



**2008 Senior State 4-H Horse Bowl  
Round Nine**

5. C1 Q. In the horse's eye, focused light rays which form the image on the retina are transmitted to the brain by what nerve?
- A. Optic nerve
- S. DET 167, Kainer 78 420/3
6. C2 Q. The angle of the slope of the shoulder is essential to the overall balance of the horse. As the slope of the shoulder becomes straighter what effect does this have on the length of the back?
- A. The back gets longer – the top line becomes longer
- S. YLM A323-2L 600/4
7. C3 Q. When a pacer hits the sole or shoe of a front foot with the diagonal rear foot, this interference is called what?
- A. Cross-firing
- S. Evans 179, DET 73 620/3
8. C4 Q. What type of hernia only occurs in a male horse?
- A. Scrotal hernia (not inguinal hernia)
- S. Evans 168 880/3

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9. C1 Q. As the owner of a horse boarding and training operation, what type of insurance do you need to carry to protect you from situations where you may be held responsible for bodily injury or property damage, particularly where negligence may be claimed?
- A. Liability Insurance
- S. HIH 1340-5 940/4
10. C2 Q. What is the proper term for the blood vessel rich, bone producing membrane that covers bone except at the articular surfaces?
- A. Periosteum
- S. Kainer plate 9, DET 209 410/3
11. C3 Q. What is the name of the glandular organ located near the stomach which serves as a reservoir for red blood cells and assists the body in combating infectious organisms?
- A. Spleen
- S. Lewis 404 440/4
12. C4 Q. What is the name of the area on the horse's jaw where the curb chain should rest?
- A. Curb groove
- S. DET 75 1000/4

**End One-On-One**

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**Begin Open Questions**

13. Q. Rain rot is a common term used to describe a condition where moisture and dirt allow a commonly found bacteria to cause an infectious situation, causing the hair coat to separate from the skin at its roots and slough off in sections? This is often confused with rain scald which is caused by an infection with what organism?
- A. Fungus
- S. DET 228 860/5
14. Q. A clinch block can be used to turn the head of the nail to start the clinch. If your horse objects to this procedure, what other tool could be used to turn the clinch?
- A. Clinchers or clinching tongs (gooseneck, alligator or saddle horse clinchers)
- S. HIH 530-3, Evans 745 900/4
15. Q. Name one of the two endocrine glands that are attached to the brain.
- A. Pituitary gland or pineal gland
- S. Kainer plate 77 420/3
16. Q. What does the term “blow a stirrup” refer to?
- A. To lose a stirrup iron
- S. DET 33 1000/4

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**Toss Up – Bonus Attached**

17. Two part Q. What term describes the 45-50 foot long rope that is used with a lash cinch to secure a pack load and what are three types of hitches with which it can be used to secure the load?
- A. Lash rope  
Single diamond, double-diamond, half-diamond, triple diamond, squaw, or Arizona
- S. HIH 1125-1 1020/4

**Bonus Question**

18. Q. Cob – C O B or – cobby C O B B Y are terms used in the horse industry. Give 3 examples of how you might use these terms.
- A. Cob-tailed – an English custom of docking the tail to a 6 inch length.  
Cob-tail class – one of two classes Hackney ponies are divided into for show.  
Cob as a type rather than breed description – short legged, max height 15.1 hands with the bone and substance of a heavyweight hunter.  
Cobby – as a description of a close coupled and stoutly built horse.  
Cob - form of feed – “corn cob”.  
Welsh Cob – a division of Welsh pony and horse based on type.
- S. Evans 63-64, DET 60, HIH 184-1 200/4

**Resume Open Questions**

19. Q. What is the proper name (genus) of the parasite causing this disease? Adult horses rarely have clinical problems from this parasite – it primarily affects nursing foals. The small thread like adult worms in the small intestine can cause diarrhea and unthriftiness.
- A. Strongyloides (Strongyloides westeri)
- S. Lewis 158 835/4

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20. Q. What hormone does the maturing follicle on the ovary release to stimulate the sexual behavior of the mares during heat?
- A. Estrogens
- S. HIH 910-6, YLM 326-3 510/3
21. Q. Which martingale combines the action of both the snaffle rein and draw reins?
- A. German martingale
- S. DET 120 1000/4
22. Q. What serious unsoundness is described as an enlargement that appears on the inside and front of the hind leg where the hock tapers into the cannon bone?
- A. Bone Spavin or Jack Spavin
- S. DET 35, HIH 230-4 620/3
23. Q. Identify one of the two different places in the horse's skeletal structure where you would find an interosseus ligament.
- A. Attachment of the radius to the ulna (present only in foals and is later ossified) or the cannon bones to the splint bones.
- S. Kainer plate 14, Evans 158-9, DET 154 410/4

**Toss Up – Bonus Attached**

24. Two part Q. What is the proper term for the fluid that suspends the red blood cells in whole blood and what term is used for the fluid that remains once the red blood cells have clotted?
- A. Plasma – fluid in whole blood  
Serum – in clotted blood
- S. Lewis 401, 403 440/4



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28. Q. Your horse has been kicked by another horse and has a contusion. The trauma is sufficient to break blood vessels resulting in an abnormal pocketing and collection of blood in body tissues. What is this formation called?

A. Hematoma (do not accept bruise – term synonymous with contusion and does not describe the situation in the question)

S. HIH 440-5, Lewis 392 840/3

29. Q. To what structure does the 12<sup>th</sup> cranial nerve – the hypoglossal nerve – provide motor control?

A. The tongue

S. Kainer plate 78 420/4

**Last Question of the Round**

30. Q. What is the last event to occur in the last stage of labor in the mare?

A. Expulsion of the placenta or afterbirth

S. Kainer plate 73, Lewis 246 510/3