

4-H Beef Bowl Study Information

- 1) Name 3 breeds of beef cattle.
A. Angus, Hereford, Shorthorn, Charolais, Limousin, Brangus, etc.
- 2) What should a finished steer ready to butcher weigh? _____ to _____
A. 1000 to 1400 lbs.
- 3) How many compartments do cattle have in their stomachs?
A. Four.
- 4) How much water per day might a feeder steer need?
A. 10 to 15 gallons
- 5) List five items you would need if you had a steer project.
A. Pen, water trough, feed storage, halter, brush, scotch comb, show stick.
- 6) How big of a pen do you need for one steer (in square feet)?
A. 900 sq. ft.
- 7) Which of these is not a nutrient: Water, Protein, Antibiotics, Minerals
A. Water
- 8) What do you call the amount of feed an animal eats in a 24 hour period?
A. Ration.
- 9) What are the two categories of feed?
A. Concentrates and roughage
- 10) Which category of feed is known to be low in digestibility and high in fiber?
A. Roughage
- 11) Which category of feed is highly digestible and low in fiber?
A. Concentrate
- 12) What kind of digestive system do cattle have that enables them to digest grass and hay?
A. Ruminant
- 13) Normal rectal temperature for a steer is _____.
A. 100 to 102 degrees F.
- 14) True or False: Heterosis is something that is observed in purebred animals.
A. False
- 15) Normal respiration (breathing) rate for a beef animal is _____.
A. 20 to 30 breathes per min.
- 16) Give an example of a way to mark an animal so it can be identified.
A. Brand, Tattoo, Number & Neck Chain, Ear Tag.
- 17) The most valuable cuts of meat come from the rump, loin, flank or shoulder?

A. Loin.

- 18) You should never inject more than _____ cc into a single site when giving intramuscular injections.
A. 10
- 19) “Prime”, “Choice” and “Standard” are examples of what?
A. Quality grades.
- 20) What is the difference between a heifer and a cow?
A Heifer is a female that has not had a calf, a cow has had a calf before.
- 21) What is a crossbred?
A. It is the offspring from parents of two different breeds.
- 22) Name a disease that cattle may get.
A. Blackleg, Leptospirosis, Influenza, Pneumonia, Pink eye, Hoof Rot, etc.
- 23) Name four different external parasites of beef cattle.
A. Flies, ticks, grubs or lice.
- 24) Which quality grade will usually receive the largest bonus when finished cattle are sold on a quality basis?
A. Choice.
- 25) Where is the greatest part of the cattle industry located in the United States?
A. The Great Plains (Texas to the Canadian Border).
- 26) Which one of the four compartments to a steer’s stomach is most like a persons?
A. Abomasum.
- 27) When you measure frame size what are you trying to estimate?
A. The minimum weight a beef animal must reach to grade choice.
- 28) Name two feeds that are high in proteins.
A. Cottonseed, Soybean, Linseed, Alfalfa Hay.
- 29) Name six major nutrients.
A. Water, carbohydrates, fats, proteins, vitamins and minerals.
- 30) Name 3 energy concentrate feeds.
A. Barley, corn, oats, wheat, milo, beet pulp and molasses.
- 31) Proteins are made from chains of smaller particles called what?
A. Amino Acids.
- 32) What nutrient has the greatest energy density?
A. Fat.
- 33) What do you call a ration that has the correct amount of the six nutrients?
A. A balanced ration.

- 34) A steer who's live weight was 1000 lbs. And carcass weight was 650 lbs. has a dressing weight of?
A. Carcass weight divided by live weight x 100 $(650/1000) \times 100 = 65\%$
- 35) What is the length of the gestation period of the cow?
A. 272-292 days
- 36) What is the main cause of bloat in beef cattle?
A. Consuming lush legumes like alfalfa, clover or high concentrate finishing rations.
- 37) What is the "flight zone" in beef cattle?
A. This is the area you enter that causes the animal to become anxious and run.
- 38) True or False. Ruminants digest plant fiber with stomach acids.
A. False.
- 39) Give an example of a mineral.
A. Calcium Phosphorous, Magnesium, Iron, Selenium, Sodium, etc.
- 40) Cattle grubs found on the back of the animal are the larvae of what parasite?
A. Heel fly
- 41) A well muscled steer will have at least _____ inches of rib eye area for every 100 lbs. live weight.
A. 1.1 inches

Beef Terms

- 1) Bull- Male animal of any age that are uncastrated.
- 2) Calves- Young cattle of either sex under one year of age.
- 3) Cow- Female bovine that has produced one or more calves.
- 4) Dam- A female parent.
- 5) Polled- Cattle born without horns.
- 6) Registered Animal- Purebred animal that has a registered certificate and number issued by the breed association. The animal's name is recorded with the names of the sire (father) and Dam (mother).
- 7) Steer- Male animal that has been castrated before sexual maturity.
- 8) Breed- Animals of like color, type and other characteristics similar to those of parents or past generations.
- 9) Feeder- A weaned animal that being fed for market.
- 10) Finish- Degree of fatness and readiness for market.
- 11) Fitting- The process of grooming an animal for show or sale.
- 12) Grade Animal- A beef animal that has one or both parents not registered with a breed association.
- 13) Parturition- Act of birth.
- 14) Pedigree- A table that gives a line of ancestors for an animal, a genealogical tree.
- 15) Purebred Animal- An animal of a recognized breed kept pure for many generations. A purebred animal may or may not be registered, but all registered animals are suppose to be purebred.
- 16) Ration- The total feed given to an animal during a 24 hour period.
- 17) Nutrition- The study of the feeding process and how an animal uses feed.
- 18) Genetics- The study of how animal or plant characteristics are passed from parent to offspring.
- 19) Colostrum- The first thick milk a mother gives, it provides nutrients, immunity to some diseases and a laxative to the offspring.
- 20) Marbling- Very small flecks (speckling, spots) of fat distributed throughout the muscle of the rib eye (rib steak). Marbling is important for tenderness and juiciness of the meat.
- 21) Rib Eye- A cross section of the loin muscle.
- 22) Gestation- Pregnancy.
- 23) EPD - Expected Progeny Difference (or Deviation).

4-H Sheep Bowl Quiz Study Guide

True/False

1. Jaw defects are found in all breeds of sheep.
A. True.
2. Rectal prolapse is a serious defect that is often an inherited weakness, but can be made worse by docking tails too short.
A. True.
3. Medications that have been approved for cattle may be used for sheep, even if sheep are not listed on the label.
A. False.
4. With a cryptorchid ram, one or both testicles do not descend into the scrotum sack.
A. True.
5. Because of their fleece, sheep have a higher dressing percentage than cattle.
A. False.
6. Skin folds are highly inheritable and harder to shear.
A. True.

General

7. Common meat breeds of sheep are:
A. Hampshire, Suffolk, Southdown, Shropshire, Dorset and Cheviot.
8. Common wool breeds are:
A. Corriedale, Columbia, and Cheviot. (Add: Polypay, Targhee, Dorset & Southdown)
9. Common fine-wool breeds are:
A. Rambouillet and Merino.
10. Which breed of sheep originated in New Zealand?
A. Corriedale.
11. Which breed of sheep is the oldest of medium-wool sheep?
A. Southdown.
12. Both rams and ewes of the which breed have horns?
A. Dorset.
13. Which breed was developed from the Spanish Merino sheep?
A. Rambouillet.
14. Sheep have how many chromosomes?
A. 54 (27 pairs).
15. What does a parasite do?
A. Takes nutrients from a host without returning benefits to it.

16. A feed that is rich in energy and low in fiber is called a _____.
A. Concentrate.
17. A bulky feed that is low in energy and high in fiber is called a _____.
A. Roughage.
18. Which is considered a roughage feed? Alfalfa or barley?
A. Alfalfa.
19. Give an example of a concentrate.
A. Corn, Barley, Oats and Milo.
20. _____ is the increase in size of muscles, bones, and other parts of the body.
A. Growth.
21. When a veterinarian performs a necropsy, what is he/she doing?
A. Examining a dead animal.
22. What does it mean to “flush” a ewe?
A. Feed her extra energy prior to breeding.
23. Grown sheep use most of their feed for _____.
A. Maintenance.
24. Three sources of high protein feeds for sheep are _____.
A. Alfalfa, cottonseed meal and soybean meal.
25. What is the cheapest of the 6 classes of nutrients?
A. Water.
26. What minerals are used to build teeth and bones?
A. Calcium, phosphorous/magnesium.
27. _____ are nutrients that do not furnish energy or structural properties, but are necessary to help keep the animal healthy.
A. Vitamins.
28. _____ and _____ furnish most of the energy needed by the animal's body.
A. Fats and carbohydrates.
29. USDA yield grades for lambs are determined by what?
A. Back fat thickness.
30. On a feed tag, “CP” stands for what?
A. Crude protein.
31. What does “Body Condition” refer to?
A. The amount of fat cover a breeding animal has.

32. Proteins are made out of substances called?
A. Amino acids.
33. Name the six classes of nutrients.
A. Carbohydrates, proteins, fats, minerals, vitamins and water.
34. Plant fiber is mainly made of what?
A. Cellulose.
35. What does the ruminant type of stomach allow the sheep to do?
A. Digest roughage.
36. Name the four compartments of the sheep's stomach.
A. Rumen, Reticulum, Omasum and Abomasum.
37. A deer, horse or a pig has a digestive system most like a sheep?
A. Deer.
38. In sheep, the estrous cycle is approximately how many days long?
A. 17.
39. Which is a more prolific breed: Polypay, Suffolk or Southdown?
A. Polypay.
40. What does it mean to graft a lamb?
A. Convince a ewe, that is not its mother, to adopt and nurse it.
41. For the first week after birth, which of the four stomach compartments is most important for a lamb?
A. Abomasum.
42. Common external parasites of sheep are?
A. Lice, mites, (DELETE: blowflies), wool maggots and nose bots.
43. Common internal parasites of sheep are ?
A. Tape worm, liver flukes and round worms.

Describe These Terms

44. Overshot
A. Teeth hit back of the dental pad.
45. Undershot
A. Teeth extend beyond the dental pad.
46. Rectal Prolapse
A. The end of the rectum tears loose and protrudes out the anus.
47. Entropion
A. Inverted eye lid.
48. Cryptochidism

- A. A testicle does not descend into the scrotum.
49. Gestation period of sheep is?
A. 5 months or 150 days.
50. Parturition
A. Act of giving birth.
51. Lactation
A. Act of giving or producing milk.
52. Tagging ewes or crutching
A. Shearing wool from the tail, twist, inside the hind legs from rear flank and udder prior to lambing in order to clear the area of fecal contamination and make it easier for the lambs to find the ewe's udder.
53. Drop band
A. A group of ewes close to lambing.
54. Gummer
A. A sheep with no teeth.
55. Foot Rot
A. A disease caused by organisms that grow in a closed foot pad where there is no oxygen. If not treated, it can cause lameness and secondary infections.
56. Conditions which lead to foot rot are:
A. Untrimmed feet, damp muddy pastures or corrals, warm temperatures or a contagious animal present.
57. "Micron" is a term used to describe what?
A. The diameter of wool fibers.
58. Docking
A. Is the cutting off of the lamb's tail in order to prevent feces from collecting around the tail area and attracting parasites.
59. Colostrum
A. The first milk a ewe gives after lambing, it is rich in nutrients and important to newborn lambs because it passes immunity and antibodies from the mother to the lamb.
60. Castrating
A. Is the removing of the male testicles.
61. Ration
A. The amount of feed an animal eats in a 24 hour period.
62. Balanced ration
A. A ration that has the right amounts and proportions of protein, carbohydrates, minerals

and vitamins (ADD: H₂O) required for animal optimal animal growth and maintenance.

63. Roughage
 - A. Feed that is low in digestibility and high in fiber content.
64. Carbohydrate
 - A. Those nutrients in a feed that provide energy from starches, sugars or cellulose.
65. Concentrate
 - A. Feed that is dense in energy or protein and low in fiber content.
66. Fiber
 - A. That part of a feed that is high in plant cell wall material, such as cellulose.
67. Minerals
 - A. Nutrients that build bones and promote good health. If a ration is lacking minerals, deficiencies can develop.
68. TDN
 - A. "Total Digestible Nutrients" the proportion of a feed that is digestible.
69. Over-Eating Disease (Pulpy-Kidney-Enterotoxemia). Caused by clostridia bacteria in the digestive tract.
 - A. A fatal condition often associated with young lambs fed high energy rations. May be prevented by vaccinating lambs 2 weeks before they go on full feed. Symptoms - lamb in good condition suddenly dies.
70. Navel Illness
 - A. An infectious disease that enters through the navel of a newborn lamb. Prevention- 7% iodine solution on navel immediately after birth in order to prevent bacteria and disease from entering the navel.
71. Sore Mouth
 - A. Viral disease that produces skin lesions on lips and in digestive tract. Open lesions are highly contagious to other sheep and people.
72. Tetanus
 - A. Caused by bacterium which grows in the absence of air, it enters the body through deep wounds or punctures. Symptoms- Stiffness of limbs, difficulty in moving or walking are often the first signs. Eyes are bright and clear, appearing unaffected. Treatment - If the disease is noted early, heavy injections of an antitoxin may help the animal recover. Prevent- Preventative vaccines are available and should be used in areas where tetanus is a known problem.
73. Bloat
 - A. Bloat may be the result of sheep grazing on lush legume pasture or are fed extremely high-quality legume hay. Symptoms - abdomen on left side of the animal becomes extended. Treatment - carefully pass a stomach tube through mouth into rumen to relieve the bloat. Liquid medicines can also be used. For bloat that is not severe, pressure can be

applied to the sides of the sheep to encourage belching which releases the gas.

74. Bluetongue

A. It 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's. It is a seasonal disease that may occur from midsummer until the first frost in fall. Vaccines are available.

75. Temperature

A. The normal rectal temperature for a sheep is 102-103 degrees F, plus or minus one degree. Animals that have been active will have a higher temperature.

76. White Muscle Disease (Stiff Lamb disease)

A. It is caused by a deficiency in the mineral selenium or vitamin E. The symptoms vary greatly. The leg, tongue and throat muscles are sometimes affected. The lambs appear to have poor control of muscles. Pneumonia is a common secondary infection. Sudden death occurs from heart failure and can be confused with enterotoxemia. Prevention - in selenium deficient areas, inject sheep with a mixture of selenium and vitamin E (ADD: Bo-Se).

77. Wool Maggots

A. Blow flies, lay their eggs in unclean wool. Maggots hatch and feed on wet wool adjacent to the skin, causing the wool to loosen and become rotten. Some forms of wool maggots can attack life tissue, which results in secondary infections. Affected sheep usually lie among weeds along fences or in shaded areas with their heads outstretched on the ground. When forced to move, they raise their hind legs high in kicking, irritated fashion. Treatment - shear affected areas. Treat area with special smear preparations. Also keeping your sheep tagged will help keep the host area for the maggots clean and to a minimum.

The following are additional questions on corrections by Patti Rehse:

How to fit a lamb:

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.

How to wash a lamb:

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.

How to make a show blanket:

Take a cotton sack and clean it well.

4-H Swine Bowl Learning Information

1. In selling commercial market hogs today, what is the most important carcass trait that has an influence on the price?
A. Percent lean.
2. What 3 things are needed to compute percent lean?
A. Market weight, backfat thickness and loin eye area.
3. How many functional teats does a gilt need to be registered?
A. At least 6 on each side.
4. What is the preferred site for intramuscular injections?
A. The neck.
5. What are some of the advantages of AI in swine production?
A. Disease control and herd improvement.
6. What is a performance index?
A. A mathematical tool for ranking animals on the basis of their productivity and efficiency.
7. What is the average dressing percent of a hog? How do you calculate it?
A. 72%; $(\text{Carcass weight} - \text{live weight}) \times 100$.
8. How old should boars be before being bred to sows?
A. 8 months
9. How many pounds and how old should gilts be before being bred?
A. At least 250 lbs. and at least 8 months old.
10. When does the first heat occur after a sow has farrowed?
A. 3 to 5 days after the pigs are weaned.
11. What is the average number of litters a sow can produce per year?
A. 2.0 to 2.2
12. When should a farrowing sow be washed?
A. 3 to 6 days prior to farrowing. Use warm soapy water to remove worm eggs, dirt and manure.
13. How should baby pig teeth be cut?
A. The needle teeth on the upper and lower jaws should have the top 1/3 cut off.
14. In commercial hog farms, tails are docked to prevent what?
A. Injury from tail biting.
15. When should castrating be done?
A. 7-14 days of age.
16. When should pigs first be introduced to their own feed?
A. When pigs are 2 to 3 weeks of age.

17. At what age are pigs usually weaned?
A. 3 to 8 weeks old.
18. What are amino acids?
A. Building blocks of proteins. Chemically, they are short carbon chains with an amine (nitrogen) group attached.
19. What mineral do baby pigs raised on concrete need to have added to their diet?
A. Iron.
20. What are the traditional strengths of the following breeds of swine?
A. Hampshire: Carcass
B. Duroc: Growth and efficiency
C. Landrace: Maternal
21. Name 3 indexes used by breeders.
A. Maternal Line Index, Sow Productivity Index and Terminal Line Index.
22. True or False: The amino acid Lysine is commonly supplemented in swine rations.
A. True.
23. What is the length of estrus in swine?
A. 24-72 hours.
24. How long does ovulation last in swine?
A. 35-45 hours.
25. How long is the gestation period?
A. 114 days, or approximately 3 months, 3 days and 3 weeks.
26. True or False: You should provide a heat lamp in cool weather to keep baby pigs from getting cold.
A. True
27. True or False: Ear notching is done to improve airflow over the ears.
A. False. It is used to identify pigs and litters.
28. An adult pig's normal temperature is _____?
A. 102.5 degrees Fahrenheit
29. What are some samples of high protein feeds?
A. Soybean oil, fish meal and alfalfa meal.
30. How often should fresh water be given to a pig?
A. Daily, 2-5 lbs for each 1 pound of dry feed given. These needs can double in high temperatures.
31. True or False: You can overfeed a sow.
A. True. Overfeeding is a frequent error. Do not self feed pregnant sows or gilts. Limit energy feeds.
32. What does A.I. stand for?
A. Artificial Insemination.

33. Which of these breeds has erect ears: Yorkshire, Landrace or Chester White?
A. Yorkshire has erect ears.
34. What do you call a male animal that has been castrated before reaching sexual maturity?
A. Barrow.
35. On the universal ear notching system, the left ear is used for individual or litter I.D.?
A. Individual.
36. What is a Boar?
A. Male hog of any age that is not castrated.
37. Name 4 breeds of swine.
A. Hampshire, Yorkshire, Duroc, Landrace, Poland China, Chester White, Berkshire, Spotted, Tamworth, Pietrain, etc.
38. Should shelter be provided for market hogs?
A. Yes, shelter from the elements such as heat, wind and rain should be provided for your growing market hog. If the animal is not provided shelter and protected against these elements, it can become stressed and this in turn can affect its growth and health.
39. Is it recommended to provide market and feeder pigs "Full: (unlimited) feed"?
A. Yes.
40. True or False: Hampshire pigs' coloring can be described as black with six white points, on the feet, the tip of the tail and the face.
A. False, that would be a Berkshire.
41. True or False: Durocs are white in color.
A. False, they are various shades of red.
42. Can a dirty pen hurt a pig?
A. Yes, dirty pens can provide a place for pathogens and parasites to grow that can infect the pig and cause disease.
43. True or False: Pigs are considered the least intelligent of all domesticated animals.
A. False.

Swine Terms

1. Barrow - Male animal that has been castrated before reaching sexual maturity
2. Boar - Male hog of any age that is not castrated.
3. Breed - Animals of like, color, type, and other characteristics similar to those of parents or past generations. Some breeds of swine are Berkshire, Hampshire, Duroc, Chester White, Poland China, Yorkshire, Spotted, Tamworth and Pietrain.
4. Castrate - to remove the testicles of male animals.
5. Dam - a female parent.
6. Feeder - A weaned animal that is ready for feeding or that is being fed to market.
7. Finish - Degree of fatness.
8. Fitting - Grooming an animal for show or sale.
9. Gilt - Female pig that has not had a litter.
10. Grade Animal - An animal that has one or both parents not registered with a breed association.
11. Parturition - Act of giving birth.
12. Pedigree - A table that gives a line of ancestors for an animal; A genealogical tree.
13. Purebred Animal - An animal of a pure breed where the ancestry is recorded.
14. Daily Ration - the total feed given any animal during a 24 hour period.
15. Registered Animal - Purebred animal that has a registration certificate and number issued by the breed association. The animal's name is recorded together with the names of the sire and the dam.
16. Genetics - the study of how animal or plant characteristics are passed from parents to offspring.
17. Farrow - the act of a pig giving birth.
18. Lactation - The process of an animal producing milk.
19. Creep Area - An area accessible to nursing pigs (but not to the sow) where supplemental feed is provided.
20. Crossbred - the progeny of purebred parents of different breeds, but of the same species.
21. Gestation Period - The time interval between conception and farrowing.
22. Runts - Small, undersized or weak pigs in a litter.

23. Shrink - weight loss.
24. Self Feed or Free Feed - Unlimited feed available at all times.
25. Sow - A female hog that has had at least one litter.
26. Yield - The percent of boneless, trimmed retail cuts of meat that can be harvested from an animal.
27. In heat - Means the gilt or sow is receptive to the boar.
28. Weaning - The time when the young pigs separated from the sow
29. Guard Rails - Rails installed in farrowing pens or houses to help prevent the sow from hurting or crushing the baby pigs.
30. Feeder Pigs - Weaned pigs that progress through growing and finishing.

4-H GOAT BOWL STUDY GUIDE (Dairy and Meat)

1. What is the name for a young goat under six months of age?
A. Kid.
2. What is a female goat called?
A. Doe.
3. What is a male goat called?
A. Buck.
4. True or False. Kidding is the act of giving birth to young?
A. True.
5. What is the father of a goat called?
A. Sire.
6. What is the mother of a goat called?
A. Dam.
7. What is an animal that has a blue ADGA registration paper?
A. Purebred or American.
8. What is an animal called whose sire and dam are registered with the registry association?
A. Purebred or American.
9. True or False. An American is the result of three successive generations of "grading up" by breeding to purebred or American sires of one breed.
A. True. Americans can be developed in all breeds.
10. What is the name of an animal with one purebred or American parent and the other a Grade or Scrub?
A. Recorded Grade.
11. What is the name of a purebred that is itself registered with the registry association?
A. Registered.
12. What is the name of the mammary or milk-producing glands of the female?
A. Udder.
13. What is the name of the first milk produced by the dam after giving birth?
A. Colostrum.
14. What is lactation?
A. The time during which milk is produced.
15. What is the gestation period?
A. The time during which the doe carries her young (pregnant period).
16. The six major dairy breeds of importance in the United States are?
A. Alpine, Oberhasli, La Mancha, Nubian, Saanen and Toggenburg.

17. Where did the Alpine originate?
A. French Alps.
18. True or False. The Alpine is a small breed.
A. False. It is a medium to large, rangy, yet deer-like animal.
19. True or False. The Alpine is always black.
A. False. It may vary from cou blanc, cou lare, cou noir sundgau and chamois and variations to these colors and patterns.
20. True or False. The minimum height of an Alpine is 30 inches and minimum weight is 135 lbs.
A. True.
21. True or False. The La Mancha breed came from Switzerland.
A. False. The breed was developed in the U.S.A. from short-eared Spanish breeds crossed with the leading purebred breeds.
22. True or False. The La Mancha breed is always white in color.
A. False. They may vary in color.
23. True or False. La Mancha has long erect ears.
A. False. They are distinguished by their external ears, which are either absent or very short.
24. True or False. Minimum height for a mature doe of the La Mancha breed is 28 inches and the minimum weight is 130 lbs.
A. True.
25. True or False. Nubian is the smallest breed.
A. False. The Nubian is a large animal and has a proud and graceful appearance.
26. True or False. The Nubian breed was developed in England.
A. True.
27. True or False. The Nubian was developed by crossing goats from India and Egypt with British dairy goats.
A. True.
28. What is the minimum height of a mature Nubian doe?
A. 30 inches.
29. What is the minimum weight of a mature Nubian doe?
A. 135 lbs.
30. What is the color of the Saanen breed of goat?
A. White or slightly cream colored.
31. Where did the Saanen originate?
A. Switzerland.

32. True or False. The Saanen is medium to large with rugged bone structure and plenty of vigor.
A. True.
33. Does the Saanen breed have ears?
A. Yes, the ears are upright.
34. What is the preferred color of the Saanen breed?
A. White.
35. What is the minimum height and weight for a mature Saanen doe?
A. 30 inches in height and 135 lbs.
36. True or False. The Toggenburg breed is the largest of all goat breeds?
A. False. It is of medium size, sturdy and vigorous.
37. True or False. The Toggenburg originated in Switzerland.
A. True.
38. What is the color of the Toggenburg breed?
A. Solid, brown varying from light fawn to dark chocolate with distinct white markings.
39. What is the minimum height and weight for a Toggenburg doe?
A. 26 inches in height and 120 lbs.
40. What three things should you consider when choosing your goat?
A. A record of its production, production of its ancestors and physical appearance of the animal.
41. How many pounds of milk does an average producing dairy doe average in a 10-month period?
A. 1,800 lbs.
42. True or False. An average producing dairy doe should average a minimum of 3 quarts milk per milking.
A. True.
43. A dairy goat should have good dairy appearance and character. Which of the following is not a desirable characteristic?
A. Feminine head
B. Thick neck
C. Sharp withers
D. Fine bones
A. B, a thick neck is undesirable.
44. If you have one doe, should you buy a buck?
A. No.
45. What size shelter or shed should a goat have?
A. 6 x 6 feet.
46. How large an exercise area should a goat have?
A. 200 square feet.

47. How high should a goat fence be?
A. 5 ft.
48. Should you have a wood, dirt or concrete floor, for the shed and exercise pen?
A. Dirt.
49. What basic equipment will you need to milk a dairy goat?
A. Cloth for washing udder, a milk pail and teat dip.
50. Should you always wash the udder before milking?
A. Yes.
51. True or False. You should wash the milking utensils once a day.
A. False. Wash after every milking.
52. What does freshening mean?
A. When the goat's lactation begins following kidding.
53. What do you call the first thick yellow milk a goat gives after freshening?
A. Colostrum.
54. Kids Colostrum is high in what vitamin?
A. Vitamin A.
55. How much colostrum does a kid need?
A. 12-24 oz. before 12 hours old.
56. True or False. Pan feeding kids is easier than bottle feeding.
A. True.
57. True or False. It is probably best to bottle feed baby goats.
A. True.
58. True or False. When feeding kids, all milk must be warmed to no more than 100 degrees before feeding.
A. True.
59. What is a good substitute for goat's milk for kids?
A. Cow's milk or high fat lamb's milk replacer for part of the milk or goat milk replacer.
60. True or False. Kids will start nibbling high quality alfalfa hay at a few days old.
A. True.
61. True or False. When about a week old, a high protein calf starter should be offered.
A. True.
62. At what age should you start offering water to a kid?
A. From day one.
63. If the kid is eating grain, at what age can you stop feeding milk?
A. When intake of grain is 1.5 lbs./head/day.

64. True or False. Your dairy goat will like roots, silage and alfalfa hay as a diet.
A. True.
65. True or False. Pasture is a good supplement for feeding your doe.
A. True.
66. Irrigated pasture is an excellent breeding ground for what parasites?
A. Stomach Worms and Liver Fluke.
67. A doe that produces less than one quart of milk per day receives all the nutrition she needs from good what?
A. Alfalfa hay.
68. A doe that produces more than 1 quart of milk per day needs how much concentrate mixture, besides alfalfa hay, for each 2 quarts of milk produced?
A. 1 quart of concentrate.
69. A pregnant doe needs how long a dry period before kidding?
A. 2 months.
70. What can you do to help prevent lameness in your goats?
A. Trim their hoof regularly.
71. If your goat starts to develop horn buds, what should you do?
A. Remove them.
72. What might you use to remove horn buds?
A. A disbudding iron is best before 10 days of age.
73. At what age should you castrate your male goat that you do not want to keep for breeding purposes?
A. 1 to 14 days old.
74. True or False. You should breed your dairy doe at least three times per year?
A. False. You should breed only once a year.
75. It is normal for a doe to have how many kids at one time?
A. Two.
76. The preferred breeding season for dairy does is usually from what month to what month?
A. August through March.
77. True or False. A doe should be at least 7 months or 80 pounds at breeding time?
A. True.
78. Does remain in heat how long?
A. One to two days.
79. The time between heat periods is generally how long?
A. 17 to 21 days.

80. How long after breeding will a doe kid? Or how long is the gestation period?
A. 5 months or 145 to 155 days.
81. Three to four weeks before kidding, what should you do to the doe?
A. Clip around udder, hind quarters and tail for cleanliness and vaccinate.
82. Shortly before parturition, what should you do to the doe?
A. Separate and place in a clean pen with water available.
83. Name three external parasites of goats?
A. Lice, mange mites, ticks, fleas, flies or screw worms.
84. Name two internal parasites of goats?
A. Roundworms, lungworms or liver flukes.
85. Name a disease of goats that effects primarily young goats.
A. Coccidiosis.
86. What is an infection of the doe's udder called?
A. Mastitis.
87. True or False. Abscesses can be contagious from goat to goat.
A. False.
88. Is foot rot contagious?
A. Yes.
89. What can you do to the feet to help prevent foot rot?
A. Trim them regularly.
90. Is pink eye an infectious disease?
A. Yes, it is very infectious.
91. True or False. Johne's disease usually affects goats 2 years and older.
A. True.
92. Name some ways that the organism that causes tetanus may enter the goat's body?
A. 1) Untreated navels at birth. 2) Puncture wounds. 3) Castration time.
4) Disbudding time. 5) At tattooing. 6) Ear tagging time.
93. What is another name for Enterotoxemia?
A. Overeating disease.
94. Does overeating disease have anything to do with overeating?
A. Yes. An imbalance in rumen micro-organisms cause a toxin to be produced.
95. How can infectious scours be controlled?
A. Adequate colostrum milk at birth, clean surroundings and judicious use of antibiotics.

96. What are three to four symptoms of Pneumonia?
A. Rapid breathing, fever, nasal discharge, depression, cough, sunken eyes and lethargic.
97. What is used to prevent white muscle disease?
A. An injection of Vitamin E and selenium compounds (Bo-Se or Mu-Se).
98. Lesions which are found on the mouth and are highly contagious, and which may spread to the udder, may be what disease?
A. Sore mouth.
99. True or False. Ringworm is caused by a tiny worm.
A. False. It is caused by a fungus.
100. Name two diseases that may affect man through milk.
A. Tuberculosis, brucellosis, leptospirosis and listeriosis.
101. True or False. The minimum height for a mature Angora doe is 25" and the minimum weight is 70 lbs.
A. True.
102. Why do you never give an Angora goat a full bath?
A. Because it would remove the lanolin in the mohair.
103. What country did Pygmy goats originate?
A. Western Africa.
104. Name 3 things mohair is used for?
A. Carpet, coats, pants, scarves, shawls, suits and blankets.
105. What are the primary hairs on an Angora goat called?
A. Kemp.
106. What are the secondary hairs on an Angora goat called?
A. Mohair.
107. What is the correct name meat harvested from goats?
A. Chevon.
108. Boer goats are used for?
A. Milk
B. Mohair
C. Meat
A. Meat
109. Boer goats originate from what country?
A. South Africa.
110. True or False. Minimum weight of mature Boer bucks is 260 lbs.
A. True.
111. True or False. Boer goats reach market weight of 60 lbs. or more by 4 months old.

- A. True.
112. True or False. Boer goats come in all colors.
A. False. Boer goats are all white with red heads.
113. True or False. Minimum weight of mature Boer does is 210 lbs.
A. True.
114. True or False. Minimum height for Oberhasli's is 28 inches and minimum weight is 120 pounds.
A. True.
115. True or False. Oberhasli's have a dished face.
A. False. They have a straight face.
116. Oberhasli's were originally what breed?
A. Swiss Alpine.
117. Oberhasli's are what color?
A. Dark bay with black trim and underbelly.
118. True or False Oberhasli's have a white or cream color udder.
A. False. Their udder is black or gray.
119. What two breeds and what percentage of each breed make up a Kinder goat?
A. 50% Nubian and 50% Pygmy.
120. On average, a goat will consume how much food per day?
A. 2.5 to 3 percent of its body weight.
121. What metabolic disease is known as pregnancy disease or pregnancy toxemia?
A. Ketosis.
122. What is the primary cause of ketosis in late pregnancy?
A. Inadequate energy in the doe's diet.
123. What is the normal pulse rate for kid goats?
A. 100 to 120 beats per minute.
124. What is the normal pulse rate for adult goats?
A. 70 to 130 beats per minute.
125. What is the normal respiratory rate for kid goats?
A. 12 to 20 per minute.
126. What is the normal respiratory rate for adult goats?
A. 9 to 15 per minute.
127. True or False. Rumen contractions are observed in the right flank.
A. False. In the left flank.

128. True or False. Miniature goats produce an average of 600 pounds of milk per year.
A. True.
129. Miniature goat's milk is higher in _____ than the larger dairy breeds.
A. Fat.
130. What is the normal temperature of a goat?
A. 102 degrees to 103 degrees
131. Where did Nigerian Dwarfs originate?
A. West Africa.
132. True or False. Nigerian Dwarfs weight at maturity is 75 pounds and are a maximum of 22.5" in height.
A. True.
133. True or False. Nigerian Dwarfs are seasonal breeders.
A. False. They breed year-round.
134. What color is not acceptable for Nigerian Dwarfs?
A. Agouti coloring.
135. What is agouti coloring?
A. A salt and pepper look.
136. What is the average birth weight for a Nigerian Dwarf?
A. Two pounds.
137. Nigerian bucks can breed at what age?
A. 7 weeks (very fertile).
138. True or False. It is common for Nigerian Dwarfs to have 3-4 offspring per kidding.
A. True.
139. True or False. Nigerian Dwarfs should be 10 months old and weigh at least 50 pounds before breeding.
A. True.
140. True or False. A collar and lead rope are used to show Nigerian Dwarfs.
A. False. A small chain is used only.
141. True or False. Nigerian Dwarfs are shown like the larger dairy breeds?
A. True

Horse Bowl Questions

1. How often should you feed your horse?
A. Twice a day.
2. Harsh or cruel treatment will gain your horse's respect.
A. False.
3. What should you always use when working around horses?
A. Caution.
4. Never stand directly behind or in front of a horse
A. True.
5. The first choice of a frightened horse is to what?
A. Run away.
6. How much distance should you keep between your horse and the horse in front of you?
A. At least one horse length.
7. What should you always check before you mount your horse?
A. The cinch/girth.
8. Is it okay to tie your horse with the reins?
A. No.
9. Is a mare a male or female?
A. Female.
10. You can wrap the lead rope around your wrist or hand.
A. False.
11. It's OK to ride without a helmet if you're just practicing.
A. False.
12. When approaching a horse, what should you always consider?
A. The horse's limited field of vision.
13. What type of knot should you use to tie your horse?
A. A quick release knot.
14. What side of your horse should you be on when leading?
A. the horse's left.
15. Should you lead a horse by the reins when they are over the horse's neck?
A. No.
16. Is a stallion male or female?
A. Male.

17. You should push a horse away from you to turn.
A. True.
18. What is the term for getting on your horse?
A. Mounting.
19. What is the term for the horse's right side?
A. Off side.
20. What should you use to clean a horse's hoof?
A. A hoofpick.
21. What should you do before approaching your horse?
A. Speak to him so he knows you're there.
22. The near side is which side of the horse?
A. The left side.
23. How should you comb the mane and tail?
A. Start at the bottom and work towards the top.
24. How should the curb strap/noseband of the bridle be adjusted?
A. So that two fingers can be inserted between the strap and the horse.
25. How often should you shoe or trim your horse?
A. Every 6-8 weeks.
25. A hand is equal to how many inches?
A. 4 inches.
26. What is the term for the equipment you use for riding?
A. Tack.
27. What is the correct basic seat and hand position when riding a horse?
A. A steady, secure, relaxed seat, with quiet hands.
28. What are aids?
A. The way the rider signals the horse to tell it what to do.
29. Name the four natural aids.
A. Hands, voice, legs, weight/seat.
30. Name an artificial aid.
A. Crops, Bats, spurs, whips.
31. What is another name for a horse shoer?
A. Farrier.
32. What are the five basic horse coat colors?
A. Bay, brown, white, black, and chestnut.
33. When a rider rises up and down with the beats of the trot, he is what?
A. Posting.

34. What is the clipped area behind the ears called?
A. The bridle path.
35. When riding, your eyes should be looking down to be sure your horse is behaving.
A. False.
36. Saddling is done from the near/left side.
A. True.
37. When riding properly, your heels should be higher than your toes.
A. False.
38. Squeezing with your legs tells your horse to do what?
A. Go forward.
39. What are the four major gaits?
A. Walk, trot/jog, canter /lope, and gallop.
40. Horses learn to obey because of what?
A. Reward and punishment.
41. How long can a horse pay attention to reward or punishment?
A. Three seconds.
42. A baby horse of either sex is a:
A. Foal.
43. A horse that will never be taller than 14'2 hands high is what?
A. A pony.
44. When cooling out a hot horse, you should immediately give him plenty of cold water.
A. False.
45. How many beats is the walking gait?
A. A four beat gait.
46. When a rider is in balance with his horse, his center of gravity is where?
A. Right over the horse's center of gravity.
47. What is a horse with a gold body color, white mane and tail called?
A. Palomino.
48. An untrained or inexperienced horse is called what?
A. Green.
49. An altered/castrated male horse is called what?
A. Gelding.
50. What breed is known as "The Father of Breeds?"
A. The Arabian.

51. What breed do small spots all over the body or in a blanket over the hips characterize?
A. The Appaloosa.
52. What is a wide stripe of white down the face called?
A. A blaze.
53. A spot of white on the muzzle is called a:
A. Snip.
54. What does it mean when a horse lays his ears flat back?
A. He is feeling angry.
55. Name the two primary classes of feeds.
A. Roughages and concentrates.
56. All bits are meant to communicate with and control the horse by what?
A. Pressure.
57. It is ok to run or trot on pavement.
A. False.
58. What is the ideal degree of slop to the shoulder?
A. 45 degrees.
59. What is the average temperature of the horse?
A. 101 degrees.
60. In an equitation class, is the rider or the horse being judged the most?
A. Rider.
61. What is the name of the area below the fetlock joint, above the coronet band?
A. Pastern.
62. What breeds are considered cold-blooded breeds?
A. Draft breeds.
63. Which type of bit multiplies the pressure the rider puts on the reins?
A. The Curb, a leverage bit.
64. Which type of bit puts the same amount of pressure on the mouth as the rider uses on the reins?
A. The Snaffle, a direct pressure bit.
65. What is the specific three beat gait when the right hind leg pushes off and the left front leg is leading?
A. Left lead canter/lope.
66. When a horse is on one lead in his front legs and on the other lead in his hind legs, he is said to be what?
A. Cross cantering.
67. A change of gait is called what?
A. A transition.
68. A horse should canter with the inside leg leading on a turn or circle.

- A. True.
69. A horse should not be fed grain when he is hot and tired.
A. True.
70. All snaffle bits are mild bits.
A. False.
71. It is not normal for a horse to try to boss or pick on other horses.
A. False.
72. What is the system of rank all horse groups have?
A. Pecking order.
73. If a horse does the same thing two or three times in a row, he is learning what?
A. A habit.
74. What is the most common fatal horse illness?
A. Colic.
75. A horse should be checked for parasites and dewormed at least how often?
A. Every 2 months.
76. The best way to handle a horse that shies is to punish him.
A. False.
77. What is the vice called when a horse braces his teeth on something arches his neck and gulps in air?
A. Cribbing.
78. What is the growth behind the fetlock joint called?
A. Ergot.
79. Horses have short memories.
A. False.
80. Any mark or deformity that diminishes the beauty, but does not affect the usefulness is called what?
A. Blemish.
81. Which is considered "soft", the bog spavin or the bone spavin?
A. Bog spavin.
82. What is another name for Equine Encephalomyelitis?
A. Sleeping sickness.
83. What is the term for the way a horse is put together?
A. Conformation.

84. A serious defect that affects a horse's usefulness is called what?
A. An unsoundness.
85. What is the best type of front leg conformation?
A. A long sloping shoulder, with short cannons.
86. What is the horse's normal temperature?
A. Between 99 and 101 degrees.
87. A horse that is relaxed, flexible, and can bend and turn easily is said to be what?
A. Supple.
88. A horse traveling with his weight mostly on his front legs is what?
A. On the forehand.
89. When a horse is collected, his balance is shifted to the rear.
A. True.
90. What is the condition that can occur when horses are kept idle and fed too much grain?
A. Azoturia.
91. Swelling at or near the fetlocks; a blemish that indicates hard work.
A. Windpuffs.
92. Degeneration of the small bone within the hoof is called what?
A. Navicular Disease.
93. What is a calcified lump on the inside of the cannon bone called?
A. Splint.
94. Which piece of equipment can be used to help with a horse who has a problem throwing its head?
A. A martingale.
95. What are games on horseback called?
A. Gymkhana.
96. What is the term used when the horse changes leads without interrupting the canter?
A. A flying change.
97. When working on your horse's head position, you must first teach him what?
A. How to flex his jaw and give to the bit.
98. What are the flying insects that lay small yellow eggs on the hair?
A. Bot flies.
99. What can live part of its life cycle in your horse's digestive tract, damaging his health and making him thin, weak, and unhealthy?
A. Internal parasites or worms.
100. What is the infection found in the frog of horses, recognized by a wet, black discharge, and a very foul odor?

A. Thrush.

4-H Dairy Bowl Study Questions and Answers

- Five breeds of dairy cattle are:
 - Holstein: Black & White, large size
 - Jersey: Fawn Colored, small size
 - Brown Swiss: Brown Colored, large size
 - Ayrshire: Red and White, medium size
 - Guernsey: Brown and White, medium size
- What is the gestation period for a cow?
 - 9 months or approximately 285 days.
- What is the mother cow called?
 - Dam.
- What is the father bull called?
 - Sire.
- True/False. **REGISTERED** dairy animals are purebred with registration papers filed with a Purebred Dairy Cattle Association.
 - True.
- True/False. A **GRADE** dairy animal is an animal with no breed registration.
 - True.
- What is another word for diarrhea or loose stool?
 - Scours.
- What is the first thick milk a cow gives after giving birth to a calf?
 - Colostrum.
- What is special about colostrum?
 - Contains antibodies which pass on immunity to certain diseases from cow to calf.
- Name two methods of dehorning calves and the reason for dehorning.
 - Electric dehorner, caustic potash burn-off or scooping method. Older animal's horns must be cut off. Reason for dehorning is so they won't hurt each other.
- An average Holstein cow should produce the following in a 305 day lactation period.
 - 16,000 lb. of milk or more.
- Name five dairy products?
 - Milk, butter, ice cream, cheese, cottage cheese and yogurt.
- Name the four stomachs of a ruminant.
 - Rumen, Reticulum, Omasum, Abomasum
- True or False. Dairy cattle are considered simple stomached animals.
 - False.

15. True or False. Cows eat hay, silage, green chop, pasture and grain.
A. True.
16. Average birth weights of newborn calves is _____.
A. Holsteins 95 lbs. Jerseys 55 lbs.
17. Which one of these helps your animal **build muscle**: Fats, Carbohydrates, or Proteins.
A. Proteins.
18. Name two feeds for dairy cattle that are a good source of protein.
A. Soybeans, alfalfa hay or any oilseed meals or fish meal.
19. What are the two primary types of feed stuffs?
A. Concentrates and Roughage.
20. Between Concentrates and Roughage which has the highest energy?
A. Concentrates.
21. Name 3 carbohydrate-type energy feeds.
A. Barley, Corn, Oats, Wheat, Beet Pulp and Molasses.
22. What is the main function of the digestive system?
A. To digest the feed in order to make nutrients readily available to the animal's body.
23. What do you call the amount of feed an animal eats in a 24 hr. period?
A. Ration.
24. Feed that is high in fiber is called what?
A. Roughage.
25. Feed that is low in fiber is called what?
A. Concentrate
26. Give examples of two concentrate feeds.
A. Corn, Soybean, Barley, Cottonseed
27. Name a roughage.
A. Hay, Pasture, Alfalfa Silage, Beet Pulp.
28. Name the three most critical minerals needed by dairy cattle.
A. Calcium, Phosphorous, and Sodium.
29. What does TDN stand for?
A. Total Digestible Nutrients.
30. What is Parturition?
A. The act of giving birth.
31. True or False. At milking time only 80% of the milk is removed from the udder.
A. True.

32. True or False. The hindquarters of an udder produce more milk than the forequarters.
A. True.
33. True/False. During peak milk production, cows can produce as much as 100 lbs. of milk in a 24 hr. period.
A. True.
34. True or False. A lactation cycle should be complete within 365 days.
A. True.
35. Name the two major functions of the first milk in dairy cattle.
A. 1. Provides nutrition to the animal offspring.
2. Source of passive immunity to the offspring via colostrum.
36. Name two minerals found in milk?
A. Calcium, phosphorus, magnesium, and potassium.
37. Why do you wash a cow's teats and udder before milking?
A. It removes the dirt and helps rid the area of bacteria, which could cause mastitis.
38. True or False. Colostrum fed to calves immediately after they are born helps prevent scours.
A. True.
39. True or False. Scours are easily transferred from one animal to another.
A. True.
40. What are ringworm symptoms?
A. Small to large scaly, hairless, gray areas especially on an animal's face and around the eyes.
41. True or False. Ringworm is easily spread by contact with other animals?
A. True
42. What is the standard treatment for ringworm?
A. Tincture of iodine applied with vigor and a brush, while being careful not to get any in the animal's eyes.
43. What is bloat?
A. The production of gas in the rumen of an animal producing a stable foam which interferes with belching and causes gas to accumulate.
44. True or False. Bloat will not cause death to an animal.
A. False
45. What is foot rot, include symptoms?
A. It is an invasion by an organism that grows best without oxygen in the skin and bottom tissue of an animal's foot causing swelling and lameness and causes a foul odor to come from the foot.
46. What is calf pneumonia and its symptoms?
A. It is an infection of the lungs and usually follows some other disease. Its symptoms are loss of appetite, high fever and a dry nose.

47. What are some of the problems associated with lice?
A. Growth prevention, loss of hair can lead to secondary infections of the skin.
48. What are warbles and how do they appear on animals?
A. Warbles are caused by a "heel fly" laying eggs around the feet of the animal, they appear as bumps on the animals' backs.
49. True or False. A man can get tuberculosis from cow's milk when the cow has TB.
A. True
50. True/False. Corn silage is usually recommended for calves under 6 months of age.
A. False.
51. What is CMT?
A. California Mastitis Test.
52. What does CMT measure?
A. Amount of somatic cells in milk.
53. True or False. Holsteins can be bred between 13-15 months of age.
A. True.
54. True or False. The heat period of a cow is 19-23 days.
A. True.
55. How many quarters does a cow have?
A. Four
56. Why is it necessary to forestrip quarters when milking?
A. It removes the first milk, which is high in bacteria and check for signs of mastitis. It also helps the cow release her milk.
57. Why should you dry teats and udder before milking?
A. It reduces the movement of bacteria in water and helps the cow release her milk.
58. Within how many hours after birth do calves lose their ability to absorb colostrum?
A. 12-18 hours
59. What protein is found only in milk?
A. Casein
60. What is a pituitary hormone that stimulates milk production?
A. Bovine Somatotropin (BST)
61. What does DHIA stand for?
A. Dairy Herd Improvement Association.
62. What is another word for milkfat?
A. Butterfat.
63. What disease of cows occurs at about the time of parturition that involves paralysis of the muscles and is associated with a low level of calcium in the blood?

A. Milk Fever.

64. What does A. I. stand for?
A. Artificial Insemination.
65. Milk that is less than one percent butterfat is called?
A. Skim Milk.
66. True or False: Urea is a non-protein, substance containing 45% nitrogen used as an additive in ruminant feeds.
A. True.
67. Returning food from the stomach to the mouth in ruminating is called?
A. Regurgitation.
68. How many days should a dry period be for a cow?
A. 60 days or 2 months.
69. True or False: You can always tell by looking at cows or their milk which ones have mastitis.
A. False.

