

Name: KEY  
Contestant Number: \_\_\_\_\_

2005 North Carolina 4-H State Skillathon  
July 7, 2005

*WRITTEN TEST - SENIOR - 2 POINTS EACH*  
*PLEASE FILL IN THE CORRECT ANSWER IN EACH BLANK*

- C 1. Of the following animals, which has a digestive system most similar to humans?  
A. Cattle                      B. Sheep                      C. Swine                      D. Horse
- B 2. Of the following which has the highest estimated heritability?  
A. Reproduction              B. Rib Eye Area              C. Feed Conversion              D. Weaning Weight
- B 3. The hindsaddle of a lamb carcass composes 50% of the carcass weight and approximately what % of the carcass value?  
A. 45 %                      B. 55 %                      C. 65%                      D, 75%
- A 4. When using the universal ear notching system on pigs, the notch for litter number goes in which ear?  
A. Right                      B. Left                      C. Both
- D 5. A deficiency of which mineral can lead to "white muscle disease" in young lambs and calves?  
A. Iron                      B. Calcium                      C. Phosphorus                      D. Selenium
- C 6. What is the single most important factor determining profitability in a sheep flock?  
A. Lamb Prices                      B. Slaughter Weight  
C. Ewe Productivity                      D. None of the Above
- D 7. Cottonseed Meal contains about \_\_\_\_\_ percent protein.  
A. 10                      B. 20                      C. 30                      D. 40
- A 8. This classification of sheep breeds includes meat-type breeds used primarily as terminal sires for market lamb productions.  
A. Ram Breeds                      B. Dual Purpose Breeds                      C. Ewe Breeds                      D. Terminal Breeds
- B 9. Which of the following terms is a mating system, which concentrates the inheritance of one or more outstanding ancestors?  
A. Outbreeding                      B. Linebreeding                      C. Backcross                      D. Terminal
- D 10. Wool that is 20 microns in diameter is considered:  
A. Quarter Blood              B. 3/8 Blood                      C. 1/2 Blood                      D. Fine
- D 11. One way to test your goat for dehydration is a "skin pinch test". If your goat is dehydrated, what would you see?  
A. Skin would be dry and hairless  
B. Skin would return to normal flattened out appearance in 2-3 seconds  
C. Goat would not let you get close enough to perform a skin pinch test  
D. Skin would stay standing up in the pinch for more than 2-3 seconds

- B 12. Improper mineral balance in a show wether's diet may cause:  
A. Founder    B. Urinary Calculi    C. Colic    D. Foot Rot
- False 13. True or False. At birth you should dip the navel stump in 2% iodine solution to prevent infections.
- B 14. Which term is used to describe the intermingling of fat within the muscle?  
A. Dressing    B. Marbling  
C. Upgrading    D. Stuffing
- D 15. If your heifer is in ideal breeding condition, her body score would be:  
A. 1 to 2    B. 2 to 3    C. 4 to 5    D. 6 to 7
- A 16. In what country did the Murray Gray breed originate?  
A. Australia    B. France  
C. Switzerland    D. Italy
- B 17. How many permanent teeth do swine have?  
A. 32    B. 44    C. 36    D. 40
- D 18. What of the following is used in calculating adjusted 205 - day weaning weights in cattle?  
A. Age of Calf    B. Age of Dam    C. Sex of Calf    D. All of the above
- C 19. Which hormone is responsible for maintaining pregnancy?  
A. Estrogen    B. Follicle Stimulating Hormone (FSH)  
C. Progesterone    D. Luteinizing Hormone (LH)
- C 20. Which production traits are most often associated with traditionally white swine breeds?  
A. Carcass merit    B. Growth and feed efficiency  
C. Maternal    D. Excel in all production traits
- A 21. What is another name for "Circling Disease"?  
A. Listeriosis    B. Leptospirosis    C. Vibriosis    D. Ovalosis
- D 22. Which of the following is an example of a legume?  
A. Alfalfa    B. Clover    C. Soybeans    D. All of the above
- B 23. One kilogram equals \_\_\_\_\_ pounds.  
A. 1.1    B. 2.2    C. 3.3    D. 100.0
- D 24. Where is the semen deposited in the sow?  
A. Bladder    B. Vulva    C. Vagina    D. Cervix
- D 25. The building blocks for protein are:  
A. Steroids    B. fats    C. Hormones    D. amino acids

## MEAT IDENTIFICATION - SENIOR - 2 POINTS EACH

PLACE THE LETTER FOR THE CORRECT ANSWER IN THE BLANK

- \_\_\_**B**\_\_\_ 1. Identify the cut of lamb.  
A. Fore Shank                      B. Center Cut Leg Steak                      C. Leg of Lamb
- \_\_\_**B**\_\_\_ 2. Identify the cut of beef.  
A. Chuck Eye Steak                      B. T-bone Steak                      C. Cubed Steak
- \_\_\_**C**\_\_\_ 3. Identify the cut of beef.  
A. Top Round Steak                      B. Sirloin Steak                      C. Cubed Steak
- \_\_\_**B**\_\_\_ 4. Identify the cut of pork.  
A. Top Loin Chop                      B. Center Loin Chop                      C. Rib in Roast
- \_\_\_**B**\_\_\_ 5. Which species does this cut of meat come from?  
A. Beef                      B. Lamb                      C. Pork

## HAY JUDGING CLASS QUESTIONS - SENIOR - 2 POINTS EACH

PLACE THE LETTER FOR THE CORRECT ANSWER IN THE BLANK

- \_\_\_**B**\_\_\_ 6. Which of the following placings is correct for this class of hay?  
A. 1-2-3-4                      B. 2-1-4-3                      C. 4-2-1-3                      D. 4-1-2-3
- \_\_\_**B**\_\_\_ 7. Which hay sample has the most desirable color?  
A. 1                      B. 2                      C. 3                      D. 4
- \_\_\_**D**\_\_\_ 8. Which hay has the most foreign matter?  
A. 1                      B. 2                      C. 3                      D. 4
- \_\_\_**C**\_\_\_ 9. Which hay has the least desirable color?  
A. 1                      B. 2                      C. 3                      D. 4
- \_\_\_**B**\_\_\_ 10. Which hay has the most stems?

**MEAT JUDGING - SENIOR - 2 POINTS EACH**  
PLACE THE LETTER FOR THE CORRECT ANSWER IN THE BLANK

- A   11. Which of the following is the correct one for this class?  
A. 1-2-3-4                      B. 4-3-2-1                      C. 2-1-3-4                      D. 2-4-3-1
- C   12. Which steak has the most lean?  
A. 1                                      B. 2                                      C. 3                                      D. 4
- B   13. Which steak has the most marbling?  
A. 1                                      B. 2                                      C. 3                                      D. 4
- D   14. Which steak has the least desirable color to the lean?  
A. 1                                      B. 2                                      C. 3                                      D. 4
- B   15. Which steak has the least lean?  
A. 1                                      B. 2                                      C. 3                                      D. 4

**2005 NC 4-H Skillathon Contest**  
**Senior Breed Identification**

(Place the letter of the correct breed and the number of the correct breed description in the blanks beside the number that corresponds to the picture)

<u>Breed #</u>	<u>Description</u>
(Picture)	
1. <u>  A  </u> <u>  2  </u>	
2. <u>  B  </u> <u>  4  </u>	
3. <u>  D  </u> <u>  3  </u>	
4. <u>  E  </u> <u>  7  </u>	
5. <u>  G  </u> <u>  5  </u>	
6. <u>  I  </u> <u>  9  </u>	

**Beef Breeds**

- A. Charolais
- B. Limousin
- C. Chianina
- D. Gelbvieh

**Sheep Breeds**

- E. Montadale
- F. Cheviot
- G. Dorset

**Swine Breeds**

- H. Poland China
- I. Spot their fast-
- J. Hampshire

**Beef Breed Descriptions**

- 1. Large Framed, developed in Italy as dual purpose for beef and draft
- 2. High growth breed originally from France known for cutability
- 3. Developed in Germany with good carcass cutability and relatively early puberty
- 4. Developed in France with moderate growth rate and frame size and high carcass cutability

**Sheep Breed Descriptions**

- 5. English, white face, meat breed known for out of season breeding
- 6. Small sized meat breed noted for its hardiness from Scotland
- 7. Dual-purpose breed developed in U.S. from crossing Columbia and Cheviot breeds

**Swine Breed Descriptions**

- 8. Lean, heavy muscled, black breed with six points and droopy ears
- 9. Developed in the US and popular with commercial swine producers for their ability to transmit gaining, feed efficient, meat qualities to their offspring.
- 10. Became very popular because of the hardiness, vigor, prolificacy and foraging characteristics that they possess

**2005 NC 4-H Skillathon Contest  
Senior Equipment Identification**

(Place the letter of the correct piece of equipment and use category in the blanks to the right of each numbered piece of equipment)

<u>Equipment ID</u>	<u>Use Category</u>	<u>Equipment ID List</u>	<u>Use Category List</u>
1. <u>  E  </u>	<u>  8  </u>	A. Tube Dehorner	1. Breeding
2. <u>  G  </u>	<u>  6  </u>	B. Test Tube	2. Castration/Docking
3. <u>  A  </u>	<u>  2  </u>	C. Electronic ID Tag	3. Facilities/animal restraint
4. <u>  F  </u>	<u>  7  </u>	D. Balling Gun	4. Identification
5. <u>  C  </u>	<u>  4  </u>	E. Wool Card	5. Obstetrical/neonatal
		F. Electric Fence Tester	6. Vaccination/product Administration
		G. Esophageal Feeder	7. Diagnostic (animal or environment)
		H. Rumen Magnet	8. Showing/ Grooming
		I. Golden Pig Rod	
		J. Pig Tooth Nippers	

**FEED IDENTIFICATION - SENIOR - 2 POINTS EACH**

PLACE THE LETTER FOR THE CORRECT ANSWER IN THE BLANK

- B   26. Identify the following feed.  
 A. Alfalfa Meal                      B. Cottonseed Meal                      C. Feather Meal
- A   27. Identify the following feed.  
 A. Potassium Chloride                      B. Trace Mineral Salt                      C. Urea
- A   28. Identify the following feed.  
 A. Riboflavin                      B. Vitamin A                      C. Fish Meal
- B   29. Identify the following feed.  
 A. Cottonseed                      B. Gin Trash                      C. Cottonseed Hulls
- C   30. Identify the following feed.  
 A. Milo                      B. Beet Pulp                      C. Buckwheat
- A   31. Which nutrient group does this feedstuff belong?  
 A. Energy                      B. Minerals                      C. Proteins

## 2005 State Skillathon Senior Team Exercise

### Steer Finishing Performance & Economics

You decide to ship 90 of your heaviest steers to a custom feed yard to be finished. The average weight of your steers was 580 pounds when they were loaded on the truck.

The feedlot manager called and gave you the following information. The ninety steers weighed an average of 525 pounds upon arrival at the lot and after 175 days on feed, they now weigh 1125 pounds. The cattle have consumed 171 tons of feed. The total cost of feeding all the cattle, including interest to this point has been \$25,650. The cattle are estimated to have an average dressing percentage of 64%. Calculate the following performance and economic measures on the steers.

1. Can you get all ninety steers onto one truck? Yes or **No**  
(Truck weighs 31,000 Lb empty and a maximum of 80,000 Lb. Loaded)
  
2. What has been the steers' on feed average daily gain? \_\_\_\_\_ **3.43** \_\_\_\_\_ Lbs.  
(The average daily gain since they arrived at the feed yard)
  
3. What has been the steers average Feed Conversion? \_\_\_\_\_ **1:6.33** \_\_\_\_\_ Lbs.  
(Pounds of feed per pound of gain)
  
4. What is the estimated average carcass weight of these steers? \_\_\_\_\_ **720** \_\_\_\_\_ Lbs.
  
5. What is the total feeding cost per pound of gain? \_\_\_\_\_ **\$ . 47** \_\_\_\_\_