# 2005 Eastern National 4-H Horse Bowl
## Round Four

### One-On-One

<table>
<thead>
<tr>
<th>Q.</th>
<th>Q.</th>
<th>A.</th>
<th>S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 C1</td>
<td>What breed was developed from the Thoroughbred, Norfolk Trotter, Barb, Morgan and Canadian Pacers and was once called the American Trotting Horse?</td>
<td>Standardbred</td>
<td>Evans pg 28</td>
</tr>
<tr>
<td>2 C2</td>
<td>Name the horse color that usually has black points and a dorsal stripe, and the hair color is not a mixture of black and white, but each hair is a smoky or mouse color.</td>
<td>Grullo</td>
<td>HIH 140-1, DET pg 125</td>
</tr>
<tr>
<td>3 C3</td>
<td>At what age would you find the central deciduous incisors erupting in a foal?</td>
<td>Birth to 7 days (accept anything in that range)</td>
<td>HIH 405-1</td>
</tr>
<tr>
<td>4 C4</td>
<td>Horses, guinea pigs and rabbits are classified as nonruminant herbivores because they do not have a rumen, but they are still able to digest forages in what structure?</td>
<td>Cecum (also accept large colon)</td>
<td>Evans pg 189</td>
</tr>
</tbody>
</table>
5 C1 Q. A group of horses possessing specific distinguishable characteristics, such as function, conformation and color that are not common to other horses would be defined by what term?

A. Breed

S. Evans pg 137 0200/2

6 C2 Q. In the horse, what is the easiest and most meaningful sign to measure to determine physical fitness?

A. Heart rate

S. Lewis pg 206 440/3

7 C3 Q. What will be the effect on the stride of a horse with a shoulder angle less than 45 degrees compared to ideal shoulder conformation?

A. The stride length will be longer

S. AYHC-YLM ADV 323-3 L 0600/3

8 C4 Q. What is the term for the accumulation of excessive synovial fluid in the joint capsule of the fetlock?

A. Wind-puffs

S. Kainer – Plate 14, DET pg 224 620/3
9 C1  Q.  What is the proper term for horse shoeing that is used as a mechanical technique to assist in the medical treatment of foot or limb disease?
   A.  Therapeutic shoeing (not corrective)
   S.  AYHC-YLM-INT 2321-1 0900/-3

10 C2  Q.  What is the foundation for any successful fly control program?
   A.  Sanitation or manure management.
   S.  HIH 415-3 1100/3

11 C3  Q.  What is the name for the small boat shaped bone that the deep flexor tendon passes over before it attaches to the coffin bone?
   A.  Navicular bone (distal sesamoid, shuttle bone)
   S.  Lewis pg 397 400/3

12 C4  Q.  What product do the sebaceous glands located in the dermis layer of the skin produce?
   A.  Sebum
   S.  Kainer plate 5 460/3

End One-On-One
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Begin Open Questions

13 Q. In hands, what is the maximum height a registered American Miniature Horse can be?
    A. 8.2 hands (34 inches)
    S. AYHC-YLM Beg 110-2 L  0200/3

14 Q. What joint is subjected to the greatest strain of all of the horse’s joints?
    A. Fetlock or metacarpal-phalangeal joint.
    S. Evans pg 689  400/3

Toss Up – Bonus Attached

15 Q. Name two of the three elastic structures of the equine hoof that function as shock absorbers.
    A. 1 – Frog
       2 – Lateral cartilages
       3 – Digital or plantar cushion
    S. AYHC-YLM-INT 206-2 L  400/3

Bonus Question

16 Q. Bonus question: The average hoof growth rate for all horses is 3/8 inch or 1 cm. per month. Name four situations or conditions that would cause this growth rate to increase.
    A. 1 – Young horses grow faster than older horses
       2 – Warm temperatures produce faster growth than cold temperatures
       3 – Irritation or injury increase growth rate
       4 – Increased wear or exercise increase growth rate
       5 – Optimal nutrition increases growth rate compared to marginal or poor nutrition
    S. AYHC-YLM-INT 206-3  400/4
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Resume Open Questions

17  Q. How many deciduous teeth has the normal horse shed by 5 years of age?
A. 24 teeth – 12 incisors and 12 premolars – the molars are permanent teeth
S. HIH 405-1 430/3

18  Q. What is the name for the cellular filters that collect fluids from between cells and work to prevent bacteria and foreign matter from entering the blood stream?
A. Lymph nodes
S. DET pg 173, Evans pg 113. 440/3

19  Q. What artificial means can be used to stimulate mares to cycle early in the breeding season?
A. Photo-stimulation – increasing light
S. Evans pg 383 480/3

Toss Up – Bonus Attached

20  Q. What are two ways you can encourage an aggressive eater to eat slower?
A. Placing bricks or softball size stones in the feed box; Feeding in large shallow troughs; feeding extruded feeds; mixing chopped hay with the concentrate; bars in the feed box, automatic feeder to feed in small doses and feed nervous horses first.
S. HIH 710-8, Lewis pg94 710/3
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Bonus

21  Q. Bonus question: Compare corn and oats with regard to energy, protein and cost per unit of energy.

   A. Corn is higher in energy, lower in protein and less expensive per unit of energy than oats.

   S. AYHC-YLM-ADV 302-2L 700/3

Resume Open Questions

22  Q. The process of reproduction in the mare is driven by the action of what group of substances?

   A. Hormones

   S. HIH 910-5, AYHC-YLM-ADV 326-2 L 480/3

23  Q. If one parent is homozygous for a dominant color and the other parent is heterozygous for the same dominant color, what color will the foal be from this mating?

   A. The same color as the parents

   S. HIH 1040-1 550/2

24  Q. What vitamin functions jointly with selenium in protecting body tissues from oxidation induced damage?

   A. Vitamin E

   S. Lewis pg 28 740/4
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25 Q. Side bone is the term for the complete ossification of the cartilages of which phalanx?
   
   A. Distal Phalanx (Pedal bone, 3\textsuperscript{rd} Phalanx, Coffin bone)
   
   S. Kainer Plate 12 800/4

Toss Up – Bonus Attached

26 Q. Name two congenital defects of the mandible.
   
   A. Parrot mouth (overshot jaw)
      Monkey mouth (undershot jaw)
   
   S. Evans pg 93 600/3

Bonus

27 Q. Bonus question: Give four reasons why you would choose to feed hay in a cubed form rather than loose hay.
   
   A. 1 – Less waste
      2 – Reduced intestinal fill; allows the horse additional feed intake
      3 – Easier storage; less space required
      4 – Reduced transportation costs
      5 – Easier to transport when away from home traveling or at a show
      6 – Minimizes dust
      7 – Can be used in automated feeders
      8 – Decreased fecal material
   
   S. Lewis pg 67 710/3
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Resume Open Questions

28 Q. A normal capillary refill time for the horse is less than how many seconds?
   A. 2 to 3 seconds (accept anything in this range)
   S. Lewis pg 384, HIH 425-2 870/3

29 Q. Give the scientific name including genus and species of the parasite that is the major concern of foals up to six months of age.
   A. *Parascaris equorum*
   S. HIH 950-9 880/4

30 Q. What pack saddle is being described – usually rigged for a double cinch, sheepskin lining is usually installed on the blades of the saddle and the saddle is the best for use with panniers?
   A. Crossbuck or sawbuck
   S. IH 1125-1 1020/3

31 Q. Which vitamin functions to maintain plasma calcium concentrations and is known as the “sunshine vitamin”?
   A. Vitamin D
   S. Lewis pg 48 740/2

Last Question of the Round

32 Q. What shoe would you choose to apply pressure to the frog area, relieving pressure on the sole and lamina and helping prevent further rotation of the coffin bone?
   A. Heart-bar shoe or full support shoe
   S. Evans pg 751, HIH 540-4 900/3