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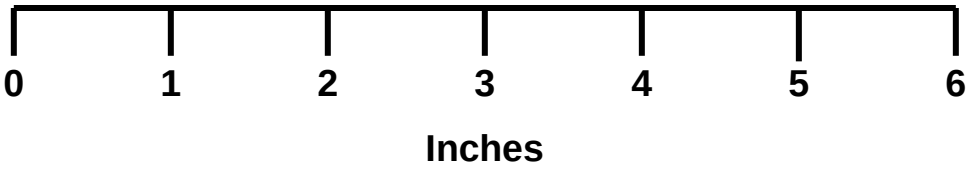

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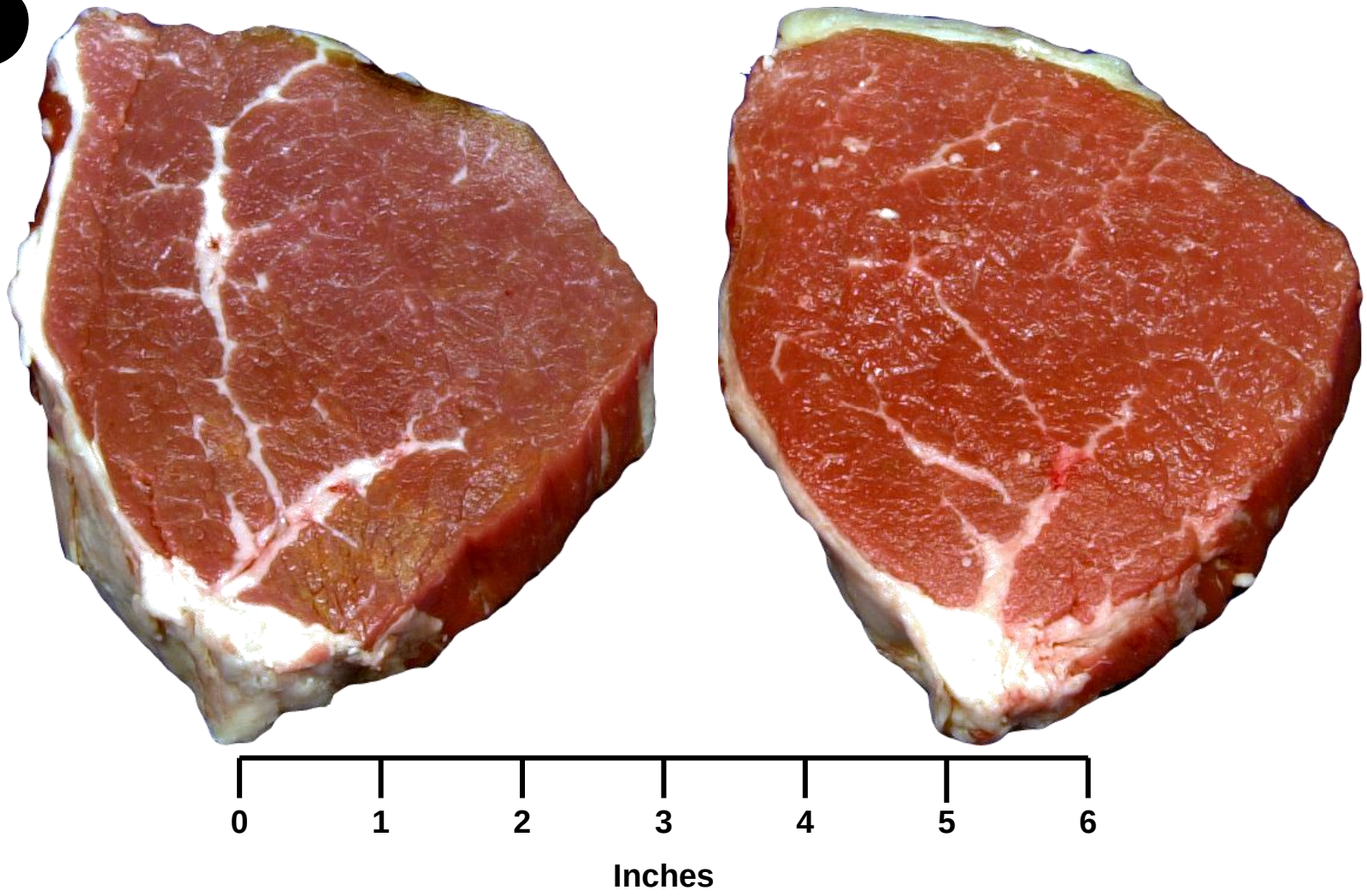

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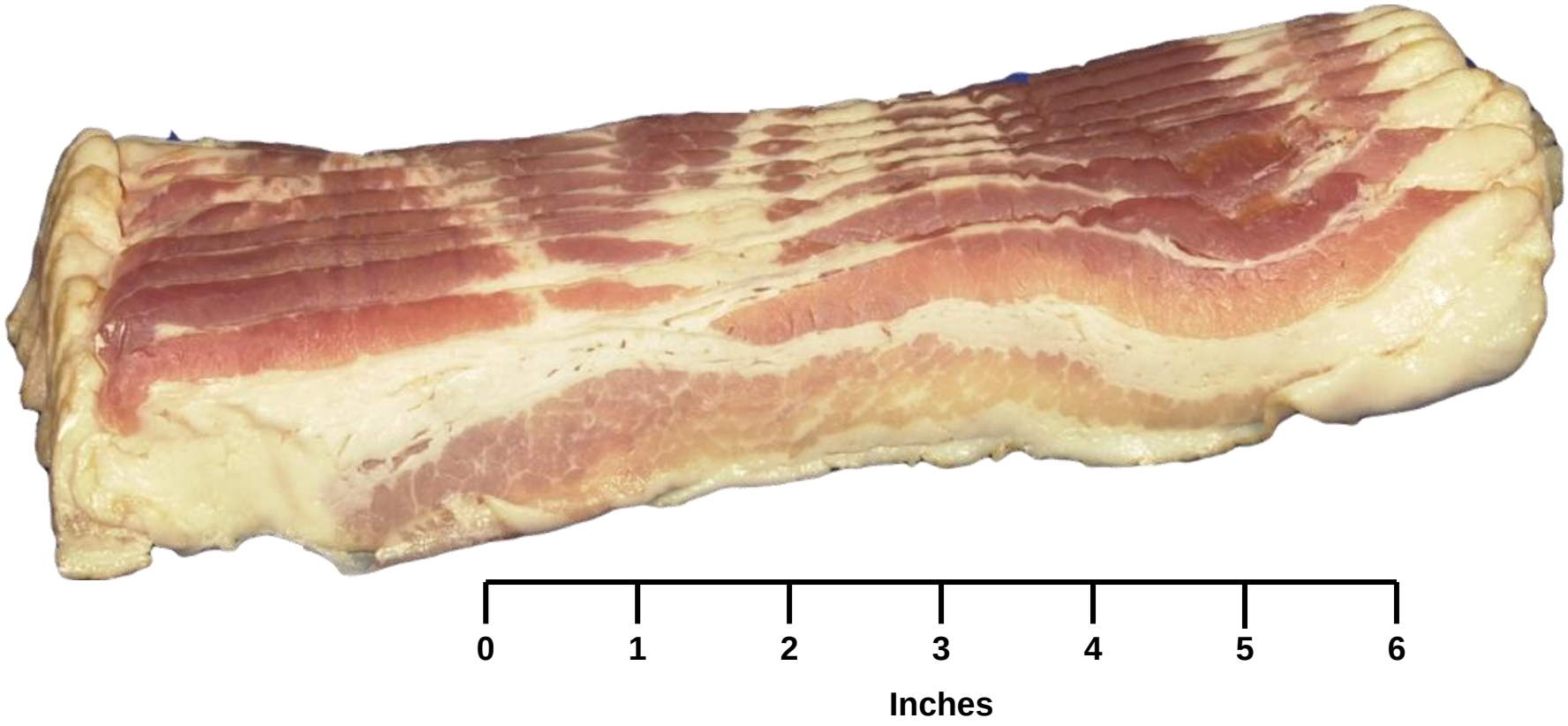

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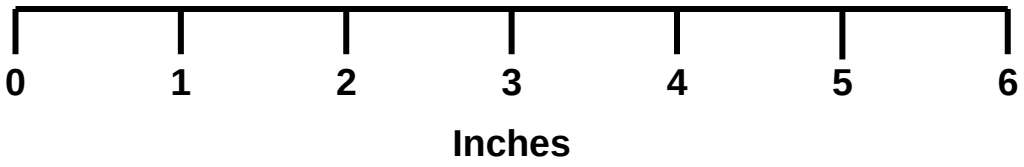

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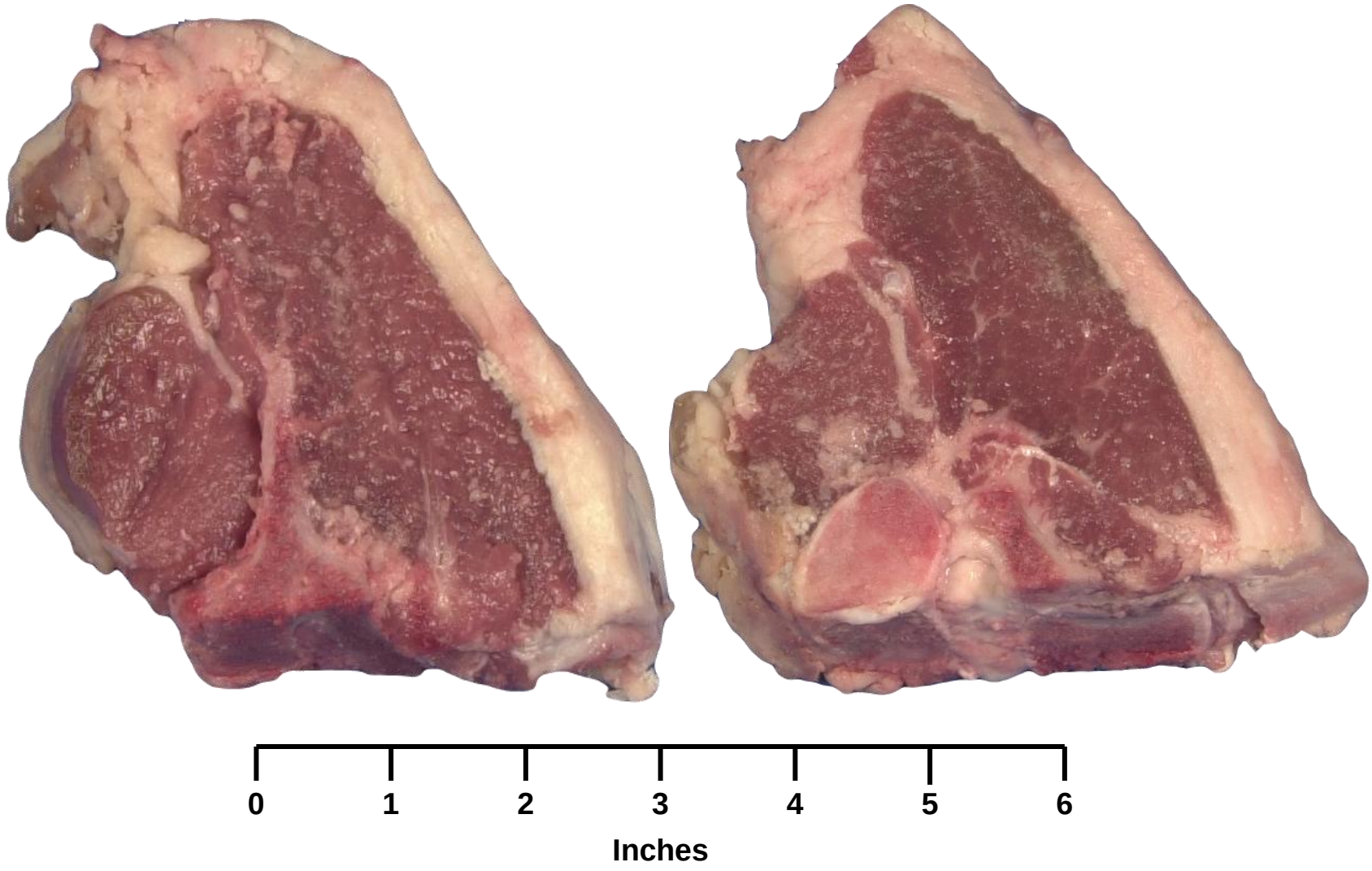


Name_____KEY_____ Contestant #_____County_____

Senior Retail Meat Cut Identification-2011

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each retail meat cut. Use capital letters and write neatly. **Seniors** provide answers for retail cut name, species of cut, and wholesale cut of origin. Each question is worth 5 points (150 points total for Seniors).

	Retail Cut Name	Species of Cut	Wholesale Cut of Origin
1.	21	B	D
2.	3	B	A
3.	35	B	G
4.	4	B	B
5.	83	P	O
6.	81	P	T
7.	68	P	Q
8.	51	L	J
9.	62	L	M
10.	56	L	K

Retail Names – to be used in answer column 1 by Clovers, Intermediates, and Seniors

Beef Retail Meat Cuts

1. Brisket, flat half
2. Brisket, point half
3. Brisket, whole
4. Arm roast
5. Arm roast, boneless
6. Arm steak
7. Arm steak, boneless
8. Blade roast
9. Blade steak
10. 7-bone roast
11. 7-bone steak
12. Flank steak
13. Sirloin steak, flat bone
14. Sirloin steak, pin bone
15. Sirloin steak, round bone
16. Sirloin steak, wedge bone
17. Sirloin steak, shell
18. Sirloin steak, boneless
19. Tenderloin steak
20. Porterhouse steak
21. T-bone steak
22. Top loin steak
23. Top loin steak, boneless
24. Short ribs
25. Skirt steak
26. Rib roast, large end
27. Rib roast, small end
28. Rib steak, small end
29. Rib steak, small end, boneless
30. Ribeye roast
31. Ribeye steak
32. Bottom round roast
33. Bottom round steak
34. Eye round roast
35. Eye round steak
36. Heel of round roast
37. Rump roast, boneless
38. Round steak
39. Round steak, boneless
40. Tip roast
41. Tip roast, cap off
42. Tip steak
43. Tip steak, cap off
44. Top round roast
45. Top round steak
46. Cross cuts
47. Cross cuts, boneless

Lamb Retail Meat Cuts

48. Breast
49. Breast riblets
50. American style roast
51. Leg Center slice
52. French style roast
53. Leg shank half
54. Sirloin chop
55. Leg sirloin half
56. Loin chop
57. Loin double chop
58. Loin roast
59. Rib chop
60. Rib roast
61. Rib roast, boneless
62. Shanks
63. Blade chop
64. Neck slice
65. Shoulder square cut

Pork Retail Meat Cuts

66. Fresh ham center slice
67. Fresh ham rump portion
68. Fresh ham shank portion
69. Fresh side pork
70. Blade chop
71. Blade roast
72. Butterfly chop
73. Center rib roast
74. Center loin roast
75. Loin chop
76. Rib chop
77. Sirloin chop
78. Top loin chop
79. Arm picnic roast
80. Arm roast
81. Arm steak
82. Blade Boston roast
83. Sliced bacon
84. Smoked jowl
85. Spareribs

Species of Cut – to be used in answer column 2 by Intermediates and Seniors

B. Beef L. Lamb P. Pork

Wholesale Cut of Origin – to be used in answer column 3 by Seniors

Beef Wholesale Cuts
A. Brisket
B. Chuck
C. Flank
D. Loin
E. Plate
F. Rib
G. Round
H. Shank

Lamb Wholesale Cuts
I. Breast
J. Leg
K. Loin
L. Rack
M. Shank
N. Shoulder

Pork Wholesale Cuts
O. Belly (Side, Bacon)
P. Boston Butt
Q. Ham
R. Jowl
S. Loin
T. Picnic Shoulder

Name_____KEY_____ Contestant #_____County_____

Senior Livestock Feed Identification-2011

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each livestock feedstuff. Use capital letters and write neatly. **Seniors** provide answers for feedstuff name, nutrient group, and characteristics/uses of the feedstuff. Each question is worth 5 points (150 points total for Seniors).

	Feedstuff Name	Nutrient Group	Charact-eristics/ Uses
1.	22	B or C	H
2.	57	C	D
3.	34	P	E
4.	74	B	A
5.	15	C	B
6.	38	C	P
7.	36	P	F
8.	1	P	C
9.	50	C	Q
10.	39	B	M

Feed Names – to be used in answer column 1 by Clovers, Intermediates, and Seniors

1. Alfalfa meal (cubed)
2. Alfalfa pasture
3. Barley (whole)
4. Blood meal
5. Brewers dried grain
6. Canola meal
7. Copper sulfate
8. Corn distillers dried grain
9. Corn distillers dried grain with soluble
10. Corn gluten feed
11. Corn gluten meal
12. Cottonseed (whole)
13. Cottonseed hulls
14. Cottonseed meal
15. Cracked shelled corn
16. Crimped oats
17. Defluorinated rock phosphate
18. Dehydrated alfalfa meal
19. Dicalcium phosphate
20. DL-methionine
21. Dried Beet pulp
22. Dried molasses
23. Dried skim milk
24. Feather meal
25. Fish meal
26. Grain sorghum (whole)
27. Ground ear corn
28. Ground limestone
29. Ground shelled corn
30. Kentucky Bluegrass pasture
31. L-lysine HCl
32. L-threonine
33. L-tryptophan
34. Linseed meal
35. Liquid molasses
36. Meat and bone meal
37. Millet (whole)
38. Oats (whole)
39. Oat hulls
40. Orchardgrass hay
41. Orchardgrass pasture
42. Oyster shells
43. Peanut meal
44. Red Clover hay
45. Red Clover pasture
46. Roller dried whey
47. Rye (whole)
48. Salt, white
49. Santoquin
50. Shelled corn
51. Soybean hulls
52. Soybean meal
53. Soybeans (whole)
54. Spray-dried animal plasma
55. Spray-dried whey
56. Steam flaked corn
57. Steam rolled barley
58. Steam rolled oats
59. Steamed bone meal
60. Sunflower meal
61. Tall Fescue hay
62. Tall Fescue pasture
63. Timothy hay
64. Timothy pasture
65. Trace-mineral premix
66. Trace-mineralized salt
67. Triticale (whole)
68. Tryptosine
69. Urea
70. Vegetable oil
71. Vitamin premix
72. Wheat (whole)
73. Wheat bran
74. Wheat middlings
75. White Clover hay
76. White Clover pasture

Feeds Nutrient Groups – to be used in answer column 2 by Intermediates and Seniors

(You may use the letter more than once!!)

B. By-product feed
C. Carbohydrate (energy)
F. Fats (energy)
M. Mineral
P. Protein
V. Vitamin

Important Characteristics/Uses of Feedstuffs – to be used in answer column 3 by and Seniors

A. By-product of the wheat flour milling industry.

B. Shelled corn that has been passed through a roller mill to break it into smaller particles.

C. Excellent feedstuff for horses and ruminants (high in protein, minerals, and vitamins).

D. Whole barley that is subjected to high-moisture steam for a short period of time (1-8 minutes) and then rolled to produce a flat flake

E. Produced by grinding the flakes that remain after oil is extracted from whole flaxseed.

F. Primarily used as a partial source of supplemental protein for monogastrics (limited use in ruminant and horse diets).

G. Protein is somewhat low in digestibility due to tannins found in the skin, and has poor amino acid balance.

H. Dried by-product of the manufacture of sugar from either sugar beets, or more commonly, sugarcane

I. Sometimes used as a laxative in prefarrowing sow rations

J. Contains corn bran and soluble protein

K. Excellent source of digestible protein, B vitamins, and minerals.

L. High in protein, and contains active immunoglobulins.

M. Consists primarily of the outer covering of oat grain after it has been processed to separate the groat (kernel) from the hull.

N. Obtained by processing rock phosphates into phosphoric acid, which is then reacted with calcium carbonate (limestone).

O. Bulk Density = 48 Pounds/Bushel

P. Compared to corn it is slightly lower in energy and higher in protein.

Q. Most extensively produced feed grain in U.S.

1

2


3
Mark Sneed

4

5

6

7

8


9

10

Name_____**KEY**_____ **Contestant #**_____**County**_____

Senior Livestock Breeds Identification-2011

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each livestock breed. Use capital letters and write neatly. **Seniors** provide answers for breed name, origin of breed, and important characteristics/traits. Each question is worth 5 points (150 points total for Seniors).

	Breed Name	Origin of Breed	Important Traits
1.	41	O	L
2.	40	K	O
3.	1	D	E
4.	7	F	C
5.	4	J	D
6.	52	N	T
7.	50	Q	Y
8.	51	H	V
9.	20	G	K
10.	21	M	H

Breed Names – to be used in answer column 1 by Clovers, Intermediates, and Seniors

Beef Breeds
1. Angus
2. Brahman
3. Brangus
4. Charolais
5. Chianina
6. Gelbvieh
7. Hereford
8. Limousin
9. Maine Anjou
10. Polled Hereford
11. Red Angus
12. Red Poll
13. Santa Gertrudis
14. Shorthorn
15. Simmental
16. Tarentaise

Goat Breeds
17. Alpine
18. American Cashmere
19. Angora
20. Boer
21. Kiko
22. Lamancha
23. Nubian
24. Oberhasli
25. Pygmy
26. Saanen
27. Spanish
28. Tennessee Fainting
29. Toggenburg

Sheep Breeds
30. Cheviot
31. Columbia
32. Corriedale
33. Dorper
34. Dorset
35. Finnsheep
36. Hampshire
37. Katahdin
38. Merino
39. Montadale
40. Oxford
41. Polled Dorset
42. Rambouillet
43. Romney
44. Southdown
45. Suffolk
46. White Dorper

Swine Breeds
47. Berkshire
48. Chester White
49. Duroc
50. Hampshire
51. Hereford
52. Landrace
53. Pietrain
54. Poland China
55. Spotted
56. Tamworth
57. Yorkshire

Origins of Breeds – to be used in answer column 2 by Intermediates and Seniors

A. Tees River Valley (England)
B. York County, England
C. Italy
D. Scotland
E. District of Angora in Asia Minor
F. Herefordshire, England
G. Africa
H. Iowa and Nebraska (U.S.A.)
I. Finland
J. Charolles, France
K. Oxford County, England
L. Kent , England
M. New Zealand
N. Denmark
O. North Carolina State Univ.
P. Maine and Anjou river valleys of France
Q. Hampshire County, England
R. Putnam and Hendricks County, Indiana
S. United States (New York/New Jersey)

Important Characteristics/Traits Origins of Breeds – to be used in answer column 3 by and Seniors

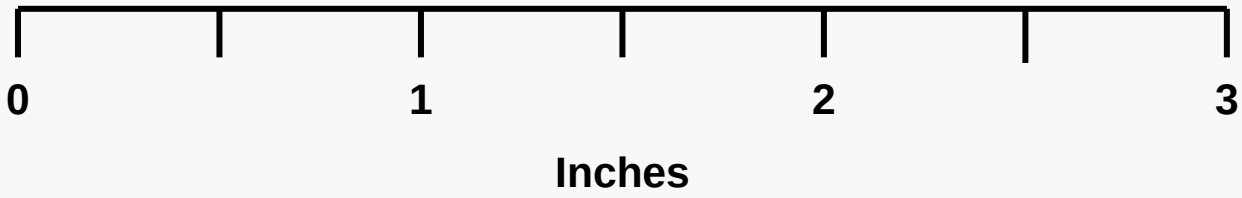
Beef Cattle Characteristics/Traits
A. Heat and tick resistance, hardiness, and maternal instincts.
B. Early maturity, reproductive performance, mothering ability, disposition, and hardiness.
C. Foraging ability, docile, and good fertility.
D. Heavily muscled, high carcass yield, growth rate, and feed efficiency.
E. Meat quality and maternal abilities.

Goats Characteristics/Traits
F. Hardy, adaptable animals that thrive in any climate while maintaining good health and excellent production.
G. Meat production mohair production, browsing ability, and not as prolific as other goats.
H. Meat yield, growth rate, constitution, and twinning rate
I. High butterfat content, extended breeding season, best suited for hot conditions, and multi-purpose use (milk, meat, and hide).
J. Heavy milkers, rugged bone, and vigor. Saanens are sensitive to excessive sunlight and perform best in cooler conditions.
K. Meat yield, growth rate, browsing ability, fertility, adaptability to wide climatic conditions, and extended breeding season.

Sheep Characteristics/Traits
L. Carcass conformation will breed "out-of-season", and milking ability.
M. Prolificacy, mothering ability, and wool production.
N. Carcass conformation, growth rate, feed conversion, and milking ability
O. Carcass conformation, heavy fleece, and lambing percentage.
P. Herding instinct and wool production.
Q. Carcass conformation, early maturity, and adaptability to varied climates.
R. Carcass conformation, growth rate, lambing percentage, and wool production.

Swine Characteristics/Traits
S. Aggressive breeder and high growth rate.
T. Prolificacy (litter size), milking ability, mothering ability.
U. Extreme muscling and leanness.
V. Carcass quality (intramuscular fat).
W. Excellent rate of gain and feed efficiency.
X. Conception rate and meat quality (intramuscular fat)
Y. Heavily muscled, lean, and good feed efficiency

1



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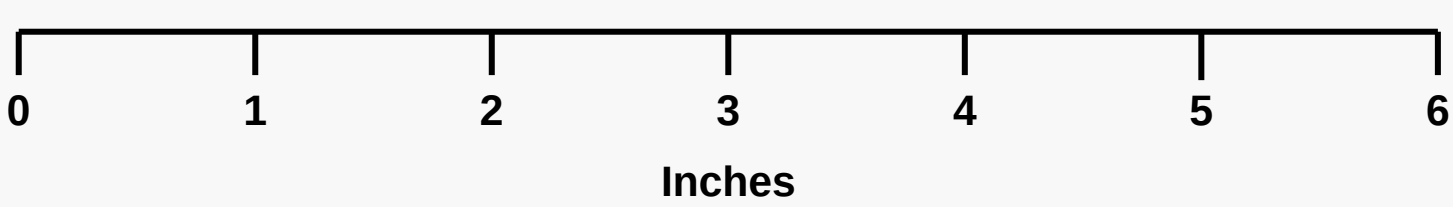

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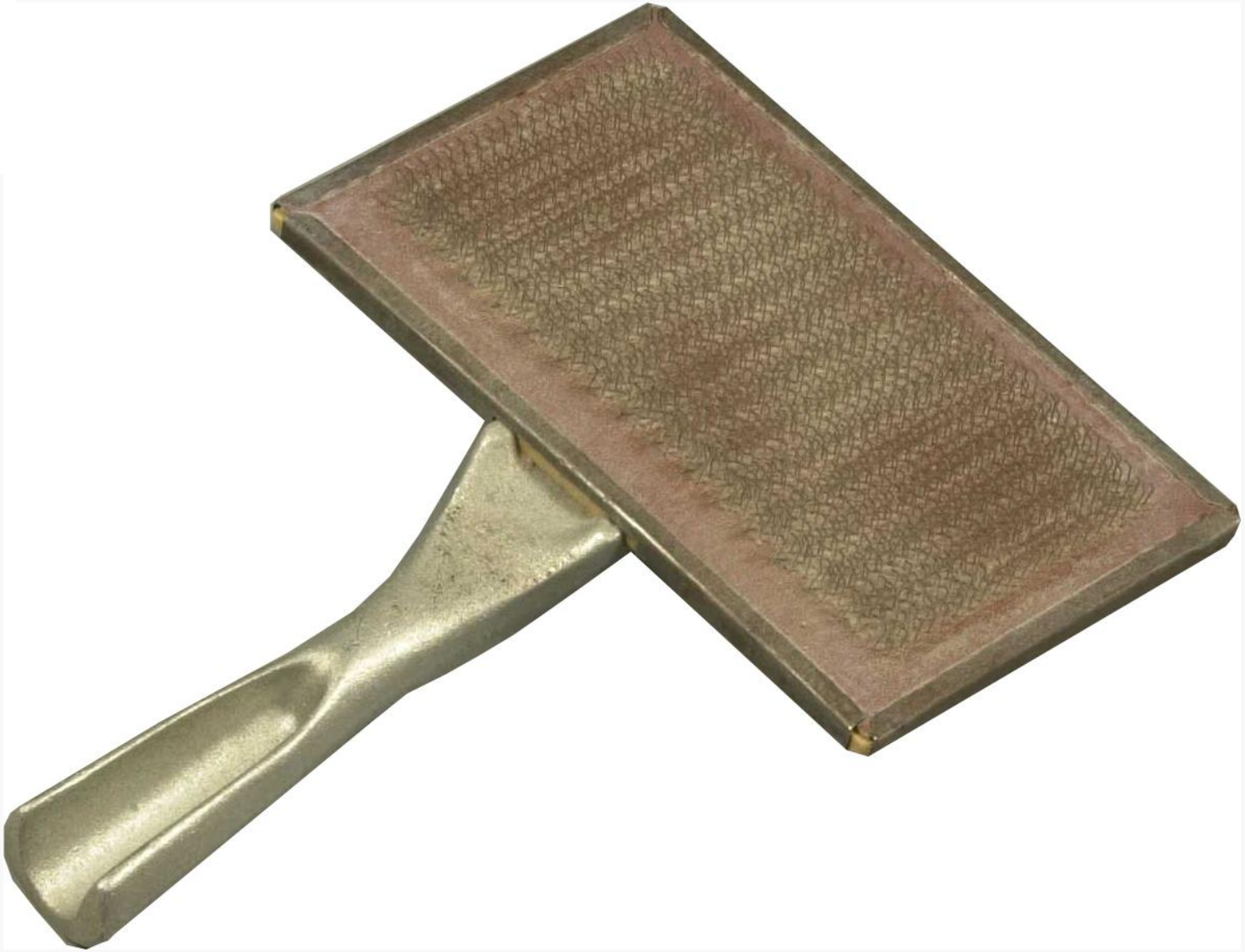

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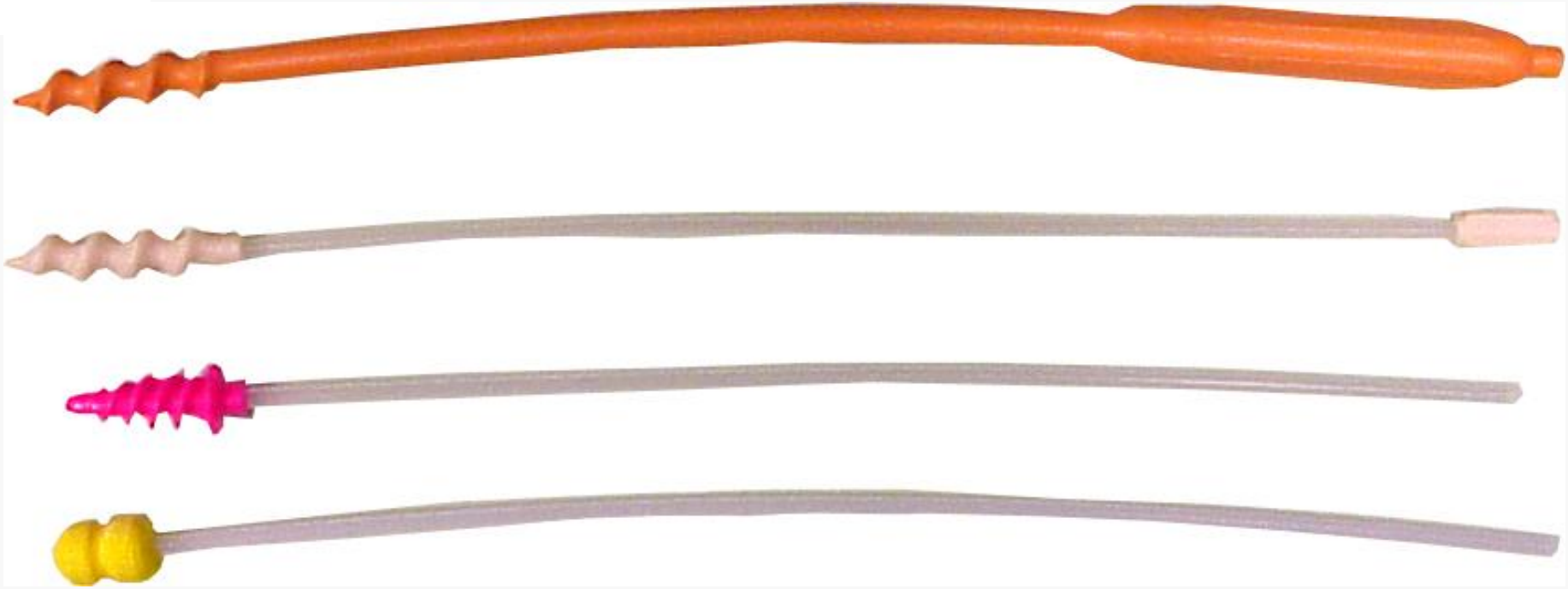

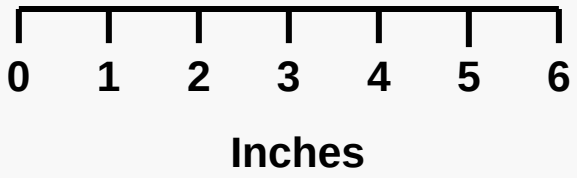

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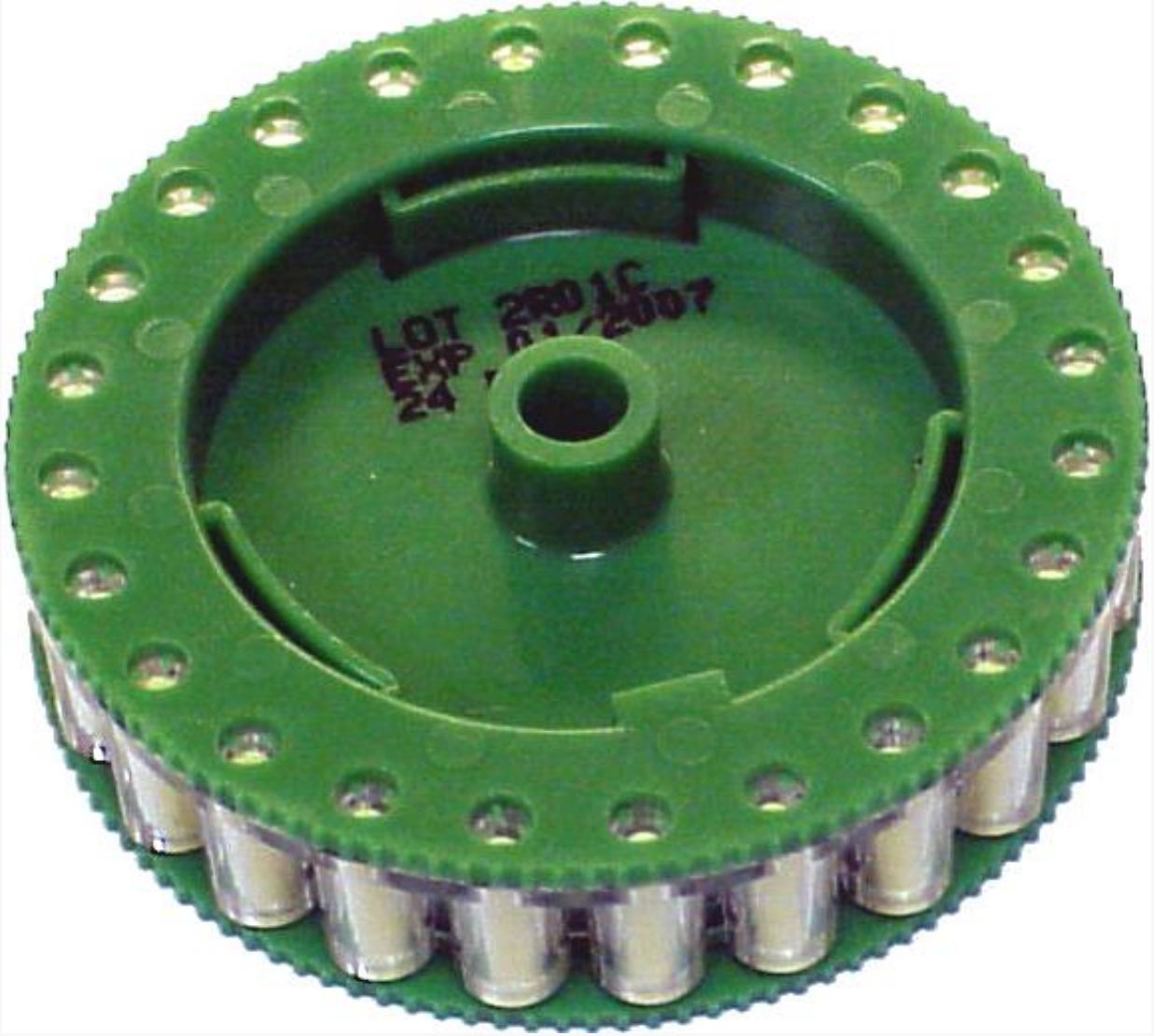

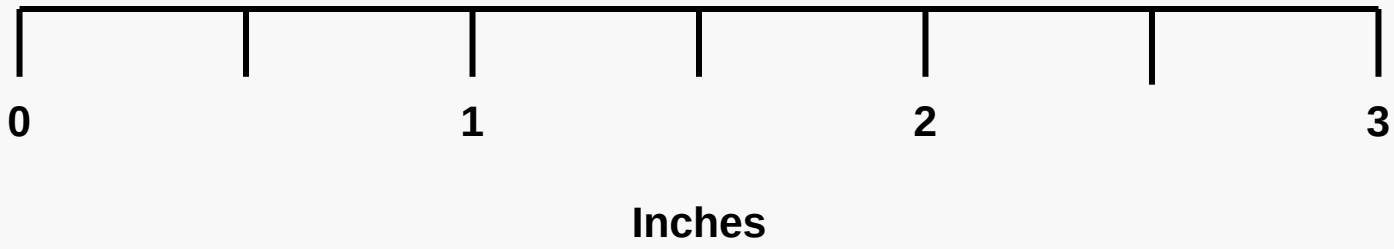

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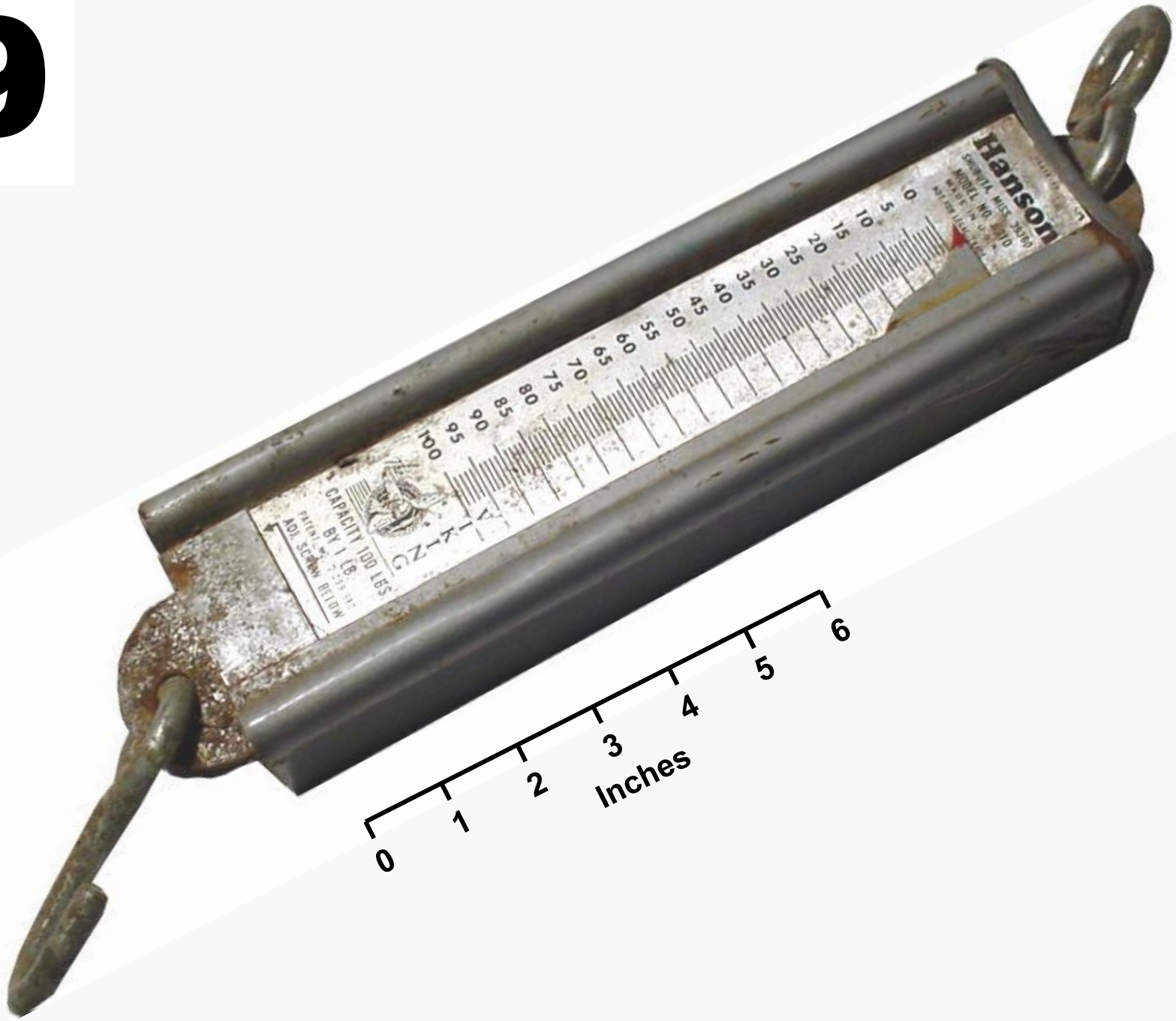
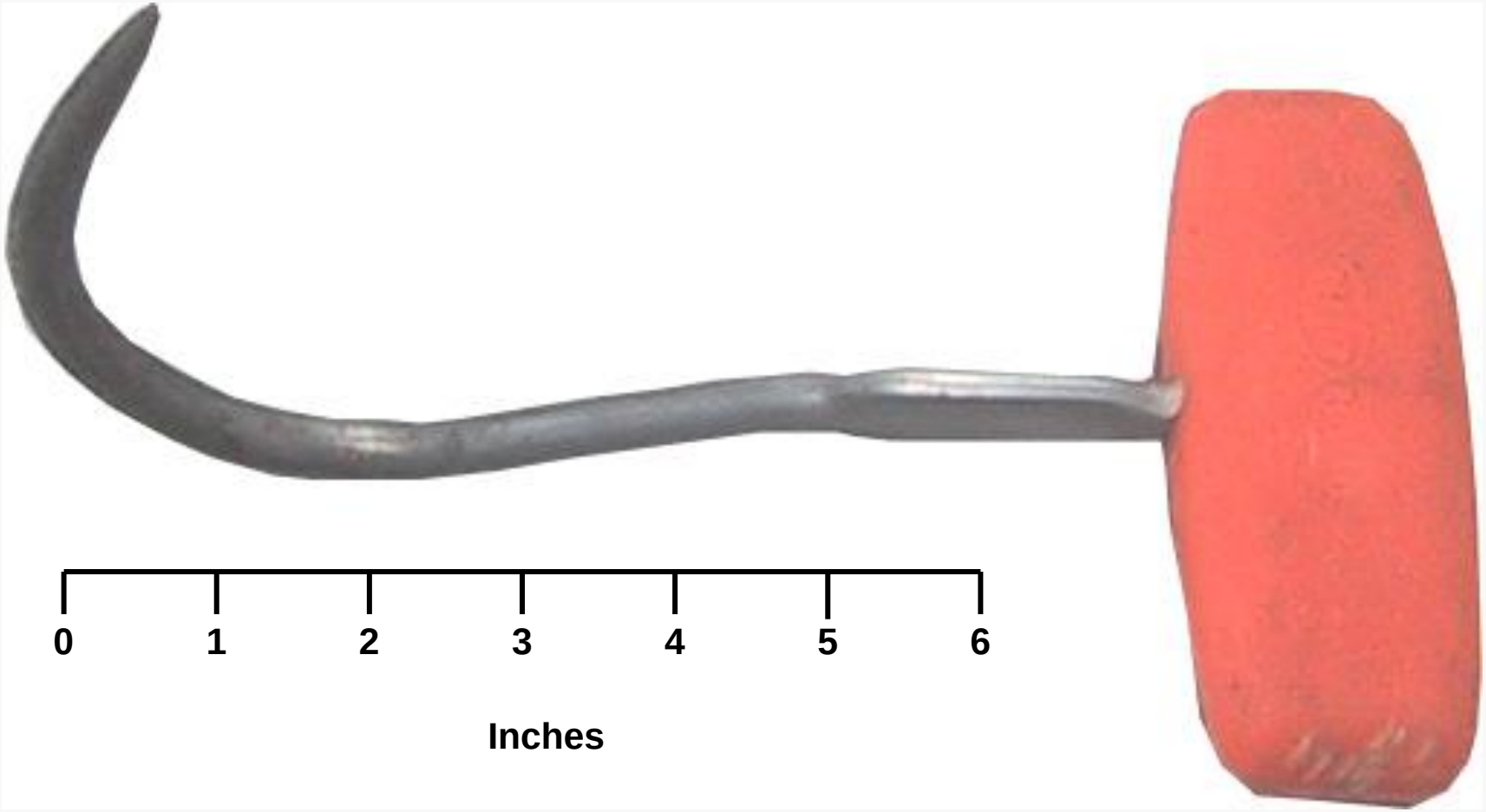

Hanson
CAPACITY 100 LBS
BY 1 LB.
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
0 1 2 3 4 5 6
Inches

10



Name____KEY_____ Contestant #_____County_____

Senior Livestock Equipment Identification-2011

INSTRUCTIONS: For each picture, use the columns on the right to choose the number or letter that indicates your answer for each piece of equipment. Use capital letters and write neatly. **Intermediates** and **Seniors** provide answers for livestock/meat equipment names and equipment use. Each question is worth 5 points (100 points total for Intermediates and Seniors).

	Equipment Name	Equipment Use
1.	28	J
2.	34	B
3.	36	R
4.	42	S
5.	2	A
6.	37	N
7.	39	T
8.	33	I
9.	24	G
10.	60	P

Equipment Names – to be used in answer column 1 by Clovers, Intermediates, and Seniors

Livestock Equipment

1. All-in-one castrator/docker
2. Artificial insemination pipettes (Swine)
3. Bowl waterer
4. Balling gun
5. Barnes dehorner
6. Cattle clippers
7. Clipper comb
8. Clipper cutter
9. Currycomb
10. Disposable syringes
11. Drench gun
12. Ear notchers
13. Ear tag pliers
14. Elastrator
15. Electric branding iron
16. Electric dehorner
17. Electric docker
18. Emasculatome (Burdizzo)
19. Emasculator
20. Ewe prolapse retainer
21. Fencing pliers
22. Foot rot shears
23. Freeze branding iron
24. Hanging Scale
25. Hog holder (snare)
26. Lamb tube feeder
27. Needle teeth nippers
28. Nipple waterer
29. Nose ring
30. Nose ring pliers
31. Obstetrical (O.B.) chain
32. Paint branding iron
33. Ralgro implant cartridge
34. Ram marking harness
35. Rumen magnate
36. Scalpel
37. Semen Storage Tank
38. Shearer's screwdriver
39. Sheep shears (electric)
40. Syringe Needles
41. Tattoo pliers
42. Wool card

Meat Equipment

43. Backfat ruler
44. Band saw
45. Bone dust scraper
46. Boning knife
47. Bowl chopper
48. Dehairing machine
49. Electrical stunner
50. Emulsifier
51. Ham net
52. Hand saw
53. Hard hat
54. Loin eye area grid
55. Meat grinder
56. Meat grinder auger
57. Meat grinder knife
58. Meat grinder plate
59. Meat grinder stuffing rod
60. Meat hook
61. Meat tenderizer
62. Meat trolley
63. Metal knife scabbard
64. Rubber apron
65. Sharpening steel
66. Smoke house
67. Thermometer
68. Tumbler
69. Vacuum sausage stuffer
70. Whale saw

Equipment Uses – to be used in answer column 2 by and Intermediates and Seniors

A. A device used to deposit boar semen into reproductive tract of a gilt or sow. The spiral tip or button end of the pipette is inserted into the cervix where the semen is deposited.
B. A device placed on rams that shows when a ewe has been serviced.
C. The part of cattle clippers that guides the hair towards the clipper cutter.
D. Used to measure backfat depth on animal carcasses.
E. An instrument used for the bloodless castration (young male calves, lambs, and goats) and docking of tails (young lambs and goats). It is used to place a small rubber ring over the scrotum or tail to shut off circulation.
F. Used to clean bone fragments from meat cuts that result from cutting meat with saws during processing.
G. Used to weigh young animals, feed ingredients to include in a diet, or the amount of feed to feed to an animal.
H. An instrument used to control vaginal prolapse in ewes.
I. The cartridge containing the RALGRO pellets (for growth promotion) that is placed in the RALGRO Pellet Injector for placing the implants in beef calves ears.
J. An automatic waterer used to provide clean, fresh water to pigs.
K. Used to remove dirt and loose hair from cattle when grooming
L. A non-rusting, round post electric fence insulator. Will work on round posts up to about ½-inch diameter.
M. Used by shearers to quickly replace the clipper comb and clipper cutter on cattle clippers.
N. Used to store frozen semen until it is ready for use. The tank holds liquid nitrogen to keep the semen frozen.
O. Used when building fences. These pliers will cut, splice, and stretch wire, and drive and pull staples.
P. Used to pick up meat pieces during carcass fabrication
Q. Used to help pull unborn calves from cows that are experiencing calving problems (dystocia).
R. Used by veterinarians for various surgical procedures, and by farmers for various health related and management practices (such as castration).
S. Used to card (comb or rake) the wool on sheep prior to shearing.
T. Used to shear and groom the wool from sheep.

Senior Retail Meat Judging-1

Name_____ **Contestant #**_____ **County**_____

T-Bone Steaks

1-4-2-3 cuts 3-5-2

Contestant Number _____

Placing Score _____

University of Kentucky
College of Agriculture
Animal Sciences Department

Contestant's Name

_____

_____

Address

_____

_____

County

_____

Class

__Retail Meat Judging 1_____

A	1 2 3 4	38
B	1 2 4 3	45
C	1 3 2 4	36
D	1 3 4 2	41
E	1 4 2 3	50
F	1 4 3 2	48
G	2 1 3 4	30
H	2 1 4 3	37
I	2 3 1 4	20
J	2 3 4 1	17
K	2 4 1 3	34
L	2 4 3 1	24
M	3 1 2 4	26
N	3 1 4 2	31
O	3 2 1 4	18
P	3 2 4 1	15
Q	3 4 1 2	28
R	3 4 2 1	20
S	4 1 2 3	47
T	4 1 3 2	45
U	4 2 1 3	39
V	4 2 3 1	29
W	4 3 1 2	35
X	4 3 2 1	27

[Questions on back]

Questions

1.) Between 1 and 3, which steak has the largest top loin muscle? __3____

2.) Which steak has the largest tenderloin muscle? ___1___

3.) Between 2 and 4, which steak has the least amount of bone? ___2__

4.) Between 3 and 4, which steak has the least amount of tail fat? __4___

5.) Which steak has the most external fat opposite the top loin muscle? ___4___

Senior Retail Meat Judging-2

Name_____ **Contestant #**_____ **County**_____

Boneless Pork Loin Chops
1-2-3-4 cuts 2-3-2

Contestant Number _____

Placing Score _____

University of Kentucky
College of Agriculture
Animal Sciences Department

Contestant's Name

_____

_____

Address

_____

_____

County

_____

Class

__Retail Meat Judging 2_____

A	1 2 3 4	50
B	1 2 4 3	48
C	1 3 2 4	47
D	1 3 4 2	42
E	1 4 2 3	43
F	1 4 3 2	40
G	2 1 3 4	48
H	2 1 4 3	46
I	2 3 1 4	43
J	2 3 4 1	36
K	2 4 1 3	39
L	2 4 3 1	34
M	3 1 2 4	42
N	3 1 4 2	37
O	3 2 1 4	40
P	3 2 4 1	33
Q	3 4 1 2	30
R	3 4 2 1	28
S	4 1 2 3	36
T	4 1 3 2	33
U	4 2 1 3	34
V	4 2 3 1	29
W	4 3 1 2	28
X	4 3 2 1	26

Senior Hay Judging-2011

Name_____ **Contestant #**_____ **County**_____

2-1-3-4 Cuts 4-3-7

Contestant Number _____

Placing Score _____

University of Kentucky
College of Agriculture
Animal Sciences Department

Contestant's Name

_____

_____

Address

_____

_____

County

_____

Class

_Hay Judging _____

A	1 2 3 4	39
B	1 2 4 3	46
C	1 3 2 4	25
D	1 3 4 2	18
E	1 4 2 3	39
F	1 4 3 2	25
G	2 1 3 4	43
H	2 1 4 3	50
I	2 3 1 4	33
J	2 3 4 1	30
K	2 4 1 3	47
L	2 4 3 1	37
M	3 1 2 4	15
N	3 1 4 2	8
O	3 2 1 4	19
P	3 2 4 1	16
Q	3 4 1 2	5
R	3 4 2 1	9
S	4 1 2 3	36
T	4 1 3 2	22
U	4 2 1 3	40
V	4 2 3 1	30
W	4 3 1 2	12
X	4 3 2 1	16

[TURN OVER for Scenario and Forage Analysis Information]

Senior Hay Judging-2011

Scenario:
You have purchased the following four (4) types of hay to use as feed for your ewe flock. You will use all four (4) types of hay at some point during the year. Rank the four hay samples in the order that you would utilize them as the most **cost effective** sole ration for your flock of mature, dry ewes in early gestation to maintain their body condition score (BCS) of a number three (3).

Nutrient Requirements for mature 155 pound, mature, dry ewes in early gestation.

Dry Matter:	4 pounds per day
Crude Protein:	9%
Total Digestible Nutrients	55%

Forage Analysis

	Hay #1 2nd cutting Orchardgrass	***Hay #2*** 1st cutting Orchardgrass	***Hay #3*** Mixed Grass	***Hay #4*** Grass/Red Clover Mixed
Dry Matter	***88.6%***	***87.9%***	***88.9%***	***88.6%***
Crude Protein	***13.5%***	***12.7%***	***7.4%***	***15.2%***
Acid Detergent Fiber	***44.2%***	***44.8%***	***49.9%***	***41.5%***
Neutral Detergent Fiber	***67.2%***	***67.5%***	***69.2%***	***61.4%***
Total Digestible Nutrients	***60.5%***	***58.6%***	***50.0%***	***62.5%***
Price per Ton	***$135***	***$100***	***$80***	***$145***

Name___KEY_____ Contestant #_____ County_____

Quality Assurance-Individual-Senior-2011

You are the manager of a large farrow to finish swine operation. Use the **P.G. 600** label to answer the **10 questions** below relating to swine management.

1. **P.G. 600 is labeled to do which of the following in a swine production operation?**

   A.) Induce fertile estrus in non-cycling gilts
   C.) Improve carcass cutability
   B.) Improve reproductive efficiency
   D.) **Both A and B**

2. **What do the letters PMSG stand for?**

   A.) **Pregnant Mare Serum Gonadotropin**
   C.) Post Mastitis Supply Granules
   B.) Pre-maternal Standard Genotype
   D.) Pregnant Maternal Sow Glands

3. **P.G. 600 would be best utilized in which of the following production schemes?**

   A.) Showpig operation that only buys bred gilts and farrows litters only in the spring

   B.) A large wean-to-finish operation

   C.) A large commercial farrow-to-finish operation that is experiencing reproductive problems mainly due to poor nutritional and reproductive management

   D.) **A large commercial farrow-to-finish operation that is experiencing reproductive problems, but the health, nutrition and reproductive management is excellent**

4. **The action of chorionic gonadotropin contained in P.G. 600 is similar to the action of what hormone in sows and gilts?**

   A.) **Luteinizing Hormone**
   C.) Testosterone
   B.) Progesterone
   D.) *Corpus Luteum*

5. **P.G. 600 is labeled to treat which one of the following diseases?**

   A.) Mastitis
   C.) Circovirus
   B.) Metritis
   D.) **None of these**

[More on Back]

6. **When should replacement gilts be injected with P.G. 600?**

   A.) At weaning

   B.) One (1) hour prior to mating with the boar or being Artificially Inseminated

   C.) When selected as a replacement, and over five months of age and weighing over 85 pounds

   D.) **When selected as a replacement, and over five and one-half months of age and weighing over 187 pounds**

7. **What size needle should be used to inject P.G. 600?**

   A.) 20 Gauge X 1 ½ inches

   B.) 14 Gauge X 2 inches

   C.) 0.90 x 38 mm

   D.) **Either A or C**

8. **Once P.G. 600 has been reconstituted with sterile water, it must be used _____?**

   A.) Within 48 hours

   B.) **Immediately**

   C.) Within 7 days

   D.) Within 1 year

9. **When should a weaned sow or gilt show heat (estrus) after an injection of P.G. 600?**

   A.) Within 24 hours after treatment

   B.) **Within three (3) – seven (7) days after treatment**

   C.) Within 21 days after treatment

   D.) Within 28 days after treatment

10. **According to the label, much of the research dealing with the use and application of P.G. 600 was published in which of the following scientific journals?**

    A.) Journal of Applied Swine Reproduction

    B.) Journal of Porcine Theriogenology

    C.) Journal of Animal Breeding and Genetics

    D.) **Journal of Animal Science**

INTERVET/SCHERING-PLOUGH ANIMAL HEALTH

29160 INTERVET LANE, P.O. BOX 318, MILLSBORO, DE, 19966-0318
Toll-Free: 800-992-8051
Customer Service: 800-441-8272
Website: www.intervetusa.com
Email: Information.USA@intervet.com

P.G. 600®

Intervet/Schering-Plough Animal Health

NADA No. 140-856; APPROVED BY FDA
FOR ANIMAL USE ONLY

DESCRIPTION

Gilts normally reach puberty (begin experiencing normal estrous cycles and exhibiting regular estrus or heat) at any time between six and eight months of age, although some gilts will not have exhibited their first estrus at ten months of age. Age at first estrus is influenced by several factors including breed type, season of the year, environmental conditions, and management practice (Hurtgen, 1986).

Sows normally exhibit estrus three to seven days after weaning their litters; however, some otherwise healthy sows may not exhibit estrus for 30 days or more after weaning (Dial and Britt, 1986). The causes of delayed return to estrus in healthy sows are poorly understood, but probably include season of the year (so-called seasonal anestrus; Hurtgen, 1979), adverse environmental conditions, such as high ambient temperatures (Love, 1978), and the number of previous litters, because the condition is more prevalent after the first litter than after later litters (Hurtgen, 1986).

P.G. 600 is a combination of serum gonadotropin (Pregnant Mare Serum Gonadotropin or PMSG) and chorionic gonadotropin (Human Chorionic Gonadotropin or HCG) for use in prepuberal gilts (gilts that have not yet exhibited their first estrus) and in sows at weaning. It is supplied in freeze-dried form with sterile diluent for reconstitution.

In gilts and sows, the action of serum gonadotropin is similar to the action of Follicle-Stimulating Hormone (FSH), which is produced by the animals' anterior pituitary gland. It stimulates the follicles of the ovaries to produce mature ova (eggs), and it promotes the outward signs of estrus (heat).

The action of chorionic gonadotropin in gilts and sows is similar to the action of Luteinizing Hormone (LH), which is also produced by the animals' anterior pituitary gland. It causes the release of mature ova from the follicles of the ovaries (ovulation), and it promotes the formation of corpora lutea, which are necessary for the maintenance of pregnancy once the gilt has become pregnant.

The combination of serum gonadotropin and chorionic gonadotropin in P.G. 600 induces fertile estrus in most prepuberal gilts and weaned sows three to seven days after administration (Schilling and Cerne, 1972; Britt et al., 1986; Bates et al., 1991). The animals may then be mated or, in the case of gilts, mating may be delayed until the second estrus after treatment.

NOTE: P.G. 600 IS INTENDED AS A MANAGEMENT TOOL TO IMPROVE REPRODUCTIVE EFFICIENCY IN SWINE PRODUCTION OPERATIONS. TO OBTAIN MAXIMUM BENEFIT FROM THIS PRODUCT, ESTRUS DETECTION AND OTHER ASPECTS OF REPRODUCTIVE MANAGEMENT MUST BE ADEQUATE. IF YOU ARE IN DOUBT ABOUT THE ADEQUACY OF YOUR BREEDING PROGRAM, CONSULT YOUR VETERINARIAN.

P.G. 600 is available in two package sizes:

SINGLE DOSE VIALS (order Code No. PG-720-1) - Five vials containing white freeze-dried powder, plus five vials containing sterile diluent. When reconstituted, each single dose vial (5 mL) of P.G. 600 contains:

SERUM GONADOTROPIN (PMSG)	400 IU
CHORIONIC GONADOTROPIN (HCG)	200 IU

(equivalent to 200 USP Units chorionic gonadotropin)

FIVE DOSE VIALS (order Code No. PG-720-5) - One vial containing white freeze-dried powder, and one vial containing sterile diluent. When reconstituted, the five dose vial (25 mL) of P.G. 600 contains:

SERUM GONADOTROPIN (PMSG)	2000 IU

(OVER)

CHORIONIC GONADOTROPIN (HCG)	1000 IU

(equivalent to 1,000 USP Units chorionic gonadotropin)

INDICATIONS FOR USE

PREPUBERAL GILTS: P.G. 600 is indicated for induction of fertile estrus (heat) in healthy prepuberal (non-cycling) gilts over five and one-half months of age and weighing at least 85 kg (187 lb.).

SOWS AT WEANING: P.G. 600 is indicated for induction of estrus in healthy weaned sows experiencing delayed return to estrus.

CAUTIONS

Treatment will not induce estrus in gilts that have already reached puberty (begun to cycle). Gilts that are less than five and one-half months of age or that weight less than 85 kg (187 lb.) may not be mature enough to continue normal estrus cycles or maintain a normal pregnancy to full term after treatment.

Treatment will not induce estrus in sows that are returning to estrus normally three to seven days after weaning. Delayed return to estrus is most prevalent after the first litter; the effectiveness of P.G. 600 has not been established after later litters. Delayed return to estrus often occurs during periods of adverse environmental conditions, and sows mated under such conditions may farrow smaller than normal litters.

DOSAGE AND ADMINISTRATION

One dose (5 mL) of reconstituted P.G. 600, containing 400 IU serum gonadotropin (PMSG) and 200 IU chorionic gonadotropin (HCG), should be injected into the gilt or sow's neck behind the ear.

Prepuberal gilts should be injected when they are selected for addition to the breeding herd. Sows should be injected at weaning during periods of delayed return to estrus.

DIRECTIONS FOR USE

SINGLE DOSE VIALS: Using a sterile syringe and a sterile 0.90 x 38 mm (20 G x 1 1/2") hypodermic needle, transfer the contents of one vial of sterile diluent (5 mL) into one vial of freeze-dried powder. Shake gently to dissolve the powder. Inject the contents of the vial into the gilt or sow's neck behind the ear.

FIVE DOSE VIAL: Using a sterile syringe and a sterile 0.90 x 38 mm (20 G x 1 1/2") hypodermic needle, transfer approximately 5 mL of the sterile diluent into the vial of freeze-dried powder. Shake gently to dissolve the powder. Transfer the dissolved product back into the vial of diluent and shake gently to mix. Inject one dose (5 mL) into the gilt or sow's neck behind the ear.

STORAGE PRECAUTIONS

Store at or below room temperature, 77°F (25°C).

Once reconstituted, P.G. 600 should be used immediately. Unused solution should be disposed of properly and not stored for future use.

Spent hypodermic needles and syringes generated as a result of the use of this product must be disposed of properly in accordance with all applicable Federal, State and local regulations.

REFERENCES

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Schilling, E., and F. Cerne (1972). Induction and synchronization of oestrus in prepuberal gilts and anestrous sows by a PMS/HCG-compound. Veterinary Record 91:471.

Manufactured for: INTERVET INC., Millsboro, DE 19966

by: INTERVET INTERNATIONAL B.V., BOXMEER- HOLLAND

1 dose	077901H 0011.240.2600 077910H 6.01
5 doses	077901A 0042.240.2610 077901A 12.00

Revised 4/01

NAC No.: 11061042

Name_____KEY_____ Contestant #_____ KEY_____County_____KEY_____

Senior Quiz-2011

Circle the correct answer to the question.

1.) All of the following are examples of legumes, except_____?

a. Soybeans
b. **Corn**
c. Alfalfa
d. Red Clover

2.) A 1305 pound medium framed black baldy heifer with an estimated 0.60 tenths of backfat and an estimated 13.85 square inch ribeye area would most likely return the most dollars of profit sold on which type of marketing grid?

a. **Grids paying premiums for Certified Angus Beef Carcasses (Higher USDA Quality Grades)**
b. Grids paying premiums for high cutability carcasses (Lower numerical USDA Yield Grades)
c. This heifer should be sold on a live weight basis.
d. This heifer should be fed longer because she is not close enough to an acceptable harvest weight.

3.) Which of the following breeding scenarios would most likely achieve the greatest level of maternal heterosis or hybrid vigor in the resulting crossbred female progeny?

a. Hampshire Boars bred to Duroc Sows
b. Spotted Boars bred to SP (Spotted X Peitrain) Sows
c. Duroc Boars bred to HD (Hampshire X Duroc) Sows
d. **Chester White Boars bred to YL (Yorkshire X Landrace) Sows**

4.) Which one of the following disease causing organisms would be the least likely to cause an abortion in a commercial ewe flock?

a. *Campylobacter fetus*
b. *Chlymidia psittach*
c. ***Clostridium perfringens***
d. *Toxoplasmosis*

5.) Which one of the following feeds would be the most ideal per head, per day as a receiving ration for unweaned, comingled stocker calves weighing an average of 425 pounds?

a. Free choice, first-cutting orchardgrass hay and 5 pounds of a medicated commercial preconditioning feed
b. Free choice, mature tall fescue hay and 10 pounds of shelled corn
c. Limit fed red clover hay and 7 pounds of whole soybeans
d. Free choice, early bloom alfalfa hay and 10 pounds of soyhulls

[OVER]

6.) Which bull would be the best choice to breed to a herd of commercial Hereford cows and first calf heifers to increase performance of the calves at weaning?

a. A Chiangus bull with above average birth weight and weaning weight EPDS
b. An Angus bull with a below average calving ease EPD and an above average weaning weight EPD
c. A Charolais bull with a 110 pound actual birth weight and 800 pound actual weaning weight
d. **A Chiangus bull with below average birth weight and above average weaning weight EPDS**

7.) Which condition is most closely associated with vitamin E and/or Selenium deficiency?

a. White muscle disease in sheep
b. Retained placentas in cattle
c. **Both a and b**
d. None of the above

8.) Which livestock operation would probably best utilize corn silage as one of the main sources of feed?

a. A large commercial meat goat operation
b. **A seedstock beef operation that sells elite A.I. quality bulls and potential donor quality females**
c. A small, part-time club lamb flock
d. A stocker calf operation that grazes stockpiled, tall fescue for cheap weight gain

9.) Which cut of meat would probably be the least desirable when prepared by grilling over an open fire?

a. A ribeye steak
b. A porterhouse steak
c. A whole pork tenderloin roast
d. **An eye of the round roast**

10.) What do the letters BRSV stand for when discussing beef cattle diseases?

a. Bovine Respiratory Standard Vaccine
b. Bovine Reduction Stunt Virus
c. **Bovine Respiratory Syncytial Virus**
d. Bovine Respiratory Shipping Fever Vaccine

11.) Which one of the following hormones maintains pregnancy in a mature Shorthorn cow?

a. Estrogen
b. **Progesterone**
c. Prostaglandin
d. Lutalyse

12.) Which pig would most likely meet the following carcass specifications: .70 backfat and a 9.5 square inch loineye area?

a. 220 pound purebred Berkshire barrow
b. 425 pound cull Yorkshire sow
c. **280 pound Hampshire cross barrow**
d. 300 pound cull Hampshire X Pietrain boar

13.) Which of the following would not be a logical reason to retain ownership on a few of your home-raised feeder calves?

a. To determine how your cattle perform for carcass quality
b. To determine how your cattle perform for average daily gain/feed intake
c. To determine if there is potential profit to be gained from retaining ownership on a larger scale
d. **All of the above**

14.) Which one of the following would be the least likely to be an ingredient in a stocker calf mineral?

a. Monensin
b. Lasalocid
c. **Ractopamine hydrochloride**
d. Chlortetracycline

15.) Which city hosted the International Livestock Exposition from 1900-1975?

a. **Chicago**
b. Omaha
c. Denver
d. Oklahoma City

16.) Which one of the following is not a vitamin?

a. Vitamin K
b. Thiamine
c. Ascorbic acid
d. **All of these are vitamins**

17.) Which one of the following would be a management technique used in a progressive seedstock sheep flock?

a. Recordkeeping
b. Clipping needle teeth of baby lambs
c. Creep feeding baby lambs
d. **Both a and c**

18.) Which swine breeds makes up the National Swine Registry and which breed leads in annual registrations?

a. **Duroc, Hampshire, Landrace, and Yorkshire – Yorkshires lead in annual registrations**
b. Duroc, Hampshire, Landrace, and Yorkshire - Durocs lead in annual registrations
c. Berkshire, Chester White, Poland China, and Spotted - Berkshires lead in annual registrations
d. Chester White, Poland China, and Spotted – Spotteds lead in annual registrations

19.) If a Simmental bull with the genotype of (bbpp) is bred to a Horned Hereford cow, what would the phenotype of the calf be?

a. Black and horned
b. Black and polled
c. **Red and horned**
d. Yellow and polled

20.) Which of the following should increase feed efficiency in a commercial beef cattle feedyard?

a. Feeding ionophores
b. Feeding Optaflexx
c. Feeding increased levels of magnesium
d. **Both a and b**

21.) Why would you use a CIDR device in a Dorset ewe?

a. **To synchronize estrus**
b. To treat for bloat
c. To apply a dewormer
d. To measure the quality of the fleece

22.) All of the following are typically used in pasture renovation except_____?

a. Apply fertilizer and lime according to soil test recommendations
b. No-tilling or broadcast seeding of a legume (usually red or white clover)
c. Using livestock to closely graze down the pasture grasses
d. **Adding large amounts of nitrogen fertilizer to increase the growth of pasture grasses**

23.) What is dystocia?

a. **Calving difficulty**
b. A bone deformity
c. Neither a or b
d. Both a and b

24.) What body condition score (BCS) would be considered optimal for a mature Angus cross cow?

a. BCS 1 or 2
b. **BCS 5 or 6**
c. BCS 9 or 10
d. BCS 50

25.) Which of the following diseases that affects beef cattle is also similar to the Scrapie disease in sheep?

a. Bovine Spongiform Encephalopathy
b. Grass tetany
c. "Mad Cow Disease"
d. **Both a and c**

Senior Quality Assurance Exercise-Team-2011
County_____

Your team is the group managers of a registered Southdown sheep flock that sells rams and ewes at national shows and sales across the U.S. Use the three feed and/or medication labels to answer the questions below.

I.) You have had several of your pregnant ewes abort lately. Upon consultation and testing, your veterinarian informs you that the abortions were caused by the disease *Campylobacter fetus.* Your vet also hypothesis that *Chlamydia psittaci* may have also be a contributing factor in the abortions.

1.) Which product could be used to help treat the remaining pregnant ewes and hopefully stop the abortions?

Aureo 4 Crumbles

2.) How should the above product be administered?

a.) **Mixed in the feed ration**

c.) Injected intramuscularly

b.) Injected subcutaneously

d.) Inject intravenously

3.) The product above is labeled for all of the following applications except, _____.

a.) Treatment of shipping fever complex in beef cattle

b.) Treatment of mastitis in lactating dairy cows

c.) Treatment of anaplasmosis infection in beef cattle

d.) Improved feed efficiency in growing calves

4.) Which product could be used to help treat any open ewes before breeding to help prevent abortions?

Chlamydia Psittaci Bacterin

5.) What are the dosage, timing, and route of administration of the product in number four (4) above?

a.) **2 ml under the skin in the upper neck, 60 days prior to breeding, repeat the dose 30 days later**

b.) 2 ml under the skin in the upper neck, 60 days prior to breeding

c.) 2 ml in the neck muscle, 60 days prior to breeding

d.) 5 ml under the skin in the upper neck, 60 days prior to breeding

[OVER]

II.) You want to try and breed your some of your ewe flock during a time outside of the natural breeding season (seasonal anestrus) to take advantage of some different potential marketing channels.

6.) Which product could you use to accomplish the above goal?

Eazi-breed CIDR and/or Progesterone

7.) What company distributes the above product?

a.) Colorado Serum Company.

b.) Pharmacia & Upjohn Company, A Division of Pfizer Inc.

c.) Pfizer Animal Health.

d.) Bluegrass Livestock Supply.

8.) This product is made in which country?

a.) United States c.) Mexico

b.) Germany d.) **New Zealand**

9.) There is no pre-slaughter withdrawal of this product most likely because the active ingredient is ___.

a.) Progesterone, a naturally occurring hormone

b.) Progesterone, a naturally occurring antitoxin

c.) Progesterone, a naturally occurring antimicrobial

d.) Progesterone, a naturally occurring source of vitamin E and selenium

10.) Which one of the following is an inactive ingredient in this product?

a.) Silicon rubber

b.) Nylon

c.) Sterile lubricating jelly

d.) **Both a and b**

Product Number – **2180023**
04/2004

Aureo 4 Crumbles

Type of Feed: Medicated Carrier **Form of Feed:** Crumbles

General Description:

Aureo Crumbles provides a source of "producer-ready" medications to customize the base feed for sheep, beef and non-lactating dairy cattle.

LAND O LAKES®

AUREO 4 CRUMBLES

MEDICATED

FOR BEEF, SHEEP AND
NON-LACTATING DAIRY CATTLE

For calves, beef and non-lactating dairy cattle: For control of bacterial pneumonia associated with shipping fever complex caused by *Pasteurella spp.*; Control of active infection of anaplasmosis caused by *Anaplasma marginale* susceptible to chlortetracycline; Treatment of bacterial enteritis caused by *Escherichia coli* and bacterial pneumonia caused by *Pasteurella multocida* organisms susceptible to chlortetracycline; For increased rate of weight gain and improved feed efficiency in calves (250 to 400 lb); For increased rate of weight gain and improved feed efficiency and reduction of liver condemnation due to liver abscesses in growing cattle over 400 lb.
For sheep: Aid in reducing the incidence of (vibrionic) abortion caused by *Campylobacter fetus* infection susceptible to chlortetracycline.

ACTIVE DRUG INGREDIENT

Chlortetracycline ..... 4 g/lb

GUARANTEED ANALYSIS

Crude Protein, (Min)	**8.0 %**
Crude Fat, (Min)	**2.0 %**
Crude Fiber, (Max)	**29.0 %**
Calcium (Ca), (Min)	**3.5 %**
Calcium (Ca), (Max)	**4.5 %**
Phosphorus (P), (Min)	**0.20 %**
Potassium (K), (Min)	**0.8 %**

INGREDIENTS

Roughage Products (not more than 60%), Processed Grain By-Products, Plant Protein Products, Calcium Carbonate, Forage Products, Magnesium-Mica, Molasses Products, Calcium Lignin Sulfonate

DIRECTIONS FOR USE

AUREO 4 Crumbles can be top-dressed on individually fed rations or thoroughly mixed with the regular ration.

In calves, beef and non-lactating beef cattle:

For control of bacterial pneumonia associated with shipping fever complex caused by *Pasteurella spp.*: Feed AUREO 4 CRUMBLES at 0.0875 lb/head/day to provide 350 mg chlortetracycline/head/day (0.35 g/head/day).

For control of active infection of anaplasmosis caused by *Anaplasma marginale* susceptible to chlortetracycline in beef cattle: For cattle under 700 lb, feed AUREO 4 CRUMBLES at 0.0875 lb/head/day to provide 350 mg chlortetracycline/ head/day (0.35 g/head/day). For cattle over 700 lb, feed AUREO 4 CRUMBLES at 0.0125 lb/100 lbs. bodyweight/day to provide 0.5 mg chlortetracycline/lb bodyweight daily (0.125 lbs to provide 0.5 g/head/day for 1000 lb. animal).

For treatment of bacterial enteritis caused by *Escherichia coli* and bacterial pneumonia caused by *Pasteurella multocida* organisms susceptible to chlortetracycline: Feed AUREO 4 CRUMBLES at 0.25 lb/100 lbs. bodyweight/day for 3 to 5 days to provide 10 mg chlortetracycline/lb bodyweight (1.25 lbs. to provide 5 g/head for a 500 lb. calf). Do not treat for more than 5 days.

For increased rate of weight gain and improved feed efficiency in calves (250 to 400 lb): Feed AUREO 4 CRUMBLES at 0.00625 to 0.0175 lb/head/daily to provide 25 to 70 mg chlortetracycline.

For increased rate of weight gain and improved feed efficiency and reduction of liver condemnation due to liver abscesses in growing cattle over 400 lb: Feed AUREO 4 CRUMBLES at 0.0175 lb/head/daily to provide 70 mg chlortetracycline.

In sheep:

As an aid in reducing the incidence of vibrionic abortion in breeding sheep: Feed 0.02 lb AUREO 4 CRUMBLES/head/day to supply 80 mg chlortetracycline/head daily. Feed continuously during pregnancy.

Available Additives:

Product No.	Options	Active Drug	Active Drug Level
2180022	Aureo 2	Chlortetracycline	2 g/lb
2180023	Aureo 4	Chlortetracycline	4 g/lb
2180021	Aureo 10	Chlortetracycline	10 g/lb

Product Features:	Product Benefits:
Aureomycin branded chlortetracycline	Used in many farm animal health programs; has zero day withdrawal at all feeding levels in all species covered.
Calves, Beef and Non-lactating Dairy Cattle:	Control of bacterial pneumonia associated with shipping fever complex caused by Pasturella supp. Control of active infection of anaplasmosis caused by Anaplasma marginale susceptible to CTC. Treatment of bacterial enteritis caused by Pasturella multocida organisms susceptible to CTC
Sheep	Aid in reducing the incidence of vibrionic abortion in breeding sheep
No-frills formula	Doesn't interfere with ration. Lower cost of medication
Different concentrations available	Flexible to meet feeding needs

Usage Tips

Mix Aureo Crumbles thoroughly with grain and roughage prior to feeding.

Follow label directions for specific feeding directions according to specie, label claim and drug concentration.

Key Points

1. Aureomycin branded chlortetracycline is approved for beef and non-lactating dairy cattle and sheep.
2. Can be top-dressed or mixed in total ration depending on concentration of drug.
3. No added protein, vitamins or trace minerals in formulation.
4. Aureomycin has no withdrawal prior to slaughter.

INDICATIONS: For use in healthy ewes as an aid in the control of Ovine Enzootic Abortion.

Contains penicillin and streptomycin as preservatives.

Vaccine is an aqueous suspension of inactivated cultures of *Chlamydia psittaci,* abortigenic serovar, emulsified with a mineral oil adjuvant.

DIRECTIONS: Store at 2° to 7° C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 60 days before slaughter.

PRECAUTIONS: Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

Use of products containing oil adjuvants may result in formation of a transient or more permanent granuloma of small to moderate size.

DOSAGE AND ADMINISTRATION: Aseptically inject 2 ml subcutaneously in the upper part of the neck 60 days prior to breeding. Repeat the dose 30 days later.

Revaccinate annually just prior to breeding.

CHLAMYDIA PSITTACI BACTERIN

Killed Bacterin

Cat. #11522	20ml	10 Dose
Cat. #11524	100ml	50 Dose

FOR VETERINARY USE ONLY

EAZI-BREED™ CIDR®

(progesterone) Sheep Insert

SUPPLIED: 20 EAZI-BREED CIDR Sheep Inserts per bag
Each EAZI-BREED CIDR Sheep Insert contains 0.3 gram of progesterone in molded silicone over a flexible nylon spine.
Attached to each EAZI-BREED CIDR Sheep Insert is a nylon tail.
NADA 141-302, Approved by FDA

Pfizer

Active Ingredient: Progesterone, 0.3 gram per EAZI-BREED CIDR Sheep Insert
Use: Induction of estrus in ewes (sheep) during seasonal anestrus. Seasonal anestrus is when ewes do not have regular estrous cycles outside the natural breeding season. EAZI-BREED CIDR Sheep Inserts have not been tested in estrous cycling ewes.
Read booklet label before using drug for complete product information.

WARNINGS:
Human Warning: Avoid contact with skin by wearing protective gloves when handling the inserts.
Keep this and all medications out of the reach of children.

Environmental Warning: Used (removed) EAZI-BREED CIDR Sheep Inserts still contain some progesterone. Used EAZI-BREED CIDR Sheep Inserts must be stored in a sealable container until disposed. Sealed bag/container with used EAZI-BREED CIDR Sheep Inserts must be properly disposed in accordance with applicable local, state and Federal regulations.

Residue Warning: A pre-slaughter withdrawal period is not required when this product is used according to label directions.

Other Information:
Store at controlled room temperature 20° to 25° C (68° to 77° F) with excursions between 15° to 30° C (59° to 86° F).
To report suspected adverse reactions or questions call Pfizer Animal Health at 1-800-366-5288.

Inactive Ingredients: silicone rubber, nylon.
Made in New Zealand

EAZI-BREED™ CIDR®

(progesterone) Sheep Insert

DO NOT USE

- In ewes with abnormal, immature or infected genital tracts
- In ewes that have never lambed
- An insert more than once. To prevent the potential transmission of venereal and blood borne diseases the EAZI-BREED CIDR Sheep Insert should be disposed after a single use.

WHEN USING THIS PRODUCT

- In ewes that respond to treatment the onset of estrus generally occurs within 1 to 3 days after removal of the EAZI-BREED CIDR Sheep Insert.
- Make sure to have a sufficient number of rams to adequately breed all ewes with an induced estrus. Breeds of rams may vary in libido in the non-breeding season. Therefore a ewe to ram ratio up to 18:1 is recommended for multi-sire situations. For single sire lots, 12:1 for ram lambs and up to 18:1 for yearling rams are recommended.

YOU MAY NOTICE:

Clear, cloudy, yellow or bloody mucus on the outside of EAZI-BREED CIDR Sheep Insert when removed from ewes. The mucus may have an offensive odor. This is a result of mild irritation to the vaginal lining by the presence of the EAZI-BREED CIDR Sheep Insert, and generally clears between the time of removal and breeding. Such irritation does not affect fertility.

DIRECTIONS:

For induction of estrus in ewes (sheep) during seasonal anestrus:

- Administer one EAZI-BREED CIDR Sheep Insert per ewe for 5 days.
- After insert removal, use standard flock breeding procedures to breed ewes at induced estrus.

Insertion:

1. Avoid contact with skin by wearing protective gloves when handling inserts.

2. Only use the specially designed EAZI-BREED CIDR Sheep Insert Applicator for administration.

3. Restrain ewes appropriately prior to administration.

4. Wash the applicator in a non-irritating antiseptic solution, and then apply a veterinary obstetrical lubricant to the end of the applicator.

5. Push the tail end of the EAZI-BREED CIDR Sheep Insert into the applicator taking care to assure the tail is extending upward through the slot of the applicator and is pointed away from the handle.

6. Fold the wings of the EAZI-BREED CIDR Sheep Insert to make it longer and continue to advance the insert into the applicator until it is fully seated with only the tips of the wings protruding from the end of the applicator (see Figure 1).

7. Lubricate the protruding tips of the wings of the EAZI-BREED CIDR Sheep Insert with veterinary obstetrical lubricant.

8. Clean the exterior of the vulva with disposable tissue.

9. Open the lips of the vulva and gently place the loaded applicator through the vulva. The slot in the applicator should face down (see Figure 2).

10. Once the loaded applicator is past the vulva slope the applicator slightly upwards (35 - 45° angle) by lowering the handle, and then forward, without forcing, until the applicator is fully inserted or resistance is felt (see Figure 3).

11. Squeeze the finger grips within the handle of the applicator to deposit the EAZI-BREED CIDR Sheep Insert in the anterior vagina (see Figure 4) and then pull the applicator backwards to remove it from the vagina.

12. With the EAZI-BREED CIDR Sheep Insert correctly placed, with the wings open in the anterior portion of the vagina, the tail of the insert should be visible, pointing downward from the vulva of the ewe.

Removal:

1. Remove EAZI-BREED CIDR Sheep Inserts by pulling, gently but firmly, on the protruding nylon tail.

2. EAZI-BREED CIDR Sheep Inserts may reverse direction within the vagina; therefore, if the nylon tail of the insert is not visible on the day of removal, check the vagina to determine if an insert is present.

3. Used (removed) EAZI-BREED CIDR Sheep Inserts must be stored in a sealable container until disposed. Sealed bag/container with used EAZI-BREED CIDR Sheep Inserts must be properly disposed in accordance with applicable local, state and Federal regulations.

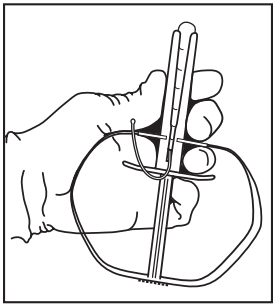


Figure 1

Figure 2

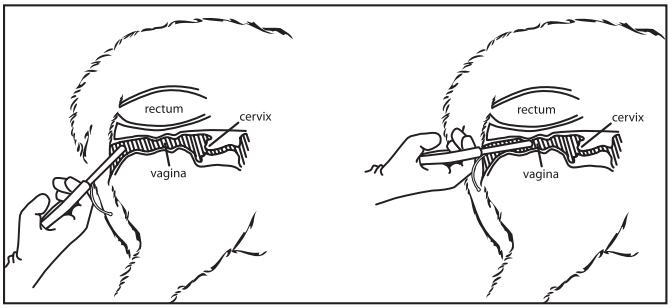


Figure 3

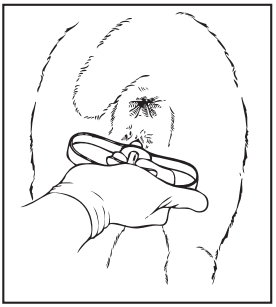


Figure 4

Made in New Zealand

Distributed by:
Pharmacia & Upjohn Company
Division of Pfizer Inc
NY, NY 10017

EAZI-BREED is a trademark and CIDR is a registered trademark of DEC International, NZ, Ltd.

Dist. by: Pharmacia & Upjohn Co.
Div. of Pfizer Inc, New York, NY 10017

www.pfizerah.com
Customer Service: 1-800-733-5500

CDR09004

Senior Team Breeding Exercise-2011 County____**KEY**_____

Your team is managing a 500 head commercial sheep operation that derives most of its income from supplying a Western U.S. lamb feedlot with feeder lambs. Even though you ship your feeder lambs shortly after weaning at 75 days of age to the feedlot, your operation is paid based off of a carcass grid that rewards high cutability carcasses with above average loin eye areas (above 2.75 square inches). Your base ewe flock consists of mainly Dorset cross ewes. You have been using Suffolk and Hampshire rams lately that are producing growthy lambs, but have not added the leanness and muscle needed to achieve the premiums of the feedlot's carcass grid. You have decided to replace four (4) of your current rams and purchase four (4) new rams. The rams you purchase will only be used as a terminal sire with all replacement ewes being purchased from other breeders. A few of the very elite wether and ewe lambs will be marketed as club lambs to be shown at county and district shows in Kentucky. Your job is to select four (4) from the eight (8) Suffolk and Hampshire rams below that you want to purchase to replace the four (4) rams that you are culling, answer the questions and explain to the contest official why you chose the four (4) rams that you did. All rams may be purchased for $1000.00 and you may purchase any combination of Suffolk and/or Hampshire rams, but you must purchase at least one (1) of each breed.

Ram #	Breed	Ram Name	% Lamb Crop EPD	60 Day Weight EPD	120 Day Weight EPD	Loin Eye Area EPD	Fleece Diameter EPD	Codon 171 Genotype
1	Suffolk	Luxford	+5.0	+2.8	+2.5	-0.7	+0.2	QR
2	Suffolk	Blue Duck	-2.5	+3.7	+4.4	+1.1	+1.1	QQ
3	Suffolk	Guywire	+8.2	+0.3	-1.9	+0.6	-0.9	RR
4	Suffolk	Vindicator	+1.7	+4.4	+7.1	+0.3	-0.4	QR
5	Hampshire	Rupp	+1.8	+3.9	+4.3	+1.4	+0.9	RR
6	Hampshire	Wildcat	+3.5	+1.2	+3.7	+0.4	-0.5	QR
7	Hampshire	Rock Solid	+0.5	+4.2	+4.9	+1.6	-0.1	RR
8	Hampshire	Venom	+0.9	+3.2	+4.0	+1.5	+0.2	QR
Suffolk Breed Average EPDs	—	—	**+2.0**	**+2.5**	**+2.7**	**+0.4**	**+0.1**	—
Hampshire Breed Average EPDs	—	—	**+2.7**	**+2.0**	**+1.7**	**+0.7**	**-0.1**	—

[Over for Questions]

Which (4) rams did your team choose to use in this operation?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

1) Considering the Suffolk rams from both a phenotypic and genotypic standpoint, which one would most likely sire lambs that would produce carcasses with the higher percent of hindsaddle?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

2) Considering the Hampshire rams from a phenotypic standpoint, which one appears to be the latest maturing?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

3) Which Suffolk ram appears to be the widest gauged with the most width through his chest floor and the most turn over his rack and center ribcage?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

4) Which two (2) Hampshire rams are the trimmest and most angular through the front 1/3 of their body?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

5) Which ram is the most susceptible to contracting Scrapie?

(1) Luxford (2) Blue Duck (3) Guywire (4) Vindicator (5) Rupp (6) Wildcat (7) Rock Solid (8) Venom

1 Luxford

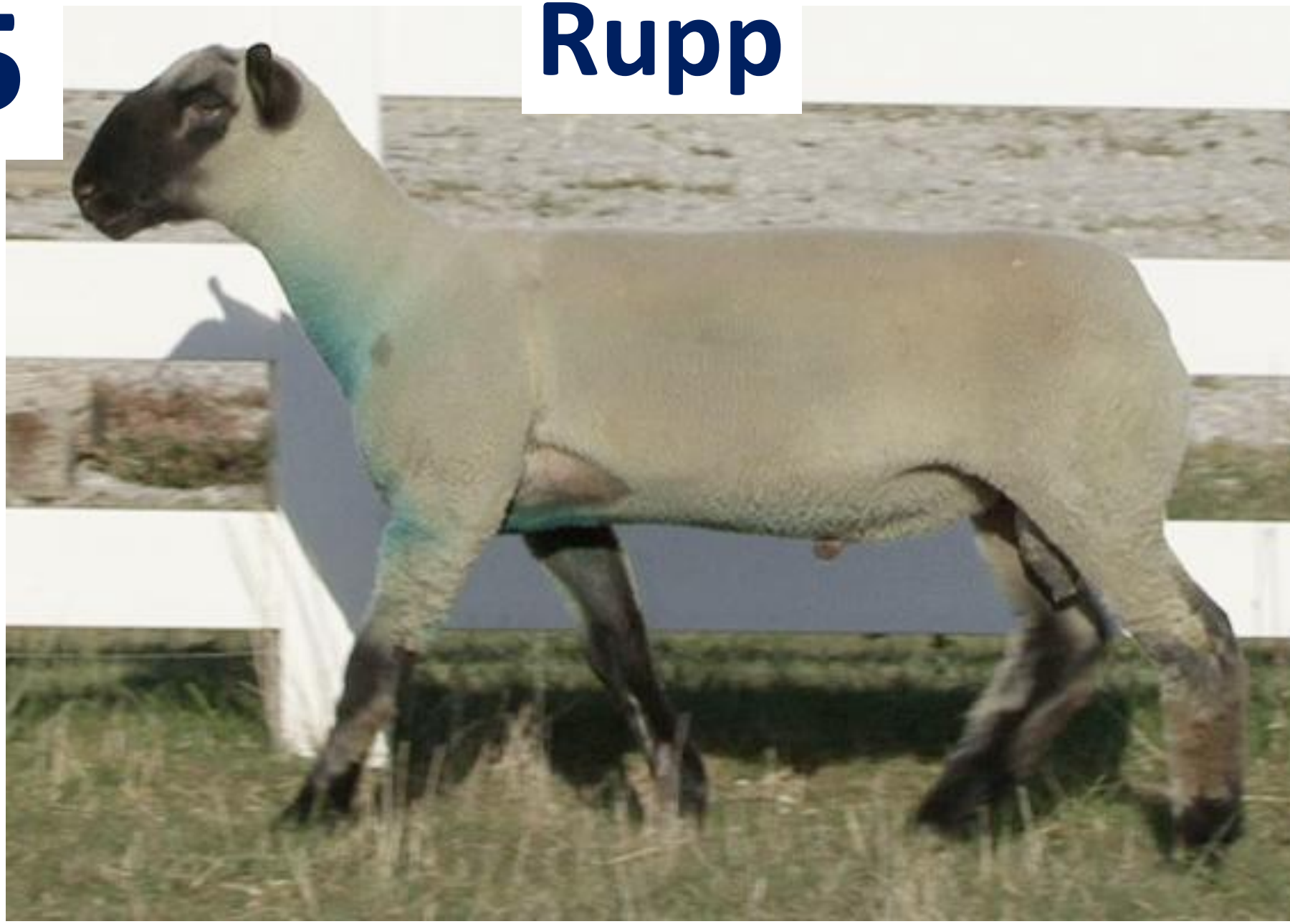
2 Blue Duck

3 Guywire

4 Vindicator

5

Rupp

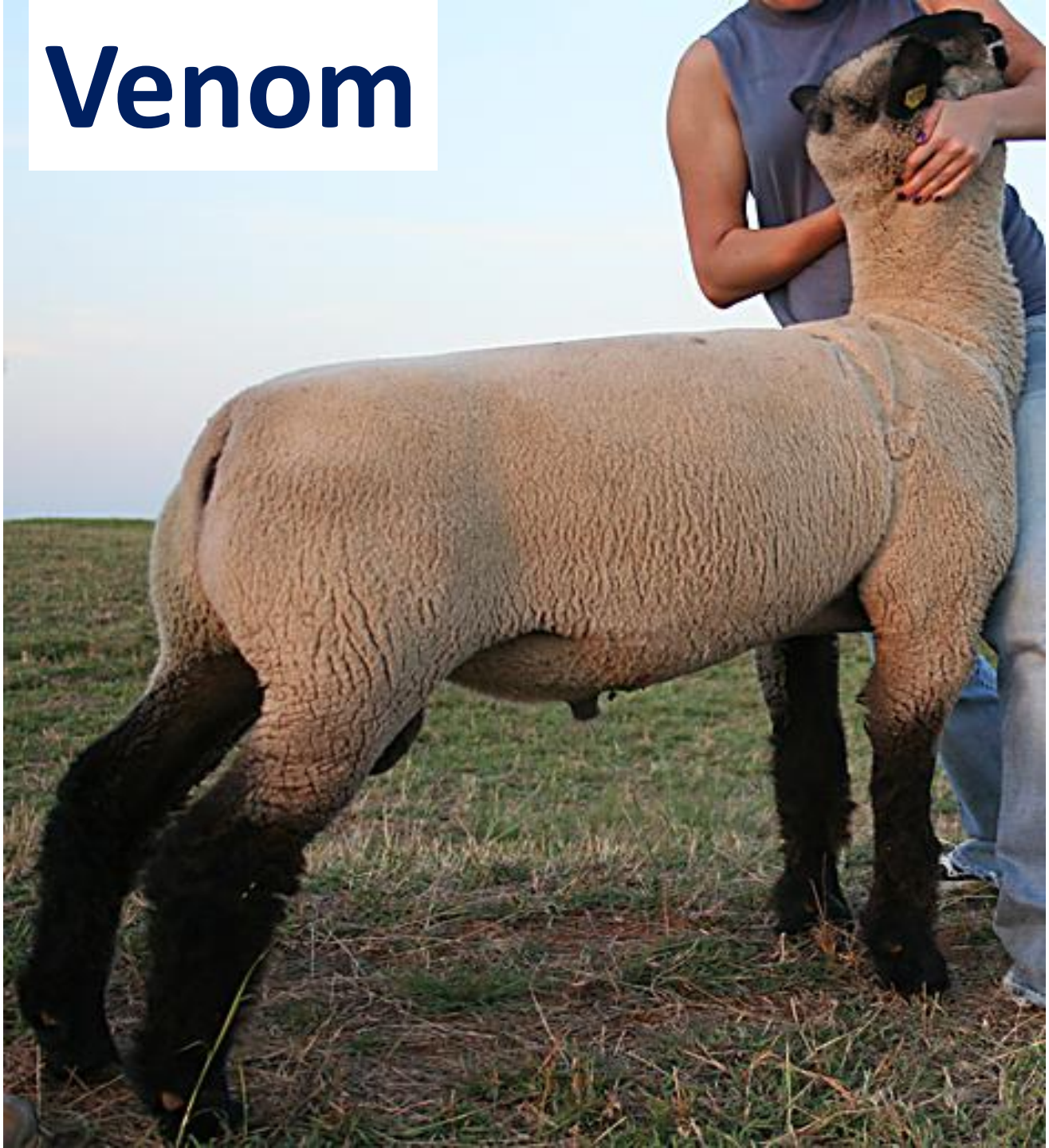


6 Wildcat

7

Rock Solid

8 Venom



Senior Team Feeding Exercise-2011 County___**KEY**_____

You are the manager of a registered Hereford seedstock operation. You need to consider mineral nutrition options to enhance the conception rates of your artificial insemination program and the number of eggs per flush on your donor cows in your embryo transplant program. Review the attached mineral supplements.

All transportation and storage cost are reflected in the final costs of the mineral supplement. Rank the Mineral Supplements according to how you would feed them from first to last to meet the needs of the above scenario. You may consider economics of the mineral supplement, quality and physical characteristics of the ingredients contained in the supplement, and physiological and digestive considerations of the animals being feed. Finally explain to the contest official why you choose your 1st choice.

1st ____**4**____ **2nd** ____**1**_____ **3rd** _____**2**_____ **4th** _____**3**____

Mineral **number 4** is a very high quality chealated mineral (mineral attached to a protein) that is more available to the cowherd. It has above adequate levels of copper, zinc, selenium and other macro and micro minerals and vitamins. In short, it is designed for this very type of production scheme-artificial insemination and embryo transplant.

Minerals 1 and 2 have much lower levels of the same micro minerals and vitamins (number 2 is especially low in copper. It is designed to be fed to most all grazing livestock-beef cattle, horses, sheep, and goats)

Mineral **number 3** is basically salt (sodium chloride) with no chelates and low levels of trace minerals are most likely unavailable to the cowherd.

#1 $15 per 50 lb. bag

Product Information

Sweetlix
LIVESTOCK SUPPLEMENT SYSTEM

#10901
SWEETLIX® 4% Mineral

Features & Benefits

- Free- choice supplement for beef cattle on pasture or with all- roughage rations
- Scientifically balanced to be fed free- choice to cattle
- All protein, mineral and vitamin ingredients are selected for high biological availability and stability

Nutrient Guarantee

Calcium, Min	22.00%	**Iodine, Min**	5 ppm
Calcium, Max	26.00%	**Manganese, Min**	850 ppm
Phosphorus, Min	4.00%	**Selenium, Min**	26 ppm
Salt, Min	14.00%	**Zinc, Min**	550 ppm
Salt, Max	16.00%	**Vitamin A, Min**	20,000 IU/ lb
Copper, Min	200 ppm	**Vitamin D-3, Min**	2,000 IU/ lb
		Vitamin E, Min	2 IU/ lb

Product Ingredients

Calcium Carbonate, Monocalcium Phosphate, Dicalcium Phosphate, Salt, Processed Grain By- Products, Molasses Products, Roughage Products, Manganous Oxide, Manganese Sulfate, Zinc Oxide, Zinc Sulfate, Copper Chloride, Copper Sulfate, Sodium Selenite, Ethylenediamine Dihydroiodide, Calcium Iodate, Cobalt Carbonate, Vitamin A Supplement, Vitamin D-3 Supplement, Vitamin E Supplement, Red Iron Oxide and Artificial Flavoring.

Feeding Directions

SWEETLIX® 4% Phos is a 6:1 calcium to phosphorus mineral scientifically formulated to be fed free choice or mixed with the grain or roughage portion of the ration. **SWEETLIX® 4% Phos** helps your animals attain maximum performance by providing a balanced intake of supplemental minerals and vitamins.

Free Choice Recommendations

Feed at the rate of 2 to 4 oz. per head per day. Provide one covered mineral feeder for every 20 to 30 animals. Locate each mineral feeder near a clean, fresh source of water. Mineral consumption levels will vary depending upon the mineral status of the animals.

For additional information, please contact your SWEETLIX® representative.

CAUTION: Follow label directions. Four (4) ounces of this product provides 3 mg selenium. Consumption of selenium should not exceed 3 mg per head per day.

WARNING: This product, which contains added copper, should not be fed to sheep or any species that have a low tolerance to supplemental copper.

#2 $12.50 per 50 lb. bag

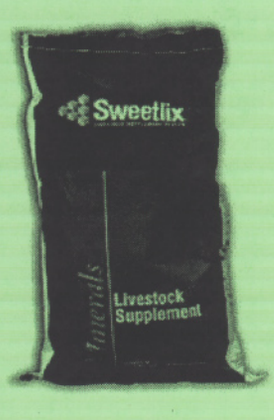
Product Information

Sweetlix
LIVESTOCK SUPPLEMENT SYSTEM

#10936
SWEETLIX® 4% Multi- Purpose Mineral

Features & Benefits

- Free- choice supplement for beef cattle on pasture or with all- roughage rations
- Scientifically balanced to be fed free- choice to cattle
- All protein, mineral and vitamin ingredients are selected for high biological availability and stability



Nutrient Guarantee

Calcium, Min	20.00%	**Copper, Max**	35 ppm
Calcium, Max	24.00%	**Manganese, Min**	490 ppm
Phosphorus, Min	4.00%	**Selenium, Min**	19 ppm
Salt, Min	15.00%	**Zinc, Min**	750 ppm
Salt, Max	18.00%	**Vitamin A, Min**	20,000 IU/ lb
Copper, Min	5 ppm	**Vitamin D-3, Min**	2,000 IU/ lb
		Vitamin E, Min	2 IU/ lb

Product Ingredients

Calcium Carbonate, Monocalcium Phosphate, Dicalcium Phosphate, Salt, Molasses Products, Roughage Products, Processed Grain By- Products, Vitamin A Supplement, Vitamin D-3 Supplement, Vitamin E Supplement, Manganous Oxide, Zinc Oxide, Sodium Selenite, Red Iron Oxide and Caramel Flavoring.

Feeding Directions

Free Choice Recommendations

Feed at a rate of 2 to 5 oz. per head per day for cattle and horses and 0.5 to 1.3 oz. for sheep and goats. Five (5) ounces of this product provides 3 mg selenium and 1.3 ounces provides 0.7 mg selenium. Provide one covered mineral feeder for every 10 to 30 animals. Locate each mineral feeder near a clean, fresh source of water. Mineral consumption levels will vary depending upon the mineral status of the animals.

For additional information, please contact your SWEETLIX® representative.

CAUTION: Follow label directions. Consumption of selenium should not exceed 3 mg per head per day for cattle and horses. Consumption of selenium should not exceed 0.7 mg per head per day for sheep and goats.

#3 $10 per 50 lb. bag

REDMOND NATURAL TRACE MINERAL SALT ANALYSIS

Product Description: Ancient Sea Salt With Natural Trace Minerals

Guaranteed Analysis

Chemical Analysis	Avg.	Max.	Min.
Sodium Chloride	93%	96%	91%
Calcium	0.55%	0.85%	0.35%
Copper			3 ppm
Iodine	12 ppm		10 ppm
Iron	500 ppm		300 ppm
Magnesium	0.09%		0.06%
Manganese			5 ppm
Phosphorus			0.02%
Potassium			0.03%
Sulfur	0.2%		0.07%
Zinc			3 ppm

Also Contains Over 50 Natural Minerals Including the Following in Alphabetical Order:

Typical - Not Guaranteed

Mineral	ppm	Mineral	ppm	Mineral	ppm
Aluminum	215	Gadolinium	.61	Selenium	0.23
Antimony	1.08	Gallium	2.36	Silicon	3000
Arsenic	0.05	Germanium	.27	Silver	.29
Barium	9.95	Indium	.37	Strontium	11.9
Bismuth	0.38	Lanthanum	0.08	Tantalum	.97
Boron	1.07	Lead	0.06	Tellurium	0.17
Bromine	10.51	Lithium	0.74	Thallium	.09
Cadmium	.27	Lutetium	.07	Thorium	0.19
Carbon	204	Molybdenum	0.08	Thulium	.07
Cerium	.76	Nickel	.07	Tin	.12
Cesium	.33	Niobium	0.11	Titanium	0.93
Chromium	0.16	Praseodymium	.11	Tungsten	.11
Cobalt	0.08	Rubidium	3.77	Vanadium	.18
Dysporsium	.21	Ruthenium	.07	Ytterbium	.07
Erbium	1.34	Samarium	1.44	Yttrium	0.04
Fluoride	13.8	Scandium	.18	Zirconium	2.95

Redmond Minerals, Inc.
PO Box 219
6005 N 100 W
Redmond, UT 84652

Phone: (435) 529-7402
Fax: (435) 529-7486
Toll Free: (866) 735-7258

www.redmondnatural.com

- **#10 Fine:** goes through a 10-mesh screen, it is approximately 1/16 of an inch, it is like coarse sand.
- **#4 Medium:** goes through a 4-mesh screen, it is approximately 1/8 of an inch, it is like kernels of wheat.
- **#3 Coarse:** goes through a 3-mesh screen, it is approximately 1/4 of an inch, it is like dried peas.

Available in 50 Lb. Bag, Superbag, Bulk & Block

#4 $20 per 50 lb. bag

Product Information

Sweetlix
LIVESTOCK SUPPLEMENT SYSTEM

#10875
SWEETLIX® CopperHead® Max 12:12 Mineral

Features & Benefits

- Loose mineral supplement scientifically designed to combat copper deficiency in cattle
- Contains 2500 ppm copper for enhanced copper nutrition
- Helps counteract copper deficiency symptoms including:
  - Rough, discolored hair (black cattle with red tinged coats)
  - Slow shed out in spring
  - Slow breeders
  - Poor immunity
- Contains 12% phosphorus to prevent phosphorus deficiency in forage based diets
- Enhanced levels of trace minerals for maximum productivity
- All CopperHead® minerals contain organic chelated sources of zinc, manganese and cobalt, as well as copper
- Highly palatable mineral ideal for reproductive and growth performance
- Contains RainBloc® for increased resistance to moisture
- Ideal for growing and brood cattle on forages known to be low in phosphorus

Nutrient Guarantee

Calcium, Min	12.00%	**Iodine, Min**	90 ppm
Calcium, Max	14.40%	**Manganese, Min**	7,500 ppm
Phosphorus, Min	12.00%	**Selenium, Min**	26 ppm
Salt, Min	10.00%	**Zinc, Min**	7,500 ppm
Salt, Max	12.00%	**Vitamin A, Min**	200,000 IU/ lb
Magnesium, Min	2.00%	**Vitamin D-3, Min**	20,000 IU/ lb
Cobalt, Min	25 ppm	**Vitamin E, Min**	200 IU/ lb
Copper, Min	2,500 ppm		

(OVER)