Memorize and be able to recognize the following feeds, animal breeds, equipment, and cuts of meat.

**FEED/FEEDSTUFFS**
- Blood Meal
- Buckwheat
- Complete Pelleted Feed
- Cracked Corn
- Corn
- Gluten Meal
- Dehydrated Alfalfa Meal
- Pellets
- Dicalcium Phosphate
- Distillers Grain
- Dried Sugar Beet
- Pulp Dried Whey
- Dry Molasses
- Fish Meal
- Dehydrated Alfalfa Meal
- Pellets
- Dicalcium Phosphate
- Distillers Grain
- Dried Sugar Beet
- Pulp Dried Whey
- Dry Molasses
- Fish Meal
- Ground Limestone (Calcium Carbonate)
- Hay Cube
- Soybean Hulls
- Soybean Meal
- Steam Rolled Barley
- Steam Rolled Oats
- Trace Mineral Salt
- Urea
- Wheat Middlings
- White Salt
- Whole Grain Oats
- Whole Grain Wheat
- Whole Kernel Corn

**NUTRITIONAL GROUPS**
- Energy
- Minerals
- Proteins
- Vitamins
- Water

**BREED IDENTIFICATION**

**BEEF BREEDS**
- Angus
- Brahman
- Charolais
- Chianina
- Gelbvieh
- Hereford
- Limousin
- Santa Gertrudis
- Shorthorn
- Simmental

**SHEEP BREEDS**
- Cheviot
- Columbia
- Corriedale
- Dorset
- Finnsheep
- Hampshire
- Katahdin
- Merino
- Rambouillet
- Southdown
- Suffolk

**SWINE BREEDS**
- Berkshire
- Chester White
- Duroc
- Hampshire
- Hereford
- Landrace
- Pietrain
- Poland China
- Spot
- Yorkshire

**MEAT GOATS**
- Boer
- Spanish
- Pygmy
- Kiko
- Angora
- Myotonic

**EQUIPMENT IDENTIFICATION**
- Ammonia sensor
- Antiseptic applicator
- Balling gun
- Beef cattle frame stick
- Beef Halter
- Breeding catheter
- Cattle clippers
- Cattle straw
- A.I. gun
- Cauterizing tail docker
- Curry comb
- Hoof trimmer
- Intravenous set
- Knife steel
- Lamb boot
- Lamb tube feeder
- Nasal cannula
- Needle teeth clippers
- Nipple waterer
- Nose lead
- Pig obstetrical forceps
- Pig resuscitator
- Pistol grip syringe
- Prolapse ring retainer
- Ralgro implant gun
- Ram marking harness
- Rumen magnet
- Scalpel
- Scotch Comb
- Shearer’s screwdriver
- Sheep shears
- Swine breeding spirite
- Test tube
- Transfer needle
- Wool card
- Dehorner
- Disposable syringe
- Drench gun
- Ear notchers
- Ear tag pliers
- Elastrator
- Electric fence tester
- Electronic I.D. tag
- Esmaculator
- Ewe spoon
- Foot rot shears
- Freeze branding iron
- Heat detection patch
- Hog snare
- Hoof chisel

**CUTS OF MEAT**

**BEEF**
- Arm pot-roast
- Blade roast
- Bottom round
- Rump roast
- Whole brisket
- Flank steak
- Ground beef
- Mock tender roast
- Petite tender
- Porterhouse steak
- Ribeye roast
- Ribeye steak
- Round steak
- Shank cross cut
- Shirt steak
- Short ribs
- T-bone steak
- Tenderloin steak
- Tip steak
- Top sirloin steak
- Tri-tip roast

**SHEEP**
- Arm chops
- Blade chops
- Center slice
- Frenched style roast
- Leg roast
- Loin chops
- Loin roast
- Rib chops
- Rib roast
- Ribs
- Shank
- Square cut
- Sirloin chops

**PORK**
- Arm roast
- Back ribs
- Blade Boston roast
- Blade steak
- Butterfly chops
- Center rib roast
- Fresh side
- Ground pork
- Loin chops
- Pork fresh ham center slice
- Rib chops
- Sirloin chops
- Sliced bacon
- Smoked ham
- Smoked picnic
- Smoked pork hock

**TRUE OR FALSE SAMPLE QUESTIONS**

Please circle the correct answer.

1. True/False: Market lambs can eat grass and be ready for slaughter without eating grain. (T)
2. True/False: Sheep may safely graze in the yard since ornamentals shrubs and bushes are not poisonous to sheep. (F)
3. True/False: Mastitis is a respiratory disease. (F)
4. True/False: A three-year old slaughter wether will have a break joint. (F)
5. True/False: A lamb should be braced when the judge feels it. (T)
6. True/False: The major source of income for sheep producers is the sale of market lambs. (T)
7. True/False: Wool hanging from an animal in ringlets is an indication of a fine fleece. (T)
8. True/False: A three-year old slaughter wether can grade prime. (F)
9. True/False: Virginia is home to the largest pork producer and packing company in the United States. (T)
10. True/False: USDA stands for United States Department of Agriculture. (T)
11. True/False: Wheat is higher in protein than corn. (T)
12. True/False: A desirable beef carcass with a modest amount of marbling would be choice. (T)
13. True/False: Urea or anhydrous ammonia are used as protein supplements for cattle. (T)
14. True/False: Mature Suffolk sheep normally produce 15 pounds of wool each year. (F)
15. True/False: The normal body temperature for cattle, sheep and pigs is around 101 degrees Fahrenheit. (T)
16. True/False: A castrated pig is called a wether. (T)
17. True/False: The rumen is the largest capacity part of a sheep or goat digestive system. (T)
18. True/False: All breeds of swine whose name ends in "shire" have erect ears. (T)

MULTIPLE CHOICE SAMPLE QUESTIONS
Please circle the correct answer.

19. If sheep are fed broiler litter, it may cause a mineral toxicity of which mineral? (D)
   A. Sulfur
   B. Selenium
   C. Magnesium
   D. Copper

20. Which substance is used to treat a disease? (C)
    A. Fertilizer
    B. Vaccine
    C. Antibiotic
    D. Implant

21. What is creeping? (B)
    A. Locking a ram up at night
    B. Providing extra feed for nursing lambs
    C. Exercising market lambs
    D. Bagging a ewe

22. What is a prolapse? (C)
    A. A feed additive
    B. A medicine
    C. When the vagina becomes inverted and sticks out
    D. Lamb born backwards

23. When a lamb is born, you should... (D)
    A. Check the ewes’ udder
    B. Identify the lamb
    C. Dip the naval in an iodine solution
    D. All of the above

24. A large, muscular, fast growing sheep breed: (D)
    A. Southdown
    B. Polypay
    C. Rambouillet
    D. Suffolk

25. Which is the most serious hoof problem in sheep? (C)
    A. Clogged Oil Duct
    B. Foot Scald
    C. Foot Rot
    D. Thrush
26. 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

27. Which of the following is not a legume?  
   A. Alfalfa  
   B. Bluegrass  
   C. Clover  
   D. Soybeans

28. 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

29. Which sheep breed is actually a composite?  
   A. Suffolk  
   B. Southdown  
   C. Dorset  
   D. Polypay

30. 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.

31. 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.

32. 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

33. “Spider lamb” is a problem most often associated with which breed?  
   A. Finn  
   B. Dorset  
   C. Suffolk  
   D. Polypay

34. Which sex tends to be the heaviest in a group of hogs that are the same age?  
   A. Gilt  
   B. Barrow  
   C. Boar  
   D. No difference

35. 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

36. When are the nutritional demands the highest during the production cycle of a cow, mare, ewe or sow?  
   A. Early gestation  
   B. Late gestation  
   C. Early lactation  
   D. Late lactation

37. 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

38. Which of the following requires the least amount of feed to produce a pound of gain?  
   A. Steer  
   B. Lamb  
   C. Barrow  
   D. Broiler

39. Which of the following is not a factor in determining beef yield grade?  
   A. Rib eye area  
   B. Back fat  
   C. Ribeye area  
   D. Liver size
40. 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? (C)
   A. Sickle hocked
   B. Droopy rump
   C. Shoulder too straight
   D. Ugly

41. Which swine breed could be added to a rotational crossbreeding program to improve maternal traits? (B)
   A. Duroc
   B. Yorkshire
   C. Hampshire
   D. Spot

42. When selecting a bull to breed to heifers, which piece of information would be helpful in predicting the birth weight of his calves? (C)
   A. his birth weight
   B. his sire’s birth weight
   C. his birth weight EPD
   D. his frame size

43. What type of lamb would have the highest dressing percent? (A)
   A. Large, fat lamb
   B. Large, trim lamb
   C. Small, trim lamb
   D. Large, trim, long tailed lamb

44. Which of the following chemicals would not be used in a foot bath to treat foot rot? (C)
   A. Copper Sulfate
   B. Formaldehyde
   C. Wormer
   D. All of the above

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

46. The time between estrous or heat periods in a ewe is roughly how many days? (D)
   A. 147 days
   B. 30 days
   C. 21 days
   D. 17 days

47. Which of the following will grow the fastest as a lamb? (C)
   A. Wether
   B. Ewe
   C. Ram
   D. No difference

48. Which two types of twine should not be used to tie wool bags? (B)
   A. Jute and sisal
   B. Plastic and Sisal
   C. Plastic and cotton
   D. Jute and Cotton

49. Which meat type breed has a white face and erect ears? (B)
   A. Southdown
   B. Dorset
   C. Rambouillet
   D. Suffolk

50. What is another name for white muscle disease? (D)
   A. Grass Tetany
   B. Bloat
   C. Hypomagnesia
   D. Stiff lamb disease

51. Which of the following growth implants may be used on feeder lambs? (A)
   A. Ralgro
   B. Compudose
   C. Synovex S
   D. Steer-oid

52. Which of the following is not an example of internal parasites? (B)
   A. Lung Worms
   B. Ticks
   C. Tape Worms
   D. Flukes
53. Which of the following is a legume? (C) 
   A. Orchard grass  
   B. Roughages  
   C. Soybean Meal  
   D. Concentrates

54. What is the main source of antibodies for a young lamb? (D) 
   A. Vitamin A  
   B. Calcium  
   C. Protein Supplement  
   D. colostrum

55. Which breed of sheep would have the finer wool? (C) 
   A. Suffolk  
   B. Dorset  
   C. Rambouillet  
   D. Columbia

56. The loin and leg of the lamb carcass is also called the... (A) 
   A. Hind saddle  
   B. American style leg of lamb  
   C. French style leg of lamb  
   D. Rear quarter

57. A deficiency of which mineral can cause “white muscle disease”? (A) 
   A. Selenium  
   B. Magnesium  
   C. Calcium  
   D. Phosphorus

58. Which breed is noted for having large numbers of lambs? (C) 
   A. Dorset  
   B. Hampshire  
   C. Fin Sheep  
   D. Southdowns

59. A lamb sirloin chop comes from the... (D) 
   A. Shoulder  
   B. Rib  
   C. Loin  
   D. Leg

60. Which of the following would not be considered a meat type breed? (D) 
   A. Suffolk  
   B. Hampshire  
   C. Dorset  
   D. Rambouillet

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

62. What is the approximate length of gestation in the ewe? (C) 
   A. 1 month  
   B. 3 months  
   C. 5 months  
   D. 9 months

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

64. What type of pasture would be most desirable for sheep? (B) 
   A. fescue and white clover  
   B. bluegrass and white clover  
   C. orchard grass and red clover  
   D. timothy and red clover

65. The amount of lamb eaten per person in the United States is approximately? (A) 
   A. 2 pounds  
   B. 5 pounds  
   C. 10 pounds  
   D. 25 pounds

66. Which would not be an acceptable cookery method for lamb rib chops? (C) 
   A. Broil  
   B. Braise  
   C.  
   D.
67. What is the term used to describe a castrated male sheep?  
   A. Steer  
   B. Wether  
   C. Gelding  
   D. Buck  
   (B)

68. Shelled corn is used in rations primarily as a source of?  
   A. Protein  
   B. Fat  
   C. Energy  
   D. Minerals  
   (C)

69. At what stage of growth does grass have the lowest protein?  
   A. Full bloom  
   B. Mid-bloom  
   C. Early bloom  
   D. Pre-bloom  
   (A)

70. Which of the following occurrences can be prevented by vaccination?  
   A. Foot Rot  
   B. Founder  
   C. Bloat  
   D. Overeating Disease  
   (D)

71. What is the normal body temperature of a sheep?  
   A. 98.6  
   B. 100  
   C. 101  
   D. 102.5  
   (C)

72. TDN or Total Digestible Nutrients is a measure of what in a feed?  
   A. Protein  
   B. Energy  
   C. Feed Consumption  
   (B)

73. What is another name for the wingless flies (sometimes called ticks) which affect sheep?  
   A. Lice  
   B. Stable Flies  
   C. Bots  
   D. Keds  
   (D)

74. Which is higher in protein?  
   A. Soybean Meal  
   B. Cottonseed Meal  
   C. Alfalfa Pellets  
   (A)

75. Which quality grade of beef is most commonly sold in grocery stores?  
   A. Prime  
   B. Choice  
   C. Good  
   D. Standard  
   (B)

76. The average gestation period of swine is?  
   A. 21 days  
   B. 114 days  
   C. 150 days  
   D. 130 days  
   (B)

77. Feeder pigs normally weigh how many pounds when sold?  
   A. 20 to 30 lbs.  
   B. 40 to 50 lbs.  
   C. 220 to 230 lbs.  
   D. 230 to 250 lbs.  
   (B)

78. The loin and leg of the lamb carcass is also called?  
   A. The Hindsaddle  
   B. American style leg of lamb  
   C. French style leg of lamb  
   D. Rear-quarter  
   (A)

79. Which of the following is not a deworming agent for sheep?  
   A. Phenothiazine  
   B. Thibenzole  
   C. Paint  
   D. Atgard  
   (C)
80. A symptom of bloat is? (C)
   A. Lameness
   B. Abortion
   C. Bulging on the left side
   D. Severe bulging on the right side

81. At what three points do we measure the back fat thickness on a market hog? (B)
   A. First rib, fourth rib, first lumbar vertebra
   B. First rib, last rib, last lumbar vertebra
   C. Last rib, first lumbar vertebra, last lumbar vertebra
   D. First rib, last rib, first lumbar vertebra

82. The mating of animals of different breeds is known as? (C)
   A. Inbreeding
   B. Rebreeding
   C. Crossbreeding
   D. None of the above

83. At what age should a heifer be bred? (C)
   A. 9 months
   B. 12 months
   C. 15 months
   D. 20 months

84. An intramuscular injection should be given (A)
   A. In the muscle
   B. Under the skin
   C. In the vein
   D. In the bone joints

85. On which ration should an 800 pound steer have the fastest rate of gain? (B)
   A. Corn silage + supplement
   B. Whole shelled corn + supplement
   C. Orchard grass pasture
   D. Full-fed oats + 4 lbs. Hay

86. What is another word for calving difficulty? (D)
   A. Laminitis
   B. Founder
   C. Enterotoxemia
   D. Dystocia

87. When the term “hot” is applied to a ration, the ration is? (A)
   A. High in concentrates
   B. Low in concentrates
   C. Warmed in an oven
   D. High in protein

88. What is the common name for the disease listeriosis which appears in cattle and sheep? (B)
   A. Bloat
   B. Circling disease
   C. Foot rot
   D. Overeating

89. What 2 breeds of cattle were used to develop the Santa Gertrudis breed? (B)
   A. Angus and Murrey Grey
   B. Shorthorn and Brahman
   C. Brahman and Limosin
   D. Shorthorn and Angus

90. Which breed of swine has erect ears? (A)
   A. Tamworth
   B. Poland China
   C. Chester White
   D. Landrace

91. A feed low in fiber and high in food value is? (D)
   A. Roughage
   B. Silage
   C. Haylage
   D. Concentrate

92. The average dressing percent of a market hog is? (D)
   A. 40%
   B. 50%
   C. 60%
   D. 55%
93. The largest compartment of the 4-part stomach of cattle or sheep is the? (D)
   A. Cecum   B. Reticulum   C. Abomasum   D. Rumen

94. The most desirable color for retail beef is? (A)
   A. Cherry Red   B. Grayish Pink   C. Pink   D. Dark Brown

95. To increase fall lambing rates which breed would you include in your flock? (C)
   A. Suffolk   B. Hampshire   C. Dorset

96. A castrated male pig is called a? (C)
   A. Steer   B. Wether   C. Barrow   D. Gilt

97. How old should a gilt be when she first farrows? (B)
   A. 6 months   B. 1 year   C. 2 years

98. 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? (B)
   A. Overeating   B. Bloat   C. Grass tetany

99. How does an elastator work? (B)
   A. Clamps & crushes cord   B. Cuts off circulation   C. Cuts scrotum on one side

100. A good source of protein for beef and sheep rations is: (C)
    A. Corn   B. Trace mineral salt   C. Soybean meal

101. What does the term intradermal mean: (C)
    A. Under the skin   B. In the Vein   C. In the skin

102. Why would we flush ewes? (B)
    A. To rid them of parasites   B. To stimulate estrus and increase ovulation rate   C. To increase feed efficiency

103. Providing extra feed for nursing lambs and calves is called: (C)
    A. Flushing   B. Foundering   C. Creeping

104. When the term burly is used in livestock judging it means: (C)
    A. Close at the knees   B. Upstanding   C. Rugged and masculine   D. More feminine

105. What frequent drought problem do we have with feeding green-chop corn silage: (D)
    A. Bloat   B. Prussic Acid Poisoning   C. White Muscling Disease   D. Nitrate Poisoning

106. The small flecks of fat in a cut of beef which give meat its flavor and is also one of the factors indicating quality is called: (B)
    A. Seam Fat   B. Marbling   C. External Fat   D. Speck Fat

107. One of the factors affecting the dressing percent of an animal is the amount of fill. Fill is: (B)
A. The amount of digestive tract and vital organs.
B. The amount of water and feed in the animal.
C. The amount of time a carcass is in storage.
D. The method of dressing.

108. Corn is usually used as the standard of energy in a ration. However, during a drought corn may become scarce and expensive. Choose the best energy source to use in replacing your corn: (A)
   A. Barley  C. Urea
   B. Peanut Meal  D. Alfalfa

109. The largest compartment of a ruminant stomach can store some 30 gallons of food and water. It is called the: (A)
   A. Rumen  C. Omasum
   B. Reticulum  D. Abomasum

110. One of our objectives is to have our replacement heifers calve as two year olds and then calve at the same time as the mature cows the next year. To do this they must weigh how much as 14-15 months of age when bred: (C)
   A. 200-400 lbs.  C. 600-800 lbs.
   B. 400-600 lbs.  D. 1000-1200 lbs.

111. Rotating animals to eat from one pasture for a time, to another pasture and so on is called: (B)
   A. Intravenous Feeding  C. Choice Feeding
   B. Controlled Grazing  D. Self-Feeding

112. Which of the following is not considered to be a British breed: (D)
   A. Hereford  C. Angus
   B. Shorthorn  D. Chianina

113. Dystocia in beef cattle is: (D)
   A. An Infectious Disease  C. A Vitamin Deficiency
   B. A Hormone  D. Calving Difficulty

114. Feeds which build bones and teeth and are necessary for important body processes are: (C)
   A. Protein  C. Minerals
   B. Fats  D. M & M's

115. Which class of cattle would require the highest protein level in their ration? (B)
   A. Cows Nursing Calves  C. 1000 Lbs. Steers
   B. 400-500 Lbs. Steers  D. Dry Cows

116. A lamb carcass weighs 60 pounds, has a 3.0 square inch loin eye, has a 0.30 inch back fat, and grades Choice+ - this carcass is? (C)
   A. Too light  C. Too Fat
   B. Light Muscled  D. Real Good

117. What is the term for removing sperm from a bull and putting that sperm into a female when she is in heat? (A)
   A. Artificial Insemination  C. Embryo Transfer
   B. Pregnancy Sharing  D. Estrous Synchronization

118. Which sex grows slowest, even when fed the same as the others? (C)
   A. Bull  C. Heifer
   B. Steer  D. They’re the same
119. How much dry feed would you expect a 1000 pound steer to eat, if he can eat all he wants? (C)
   A. 10 pounds  C. 24 pounds
   B. 17 pounds  D. 31 pounds

120. Which product is used to treat a disease once an animal already has it? (C)
   A. Vaccine  C. Antibiotic
   B. Implant  D. Bacterin

121. How can you tell if two hogs are littermates? (B)
   A. Left ear notch  C. The pigs are all the same color
   B. Right ear notch  D. The information written on their ear tag

122. The information on an injection product label says to administer the injection either subcutaneously or intramuscularly. Where would you give it? (B)
   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

123. What type of grade or score is not related to fatness of the animal? (D)
   A. Condition Score  C. Quality Grade
   B. Yield Grade  D. Frame Score

124. 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)
   A. Energy  C. Vitamin A
   B. Protein  D. Calcium

125. 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)? (D)
   A. 100  C. 6.0
   B. 200  D. 2.0

126. A calf is having trouble being born. What piece of equipment do you need? (B)
   A. Esophageal Feeder  C. Emasculator
   B. Obstetrical Chain  D. Drench Gun

127. Which factor is most closely related to whether a beef carcass grades Choice or Select? (D)
   A. Back fat  C. Whether it's a steer or heifer
   B. Amount of muscle  D. Amount of marbling

128. If a cow is in heat today when would be expected to be in heat again (B)
   A. 17 days from now  B. 21 days from now
   C. 283 days from now  D. 365 days from now

129. What method is used to administer de-wormers? (E)
   A. Oral  D. Injected
   B. Topical  E. All of the above

130. Maternal milk EPD is a measurement of? (B)
   A. Pounds of milk produced  B. Pounds of weaning weight that is due to milk production

131. What wholesale cut corresponds to the shoulder of cattle? (B)
   A. Shoulder  B. Chuck
132. Which market animal now sells for the highest price per pound (live basis)? (B)
   A. Hog  D. Steers and Lambs are the same
   B. Steer  C. Lamb
   C. Round  D. Plate

133. Which breed is tolerant of high temperatures, resistant to parasites, but is late maturing and has lower quality beef? (A)
   A. Brangus  D. Limousin
   B. Angus  C. Simmental

134. The time between when a drug is administered and the animal can safely be sold for slaughter is called? (B)
   A. Waiting Period  D. Safety Period
   B. Withdrawal Period  C. Medicinal Interval

135. What disease resulted in the slaughter of many thousands of livestock in England this year? (C)
   A. Foot Rot  D. Crazy Cow Syndrome
   B. Sore Mouth  C. Foot and Mouth

136. From the profile, an animal straight in the hock and walking with a naturally short, stiff stride is called? (D)
   A. Cow Hocked  D. Post Legged
   B. Stiff Legged  C. Sickle Hocked

137. What in the name of the technology used to measure fat and amount of muscle in a live animal? (B)
   A. Magnetic Resonance Imaging  D. Ultraviolet
   B. Ultrasound  C. Endoscopy

138. Which vitamin is related to green forage consumption by cattle and sheep? (A)
   A. Vitamin A  D. Vitamin B-6
   B. Vitamin C  C. Vitamin D

139. Which of the following is a major problem with quality of pork? (B)
   A. EPD  D. SPI
   B. PSE  C. ESP

140. After calving, the cow expels the afterbirth. What is the afterbirth officially called? (C)
   A. Pasturella  D. Platypus
   B. Progesterone  C. Placenta

141. 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)
   A. All the time  D. None of the time
   B. Half the time  C. 25% of the time

142. If you want to select highly productive replacement gilts that excel in the maternal traits, which piece of data is most useful? (A)
   A. Dam’s SPI  D. Number born alive in her own litter
   B. Days to 250  C. Back fat depth

143. Where do we measure back fat thickness and ribeye area on beef and lamb carcasses? (C)
   A. Between 4th and 5th ribs  D. Any of these are acceptable locations
   B. Between 10th and 11th ribs  C. Between 12th and 13th ribs
144. 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? (C)
   A. 225 pounds  C. 400 pounds
   B. 300 pounds  D. 450 pounds

145. Which structure is not a part of the reproductive tract of a female? (B)
   A. Ovary  C. Cervix
   B. Esophagus  D. Uterus

146. What is a problem that can result from lambs being docked very close to the body? (D)
   A. Internal parasites  C. Meat quality is reduced
   B. Limp when they walk  D. Rectal prolapse

147. What’s the problem with extremely large framed steers in the industry? (D)
   A. Produce carcasses that are too big  C. Have a low average daily gain
   B. Take a long time to finish properly  D. Both a and b

148. Farmers often add urea to corn silage as it goes from the field to the silo. Why? (A)
   A. Increase protein content  
   B. Increase energy content
   C. Adds calcium and phosphorous
   D. Keeps it from spoiling

149. Which hormone is associated with females showing standing heat? (D)
   A. Progesterone  C. Prostaglandin
   B. Prolactin  D. Estrogen

150. Ultrasound technology cannot determine which meat characteristics? (A)
   A. Firmness and color  C. Back fat thickness
   B. Marbling score  D. Loin eye area

151. Which view is best to determine if an animal is too straight in the shoulder? (B)
   A. Rear View  C. Front View
   B. Side View  D. Looking down from above

152. Which of the following diseases is very contagious, meaning that it can be spread from one animal to others in the same group? (C)
   A. Listeriosis, also known as circling disease
   B. Hypothermia, or low body temp.
   C. Foot Rot
   D. Enterotoxaemia/Overeating disease

153. Which retail cut contains a piece of spine? (A)
   A. Porterhouse steak  C. Top Round steak
   B. Ribeye steak  D. Flank Steak

154. A pork carcass weighs 135 pounds, has 0.7 inch of back fat and a loin eye area of 6.5 square inches. This carcass is? (C)
   A. Too fat  C. Too light
   B. Too light muscled  D. Very desirable

155. Which important things are contained in colostrum? (A)
   A. Antibodies  C. Protein
   B. Fat  D. All of these
156. Which feed can be used as a protein source for cattle and sheep, but provides no energy at all? (A)
   A. Urea  B. Corn gluten feed  C. Soybean Meal  D. Cottonseed Meal

157. What does the term gestation mean? (C)
   A. The time during which the mating process to take place.
   B. The period of time after the offspring has been weaned.
   C. The time period measured from conception to birth of the animal.
   D. The amount of time it takes for the birthing process to be completed.

158. The good pre-breeding reproductive management tool for the ewe flock and ram involve which of the following: (A)
   A. Flushing  B. Washing  C. Castrating  D. Cleaning the lambing barn

159. Which of the following sheep breeds is most likely to be used for out-of-season breeding and early fall lambing? (B)
   A. Hampshire  B. Dorset  C. Columbia  D. Suffolk

160. The ability of an animal to pass their genetic traits on to their offspring is called what? (C)
   A. Heterosis  B. Genealogy  C. Heritability  D. Backgrounding

161. Shelled corn is used in rations primarily as a source of? (C)
   A. Protein  B. Fat  C. Energy  D. Minerals

162. Which is the smallest framed breed of the following? (A)
   A. Southdown  B. Suffolk  C. Dorset  D. Hampshire

163. When does a ewe have the highest feed requirements? (D)
   A. Pregnancy  B. When nursing one lamb  C. Just after shearing  D. When nursing twins

164. When is grass at its most nutritious stage? (A)
   A. Vegetative  B. Early bloom  C. Full bloom  D. Mature

165. Feed additives are put in rations to? (D)
   A. Increase rate of gain  B. Improve feed efficiency  C. Treat diseases  D. All of these

166. Which of the following vitamin-mineral combination is associated with stiff lamb disease? (B)
   A. Calcium, phosphorus, vitamin d  B. Selenium, vitamin e  C. Sodium, vitamin c  D. Potassium, vitamin b-12

167. Which of the following would be considered a concentrate feed? (D)
   A. Alfalfa hay  B. Corn silage  C. Ryegrass pasture  D. Shelled corn

168. A sheep producers has a 125% lamb crop. If he has 100 ewes, how many lambs did his ewes have? (B)
   A. 100  B. 125  C. 150  D. 50
169. When we slaughter a lamb, approximately how much back fat should the carcass have? (B)
A. None  B. .15 inch  C. 5 inch  D. 1 inch

170. What does the term creeping mean? (B)
A. Locking a ram up at night  C. Exercising market lambs
B. Providing extra feed for nursing lambs  D. Bagging a ewe

171. A feed low in fiber and high in food value is? (D)
A. Roughage  B. Silage  C. Haylage  D. Concentrate

172. A good source of protein for beef and sheep rations is: (C)
A. Corn  B. Trace mineral salt  C. Soybean meal

173. Purified wool grease used in salves, cosmetics, and ointments is called? (B)
A. Woolite  B. Lanolin  C. Margin  D. Crimp

174. A fatal, degenerative disease affecting the central nervous system known as transmissible spongiform encephalopathies (TSE’s) is called: (B)
A. Ringworm  C. Shipping fever  D. Postpartum
B. Scrapie

175. A male animal that has only one normal size testicle descended into the scrotum is called what? (C)
A. Hermaphrodite  B. Freemartin  C. Cryptorchid  D. Mulefoot

176. When cattle twins are born and they are of different sex, the female is called a: (B)
A. Cryptorchid  B. Freemartin  C. Hermaphrodite  D. Mulefoot

177. Pigs born at the same time from the same sow are called: (D)
A. Piglets  B. Shoats  C. Feeder Pigs  D. Littermates

178. Which of the following products is used to synchronize cattle: (D)
A. Bovatec  B. Synovex  C. Invomec  D. Lutalyse

179. What type of examination is used to determine if heifers are big enough to breed? (C)
A. Pregnancy Exam  C. Pelvic Exam
B. Blood Pressure Test  D. Soundness Exam

180. What does EPD stand for? (C)
A. Early Pregnancy Diagnosis  C. Expected Progeny Difference
B. European Popular Demand  D. Eastern Police Department

181. What does heterosis refer to in a crossbreeding program? (B)
A. Heredity  C. Genealogy  D. Hypertension
B. Hybrid Vigor

182. The ability of an animal to pass their genetic traits on to their offspring is called what? (C)
A. Heterosis  B. Genealogy  C. Heritability  D. Backgrounding

183. Which of the following is not considered to be a British Breed? (D)
A. Hereford  B. Shorthorn  C. Angus  D. Chianina
184. TDN or Total Digestible Nutrients is a measure of what in a feed? (B)
   A. Protein
   B. Energy
   C. Palatability
   D. Feed Consumption

185. The instructions on an injectable medication recommend it be given subcutaneously. This means the injection is given where? (B)
   A. Orally
   B. Under the Skin
   C. In the Muscle
   D. In the Vein

186. Which animal is most efficient in converting forage into human food? (D)
   A. Steer
   B. Hog
   C. Chicken
   D. Lamb

187. Which feed additive is used to prevent heifers from coming into heat? (D)
   A. Bovatec
   B. Aureomycin
   C. Decoquinate
   D. MGA

188. Your vet has a balling gun in his hand. What is he going to do? (C)
   A. Remove horns
   B. Castrate
   C. Give a big pill
   D. Vaccinate

189. The most tender cut of beef is the? (D)
   A. Porterhouse steak
   B. Top loin steak
   C. Round steak
   D. Filet mignon

190. The term bovine relates to which animal? (A)
   A. Cattle
   B. Sheep
   C. Swine
   D. Horses

191. The average dressing percent of a market lamb is? (B)
   A. 40 percent
   B. 50 percent
   C. 60 percent
   D. 70 percent

192. Your market lambs are on good pasture but are not growing well and have dirty tails. What is most likely the problem? (A)
   A. The lambs need to be dewormed
   B. Listeriosis
   C. White muscle disease
   D. The lambs are not eating

193. A 240 pound barrow has 5.5 square inches of loin eye area and 0.8 inches of back fat. This is? (D)
   A. Too light muscled
   B. Too fat
   C. Too heavy
   D. Real good

194. What other trait is improved in addition to semen-production by having bulls with larger scrotal circumference? (B)
   A. rate of gain
   B. age at puberty of daughters
   C. amount of muscle
   D. disposition

195. What specie requires an iron supplement shortly after birth? (C)
   A. Cattle
   B. Sheep
   C. Swine
   D. Horse

196. For a swine producer with a farrow-to-finish program, what factor is most important in his profitability? (A)
   A. Feed cost
   B. Pigs per sow per year
   C. Rate of gain
   D. Back fat thickness

197. Which of the following breeds do not have any Brahman influence? (A)
   A. Longhorn
   B. Beefmaster
C. Santa Gertrudis  D. Brangus

198. Which of the following is an internal parasite that is not controlled with any deworming product? (B)
   A. Stomach worms  C. Lungworms
   B. Coccidian  D. Grubs

199. A ewe that is bred on October 1 should lamb on: (B)
   A. February 1  C. March 15
   B. March 1  D. April 1

200. Which of the following feeds is higher in energy content? (C)
   A. Oats  C. Wheat
   B. Barley  D. Alfalfa pellets

201. Which is the main source of disease-protection for the newborn animal? (B)
   A. Vaccination  C. Vitamin injection
   B. Colostrum milk  D. Creep feed

202. Which of these bulls is most likely to cause calving difficulty? (D)
   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

203. Ear notching of swine is used to identify? (D)
   A. The breeder  C. Pig number within the litter
   B. The litter number  D. Both b and c

204. In normal slaughter operations, which specie does not have the skin removed from the carcass? (B)
   A. Cattle  C. Sheep
   B. Pigs  D. All have it removed

205. Which of the following lamb cuts comes from the same part of the carcass as a porterhouse steak of beef? (C)
   A. Blade chop  C. Loin chop
   B. Rib chop  D. Sirloin chop

206. 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)? (C)
   A. 450  C. 3.0
   B. 150  D. Need more information

207. With which specie are the following terms associated: percent muscle, days to 230, litter size, needle teeth? (B)
   A. Cattle  C. Sheep
   B. Pigs  D. Horse

208. Giving injections in which way causes the greatest problem for the beef industry with injection site reactions? (B)
   A. Intravenous  C. Subcutaneous
   B. Intramuscular  D. Intradermal

209. When should a cow be artificially bred if she is seen in “standing heat” tomorrow morning? (B)
   A. Tomorrow morning  C. The day after tomorrow
   B. Tomorrow evening  D. Sunday night
210. A lamb carcass weighs 60 pounds, has a 3.0 square inch loin eye, and has 0.30 inch back fat and grades Choice+. The carcass is?  
A. Too light  
B. Light muscled  
C. Too fat  
D. Real good  
(C)

211. 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)

212. Meat from sheep less than 12 months of age is called:  
A. Lamb  
B. Veal  
C. Mutton  
D. Steak  
(A)

213. 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)

214. 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)

215. In using livestock medications you should:  
A. Read and follow label instructions  
B. Obey withdrawal requirements  
C. Use the proper does or amount  
D. All of the above  
(D)

216. 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 Test  
(C)

217. 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?  
A. More  
B. Less  
C. The same  
D. It doesn't matter  
(B)

218. You take the temperature of your ewe and find the temperature to be 106 degrees, what does this mean?  
A. The ewe is probably sick  
B. The ewe is chilled  
C. The ewe needs to be fed more  
D. Everything is normal  
(A)

219. You sold a market hog that weighed 220 pounds, what would you expect the carcass weight to be?  
A. 100 lb.  
B. 150 lb.  
C. 180 lb.  
D. 200 lb.  
(B)

220. You want to improve milking ability in your beef herd. What trait should you select for?  
A. Birth weight  
B. Weaning weight  
C. Yearling weight  
D. Mature weight  
(B)

221. Which specie has a digestive system most like a human?  
A. Pig  
B. Sheep  
C. Cow  
D. Horse  
(A)

222. Which is a likely problem with corn silage?  
(A)
A. High nitrate levels  
B. Fescue toxicity  
C. High energy levels  
D. Low dry matter levels

286. What compounds are called the building blocks of protein?  
A. Carbohydrates  
B. Amino acids  
C. Fatty Acids  
D. Dominos

287. Which factor is not used in determining beef yield grades?  
A. Live weight  
B. Rib eye area  
C. Back fat  
D. % kph fat

288. 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

289. Which lamb will have the lowest dressing percentage?  
A. 110 lb. ram lamb with .15 inch back fat  
B. 100 lb. wether lamb with tail and less than .10 inch back fat  
C. 115 lb. wether lamb with .15 inch back fat  
D. 120 lb. wether lamb with .25 inch back fat

290. Which of the following breeds would you expect to have the smallest diameter wool fibers?  
A. Rambouillet  
B. Columbia  
C. Dorset  
D. Hampshire

291. What daily rate of gain might you expect when finishing lambs on a high grain ration?  
A. 0.6 lb.  
B. 1.25 lb.  
C. 1.5 lb.  
D. 5.0

292. Which factor is most important in determining beef quality grade?  
A. Muscling  
B. Back-fat thickness  
C. Carcass length  
D. Marbling

293. Which of the following diseases is prevented with a 7-way clostridium vaccine?  
A. Overeating disease  
B. Shipping fever  
C. Tetanus  
D. Bloat

294. 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

295. When a calcium supplement is needed, which supplement should be purchased?  
A. Trace mineral salt  
B. Dicalcium phosphate  
C. Limestone  
D. Copper sulfate

296. Which specie has the lowest average dressing weight?  
A. Cattle  
B. Swine  
C. Sheep  
D. They're all the same

297. 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

298. What does an antibiotic do?  
A. Treats disease  
B. Prevents disease
299. 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)**

300. Oats and corn can be bought at the same price per pound, which is a less expensive source of energy? **(B)**
   A. Oats
   B. Corn
   C. They are equal
   D. Not enough information to answer

301. The label on an antibiotic says follow a 20-day withdrawal. What does this mean: **(B)**
   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

302. A 170 pound pork carcass has 0.7 inches of fat and a 6.0 square inch loin eye. This is: **(D)**
   A. Too fat
   B. Too light muscles
   C. Too small a carcass
   D. Real good

303. Atrophic Rhinitis is a swine disease of what system? **(A)**
   A. Respiratory
   B. Nervous
   C. Digestive
   D. Circulatory

304. What factors determine feeder calf grades? **(D)**
   A. Frame size
   B. Muscling
   C. Thriftiness
   D. All of the above

305. Which breed of cattle, developed in Texas, is a cross of Brahman and Shorthorn? **(C)**
   A. Braford
   B. Brangus
   C. Santa Gertrudis
   D. Longhorn

306. In which weight range are Blue O (B.O.) market lambs sold? **(D)**
   A. 150-170 lbs.
   B. 70-85 lbs.
   C. 85-110 lbs.
   D. 100-125 lbs.

307. What do the initials FEPD stand for in regards? **(D)**
   A. foundered ewe, pustular dermatitis
   B. fat ewe, probably dystocia
   C. foreign export production duty
   D. flock expected progeny difference

308. Which of the following implants are approved for lambs on feed? **(A)**
   A. Ralgro
   B. Lamboid
   C. Synovex
   D. None are approved

309. Which is the most common way in which foot rot is introduced into a flock? **(D)**
   A. Carried by birds
   B. Caught from cattle
   C. Deep, persistent mud
   D. Newly purchased sheep

310. Which is the highest in protein? **(B)**
   A. Corn silage
   B. Second cutting Orchard Grass
   C. First cutting Orchard Grass
   D. Corn grain

311. If lambs are being sold on a carcass weight basis for $1.20 lb. what would a equivalent live weight price be per pound? **(B)**
312. When finishing lambs on a high concentrate (80%+) ration, what would be an appropriate average daily gain (lb) and feed conversion rate, respectively:  
A. 0.3 & 6 to 1  
B. 0.5 & 4 to 1  
C. 0.7 & 5 to 1  
D. 1.5 & 8 to 1

313. What product is recommended for use in dipping baby lamb navel cords?  
A. Formaldehyde  
B. Alcohol  
C. Zinc sulfate solution  
D. Iodine

314. 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. Foot rot  
D. Vibriosis

315. 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%

316. 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. Coccodiosis  
C. Shipping fever  
D. Tapeworms

317. 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

318. In addition to age, muscle color and texture, which trait primarily determines beef quality grade?  
A. Marbling  
B. Ribeye area  
C. Back fat  
D. Conformation

319. Which amino acid is usually most limiting in swine rations?  
A. Lysine  
B. Cystine  
C. Citric  
D. None are required

320. Which beef carcass trait would be out of the mainstream of industry demand for fed steers?  
A. 0.32 in. Back fat  
B. 750 lb. Carcass  
C. Low choice  
D. 19 sq. In. Ribeye

321. Which is the most serious contaminant of U. S. wool?  
A. Manure  
B. Plastic twine  
C. Burs  
D. Dead sheep

322. During which season do Orchard grass, fescue and bluegrass make the most growth?  
A. Late April-early June  
B. Late June-Aug  
C. Late June-Aug  
D. June-July

323. 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

324. Which product would not have much use in estrous synchronization in heifers?  
A. MGA  
B. Lutalyse  
C. Synovex  
D. Synchronate B
325. Which de-wormer has a longer effectiveness in the animal?  
   A. Tramisol       B. Ivomec  
   C. Synanthic      D. Safeguard  

326. White swine breeds are generally noted for what?  
   A. Carcass merit  B. Growth rate  
   C. Maternal traits  D. Sire traits  

327. Which cattle type should not be implanted with growth promoting implants?  
   A. Yearling replacement heifers  B. Suckling feeder calves  
   C. Feedlot heifers  D. Yearling steers  

328. Which breed was not developed from crossing other breeds?  
   A. Santa Gertrudis  B. Columbia  
   C. Beefmaster  D. Arabian  

329. Which disease problem causes the nutrient problem of founder?  
   A. Energy excess  B. Energy deficiency  
   C. Selenium deficiency  D. Magnesium deficiency  

330. 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  

331. 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  

332. Which swine breed might best be described as a “White duroc”?  
   A. Yorkshire  B. Chester White  
   C. Landrace  D. Vietnamese Potbelly  

333. 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.  

334. What should happen to the protein percent of the ration when pigs grow from 50 pounds to 230 pounds?  
   A. Increase  B. Decrease  
   C. Stay constant at 16%  D. Stay constant at 12%  

335. 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  

336. Which factor does not affect beef carcass quality grades?  
   A. Marbling  B. Color of lean  
   C. Muscling  D. Maturity  

337. Which animal can routinely carry the thickest back fat and still produce an acceptable carcass?  
   A. Steer  B. Hog
338. 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. 0.3 lbs.  B. 1.5 lbs.  C. 3 lbs.  D. 4.5 lbs.  **(B)**

339. Which breed is noted for its carcass quality?
   A. Angus  C. Hereford
   B. Chianina  D. Limousin  **(A)**

340. Which animal is most efficient in converting forage into human food?
   A. Steer  C. Chicken
   B. Hog  D. No difference  **(A)**

341. Which factor is most important in determining beef yield grades?
   A. Hot carcass weight  B. Rib eye area  C. Back fat thickness  D. % kidney, pelvic, heart fat  **(C)**

342. The highest concentrations of cholesterol are found in
   A. Bone  B. Connective tissue  C. Muscle  D. Fat  **(D)**

343. Which of the following problems can be caused by low energy intake late in a ewe’s gestation? **(A)**
   A. Pregnancy toxemia  B. Milk fever  C. Grass tetany  D. Mastitis

344. Which swine breed is noted for carcass cutability?
   A. Landrace  C. Yorkshire
   B. Hampshire  D. Chester White  **(B)**

345. In Virginia, what percent of clear wool price does lamb’s wool bring?
   A. 100%  B. 85%  C. 75%  D. 50%  **(B)**

346. A hog carcass length is measured from the first rib to?
   A. Last lumbar vertebra  B. Last rib  C. Hock  D. Aitch bone  **(D)**

347. Which crop will produce the most total pounds of TDN?
   A. Alfalfa  B. Corn grain  C. Corn silage  D. Buttercups  **(C)**

348. Which performance information would be useful in selecting replacement gilt? **(C)**
   A. SPI (Sow productivity index)  B. 21 day litter weight  C. Both A & B  D. Neither A or B

349. With which species can the most rapid genetic change be made in a given time period? **(B)**
   A. Bovine  B. Porcine  C. Equine  D. Ovine

350. A final swine finishing ration should have about what percent crude protein? **(D)**
   A. 22%  B. 20%  C. 15%  D. 12%
351. When feeding heifers, 10 pounds of dry matter in a ration came from corn silage which tested 40% dry matter. How many pounds of silage should be fed?  
   A. 40 lbs. \hspace{2em} B. 25 lbs. \hspace{2em} C. 20 lbs. \hspace{2em} D. Not enough information

352. Which retail beef cut among the following usually sells for the highest price per pound?  
   A. Beef rib eye steak \hspace{2em} B. Beef eye of round steak \hspace{2em} C. Beef flank steak \hspace{2em} D. Beef top round steak

353. Which of the following does not affect beef quality grade?  
   A. Marbling \hspace{2em} B. Color \hspace{2em} C. Age \hspace{2em} D. Outside fat

378. Which mineral has a large effect upon reproduction and disease fighting ability of an animal?  
   A. Calcium \hspace{2em} B. Zinc \hspace{2em} C. Magnesium \hspace{2em} D. Selenium

354. Which nutrients of human interest are associated with the fat on meat products?  
   A. Cholesterol \hspace{2em} B. Calories \hspace{2em} C. Saturated fatty acids \hspace{2em} D. All of these

355. One of the biggest problems seen in animals grazing pastures in a wet year is?  
   A. Insufficient grass supply \hspace{2em} B. Low protein content \hspace{2em} C. Worms \hspace{2em} D. All of these

356. Which ration would product the fastest gain for a lamb or steer?  
   A. Grass-clover pasture \hspace{2em} B. Corn silage \hspace{2em} C. ½ hay, ½ grain \hspace{2em} D. 100% grain

357. An ionophore, such as Rumensin or Bovatec, will?  
   A. Improve feed efficiency \hspace{2em} B. Reduce rumen gas production \hspace{2em} C. Reduce coccidiosis \hspace{2em} D. All of these

358. A 600 pound beef carcass had .30 inches of fat, a 13 square inch ribeye, and modest marbling score. This is:  
   A. Too fat \hspace{2em} B. Too light muscled \hspace{2em} C. Too big a carcass \hspace{2em} D. Real good

359. Which birth weight EPD would be best for a bull to be bred to heifers?  
   A. +8 \hspace{2em} B. +5 \hspace{2em} C. +3 \hspace{2em} D. –1

360. A heifer has a temperature of 101 degrees. She is?  
   A. Too cold \hspace{2em} B. Getting sick \hspace{2em} C. Running a fever \hspace{2em} D. Normal

361. Which specie can produce a high-grading carcass without any grain feeding?  
   A. Steer \hspace{2em} B. Lamb \hspace{2em} C. Hog \hspace{2em} D. None

362. Which of the following devices is used to dock tails of lambs?  
   A. Elastrator \hspace{2em} B. Emasculator \hspace{2em} C. Emasculatome \hspace{2em} D. All of these can be used

363. Which source provides the best indication of a market price 6 months from now?  
   A. 5-year average prices \hspace{2em} B. Futures market
364. Which specie is most apt to come into heat before the young animal is weaned? (A)
   A. Cow
   B. Sow
   C. Ewe
   D. None

365. Which breed of cattle is most apt to produce fast gaining, lean, heavily muscled steers? (B)
   A. Shorthorn
   B. Charolais
   C. Polled Hereford
   D. Holstein

366. At what weight does the highest protein requirement (% of the ration) of a beef animal occur? (A)
   A. 400 lbs.
   B. 700 lbs.
   C. 1000 lbs.
   D. 1200 lbs.

367. In the swine business, what does PRV mean? (D)
   A. Pig riot victim
   B. Porcine round virus
   C. Pale, rotten and vile
   D. Peseudorabies virus

368. If rate of gain, leanness, and muscling are important, then which breed should you use? (B)
   A. Landrace
   B. Duroc
   C. Yorkshire
   D. Saddleback

369. Which feed grain is normally harvested in July? (B)
   A. Corn
   B. Barley
   C. Milo
   D. Soybeans

370. A 160 pound pork carcass has .8 inches of fat and 6.0 square inch loin eye. This is? (D)
   A. Too fat
   B. Too light muscled
   C. Too small a carcass
   D. Real good

371. Which factors are important in allowing cows to come back into heat after calving? (D)
   A. Time after calving
   B. Cow body condition
   C. Level of feeding
   D. All of these

372. When does a cow have the lowest feed requirements? (D)
   A. Just after calving
   B. Just after breeding
   C. Last 60 days of gestation
   D. Just after weaning

373. Which mineral is most likely to be needed by cows during the calving season on lush spring grass? (B)
   A. Calcium
   B. Magnesium
   C. Iron
   D. Potassium

374. Which of the following pieces of equipment is most often used to identify beef cattle? (A)
   A. Ear tagger
   B. Freeze brand
   C. Ear notcher
   D. Neck chain

375. Shelled corn costs $100 per ton and has 90% TDN. Hay costs $80 per ton and has 50% TDN. Which is the
     cheapest source of TDN (energy)? (A)
   A. Shelled corn
   B. They’re the same
   C. Hay
   D. No way of knowing

376. How much dry feed would you expect a 1100 pound steer or cow to eat each day? (B)
   A. 10 pounds
   B. 25 pounds
   C. 15 pounds
   D. 40 pounds
377. How much wool would you expect to shear from a 150 pound crossbred ewe if you only sheared once per year?
   A. 4 pounds  
   B. 12 pounds  
   C. 7 pounds  
   D. 20 pounds  
   **(C)**

378. From which wholesale cut is a beef T-bone steak made?
   A. Round  
   B. Rib  
   C. Loin  
   D. Chuck  
   **(C)**

379. Which specie is normally rebred before re-weaning?
   A. Sheep  
   B. Pig  
   C. Cow  
   D. None are  
   **(C)**

380. If you need extra energy in your ration, which feed should you use?
   A. Oats  
   B. Shelled corn  
   C. Alfalfa hay  
   D. Soybean meal  
   **(B)**

381. Which type of lameness is caused by a digestive system upset?
   A. Founder  
   B. Thrush  
   C. Foot rot  
   D. Uneven toe size  

382. In what part of the reproductive tract is the developing fetus found during pregnancy?  
   A. Vagina  
   B. Uterus  
   C. Cervix  
   D. Ovary  
   **(B)**

383. Which organization is responsible for meat inspection, which ensures a safe and wholesome meat supply?
   A. USDA  
   B. State Vet’s Office  
   C. Food and Drug Administration  
   D. Extension Service  
   **(A)**

384. Which of the following is not a macro mineral?
   A. Selenium  
   B. Magnesium  
   C. Sulfur  
   D. Potassium  
   **(A)**

385. The term hypocalcemia is also called?
   A. Osteoporosis  
   B. Calcium Complex  
   C. Calcium toxicity  
   D. Milk Fever  
   **(D)**

386. Unless born on pasture where they have access to soil baby pigs are especially susceptible to a deficiency of this mineral.
   A. Iron  
   B. Copper  
   C. Zinc  
   D. Lead  
   **(A)**

387. Deficiency of this vitamin can lead to rickets?
   A. Vitamin C  
   B. Vitamin D  
   C. Vitamin B12  
   D. Vitamin A  
   **(B)**

424. Which of the following is not a feed additive?
   A. Bovatec  
   B. MGA  
   C. Ralgro  
   D. CTC  
   **(C)**

426. Which of the following factors does not affect quality grade in lambs?
   A. Flank streaking  
   B. Conformation  
   C. Maturity  
   D. Loin eye marbling  
   **(D)**

427. Where are the highest concentrations of cholesterol found?
   A. Fat  
   B. Muscle  
   **(A)**
428. What is the term for a castrated hog? *(A)*
A. Barrow
B. Boar
C. Sow
D. Piglet

429. Which is closest to the ideal fat thickness for a finished market steer? *(B)*
A. 0.15 inch
B. 0.40 inch
C. 0.70 inch
D. 1.0 inch

430. Which hormone is most important in maintaining pregnancy? *(D)*
A. Estrogen
B. Prolactin
C. Oxytocin
D. Progesterone

431. Which type of fertilizer is needed by Orchard grass, but not by Alfalfa? *(C)*
A. Lime
B. Phosphorous
C. Nitrogen
D. Potassium

432. Which needle is smaller in diameter? *(B)*
A. 14 gauge
B. 20 gauge
C. 16 gauge
D. 18 gauge

433. How much would you expect the carcass from a 1200 pound steer to weigh? *(B)*
A. 600 pounds
B. 720 pounds
C. 840 pounds
D. 1000 pounds

434. At approximately what age do cattle get their first set of permanent front teeth? *(C)*
A. They’re born with them
B. 1 year
C. 2 years
D. 3 years

435. By what process can a cow produce a large number of calves in the same year? *(B)*
A. Artificial insemination
B. Embryo transfer
C. Estrous synchronization
D. Cesarean section

436. Semen used for artificial insemination in cattle is frozen and stored in what? *(C)*
A. Ice
B. Dry Ice
C. Liquid Nitrogen
D. Liquid Helium

437. Which of these can impair a bull’s reproductive performance? *(E)*
A. Warts on his penis
B. Very little body condition
C. Small scrotal circumference
D. None of these
E. All of these

438. If a Red Angus bull is mated to Hereford cows what percentage of his calves will be red? *(B)*
A. 50%
B. 100%
C. 75%
D. 0%

439. What normally happens to the price per pound of cattle as they get heavier? *(B)*
A. Price goes up
B. Price goes down
C. Depends what breed
D. None of these
440. What percent of her mature body weight should a heifer weigh at breeding? (C)
   A. 25%  
   B. 50%  
   C. 65%  
   D. 100%

441. After calving a cow expels afterbirth, this is also known as? (C)
   A. Progesterone  
   B. Uterine Waste  
   C. Placenta  
   D. PETA

442. Which breed of bull would be best suited to breed heifers to? (C)
   A. Brahman  
   B. Charolais  
   C. Angus  
   D. Maine Anjou

443. Ultrasound can be used to? (D)
   A. Compare intramuscular fat  
   B. Determine sex of a fetus  
   C. Determine pregnancy status  
   D. All of these

444. Which type of disease causes more sickness in calves that are just bought at a stockyard? (B)
   A. Lameness  
   B. Respiratory  
   C. Eye problems  
   D. Ringworm and warts

445. Which factor is most closely related to a cow having trouble delivering her calf? (B)
   A. Milk producing ability of the cow  
   B. Birth weight of the calf  
   C. If the cow was bred artificially she will have less trouble calving  
   C. Cows calving in the winter have more trouble than those calving in the spring do.

446. What is the process of producing milk called? (A)
   A. Lactation  
   B. Gestation  
   C. Ovulation  
   D. Palpation

447. Which animal should complete at least two gestations in one year? (C)
   A. Mare  
   B. Cow  
   C. Sow  
   D. None of the above

448. What does a cattle implant do? (D)
   A. Makes them grow faster  
   B. Makes them eat more feed  
   C. Makes the carcass leaner  
   D. All of these are true

449. In the ruminant digestive system, most of the roughage is broken down by bacteria action in the? (C)
   A. Abomasum  
   B. Omasum  
   C. Rumen  
   D. Reticulum

450. Quality Grade is associated with the eating characteristics of cuts we get from a beef carcass. Which is the only factor used to determine Quality Grade? (D)
   A. Fat thickness  
   B. Carcass weight  
   C. Ribeye area  
   D. Marbling Score

451. Which of these factors is most closely related to how quickly a cow begins to show heat after she calves, and therefore how quickly she may become bred? (B)
   A. Frame size  
   B. Condition score  
   C. Amount of muscle she has  
   D. Sex of her calf

452. Which is the correct ranking of feeds for TDN content (highest to lowest)? (A)
   A. Corn, Barley, Oats  
   B. Oats, Corn, Barley  
   C. Barley, Oats, Corn  
   D. Barley, Corn, Oats
453. Yorkshire gilts are mated to a Hampshire boar in a terminal breeding system. What happens to the pigs?  
   (C)  
   A. Barrows go to the market, gilts are kept for replacements  
   B. Pigs are sold through a marketing terminal  
   C. All pigs produced are sold for slaughter, no replacements are kept.  
   D. Gilts that are bred back to another Hampshire boar  

454. Which species of grass often has a fungus that causes reduced gain, reproductive problems, and reduced milk production?  
   (C)  
   A. Orchard grass  
   B. Bluegrass  
   C. Tall Fescue  
   D. Switchgrass  

455. Why is it a good idea to vaccinate ewes and cows for certain diseases about 4 to 6 weeks before the end of pregnancy?  
   (D)  
   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  

456. Which grade or score is most closely related to the mature size of an animal?  
   (D)  
   A. Yield Grade  
   B. Quality Grade  
   C. Condition score  
   D. Frame Score  

457. Which of the following diseases is not contagious, meaning that it cannot be spread from one animal to another in the same group?  
   (D)  
   A. Foot rot  
   B. Sore mouth  
   C. Pinkeye  
   D. Enterotoxaemia/Overeating disease  

458. Which breed is noted for muscling, growth, and high milk production?  
   (D)  
   A. Angus  
   B. Charolais  
   C. Limousin  
   D. Simmental  

459. 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?  
   (B)  
   A. Pork  
   B. Beef  
   C. Lamb  
   D. All of them  

460. Which feed contains the lowest protein content?  
   (A)  
   A. Corn  
   B. Oats  
   C. Alfalfa Meal  
   D. Soybean Meal  

461. Which of the following would not commonly be used in a sheep foot bath?  
   (A)  
   A. Iron Sulfate  
   B. Copper Sulfate  
   C. Zinc Sulfate  
   D. Formaldehyde  

462. What is the desirable birth weight for a pig?  
   (B)  
   A. 1 pound  
   B. 3 pounds  
   C. 6 pounds  
   D. 10 pounds
**Word Matching Sample Questions**

Please match the words. Some words may have multiple options available to one word.

463. Match the species name with the scientific name.

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<tr>
<td></td>
<td>B Horse -</td>
<td>A. Porcine</td>
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<td>C Cattle</td>
<td>B. Equine</td>
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<td></td>
<td>D Sheep</td>
<td>C. Bovine</td>
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<td>A Swine</td>
<td>D. Ovine</td>
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464. Match the correct gestation period of the species

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<td></td>
<td>B ewe</td>
<td>A. 283 days</td>
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<td>C sow</td>
<td>B. 147 days</td>
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<td>A cow</td>
<td>C. 114 days</td>
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465. Match the desirable birth weight with the species:

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<td></td>
<td>B Cattle</td>
<td>A. 3 lbs.</td>
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<td>C Sheep</td>
<td>B. 80 lbs.</td>
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<td>A Hogs</td>
<td>C. 12 lbs.</td>
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466. Match with the protein amounts

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<td>C Soybean Meal</td>
<td>A. 18-20%</td>
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<td></td>
<td>D Cottonseed Meal</td>
<td>B. 10-14%</td>
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<td></td>
<td>B Clover Hay</td>
<td>C. 44%</td>
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<td></td>
<td>A Alfalfa Pellets</td>
<td>D. 33%</td>
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467. How much should each species gain per day.

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<td>D Sheep</td>
<td>A. More Than 1 Lb.</td>
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<td>C Cattle</td>
<td>B. 2 Lbs.</td>
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<td></td>
<td>B Hogs</td>
<td>C. 3 Lbs.</td>
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<td>D. Less Than 1 Lb.</td>
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468. Match the following diseases with an appropriate description

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<td>D Pneumonia</td>
<td>A. Gut disease caused by a bacteria that can be fatal</td>
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<td></td>
<td>B Coccidiosis</td>
<td>B. Parasitic disease of the gut</td>
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<td></td>
<td>A Enterotoxemia</td>
<td>C. Reproductive disease most often affecting cattle</td>
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<td></td>
<td>C Leptospirosis</td>
<td>D. Infection in the lung</td>
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469. Match with product with use. Options can be used more than once.

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<tr>
<td></td>
<td>D Ivomec</td>
<td>A. Feed additive – increase efficiency</td>
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<td>C Lutalyse</td>
<td>B. Growth promotant implant</td>
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<td></td>
<td>A Bovatec</td>
<td>C. Used in estrous synchronization</td>
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<td></td>
<td>D Synovex</td>
<td>D. Deworming product</td>
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<td></td>
<td>C Synchromate B</td>
<td>E. Feed additive – prevents estrous</td>
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<td></td>
<td>A Rumensin</td>
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<td></td>
<td>D Tramisol</td>
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<td>E or C MGA</td>
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470. Match the term for a castrated male with the appropriate species.

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<tr>
<td></td>
<td>B Swine</td>
<td>A. Gelding</td>
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<td></td>
<td>D Cattle</td>
<td>B. Barrow</td>
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<tr>
<td></td>
<td>A Horse</td>
<td>C. Wether</td>
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<td>C Sheep</td>
<td>D. steer</td>
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471. Match the cattle breed with its description
- **B** Limousin     A. British breed noted for marbling
- **A** Angus       B. French breed – high cutability
- **D** Santa Gertrudis   C. High growth and milk Austrian breed
- **C** Simmental   D. Cross of Brahman and Shorthorn

472. 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

473. 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%

474. 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, Synchromate B D. Control cattle grubs

475. Match the breed with the most appropriate description
- **D** Charolais     A. British breed noted for marbling
- **B** Longhorn     B. Light muscled noted for calving ease
- **A** Angus       C. Composite Breed
- **C** Beefmaster   D. High growth French breed, noted for cutability

476. Match the sheep breed with the appropriate characteristics:
- **D** Dorset     A. Prolific
- **A** Finnsheep   B. Developed from Finn, Dorset, Rambouillet, Targee
- **C** Columbia   C. Developed from Lincoln and Rambouillet
- **B** Polypay   D. Year round breeding, meat type

477. Match the mineral with the condition it is associated with:
- **C** Copper   a. white muscle disease
- **D** Calcium & Phosphorous   b. grass tetany
- **B** Magnesium   c. dead sheep
- **A** Selenium d. urinary calculi

478. Match the nutritional disease with the cause
- **D** Grass tetany   A. Calcium: Phosphorous ratio
- **C** White muscle disease   B. Low energy level
- **B** Pregnancy toxemia C. Selenium deficiency
- **A** Milk fever   D. Magnesium deficiency

479. 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).
- **B** Bovatec A. Use to synchronize estrus
- **C** Synovex   B. Feed additive, improves feed efficiency
- **D** Ivomec   C. Growth promotant implant
- **A** Lutalyse D. Systemic dewormer
**WORD MATCHING SAMPLE QUESTIONS**
Please give a short answer to the following questions.

480. What 3 parts of the ruminant are collectively known as the fore-stomach?
* Rumen, Reticulum, and Omasum

481. In the ruminant digestive system the honeycomb is another name for the?
* Reticulum

482. Which part of the ruminant digestive system is the true stomach?
* Abomasum

483. The common name for the disease brucellosis is?
* Bangs

484. The term parturition is related to what system?
* Reproductive

485. What are the lamb quality grades?
* Prime, Choice, Good, Utility and Cull

486. Dressing percent is a comparison of what 2 measures?
* Live weight and carcass weight

487. What are the 2 designations which describe the palatability of pork?
* U.S. and Utility

488. Name the cutability grades for pork?
* 1, 2, 3, 4

489. List these grades from the fattest to leanest.
* 2. Choice
* 3. Select
* 1. Prime
* 4. Standard