e. None of the above.

Station 14 (red)

40. Identify the following item.

- a. Paddle to stir cheese
- b. 4 compartment sampler for a ruminant
- c. California Mastitis Test Paddle\*
- d. "Once under" teat dipper
- e. Wisconsin Mastitis Test Paddle

41. Identify this plant.

- a. Alfalfa
- b. Brome grass
- c. Red Clover
- d. Ryegrass\*
- e. Timothy

42. Identify the following plant.

- a. Soybean
- b. Orchard grass
- c. Alfalfa\*
- d. Red Clover
- e. Sudan Grass

Station 25 (red)

73. Identify this feed.

- a. Grass Silage
- b. Alfalfa Silage\*
- c. High Moisture Corn
- d. Whole Cotton Seed
- e. Corn Silage

74. A body condition score of 3.5 points means the cow is:

- a. Obese
- b. Powerful
- c. Quite thin
- d. Slightly over conditioned\*
- e. Slightly under conditioned

75. What is the most important part of a milking routine?

- a. Keep the milking parlor free of startling noises.
- b. Dip teats after milking.
- c. Put the milker on clean, dry teats.\*
- d. Assure smooth cow flow.
- e. Wipe with individual paper towels.

Station 36 (red)

106. Why are dairy heifer calves separated from the dam immediately after birth?

- a. Control colostrum intake.
- b. Prevent fecal contamination.
- c. Prevent spread of pathogens from the cow's milk.
- d. Make it easier to break bond that develops between cow and calf.
- e. All of the above.\*

107. What disease currently devastating England, causes blisters on the feet and tongues of cloven hooved animals?

- a. Bovine Spongiform Encephalopathy
- b. Johne's Disease
- c. Blackleg
- d. Blue Tongue
- e. Foot and Mouth Disease\*

108. Which of the following practices are important for biosecurity?

- a. Wearing boots when visiting livestock farms.
- b. Changing clothes before visiting your neighbor's livestock farm.
- c. Asking foreign travelers to wait 5 days before visiting your farm.
- d. Having a veterinarian check purchased animals before bringing them to your farm.
- e. All of the above.\*

Station 47 (red)

139. Who pays for "Milk Mustache" advertisements?

- a. Dairy farmers only
- b. Dairy processors only
- c. TV stations
- d. Dairy Farmers and Dairy Processors\*
- e. The Indianapolis 500

140. What is a TMR?

- a. Total Meal Ration
- b. Total Mixed Ration\*
- c. Total Mineral Ratio
- d. Tub Mixer Ration
- e. None of the above

141. What does a plate cooler do on a dairy farm?

- a. Cools plates.
- b. Cools milk before it goes on the truck.
- c. Sterilizes milk before it enters the bulk tank.
- d. Cools milk before it enters the bulk tank.\*
- e. c and d

Station 58 (blue)

22. Cows begin to show symptoms of heat stress at what temperature?

- a. 32 degrees F
- b. 72 degrees F\*
- c. 32 degrees C
- d. 92 degrees F
- e. 102 degrees F

23. What breed is this cow?

- a. Milking Shorthorn
- b. Simental
- c. Guernsey
- d. Brown Swiss\*
- e. Holstein

24. What is considered the best material for bedding freestalls?

- a. newspaper
- b. straw
- c. sand\*
- d. recycled manure
- e. sawdust

Station 69 (blue)

55. What is this breed of dairy cow?

- a. Holstein\*
- b. Brown Swiss
- c. Jersey
- d. Angus
- e. Guernsey

56. Which of the following is a common foot problem in cattle?

- a. Foot rot
- b. Laminitis
- c. Hairy Heel Warts
- d. Sole Ulcers
- e. All of the above.\*

57. Which of the following feeds does not provide much fiber in a dairy cow's ration?

- a. Corn Silage
- b. Dry Hay
- c. Whole Cotton Seed\*
- d. Soybean Meal
- e. Tricale Silage

Station 80 (blue)

88. Approximately what percentage of lameness occurs in the rear legs of dairy cows?

- a. 25%
- b. 90%\*
- c. 100%
- d. about 50%
- e. 75%

89. What is the most important economic disease of dairy cattle?

- a. mastitis\*
- b. laminitis
- c. salmonella
- d. E. coli
- e. milk fever

90. Which of the following instruments is best for applying teat dip?

- a.
- b.
- c. \*
- d.
- e. Any will do.

Station 91 (blue)

121. Which of the following is true?

- a. Cows need only limited ventilation.
- b. Cows are stressed by heat beginning at 85 degrees Fahrenheit.
- c. Cow freestalls must be 9 feet long.
- d. Mattresses eliminate the need for any bedding.
- e. Blood circulation to the udder improves when cows are lying down.\*

122. How many liters in a gallon?

- a. 2.5
- b. 3.8\*
- c. 4.5
- d. 5.8
- e. 10.6

123. One ml equals \_\_\_\_\_ cc.

- a. one\*
- b. ten
- c. 12
- d. 24
- e. 100

Station 4 (red)

10. The average American eats \_\_\_\_ pounds of fish per year?

- a. 35
- b. 15\*
- c. 9
- d. 25
- e. 30

11. The highest concentration of Dissolved Oxygen in a pond occurs:

- a. Mid to late morning
- b. Mid to late afternoon\*
- c. Midnight
- d. Dawn
- e. Noon

12. The lowest concentration of Dissolved Oxygen in a pond occurs:

- a. Mid morning
- b. Mid afternoon
- c. Mid evening
- d. Just before dawn\*
- e. Midnight

Station 15 (red)

43. Most fish require a Dissolved Oxygen reading of at least \_\_\_ppm for good health, etc.
- a. 10
  - b. 16
  - c. 4\*
  - d. 20
  - e. 50
44. African Fish, mouthbrooder, die in temperatures of less than 50 degrees F, white fish meat.
- a. Catfish
  - b. Crappie
  - c. Tilapia\*
  - d. Hybrid Striped Bass
  - e. Trout
45. How many fingerling catfish can you stock in a 40 cubic foot cage?
- a. 250
  - b. 350\*
  - c. 475
  - d. 600
  - e. 800

Station 26 (red)

76. A fish stocked in ponds to eat weeds, etc...grows to 35~38 inches in 5 years.
- a. Trout
  - b. Sunfish
  - c. Catfish
  - d. Pike
  - e. Grass Carp\*
77. Netting for fish cages can be made of what?
- a. Plastic
  - b. Wire
  - c. Polyester
  - d. None of the above
  - e. All of the above\*
78. What is the standard depth of netting used in fish cage construction?
- a. 2 feet
  - b. 4 feet\*
  - c. 6 feet
  - d. 8 feet
  - e. 10 feet

Station 37 (red)

109. When putting a cage in a pond, what is the minimum depth the pond can be?

- a. 2 inches below the bottom of the cage
- b. 1 foot below the bottom of the cage
- c. 2 feet below the bottom of the cage\*
- d. 4 feet below the bottom of the cage
- e. 6 feet below the bottom of the cage

110. This fish can be grown in cages in ponds in winters in Indiana.

- a. Catfish
- b. Crayfish
- c. Sunfish
- d. Tilapia
- e. Trout\*

111. A type of pond built above ground in Indiana:

- a. Bank pond
- b. Dam Pond
- c. Fenced pond
- d. Levee pond\*
- e. Embanked pond

Station 48 (red)

142. What is a “medium” stocking rate for grass carp?

- a. 5
- b. 15\*
- c. 25
- d. 35
- e. 50

143. What are the small floating zooplankton in ponds called?

- a. Alkaloids
- b. Galls
- c. Flukes
- d. Limeoids
- e. Bloom\*

144. What is the device called to measure water clarity?

- a. Biofilter
- b. Quad meter
- c. Secchi disc\*
- d. Density Box
- e. Photometer

Station 59 (blue)

25. When is the best time to harvest fish?

- a. Dawn
- b. Mid morning
- c. Noon
- d. Late afternoon\*
- e. Night

26. What is the purpose of the biofilter in a recirculating system?

- a. Add oxygen
- b. Supply food for fish
- c. Oxidize iron
- d. Produce algae
- e. Oxidize ammonia\*

27. What is the most critical water quality for fish?

- a. pH
- b. 4-H
- c. Nitrite
- d. Oxygen\*
- e. Temperature

Station 70 (blue)

58. What is the biggest problem for oxygen for fish ponds in winter?

- a. Ice
- b. Snow\*
- c. Wind
- d. Wind Chill
- e. Freezing Rain

59. Rule of thumb to feed fish in cages.

- a. All they want.
- b. Have food floating all day.
- c. Have food floating all night.
- d. All they will clean up in 10- 15 minutes.\*
- e. Never over once per day.

60. Microscopic Algae can:

- a. Forms scums
- b. Cause red and black streaks in water
- c. Can cause "oily" water
- d. Are not consumed by grass carp
- e. All of the above.\*



Station 81 (blue)

91. When is the best time to apply aquatic herbicides?

- a. Late spring\*
- b. Late fall
- c. Late summer
- d. July only
- e. August only

92. Fish diseases are:

- a. Easy to diagnose and treat.
- b. Difficult to diagnose and easy to treat.
- c. Not ever important.
- d. Difficult to diagnose and treat.\*
- e. Easily identified by local veterinarians.

93. The most common fish kill in Indiana comes from:

- a. Diseases
- b. Parasites
- c. Lightning
- d. Oxygen\*
- e. Muddy water

Station 92 (blue)

124. If you stock 100 small mouth bass in a pond for sport fishing, how many bluegill fish should you also stock?

- a. 100
- b. 250
- c. 500\*
- d. 1,000
- e. 2,000

125. One pound equals \_\_\_\_\_ grams.

- a. 55
- b. 100
- c. 258.5
- d. 454\*
- e. 1,000

126. One kilogram equals \_\_\_\_\_ pounds.

- a. 1.1
- b. 2.2\*
- c. 3.3

- d. 6.0
- e. 100.0

Station 5 (red)

13. Paylean should be fed to pigs weighing how many pounds?

- a. 30-125
- b. 90-125
- c. 125-150
- d. 150-240\*

14. Where is the proper site for giving a baby pig an iron injection?

- a. 1
- b. 2
- c. 3
- d. 4\*

15. What is the gestation length of a sow?

- a. 65-68 days
- b. 112-115 days\*
- c. 152-155 days
- d. 201-204 days

Station 16 (red)

46. Using the universal system, what is the ear notch of this pig?

- a. 11-3\*
- b. 32-9
- c. 3-11
- d. 24-10

47. What is the optimal length of time Paylean should be fed?

- a. 10 days
- b. 7 days
- c. 60 days
- d. 21 days\*

48. Identify the breeds of swine in picture order.

- a. Yorkshire, Chester White, Berkshire, and Tamworth
- b. Yorkshire, Chester White, Poland China, and Duroc
- c. Landrace, Chester White, Poland China, and Duroc\*
- d. Chester White, Landrace, Poland China, and Tamworth

Station 27 (red)

79. What is the most valuable pork cut?

- a. Loin\*
- b. Ham
- c. Shoulder
- d. Bacon

80. Which one of the pork cuts is a Loin Chop?

- a. 1
- b. 2
- c. 3
- d. 4\*

81. What two breeds does one cross to get a white pig with gray spots on its rump, called a Blue Butt?

- a. Hampshire X Duroc
- b. Yorkshire X Chester White
- c. Hampshire X Yorkshire\*
- d. Berkshire X Poland China

Station 38 (red)

112. A measure of carcass leanness is the loin eye area at what rib?

- a. 10th\*
- b. 12th
- c. 8th
- d. 9th

113. Where is semen deposited in the sow?

- a. Bladder
- b. Vulva
- c. Vagina
- d. Cervix\*

114. In which organ does the embryo grow and develop?

- a. Ovaries
- b. Uterine Horns\*
- c. Oviducts
- d. Cervix

Station 49 (red)

145. What is this device used for?

- a. Drinking a large beverage.
- b. Inseminating a sow.\*
- c. Removing embryos from a female animal.
- d. Inseminating a cow.

146. Which is considered to be a good indicator of frame size in feeder pigs?

- a. Length of tail
- b. Length of body\*
- c. Breed
- d. Weight

147. Gilts should reach puberty at what age?

- a. 3 to 4 months
- b. 4 to 5 months
- c. 5.5 to 6.5 months\*
- d. 7.5 to 8 months

Station 60 (blue)

28. What do the letters PSE stand for?

- a. Pink Soft Exudative
- b. Pale Soft Exudative\*
- c. Pale Soggy Eggs
- d. Pickled Sow Embryos

29. What is the minimum acceptable loin eye area?

- a. 3 sq. inch
- b. 5 sq. inch\*
- c. 7 sq. inch
- d. 9 sq. inch

30. What is the average volume of semen produced by the boar?

- a. 50-100
- b. 100-150
- c. 150-200 ml\*
- d. 200-300

Station 71 (blue)

61. What is the average litter size born alive?

- a. 5
- b. 10\*
- c. 15
- d. 20

62. When measuring carcass composition using grids and probes, which of the following factors are used to predict percent carcass lean? 1) warm carcass weight, 2) loin eye area at the 10th rib, 3) fat depth at the 10th rib?

- a. #1
- b. #2

- c. #3
- d. #1, 2 and 3\*

63. AutoFOM uses \_\_\_\_\_ to measure carcass fat and loin depth.
- a. light reflectance
  - b. x-rays
  - c. gamma – rays
  - d. ultrasound\*

Station 82 (blue)

94. The Tobec machine measures carcass lean content using:
- a. light reflectance
  - b. x-rays
  - c. an electromagnetic field\*
  - d. ultrasound

95. How many needle teeth do piglets have?
- a. 2
  - b. 4
  - c. 8\*
  - d. all lower teeth

96. How long after the first vaccination does an animal start developing immunity to the disease?
- a. About 1 week
  - b. About 2 weeks\*
  - c. About 3 weeks
  - d. About 1 month

Station 93 (blue)

127. Ractopamine does not do which of the following?
- a. Increases carcass lean mass.
  - b. Increases feed intake.\*
  - c. Decreases backfat thickness.
  - d. Increases protein accretion.

128. Which building did we all meet in for the welcome session Wednesday afternoon?
- a. Computer Science
  - b. Founders Building of 1869
  - c. Smith
  - d. Hovde
  - e. Class of 1950\*

129. The size of a porcine ovum is:

- a. that of a chicken egg
- b. about one inch diameter
- c. equal to this period “.” \*
- d. one-half the size of a chicken egg
- e. so small that it would take one million side by side to equal one mm

Station 6 (red)

16. Which of the following dog breeds shed very little hair, if at all?

- a. Labrador Retriever
- b. Standard Poodle\*
- c. Brittany Spaniel
- d. Dachshund
- e. Old English Sheepdog

17. Which of the following is not a reason why cats will use a scratching post?

- a. Visual marking of territory/home range
- b. Stretching after napping
- c. Removing older nail sheaths from their claws
- d. Scent marking of territory/home range
- e. All of the above are reasons cats use a scratching post\*

18. Which of the following dog breeds need the least amount of outdoor exercise?

- a. Golden Retriever
- b. Australian Shepherd
- c. Jack Russell Terrier
- d. German Shorthair Pointer
- e. Pekingese\*

Station 17 (red)

49. Additional costs in the first year related to acquiring a new puppy include:

- a. Veterinary exam and preventive medications
- b. Food and supplies
- c. Neutering or pre-breeding testing
- d. Training classes
- e. All of the above are necessary\*

50. Which of the following is an incorrect statement about litter box care?

- a. A household with two cats should have 3 litter boxes.
- b. Remove the cat's waste every 24-48 hours.
- c. Change the brand or type of litter frequently to keep your cat interested in new textures.\*
- d. Thoroughly rinse and clean the box once a week.
- e. Avoid use of heavily scented or perfumed litter in the litter box.

51. CERF stands for:

- a. Central European Regional Four-H
- b. Canine Ear Research Foundation
- c. Cat Early Retirement Fund
- d. Canine Eye Registry Foundation\*
- e. Caprine Evergreen Repellant Formula

Station 28 (red)

82. Which of the following best describes how to properly clean a pet's ear?

- a. Fill up the ear canal with cleaner, squish it around, and wipe out with cotton balls.\*
- b. Apply hydrogen peroxide to dissolve the wax and kill bacteria.
- c. Gently use cotton swabs to remove wax from deep in the ear canal.
- d. Apply vinegar and water to dry out the ear.
- e. Pluck all the hair out with an ear powder.

83. Dogs and cats typically need their first teeth cleaning and polishing at what age?

- a. 6-12 months
- b. 1-2 years
- c. 3-4 years\*
- d. 5-6 years
- e. 7-10 years

84. Cats and small dogs are first considered "senior" (entering their second half of life) at what age?

- a. 5 years
- b. 7 years\*
- c. 9 years
- d. 11 years
- e. 13 years

Station 39 (red)

115. Select the incorrect statement on horse reproduction.

- a. Mares have two ovaries.
- b. Mares are termed long-day breeders.
- c. Twins are common in horses.\*
- d. The gestation length in horses is approx. 342 days.
- e. The stallion has two testes.

116. Select the incorrect statement on horse anatomy.

- a. The horse does not have a rumen.
- b. The horse does have a gallbladder.\*
- c. The horse does not have an abomasum.
- d. The coffin bone is located within the horse's foot.
- e. The horse does have a liver.

117. How many chromosomes does a newborn horse possess?

- a. 24
- b. 26
- c. 43
- d. 64\*
- e. 86

Station 50 (red)

148. Placental hormones of the horse include:

- a. progesterone, estrogen, and eCG\*
- b. calcitonin, hCG, and progesterone
- c. hCG, growth hormone, and somatomedin
- d. progesterone and melatonin
- e. hCG, progesterone, and estrogen

149. The stage of the horse's estrous cycle that directly follows estrus is:

- a. proestrus
- b. metestrus\*
- c. diestrus
- d. anestrus
- e. pseudo-estrus

150. In the stallion, the \_\_\_\_\_ is the site of sperm storage and final maturation.

- a. testis
- b. vas deferens
- c. prostate gland
- d. urethra
- e. epididymis\*

Station 61 (blue)

31. Ataxia in the horse is characterized by:

- a. An inability to coordinate the muscles in the execution of voluntary movement.\*
- b. The inability to expel the placenta after parturition.
- c. The fact that twins are rare in horses.
- d. Lack of milk let-down in the mare.
- e. The presence of a PDA in the neonate.

32. An immature female chicken is called:

- a. cockerel
- b. hen
- c. pullet \*
- d. leghorn
- e. rooster



33. An immature male chicken is called:

- a. poult
- b. leghorn
- c. cockerel\*
- d. gander
- e. condor

Station 72 (blue)

64. The number of chromosomes in the chicken is:

- a. 22
- b. 36\*
- c. 46
- d. 66
- e. 86

65. Avian females have:

- a. one functional ovary- on the left side\*
- b. one functional ovary-on the rightside
- c. two functional ovaries
- d. no ovaries
- e. just lays eggs from preformed ova without ovaries

66. What is the normal body temperature of a chicken?

- a. 95 F
- b. 98 F
- c. 100 F
- d. 103 F
- e. 107 F\*

Station 83 (blue)

97. In birds, \_\_\_\_\_ is a method of increasing \_\_\_\_\_ over the respiratory dead-space.

- a. convection, heat increment
- b. panting, blood flow
- c. gular flutter, air flow\*
- d. horripilation, evaporation
- e. blood flow, effective surface area

98. Avian bones tend to have air filled spaces and hence are called \_\_\_\_\_ bones.

- a. light
- b. vascular
- c. ventilation

- d. pneumatic\*
- e. von Willebrand's

99. An adult male duck is called a:

- a. drake\*
- b. duckling
- c. tom
- d. tommy
- e. gander

Station 94 (blue)

130. The breastbone in the chicken is also called the:

- a. sternum\*
- b. girdle
- c. femur
- d. hock
- e. pygostyle

131. The glandular stomach of the chicken is also called the:

- a. crop
- b. ventriculus
- c. cecum
- d. ceca
- e. proventriculus\*

132. The queen's milk contains about:

- a. 5% protein
- b. 14% protein
- c. 27% protein
- d. 32% protein
- e. 42% protein\*

Station 7 (red)

19. The frequency of rumen contractions in a normal adult cow is \_\_\_\_\_ per 2 minutes.

- a. 1
- b. 3\*
- c. 4
- d. 6
- e. 9

20. The average, normal temperature in a cow is:

- a. 100.0o F
- b. 101.5 \*

- c. 102.5
- d. 103
- e. 106

21. Capillary Refill Time (CRT) is used to evaluate an animal's:
- a. Digestive system
  - b. Respiratory system
  - c. Cardiovascular system\*
  - d. Lymphatic system
  - e. Integumentary system

Station 18 (red)

52. When giving a cow a bolus (pill), the balling gun is placed \_\_\_\_\_ where the bolus is ejected from the balling gun.
- a. In the animal's cheek (between teeth & cheek).
  - b. Under the tongue.
  - c. Behind and on top of the base of the tongue.\*
  - d. In the esophagus.
  - e. On top of the tongue, in the middle of the mouth.

53. The intramuscular (IM) injection site of choice in cattle over 300 lbs is:
- a. Neck\*
  - b. Triceps
  - c. Loin
  - d. Hamstring
  - e. Gluteal

54. Which one of the following is the least effective means of keeping a cow from kicking?
- a. Hobbles
  - b. Tie rear leg to a post behind the cow
  - c. Rope flank squeeze
  - d. Tail restraint
  - e. Nose leads (tongs)\*

Station 29 (red)

85. A cow's primary means of defense is to:
- a. Kick
  - b. Butt you with her head
  - c. Run\*
  - d. Squeeze you up against a wall
  - e. Bite

86. Which one of the following knots will create a loop that will not change in size regardless of how hard it is pulled?

- a. Square
- b. Two half hitches
- c. Halter tie
- d. Bowline\*
- e. Clove hitch

87. This piece of equipment is used to \_\_\_\_\_ (flank squeeze--delete name on question)

- a. Lift chunks of ice
- b. Measure diameters of trees
- c. Measure the width of a cow's hip bones
- d. Keep a cow from kicking\*
- e. Hang a water bucket on the side of a stall

Station 40 (red)

118. Without turning their heads, cattle can see almost \_\_\_\_\_ degrees around them.

- a. 90
- b. 180
- c. 220
- d. 270
- e. 360\*

119. The quickest and easiest, yet effective, method of restraint used to castrate a bull calf is:

- a. Nose leads
- b. Tail restraint\*
- c. Hobbles
- d. Flank squeeze
- e. Criss-cross method of rope casting

120. The herding instinct in cattle is:

- a. Extremely strong
- b. Very strong\*
- c. Present sometimes
- d. Present very little
- e. Nonexistent

Station 51 (blue)

1. A bloated cow will show distension as a:

- a. Distended rib cage
- b. Distended right paralumbar fossa
- c. Distended left paralumbar fossa\*

- d. Distended left lower abdomen
- e. Distended right lower abdomen

2. A stressed bovine will have all of the following signs, the most serious being:

- a. Increased heart rate
- b. Increased respiratory rate
- c. Sweating
- d. Open mouth breathing\*
- e. Feel hot

3. The pulse site of choice on a cow is:

- a. Under the jaw
- b. Inside the knee
- c. Between the dewclaws
- d. On the inside of the back leg
- e. On the ventral midline of the tail\*

Station 62 (blue)

34. Animal health evaluation should always begin with:

- a. Observation of the animal.\*
- b. Determination of the body temperature.
- c. Examination of the digestive system.
- d. Examination of feces.
- e. Examination of blood from the animal.

35. To examine the lymphatic (immune) system in the dog or cat, the simplest thing to do is:

- a. Take a blood sample and count white blood cells.
- b. Determine the animal's body temperature.
- c. Check for a cough or snotty nose.
- d. Palpate lymph nodes.\*
- e. Check the vaccination history.

36. A dog chewing on it's feet could be an indication of all of the following except:

- a. Food allergy
- b. Thorns in the feet
- c. Fleas
- d. Allergy to molds
- e. Hookworm infection\*

Station 73 (blue)

67. In performing a necropsy on a pig, the snout should be cut off to evaluate for:

- a. Nasal bots
- b. Atrophic rhinitis\*

- c. Nose length
- d. Sinus infection
- e. Hog rings

68. A good place to check the pulse on a dog is:

- a. On the inside of the thigh.\*
- b. At the point of the chin.
- c. On the ventral midline of the tail.
- d. Between the dewclaws.
- e. Under the tongue.

69. This instrument is used to: (balling gun--do not put name of instrument on)

- a. Extract rumen fluid from a cow.
- b. Administer a bolus to a cow.\*
- c. Take a "punch biopsy" of tissue from a cow.
- d. Collect a fecal specimen from an animal.
- e. Measure medicine for treatment of horses.

Station 84 (blue)

100. Identify the knot shown by name:

- a. Square knot
- b. Clove hitch
- c. Bowline\*
- d. Half hitch
- e. Granny knot

101. This knot (goes with question 21 object) is used to:

- a. Create a loop that will not slip.
- b. Anchor something with a quick release.
- c. Tie up cow's or horse's tails.
- d. Join two ropes of different size.
- e. a and d\*

102. This instrument is used for what purpose? (ear thermometer)

- a. Rectal palpation in cats.
- b. Endoscopy of lizards.
- c. Measuring body temperature in dogs and cats.\*
- d. Examining the ears of small animals.
- e. Examining dogs for cataracts.

Station 95 (blue)

133. Cats with polydactyly have:

- a. Poor eye sight
- b. Extra toes\*
- c. Blood-tinged urine
- d. Spots on their coats that are devoid of hair
- e. Dead fetuses within the uterus

134. The average normal body temperature of the cat is:

- a. 95.6 F
- b. 98.6 F
- c. 100.0 F
- d. 101.5 F\*
- e. 106 F

135. The organ in the cat that produces insulin is the:

- a. thyroid gland
- b. pineal gland
- c. bladder
- d. pancreas\*
- e. liver

Station 8 (red)

22. The national organization that recognizes breeds of rabbits is:

- a. The Society for Animal Science
- b. The American Rabbit Breeders Association\*
- c. The Indiana Rabbit Breeders Association
- d. The United States Department of Agriculture
- e. The American Association for Laboratory Animal Science

23. Rabbits that are over \_\_\_\_\_ pounds should be housed on solid bottom floors.

- a. 5
- b. 8
- c. 10
- d. 12\*
- e. 15

24. Temperatures in excess of \_\_\_\_\_ 0 Fahrenheit will impair the semen quality of most bucks.

- a. 70
- b. 75
- c. 80\*
- d. 90
- e. 100

Station 19 (red)

55. Breeders would most likely use \_\_\_\_\_ for producing research rabbits.

- a. Inbreeding\*
- b. Hybrid breeding
- c. Cross breeding
- d. Outbreeding
- e. None of the above

56. Air should be exhausted out of the barn at:

- a. Highest point of the barn, with prevailing winds.\*
- b. Lowest point of the barn, against prevailing winds.
- c. Highest point of the barn, against prevailing winds.
- d. Lowest point of the barn, with prevailing winds.
- e. Highest point of the barn, cross-wise to prevailing winds.

57. The breed that is displayed is:

- a. Flemish Giant
- b. New Zealand White
- c. Rhinelander
- d. Dwarf Hoto \*
- e. Checkered Giant

Station 30 (red)

88. The breed that is displayed is:

- a. New Zealand White
- b. Dutch Belted
- c. English Lop\*
- d. Netherland Dwarf
- e. Flemish Giant

89. The breed that is displayed is:

- a. French Angora
- b. English Lop
- c. Harlequin
- d. Hoto
- e. Himalayan\*

90. The body type of this rabbit is:

- a. Commercial
- b. Mandolin
- c. Full Arched
- d. Compact
- e. Cylindrical\*

Station 41 (red)



121. The body type of this rabbit is:

- a. Commercial
- b. Mandolin\*
- c. Full Arched
- d. Compact
- e. Cylindrical

122. Many rabbits are pre-disposed to respiratory disease due to:

- a. Breed type
- b. Genetics
- c. Poor handling
- d. Inadequate ventilation\*
- e. Inadequate veterinary care

123. Endoparasites are parasites that live:

- a. In the barn
- b. In the rabbit hutch
- c. In the rabbit\*
- d. Outside the rabbit
- e. On the rabbit

Station 52 (blue)

4. Rabbits are the intermediate host for:

- a. Tapeworms\*
- b. Hookworms
- c. Inchworms
- d. Whipworms
- e. Earthworms

5. The “peek a boo” worm usually attaches itself to the rabbit in the area of:

- a. The anal region
- b. The ears
- c. The chin \*
- d. The hocks
- e. The forehead

6. Psoroptes Cuniculi is an arthropod, which attacks the rabbit in the area of:

- a. The rear hocks
- b. The chin
- c. The head
- d. The abdomen
- e. The ears\*

Station 63 (blue)

37. Rabbit feed pellets should generally be:

- a. Long and wide in diameter
- b. Long and short in diameter
- c. Short and wide in diameter
- d. Short and short in diameter\*
- e. None of the above

38. To prevent overfeeding breeders should feed rabbits the amount of feed that they will routinely consume in:

- a. 10 minutes
- b. 15 minutes
- c. 20 minutes\*
- d. 60 minutes
- e. 90 minutes

39. Rabbits being nocturnal animals should be fed:

- a. First thing in the morning
- b. Mid-morning
- c. Noon
- d. Mid-Afternoon
- e. Evening\*

Station 74 (blue)

70. "Night feces" are a source of vitamin \_\_\_\_\_ for the domestic rabbit.

- a. A
- b. B\*
- c. C
- d. D
- e. E

71. To condition a domestic rabbit, one should feed a diet that is:

- a. High in protein, low in fiber
- b. High in fiber, low in energy\*
- c. High in fiber, high in energy
- d. Low in fiber, low in energy
- e. Low in fiber high in energy

72. Newborn rabbits are totally dependent upon maternal care for:

- a. 1 – 2 weeks
- b. 2 – 3 weeks
- c. 3 – 5 weeks
- d. 4 – 6 weeks\*
- e. 6 – 8 weeks

Station 85 (blue)

103. Which rabbit pelt is used for designer fur?

- a. Belgian hare
- b. Netherland dwarf
- c. Dutch belt
- d. Himalayan
- e. Rex\*

104. If a nesting box is changed from one location to another, it is very important to place \_\_\_\_\_ in the box as when the rabbit was initially trained.

- a. Excreta\*
- b. Hair
- c. Environmental enrichment device
- d. Crock
- e. None of the above

105. Does may be successfully rebred \_\_\_\_\_ days after kindling.

- a. 2
- b. 3\*
- c. 4
- d. 5
- e. 10

Station 96 (blue)

136. A \_\_\_\_\_ ml syringe will suffice for most injections with the domestic rabbit.

- a. 1 – 3\*
- b. 2 – 4
- c. 3 – 5
- d. 4 – 6
- e. 6 – 8

137. A red blood cell can also be termed a:

- a. cytoplasm
- b. platelet
- c. leukocyte
- d. erythrocyte\*
- e. thrombocyte

138. Luteinizing hormone is produced by the:

- a. ovary
- b. bone cells
- c. brain

- d. pineal gland
- e. anterior pituitary\*

Station 9 (red)

25. Which of the following is not one of the top 5 egg producing states in the United States today?

- a. Ohio
- b. Indiana
- c. Pennsylvania
- d. Minnesota\*

26. The only difference between a white egg and a brown egg, besides the color, is:

- a. The amount of calcium in the shell.
- b. The amount of protein in the yolk.
- c. The increased size of the yolk in brown eggs.
- d. None of the above.\*

27. At what age do turkeys begin laying eggs?

- a. 20 weeks
- b. 10 weeks
- c. 40 weeks
- d. 30 weeks\*

Station 20 (red)

58. At 42 days of age, a broiler can be expected to weigh:

- a. 21 lbs
- b. 8 lbs
- c. 6.5 lbs
- d. 4.1 lbs \*

59. Layers are brought into lay by, which of the following?

- a. Layers are reared until 30-weeks of age and then they automatically begin laying eggs.
- b. Layers are reared until 20 to 25 weeks of age and then photostimulated to bring them into egg production. \*
- c. Layers are reared until 60-weeks of age and then photostimulated to bring them into egg production.
- d. Layers are reared until 80-weeks of age and then photostimulated to bring them into egg production.

60. The domestic chicken has \_\_\_\_\_ air sacs.

- a. 2
- b. 3
- c. 5
- d. 7
- e. 9\*

Station 31 (red)

91. Which vitamin is needed for blood clotting?

- a. A
- b. D
- c. C
- d. E
- e. K\*

92. Select one volatile fatty acid produced in the rumen.

- a. carbon dioxide
- b. acetate\*
- c. oxygen
- d. amino acid
- e. methane

93. \_\_\_\_\_ is the act of giving birth.

- a. dilatation
- b. capacitation
- c. hemostasis
- d. parturition\*
- e. fertilization

Station 42 (red)

124. The "buffy coat" on top of the red blood cells after centrifugation are:

- a. caused by anemia
- b. dead red blood cells
- c. leukocytes\*
- d. erythrocytes
- e. caused by dehydration

125. Edema is an excess of:

- a. intracellular fluid
- b. plasma in blood
- c. cytoplasmic fluid
- d. interstitial fluid in tissue\*
- e. blood in tissue

126. Rapid destruction of erythrocytes in the blood will cause elevated levels of:

- a. white blood cells
- b. somatomedins
- c. angiotensinogen
- d. plasma albumin
- e. plasma bilirubin\*

Station 53 (blue)

7. Clotted blood that has been subjected to centrifugation yields:

- a. cerebrospinal fluid
- b. saliva
- c. lymph
- d. serum\*
- e. plasma

8. Purdue University was founded in:

- a. 1669
- b. 1711
- c. 1869\*
- d. 1901
- e. 1963

9. Caprine is an adjective that refers to:

- a. cattle
- b. chickens
- c. ducks
- d. swine
- e. goats\*

Station 64 (blue)

40. A dairy cow has \_\_\_\_\_ mammary gland(s).

- a. one
- b. two
- c. four\*
- d. six
- e. three

41. One square yard equals \_\_\_\_\_ square feet.

- a. one
- b. three
- c. nine\*
- d. ten
- e. sixteen

42. In cattle, this term means naturally having no horns.

- a. docked
- b. pointed
- c. buffed
- d. polled\*
- e. smooth

Station 75 (blue)

73. A mare has \_\_\_\_\_ mammary gland(s).

- a. one
- b. two\*
- c. three
- d. four
- e. five

74. An intact male sheep is called a:

- a. boar
- b. stud
- c. ram\*
- d. bull
- e. staple

75. The \_\_\_\_\_ produces bile.

- a. brain
- b. spleen
- c. pineal gland
- d. cecum
- e. liver\*

Station 86 (blue)

106. Cottonseed meal contains about \_\_\_\_ percent protein.

- a. 10
- b. 20
- c. 40\*
- d. 60
- e. 67.5

107. The \_\_\_\_\_ nerve is the largest nerve in the dog.

- a. third
- b. vagus
- c. ninth
- d. optic\*
- e. sympathetic

108. The \_\_\_\_\_ in cattle is really the chest area.

- a. flank
- b. poll
- c. shank
- d. brisket\*
- e. paunch

Station 97 (blue)

139. The female cat is known as a \_\_\_\_\_ ovulator.
- a. spontaneous
  - b. quick
  - c. slow
  - d. reflex\*
  - e. double
140. The generation interval in cattle is about \_\_\_\_ years.
- a. one
  - b. two
  - c. four\*
  - d. six
  - e. 7 to 10
141. The building blocks for proteins are:
- a. steroids
  - b. fats
  - c. hormones
  - d. amino acids\*
  - e. vitamins

Station 10 (red)

28. Which forage is a legume?
- a. Orchard grass
  - b. Fescue
  - c. Bluegrass
  - d. Alfalfa\*
  - e. Flax
29. Which feed is used to supply energy to lambs?
- a. Limestone
  - b. Soybean meal
  - c. Corn\*
  - d. Flax
  - e. Vitamin D
30. Pregnancy detection in ewes is usually determined with which technology?
- a. Ultrasound\*
  - b. Laparoscopic/manual techniques
  - c. X-ray films
  - d. Insemination detector
  - e. Hormone assay of urine



Station 21 (red)

61. Which of the following is not one of the four main wholesale cuts from a lamb carcass?

- a. Leg
- b. Rack
- c. Shoulder
- d. Neck\*
- e. None of the above

62. What factor is the primary determinant of the USDA Yield Grade for sheep?

- a. Leg score
- b. Fat thickness\*
- c. Break joint
- d. Ribeye size
- e. Neck score

63. A subcutaneous injection for a lamb would be given where?

- a. In the muscle
- b. In the mouth
- c. Under the skin\*
- d. Rectally
- e. Per os

Station 32 (red)

94. Footrot in sheep is caused by?

- a. Virus
- b. Bacteria\*
- c. Nutritional disorder
- d. All of the above
- e. None of the above

95. Sheep feet are trimmed to:

- a. Prevent footrot
- b. Make them look better
- c. Help the sheep walk easier
- d. All of the above\*
- e. None of the above

96. When moving or showing sheep, you should be on what side of the animal?

- a. Left\*
- b. Right
- c. Rear
- d. Underneath
- e. In front of

Station 43 (red)

127. What is an average range for a lamb's carcass dressing percent?

- a. 38 to 42%
- b. 48 to 52%\*
- c. 58 to 62%
- d. 68 to 72%
- e. 75 to 100%

128. Flushing is used in sheep to:

- a. Treat a disease
- b. Improve reproductive performance\*
- c. Get them ready for the fair
- d. Prepare for shearing
- e. Prepare for selling

129. Which of the following is not one of the four compartments of a sheep stomach?

- a. Rumen
- b. Omasum
- c. Abomasum
- d. Colon\*
- e. Reticulum

Station 54 (blue)

10. What are some basic types of production records used to select sheep?

- a. Type of birth\*
- b. Show ring placing of sire
- c. Breed
- d. All of the above
- e. None of the above

11. Withdrawal time for medications means:

- a. Time an animal must be off medication before slaughter.\*
- b. Time feed and water is withheld.
- c. Amount of medication given to an animal.
- d. None of the above.
- e. a and c from above.

12. Labels on medications give instructions for:

- a. Dosage given to animal.
- b. How to store medication.
- c. Withdrawal time.
- d. Precautions.
- e. All of the above.\*

Station 65 (blue)

43. Club lamb fungus, or ringworm, is a significant health issue in sheep because it:

- a. Can infect people\*
- b. Can kill sheep
- c. Will never go away
- d. Makes carcass condemned
- e. All of the above

44. Sheep catch ringworm by:

- a. Frequent shearing and washing
- b. Sharing contaminated equipment
- c. Contact with an infected sheep
- d. All of the above\*
- e. None of the above

45. Realtime ultrasound can be used to:

- a. Measure fat depth in an animal
- b. Measure ribeye area
- c. Determine pregnancy
- d. All of the above\*
- e. None of the above

Station 76 (blue)

76. Which is evaluated in a ram breeding soundness exam?

- a. Physical condition\*
- b. Show ring placing
- c. Performance records
- d. All of the above
- e. None of the above

77. Where do you handle lambs to predict carcass fat depth?

- a. Lower leg
- b. Neck
- c. Ribs and backbone\*
- d. Shoulder
- e. All of the above

78. Where do you handle lambs to predict carcass muscle?

- a. Loin and leg\*
- b. Flank
- c. Neck
- d. Backbone
- e. Mouth

Station 87 (blue)

109. An example of a grass would be:

- a. Red clover
- b. Lespedeza
- c. Alfalfa
- d. Trefoil
- e. Fescue\*

110. Footwear is disinfected to:

- a. Keep your boots from smelling
- b. Control spread of disease\*
- c. To make your boots shiny
- d. All of the above
- e. None of the above

111. The blades on a sheep shearing machine are called:

- a. Rake and cutter
- b. Comb and brush
- c. Top and bottom blades
- d. Comb and cutter\*
- e. None of the above

Station 98 (blue)

142. Which of the following is not an amino acid?

- a. arginine
- b. lysine
- c. leucine
- d. cystine
- e. septine\*

143. \_\_\_\_\_ is the study of animal behavior.

- a. Nephrology
- b. Ethology\*
- c. Histology
- d. Behavology
- e. Psychology

144. TGE in swine is caused by a:

- a. bacterium
- b. fungus
- c. tick
- d. rat
- e. virus\*

Station 11 (red)

31. The priority rank for supplying nutrients in horse diets should always be which of the following?
- Grain > supplements > hay > pasture > water
  - Pasture > hay > grain > supplements > water\*
  - Water > hay > pasture > grain > supplements
  - Hay > grain > water > pasture > supplements
  - Supplements > hay > grain > pasture > water
32. What percentage of the horse's body weight would you expect it to maximally eat of total dry matter every day?
- ½%
  - 2 ½%\*
  - 5%
  - 10%
  - 20%
33. What category of adult horse has the highest requirements per day for crude protein, calcium, and energy total?
- maintenance
  - gestation
  - lactation\*
  - intense work
  - breeding

Station 22 (red)

64. Approximately how much water would you expect a 1,300-pound horse to drink per day?
- 6 – 7 quarts
  - 6 – 7 gallons
  - 12 – 14 quarts
  - 12 - 14 gallons\*
  - 24 – 28 gallons
65. In what segment of the horse industry are there the most jobs and potential for income?
- On-farm breeding
  - Feed, health & equipment sales\*
  - Training
  - Jockey
  - Veterinarian
66. During what month would you expect most of the foals in North America to be born?
- January
  - February
  - March

- d. April\*
- e. May

Station 33 (red)

97. At what stage of horse pregnancy would you expect the endometrial cups to be formed in the mare?

- a. day 12
- b. day 24
- c. day 36\*
- d. day 48
- e. day 60

98. Which of the following is a mycotoxin affecting the horse?

- a. fumonisin\*
- b. vomitoxin
- c. zeralenone
- d. aflatoxin
- e. endophyte

99. What is the acronym (letters for four words in title) for the foal loss problem in Lexington?

- a. MRLS\*
- b. HASB
- c. KTBA
- d. THKF
- e. WCTS

Station 44 (red)

130. In the end, what is thought to be the cause of the abortions/stillbirths of 30% of the 2001 foal crop in central Kentucky?

- a. estrogens in clover
- b. zeralenone in bluegrass
- c. fumonisin in rye grass
- d. hydrogen cyanide in cherry tree leaves\*
- e. endophyte in fescue

131. What is the word or type of metabolism that describes the muscle type of horses, which goes for long, slow distances and is best suited to utilize oxygen efficiently without buildup of lactic acid?

- a. aerobic\*
- b. ataxia
- c. hyperkalemic
- d. anaerobic
- e. hypoglycemic

132. Approximately what heart rate represents the VO<sub>2</sub> max of an athletic horse?

- a. 40 bpm
- b. 80 bpm
- c. 120 bpm
- d. 160 bpm
- e. 200 bpm\*

Station 55 (blue)

13. What is the respiratory disease in horses that we call heaves and approximates emphysema and difficulty exhaling?

- a. roaring
- b. COPD\*
- c. thrush
- d. asthma
- e. navicular

14. Which of the following is not a method of increasing the intensity of the work in a standard exercise test for horses on a treadmill?

- a. Add weight
- b. Work faster
- c. Go up an incline
- d. Work longer\*
- e. Soften the footing

15. On which digit does the horse stand?

- a. one
- b. two
- c. three\*
- d. four
- e. five

Station 66 (blue)

46. What is the common name for this bone of the horse?

- a. cannon bone\*
- b. pastern bone
- c. shoulder bone
- d. elbow
- e. coffin bone

47. What disease is associated with the degradation of this bone?

- a. laminitis
- b. navicular\*
- c. bowed tendons

- d. bucked shins
- e. carpal chips

48. What structure of the horse's leg does this bone represent?

- a. elbow
- b. knee
- c. sesamoid
- d. pastern
- e. splint\*

Station 77 (blue)

79. What common unsoundness is caused by long, low, weak, pasterns; working horses in deep surfaces and results in inflammation and hemorrhage around the deep digital flexor tendon?

- a. tendonitis
- b. bowed tendon\*
- c. curbs
- d. check ligaments
- e. laminitis

80. What is the primary "soft tissue" structure that keeps the animal's leg upright, stabilizes the pastern joints, and keeps the horse's foot from extending or flexing too far?

- a. superficial flexor tendon
- b. frog
- c. semitendonosis
- d. deltoid muscles
- e. suspensory ligament\*

81. What is the acronym (first letters of words in title) for Purdue University's therapeutic horseback riding & driving program?

- a. CORRAL
- b. NARHA
- c. THE AQHA
- d. THE NRHA
- e. THE CHAPS\*

Station 88 (blue)

112. What is the average or "ideal" body condition score for horses?

- a. 1
- b. 3
- c. 5\*
- d. 7
- e. 9



113. What is the name of the farm that is home to Purdue's Intercollegiate Horse Show Teams?

- a. Fantasy
- b. Foxton\*
- c. Three Chimneys
- d. Forrest Hill
- e. Kings Hill

114. What is the largest expense in routine management of a horse boarding stable?

- a. Hoof care
- b. insurance
- c. health care
- d. feed\*
- e. equipment

Station 99 (blue)

145. At what age would most Thoroughbred racehorses begin routine training?

- a. 12 months
- b. 18 months\*
- c. 24 months
- d. 30 months
- e. 36 months

146. What is the chemical symbol for potassium?

- a. Bo
- b. P
- c. Po
- d. K\*
- e. M

147. What is the chemical symbol for sodium?

- a. S
- b. So
- c. Ca
- d. Na\*
- e. Xa

Level 1:

1. What is Dry Matter?
  - a. Dry matter expresses the proportion of a feed that is not water
2. Timely consumption of \_\_\_\_\_ is key to protecting calves short term health status and developing a strong immune system.
  - a. colostrum
3. What genetic term refers to an animals inherited genotype and the environment where the animal lives?
  - a. Phenotype

Level 2:

4. What does the acronym TDN stand for?
  - a. Total Digestible Nutrients
5. What is total digestible nutrients (TDN) a measure of in nutrition?
  - a. Energy
6. Name a byproduct feed that comes from ethanol production process:
  - a. Any of the following will be correct Distillers Grains with Soluble, Dried Distillers Grains with Soluble, Dried Distillers Grains, modified distillers grains with or without soluble or soluble
7. The corn wet milling process is used to produce food grade products such as corn oil and high fructose corn syrup. Name a byproduct feed that also a produced in making these products?
  - a. Corn gluten feed
8. In a ruminant animal, what are the four compartments of the digestive system?
  - a. Reticulum, Rumen, Omasum, and Abomasum
9. What blood feeding insect is most economically detrimental to the beef cattle industry?
  - a. Horn Fly
10. What mineral is deficient in weathered or mature forages?
  - a. Calcium

Level 3:

1. A 2 year old bull that has passed a veterinarian's breeding soundness exam can be expected to successfully breed how many cows?
  - a. 20-25 cows
2. As forage quality improves, a ruminant animal is able to consume more forage due to increased or decreased passage rate.
  - a. Increased passage rate
3. On a nutrition analysis or feed tag, what listed terms refer to a measurement of energy?
  - a. Net Energy of gain ( $NE_g$ ), Net Energy of Maintenance ( $NE_m$ ), Net Energy of Lactation ( $NE_l$ ), Total Digestible Nutrients (TDN)
4. What vitamin is important for proper bone formation, vision, growth, skin and hoof tissue health?
  - a. Vitamin A

5. The deficiency of \_\_\_\_\_ results in a variety of nervous system disorders?
  - a. Thiamin
6. What compound is found in raw soybeans that renders dietary protein indigestible in non-ruminant animals and calves less than 300 pounds?
  - a. Trypsin inhibitor
7. What is trypsin?
  - a. Trypsin is a digestive enzyme that is vital for the digestion and utilization of dietary protein.
8. Due to the high fat content of whole cotton seed, cattle should not be allowed to consume more than \_\_\_\_\_ % of body weight.
  - a. 0.75%

## Level 1.

- **Approximately how much feed does it require to produce a pound of beef?**  
6-7 pounds
- **At how many months old are calves usually weaned?**  
7-8 months
- **What is the average market weight for cattle?**  
1150-1250 pounds
- **What is the average weight of a calf at birth?**  
80-100 lbs.
- **In days, what is the gestation length of a beef cow?**  
284 days
- **How long is the gestation period of a goat in days?**  
150 days
- **What is the Genus and species of goats?**  
Capra hircus
- **What does the term sheering refer to in sheep?**  
To remove, fleece, wool or hair by cutting or clipping
- **What do you call purified wool grease?**  
Lanolin
- **How many pounds of feed does it take to produce one pound of gain in a hog?**  
3-4
- **A boar that has been castrated is called a what?**  
Barrow
- **What are the small teeth that should be trimmed when a baby pig is born to avoid scratching the sow's udder?**  
Needle Teeth

## Level 2.

- **What are Body Condition Scores (BCSs)?**  
BCS numbers are used to suggest the relative fatness or body composition of a cow.
- **To ensure high pregnancy rates, the lowest body condition score that a cow should have is what?**  
Five
- **A cow with a body condition score of 9 would be considered what?**  
Extremely Fat

- **Where is the proper place to put implants?**  
Backside of middle third of ear
- **According to the American Boar Goat Association, scrotal splits can be no larger than what?**  
2 inches
- **What is the term in sheep that refers to a group of animals that live, travel or feed together?**  
Flock
- **What is meant by the term flushing the ewe?**  
Increasing the plane of nutrition prior to breeding
- **Sheep are classified by what product that they produce.**  
Wool
- **The natural wave in wool is referred to as:**  
Crimp
- **The small teeth in a baby pig are called what?**  
Needle Teeth
- **What is the average market weight for pigs?**  
230-260 lbs.
- **When pigs are ear notched, what do the left ear notches stand for?**  
Individual pig mark or number
- **When are baby pigs usually weaned?**  
8 weeks
- **Pigs are typically what age when they reach slaughter weight?**  
6 months of age

### Level 3.

- **What is the average age that a heifer should be bred for the first time?**  
15 months
- **What is the average body temperature of cattle?**  
102.5
- **What is the intramuscular (IM) injection site of choice in cattle over 300 lbs.?**  
Neck
- **What term describes the loss of weight during shipping?**  
Shrink
- **What fiber do Angora goats produce?**  
Mohair

- **What is the common name for Para tuberculosis in goat?**  
Johne's disease
- **The "true" stomach of a ruminant is known as the what?**  
Abomasum
- **When a ewe is found in labor, how long should you allow for normal dilation and delivery?**  
30 min. to an hour
- **How many mammary glands does a ewe have?**  
2
- **The poorest quality of wool is located where on the sheep?**  
Belly
- **When is the normal season of lambing?**  
Spring
- **What type of digestive system do pigs have?**  
Monogastric
- **What is added to swine diets to increase energy?**  
Fats
- **A 150-260 lb. pig should have a minimum of square feet in a pen?**  
8 sq. ft.
- **One mature boar should be able to breed how many sows within a three-week period?**  
8-10

## **Beef**

Q. Corn silage, pasture, and hay are examples of what type of feed?

A. Roughages

Q. When is the best time to dehorn a calf?

A. From one day to three months of age

Q. At what age should a beef heifer be bred?

A. 15-18 months

Q. What is the process called in which the testicles of male calves are removed?

A. Castration

Q. Calcium and phosphorous are examples of what type of nutrients?

A. Minerals

Q. What is a beef animal that naturally lacks horns called?

A. Polled

Q. Besides a balanced ration, a clean, fresh supply of this nutrient is essential in feeding livestock?

A. Water

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

Q. What is the normal temperature of a beef animal?

A. 101.0°F or 38.3°C

Q. What causes dark cutting beef?

A. Stress prior to slaughter

Q. What is the normal pulse rate for cattle?

A. 60-70 beats per minute

Q. What is the normal respiration rate for cattle?  
A. 10-30 per minute

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

## **Sheep**

Q. How many pounds should you feed ewes during early gestation?  
A. 4-5 pounds of feed and hay

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. When lactating, how much grain should a ewe receive?  
A. 1-2 pounds

Q. How old before lambs begin to eat dry feed?  
A. 2-3 weeks of age

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. What is the gestation (pregnancy) length of a Ewe?  
A. 145 days

Q. In sheep what is the practice of docking?  
A. Removing the tail

**Swine:**

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. What are the most troublesome external parasites of swine?  
A. Lice and mange

Q. What is meant by “standing heat” when referring to swine?  
A. The period during which the female will stand to be mounted

Q. What is a piglet born dead called?  
A. Stillbirth

Q. How old should gilts be when they are bred?  
A. 8-9 months

Q. How much should a gilt weigh when she is bred?  
A. 275-300 pounds

Q. Which teeth should be clipped in baby pigs?  
A. Needle teeth

Q. What is meat from swine called?  
A. Pork

## **Goats:**

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. Imbalances in Calcium, Magnesium, and Phosphorous can lead to what potentially deadly condition in male goats?

A. Urinary calculi

Q. What feed additive besides salt is commonly added to grain formulated for wethers and bucks to try to prevent urinary calculi?

A. Ammonia Chloride

Q. Give an example of a guard animal for goats

A. Donkeys, llamas, guardian dogs

Q. What is the fiber from an Angora goat called?

A. Mohair

## Multiple Choice Questions

Market lambs can eat grass and be ready for slaughter without eating grain

True \_\_\_\_\_ False \_\_\_\_\_ **(T)**

Mastitis is a respiratory disease.

True \_\_\_\_\_ False \_\_\_\_\_ **(F)**

The average gestation length of a ewe is 9 months.

True \_\_\_\_\_ False \_\_\_\_\_ **(F)**

Which substance is used to treat a disease?

- A. Fertilizer
- B. Vaccine
- C. Antibiotic
- D. Implant **(C)**

What is a prolapse?

- A. A feed additive
- B. A medicine
- C. When the vagina becomes inverted and sticks out
- D. lamb born backwards **(C)**

Which of the following is not a legume?

- A. Alfalfa
- B. Bluegrass
- C. Clover
- D. Soybeans **(B)**

Which breed of bull would be most appropriate to use as a terminal sire on mature black baldie cows to maximize weaning weights?

- A. Angus
- B. Hereford
- C. Longhorn
- D. Charolais **(D)**

If we are to give a steer an intramuscular injection of a product which causes tissues irritation, which is the preferred injection site?

- A. Rump
- B. Quarter
- C. Loin
- D. Neck **(D)**

When selecting a bull to breed to heifers, which piece of information would be helpful in predicting the birth weight of his calves?

- A. his birth weight
- B. his sire's birth weight
- C. his birth weight EPD
- D. his frame size (C)

What is the main source of antibodies for a young lamb?

- A. vitamin A
- B. calcium
- C. protein supplement
- D. colostrum (D)

What is a castrated male sheep called?

- A. Steer
- B. Wether
- C. Gelding
- D. Buck (B)

The average gestation period of swine is

- A. 21 days
- B. 114 days
- C. 150 days
- D. 130 days (B)

When cattle twins are born and they are of a different sex, the female is called a

- A. Cryptorchid
- B. Freemartin
- C. Hermaphrodite
- D. Mulefoot (B)

A symptom of bloat is

- A. lameness
- B. abortion
- C. bulging on the left side
- D. severe bulging on the right side (C)

What is another word for calving difficulty?

- A. Laminitis
- B. Founder
- C. Enterotoxemia
- D. Dystocia (D)

A castrated male pig is called a?

- A. Steer
- B. Wether
- C. Barrow
- D. Gilt (C)



What specie requires an iron supplement shortly after birth?

- A. cattle
- B. sheep
- C. swine
- D. horse (C)

What results from breeding a sire to his own daughter?

- A. hybrid vigor
- B. crossbreeding
- C. inbreeding
- D. heterosis (C)

Ear notching of swine is used to identify

- A. the breed
- B. the litter number
- C. pig number within the litter
- D. both b and c (D)

Meat from sheep less than 12 months of age is called:

- A. Lamb
- B. Veal
- C. Mutton
- D. Steak (A)

The label on an antibiotic says follow a 20-day withdrawal. They means:

- A. Wait 20 days after buying the drug to use it
- B. Wait 20 days after giving to sell the animal for slaughter
- C. Wait 20 days after buying the animal to use it
- D. Don't turn the animal out for 20 days after using it (B)

Which of the following pieces of equipment is most often used to identify beef cattle?

- A. ear tagger
- B. freeze brand
- C. ear notcher
- D. neck chain (A)

Spell Charolais

Spell Boer (In reference to Goats)

Spell Limousin

Spell Duroc

Spell Rambouillet

Spell Tarentaise

Which is closest to the ideal fat thickness for a finished market steer?

- A. 0.15 inch
- B. 0.40 inch
- C. 0.70 inch
- D. 1.0 inch **(B)**

Which needle is smaller in diameter?

- A. 14 gauge
- B. 20 gauge
- C. 16 gauge
- D. 18 gauge **(B)**

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

Semen used for artificial insemination in cattle is frozen and stored in what?

- A. Ice
- B. Dry Ice
- C. Liquid Nitrogen
- D. Liquid Helium **(C)**

What normally happens to the price per pound of cattle as they get heavier?

- A. Price goes up
- B. Price goes down
- C. Depends what breed
- D. None of these **(B)**

What is the process of producing milk called?

- A. Lactation
- B. Gestation
- C. Ovulation
- D. Palpation **(A)**

Which animal should complete at least two gestations in one year?

- A. Mare
- B. Cow
- C. Sow
- D. None of the above **(C)**

What is the desirable birth weight for a pig?

- A. 1 pound
- B. 3 pounds
- C. 6 pounds
- D. 10 pounds **(B)**

## Beef

### Junior

**Approximately how much feed does it require to produce a pound of beef?**

6-7 pounds

**What is the term given to a female bovine that has not produced a calf?**

Heifer

**T or F Cattle can eat grain only?**

False, they eat forages also.

**At how many months old are calves usually weaned?**

7-8 months

**The breed of cattle which originated in Scotland, having no horns and is mainly black in color, but can be red is what?**

Angus

**A young bull or heifer that is under 1 year of age is called a what?**

Calf

**What is the average market weight for cattle?**

1150-1250 pounds

**A group of cattle is called a what?**

Herd



**What is the average weight of a calf at birth?**

80-100 lbs.

**Is it good management practice to raise polled or dehorned animals rather than keeping animals with horns?**

Yes

**At approximately what age is it best to castrate, dehorn, earmark, and brand calves?**

3-5 months

**When someone refers to a cow as open what does he or she mean? (BU-6352 Revised 1999)**

The cow is not pregnant or bred

**A castrated male bovine is commonly known as \_\_\_\_\_?**

Steer

**In cattle, this term means naturally having no horns.**

- A. docked
- B. pointed
- C. buffed
- D. polled
- E. smooth

D.polled

**In days, what is the gestation length of a beef cow?**

- A. 115 days
- B. 151 days
- C. 230 days
- D. 284 days
- E. 345 days

D.284 days

**Implants are used in beef production to: (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

- A. improve feed efficiency**
- B. improve average daily gain**
- C. improve profitability**
- D. All of the above**

D. all of the above

**What breed of beef cattle was developed in France, is known for fast growth lean meat and are large and white? (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

Charolais

**List three of five common techniques for permanent identification of cattle. (University of Arkansas Sample Beef Bowl Quiz Questions)**

Ear notching

Ear tattooing

Hot Iron branding

Freeze branding

Chemical branding

**What are Body Condition Scores (BCSs)? (Texas 4-H Quiz Bowl Sample Questions)**

BCS numbers are used to suggest the relative fatness or body composition of a cow.

**The target body condition score for a cow prior to calving is**

          ?

**(Texas 4-H Quiz Bowl Sample Questions)**

5-6

**Most thin cows will not re-breed if they are exposed to the bulls.**

**(Texas 4-H Quiz Bowl Sample Questions)**

True

**To ensure high pregnancy rates, the lowest body condition score that a cow should have is \_\_\_\_\_?**  
(Texas 4-H Quiz Bowl Sample Questions)

Five

**A cow with a body condition score of 9 would be considered \_\_\_\_\_?** (Texas 4-H Quiz Bowl Sample Questions)

Extremely Fat

**A cow with a body condition score of 1 would be considered \_\_\_\_\_?**  
(Texas 4-H Quiz Bowl Sample Questions)

Very Thin

**T or F The most prudent and effective way to reduce birth weight is to feed less.**  
(Texas 4-H Quiz Bowl Sample Questions)

False: use a bull that is known to sire calves with low birth weights

**Bos taurus and Bos indicus breeds, which group will reach puberty first and are considered early maturing?**  
(Texas 4-H Quiz Bowl Sample Questions)

Bos Taurus

**T or F A mature cow that has consistently calved throughout her life and is unexpectedly found open can be retained in the herd.**  
(Texas 4-H Quiz Bowl Sample Questions)

True

**Where is the proper place to put implants?**  
(Texas 4-H Quiz Bowl Sample Questions)

Backside of middle third of ear

**T or F Implanting at any location other than the backside middle third of ear violates federal law.**

**(Texas 4-H Quiz Bowl Sample Questions)**

True

**T or F Many implants are available, but selection of an implant is less critical than the decision on whether to implant or not.**

**(Texas 4-H Quiz Bowl Sample Questions)**

True

**When feeding a concentrate feed, what should one do upon the first signs of any digestive problems?**

**(Texas 4-H Quiz Bowl Sample Questions)**

increase hay (roughage)

**What is the term used to describe a digestive ailment often caused by cattle eating rations too high in grain; especially common when starting on feed?**

**(Texas 4-H Quiz Bowl Sample Questions)**

acidosis

**What feedstuff can be added to help prevent feed separation and settle dust in a mixed feed?**

**(Texas 4-H Quiz Bowl Sample Questions)**

molasses

**What vitamin is typically adequate in cattle exposed to sunlight?**

**(Texas 4-H Quiz Bowl Sample Questions)**

Vitamin D

**T or F Excessive fattening of heifers at young ages diminishes future milk production potential.**

**(Texas 4-H Quiz Bowl Sample Questions)**

True

**How many times a day should cattle be fed to consume more feed and have fewer digestive problems?**

**(Texas 4-H Quiz Bowl Sample Questions)**

more than twice a day

**With show cattle, rinsing the calf daily is designed to do what?**

**(Texas 4-H Quiz Bowl Sample Questions)**

promote healthy skin and hair

## **Senior**

**What is the #1 agricultural commodity in Oklahoma?**

Beef or Cattle and calves

**Name the breed of cattle developed in southern United States from stock originating in India and having a lump between the shoulders and large folds of loose skin?**

Brahman

**T or F Breeding bulls should be kept very fat to improve breeding performance during the breeding season.**

False

**What is the term used to describe abnormally large, bulging muscles in the rear quarter and forearm of a beef animal?**

Double muscling

**The average age that a heifer will be bred for the first time is: (4A465 Wyoming Beef Report)**

- A. 9 months
- B. 5 months
- C. 24 months
- D. 15 months

D. 15 months

**The time period that a cow or heifer will stand to be receptive to a bull is known as what? (4A465 Wyoming Beef Report)**

Heat or Estrus

**What is the average body temperature of cattle?**

- A. 98.6
- B. 100
- C. 101
- D. 102.5

D. 102.5

**What mineral deficiency causes grass tetany, a condition in which cattle appear nervous, lack muscle coordination, and have muscle twitch?**

- A. Magnesium
- B. Calcium
- C. Phosphorus
- D. Selenium
- E. Sodium

A. Magnesium

**The intramuscular (IM) injection site of choice in cattle over 300 lbs. is:**

- A. neck
- B. triceps
- C. lion
- D. hamstring
- E. gluteal

A. neck

**What scientific name refers to cattle?**

- A. ovine
- B. porcine
- C. equine
- D. caprine
- E. bovine

E.bovine

**Loss of weight during shipping is called \_\_\_\_\_.**

Shrink

**Where is the brisket of a calf? (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

Between the front legs

**What disease is caused by a magnesium deficiency and is sometimes seen in grazing cattle? (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

Grass Tetany

**When the reproductive processes of a group of cows are manipulated so that a large number of cows all come into heat at the same time, this is known as \_\_\_\_\_. (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

Estrous Synchronization

**Name two signs that a cow/heifer is in heat (Nebraska 4-H 2000 Livestock Quiz Bowl Questions).**

Tend to group together, ride each other, and exhibit standing heat/stand to be ridden, mucous discharge from vagina

**Describe how a calf will be presented,(i.e., in what position are its various body parts) in a normal delivery (Nebraska 4-H 2000 Livestock Quiz Bowl Questions).**

Front legs first with head resting between legs, calf is right side up

**The flap of skin on the throat of a beef animal is called what? (Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

Dewlap

**What's another name for cattle that are registered with a breed association and that are used to establish a breeding herd? (Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

- A. Commercial**
- B. Straightbred**
- C. Seedstock**

D. Seedstock

**What do the letters NCBA stand for? (University of Arkansas Sample Beef Bowl Quiz Questions)**

National Cattlemen's Beef Association

**Protein and energy should be in proper balance. If protein is in excess compared to the level of energy, what will happen to the excess protein? (Texas 4-H Quiz Bowl Sample Questions)**

The protein will be used for energy.

**Heifers should weigh what percent of their mature weight at their first breeding? (Texas 4-H Quiz Bowl Sample Questions)**

65-70 percent



**What is the recommended age to calve first-calf heifers to increase total lifetime productivity?**

**(Texas 4-H Quiz Bowl Sample Questions)**

2 years old

**What major hormone is produced by the testis (testicle) of the bull?**

**(Texas 4-H Quiz Bowl Sample Questions)**

Testosterone

**How many days prior to the breeding season should bulls be evaluated for breeding soundness?**

**(Texas 4-H Quiz Bowl Sample Questions)**

30-60 days

**What are the reproductive organs that produce the ovum or egg during estrus?**

**(Texas 4-H Quiz Bowl Sample Questions)**

Ovaries

**How early can an experienced palpator with skill and practice be able to detect pregnancy?**

**(Texas 4-H Quiz Bowl Sample Questions)**

30 days

**What two criteria are used to determine frame scores?**

**(Texas 4-H Quiz Bowl Sample Questions)**

Hip height and age of animal

**There are four measured factors used to formulate yield grades. Name them.**

**(Texas 4-H Quiz Bowl Sample Questions)**

fat thickness, ribeye area, carcass weight, kidney, pelvic, and heart fat

**Between what ribs are ribeye measurements taken?  
(Texas 4-H Quiz Bowl Sample Questions)**

12<sup>th</sup> and 13<sup>th</sup> rib

**Cattle require eight basic nutrients. Name five.  
(Texas 4-H Quiz Bowl Sample Questions)**

protein, minerals, vitamins, water, sugar, starch, cellulose, fat

**What term is used to describe the activity that ensures the body is getting its requirement to function properly?  
(Texas 4-H Quiz Bowl Sample Questions)**

maintenance

**What additive is used in feeds to help prevent some feedlot stress problems and control low-level infections but has little effect on increasing weight gain?  
(Texas 4-H Quiz Bowl Sample Questions)**

Antibiotics

**What percent of body weight can cattle consume daily in dry matter?  
(Texas 4-H Quiz Bowl Sample Questions)**

2-3 percent

**What is another name for Bangs Disease?  
(Texas 4-H Quiz Bowl Sample Questions)**

Brucellosis

**T or F Brucellosis causes abortion and infertility in cattle.  
(Texas 4-H Quiz Bowl Sample Questions)**

True

# Sheep

## Junior

**When a ewe is found in labor, how long should you allow for normal dilation and delivery?**

30 min. to an hour

**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 sheering refer to in sheep?**

To remove, fleece, wool or hair by cutting or clipping

**A female sheep or lamb is classed what?**

Ewe

**A young sheep less than one year is called a what?**

Lamb

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

Wool

**T or F Orphaned lambs may not be bottle-fed.**

False

**T or F Sheep can utilize only a few forages.**

False

**What is the breed of lamb, which has a white body and black face with no wool on the legs or face?**

Suffolk

**What is the average market weight for a lamb?**

90-130#

**T or F Sheep are highly susceptible to disease and predators, and thus require herders with well-developed management skills.**

True

**T or F Predators are a very real, modern problem in the sheep industry.**

True

**What is a male sheep that has not been castrated called?**

Ram

**Name two of the three main products that sheep produce? (4HCCS BU-6370 Revised 2000)**

Meat, Wool, Milk

**What is a wether? (4HCCS BU-6370 Revised 2000)**

A male sheep that has been castrated.

**How many compartments are there in a lamb's stomach? (Kansas 4-H Sheep Quiz Bowl Manual)**

Four

**Where is the poll located on a sheep?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

on the top of the head

**What is meant by the term cloven hoof?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

the hoof is split into two parts

**How many mammary glands does a ewe have?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

2

**As a ram matures and increases in size he will sire lambs with  
\_\_\_\_\_ birth weights. (Kansas 4-H Sheep Quiz Bowl Manual)**

- A. Heavier**
- B. Lighter**
- C. The Same**

C. The same

**A tool used for docking and castrating that crushes and cuts at the same  
time is called an \_\_\_\_\_. (Kansas 4-H Sheep Quiz Bowl Manual)**

Emasculator

**What legume hay generally has the highest feeding value for sheep?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

Alfalfa hay

**What is meant by the term flushing the ewe?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

increasing the plane of nutrition prior to breeding

**Name the condition occurring when a ewe expels a fetus prematurely.  
(Kansas 4-H Sheep Quiz Bowl Manual)**

abortion

**What do you call the entire coat of wool shorn from the sheep at one time? (Kansas 4-H Sheep Quiz Bowl Manual)**

fleece

**What do you call purified wool grease?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

lanolin

**The poorest quality of wool is located on the \_\_\_\_\_ of the sheep.  
(Kansas 4-H Sheep Quiz Bowl Manual)**

belly

**What is the main wild predator of sheep?  
(Kansas 4-H Sheep Quiz Bowl Manual)**

coyote

## **Senior**

**Small breeds of sheep such as Dorset, will reach breeding size by the time they reach 95-100 lbs.**

True

**What is the average gestation length for a ewe?**

146 days or 5 months

**T or F Rams should be removed from the flock during late gestation in order to prevent injury to the ewes.**

True

**Many lambs (ewes) will breed at approximately \_\_\_\_\_ months of age or when they reach 65% of their mature body weight.**

8

**T or F Sheep should be given salt free choice.**

True

**Breeds of sheep are classified by the type of \_\_\_\_\_ that they produce.**

Wool

**Give one example of a down breed?**

Southdown, Shropshire, Hampshire, Suffolk

**What is it when sheep are bred as a terminal cross?**

All offspring are marketed and not saved as breeding animals

**The normal season of lambing is?**

Spring

**T or F Sheep are good users of arid rangeland.**

True

**A flock of sheep is referred to as a :**

- a. dew
- b. wether
- c. band
- d. gaggle
- e. herd

c.band

**The natural wave in wool is referred to as:**

- a.crimp
- b.crutch
- c.fleece
- d.grease
- e.curly

a. crimp

**A lamb becomes a sheep at \_\_\_\_\_ at age:**

- a.9 months
- b.12 months
- c.18 months
- d.when its first offspring are born

b.12 months

**T or F Generally speaking, Oklahoma's sheep numbers follow national trends**

True

**Most of the sheep breeds in the US are originally from \_\_\_\_\_.**

- a. South America
- b. Australia
- c. New Zealand
- d. Mexico
- e. Europe

e. Europe



**T or F Some sheep breeds can breed twice a year?**

True

**What is the oil called in the fleece of sheep?**

Lanolin

**What breed of sheep is hornless and a producer of excellent meat?**

Suffolk

**Which breed of sheep from southern England has both ewes and rams that are horned, and has a tendency to produce out-of-season lambs, and has a white face and legs?**

Dorset

**This breed of sheep originated in the United States and has a white face, ears, and legs. They are a rugged breed that is good in meat and wool production. (4HCCS BU-6370 Revised 2000)**

- A. Columbia
- B. Dorset
- C. Hampshire

A. Columbia

**Which of the following is generally called a wool breed ((Nebraska 4-H 2000 Livestock Quiz Bowl Questions)?**

- A. Suffolk**
- B. Rambouillet**
- C. Southdown**

B. Rambouillet

**Sheep have eight small teeth when they are less than one year old, which are replaced by how many teeth each year until their fourth birthday? (4HCCS BU-6370 Revised 2000)**

Two teeth each year

**What name refers to sheep?**

- A. ovine
- B. porcine
- C. equine
- D. caprine
- E. bovine

A. ovine

**What is the normal body temperature of a sheep within 1 degree?**

102.3

**When evaluating a lamb, if has a very square blocky appearance down his topline, it is an indication of \_\_\_\_\_. (Kansas 4-H Sheep Quiz Bowl Manual)**

Condition or fat

**Comparing rams and wethers, which will have the higher rate of gain? (Kansas 4-H Sheep Quiz Bowl Manual)**

rams

**Before what age is it best to dock and castrate a lamb? (Kansas 4-H Sheep Quiz Bowl Manual)**

2 weeks

**List the four major primal cuts of lamb. (Kansas 4-H Sheep Quiz Bowl Manual)**

leg, loin, rack, shoulder

**Flushing can help increase \_\_\_\_\_ efficiency in a sheep flock. (Kansas 4-H Sheep Quiz Bowl Manual)**

reproductive

**Is a newborn lamb a functioning ruminant?**  
**(Kansas 4-H Sheep Quiz Bowl Manual)**

No

**What is the name of the lip-curling reflex exhibited by rams when they smell a ewe in heat?**  
**(Kansas 4-H Sheep Quiz Bowl Manual)**

flehming reflex

**What is the normal presentation of the fetal lamb for delivery?**  
**(Kansas 4-H Sheep Quiz Bowl Manual)**

head between front legs (diving position)

**What is accelerated lambing?**  
**(Kansas 4-H Sheep Quiz Bowl Manual)**

lambing more often than once every 12 months

**How many sheep make up one animal unit?**  
**(Kansas 4-H Sheep Quiz Bowl Manual)**

5 ewes and their offspring

# Swine

## Junior

**A breed of swine which is black in color with a white belt around its shoulders is what?**

Hampshire

**T or F Berkshires have drooping or erect ears?**

Drooping

**A boar that has been castrated is called a what?**

Barrow

**What is it called when you breed the boar of one breed to a sow of a different breed?**

Crossbreeding

**How many pounds of feed does it take to produce one pound of gain in a hog?**

3-4

**How often do sows come in to estrous (heat)?**

Approximately every 21 days

**Name the breed of swine, which is white and has erect ears?**

Yorkshire

**T or F Pigs are known as ruminants?**

False

**The small teeth in a baby pig are called what?**

Needle Teeth

**A female pig which has not had any babies is called what?**

A gilt

**What is the average market weight for pigs?**

230-260 lbs

**The number of pigs a sow has is called what?**

The litter

**What is ear notching and what is its purpose in swine?**

Ear notching is the cutting of a V shape in the ear of a pig and it is used for identifying litter number and individual pig number.

**When pigs are ear notched, what do the left ear notches stand for?  
(Nebraska 4-H 2002 Livestock Quiz Bowl Questions)**

Individual pig mark or number

**An adult female hog that has had an offspring is called a what?**

A sow

**An adult male hog that has not been castrated is called a what?**

A Boar

**What is a young swine called?**

A pig

**What does the term farrow refer to?**

To give birth to pigs

**How much do baby pigs weigh at birth?**

1.5-3 pounds

**When are baby pigs usually weaned?**

8 weeks

**T or F The carcass of a swine is more desirable if it has a lot of fat?**

False

**What is it called when one cuts a v-shape in the ear of a swine to indicate its litter or number in litter?**

Notching

**Pigs are typically what age when they reach slaughter weight?**

- A. 3 months of age
- B. 6 months of age
- C. 9 months of age

B. 6 months of age

**What breed of pigs has erect ears and the following color pattern: a black body with six white points, including their nose, tail, and feet?**

Berkshire

**When pigs are ear notched, what does the left ear notches stand for? (4-H Circular 134R)**

Individual pig mark or number

**This swine breed is solid red, has droopy ears and grows quickly and efficiently. (4-H Circular 134R)**

Duroc

**What is a common form of identification used on pigs? (4-H Circular 134R)**

- A. Branding
- B. Ear notching
- C. Ear tattoos

B. Ear Notching

**What two breeds does one cross to get a white pig with gray spots on its rump, called a Blue Butt?**

- A. Hampshire X Duroc
- B. Yorkshire X Chester White
- C. Hampshire X Yorkshire
- D. Berkshire X Poland China

C. Hampshire X Yorkshire

**What is the most valuable pork cut?**

- A. Loin
- B. Ham
- C. Shoulder
- D. Bacon

A. Loin

**What is the gestation length of a sow?**

- A. 65-68 days
- B. 112-115 days
- C. 152-155 days
- D. 201-204 days

B. 112-115 days

**What part of the day should you haul your pig in the summer?**

Morning or evening when it is cool

**T or F The skin from pigs used to treat people who have been burned badly.**

True

## **Senior**

**What comes from pigs and is used to treat diabetes in humans?**

Insulin

**Sows milk meets the nutritional needs of the young pig in everything but?**

Iron

**T or F Swine and humans have similar digestive systems?**

True

**A sow will usually cycle about days after her pigs are weaned.**

5 days (range 2-10)

**Why do sows bred during the summer months often have smaller litters than those bred and farrowed during the cooler months.**

heat stress causes lower conception and smaller litters.

**One mature boar should be able to breed to sows within a three-week period.**

8 to 10



**What is the area called where pigs are moved following weaning and kept until approximately 40-50 pounds? (BU –6159 Revised 1998)**

Nursery

**Pigs are considered (4-H Circular 134R)**

- A. Monogastric
- B. Ruminants
- C. Herbivores

A. Monogastric

**What is added to swine diets to increase energy? (4-H Circular 134R)**

- A. Fats
- B. Vitamin A
- C. Vitamin D

A. Fats

**Name two factors that can influence the pig's growth rate and nutrient requirements. (4-H Circular 134R)**

Genetics, sex, health of the pig, the pig's environment, and the stage of development/weight

**Of the shoulder, loin, and ham, which is the preferred place to tap a pig to get it to move? Why is this better than the other two places? (4-H Circular 134R)**

The shoulder because the ham and loin are high priced cut areas that could bruise.

**What name refers to a pig?**

- A. ovine
- B. porcine
- C. equine
- D. caprine
- E. bovine

B. porcine

**A 150-260 lb pig should have a minimum of how much space in a pen?  
(Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

- A. 4 sq ft**
- B. 8 sq ft**
- C. 12 sq ft**

B. 8 sq ft

**What would be an average feed efficiency for feedlot cattle? (Nebraska 4-H 2000 Livestock Quiz Bowl Questions)**

- A. 4 lbs of feed to 1 lbs of gain**
- B. 7 lbs of feed to 1 lbs of gain**
- C. 11 lbs of feed to 1 lbs of gain**

C. 7 lbs of feed to 1 lbs of gain

**One mature boar should be able to breed to sows within a three-week period.**

8-10

**Gilts should be to months old and weigh at least 200-250 pounds before they are bred.**

7-8 months

**Which is considered to be a good indicator of frame size in feeder pigs?  
(Purdue Quiz Bowl Questions)**

- A.length of tail**
- B.lenth of body**
- C.Breed**
- D.Weight**

B.length of body

**What is added to swine diets to increase energy? (Nebraska 4-H 2001  
Livestock Quiz Bowl questions?)**

**A. Fats**

**B. Vitamin A**

**C. Vitamin D**

A. Fats

# 4-H SHEEP QUIZ BOWL STUDY GUIDE

1. Jaw defects are found in all breeds of sheep.

Answer: True

2. Rectal prolapse is a serious defect and is often an inherited weakness.

Answer: True

3. You should keep ewes with inverted eyelids for breeding purposes because the problem can be solved by clipping a piece out of the upper eyelid with scissors.

Answer: False (This is an inherited characteristic, so do not keep for breeding stock.)

4. Cryptorchid rams will have a low fertility count.

Answer: True (Cryptorchidism is when a testicle is retained in the body cavity.)

5. Scours are highly inheritable.

Answer: True

6. Castration of young Rambouillet rams will not prevent horns from growing.

Answer: True

7. Skin folds are highly inheritable and harder to shear.

Answer: True

8. Open-faced ewes raise more lambs than extremely closed faced ewes.

Answer: True

9. With a cryptorchid ram, one or both testicles do not descend into the scrotum sack.

Answer: True

10. Rectal prolapse can sometimes be corrected by surgery.

Answer: True

11. Common meat breeds of sheep (medium-wool) are.

Answer: Hampshire, Suffolk, Southdown, Shropshire, Dorset, Cheviot

12. Common wool breeds are.

Answer: Corriedale, Columbia, (medium wool) Cheviot

13. Common fine-wool breeds are.

Answer: Rambouillet, Merion

14. Which breed of sheep originated in New Zealand?

Answer: Corriedale

15. The is the oldest breed of medium-wool sheep?

Answer: Southdown (South Eastern England)

16. Both rams and ewes of the breed have horns.

Answer: Dorest

17. The breed was developed from Spanish Merino sheep.

Answer: Rambouillet

18. There are more than breeds of sheep in the world today.

Answer: 200

19. Which is larger, a Corriedale or a Cheviot?

Answer: Corriedale

20. The is an American breed.

Answer: Columbia

21. The is a feed that is rich in energy and low in fiber.

Answer: Concentrate

22. Digested feed which is not used for growth, maintenance or reproduction is stored as. Answer: Fat

23. A bulky feed that is low in energy and high in fiber is called a.

Answer: Roughage

24. Give an example of a roughage.

Answer: Hay, Pasture

25. Give an example of a concentrate.

Answer: Corn, Barley, Oats, Milo

26. Is the increase in size of muscles, bones and other parts of the body.

Answer: Growth

27. An animal uses feed for reproduction, fattening, and .

Answer: Growth and maintenance

28. Young lambs use the most of the feed for and .

Answer: Growth and maintenance

29. Grown sheep use most of their feed for.

Answer: Maintenance

30. Three sources of high protein feeds for sheep are.

Answer: Linseed Meal, Cottonseed Meal and Soybean Meal

31. What is the cheapest of the 5 classes of nutrients?

Answer: Water

32. Are used mainly to build teeth and bones.

Answer: Minerals

33. Are nutrients that do not furnish energy or help build the body, but are necessary to keep the animal healthy.

Answer: Vitamins

34. And furnish most of the energy needed by the animal's body.

Answer: Fats and carbohydrates

35. Are used by the body to build muscles and blood.

Answer: Protein

36. An animal can live much longer without feed than without.

Answer: Water

37. In livestock feeding, which are more important, fats or carbohydrates?

Answer: Carbohydrates

38. Proteins are made of substances called.

Answer: Amino acids

39. Name the five classes of nutrients.

Answer: Energy, Proteins, Minerals, Water and Vitamins

40. A lamb's stomach is divided into compartments.

Answer: 4

41. Which has a stomach like a lamb's, a calf or a pig?

Answer: Calf

42. List the two methods of feeding market lambs.

Answer: Creep or hand

43. What is the best roughage for sheep?

Answer: Alfalfa

44. Common external parasites of sheep are.

Answer: Lice, Mites, Blowflies, Wool Maggots, Nose Bots or Keds

45. Common internal parasites of sheep are.

Answer: Tape Worm, Liver Flukes

46. What is the gestation period for a sheep?

Answer: 5 months or 150 days

47. What are the conditions that lead to foot rot?

Answer: Untrimmed feet, damp muddy pastures or corrals, warm temperatures or a contagious animal present.

48. Each lamb needs of feed trough space for grain.

Answer: One foot

Define these terms.

49. Overshot

Answer: Teeth hit back of the pad

50. Undershot

Answer: Teeth extend beyond the pad

51. Rectal Prolapse

Answer: The end of the digestive tube tears loose and protrudes out the rectum

52. Entropion

Answer: Inverted eye lid

53. Cryptorchidism

Answer: A testicle retained up the body cavity.

54. Gestation Period

Answer: The time between being bred and lambing

55. Parturition

Answer: Act of giving birth

56. Lactation

Answer: Act of giving or producing milk

57. Tagging ewes

Answer: Shearing wool from the tail, twist, inside the hind legs from rear flank and udder.

58. Drop band

Answer: A group of ewes close to lambing

59. Gummer

Answer: A sheep without teeth

60. Foot Rot

Answer: In an organism that grows in an environment where there is on oxygen. Therefore, damp hooves that have grown over the food pad will create an excellent condition for the organism to grow.

61. Colostrum

Answer: The first milk a ewe gives after lambing which is rich in nutrients and important to a new lamb.

62. Docking



Answer: The cutting off of a lamb's tail

63. Castrating

Answer: The removing of the male testicles

64. Ration

Answer: The amount of feed an animal eats in a 24 hour period.

65. Balanced Ration

Answer: A ration that has the right amounts of protein, carbohydrates, minerals, and vitamins for animal growth and health

66. Roughage

Answer: Feed that is low in digestibility and high in fiber content. (Example: barley, oats, and other grains)

67. Concentrate

Answer: Feed that is high in digestibility and low in fiber content. (Example: barley, oats, and other grains)

68. Carbohydrates

Answer: Those nutrients in a feed that provide energy, but do not supply protein.

69. Fiber

Answer: That part of a feed that is hard to digest. (Example: straw, plant stems)

70. Minerals

Answer: Nutrients that build bones and promote good health. (Examples: copper, selenium, calcium, sodium, phosphorus)

71. Protein

Answer: Those nutrients in a feed that contain nitrogen and that build muscles, hair, etc. Amino acids are the building blocks of proteins.

72. TDN

Answer: Total digestible nutrients or that part of a feed that is digestible.

73. Vitamins

Answer: Food nutrients that animals require in small amounts.

74. Over-Eating Disease (Pulpy Kidney, Enterotoxemia)

Answer: A fatal condition associated with high energy rations. May be prevented by vaccinating lambs 2 weeks before they are on full feed. Symptoms – lamb in good condition suddenly dies.

75. Navel Illness

Answer: An infectious disease that enters through the navel of a newborn lamb. Prevention – 7% iodine solution on navel immediately after birth.

76. Sore Mouth

Answer: Contagious virus disease which produces skin lesions on lips and in digestive tract. Treatment – remove scabs and rubbing iodine & glycerine. (Use rubber gloves)

77. Tetanus (Lockjaw)

Answer: This disease often results from deep wounds or punctures and is caused by a bacterium that grows in the absence of air. Symptoms – Stiffness of limbs and difficulty in moving or walking are often the first signs. The eyes are bright and clear, appearing unaffected. Treatment – If the disease is noted early, heavy injections of antitoxin may help the animal recover. Prevention – preventive vaccines are available. Vaccinate lambs before docking or castrating.

78. Bloat

Answer: Bloat may result when sheep graze on lush legume pasture or are fed extremely high-quality legume hay. Some animals may become chronic bloaters. A bloat-like condition due to founder or impaction is rare in lambs, but may occur. Symptoms – The abdomen on the left side of the animal becomes extended. Treatment – Consult your veterinarian. He/She may pass a stomach tube through mouth into rumen to relieve gaseous bloat. He/She can also recommend liquids to give to stop the production of gas. Consult your veterinarian.

79. Bluetongue

Answer: Bluetongue is an insect-borne, noncontagious virus that is transmitted from an infected animal to susceptible sheep by bites of a small insect called the biting midge, gnat, or no-see-um. It's a seasonal disease that may occur from midsummer until the first frost in fall.

80. Respiration.

Answer: Breathing. Normal rate is 12 to 20 breaths per minute. Stand back from animal and count the in-and-out movements of the ribs.

81. Stool

Answer: Check for solid or liquid, off-color, undigested material, tapeworms, or blood or mucus content. These are all signs of disease or other abnormal conditions.

82. Temperature

Answer: The normal rectal temperature of a sheep is 103 degrees Fahrenheit, plus or minus 1 degree. Animals that have been active will have a higher temperature, perhaps as high as 105 degrees Fahrenheit, especially on warm days.

83. Ticks

Answer: Sheep heavily infected with ticks are unthrifty. Control ticks by using chemical dips, sprays or dusts. It's best to treat for ticks after shearing. Treating once a year is usually adequate.

84. White Muscle Disease (Stiff Lamb Disease)

Answer: White muscle disease is caused by insufficient selenium (a mineral) or a deficiency of vitamin E. Symptoms – The signs of this disease vary considerably. The leg muscles are usually affected and the throat and tongue muscles are sometimes affected. The lambs appear to have poor control of muscles. Pneumonia is a common secondary infection. Sometimes there is profuse diarrhea. Sudden death from heart failure can be confused with enterotoxemia (pulpy-kidney). Prevention – In selenium deficient areas, inject sheep with a mixture of selenium and vitamin E.

85. Wool Maggots

Answer: Adult blow flies lay their eggs on open sores, wool bloody from lambing, or wool soiled with urine or feces. Maggots soon hatch and feed on wet wool adjacent to the skin, causing the wool to loosen and become putrid. Some flies, such as the screwworm, produce maggots that attack live tissue instead of putrid materials or secretions. Symptoms – Affected sheep usually lie among weeds along fences or in shaded areas with their heads outstretched on ground. When forced to move, they raise their hind legs in a kicking, irritated fashion. Treatment – Shear affected areas. Treat are with special smear preparations. Consult your veterinarian.

Describe how to

86. Gentle A Lamb

Answer: Stand outside the pen quietly while the lamb eats. Then quietly stand around inside the pen while the lamb eats. Catch the lamb and hold it for short lengths of time. Practice moving the lamb around in the pen. Talk to the lamb while moving with it. It will learn to recognize your voice, which can have a calming effect. Start working with your lamb when you first get it.

87. Fit A Lamb

Answer: The lamb must not have more than 1 inch or stretched fleece anywhere on its body. It is best to completely shear lambs 45 to 60 days before fair. Trim so that no telltale shear marks show. Use a wool card between each trimming. Slick shearing the lamb within 3 days before the show is acceptable. Wash the lamb at least 2 weeks before show date and again the day before show or that morning if the show is in the afternoon. Be sure to correctly trim the lamb's feet before showing.

88. Wash A Lamb

Answer: Wash the lamb on a warm, but not hot, day. Use a hose to completely wet the lamb. Use a non-detergent soap and warm water. Brush vigorously. Rinse thoroughly and let dry. Blanket the lamb until fair time.

89. Make A Show Blanket

Answer: Take a cotton sack and clean it well. Don't use a sack covered with colored ink on it. Cotton materials is preferable to burlap since burlap fibers show up in textiles, causing defects.

90. Show A Lamb

Answer: When showing a lamb in market class, the main purpose is to present the lamb so that it makes the most favorable impression possible on the judge. In the showmanship class, the main purpose is to show you and your lamb to the best possible advantage.

Miscellaneous

91. What things will the judge look for in showmanship?

- Is the animal clean?
- Are the feet correctly trimmed?
- Is the animal well-groomed?
- Can the exhibitor handle the animal?
- Is the exhibitor neatly and correctly dressed?
- Does he/she move the animal quietly?
- Does he/she correctly pose the animal?
- Does the exhibitor keep the animal between the judge and himself?
- Does he/she keep one eye on the animal and one eye on the judge at all times?
- Does the exhibitor practice good sportsmanship?

92. How should you conduct yourself in the show ring?

- Be courteous and neatly dressed at all times.
- Keep alert and follow instructions.
- Give the animal and the judge your complete attention.

# Sheep Quiz Bowl Questions

## SHEEP 1 – Questions

1. Where did the sheep breed Columbia develop?
  - a. U.S.
2. What sheep breed has the special qualities of being a sire breed and having a fast growth rate?
  - a. Hampshire
3. What breed of sheep can breed out of season?
  - a. Dorset
4. This all-white sheep breed developed in Scotland and is know for easy lambing and good milking capabilities. What breed is it?
  - a. Cheviot
5. This breed of sheep has the finest fleece and originated in Spain, what breed is it?
  - a. Merino
6. Developed in Finland, this very maternal sheep breed usually has a 250 – 400% lamb crop, what breed is it?
  - a. Finnsheep
7. Name the sheep breed that has a mouse-brown face from England.
  - a. Southdown
8. What are white-face breeds known as?
  - a. Ewe breeds
9. Why are white-face breeds known as ewe breeds?
  - a. Usually used as ewes in crossbred flocks because they produce more wool and milk
10. What are black-face breeds called?
  - a. Ram breeds
1. Sheep growing diets have about what percent crude protein?
  - a. 15% - 17%
2. Sheep finishing diets have about what percent crude protein?
  - a. 12% - 14%
3. At market time a meat lamb should weigh how many pounds?
  - a. 115 pounds – 135 pounds
4. Which type of lamb takes longer to grow, a market lamb or a wool lamb?
  - a. Wool lamb
5. What is one sheep judging term?
  - a. Stronger Topped,
  - b. Neater and Leaner in the Fore and Rear Flanks,
  - c. Trimmer thru the throat,
  - d. chest region along the underline,
  - e. Longer thru the loin, etc.

1. What is one way to prevent Navel Ill in lambs?
  - a. Immediately after birth, dip navel in tincture of 7% iodine; Disinfect lambing pens between births
2. How do you prevent pneumonia in sheep?
  - a. Provide adequate ventilation, prevent drafts, and reduce stress
3. What is the main symptom of scours in sheep?
  - a. Diarrheal (loose stool) that leads to dehydration
4. How long before lambing should ewes be sheared or crotched?
  - a. 3 – 4 weeks
5. Why is shearing and crotching done in ewes?
  - a. To allow for cleaner lambing and no dirty tags for lambs to suck on
6. What is the first thing that should be done when a lamb is born?
  - a. Clean the nostrils and mouth of uterine membranes to allow newborn lamb to breathe.

1. Name 2 parts of a wool fiber?
  - a. Tip, shaft, root, epidermis, cortex, medulla
2. About what percent of the live weight of a lamb becomes boneless lamb meat?
  - a. 33%
3. Name 3 sheep by-products?
  - a. hair conditioner;
  - b. animal feeds;
  - c. buttons;
  - d. fats for soaps,
  - e. oil;
  - f. gelatin for ice cream,
  - g. wine,
  - h. beer,
  - i. jello;
  - j. glue

1. Wool breed are judged 60% for their wool, and what percent for their conformation?
  - a. 40%
2. Which type of sheep, wool or market breeds, have their hair coat 'slick shorn' when they are shown?
  - a. Market breeds

1. What term is used to refer to the amount of weight a lamb gains each day?
  - a. Average Daily Gain (ADG)
2. What is the condition called where a sheep has lost some, but not all, or its teeth?
  - a. Broken Mouth

3. What is docking?
  - a. Cutting the tails short on baby lambs
4. What is dual purpose sheep breed used for?
  - a. Both wool and meat
5. What is a female sheep called?
  - a. Ewe
6. What is a young unborn animal as it develops in the uterus of a mammal called?
  - a. Fetus
7. What is a flock?
  - a. Small group of sheep
8. What is mutton?
  - a. The meat from mature sheep
9. What is the region of the foot or leg between the hoof and dewclaw called?
  - a. Pastern
10. What is an animal called that is born without horns in a species that sometimes has them?
  - a. Polled
11. What is another name for progeny?
  - a. Offspring
12. What are dung locks, floor sweepings or stained pieces of wool called?
  - a. Tags

## SHEEP 2 – Questions

1. Who or what determines the standards for determining yield grades?
  - a. United States Department of Agriculture (USDA)
2. What does cutability mean?
  - a. The yield of closely trimmed retail cuts from major wholesale cuts of a carcass
3. What is the best yield grade for cutability?
  - a. One
4. What is the major factor that affects cutability in a carcass?
  - a. Fatness
5. Where is fatness measured?
  - a. At the 12<sup>th</sup> rib over the rib eye muscle.
6. What are animals with a four compartment stomach called?
  - a. Ruminants
7. Because of their rumen, sheep and cattle can digest what, that monogastrics, such as humans can not?
  - a. Forage, roughage

8. When should lambs be introduced to creep or grain?
  - a. When they begin nursing.
9. What are 2 signs of lambing?
  - a. The udder will begin to fill, the ewe will go off by herself, the ewe is restless, the ewe will lie down and get up often, stretching
10. What are 2 possible causes of lamb losses?
  - a. Not breathing, cold, starvation, pneumonia, scours, Navel Ill, entropion (inverted eyelids), urinary calculi (H<sub>2</sub>O belly)
11. Name one tool used for docking tails on lambs
  - a. Emasculator, burdizzo, elastic band
12. How long should the tail be left when docking?
  - a. At least 2 tailbones long
13. What is a symptom of rectal prolapse?
  - a. Rectum hangs out
14. What is the disease that causes a lamb to have stiff muscles and a hunched back?
  - a. White Muscle Disease
15. What is the cause of *White Muscle Disease*?
  - a. Lack of selenium and/or Vitamin E
16. What is another name for *entertoxemia*?
  - a. Overeating Disease
17. What disease is the biggest problem in the sheep industry that affects the central nervous system and has no known cure?
  - a. *Scrapie*
18. Name 3 keys to prevention of disease.
  - a. Keep facilities clean, have vaccination program, have adequate housing and space, provide fresh clean water, feed a balanced diet, control predators and rodents, control exposure to other species and new animals, internal and external parasite control
19. Name a common internal parasite.
  - a. liver flukes,
  - b. tape worms,
  - c. large stomach worms,
  - d. brown stomach worms
  - e. stomach hair worms,
  - f. coccidiosis
20. Name a common external parasite
  - a. Ticks, maggots, lice, mosquitoes
21. What term is used to describe practices that are done to ensure that only animals that will produce safe and wholesome meat are being set to market?
  - a. Quality Assurance



22. What are 2 things that should be done with animal medications and drugs to ensure safe use?
  - a. Record animals treated, dates treated, products administered, how administered, withdrawal time, properly store and label all animal health products, follow all directions
23. How old are most lambs when they are harvested?
  - a. 5 – 7 months of age
24. Where in the U.S. is the highest amount of lamb consumed?
  - a. East and West Coasts
25. What is the term used to describe when a ewe prematurely expels an undeveloped fetus?
  - a. Abortion
26. What is a birth called which the rear portion of a fetus is presented first?
  - a. Breech
27. What is a card?
  - a. A hand tool used to fit show sheep Machine used to separate wool fibers
28. What term describes the natural waviness of wool fiber?
  - a. Crimp
29. What is the oral administration of a liquid, usually medicine for internal parasites/
  - a. Drenching
30. What is dystocia?
  - a. Difficult birth
31. What is an injection given directly into an animal's bloodstream?
  - a. Intravenous (IV)
32. Where is an intramuscular (IM) injection given
  - a. Neck muscle
33. What is the period of time when female mammals are producing milk?
  - a. Lactation
34. What is a chemical substance that nourishes the body?
  - a. Nutrient
35. What is another term that refers to sheep?
  - a. Ovine
36. What is a written statement giving the record of an animal's ancestry?
  - a. Pedigree

## SHEEP 3 – Questions

1. What do you need to give a good set of reasons?
  - a. Knowledge of ideal sheep, knowledge of names of parts and comparative terms, knowledge of reasons organization, ability to take good notes, confidence
2. Where is the ovum released from?
  - a. The follicle on the ovary
3. Where does the ovum go from the ovary?
  - a. Oviduct
4. What are two factors that influence fertility in a ewe?
  - a. Heredity; age of ewe; light, temperature, humidity and season of the year; association with the ram, nutrition, disease and parasites
5. About how many different breeds of sheep are there in the world?
  - a. 914
6. What country has the most sheep in the world?
  - a. Australia
7. About how many sheep are there in the U.S.?
  - a. 7 million
8. Which 2 states are the highest sheep producing states in the U.S.?
  - a. Texas and California
9. What are 2 of the most popular sheep breeds in the U.S.?
  - a. Rambouillet, Columbia, Suffolk and Hampshire
10. Besides dogs, what other animals are used to guard sheep?
  - a. Llama, donkeys
11. What is the wool from one sheep called?
  - a. Fleece
12. What is the practice of feeding and managing the ewes so that they are gaining weight when the breeding season begins?
  - a. Flushing
13. What is refined wool grease?
  - a. Lanoline
14. What is the term used to describe exhibiting more than one estrous per year?
  - a. Polyestrus
15. What is the term used to describe the characteristics of an animal that can be seen or measured?
  - a. Phenotype

# Swine Quiz Bowl

## Intermediate Questions

### Set A

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Name a common grain that is used in swine diets.

*Answer:* Corn or soybean meal

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 8

#### HEALTH

*Question # 2* Team B Contestant 1

Short Answer

*Question:* What is one feed medication that may be used to prevent pneumonia?

*Answer:* Lincomix or Pulmotil

*Resource:* Swine Pneumonia, L-5203 Page: 5

#### CARCASS QUALITY

*Question # 3* Team A Contestant 2

Fill in the Blank

*Question:* Pork should be cooked to a medium degree of doneness, with an internal temperature of.

*Answer:* 160 degrees F

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**YOUTH PROJECTS**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* How often should a needle be replaced if it is never bent?

*Answer:* At least every 20 injections.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**GENERAL MANAGEMENT**

*Question # 5* Team A Contestant 3

Fill in the Blank

*Question:* You should change your footwear and equipment or clean and disinfect when going from the farm returning to the main herd.

*Answer:* Isolation

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 1

**YOUTH LIVESTOCK JUDGING**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What is body capacity?

*Answer:* Internal dimension

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 4

**CARCASS QUALITY**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* As hogs age, do they tend to fatten from front to rear or from rear to front?

*Answer:* Front to rear

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**GENERAL MANAGEMENT**

Question # 8 Team B Contestant 4

Fill in the Blank

*Question:* A piglet's is a good yardstick to measure general health and comfort.

*Answer:* Behavior

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**YOUTH PROJECTS**

Question # 9

True/False

*Question:* In sows, tenting the loose skin behind the ear is deemed acceptable by NPPC for a subcutaneous injection.

*Answer:* True

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**HEALTH**

Question # 10

Short Answer

*Question:* The term "thumping" refers to what?

*Answer:* Shallow rapid breathing

*Resource:* Swine Pneumonia, L-5203 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* List one way to prevent a diet-induced diarrheal disease in swine?

*Answer:* Do not overfeed protein and other ingredients such as fat and make sure the pig finds the water source.

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**HEALTH**

Question # 12

Short Answer

*Question:* What was the first name given to the virus that causes PRRS?

*Answer:* Lelystad virus

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**GENERAL MANAGEMENT**

Question # 13

Short Answer

*Question:* Besides the "oink", what are 3 key co-products used from pigs?

*Answer:* Heart valves, insulin, burn dressings, pigskin leather, drugs, or pharmaceuticals

*Resource:* Quick Facts, pork.org Page: 37

**GENERAL MANAGEMENT**

Question # 14 \*\* Bonus Question Attached \*\*

True/False

*Question:* Watching your pig closely is always important, but especially just after arrival.

*Answer:* True. Be sure they are eating, drinking and to detect sickness.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* How is Atrophic Rhinitis diagnosed in live animals?

*Answer:* Veterinarians can diagnose bacterial rhinitis and turbinate atrophy by swabbing the turbinate bones through the snout and producing a bacterial culture. Visual inspection is another method of live animal diagnosis.

*Resource:* Atrophic Rhinitis, L-2193 Page: 2

**CARCASS QUALITY**

Question # 15

Short Answer

*Question:* Where is subcutaneous fat located?

*Answer:* Under the skin

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**GENETICS & SELECTION**

Question # 16

True/False

*Question:* Body capacity in breeding animals should be: deep rib and flank, spring and shape to rib, wide chest floor

*Answer:* True. Discriminate against: •Shallow bodied or "round ribbed". •Flat ribbed. •Narrow chested

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 2

**HEALTH**

Question # 17

Short Answer

*Question:* How long (in days) can the PRRS virus be recovered from the throat of an infected pig after the start of an infection?

*Answer:* 157 days

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 3

**HEALTH**

*Question # 18*

Short Answer

*Question:* What company makes a ractopamine product called Paylean for swine?

*Answer:* Elanco Animal Health (a division of Eli Lilly and Company)

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**CARCASS QUALITY**

*Question # 19*

Short Answer

*Question:* Define "Extra Label"

*Answer:* The VETERINARIAN prescribes a drug to be used in a manner other than what's on the label.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**CARCASS QUALITY**

*Question # 20*

Short Answer

*Question:* What method of cooking is used for tender cuts of meat?

*Answer:* Dry heat cooking

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**FEEDS/FEEDING**

*Question # 21*

Short Answer

*Question:* What does the acronym PQA stand for?

*Answer:* Pork Quality Assurance

*Resource:* Quick Facts, pork.org Page: 10



**CARCASS QUALITY**

Question # 22

Short Answer

*Question:* List the three types of potential food safety hazards in meat products.

*Answer:* Microbial, chemical, and physical

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 14

**HEALTH**

Question # 23 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* When should you determine the cause of diarrhea in swine?

*Answer:* As soon as the pig develops diarrhea

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What three pork plants "strongly encourage" PQA requirements?

*Answer:* John Morrell, IBP, and Seaboard Farms

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 5

**HEALTH**

Question # 24

Short Answer

*Question:* What is one way to minimize economic losses from disease when purchasing the initial swine in your herd?

*Answer:* Purchase all of the initial swine in your herd and all replacements from one source.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 2

**FEEDS/FEEDING**

Question # 25

Short Answer

*Question:* When feeding Paylean what level of Crude Protein is recommended in your swine feed?

*Answer:* At least 16%

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**REPRODUCTION**

Question # 26

Short Answer

*Question:* List up three things that determine when a gilt reaches puberty?

*Answer:* Age; body condition; plane of nutrition; exposure to a mature boar; pen size; and number of gilts per pen

*Resource:* Keeping Show Gilts as Replacements, ASWeb 088 Page: 1

**CARCASS QUALITY**

Question # 27

Short Answer

*Question:* What is the maximum rate/ton allowed for feeding Paylean?

*Answer:* 18 grams/ton. Paylean™ is approved at 18 grams per ton from 150 to 240 pounds (pen average).

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**GENETICS & SELECTION**

Question # 28

Short Answer

*Question:* List 3 underline problems in breeding females.

*Answer:* Poor spacing, pin nipples, inverted nipples, blunt/blind nipples, or coarse/fleshy nipples.

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 2

**CARCASS QUALITY**

*Question # 29*

Short Answer

*Question:* What method of cooking should be used for less tender cuts?

*Answer:* Moist Heat Cooking

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**REPRODUCTION**

*Question # 30*

Short Answer

*Question:* What is an AI spirette?

*Answer:* A spirette is a spiral shaped, plastic tipped insemination rod.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

# Swine Quiz Bowl

## Intermediate Questions

### Set B

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* If a pork carcass is given a muscle score of 1, is this considered thick, average, or thin?

*Answer:* Thin

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 1

#### **GENERAL MANAGEMENT**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* What is the earliest recommended age to introduce piglets to creep feed?

*Answer:* At one week of age

*Resource:* Baby Pig Basics, ASWeb-069 Page: 3

#### **HEALTH**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What is the best prevention measure in fighting Atrophic Rhinitis?

*Answer:* Proper management of the pig's environment.

*Resource:* Atrophic Rhinitis, L-2193 Page: 3-4

**REPRODUCTION**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* What is the average pig's estrous cycle?

*Answer:* 21 days

*Resource:* Artificial Insemination of Swine, L-5321 Page: 1

**HEALTH**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* Why do exhibitors keep their Gilt after a show?

*Answer:* To produce their own swine for next year's project

*Resource:* Keeping Show Gilts as Replacements, ASWeb 088 Page: 1

**CARCASS QUALITY**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What are the "four lean cuts?"

*Answer:* Ham, loin, Boston butt, and picnic shoulder

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* What is the first milk given from the mother called?

*Answer:* Colostrum

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**GENERAL MANAGEMENT**

Question # 8 Team B Contestant 4

Short Answer

*Question:* At what age will the piglets own immune system function at full capacity?

*Answer:* 3 weeks of age

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**YOUTH PROJECTS**

Question # 9

True/False

*Question:* It is ok to reuse bent needles if you clean the needle and straighten it back up.

*Answer:* False - You should never reuse a bent needle.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**HEALTH**

Question # 10

Short Answer

*Question:* Name one way that Erysipelas is spread in swine.

*Answer:* Through oral and nasal fluids and feces and can be carried by many healthy swine.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**General**

Question # 11

Short Answer

*Question:* What major four breed registries have adopted policies not to let any pigs found to be a stress carrier have a pedigree?

*Answer:* Yorkshire, Landrace, Duroc, and Hampshire

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 3

**GENETICS & SELECTION**

Question # 12

Multiple Choice

*Question:* The correct design for breeding hogs' in their hock joints, shoulder blades, and pasterns is: a) straight or b) angular

*Answer:* a) Angular. Forelimb: Angulation to provide maximum cushion to stride, prefer sloping forearm, cannon bone, and pastern (sickle shape). Hind Limb: Prefer angulation to joins of stifle and hock, cushion to pastern.

*Resource:* Texas Cooperative Extension Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**HEALTH**

Question # 13

Short Answer

*Question:* At what age should you begin to vaccinate gilts or boars for erysipelas?

*Answer:* 6 1/2 months or older

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**CARCASS QUALITY**

Question # 14

Short Answer

*Question:* What is the minimum percent protein recommended for use when feeding Paylean?

*Answer:* 16%. A diet of at least 16% CP is recommended.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**CARCASS QUALITY**

Question # 15 \*\* Bonus Question Attached \*\*

Short Answer

Question: What is marbling?

Answer: The flecks of white fat that are present within a muscle. (Intramuscular fat)

Resource: Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**HEALTH**

Question # BONUS QUESTION

Short Answer

Question: What is the best method for preventing economic loss from the Parvovirus disease?

Answer: To produce immunity in gilts before breeding by vaccination or exposure to manure.

Resource: Vaccinations for Farrowing Operations, L2192 Page: 2

**HEALTH**

Question # 16

Short Answer

Question: What does Erysipelas cause in swine?

Answer: Arthritis and death loss

Resource: Vaccinations for Farrowing Operations, L2192 Page: 1

**HEALTH**

Question # 17

Short Answer

Question: Name three causes of atrophic rhinitis.

Answer: Bacteria, viruses, chemicals, dust, pollen, temperature fluctuations, and other environmental irritants

Resource: Atrophic Rhinitis, L-2193 Page: 1



**GENERAL MANAGEMENT**

Question # 18

Short Answer

*Question:* What is the average weight of most baby pigs when they are first born?

*Answer:* 3.5 to 4.5 pounds

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**CARCASS QUALITY**

Question # 19

Fill in the Blank

*Question:* If the show pig industry wants to improve its image and the quality of the product it is producing for the dinner plate, total of the stress gene is necessary.

*Answer:* elimination

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 4

**GENERAL MANAGEMENT**

Question # 20

Fill in the Blank:

*Question:* Baby piglets are born virtually immunologically.

*Answer:* Naked

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**FEEDS/FEEDING**

Question # 21

Short Answer

*Question:* When will the largest response be seen when feeding Paylean?

*Answer:* During the first four weeks of feeding. (during the repartitioning phase)

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**YOUTH PROJECTS**

Question # 22 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What gauge and length of needle is recommended to be used on breeding stock for an intramuscular injection?

*Answer:* 14 or 16 gauge and 1 to 1-1/2 inch in length

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What is a withdrawal time?

*Answer:* The amount of time that has been established by research for the drug to clear the animal's body, making the meat safe for human consumption.

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 4

**HEALTH**

Question # 23

Short Answer

*Question:* The pneumonia bacterial agent present in virtually all herds is what?

*Answer:* Mycoplasma hypneumoniae

*Resource:* Swine Pneumonia, L-5203 Page: 1

**CARCASS QUALITY**

Question # 24

Short Answer

*Question:* When ear notching, the pig's left ear denotes what?

*Answer:* Identifies the pig number

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 29

**YOUTH PROJECTS**

Question # 25

Short Answer

*Question:* What does the term "hand feeding" mean?

*Answer:* Feeding a known amount of feed to each pig individually.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 7

**YOUTH LIVESTOCK JUDGING**

Question # 26

Short Answer

*Question:* List four areas to evaluate for fat deposition when judging market swine.

*Answer:* The jowl, over the blades, behind the shoulder, along the loin edge, through the lower 1/3 of the body cavity, the flank, and the seam of the ham.

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 3

**GENERAL MANAGEMENT**

Question # 27

Short Answer

*Question:* What is the percentage of post-farrowing deaths that occur within the first four days of life?

*Answer:* 65%

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**HEALTH**

Question # 28

Short Answer

*Question:* Do pigs with Atrophic Rhinitis usually develop pneumonia?

*Answer:* No

*Resource:* Atrophic Rhinitis, L-2193 Page: 2

**GENERAL MANAGEMENT**

*Question # 29*

Short Answer

*Question:* Name two different types of flooring that can be used for hog facilities.

*Answer:* Dirt, sand, wood, or concrete

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 5 - 6

**GENERAL MANAGEMENT**

*Question # 30*

True/False

*Question:* You should clean and disinfect your pen and all equipment before you bring your pig home.

*Answer:* True. Clean/disinfect all feeders, show supplies, buckets, scales, housing, including walls, ceiling, floors, cracks, and crevices.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 1

# Swine Quiz Bowl

## Intermediate Questions

### Set C

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* What does the color of the lean do as an animal ages?

*Answer:* It darkens

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

#### **CARCASS QUALITY**

*Question # 2* Team B Contestant 1

Fill in theBlank

*Question:* As an animal ages, the meat.

*Answer:* Toughens

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

#### **YOUTH PROJECTS**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What is the recommended gauge of needle to use on a baby pig for an intramuscular injection?

*Answer:* 18 or 20 gauge

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**HEALTH**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* If pigs are bought from separate farms it is recommended to keep these pigs isolated from one another for how many days?

*Answer:* 60 days

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**CARCASS QUALITY**

*Question # 5* Team B Contestant 2

Short Answer

*Question:* What are the two types of Animal Health Products?

*Answer:* Over The Counter Drugs (OTC) and Prescription Drugs (Rx)

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 36

**CARCASS QUALITY**

*Question # 6* Team A Contestant 3

Short Answer

*Question:* What is the approximate dressing percentage of a hog?

*Answer:* 72%

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* While the baby pigs like their environment warm, the sows do not. What temperature is ideal for the sow?

*Answer:* 65 degrees F

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**REPRODUCTION**

Question # 8 Team B Contestant 4

Short Answer

*Question:* What is the visible portion of the female reproductive tract?

*Answer:* Vulva

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**GENERAL MANAGEMENT**

Question # 9

Short Answer

*Question:* Why is it important to process the litter, including castration, shortly after birth?

*Answer:* The sooner these processes are completed, the easier it is on the overall stress and health of the piglet.

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**YOUTH**

Question # 10

Short Answer

*Question:* How are drug residues usually tested in animals?

*Answer:* Urine test or blood test. Usually with urine tests or blood tests.

*Resource:* Quality Counts (pdf), CHE-1 Page: 65

**HEALTH**

Question # 11

Short Answer

*Question:* Typical symptoms of pneumonia are?

*Answer:* Coughing and thumping

*Resource:* Swine Pneumonia, L-5203 Page: 1

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* Define "Labeled Use"

*Answer:* Using the drug EXACTLY as it is specified on this label.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**HEALTH**

Question # 13

Short Answer

*Question:* Operations that produce show pigs or breeding stock fall into which two of the types of swine operations?

*Answer:* Either farrow-to-feeder-pig or farrow-to-finish

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**GENETICS & SELECTION**

Question # 14 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* On average what is the decrease in weaning weight on litters from a positive stressed sow as compared to a negative sow.

*Answer:* 10% lighter

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know, ASWeb-071 Page: 2



**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* When a producer is using a drug extra label in the context of Vet-Client Patient relationship, the producer using the prescription must agree to what?

*Answer:* Use the drug properly, identify treated swine, and adhere to recommended withdrawal times.

*Resource:* Swine Pneumonia, L-5203 Page: 4

**GENERAL MANAGEMENT**

Question # 15

Short Answer

*Question:* Stress from hauling, new penmates and new surroundings can result in what negative impact on your pig?

*Answer:* Compromised immune system, decreased feed intake, decreased weight gain

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**YOUTH**

Question # 16

Multiple Choice

*Question:* The primary goal of Quality Counts primary is: a) to help us place higher at shows, or b) help us supply animals safer for food

*Answer:* b) help us supply animals safer for food. The main objective of raising livestock is to produce high-quality food for human consumption.

*Resource:* Quality Counts (pdf), CHE-1 Page: 103

**YOUTH LIVESTOCK JUDGING**

Question # 17

Short Answer

*Question:* What shape is muscle?

*Answer:* It is bulging and roundish in shape

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 1

**HEALTH**

Question # 18

Short Answer

*Question:* How long is it recommended to isolate any new breeding stock before allowing them into a PRRS-infected herd?

*Answer:* 60 days

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 3

**CARCASS QUALITY**

Question # 19

Yes/No

*Question:* Is "Extra Label" usage legal?

*Answer:* Yes

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**CARCASS QUALITY**

Question # 20

Short Answer

*Question:* What are 3 possible causes of violative drug residue?

*Answer:* Feed additives not withdrawn at specified times; Medicated feed residues left in feeders; Improper injection techniques

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 6

**YOUTH PROJECTS**

Question # 21 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What gauge needle should be used on a nursery pig for a subcutaneous injection?

*Answer:* 16 or 18

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What are the 4 major pork plants that already have "mandatory" PQA requirements for their pork?

*Answer:* Farmland, Hatfield, Hormel, and Swift

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 5

**CARCASS QUALITY**

Question # 22

Short Answer

*Question:* When looking at the live hog, we refer to the "top". What muscle is this on the pork carcass?

*Answer:* Loin

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**HEALTH**

Question # 23

Short Answer

*Question:* What does Parvovirus cause in swine?

*Answer:* Embryonic death, mummified pigs and temporary infertility.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**CARCASS QUALITY**

Question # 24

True/False

*Question:* "Off Label" usage is illegal.

*Answer:* True

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**GENERAL**

Question # 25

Short Answer

*Question:* Where should Estrous detection be performed?

*Answer:* In a neutral pen

*Resource:* Keeping Show Gilts as Replacements, ASWeb 088 Page: 1

**HEALTH**

Question # 26

Fill in theBlank

*Question:* Pneumonia is an important disease of the.

*Answer:* Lower respiratory tract.

*Resource:* Swine Pneumonia, L-5203 Page: 1

**HEALTH**

Question # 27

Short Answer

*Question:* How many doses of parvovirus vaccine should you give to boars and gilts before the first breeding?

*Answer:* Two doses, three to four weeks apart.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**HEALTH**

Question # 28

True/False

*Question:* Overfeeding protein can, in itself, cause loose stools or diarrhea.

*Answer:* True

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 1

**HEALTH**

*Question # 29*

True/False

*Question:* All lameness can be prevented.

*Answer:* False

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**YOUTH**

*Question # 30*

Multiple Choice

*Question:* Which of these is NOT found on a medicine label? a) Route of administration, b) Dosage, c) Size of needle to use, c) Withdrawal time

*Answer:* c) Size of needle to use. The medicine label contains: route of administration, dosage, withdrawal times

*Resource:* Quality Counts (pdf), CHE-1 Page: 55

# Swine Quiz Bowl

## Intermediate Questions

### Set D

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Name the three basic types of swine operations.

*Answer:* 1. Farrow to feeder-pig, 2. Farrow to finish, 3. Feeder-pig finisher

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 3

#### CARCASS QUALITY

*Question # 2* Team B Contestant 1

Short Answer

*Question:* Define Chemical hazards.

*Answer:* Residues left from antibiotics and medicated feeds.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 14

#### YOUTH PROJECTS

*Question # 3* Team A Contestant 2

Short Answer

*Question:* Where should you give an intramuscular injection to a pig?

*Answer:* In the neck just behind and below the ear.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**GENERAL MANAGEMENT**

*Question # 4* Team B Contestant 3

Short Answer

*Question:* How many days is recommended to isolate incoming breeding swine before introducing them to the herd?

*Answer:* 60 days

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 1

**CARCASS QUALITY**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* What does PSE stand for?

*Answer:* Pale, soft, and exudative

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 1

**CARCASS QUALITY**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What is the active ingredient of Paylean?

*Answer:* Ractopamine. Elanco has come out with a ractopamine product called Paylean™.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**YOUTH PROJECTS**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* When showing your pig, about how far do you want to keep your pig from the judge's viewing area?

*Answer:* About 10-15 feet

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 10

**CARCASS QUALITY**

Question # 8 Team B Contestant 4

Short Answer

*Question:* Does "holding" animals by restricting feed or water intake have a negative or positive effect on pork quality?

*Answer:* Negative. Lack of water can cause the muscle to lose shape and expression.

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 4

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**YOUTH PROJECTS**

Question # 9

True/False

*Question:* If you have recently given shots to a pig on both sides of his neck it is ok to give a shot in the loin.

*Answer:* False

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**REPRODUCTION**

Question # 10

Short Answer

*Question:* Where is the site of fertilization in the swine female's reproductive tract?

*Answer:* Oviduct

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2



**GENERAL MANAGEMENT**

Question # 11

Short Answer

*Question:* What is the current slaughter capacity in the U.S.?

*Answer:* About 444,925 head per day

*Resource:* Quick Facts, pork.org Page: 12

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* Define Microbial contamination.

*Answer:* The presence of pathogens such as E. coli or salmonella

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 14

**GENETICS & SELECTION**

Question # 13 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What type of flooring is the hardest on pigs joints?

*Answer:* Cement

*Resource:* From the Ground Up: The Importance of Structural Soundness, ASWeb-096 Page: 1

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* How many different variations of PRRS exist?

*Answer:* At least 20

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**HEALTH**

Question # 14

Short Answer

*Question:* If you purchase swine from a single source and those animals are healthy is there any need to take disease precautions before introducing those replacements into your herd? Why?

*Answer:* Yes, because they may have been exposed to disease during shipment.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 1

**CARCASS QUALITY**

Question # 15

Short Answer

*Question:* What does FSIS stand for?

*Answer:* Food Safety and Inspection Service

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 20

**HEALTH**

Question # 16

Short Answer

*Question:* How is the PRRS virus spread?

*Answer:* By pig to pig contact

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**GENERAL MANAGEMENT**

Question # 17

Short Answer

*Question:* Name one way to cool the sow off in the farrowing crate.

*Answer:* Dripping water between the sows shoulder blades at a slow rate.

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**HEALTH**

Question # 18

True/False

*Question:* Infected swine urine with Leptosprira is a major source of infection for normal pigs.

*Answer:* True

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**GENERAL MANAGEMENT**

Question # 19

Short Answer

*Question:* What producer program promotes animal well being and food safety?

*Answer:* PQA (Pork Quality Assurance)

*Resource:* Quick Facts, pork.org Page: 10

**YOUTH**

Question # 20

Short Answer

*Question:* Following drug labels, winning and losing with grace, and following show rules is which pillar of character?

*Answer:* Fairness. Uses only approved drugs, accepts winning or losing with grace, follows rules in the show ring.

*Resource:* Quality Counts (pdf), CHE-1 Page: 99

**YOUTH PROJECTS**

Question # 21

True/False

*Question:* Serious consequences, such as prison time, could result from misuse of medications.

*Answer:* True

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**HEALTH**

*Question # 22* \*\* Bonus Question Attached \*\*

Short Answer

*Question:* After purchasing your show pigs and bringing them home, when should you vaccinate and deworm them?

*Answer:* Within one week of arrival and repeated one month later.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 9

**HEALTH**

*Question #* BONUS QUESTION

Short Answer

*Question:* When should vaccination in pregnant sows for E. coli should be done?

*Answer:* Vaccination time should be done 4 to 7 weeks before farrowing and follow up with a booster 2 to 3 weeks before farrowing.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 3

**CARCASS QUALITY**

*Question # 23*

Short Answer

*Question:* Is the muscle from the shoulder or the loin more tender?

*Answer:* Loin

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**YOUTH PROJECTS**

*Question # 24*

Short Answer

*Question:* What is the method of administering drugs to an animal through the nose known as?

*Answer:* Intranasal

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**CARCASS QUALITY**

Question # 25

True/False

*Question:* It is not the producer's responsibility to do everything they can to provide a safe, wholesome product for the consumer. It is the consumer's problem.

*Answer:* False - It is the producers responsibility.

*Resource:* Preventing Drug Residues in Livestock, ASWeb 085 Page: 1

**GENETICS&SELECTION**

Question # 26

Fill in theBlank

*Question:* A desirable breeding animal's neck, rump, and body should be.

*Answer:* Long. Long necked, long bodied, long rumped.

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**GENETICS & SELECTION**

Question # 27

Short Answer

*Question:* What does EPD stand for?

*Answer:* Expected Progeny Differences

*Resource:* Understanding the Genetic and Environmental Interactions, ASWeb-094 Page: 1

**CARCASS QUALITY**

Question # 28

True/False

*Question:* The longer I feed Paylean, the more it will help develop muscle.

*Answer:* False. The largest response will be seen in the first four weeks of feeding, during the repartitioning phase. Therefore, you do not need to feed it long to get a response.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**CARCASS QUALITY**

*Question # 29*

Short Answer

*Question:* List 3 reasons producers use animal health products on a farm.

*Answer:* Provide for the welfare of the animal; Treat disease or parasites; Prevent disease or parasites; Improve rate of gain; Improve feed efficiency; Minimize production costs

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 17

**REPRODUCTION**

*Question # 30*

True/False

*Question:* When inserting the spirette into the cervix for artificial insemination you should use a clockwise rotation.

*Answer:* False - Counterclockwise

*Resource:* Artificial Insemination of Swine, L-5321 Page: 3

# Swine Quiz Bowl

## Intermediate Questions

### Set E

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Name one parasite that may cause pneumonia.

*Answer:* roundworms or lungworms

*Resource:* Swine Pneumonia - L-5203 Page: 3

#### HEALTH

*Question # 2* Team B Contestant 1

Short Answer

*Question:* Young pigs that survive PRRS infection are very contagious to other pigs for how long?

*Answer:* 4 to 5 weeks

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 2

#### GENERAL MANAGEMENT

*Question # 3* Team A Contestant 2

Short Answer

*Question:* If a sow has been kept outside, it is a good idea to treat them for external parasites about how many weeks prior to farrowing?

*Answer:* About two weeks prior to farrowing

*Resource:* Baby Pig Basics - ASWeb-069 Page: 2

**YOUTH PROJECTS**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* What is the best known way to prevent or avoid lameness in show pigs?

*Answer:* Make sure you buy a structurally sound pig when you purchase your show project.

*Resource:* Preventing Lameness in Show Pigs - ASWeb-086 Page: 1

**GENERAL MANAGEMENT**

*Question # 5* Team A Contestant 3

True/False

*Question:* When buying replacement animals it is a good idea to buy from one or as few "clean" sources as possible.

*Answer:* True

*Resource:* Isolation Procedures for Farrowing Operations - L-2263 Page: 3

**HEALTH**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* Name a type of bedding that could be used to keep the pigs warm and should keep them cleaner.

*Answer:* Straw, sand, or shavings

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 5

**HEALTH**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* An extra-label drug is what?

*Answer:* A drug approved for use in an other animal species but not in swine.

*Resource:* Swine Pneumonia - L-5203 Page: 4



**GENERAL MANAGEMENT**

Question # 8 Team B Contestant 4

Short Answer

*Question:* What is the recommended age limit in days to foster a piglet to another sow?

*Answer:* Up to three days

*Resource:* Baby Pig Basics - ASWeb-069 Page: 2

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**GENERAL MANAGEMENT**

Question # 9

True/False

*Question:* Vaccinating your pig with a booster shot can help reduce the risk of disease.

*Answer:* True. Extension vet recommends vaccinating all pigs ...

*Resource:* Texas Ag Extension Service-Starting Them Off Right!! Sterle ASWeb-075 Page: 2

**GENETICS & SELECTION**

Question # 10

True/False

*Question:* Toe size is NOT important in breeding swine selection.

*Answer:* FALSE. Toe Size: Prefer even toe size, large toe size, even weight distribution.

- Uneven toe size, generally smaller inside toe, because this results in abnormal wear on outside toe, exposing pad and causing lameness.

*Resource:* Texas Cooperative Extension Breeding Swine Selection ASWeb-117 6-00 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* How long can whipworm eggs remain viable in contaminated premises?

*Answer:* As long as 6 years

*Resource:* Diarrheal Disease in Show Swine - E-439 Page: 1

**GENETICS & SELECTION**

Question # 12

Short Answer

*Question:* Why is structural correctness important in breeding swine selection?

*Answer:* because of confinement production systems

*Resource:* Texas Cooperative Extension Breeding Swine Selection ASWeb-117 6-00 Page: 1

**HEALTH**

Question # 13

Short Answer

*Question:* How long are finisher hogs and breeding stock highly contagious to other pigs after surviving PRRS?

*Answer:* 2-3 weeks

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 1

**GENERAL MANAGEMENT**

Question # 14

Short Answer

*Question:* What country produces and consumes the most pork?

*Answer:* CHINA

*Resource:* Quick Facts - pork.org Page: 15

**YOUTH PROJECTS**

Question # 15 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What is an intramuscular injection?

*Answer:* An injection in the muscle, given in the neck.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety - ASWeb-090 Page: 2

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* Name the three government agencies that regulate meat production.

*Answer:* FDA; EPA; FSIS

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 20

**CARCASS QUALITY**

Question # 16

Short Answer

*Question:* To maximize juiciness when cooking pork, would you prefer more or less marbling?

*Answer:* More marbling. The more marbling a muscle has, the more flavorful and juicy it is when cooked.

*Resource:* Carcass Quality - Why is it important? ASWeb-070 Page: 2

**CARCASS QUALITY**

Question # 17

Short Answer

*Question:* Which of these is closest to today's average backfat on hogs? 2.8 inches 1.5 inches .75 inches

*Answer:* .75 INCHES. Hogs in the 1950's averaged about 2.8 inches when fat was in demand for munitions.

*Resource:* Quick Facts - pork.org Page: 49

**HEALTH**

Question # 18

Short Answer

*Question:* What is the recommended time period to take show pigs off all medication (even 0 day withdrawal period) how many hours before the show?

*Answer:* At least 24 hours

*Resource:* Diarrheal Disease in Show Swine - E-439 Page: 4

**HEALTH**

Question # 19

Short Answer

*Question:* The most common viral cause of pneumonia is ?

*Answer:* PRRS

*Resource:* Swine Pneumonia - L-5203 Page: 2

**HEALTH**

Question # 20

Short Answer

*Question:* Is it possible to get PRRS-virus-negative pigs from PRRS-virus-positive sows? How?

*Answer:* Yes, by waiting until the outbreak is over, then early-weaning and rearing the pigs off-site.

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 3

**GENERAL**

Question # 21

True/False

*Question:* Breeding shows are terminal shows.

*Answer:* False

*Resource:* Plan for Herd Health When Starting a Swine Operation - L-2369 Page: 2

**HEALTH**

Question # 22

Short Answer

*Question:* A common symptom of Swine Influenza Virus is

*Answer:* explosive coughing outbreaks

*Resource:* Swine Pneumonia - L-5203 Page: 2

**GENETICS & SELECTION**

Question # 23 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What is the minimum number of teats preferred PER SIDE for breeding gilts?

*Answer:* 6. 6 PER SIDE. At least 12 evenly spaced teats

*Resource:* Texas Cooperative Extension Breeding Swine Selection ASWeb-117 6-00 Page: 2

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What are the 3 types of drug use?

*Answer:* Labeled Use; Off Label; Extra Label

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 37

**HEALTH**

Question # 24

Short Answer

*Question:* If you use a killed vaccine or bacterin to vaccinate for Erysipelas in swine when should you give a booster injection?

*Answer:* 3 to 4 weeks later

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 1

**HEALTH**

Question # 25

Short Answer

*Question:* Can Atrophic Rhinitis be eliminated or prevented entirely in a commercial herd and why?

*Answer:* No, because it is neither cost-effective nor realistic.

*Resource:* Atrophic Rhinitis - L-2193 Page: 3

**CARCASS QUALITY**

Question # 26

Short Answer

*Question:* Define "Off Label"

*Answer:* The PRODUCER uses drugs on their own in a manner other than what is stated on the label without veterinarian guidance.

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 37

**GENETICS & SELECTION**

Question # 27

Short Answer

*Question:* What is the major goal of raising show pigs?

*Answer:* Achieving maximum lean growth with minimal fat deposition.

*Resource:* Understanding the Genetic and Environmental Interactions ASWeb-094 Page: 1

**HEALTH**

Question # 28

Short Answer

*Question:* One vaccination program will not fit all farrowing operations. So who should a breeder use to recommend a vaccination program for their operation?

*Answer:* Veterinarian

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 3

**GENERAL MANAGEMENT**

*Question # 29*

True/False

*Question:* Sows that are too hot tend to produce more milk.

*Answer:* False- Sows that are too hot tend to produce less milk

*Resource:* Baby Pig Basics - ASWeb-069 Page: 1

**YOUTH**

*Question # 30*

Fill in the Blank

*Question:* Intramuscular injections should be given in the.

*Answer:* NECK MUSCLE. Intramuscular (in the muscle) injections should be given in the neck muscle.

*Resource:* Quality Counts (pdf) - CHE-1 Page: 55

# Swine Quiz Bowl

## Intermediate Questions

### Set F

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* What is the only way that feeder pigs will have been tested for any disease before purchased?

*Answer:* If the originated from out-of-state.

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 2

#### GENETICS & SELECTION

*Question # 2* Team B Contestant 1

Short Answer

*Question:* The vulva is related to reproduction or muscling?

*Answer:* Reproduction. Reproductive traits: Vulvas: normal size. Not "upturned" or infantile. could signify small, underdeveloped reproductive tract or infertility.

*Resource:* Texas Cooperative Extension Breeding Swine Selection ASWeb-117 6-00 Page: 2

#### CARCASS QUALITY

*Question # 3* Team A Contestant 2

Short Answer

*Question:* Where should an intramuscular injection be given?

*Answer:* In the muscle in the neck (just behind and below the ear). Never the loin or ham.

*Resource:* Carcass Quality - Why is it important? ASWeb-070 Page: 10



**HEALTH**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* What is the most essential of all nutrients in a pig's diet?

*Answer:* Water

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 7

**CARCASS QUALITY**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* What is marbling?

*Answer:* Intramuscular fat- the flecks within a muscle.

*Resource:* Selecting the Perfect Chop (or Steak) ASWeb-092 Page: 1

**YOUTH PROJECTS**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* Where do you give a subcutaneous injection to market swine?

*Answer:* Under the skin in the elbow or the flank.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety - ASWeb-090 Page: 1

**HEALTH**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* The major source of the PRRS virus transmission to non-infected pigs is

*Answer:* The live pig that is infected

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 2

**GENERAL**

Question # 8 Team B Contestant 4

Short Answer

*Question:* When are gilts and sows usually bred?

*Answer:* When they are in standing heat

*Resource:* Keeping Show Gilts as Replacements - ASWeb 088 Page: 1

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**GENETICS & SELECTION**

Question # 9

Short Answer

*Question:* What is the minimum number of teats preferred PER SIDE for breeding gilts?

*Answer:* Six. Six per side. At least 12 evenly spaced teats

*Resource:* Texas Cooperative Extension Breeding Swine Selection ASWeb-117 6-00 Page: 2

**HEALTH**

Question # 10

Short Answer

*Question:* If you use a killed vaccine or bacterin to vaccinate for Erysipelas in swine when should you give a booster injection?

*Answer:* 3 to 4 weeks later

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* Can Atrophic Rhinitis be eliminated or prevented entirely in a commercial herd and why?

*Answer:* No, because it is neither cost-effective nor realistic.

*Resource:* Atrophic Rhinitis - L-2193 Page: 3

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* Define "Off Label"

*Answer:* The PRODUCER uses drugs on their own in a manner other than what is stated on the label without veterinarian guidance.

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 37

**GENETICS & SELECTION**

Question # 13

Short Answer

*Question:* What is the major goal of raising show pigs?

*Answer:* Achieving maximum lean growth with minimal fat deposition.

*Resource:* Understanding the Genetic and Environmental Interactions ASWeb-094 Page: 1

**HEALTH**

Question # 14

Short Answer

*Question:* One vaccination program will not fit all farrowing operations. So who should a breeder use to recommend a vaccination program for their operation?

*Answer:* Veterinarian

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 3

**GENERAL MANAGEMENT**

Question # 15

True/False

*Question:* Sows that are too hot tend to produce more milk.

*Answer:* False - Sows that are too hot tend to produce less milk

*Resource:* Baby Pig Basics - ASWeb-069 Page: 1

**YOUTH**

Question # 16 \*\* Bonus Question Attached \*\*

Fill in the Blank

*Question:* Intramuscular injections should be given in the.

*Answer:* Neck muscle. Intramuscular (in the muscle) injections should be given in the neck muscle.

*Resource:* Quality Counts (pdf) - CHE-1 Page: 55

**FEEDS/FEEDING**

Question # BONUS QUESTION

Short Answer

*Question:* What level of Paylean is approved is swine and what is the weight range of those swine?

*Answer:* 18 grams per ton for pigs from 150 to 240 pounds.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle. ASWeb-093 Page: 1

**GENERAL MANAGEMENT**

Question # 17

Short Answer

*Question:* How often is recommended to weigh your show pig?

*Answer:* Once a week, at the same time of day on the same day of the week

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 6

**CARCASS QUALITY**

Question # 18

True/False

*Question:* It is legal for me to feed Paylean to my show lamb.

*Answer:* False. It is only labeled for swine at this time, not steers or lambs.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle. ASWeb-093 Page: 1

**CARCASS QUALITY**

Question # 19

Short Answer

*Question:* Define Physical hazards.

*Answer:* Broken needles, metal, or other foreign objects in the meat.

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 14

**GENERAL**

Question # 20

Short Answer

*Question:* What are some signs of estrus?

*Answer:* Swollen, red vulva; mucus from the vulva; standing to be mounted; "popping" ears; increased vocalization; increased activity and mounting other females

*Resource:* Keeping Show Gilts as Replacements - ASWeb 088 Page: 1

**YOUTH PROJECTS**

Question # 21

Short Answer

*Question:* At what age are most market swine exhibited?

*Answer:* 6 months of age

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 4

**HEALTH**

Question # 22

Short Answer

*Question:* What is the most common infection of joints?

*Answer:* Mycoplasma

*Resource:* Preventing Lameness in Show Pigs - ASWeb-086 Page: 1

**GENETICS & SELECTION**

Question # 23

Short Answer

*Question:* Describe how an animal that is straight off both the front and rear legs will walk.

*Answer:* The animal will take small, exaggerated steps and often walk up on its toes.

*Resource:* From the Ground Up: The Importance of Structural Soundness - ASWeb-096 Page: 1

**GENERAL MANAGEMENT**

Question # 24 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* Why is it important to inject baby pigs with an iron supplement?

*Answer:* Baby pigs are born with a limited supply of iron in their livers and they must be supplemented to prevent anemia.

*Resource:* Baby Pig Basics - ASWeb-069 Page: 3

**GENERAL MANAGEMENT**

Question # BONUS QUESTION

Short Answer

*Question:* What bacteria is most commonly the cause of joint infections?

*Answer:* MYCOPLASMA. The most common infection of joints is mycoplasma.

*Resource:* Preventing Lameness in Show Pigs - ASWeb-086 Page: 1

**CARCASS QUALITY**

Question # 25

Short Answer

*Question:* What part of the pork carcass produces the bacon?

*Answer:* Belly

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs ASWeb-087 Page: 1

**HEALTH**

Question # 26

True/False

*Question:* Parvovirus disease mainly occurs in non-pregnant gilts and boar hogs?

*Answer:* False: Parvovirus disease mainly occurs in pregnant gilts and first-litter sows infected between breeding and 65-70 days of gestation.

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 2

**YOUTH LIVESTOCK JUDGING**

Question # 27

Short Answer

*Question:* What are the five Basic areas that market swine are placed on?

*Answer:* Muscle, leanness, growth, volume and structural soundness

*Resource:* Evaluating Market Swine - ASWeb-039 Page: 1

**GENETICS & SELECTION**

Question # 28

True/False

*Question:* With the improvement of genetics in producing more muscling in swine we still need to use animals with the stress gene.

*Answer:* False- With the improvement of genetics there is no need to use animals with the stress gene.

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know - ASWeb-071 Page: 2

**REPRODUCTION**

*Question # 29*

Short Answer

*Question:* How long on average must sperm be present in the female reproductive tract to undergo biological changes necessary for fertilization?

*Answer:* 2 to 3 hours

*Resource:* Artificial Insemination of Swine - L-5321 Page: 2

**HEALTH**

*Question # 30*

Short Answer

*Question:* How often should a boar receive a vaccination for Erysipelas?

*Answer:* Every six months

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 1



# Swine Quiz Bowl

## Junior Questions

### Set A

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Fill in the Blank

*Question:* Stress positive animals tend to be at birth and do not grow any faster than "NN" normal animals.

*Answer:* Smaller

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 4

#### **YOUTH PROJECTS**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* While showing your pig, if you tap the right side of the neck and shoulders, typically the pig will go which direction?

*Answer:* Left

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 10

#### **GENERAL MANAGEMENT**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What is a barrow?

*Answer:* A castrated male pig.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 9

**HEALTH**

*Question # 4* Team B Contestant 2

Fill in the Blank

*Question:* A veterinarian can provide an individualized herd program for your operation which includes specific vaccination procedures.

*Answer:* Health

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 3

**CARCASS QUALITY**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* How many steps are in the HACCP program?

*Answer:* Seven

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 15

**CARCASS QUALITY**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What does FDA stand for?

*Answer:* Food and Drug Administration

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 20

**CARCASS QUALITY**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* What is the starting point of the Food Supply Continuum?

*Answer:* Producer

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 3

**YOUTH PROJECTS**

Question # 8 Team B Contestant 4

Short Answer

Question: If you are hand-feeding your show pig, what is the minimum number of times you should feed it daily?

Answer: Twice a day

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 7

**\* \* \* \* \* Toss-Up Questions \* \* \* \* \***

**HEALTH**

Question # 9

Short Answer

Question: Operations that produce show pigs or breeding stock fall into which two of the types of swine operations?

Answer: Either farrow-to-feeder-pig or farrow-to-finish

Resource: Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 1

**HEALTH**

Question # 10

Short Answer

Question: The major source of the PRRS virus transmission to non-infected pigs is.

Answer: The live pig that is infected

Resource: Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**YOUTH**

Question # 11

Short Answer

*Question:* How are drug residues usually tested in animals?

*Answer:* Urine Test or Blood Test - Usually with urine tests or blood tests.

*Resource:* Quality Counts (pdf), CHE-1 Page: 65

**GENERAL MANAGEMENT**

Question # 12

Short Answer

*Question:* What is a gilt?

*Answer:* A female pig that has not had any litters.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 3

**GENERAL MANAGEMENT**

Question # 13 \*\* Bonus Question Attached \*\*

True/False

*Question:* Watching your pig closely is always important, but especially just after arrival.

*Answer:* True - Be sure they are eating, drinking, and to detect sickness.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* Since one-source purchases of breeding stock may not always be possible what is the next-best disease prevention practice?

*Answer:* Purchase swine from as few sources as possible.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 2

**HEALTH**

Question # 14

Short Answer

*Question:* The virus that causes PRRS was first isolated in which country in 1991?

*Answer:* The Netherlands

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**YOUTH**

Question # 15

Short Answer

*Question:* Following drug labels, winning and losing with grace, and following show rules is which pillar of character?

*Answer:* Fairness. Uses only approved drugs, accepts winning or losing with grace, and follows rules in the show ring.

*Resource:* Quality Counts (pdf), CHE-1 Page: 99

**CARCASS QUALITY**

Question # 16

Short Answer

*Question:* What is marbling?

*Answer:* The flecks of white fat that are present within a muscle. (Intramuscular fat)

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**HEALTH**

Question # 17

Short Answer

*Question:* If a vaccination program is used in a swine herd is it the complete answer to keep PRRS from negatively effecting the herd?

*Answer:* No, because there are so many different strains of PRRS that the vaccine may not target the strain present in the herd.

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 3

**CARCASS QUALITY**

Question # 18 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What is the two-step process recommended by USDA for properly cooking whole pork cuts?

*Answer:* Cook to 145 degrees, internal temperature, followed by a 3 minute "rest"

*Resource:* Quick Facts, pork.org Page: 34

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* List one reason that you should go through Pork Quality Assurance.

*Answer:* Improves swine care; avoids violative drug residues; decreases production costs; or increases awareness of food safety.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 4

**GENETICS & SELECTION**

Question # 19

True/False

*Question:* Body capacity in breeding animals should be: deep rib and flank, spring and shape to rib, wide chest floor.

*Answer:* True. Discriminate against: shallow bodied or "round ribbed", flat ribbed, narrow chested.

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 2

**FEEDS/FEEDING**

Question # 20

Short Answer

*Question:* What level of Paylean is approved is swine and what is the weight range of those swine?

*Answer:* 18 grams per ton for pigs from 150 to 240 pounds.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**GENERAL MANAGEMENT**

Question # 21

True/False

*Question:* If weaning at less than or equal to 21 days, a single injection of 100mg of iron in the neck should be sufficient.

*Answer:* True

*Resource:* Baby Pig Basics, ASWeb-069 Page: 3

**HEALTH**

Question # 22

True/False

*Question:* All lameness can be prevented.

*Answer:* False

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**CARCASS QUALITY**

Question # 23

Short Answer

*Question:* What part of the pork carcass produces the bacon?

*Answer:* Belly

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**GENERAL MANAGEMENT**

Question # 24

Multiple Choice

*Question:* Which of these is NOT critical to a pig care program?

- A. Treat for internal/external parasites,
- B. Castrate males,
- C. Name your pig,
- D. Be sure he finds the water source.

*Answer:* C. Name your pig.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**HEALTH**

Question # 25

Short Answer

Question: What is the most common infection of joints?

Answer: Mycoplasma

Resource: Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**HEALTH**

Question # 26

Short Answer

Question: What is the best prevention measure in fighting Atrophic Rhinitis?

Answer: Proper management of the pig's environment.

Resource: Atrophic Rhinitis, L-2193 Page: 3 & 4

**GENETICS & SELECTION**

Question # 27

Short Answer

Question: What type of flooring is the hardest on pigs joints?

Answer: Cement

Resource: From the Ground Up: The Importance of Structural Soundness, ASWeb-096 Page: 1

**FEEDS/FEEDING**

Question # 28

Short Answer

Question: Is there a magic pill that will make an average animal into an ideal animal?

Answer: No

Resource: The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1



## **CARCASS QUALITY**

*Question # 29*

Yes/No

*Question:* Is imported meat subject to the same rules and regulations as U.S. pork?

*Answer:* Yes

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 18

## **HEALTH**

*Question # 30*

Short Answer

*Question:* When should you determine the cause of diarrhea in swine?

*Answer:* As soon as the pig develops diarrhea

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

# Swine Quiz Bowl

## Junior Questions

### Set B

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Is the muscle from the shoulder or the loin more tender?

*Answer:* Loin

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

#### **CARCASS QUALITY**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* When ear notching, the pig's right ear denotes what?

*Answer:* The litter number

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 29

#### **YOUTH PROJECTS**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* At what age are most market swine exhibited?

*Answer:* 6 months of age

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 4

**HEALTH**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* If you use a killed vaccine or bacterin to vaccinate for Erysipelas in swine when should you give a booster injection?

*Answer:* 3 to 4 weeks later

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**HEALTH**

*Question # 5* Team A Contestant 3

True/False

*Question:* Sows that are too hot tend to produce more milk.

*Answer:* False - Sows that are too hot tend to produce less milk

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**GENETICS & SELECTION**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What does EPD stand for?

*Answer:* Expected Progeny Differences

*Resource:* Understanding the Genetic and Environmental Interactions, ASWeb-094 Page: 1

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Fill in the Blank:

*Question:* Baby pigs are born with very little body fat. So it is important that we keep the pigs to prevent cold stress.

*Answer:* Warm

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**HEALTH**

Question # 8 Team B Contestant 4

True/False

Question: A poor health management plan can easily be fixed using antibiotics.

Answer: False

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 8

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**HEALTH**

Question # 9

Short Answer

Question: Name one parasite that may cause pneumonia.

Answer: Roundworms or lungworms

Resource: Swine Pneumonia, L-5203 Page: 3

**REPRODUCTION**

Question # 10

True/False

Question: When inserting the spirette into the cervix for artificial insemination you should use a clockwise rotation.

Answer: False - Counterclockwise

Resource: Artificial Insemination of Swine, L-5321 Page: 3

**CARCASS QUALITY**

Question # 11

Short Answer

Question: What does PQA stand for?

Answer: Pork Quality Assurance

Resource: Youth Program Pork Quality Assurance, ASWeb-074 Page: 2

**HEALTH**

Question # 12

Short Answer

Question: How long are finisher hogs and breeding stock highly contagious to other pigs after surviving PRRS?

Answer: 2-3 weeks

Resource: Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**YOUTH**

Question # 13 \*\* Bonus Question Attached \*\*

Multiple Choice

Question: The primary goal of Quality Counts is: a) to help us place higher at shows b) help us supply animals safer for food, or c) to exhibit more livestock projects

Answer: b) main objective of raising livestock is to produce high-quality food for human consumption.

Resource: Quality Counts (pdf), CHE-1 Page: 103

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

Question: What is a withdrawal time?

Answer: The amount of time that has been established by research for the drug to clear the animal's body, making the meat safe for human consumption.

Resource: Carcass Quality - Why is it important?, ASWeb-070 Page: 4

**CARCASS QUALITY**

Question # 14

Fill in the Blank

*Question:* If the show pig industry wants to improve its image and the quality of the product it is producing for the dinner plate, total of the stress gene is necessary.

*Answer:* elimination

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 4

**GENERAL**

Question # 15

True/False

*Question:* Breeding shows are terminal shows.

*Answer:* False

*Resource:* Keeping Show Gilts as Replacements, ASWeb-088 Page: 1

**CARCASS QUALITY**

Question # 16

Short Answer

*Question:* What is the ending point of the Food Supply Continuum?

*Answer:* Consumer

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 3

**YOUTH PROJECTS**

Question # 17

True/False

*Question:* There is no need to practice or train your pig to show. It will automatically know how to walk and turn with the show stick.

*Answer:* False.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 10

**HEALTH**

Question # 18 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* When a producer is using a drug extra label in the context of Vet-Client patient relationship, the producer using the prescription must agree to what?

*Answer:* Use the drug properly, identify treated swine, and adhere to recommended withdrawal times.

*Resource:* Swine Pneumonia, L-5203 Page: 4

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* Name two things you should write down each time you treat an animal.

*Answer:* 1. Date treated 2. Animal or Pen ID 3. Product Used for treatment  
4. Amount given 5. Route of administration 6. Who gave the drug  
7. Withdrawal time 8. Date withdrawal time is complete

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 31

**GENETICS & SELECTION**

Question # 19

Short Answer

*Question:* Describe the ideal design of a breeding pig's top AS VIEWED FROM THE SIDE:

*Answer:* Level top, level hip, high tail setting

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**GENERAL MANAGEMENT**

Question # 20

Fill in the Blank

*Question:* Baby piglets are born virtually immunologically.

*Answer:* Naked

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**FEEDS/FEEDING**

Question # 21

Short Answer

*Question:* When feeding Paylean what level of Crude Protein is recommended in your swine feed?

*Answer:* At least 16%

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**HEALTH**

Question # 22

Short Answer

*Question:* What are the two keys to preventing lameness?

*Answer:* Make feet and leg soundness a priority; observe your pigs closely every day without fail

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**HEALTH**

Question # 23

True/False

*Question:* All leptospirosis vaccines for swine are bacterins.

*Answer:* True

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**CARCASS QUALITY**

Question # 24

Short Answer

*Question:* What is the ideal color of fresh pork?

*Answer:* Reddish pink (Some resources may say "grayish pink". The From Pen to Plate resources states grayish pink.)

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2



**HEALTH**

Question # 25

Short Answer

*Question:* Typical symptoms of pneumonia are?

*Answer:* Coughing and Thumping

*Resource:* Swine Pneumonia, L-5203 Page: 1

**HEALTH**

Question # 26

Short Answer

*Question:* What company has a ractopamine product called Paylean for swine?

*Answer:* Elanco Animal Health (a division of Eli Lilly and Company)

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**GENERAL MANAGEMENT**

Question # 27

True/False

*Question:* When buying replacement animals it is a good idea to buy from one or as few "clean" sources as possible.

*Answer:* True

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 3

**YOUTH PROJECTS**

Question # 28

Short Answer

*Question:* When showing your pig, about how far do you want to keep your pig from the judge's viewing area?

*Answer:* about 10-15 feet

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 10

**GENERAL MANAGEMENT**

*Question # 29*

True/False

*Question:* If any animal tests in isolation tests positive for a serious disease, generally the rest of the group should be fine to introduce to the main herd.

*Answer:* False - The whole group should probably be culled and sent to market

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 2

**HEALTH**

*Question # 30*

Short Answer

*Question:* What is the most essential of all nutrients in a pig's diet?

*Answer:* Water

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 7

# Swine Quiz Bowl

## Junior Questions

### Set C

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

True/False

*Question:* It is not the producer's responsibility to do everything they can to provide a safe, wholesome product for the consumer. It is the consumer's problem.

*Answer:* False - It is the producers responsibility.

*Resource:* Preventing Drug Residues in Livestock, ASWeb 085 Page: 1

#### **HEALTH**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* How is the PRRS virus spread?

*Answer:* By pig to pig contact

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

#### **YOUTH PROJECTS**

*Question # 3* Team A Contestant 2

True/False

*Question:* If you have recently given shots to a pig on both sides of his neck it is ok to give a shot in the loin.

*Answer:* False

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**HEALTH**

*Question # 4* Team B Contestant 2

True/False

*Question:* Infected swine urine with *Leptosprira* is a major source of infection for normal pigs.

*Answer:* True

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**GENERAL MANAGEMENT**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* Name two different types of flooring that can be used for hog facilities.

*Answer:* Dirt, sand, wood, or concrete

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 0

**HEALTH**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* How often should a boar receive a vaccination for Erysipelas?

*Answer:* Every six months

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**HEALTH**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* At what age should you begin to vaccinate gilts or boars for erysipelas?

*Answer:* 6 1/2 months or older

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**HEALTH**

Question # 8 Team B Contestant 4

Short Answer

*Question:* Name a type of bedding that could be used to keep the pigs warm and should keep them cleaner.

*Answer:* Straw, sand, or shavings

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 5

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**GENERAL MANAGEMENT**

Question # 9

True/False

*Question:* You should clean and disinfect your pen and all equipment before you bring your pig home.

*Answer:* True. Clean/disinfect all feeders, show supplies, buckets, scales, housing, including walls, ceiling, floors, cracks, and crevices.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 1

**GENERAL MANAGEMENT**

Question # 10

Short Answer

*Question:* What is the first milk given from the mother called?

*Answer:* Colostrum

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* An extra-label drug is what?

*Answer:* A drug approved for use in an other animal species but not in swine.

*Resource:* Swine Pneumonia, L-5203 Page: 4

**GENETICS & SELECTION**

Question # 12

Short Answer

*Question:* Why is structural correctness important in breeding swine selection?

*Answer:* Because of confinement production systems

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**GENETICS & SELECTION**

Question # 13

Short Answer

*Question:* The vulva is related to reproduction or muscling?

*Answer:* Reproduction - Reproductive traits: Vulvas: normal size. Not "upturned" or infantile, could signify small, underdeveloped reproductive tract or infertility.

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 2

**GENETICS&SELECTION**

Question # 14 \*\* Bonus Question Attached \*\*

Fill in the Blank

*Question:* A desirable breeding animal's neck, rump, and body should be.

*Answer:* Long. Long necked, long bodied, long rumped

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**HEALTH**

*Question #* BONUS QUESTION

Short Answer

*Question:* How many doses of parvovirus vaccine should you give to boars and gilts before the first breeding?

*Answer:* Two doses, three to four weeks apart.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**HEALTH**

*Question #* 15

Short Answer

*Question:* Should feeder pigs that have been purchased from different sources be mixed together as they are fed out to market weight?

*Answer:* No

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 4

**HEALTH**

*Question #* 16

Short Answer

*Question:* A common symptom of Swine Influenza Virus is

*Answer:* Explosive coughing outbreaks

*Resource:* Swine Pneumonia, L-5203 Page: 2

**HEALTH**

*Question #* 17

Short Answer

*Question:* Hogs that are sick from any disease including pneumonia usually are doing what as compared to the rest of the group of hogs they are in?

*Answer:* Lie down instead of being up and moving alertly.

*Resource:* Swine Pneumonia, L-5203 Page: 3

**CARCASS QUALITY**

*Question # 18* \*\* Bonus Question Attached \*\*

Short Answer

*Question:* If a pork carcass is given a muscle score of 1, is this considered thick, average, or thin?

*Answer:* Thin

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 1

**HEALTH**

*Question #* BONUS QUESTION

Short Answer

*Question:* What is the only way that feeder pigs will have been tested for any disease before purchased?

*Answer:* If the originated from out-of-state.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 3

**HEALTH**

*Question # 19*

Short Answer

*Question:* If you purchase swine from a single source and those animals are healthy is there any need to take disease precautions before introducing those replacements into your herd? Why?

*Answer:* Yes, because they may have been exposed to disease during shipment.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 3

**YOUTH**

*Question # 20*

True/False

*Question:* Checking your animal every few days for sickness works fine.

*Answer:* False - You should check your animals every day for signs of injury or illness.

*Resource:* Quality Counts (pdf), CHE-1 Page: 71



**YOUTH**

Question # 21

Short Answer

Question: A.D.G. refers to what?

Answer: Average daily gain (ADG).

Resource: Quality Counts (pdf), CHE-1 Page: 73

**YOUTH PROJECTS**

Question # 22

True/False

Question: In sows, tenting the loose skin behind the ear is deemed acceptable by NPPC for a subcutaneous injection.

Answer: True

Resource: Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**YOUTH PROJECTS**

Question # 23

Short Answer

Question: What does the term "hand feeding" mean?

Answer: Feeding a known amount of feed to each pig individually.

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 7

**GENETICS & SELECTION**

Question # 24

Short Answer

Question: What is the minimum number of teats preferred PER SIDE for breeding gilts?

Answer: Six. Six per side. At least 12 evenly spaced teats

Resource: Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117 6-00 Page: 2

**GENETICS & SELECTION**

Question # 25

True/False

*Question:* Knowing the genetic history of your swine will help you produce a better show animal.

*Answer:* True

*Resource:* Understanding the Genetic and Environmental Interactions, ASWeb-094 Page: 1

**YOUTH PROJECTS**

Question # 26

Short Answer

*Question:* Is a show pig with a "roach" or arc in his top considered structurally sound?

*Answer:* No

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**GENERAL MANAGEMENT**

Question # 27

True/False

*Question:* The sow's udder provides more milk per teat at the back than at the front.

*Answer:* False - The sow's udder provides more milk at the front than at the back.

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**YOUTH PROJECTS**

Question # 28

True/False

*Question:* It is ok to reuse bent needles if you clean the needle and straighten it back up.

*Answer:* False - You should never reuse a bent needle.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**GENERAL MANAGEMENT**

*Question # 29*

Short Answer

*Question:* What country produces and consumes the most pork?

*Answer:* China

*Resource:* Quick Facts, pork.org Page: 15

**YOUTH**

*Question # 30*

Fill in the Blank

*Question:* Intramuscular injections should be given in the

*Answer:* Neck Muscle - Intramuscular (in the muscle) injections should be given in the neck muscle.

*Resource:* Quality Counts (pdf), CHE-1 Page: 55

# Swine Quiz Bowl

## Junior Questions

### Set D

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* What does PSE stand for?

*Answer:* Pale, Soft, and Exudative

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 1

#### **HEALTH**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* How long (in days) can the PRRS virus be recovered from the throat of an infected pig after the start of an infection?

*Answer:* 157 days

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

#### **HEALTH**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* The most common viral cause of pneumonia is

*Answer:* PRRS

*Resource:* Swine Pneumonia, L-5203 Page: 2

**CARCASS QUALITY**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* When looking at the live hog, we refer to the "top". What muscle is this on the pork carcass?

*Answer:* Loin

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**GENERAL MANAGEMENT**

*Question # 5* Team A Contestant 3

True/False

*Question:* The most widely consumed meat in the world is chicken.

*Answer:* False. Pork is the most widely eaten meat.

*Resource:* Quick Facts, pork.org Page: 15

**HEALTH**

*Question # 6* Team B Contestant 3

True/False

*Question:* Overfeeding protein can, in itself, cause loose stools or diarrhea.

*Answer:* True

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 1

**CARCASS QUALITY**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* Where is subcutaneous fat located?

*Answer:* Under the skin

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**CARCASS QUALITY**

Question # 8 Team B Contestant 4

Short Answer

Question: How many government agencies regulate meat production?

Answer: Three

Resource: Youth Program Pork Quality Assurance, ASWeb-074 Page: 20

**\* \* \* \* \* Toss-Up Questions \* \* \* \* \***

**CARCASS QUALITY**

Question # 9 \*\* Bonus Question Attached \*\*

True/False

Question: Paylean can make an average pig a great one.

Answer: False - There is no magic pill that will make an average animal into an ideal animal.

Resource: The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

Question: What does FSIS stand for?

Answer: Food Safety and Inspection Service

Resource: Youth Program Pork Quality Assurance, ASWeb-074 Page: 20

**GENERAL MANAGEMENT**

Question # 10

Short Answer

*Question:* Why is it important to process the litter, including castration, shortly after birth?

*Answer:* The sooner these processes are completed, the easier it is on the overall stress and health of the piglet

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**HEALTH**

Question # 11

Short Answer

*Question:* How many different variations of PRRS exist?

*Answer:* At least 20

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* What are the two types of Animal Health Products?

*Answer:* Over The Counter Drugs (OTC) and Prescription Drugs (Rx)

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 36

**GENETICS & SELECTION**

Question # 13

Multiple Choice

*Question:* The best description for correct muscle shape and design for breeding animals is which of these: a) round, tight and short or b) "long, smooth"

*Answer:* b) "long, smooth". Shape is important, and judges discriminated against round, tight and short muscle which hinders movement and could result in reproductive problems.

*Resource:* Texas Cooperative Extension Breeding Swine Selection, ASWeb-117 6-00 Page: 1

**FEEDS/FEEDING**

Question # 14

Short Answer

*Question:* When will the largest response be seen when feeding Paylean?

*Answer:* During the first four weeks of feeding (during the repartitioning phase).

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**HEALTH**

Question # 15

Short Answer

*Question:* Name the three basic types of swine operations.

*Answer:* 1. Farrow to feeder-pig, 2. Farrow to finish, 3. Feeder-pig finisher

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 1

**GENETICS & SELECTION**

Question # 16

Short Answer

*Question:* What is the major goal of raising show pigs?

*Answer:* Achieving maximum lean growth with minimal fat deposition.

*Resource:* Understanding the Genetic and Environmental Interactions, ASWeb-094 Page: 1

**HEALTH**

Question # 17

Short Answer

*Question:* One vaccination program will not fit all farrowing operations. So who should a breeder use to recommend a vaccination program for their operation?

*Answer:* Veterinarian

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 3



**HEALTH**

Question # 18

Short Answer

*Question:* What is the primary way that Parvovirus disease is spread in pigs?

*Answer:* Parvovirus is primarily spread through manure.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**HEALTH**

Question # 19

True/False

*Question:* Parvovirus disease mainly occurs in non-pregnant gilts and boar hogs?

*Answer:* False. Parvovirus disease mainly occurs in pregnant gilts and first-litter sows infected between breeding and 65-70 days of gestation.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**GENETICS & SELECTION**

Question # 20 \*\* Bonus Question Attached \*\*

True/False

*Question:* With the improvement of genetics in producing more muscling in swine, we still need to use animals with the stress gene.

*Answer:* False. With the improvement of genetics there is no need to use animals with the stress gene.

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know, ASWeb-071 Page: 2

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* What are some causes of lameness in show pigs?

*Answer:* Injury, arthritis, and structural stress

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**YOUTH PROJECTS**

Question # 21

True/False

*Question:* Serious consequences, such as prison time, could result from misuse of medications.

*Answer:* True

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**CARCASS QUALITY**

Question # 22

True/False

*Question:* Feeding Paylean longer than recommended or at rates higher than recommended is ILLEGAL.

*Answer:* True. Increasing the dosage (above 18 g/T) or feeding longer is not recommended and is, in fact, illegal.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**CARCASS QUALITY**

Question # 23

True/False

*Question:* It is legal for me to feed Paylean to my show lamb.

*Answer:* False. It is only labeled for swine at this time, not steers or lambs.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**GENERAL MANAGEMENT**

Question # 24

True/False

*Question:* Vaccinating your pig with a booster shot can help reduce the risk of disease.

*Answer:* True. Extension vet recommends vaccinating all pigs ...

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**REPRODUCTION**

*Question # 25*

Short Answer

*Question:* What is the average pig's estrous cycle?

*Answer:* 21 days

*Resource:* Artificial Insemination of Swine, L-5321 Page: 1

**YOUTH**

*Question # 26*

Short Answer

*Question:* Name four traits of a person with good character.

*Answer:* Traits that define a person of good character: trustworthiness, respect, responsibility, fairness, caring, and citizenship

*Resource:* Quality Counts (pdf), CHE-1 Page: iv

**HEALTH**

*Question # 27*

Short Answer

*Question:* Can Atrophic Rhinitis be eliminated or prevented entirely in a commercial herd and why?

*Answer:* No, because it is neither cost-effective nor realistic.

*Resource:* Atrophic Rhinitis, L-2193 Page: 3

**CARCASS QUALITY**

*Question # 28*

True or False

*Question:* Pork tenderloin is equally as lean as a skinless chicken breast.

*Answer:* True. 3 oz. of tenderloin has 2.98 gm total fat and 1.02 gm saturated fat

*Resource:* Quick Facts, pork.org Page: 15

**CARCASS QUALITY**

*Question # 29*

Multiple Choice

*Question:* Which of these is closest to today's average backfat on hogs?

a) 2.8 inches b) 1.5 inches c) .75 inches

*Answer:* c) .75 inches - Hogs in the 1950's averaged about 2.8 inches when fat was in demand for munitions.

*Resource:* Quick Facts, pork.org Page: 49

**HEALTH**

*Question # 30*

Short Answer

*Question:* Do pigs with Atrophic Rhinitis usually develop pneumonia?

*Answer:* No

*Resource:* Atrophic Rhinitis, L-2193 Page: 2

# Swine Quiz Bowl

## Senior Questions

### Set A

Developed 01/2012

#### **GENERAL MANAGEMENT**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Most creep feeds for pigs contain what percent of crude protein?

*Answer:* 15-20% crude protein

*Resource:* Baby Pig Basics - ASWeb-069 Page: 3

#### **HEALTH**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* If a pig is growing well but has chronically loose stool what should you change in his diet?

*Answer:* Reduce the protein and increase the fiber.

*Resource:* Diarrheal Disease in Show Swine - E-439 Page: 1

#### **CARCASS QUALITY**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* List two methods that will help you prevent errors and drug residues in medicating swine.

*Answer:* Read the label and keep complete and accurate records of medication use.

*Resource:* Preventing Drug Residues in Livestock - ASWeb-085 Page: 1

**GENETICS & SELECTION**

Question # 4 Team B Contestant 2

Short Answer

*Question:* What is an animal known as that inherits a copy of the stress gene from both parents?

*Answer:* "nn"

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know - ASWeb-071 Page: 1

**GENETICS & SELECTION**

Question # 5 Team A Contestant 3

Short Answer

*Question:* What is the foremost condition that can put stress on the feet and legs of an animal?

*Answer:* Flooring

*Resource:* From the Ground Up: The Importance of Structural Soundness - ASWeb-096 Page: 1

**HEALTH**

Question # 6 Team B Contestant 3

Short Answer

*Question:* What is the nutrient that gives the hog energy and should make up the majority of the diet?

*Answer:* Carbohydrates

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 7

**CARCASS QUALITY**

Question # 7 Team A Contestant 4

Short Answer

*Question:* What makes pork tender and juicy during cooking?

*Answer:* Marbling or fat

*Resource:* Selecting the Perfect Chop (or Steak) ASWeb-092 Page: 1

**GENETICS & SELECTION**

Question # 8 Team B Contestant 4

Short Answer

*Question:* At least how many hours do packing plants try to let animals rest after arrival at the plant before slaughter.

*Answer:* At least two hours

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know - ASWeb-071 Page: 1

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**YOUTH PROJECTS**

Question # 9

True/False

*Question:* If you have recently given shots to a pig on both sides of his neck it is ok to give a shot in the loin.

*Answer:* False

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety - ASWeb-090 Page: 1

**HEALTH**

Question # 10

Short Answer

*Question:* What was the first bacterium discovered to cause Atrophic Rhinitis?

*Answer:* Bordetella Bronchioseptica

*Resource:* Atrophic Rhinitis - L-2193 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* The pneumonia bacterial agent present in virtually all herds is what?

*Answer:* Mycoplasma hypneumoniae

*Resource:* Swine Pneumonia - L-5203 Page: 1

**GENERAL MANAGEMENT**

Question # 12

Short Answer

*Question:* List three undesirable characteristics of a sow's udder.

*Answer:* Blunt nipples, pin nipples, mastitis, and sores caused by needle teeth.

*Resource:* Baby Pig Basics - ASWeb-069 Page: 2

**GENERAL MANAGEMENT**

Question # 13 \*\* Bonus Question Attached \*\*

True/False

*Question:* The most widely consumed meat in the world is chicken.

*Answer:* FALSE. pork is the most widely eaten meat

*Resource:* Quick Facts - pork.org Page: 15

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What is a withdrawal time?

*Answer:* The amount of time that has been established by research for the drug to clear the animal's body, making the meat safe for human consumption.

*Resource:* Carcass Quality - Why is it important? ASWeb-070 Page: 4



**GENERAL MANAGEMENT**

Question # 14

Short Answer

*Question:* What is the recommended age limit in days to foster a piglet to another sow?

*Answer:* Up to three days

*Resource:* Baby Pig Basics - ASWeb-069 Page: 2

**CARCASS QUALITY**

Question # 15

Short Answer

*Question:* What does the color of the lean do as an animal ages?

*Answer:* It darkens

*Resource:* Selecting the Perfect Chop (or Steak) ASWeb-092 Page: 1

**CARCASS QUALITY**

Question # 16

True/False

*Question:* Paylean can make an average pig a great one.

*Answer:* False. There is no magic pill that will make an average animal into an ideal animal.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle. ASWeb-093 Page: 1

**GENETICS & SELECTION**

Question # 17

Short Answer

*Question:* What is a pig known as that receives a single copy of stress gene from one parent referred to as.

*Answer:* A carrier or "Nn"

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know - ASWeb-071 Page: 2

**HEALTH**

Question # 18

Short Answer

*Question:* What was the first name given to the virus that causes PRRS?

*Answer:* Lelystad virus

*Resource:* Porcine Reproductive and Respiratory Syndrome - L-5137 Page: 1

**YOUTH PROJECTS**

Question # 19

Short Answer

*Question:* What are two management practices that can greatly assist producers (including youth exhibitors) to produce a safe, wholesome product?

*Answer:* Correct injection techniques and observation of withdrawal times.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety - ASWeb-090 Page: 1

**HEALTH**

Question # 20

True/False

*Question:* Parvovirus disease mainly occurs in non-pregnant gilts and boar hogs?

*Answer:* False: Parvovirus disease mainly occurs in pregnant gilts and first-litter sows infected between breeding and 65-70 days of gestation.

*Resource:* Vaccinations for Farrowing Operations - L2192 Page: 2

**HEALTH**

Question # 21

Short Answer

*Question:* What is one way to minimize economic losses from disease when purchasing the initial swine in your herd?

*Answer:* Purchase all of the initial swine in your herd and all replacements from one source.

*Resource:* Plan for Herd Health When Starting a Swine Operation - L-2369 Page: 2

**YOUTH LIVESTOCK JUDGING**

Question # 22 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What are the five Basic areas that market swine are placed on?

*Answer:* Muscle, leanness, growth, volume and structural soundness

*Resource:* Evaluating Market Swine - ASWeb-039 Page: 1

**GENETICS & SELECTION**

Question # BONUS QUESTION

Short Answer

*Question:* Why is there a withdrawal time listed on animal health products?

*Answer:* To make sure the drug administered to the animal is safely clear from its system prior to slaughter.

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know- ASWeb-071 Page: 1

**YOUTH**

Question # 23

Fill in the Blank

*Question:* Intramuscular injections should be given in the

*Answer:* Neck muscle. Intramuscular (in the muscle) injections should be given in the neck muscle.

*Resource:* Quality Counts (pdf) - CHE-1 Page: 55

**CARCASS QUALITY**

Question # 24

Short Answer

*Question:* Where is subcutaneous fat located?

*Answer:* Under the skin

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs ASWeb-087 Page: 1

**CARCASS QUALITY**

Question # 25

Short Answer

*Question:* What does HACCP stand for? (pronounced "Ha-sip")

*Answer:* Hazard Analysis and Critical Control Points

*Resource:* Youth Program Pork Quality Assurance ASWeb-074 Page: 13

**REPRODUCTION**

Question # 26

Short Answer

*Question:* What is a catheter?

*Answer:* A catheter is a foam tipped insemination rod.

*Resource:* Artificial Insemination of Swine - L-5321 Page: 2

**HEALTH**

Question # 27

True/False

*Question:* A poor health management plan can easily be fixed using antibiotics.

*Answer:* False

*Resource:* Texas 4-H Swine Project Guide AS16-2 Page: 8

**REPRODUCTION**

Question # 28

True/False

*Question:* The female reproductive system is more conducive to AI than that of cattle or sheep.

*Answer:* True

*Resource:* Artificial Insemination of Swine - L-5321 Page: 2

**HEALTH**

*Question # 29*

Short Answer

*Question:* What is the incubation period for TGE disease in swine?

*Answer:* 18 to 36 hours

*Resource:* Diarrheal Disease in Show Swine - E-439 Page: 2

**YOUTH PROJECTS**

*Question # 30*

Short Answer

*Question:* What is the method of administering drugs to an animal through the nose known as?

*Answer:* Intranasal

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety - ASWeb-090 Page: 2

# Swine Quiz Bowl

## Senior Questions

### Set B

Developed 01/2012

#### **HEALTH**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* In the early 1990's this disease was known as the Mystery Swine Disease.

*Answer:* PRRS

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

#### **YOUTH PROJECTS**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* What is an intramuscular injection?

*Answer:* An injection in the muscle, given in the neck.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

#### **GENERAL MANAGEMENT**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What country produces and consumes the most pork?

*Answer:* China

*Resource:* Quick Facts, pork.org Page: 15

**FEEDS/FEEDING**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* When feeding Paylean what level of Crude Protein is recommended in your swine feed?

*Answer:* At least 16%

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**REPRODUCTION**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* After fertilization where does the embryo migrate to?

*Answer:* Into the uterus

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**CARCASS QUALITY**

*Question # 6* Team B Contestant 3

Fill in the Blank

*Question:* The regulatory agency responsible for determining tissue tolerance for most animal health products is the

*Answer:* FDA

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 26

**REPRODUCTION**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* When should gilts be inseminated after the detection of estrus?

*Answer:* 12 hours

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**REPRODUCTION**

Question # 8 Team B Contestant 4

Short Answer

Question: In days what is the range of a pig's estrous cycle?

Answer: 17 to 25 days

Resource: Artificial Insemination of Swine, L-5321 Page: 1

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**HEALTH**

Question # 9

Fill in the Blank

Question: Atrophic Rhinitis is an inflammation of

Answer: The upper respiratory tract.

Resource: Atrophic Rhinitis, L-2193 Page: 1

**GENERAL MANAGEMENT**

Question # 10

Short Answer

Question: Why is it important to inject baby pigs with an iron supplement?

Answer: Baby pigs are born with a limited supply of iron in their livers and they must be supplemented to prevent anemia.

Resource: Baby Pig Basics, ASWeb-069 Page: 3



**HEALTH**

Question # 11

Short Answer

*Question:* How long are finisher hogs and breeding stock highly contagious to other pigs after surviving PRRS?

*Answer:* 2-3 weeks

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* Name the 8 things you should write down each time you treat an animal.

*Answer:* 1. Date treated 2. Animal or Pen ID 3. Product Used for treatment  
4. Amount given 5. Route of administration 6. Who gave the drug 7. Withdrawal time  
8. Date withdrawal time is complete

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 31

**GENERAL MANAGEMENT**

Question # 13 \*\* Bonus Question Attached \*\*

True/False

*Question:* You must pull a blood different blood sample for each disease to be tested in swine.

*Answer:* False - All tests for major diseases can be done in a single blood sample.

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 2

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* Name the 6 reasons producers use animal health products on a farm.

*Answer:* Provide for the welfare of the animal; Treat disease or parasites; Prevent disease or parasites; Improve rate of gain; Improve feed efficiency; Minimize production costs

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 17

**GENETICS & SELECTION**

Question # 14

Short Answer

*Question:* On average what is the decrease in weaning weight on litters from a positive stressed sow as compared to a negative sow.

*Answer:* 10% lighter

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know, ASWeb-071 Page: 2

**CARCASS QUALITY**

Question # 15

Short Answer

*Question:* What does FSIS stand for?

*Answer:* Food Safety and Inspection Service

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 20

**CARCASS QUALITY**

Question # 16

True/False

*Question:* A higher dressing percentage is more desirable than a lower dressing percentage.

*Answer:* True

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**REPRODUCTION**

Question # 17

Short Answer

*Question:* In a female swine's reproductive tract the cervix consists of multiple rings and ridges that act as a barrier to prevent what?

*Answer:* To prevent bacteria, dirt, and other foreign material from entering the uterus.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**REPRODUCTION**

Question # 18

Short Answer

Question: What is the average pig's estrous cycle?

Answer: 21 days

Resource: Artificial Insemination of Swine, L-5321 Page: 1

**HEALTH**

Question # 19

Short Answer

Question: Name one parasite that may cause pneumonia.

Answer: Roundworms or lungworms

Resource: Swine Pneumonia, L-5203 Page: 3

**CARCASS QUALITY**

Question # 20 \*\* Bonus Question Attached \*\*

Short Answer

Question: List two factors that may effect carcass meat quality.

Answer: Stress, improper handling, presence of the pork stress gene, and other genetic factors

Resource: Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**GENERAL MANAGEMENT**

Question # BONUS QUESTION

Short Answer

Question: Describe the order of where and how fat is typically deposited on a pig.

Answer: Generally, from front to back. First, in the jowl (chin) area, in the shoulder area, down the top loin edges, the lower third of the body (underline), the seam of the ham, and finally the ponies (around the tailhead).

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 5

**CARCASS QUALITY**

Question # 21

Yes/No

Question: Is "Extra Label" usage legal?

Answer: Yes

Resource: Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**GENETICS & SELECTION**

Question # 22

Short Answer

Question: The vulva is related to reproduction or muscling?

Answer: Reproduction. Reproductive traits: Vulvas: normal size. Not "upturned" or infantile. could signify small, underdeveloped reproductive tract or infertility.

Resource: Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117, 6-00 Page: 2

**HEALTH**

Question # 23

Short Answer

Question: What is PRRS?

Answer: Porcine Reproductive and Respiratory Syndrome. This disease causes pneumonia and death or become a chronic disease that causes a pig to gain weight more slowly or stop growing.

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 9

**HEALTH**

Question # 24

Short Answer

Question: If you use a killed vaccine or bacterin to vaccinate for Erysipelas in swine when should you give a booster injection?

Answer: 3 to 4 weeks later

Resource: Vaccinations for Farrowing Operations, L2192 Page: 1

**CARCASS QUALITY**

Question # 25

Short Answer

Question: What is PSE?

Answer: Pale, Soft, and Exudative pork. It is undesirable in the pork industry because it "leaks" water making it dry and tough after cooking.

Resource: Carcass Quality - Why is it important?, ASWeb-070 Page: 2-3

**HEALTH**

Question # 26

Short Answer

Question: List one way to prevent a diet-induced diarrheal disease in swine?

Answer: Do not overfeed protein and other ingredients such as fat and make sure the pig finds the water source.

Resource: Diarrheal Disease in Show Swine, E-439 Page: 3

**HEALTH**

Question # 27

Short Answer

Question: What is the most essential of all nutrients in a pig's diet?

Answer: Water

Resource: Texas 4-H Swine Project Guide, AS16-2 Page: 7

**YOUTH**

Question # 28

True/False

Question: Checking your animal every few days for sickness works fine.

Answer: False. You should check your animals every day for signs of injury or illness.

Resource: Quality Counts (pdf), CHE-1 Page: 71

**HEALTH**

*Question # 29*

Short Answer

*Question:* The major source of the PRRS virus transmission to non-infected pigs is

*Answer:* The live pig that is infected

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**HEALTH**

*Question # 30*

Short Answer

*Question:* Name the three basic types of swine operations.

*Answer:* 1. Farrow to feeder-pig, 2. Farrow to finish, 3. Feeder-pig finisher

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 3

# Swine Quiz Bowl

## Senior Questions

### Set C

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* For the best natural immunity in gilts how long should you delay breeding in months.

*Answer:* 7 1/2 to 8 months

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

#### CARCASS QUALITY

*Question # 2* Team B Contestant 1

Short Answer

*Question:* What does long term stress on animals lead to as far as carcass defects?

*Answer:* DFD (Dark, firm and dry)

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

#### CARCASS QUALITY

*Question # 3* Team A Contestant 2

Short Answer

*Question:* List the main consequence of misuse of animal health products.

*Answer:* Residues of medication in the meat

*Resource:* Preventing Drug Residues in Livestock, ASWeb 085 Page: 1

**CARCASS QUALITY**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* Who has to approve extra label use of any medication given to livestock?

*Answer:* A veterinarian

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**YOUTH PROJECTS**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* What does NPPC stand for?

*Answer:* National Pork Producers Council

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 1

**YOUTH LIVESTOCK JUDGING**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What is the one thing that bad structure in market hogs can affect?

*Answer:* The ability to gain and grow effectively

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 4

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* How does the piglet receive passive immunity from the mother during the first few hours after birth?

*Answer:* From colostrum

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1



**HEALTH**

Question # 8 Team B Contestant 4

Short Answer

*Question:* What is the recommended time period to take show pigs off all medication (even 0 day withdrawal period) how many hours before the show?

*Answer:* At least 24 hours

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 4

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**CARCASS QUALITY**

Question # 9

Short Answer

*Question:* Define "Off Label"

*Answer:* The PRODUCER uses drugs on their own in a manner other than what is stated on the label without veterinarian guidance.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**HEALTH**

Question # 10

Short Answer

*Question:* At what age should you begin to vaccinate gilts or boars for erysipelas?

*Answer:* 6 1/2 months or older

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**REPRODUCTION**

Question # 11

Short Answer

*Question:* List up three things that determine when a gilt reaches puberty?

*Answer:* Age; body condition; plane of nutrition; exposure to a mature boar; pen size; and number of gilts per pen

*Resource:* Keeping Show Gilts as Replacements, ASWeb 088 Page: 1

**GENERAL MANAGEMENT**

Question # 12

Short Answer

*Question:* Where is the first place you're most likely to notice fat deposits on your pig?

*Answer:* In the jowl (chin) area.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 5

**YOUTH**

Question # 13

Multiple Choice

*Question:* The primary goal of Quality Counts primary is: a) to help us place higher at shows b) help us supply animals safer for food?

*Answer:* b). main objective of raising livestock is to produce high-quality food for human consumption.

*Resource:* Quality Counts (pdf), CHE-1 Page: 103

**GENERAL MANAGEMENT**

Question # 14

Short Answer

*Question:* If a sow has been kept outside, it is a good idea to treat them for external parasites about how many weeks prior to farrowing?

*Answer:* About two weeks prior to farrowing

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**HEALTH**

Question # 15

Short Answer

*Question:* The virus that causes PRRS was first isolated in which country in 1991?

*Answer:* The Netherlands

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**GENERAL MANAGEMENT**

Question # 16

True/False

*Question:* When buying replacement animals it is a good idea to buy from one or as few "clean" sources as possible.

*Answer:* True

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 3

**HEALTH**

Question # 17 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* When should you determine the cause of diarrhea in swine?

*Answer:* As soon as the pig develops diarrhea

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**CARCASS QUALITY**

Question # BONUS QUESTION

Short Answer

*Question:* What does the term "dressing percentage" mean?

*Answer:* The percentage of the carcass that is remaining after the viscera (intestines), organs, blood, hair, and head are removed. (It is calculated by dividing hot carcass weight by live weight and multiplying by 100.)

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**CARCASS QUALITY**

Question # 18

Short Answer

*Question:* List the 4 of the 7 steps of the HACCP program.

*Answer:* 1. Identify hazards 2. Find critical points in the process 3. Establish critical limits for each critical control point 4. Monitor 5. Take corrective action if monitoring shows deviations outside the limits of the critical control point 6. Keep records on each critical control point 7. Verify that the HACCP plan is working correctly.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 15

**GENERAL MANAGEMENT**

Question # 19

Short Answer

*Question:* Name one way to cool the sow off in the farrowing crate.

*Answer:* Dripping water between the sows shoulder blades at a slow rate

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**REPRODUCTION**

Question # 20

Short Answer

*Question:* What is the most important sign to watch for when Artificially Inseminating swine?

*Answer:* The detection of Estrous

*Resource:* Artificial Insemination of Swine, L-5321 Page: 1

**GENERAL MANAGEMENT**

Question # 21

Short Answer

*Question:* Name three practices that help create an ideal farrowing area for baby piglets.

*Answer:* Proper disinfection of the farrowing area, thorough rinsing, prevention of drafts and creating a microenvironment for piglets that is around 90-95 degree F.

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**HEALTH**

Question # 22

Short Answer

*Question:* Name one way that Erysipelas is spread in swine.

*Answer:* Through oral and nasal fluids and feces and can be carried by many healthy swine.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**YOUTH**

Question # 23

Multiple Choice

*Question:* Which of these is NOT found on a medicine label? a) route of administration; b) dosage, c) size of needle to use, d) withdrawal,

*Answer:* c) Size of needle to use. The medicine label contains: route of administration, dosage, withdrawal times,

*Resource:* Quality Counts (pdf), CHE-1 Page: 55

**HEALTH**

Question # 24

True/False

*Question:* Mecodox is a feed medication used to prevent swine dysentery and has a very short withdrawal time.

*Answer:* False - Very long withdrawal time

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 4

**REPRODUCTION**

Question # 25

Short Answer

*Question:* What is ovulation in sow?

*Answer:* The release of the egg from the follicle on the ovary.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 1

**GENERAL MANAGEMENT**

Question # 26

Fill in the Blank

Question: A piglet's \_\_\_\_\_ is a good yardstick to measure general health and comfort.

Answer: Behavior

Resource: Baby Pig Basics, ASWeb-069 Page: 2

**HEALTH**

Question # 27

Short Answer

Question: Young pigs that survive PRRS infection are very contagious to other pigs for how long?

Answer: 4 to 5 weeks

Resource: Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**CARCASS QUALITY**

Question # 28 \*\* Bonus Question Attached \*\*

Short Answer

Question: What are the "four lean cuts?"

Answer: ham, loin, Boston butt, picnic shoulder

Resource: From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

**HEALTH**

Question # BONUS QUESTION

Short Answer

Question: How many different variations of PRRS exist?

Answer: At least 20

Resource: Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 1

**HEALTH**

*Question # 29*

Short Answer

*Question:* What does Parvovirus cause in swine?

*Answer:* Embryonic death, mummified pigs and temporary infertility.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**CARCASS QUALITY**

*Question # 30*

Short Answer

*Question:* Name the three cuts of the swine carcass that are used for locomotion?

*Answer:* Boston Butt, picnic shoulder and ham

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

# Swine Quiz Bowl

## Senior Questions

### Set D

Developed 01/2012

#### HEALTH

*Question # 1* Team A Contestant 1

Short Answer

*Question:* Hogs that are sick from any disease including pneumonia usually are doing what as compared to the rest of the group of hogs they are in?

*Answer:* Lie down instead of being up and moving alertly.

*Resource:* Swine Pneumonia, L-5203 Page: 3

#### GENERAL MANAGEMENT

*Question # 2* Team B Contestant 1

Short Answer

*Question:* Lameness is very common in show pigs. List 3 causes of this lameness.

*Answer:* Skeletal structure, flooring, injury, bacterial infection, and ostoechondrosis.

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

#### CARCASS QUALITY

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What are three methods of moist heat cooking?

*Answer:* Braising, stewing, poaching and steaming

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1



**CARCASS QUALITY**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* What is the ideal color of fresh pork?

*Answer:* Reddish pink (Some resources may say "grayish pink". The From Pen to Plate resources states grayish pink.)

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**HEALTH**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* Name three symptoms associated with Atrophic Rhinitis

*Answer:* Sneezing, crooked snout, bleeding snout, and tear stained face

*Resource:* Atrophic Rhinitis, L-2193 Page: 1

**YOUTH PROJECTS**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What disease in show pigs usually affects the cartilage within the joints and is usually diagnosed with the help of X-rays?

*Answer:* Osteochondrosis

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* What is the main reason to isolate new breeding swine?

*Answer:* To prevent the herd from being exposed to a new disease causing organisms.

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 2

**GENERAL MANAGEMENT**

Question # 8 Team B Contestant 4

Short Answer

*Question:* What is soundness?

*Answer:* An animal's ability to walk smoothly with body weight evenly supported on the feet and legs

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 4

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**CARCASS QUALITY**

Question # 9

Short Answer

*Question:* What is the maximum rate/ton allowed for feeding Paylean?

*Answer:* 18 grams/ton. Paylean™ is approved at 18 grams per ton from 150 to 240 pounds (pen average).

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**YOUTH PROJECTS**

Question # 10

Short Answer

*Question:* What is the recommended gauge of needle to use on a baby pig for an intramuscular injection?

*Answer:* 18 or 20 gauge

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* List two medications included in a swine ration to prevent swine dysentery.

*Answer:* Lincomix, Denagard, or Mecadox

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**CARCASS QUALITY**

Question # 12

Short Answer

*Question:* Define "Extra Label"

*Answer:* The VETERINARIAN prescribes a drug to be used in a manner other than what's on the label.

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**HEALTH**

Question # 13 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* If you purchase swine from a single source and those animals are healthy is there any need to take disease precautions before introducing those replacements into your herd? Why?

*Answer:* Yes, because they may have been exposed to disease during shipment.

*Resource:* Plan for Herd Health When Starting a Swine Operation, L-2369 Page: 1

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* When should vaccination in pregnant sows for E. coli should be done?

*Answer:* Vaccination time should be done 4 to 7 weeks before farrowing and follow up with a booster 2 to 3 weeks before farrowing.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 3

**REPRODUCTION**

Question # 14

True/False

*Question:* It is critical to mate the female within a few hours before ovulation.

*Answer:* True

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**HEALTH**

Question # 15

Short Answer

*Question:* If a swine herd is vaccinated for Atrophic Rhinitis and the herd's environment is not properly maintained will the vaccination program be effective? Why?

*Answer:* No, because with an uncorrected environment the irritants that caused the Rhinitis problem are still present. Proper environmental management often gives as good a response as vaccination programs.

*Resource:* Atrophic Rhinitis, L-2193 Page: 3

**GENETICS & SELECTION**

Question # 16

Short Answer

*Question:* List some of the symptoms that a swine with "nn" a copy of the stress gene from both parents might exhibit.

*Answer:* Extreme nervousness and excitability (including tail twitching when in a stressed situation), and inferior meat

*Resource:* Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know, ASWeb-071 Page: 1

**HEALTH**

Question # 17

Short Answer

*Question:* What is salt toxicity or water deprivation?

*Answer:* Lack of water for a couple of days followed by overconsumption of water.

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 3

**HEALTH**

Question # 18

Short Answer

*Question:* If a vaccination program is used in a swine herd is it the complete answer to keep PRRS from negatively effecting the herd? Why?

*Answer:* No, because there are so many different strains of PRRS that the vaccine may not target the strain present in the herd.

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 3

**CARCASS QUALITY**

Question # 19

True/False

*Question:* "Off Label" usage is illegal.

*Answer:* True

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 37

**CARCASS QUALITY**

Question # 20

Short Answer

*Question:* Feeding Paylean is recommended for use up to how long?

*Answer:* Up to 7 weeks. Feeding it longer than recommended (during the last 7 weeks of the finishing phase) is illegal.

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**HEALTH**

Question # 21

Short Answer

*Question:* Should you give sows a booster vaccination for parvovirus and if so when should you give it to the sow?

*Answer:* Yes, you should give it to the sow at each weaning the day of weaning.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 3

**CARCASS QUALITY**

Question # 22

Multiple Choice

Question: Which of these is closest to today's average backfat on hogs?

a) 2.8 inches b) 1.5 inches c) .75 inches

Answer: c) .75 inches. Hogs in the 1950's averaged about 2.8 inches when fat was in demand for munitions.

Resource: Quick Facts, pork.org Page: 49

**GENERAL MANAGEMENT**

Question # 23

Short Answer

Question: Water is the most important nutrient for any animal. What is the approximate amount of water needed for a pig weighing just under 60 pounds?

Answer: .7 to 1 gal/day. Nursery (up to 60lb BW) 0.7 to 1 gal/pig/day.

Resource: Just the Facts! Dehydration: The Need for Water, Shannon, pork.org Page: 1

**GENETICS & SELECTION**

Question # 24

True/False

Question: With the improvement of genetics in producing more muscling in swine we still need to use animals with the stress gene.

Answer: False - With the improvement of genetics there is no need to use animals with the stress gene.

Resource: Elimination of the Porcine Stress Gene: What the Show Pig Industry Needs to Know, ASWeb-071 Page: 2

**YOUTH PROJECTS**

Question # 25

Short Answer

Question: How often should a needle be replaced if it is never bent?

Answer: At least every 20 injections.

Resource: Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**GENETICS & SELECTION**

*Question # 26    \*\* Bonus Question Attached \*\**

True/False

*Question:* Toe size is NOT important in breeding swine selection.

*Answer:* False. Toe Size: Prefer even toe size, large toe size, even weight distribution. Uneven toe size, generally smaller inside toe, because this results in abnormal wear on outside toe, exposing pad and causing lameness.

*Resource:* Texas Cooperative Extension Breeding Swine Selection, ASWeb-117 6-00    Page: 1

**HEALTH**

*Question #    BONUS QUESTION*

Short Answer

*Question:* In late 1992 a large swine herd in Texas became infected with PRRS. What were three of the devastating results from this infection?

*Answer:* 1) Sows farrowed 5 days early, with all pigs dying 2) Weak, stillborn and mumified pig numbers in normally farrowed sows increased dramatically. 3) Healthy unweaned pigs sickened and died. 4) Nursery pigs suffered up to 25 percent mortality from pneumonia and survivors became poor-doers. 5) Pneumonia increased significantly in the grower-finisher area.

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137    Page: 1

**CARCASS QUALITY**

*Question # 27*

Fill in the Blank

*Question:* As an animal ages, the meat

*Answer:* Toughens

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092    Page: 1

**HEALTH**

*Question # 28*

Short Answer

*Question:* How long (in days) can the PRRS virus be recovered from the throat of an infected pig after the start of an infection?

*Answer:* 157 days

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137    Page: 3

**CARCASS QUALITY**

*Question # 29*

Short Answer

*Question:* Describe the muscling of a pork carcass with a muscle score of "3".

*Answer:* The carcass is considered thick muscling and is described as being bulging in appearance, with the hams and shoulder being significantly thicker than the loin (due to increased muscle, not fat).

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 1

**HEALTH**

*Question # 30*

Short Answer

*Question:* How long can whipworm eggs remain viable in contaminated premises?

*Answer:* As long as 6 years

*Resource:* Diarrheal Disease in Show Swine, E-439 Page: 1



# Swine Quiz Bowl

## Senior Questions

### Set E

Developed 01/2012

#### **CARCASS QUALITY**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* When pork is classified as pale, soft, and exudative (PSE), is the water being retained by or "leaking" out of the muscles?

*Answer:* "leaking" out

*Resource:* From Pen to Plate: Carcass Composition of Market Hogs, ASWeb-087 Page: 1

#### **GENERAL MANAGEMENT**

*Question # 2* Team B Contestant 1

Short Answer

*Question:* In the pork industry, what is meant by the term "finishing?"

*Answer:* Finishing refers to the time period when animal's growth slows and fat begins to deposit within and around the muscle.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 1

#### **HEALTH**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* What are the two keys to preventing lameness?

*Answer:* Make feet and leg soundness a priority; observe your pigs closely every day without fail

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**CARCASS QUALITY**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* What is the 2 step process recommended by USDA for properly cooking whole pork cuts?

*Answer:* Cook to 145 degrees, internal temperature, followed by a 3 minute "rest"

*Resource:* Quick Facts, pork.org Page: 34

**GENERAL MANAGEMENT**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* For every pound of feed, a pig needs about 1/3 gal. of water. Approximately how much water should your hog need if he is eating 3# per day?

*Answer:* One gallon. 1/3 gallon of water should be consumed per pound of feed consumed to maintain growth and health.

*Resource:* Just the Facts! Dehydration: The Need for Water, Shannon, pork.org Page: 1

**HEALTH**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What are some causes of lameness in show pigs?

*Answer:* Injury, arthritis, and structural stress

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**GENERAL MANAGEMENT**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* Name two factors to consider regarding facilities.

*Answer:* Protection from the weather, affordability, ability to clean and disinfect

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 5

**CARCASS QUALITY**

Question # 8 Team B Contestant 4

Short Answer

Question: How much has research shown that Paylean can increase lean gain?

Answer: 25-37%. Paylean™ fed at 18 grams per ton increased lean gain by 25-37% in research trials.

Resource: The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**\* \* \* \* \* Toss-Up Questions \* \* \* \* \***

**YOUTH PROJECTS**

Question # 9

Short Answer

Question: What gauge and length of needle is recommended to be used on breeding stock for an intramuscular injection?

Answer: 14 or 16 gauge and 1 to 1-1/2 inch in length

Resource: Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**CARCASS QUALITY**

Question # 10

Short Answer

Question: When ear notching, the pig's right ear denotes what?

Answer: The litter number

Resource: Youth Program Pork Quality Assurance, ASWeb-074 Page: 29

**CARCASS QUALITY**

Question # 11

Fill in the Blank

*Question:* If the show pig industry wants to improve its image and the quality of the product it is producing for the dinner plate, total \_\_\_\_\_ of the stress gene is necessary.

*Answer:* elimination

*Resource:* The Frequency of the Porcine Stress Gene in Texas Show Pigs, ASWeb-095 Page: 4

**GENERAL MANAGEMENT**

Question # 12

Short Answer

*Question:* How often is recommended to weigh your show pig?

*Answer:* Once a week, at the same time of day on the same day of the week

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 6

**GENERAL MANAGEMENT**

Question # 13

Short Answer

*Question:* What is the earliest recommended age to introduce piglets to creep feed?

*Answer:* At one week of age

*Resource:* Baby Pig Basics, ASWeb-069 Page: 3

**HEALTH**

Question # 14

Short Answer

*Question:* Is it possible to transmit the PRRS virus in to a swine herd by purchasing semen from a boar stud? And if so - why?

*Answer:* Yes, because infected boars shed PRRS virus into the semen for 43 days after infection and if the boar is infected gilts and/or sows artificially inseminated with that semen can become infected.

*Resource:* Porcine Reproductive and Respiratory Syndrome, L-5137 Page: 2

**GENERAL**

Question # 15

Short Answer

*Question:* Where should Estrous detection be performed?

*Answer:* In a neutral pen

*Resource:* Keeping Show Gilts as Replacements, ASWeb 088 Page: 1

**HEALTH**

Question # 16

Short Answer

*Question:* What is the disease Colibacillosis in swine commonly known as?

*Answer:* E. coli diarrhea

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 3

**GENERAL MANAGEMENT**

Question # 17 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* Why is it important to process the litter, including castration, shortly after birth?

*Answer:* The sooner these processes are completed, the easier it is on the overall stress and health of the piglet

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**HEALTH**

Question # BONUS QUESTION

Short Answer

*Question:* Since pigs with Atrophic Rhinitis are not discriminated against in price at slaughter explain why pigs with this disease cause economic losses to producers.

*Answer:* Pigs with moderate or severe AR normally have a reduced growth weight and worsened feed-conversion efficiency. This causes increased cost to the producer because he/she has to feed the pig longer in order to reach market weight.

*Resource:* Atrophic Rhinitis, L-2193 Page: 1-2

**YOUTH LIVESTOCK JUDGING**

*Question # 18*

Short Answer

*Question:* What shape is muscle?

*Answer:* It is bulging and roundish in shape

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 1

**YOUTH PROJECTS**

*Question # 19*

Short Answer

*Question:* Name an advantage of purchasing animals directly from a farm.

*Answer:* These animals are generally not exposed to other pigs where they could pick up diseases, you can related animals (littermates or parents), one-on-one attention from producer, producer can offer suggestions.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 3-4

**YOUTH LIVESTOCK JUDGING**

*Question # 20*

Short Answer

*Question:* Where do you evaluate market animals to determine body capacity?

*Answer:* Evaluate swine for width through their blades, the spring to their rib cages, and the width they have through their chest floors.

*Resource:* Evaluating Market Swine, ASWeb-039 Page: 4

**GENERAL MANAGEMENT**

*Question # 21*

Short Answer

*Question:* How many days is recommended to isolate incoming breeding swine before introducing them to the herd?

*Answer:* 60 days

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 1

**REPRODUCTION**

Question # 22

Short Answer

*Question:* When should sows be inseminated after detection of estrus?

*Answer:* 24 hours

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**YOUTH PROJECTS**

Question # 23

Short Answer

*Question:* What does the term "hand feeding" mean?

*Answer:* Feeding a known amount of feed to each pig individually.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 7

**CARCASS QUALITY**

Question # 24

Short Answer

*Question:* What is the hot carcass weight?

*Answer:* The weight of the carcass after the hog is stunned, bled, dehaired and the viscera (intestines) and head have been removed.

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 1

**GENERAL MANAGEMENT**

Question # 25 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* Two keys to preventing lameness are:

*Answer:* 1) correct feet and leg soundness, 2) observing pigs daily for lameness

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**HEALTH**

*Question #* BONUS QUESTION

Short Answer

*Question:* How is Atrophic Rhinitis diagnosed in live animals?

*Answer:* Veterinarians can diagnose bacterial rhinitis and turbinate atrophy by swabbing the turbinate bones through the snout and producing a bacterial culture. Visual inspection is another method of live animal diagnosis.

*Resource:* Atrophic Rhinitis, L-2193 Page: 2

**GENERAL MANAGEMENT**

*Question #* 26

Short Answer

*Question:* While the baby pigs like their environment warm the sows do not. What temperature is ideal for the sow?

*Answer:* 65 degrees F

*Resource:* Baby Pig Basics, ASWeb-069 Page: 1

**GENERAL MANAGEMENT**

*Question #* 27

True/False

*Question:* If weaning at less than or equal to 21 days, a single injection of 100mg of iron in the neck should be sufficient.

*Answer:* True

*Resource:* Baby Pig Basics, ASWeb-069 Page: 3

**GENETICS & SELECTION**

*Question #* 28

True/False

*Question:* Knowing the genetic history of your swine will help you produce a better show animal.

*Answer:* True

*Resource:* Understanding the Genetic and Environmental Interactions, ASWeb-094 Page: 1



**YOUTH PROJECTS**

*Question # 29*

True/False

*Question:* Serious consequences, such as prison time, could result from misuse of medications.

*Answer:* True

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 2

**CARCASS QUALITY**

*Question # 30*

Fill in the Blank

*Question:* The regulatory agency responsible for inspecting pigs at the packing plant is the

*Answer:* FSIS (Food Safety and Inspection Service)

*Resource:* Youth Program Pork Quality Assurance, ASWeb-074 Page: 26

# Swine Quiz Bowl

## Senior Questions

### Set F

Developed 01/2012

#### **GENERAL MANAGEMENT**

*Question # 1* Team A Contestant 1

Short Answer

*Question:* What is the current slaughter capacity in the U.S.?

*Answer:* About 444,925 head per day

*Resource:* Quick Facts, pork.org Page: 12

#### **GENETICS & SELECTION**

*Question # 2* Team B Contestant 1

Fill in the Blank

*Question:* A desirable breeding animal's neck, rump, and body should be

*Answer:* Long. Long necked, long bodied, and long rumped.

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117, 6-00 Page: 1

#### **GENETICS & SELECTION**

*Question # 3* Team A Contestant 2

Short Answer

*Question:* Why is structural correctness important in breeding swine selection?

*Answer:* Because of confinement production systems

*Resource:* Texas Cooperative Extension, Breeding Swine Selection, ASWeb-117, 6-00 Page: 1

**CARCASS QUALITY**

*Question # 4* Team B Contestant 2

Short Answer

*Question:* To maximize juiciness when cooking pork, would you prefer more or less marbling?

*Answer:* More marbling. The more marbling a muscle has, the more flavorful and juicy it is when cooked.

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**HEALTH**

*Question # 5* Team A Contestant 3

Short Answer

*Question:* A common symptom of Swine Influenza Virus is

*Answer:* Explosive coughing outbreaks

*Resource:* Swine Pneumonia, L-5203 Page: 2

**HEALTH**

*Question # 6* Team B Contestant 3

Short Answer

*Question:* What does Leptospirosis cause in swine?

*Answer:* Leptospirosis can cause abortion, infertility, mummified pigs, and stillborn or weak pigs.

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 2

**YOUTH**

*Question # 7* Team A Contestant 4

Short Answer

*Question:* Following drug labels, winning and losing with grace, and following show rules is which pillar of character?

*Answer:* Fairness. Uses only approved drugs, accepts winning or losing with grace, and follows rules in the show ring.

*Resource:* Quality Counts (pdf), CHE-1 Page: 99

**REPRODUCTION**

Question # 8 Team B Contestant 4

Short Answer

*Question:* Where is the site of fertilization in the swine female's reproductive tract?

*Answer:* Oviduct

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

\* \* \* \* \* **Toss-Up Questions** \* \* \* \* \*

**YOUTH PROJECTS**

Question # 9

Short Answer

*Question:* How do you calculate the average daily gain of your show pig?

*Answer:* Divide the weight gain by the number of days between weighings

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 7

**CARCASS QUALITY**

Question # 10

Short Answer

*Question:* What are the two types of carcass quality defects caused by stress on the animal?

*Answer:* PSE (Pale, soft and exudative) or DFD (Dark, firm and dry)

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**HEALTH**

Question # 11

Short Answer

*Question:* Another name for common swine pneumonia is ?

*Answer:* Enzootic pneumonia

*Resource:* Swine Pneumonia, L-5203 Page: 1

**HEALTH**

Question # 12

Short Answer

*Question:* Name a common grain that is used in swine diets.

*Answer:* Corn or soybean meal

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 8

**GENERAL MANAGEMENT**

Question # 13

Fill in the Blank

*Question:* You should change your footwear and equipment or clean and disinfect when going from the \_\_\_\_\_ farm returning to the main herd.

*Answer:* Isolation Farm

*Resource:* Isolation Procedures for Farrowing Operations, L-2263 Page: 1

**HEALTH**

Question # 14

Short Answer

*Question:* What are the four most important swine diseases to vaccinate for?

*Answer:* Erysipelas, Leptospirosis, Parvovirus, and Colibacillosis

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1

**FEEDS/FEEDING**

Question # 15 \*\* Bonus Question Attached \*\*

Short Answer

*Question:* When will the largest response be seen when feeding Paylean?

*Answer:* During the first four weeks of feeding (during the repartitioning phase).

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**GENERAL MANAGEMENT**

Question # BONUS QUESTION

Short Answer

*Question:* How do you convert pork carcass price to live price?

*Answer:* Multiply the carcass price by .74

*Resource:* Quick Facts, pork.org Page: 9

**HEALTH**

Question # 16

Short Answer

*Question:* What company has a ractopamine product called Paylean for swine?

*Answer:* Elanco Animal Health (a division of Eli Lilly and Company)

*Resource:* The Facts about Paylean™: Ractopamine for Swine, Sterle, ASWeb-093 Page: 1

**REPRODUCTION**

Question # 17

Short Answer

*Question:* What is the greatest advantage of Artificial Insemination in swine?

*Answer:* Permits more extensive use of new, superior genetics at a potentially lower cost.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 1

**CARCASS QUALITY**

*Question # 18*

Short Answer

*Question:* Name three methods of dry heat cooking.

*Answer:* Roasting, broiling, grilling, panbroiling and stir fry.

*Resource:* Selecting the Perfect Chop (or Steak), ASWeb-092 Page: 1

**CARCASS QUALITY**

*Question # 19*

Short Answer

*Question:* List three things that drugs or medications are used for in the swine industry.

*Answer:* To prevent or treat disease, provide for the welfare of the animal, minimize production costs, and improve rate of gain and feed efficiency.

*Resource:* Preventing Drug Residues in Livestock, ASWeb 085 Page: 1

**CARCASS QUALITY**

*Question # 20*

Short Answer

*Question:* As hogs age, do they tend to fatten from front to rear or from rear to front?

*Answer:* Front to rear

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 2

**GENERAL MANAGEMENT**

*Question # 21*

Short Answer

*Question:* What producer program promotes animal well being and food safety?

*Answer:* PQA

*Resource:* Quick Facts, pork.org Page: 10

**HEALTH**

Question # 22

Short Answer

*Question:* What is the most common infection of joints?

*Answer:* Mycoplasma

*Resource:* Preventing Lameness in Show Pigs, ASWeb-086 Page: 1

**HEALTH**

Question # 23

Short Answer

*Question:* What are some effects of the porcine stress gene?

*Answer:* The stress gene causes the pig to be more muscular and lean, but will have lower quality meat. It may also cause the animal to be so excitable that stress can kill the animal.

*Resource:* Texas 4-H Swine Project Guide, AS16-2 Page: 5

**GENERAL MANAGEMENT**

Question # 24

True/False

*Question:* Watching your pig closely is always important, but especially just after arrival.

*Answer:* True. Watch to verify they are eating, drinking, and to detect sickness.

*Resource:* Texas Ag Extension Service, Starting Them Off Right!!, Sterle, ASWeb-075 Page: 2

**REPRODUCTION**

Question # 25

Short Answer

*Question:* List 3 of the 5 factors that might affect the shelf life, motility and viability of the semen.

*Answer:* Shipment, diluent, storage temperature, fluctuations in temperature and length of time since collection.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 3



**GENETICS & SELECTION**

*Question # 26* \*\* Bonus Question Attached \*\*

Short Answer

*Question:* What is one problem that can be caused to a pig's front legs if the pig is too straight shouldered?

*Answer:* Puts too much pressure on the knee joint and can cause the pig's knees to buckle over.

*Resource:* From the Ground Up: The Importance of Structural Soundness, ASWeb-096 Page: 1

**CARCASS QUALITY**

*Question # Bonus BONUS QUESTION*

Short Answer

*Question:* List two things you could do to ensure acceptable pork quality.

*Answer:* Proper handling, disposition, observe and follow withdrawal times, inject animals properly, not restricting feed or water intake to restrict weight gain, genetics (no stress gene)

*Resource:* Carcass Quality - Why is it important?, ASWeb-070 Page: 3

**GENERAL MANAGEMENT**

*Question # 27*

True/False

*Question:* The sow's udder provides more milk per teat at the back than at the front.

*Answer:* False - The sow's udder provides more milk at the front than at the back

*Resource:* Baby Pig Basics, ASWeb-069 Page: 2

**REPRODUCTION**

*Question # 28*

Short Answer

*Question:* What is an AI spirette?

*Answer:* A spirette is a spiral shaped, plastic tipped insemination rod.

*Resource:* Artificial Insemination of Swine, L-5321 Page: 2

**YOUTH PROJECTS**

*Question # 29*

Short Answer

*Question:* List three possible causes for broken needles when administering drugs to livestock.

*Answer:* Reusing bent needles, using the wrong gauge or length of needle, improper site of administration, and improper restraint of the animals during the process.

*Resource:* Providing a Safe, Wholesome Product: Administration of Medications to Ensure Pork Quality/Safety, ASWeb-090 Page: 1

**HEALTH**

*Question # 30*

Short Answer

*Question:* What does Erysipelas cause in swine?

*Answer:* Arthritis and death loss

*Resource:* Vaccinations for Farrowing Operations, L2192 Page: 1