

**2011 Eastern National 4-H Horse Bowl
Round 1**

One-On-One

1. C1 Q. Which breed has had the most influence in the development of light horse breeds in America?
- A. Thoroughbred (also accept Arabian as correct answer since the Thoroughbred was developed primarily from the Arabian)
- S. Evans p. 17 200/3
-
2. C2 Q. What is the primary difference between a horse with a roan coat and a horse with a gray coat?
- A. A roan horse's coat does not change over time (proportion of white hairs is the same at birth and each successive coat); gray will become lighter (more white hairs with each successive coat)
- S. ES p. 38; Evans p. 81 300/2
-
3. C3 Q. What term refers to a mature female horse that has never been bred?
- A. Maiden mare
- S. DET p. 174 510/2
-
4. C4 Q. What 4 beat gait is the slowest gait and is common to all breeds of horses?
- A. Walk
- S. ES p. 70 640/2

**2011 Eastern National 4-H Horse Bowl
Round 1**

5. C1 Q. What is the common term for Equine Periodic Ophthalmia?

A. Moon Blindness

S. Evans p. 521 825/3

6. C2 Q. Sun-cured hay is a good source of what vitamin?

A. Vitamin D

S. Evans p. 260 740/2

7. C3 Q. What type of bit is considered to be the most severe western curb bit?

A. Spade bit

S. HIH 1100-10 1000/3

8. C4 Q. What is the slang term for the medication phenylbutazone?

A. Bute

S. DET p. 43 805/2

**2011 Eastern National 4-H Horse Bowl
Round 1**

9. C1 Q. What is the purpose of adding stickers or “mud calks” to the heel of a racing plate?
- A. To increase traction on a muddy race track (accept to increase traction)
- S. Evans p. 735 900/2
-
10. C2 Q. What is the common term for the ossification of the lateral cartilages of the distal phalanx?
- A. Sidebones
- S. Kainer plate 12 620/2
-
11. C3 Q. In a ranch operation, what is the purpose of a boundary rider?
- A. To ride the fences of the property and repair any problems
- S. DET p. 36 920/3
-
12. C4 Q. What is the name for the winged horse of Greek mythology?
- A. Pegasus
- S. DET p. 207 100/2

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 1**

Begin Open Questions

13. Q. Giving the horse more selenium, vitamin E and reducing grain intake on days the horse is idle are nutritional preventatives for what metabolic disorder in horses?

A. Tying up (also accept Recurrent Exertional rhabdomyolysis, Monday morning sickness, Azoturia)

S. Evans p. 306 700/3

14. Q. What is the common term for the 1st premolar teeth?

A. Wolf teeth

S. Kainer plate 49 435/2

Toss Up – Bonus Attached

15. Q. (Two Part) What is the recommendation for the **minimum** height for a perimeter fence and the **minimum** height for a fence used to divide pastures?

A. 5 feet (60 inches) (perimeter); 4 ½ feet (54 inches) (divider)

S. Evans p. 760; HIH 350-1 920/3

**2011 Eastern National 4-H Horse Bowl
Round 1**

Bonus Question

16. Q. (Bonus) Identify **four** advantages of having a “Dutch” or open top exterior door for each horse stall.
- A. Improves stable ventilation (better air quality)
More light
Permits horse to put head out into fresh air
Decreases respiratory diseases
Helps alleviate boredom/stable vices
Provides a fire exit
- S. Lewis p. 181 920/3

Resume Open Questions

17. Q. You are the veterinarian treating a horse with West Nile Encephalitis. The horse’s owner is concerned and wants to know why you are not treating the horse with an antibiotic. Explain why.
- A. West Nile is caused by a virus and antibiotics are used to treat bacterial diseases
- S. HIH 665-2; DET p. 12 805/3
18. Q. What type of internal parasite causes “summer sores”?
- A. Stomach worm (also accept Habronema)
- S. Lewis p. 158 835/2
19. Q. What term refers to a wild Australian horse?
- A. Brumby
- S. DET p. 41 200/3

**2011 Eastern National 4-H Horse Bowl
Round 1**

Toss Up – Bonus Attached

20. Q. What are the two **most** common sources of calcium and phosphorus in horse feeds?
- A. Dicalcium phosphate and steamed bone meal
- S. YLM ADV 202-2L 750/3

Bonus Question

21. Q. (Bonus) In addition to a hoof pick, what are the **three** basic tools used by a farrier when trimming the feet?
- A. Hoof knife (farrier's knife), rasp and hoof nippers (nippers)
- S. Evans p. 722, 725 900/3

Resume Open Questions

22. Q. What is another name for a dorsal stripe?
- A. Back stripe, line back or eel stripe
- S. ES p. 38 310/2
23. Q. You are judging a cutting horse competition. It is important to remember when calculating the final scores that each entry begins with what score?
- A. 70 points
- S. HIH 180D-1 1010/2

**2011 Eastern National 4-H Horse Bowl
Round 1**

24. Q. There are three parts of the small intestine. Which of these parts is the most distal portion?

A. Ileum

S. Kainer plate 51 430/3

25. Q. Which current horse breed was originally known as the Kentucky Saddler?

A. American Saddlebred

S. Evans p. 38 200/3

Toss Up – Bonus Attached

26. Q. A back cinch is optional with some types of western saddles. Which **two** types of western saddles **always** have a back cinch?

A. Roping and cutting

S. HIH 1100-5 1000/3

Bonus Question

27. Q. (Bonus) Identify **four** reasons for using a saddle blanket or pad.

A. To protect the horse's back
To absorb sweat and moisture
To protect the saddle
To help the saddle fit better

S. HIH 1100-5 1000/3

Resume Open Questions

**2011 Eastern National 4-H Horse Bowl
Round 1**

28. Q. What does the term Indian broke indicate?
- A. The horse is trained to allow mounting from the off side (also accept trained to allow mounting from both sides)
- S. DET p. 151 980/2
29. Q. You do the math....A horse that is 66 inches tall would be considered to be how many hands tall?
- A. 16.2 hands tall
- S. Evans p. 139 400/2
30. Q. Describe a unicorn hitch.
- A. Two horses hitched as a pair with a third in front of them (also accept pair of wheel horses with a single lead horse)
- S. DET p. 279 1050/2
31. Q. What is the total number of bones in the skeleton of the horse?
- A. 205
- S. Evans p. 90 410/2

Last Question of the Round

32. Q. What gait defect is seen in pigeon-toed horses?
- A. Paddling or winging out
- S. Evans p. 181; DET p. 201 640/2

**2011 Eastern National 4-H Horse Bowl
Round 2**

One-On-One

1. C1 Q. What common term refers to the secretion produced by the lacrimal glands?

 A. Tears

 S. Kainer plate 45 425/2

2. C2 Q. What term describes a gray horse with a basic body color of black?

 A. Blue or steel gray

 S. Evans p. 81 300/2

3. C3 Q. What term refers to paired alleles of a gene that are **not** identical?

 A. Heterozygous

 S. Evans p. 451 550/2

4. C4 Q. How does a horse reposition their head to better visualize objects that are far away?

 A. The horse lowers their head

 S. HIH 1220-1 425/3

**2011 Eastern National 4-H Horse Bowl
Round 2**

5. C1 Q. Perlino is the result of a double dilution of what color?
A. Bay
S. Evans p. 474 300/3
6. C2 Q. You just found out that a young foal in your barn has white muscle disease. What vitamin deficiency is the most likely nutritional cause?
A. Vitamin E deficiency
S. ES p. 124 740/3
7. C3 Q. What is the best and simplest way to control blood loss or hemorrhage from a wound?
A. Apply a pressure bandage (also accept apply direct pressure)
S. Evans p. 609 400/2
8. C4 Q. The chestnut horse you recently purchased at an auction has a brand that is white in color. Would the brand most likely be a hot brand or a freeze brand?
A. Freeze brand
S. Evans p. 809 310/3

**2011 Eastern National 4-H Horse Bowl
Round 2**

9. C1 Q. The genetic disorder Equine Night Blindness primarily affects which horse breed?
- A. Appaloosa
- S. ES p. 100 550/2
-
10. C2 Q. What mammal is considered to be the **primary** source of rabies in horses?
- A. Skunks
- S. HIH 680-1 820/3
-
11. C3 Q. “Ridgeling” is a slang term for what condition in the stallion?
- A. Cryptorchid (one or both testes are retained within the abdominal cavity or inguinal canal, not descended into the scrotum)
- S. Kainer plate 76 500/3
-
12. C4 Q. What is the **minimum** width for a gate that will be used to move equipment such as a tractor in and out of a pasture?
- A. Minimum of 12 feet wide
- S. Evans p. 771 920/3

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 2**

Begin Open Questions

13. Q. Toxicity of what mineral results in “Big head disease” or hyperparathyroidism?

A. Phosphorus

S. ES p. 135 750/3

14. Q. Black Allan is the foundation sire for which horse breed?

A. Tennessee Walking Horse

S. Evans p. 40 200/2

Toss Up – Bonus Attached

15. Q. (Two Part) What are the **three** roan colors and the base coat color associated with **each** of the colors?

A. Blue roan (black); Red roan (Bay); Strawberry roan (chestnut)

S. ES p. 47 300/2

Bonus Question

16. Q. (Bonus) Identify **four** areas of the horse that would be visually appraised and palpated when determining a body condition score.

A. Along the top side of the neck Over the rib cage
In the crease down the back (topline) Along the withers
In the area adjacent to the tail head Over the hip and pin bones
Behind the shoulder/over the point of the shoulder

S. HIH 720-3, 720-4 800/3

**2011 Eastern National 4-H Horse Bowl
Round 2**

Resume Open Questions

17. Q. You are the barn manager at a Quarter Horse breeding farm and note that one of the pregnant broodmares has wax-like secretions on the end of the teats. How soon would you expect this mare to foal?

A. Accept anything within range of 1 to 6 days

S. Lewis p. 244; Evans p. 417; HIH 940-3 510/3

18. Q. What type of bedding is preferred for foaling stalls?

A. Straw

S. HIH 940-3 500/2

19. Q. Mosquitoes are considered to be the vector for transmission of West Nile Virus encephalitis. What is considered to be the **primary** reservoir host that infects mosquitoes with this disease?

A. Birds (especially crows, blue jays and raptors such as owls and hawks)

S. HIH 665-1 820/3

Toss Up – Bonus Attached

20. Q. What are the **two** main causes of barn fires in the summer?

A. Spontaneous combustion of improperly cured hay and electrical storms

S. HIH 340-1 920/2

2011 Eastern National 4-H Horse Bowl Round 2

Bonus Question

21. Q. (Bonus) Identify **three** coat colors that are the result of the interactions of dilution genes.
- A. Palomino, Buckskin, Dun, Cream, Perlino, Champagne, Cremello, Silver dapple, Smokey, Smokey cream, Grulla
- S. ES p. 95; Evans p. 472; HIH 1040-2 300/3

Resume Open Questions

22. Q. What is the common term for the apocrine tubular glands?
- A. Sweat glands
- S. Kainer plate 5 460/3
23. Q. What part of the bridle keeps the crown piece from slipping forward over the ears and off the head?
- A. Throatlatch
- S. HIH 1100-6 1000/2
24. Q. What are you doing if you are “bulldogging”?
- A. Steer wrestling
- S. DET p. 43 1060/3

**2011 Eastern National 4-H Horse Bowl
Round 2**

25. Q. Your horse has bones that are softened, bent and bowed out and has been diagnosed with rickets. This problem could be prevented in the future by feeding more of which vitamin?

A. Vitamin D

S. ES p. 124 740/2

Toss Up – Bonus Attached

26. Q. Give **two** advantages of the elevated inside rim on a polo shoe.

A. Increases traction, prevents sliding, enables foot to roll over faster, allows horse to pivot on the shoe while maintaining toe grip regardless of where the foot breaks over

S. Evans p. 737 900/3

Bonus Question

27. Q. (Bonus) **Other than dental changes**, identify **three** normal signs of aging that would be observed in the physical appearance of horses.

A. Drooping lower lip	Deep hollows above the eyes
Sway back	Graying hair

S. HIH 450-1, 450-6 400/3

Resume Open Questions

**2011 Eastern National 4-H Horse Bowl
Round 2**

28. Q. What is the most common topical medication used to control bleeding wounds?
- A. Silver nitrate
- S. HIH 440-2 805/3
29. Q. Aniridia is a genetic disorder in which the iris of the eye is absent. This occurs primarily in which horse breed?
- A. Belgian
- S. ES p. 100 550/3
30. Q. What conformation defect is described by the term “wasp-waisted”?
- A. Weak coupling or shallow in the flank
- S. Evans p. 152 600/3
31. Q. What is the common name for the dominance hierarchy exhibited by a group of horses?
- A. Pecking order
- S. DET p. 207 910/2

Last Question of the Round

32. Q. What is the name of the horse that was assigned the first permanent registration number in the AQHA?
- A. Wimpy P-1 (also accept Wimpy)
- S. Evans p. 27 100/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

One-On-One

1. C1 Q. Plant poisoning from consumption of Johnson grass would be treated as what type of sudden death poisoning?
- A. Cyanide-induced sudden death poisoning
- S. Lewis p. 334 770/3
-
2. C2 Q. What does the term trappy describe in regards to way of going?
- A. Short, quick, high and choppy stride (accept choppy stride)
- S. Evans p. 181 640/2
-
3. C3 Q. A foal that is being weaned will call for its dam. This would be categorized as what type of behavior?
- A. Et-epimeletic behavior
- S. Evans p. 676 910/3
-
4. C4 Q. In general, what type of horse is often used as a nurse mare because they produce more milk?
- A. Draft or draft-cross mares
- S. Lewis p. 273 510/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

5. C1 Q. What is the pangaré effect?
- A. Gene that results in light areas on the muzzle, over the eyes, on the flanks and on the inside of the legs
- S. Evans p. 481 300/3
-
6. C2 Q. All Standardbreds trace their ancestry to what horse?
- A. Hambletonian 10 (Hambletonian)
- S. HIH 171B-1 200/3
-
7. C3 Q. What is the common name for *Oxyuris equi*?
- A. Pinworms
- S. Lewis p. 400 835/3
-
8. C4 Q. What is the name of the famous endurance trail ride that takes place in California and is ridden over the former route of the Pony Express?
- A. Tevis Cup
- S. DET p. 266 1070/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

9. C1 Q. What general type of medication is used to reduce a fever?
A. Antipyretic
S. DET p. 13 805/3
10. C2 Q. What organ receives oxygenated blood from the renal artery?
A. Kidney
S. Kainer plate 60 470/3
11. C3 Q. What would be added to the shoes of pack horses and mules to extend the life of the shoes?
A. Borium
S. Evans p. 738 900/2
12. C4 Q. What is the term used to describe an allele of a gene that has the ability when expressed to mask any observed phenotype from expression of either a different allele for the same gene or another gene regulating the same trait?
A. Dominant
S. ES p. 90 550/2

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 3**

Begin Open Questions

13. Q. You do the math... A 25 year old horse would be equivalent to a human of what age?

A. 75 years old (1 horse year = 3 human years)

S. HIH 450-1 400/2

14. Q. A horse that has pediculosis is infested with what type of external parasite?

A. Lice

S. Lewis p. 399 835/3

Toss Up – Bonus Attached

15. Q. Which **two** anatomic structures aid the horse in collecting loose feed such as kernels of grain from a feed bucket or manger?

A. Upper lips (also accept lips) and tongue

S. Evans p. 93 430/3

Bonus Question

16. Q. (Bonus) Identify the **three** stallions that are **traditionally** considered to be the foundation sires for the Thoroughbred.

A. Byerly Turk, Godolphin Arabian and Darley Arabian

S. Evans p. 21 200/4

**2011 Eastern National 4-H Horse Bowl
Round 3**

Resume Open Questions

17. Q. An artificial lighting program for the manipulation of the estrous cycle of mares usually results in ovulation after how many days?
- A. 60 to 90 days (accept anything within this range)
- S. YLM ADV 336-2L 510/3
18. Q. What is the poisonous chemical secreted by blister beetles?
- A. Cantharidin
- S. YLM ADV 300-3L 835/2
19. Q. How does a straight shoulder affect the length of the back?
- A. The straighter the shoulder the longer the back
- S. YLM INT 223-3L 600/3

Toss Up – Bonus Attached

20. Q. When comparing a cowboy shoe and a mule shoe... What are the **two** main differences in the **shape** of the mule shoe?
- A. Mule shoes are longer, narrower, closer (narrower) at the heels (only need to give 2 answers)
- S. Evans p. 732, 734 900/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

Bonus Question

21. Q. (Bonus) Identify the **three** accessory sex glands in the stallion.
- A. Prostate gland, seminal vesicles, Bulbourethral glands (Cowper's gland)
(also accept coagulating glands, ampullary glands)
- S. Kainer plate 74; DET p. 42 480/4

Resume Open Questions

22. Q. A mare that has hyperkalemia has an abnormally high level of what electrolyte in her blood?
- A. Potassium
- S. DET p. 146 800/3
23. Q. What is the purpose for the fleshy upper and lower eyelids known as "hooded eyes" which are characteristics of Exmoor ponies?
- A. To protect their eyes from the harsh wind and rain
- S. HIH 157B-2 200/3
24. Q. What is the **primary** cause of runoff and soil erosion on horse farms?
- A. Overgrazing
- S. HIH 360-4 970/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

25. Q. You are the conditioning veterinarian judge for an endurance trail ride. What condition would these vital signs indicate? Temperature 102 degrees Fahrenheit, heart rate 100 beats/minute, respirations 100 breaths/minute and movement of the horse's flank is exaggerated with a slight audible thumping sound
- A. Thumps (Synchronous diaphragmatic flutter)
- S. Evans p. 110; Lewis p. 213 800/3

Toss Up – Bonus Attached

26. Q. Identify **three** types of teeth that are **only** present as permanent teeth.
- A. Wolf teeth, molars and canines
- S. HIH 405-1; Evans p. 92 435/3

Bonus Question

27. Q. (Bonus) Name **four** of the approved coat patterns for a pony to be registered with the Pony of America Club.
- A. Snowflake, frost, blanket, leopard, few spot leopard, marbled roan, white with dark spots over hindquarters
- S. HIH 167B-2 300/3

Resume Open Questions

28. Q. What is the **minimum** height for an indoor arena that will be used for hunter/jumper horses?
- A. Minimum of 16 foot ceiling
- S. HIH 320-7 920/3

**2011 Eastern National 4-H Horse Bowl
Round 3**

29. Q. What piece of equipment can be used with young maiden mares to prevent lacerations, tears or bruises of the vagina or cervix during live cover breeding?

A. Breeding roll

S. Evans p. 413 500/3

30. Q. What is the term for the chronic dermatitis that occurs from inflammation of the back of the pastern?

A. Grease-heel, Scratches, Grease or Mud fever (also accept cracked heels)

S. Evans p. 167; DET p. 183 620/3

31. Q. What is the common term for the middle phalanx?

A. Short pastern

S. Kainer plate 12 410/3

Last Question of the Round

32. Q. Charging refers to the behavior of a horse that suddenly attacks or savages a person or other horse. What does charging refer to in jumping events?

A. Rushing into the fence

S. DET p. 54 1075/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

One-On-One

1. C1 Q. The American Walking pony is a result of breeding the Tennessee Walking Horse and what pony breed?
- A. Welsh Pony
- S. Evans p. 66 200/3
-
2. C2 Q. What are the **two** artificial gaits performed by the 5-gaited American Saddlebred ?
- A. Slow gait (stepping pace) and rack (single-foot)
- S. Evans p. 40, 178 640/3
-
3. C3 Q. There is a red maple tree on your neighbor's property next to your fence line. You discovered your horse eating green leaves off the branches that are within the horses reach. What effect would you expect from the horse eating the red maple leaves?
- A. None – Red maple leaves are not toxic when fresh (leaves are toxic when wilted or dried)
- S. Lewis p. 331 770/3
-
4. C4 Q. Rapid growth is an important factor contributing to DOD. What do the initials DOD represent?
- A. Developmental Orthopedic Diseases
- S. Lewis p. 283 810/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

5. C1 Q. What gland produces the hormone epinephrine?
A. Adrenal gland
S. Evans p. 127 490/4
6. C2 Q. What is the common term for the proximal interphalangeal joint?
A. Pastern joint
S. Evans p. 689 410/3
7. C3 Q. What activity is judged on how well the human and equestrian athletes work together, includes free style routines and is defined as “gymnastics on horseback”?
A. Vaulting
S. HIH 185D-1 1010/3
8. C4 Q. Palomino horses do not “breed true”. What does this mean?
A. When breeding a palomino to a palomino only 50 percent will produce a palomino (also accept breeding a palomino to a palomino will not always result in a palomino)
S. Evans p. 51 550/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

9. C1 Q. The breeding of what two equines produces a hinny?
A. Stallion and female donkey (jennet or jenny)
S. ES p. 22 550/3
10. C2 Q. What is the common or slang term for Equine Infectious Anemia?
A. Swamp fever
S. Lewis p. 175; DET 260 800/3
11. C3 Q. What term refers to the middle team of horses in a 6-horse hitch?
A. Swing team
S. DET p. 261 1050/3
12. C4 Q. Decreased growth rates, muscle loss, slow hoof growth and lack
of energy are all effects of a deficiency of what class of nutrients?
A. Protein
S. ES p. 120 760/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 4**

Begin Open Questions

13. Q. Gigantic head, undeveloped and spiraling of the tail are all terms used when describing which of the 4 criteria used to evaluate semen?

A. Morphology

S. Evans p. 366 520/4

14. Q. What type of bacteria is the most common cause of infectious enterocolitis in adult horses and results in lethargy, anorexia, colic and diarrhea?

A. Salmonella

S. ES p. 171; HIH 660-1, 660-2 830/4

Toss Up – Bonus Attached

15. Q. (Two Part) What are the **two** most common types of hammers used by a farrier and what are each of them used for?

A. Rounding hammer - making and shaping shoes
Driving hammer - driving nails, forming and finishing clinches,
wringing off the nails

S. Evans p. 728 900/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

Bonus Question

16. Q. (Bonus) Vital signs that include TPR, capillary refill, mucous membranes and skin pliability are used to evaluate the health of the horse. Identify **four** other observations that are used to evaluate a horse's health.

- | | |
|---|----------------|
| A. Body fluids (feces, urine, tears, saliva, sweat) | Hair coat |
| Body condition and weight | Movement |
| Normal behavior/alertness | Hoof condition |
| Behavior disorders | |
| Feeding habits/appetite | |
| Menace reflex | |

S. HIH 425-1 800/4

Resume Open Questions

17. Q. The dark liver or black chestnut color is **primarily** found in what breed of horses?

A. Morgan

S. Evans p. 36 300/3

18. Q. Horses with recurrence of urinary calculi would benefit from feeding a diet that has less of what specific mineral?

A. Calcium

S. Lewis p. 297 750/3

19. Q. What is a ginglymus joint?

A. Hinge joint (ex. elbow)

**2011 Eastern National 4-H Horse Bowl
Round 4**

S. Kainer plate 13; Evans p. 688 410/3

Toss Up – Bonus Attached

20. Q. In regards to pasture management, identify **two** instances when you should keep horses off pasture.

A. During pesticide spraying, when fertilizing, to reduce overgrazing, when there is fresh or lush pasture, during winter, when soils are wet

S. HIH 360-3, 360-4 920/3

Bonus Question

21. Q. You are an equine genetics specialist. Your client breeds and shows palomino horses. Identify the colors **and** the percentage of each color that would result from the following **four** combinations...

- Palomino x Palomino
- Chestnut x Palomino
- Palomino x Cremello
- Chestnut x Cremello

A. Palomino x Palomino = 25% Chestnut, 50% Palomino and 25% Cremello
Chestnut x Palomino = 50% Chestnut and 50% Palomino
Palomino x Cremello = 50% Palomino and 50% Cremello
Chestnut and Cremello = 100% Palomino

S. Evans p. 51 550/4

Resume Open Questions

22. Q. Which current breed of horses was formerly referred to as “Steeldusts”?

A. Quarter Horse

S. Evans p. 25 200/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

23. Q. What term describes fresh, green forage that is cut, chopped and fed all in the same day?
- A. Soilage or green chop (do not accept silage which is fermented)
- S. Lewis p. 403 780/3
24. Q. In regards to anatomy, the horses first line of defense against cold weather is a long thick hair coat which provides insulation and protection. What part of the anatomy provides additional insulation and is considered to be the next line of defense against cold?
- A. Fat (layer of fat under the skin)
- S. Lewis p. 188 460/4
25. Q. What type of bar shoe would be used for the treatment of a horse with navicular disease?
- A. Egg bar (do not accept heart bar)
- S. HIH 540a 900/3

Toss Up – Bonus Attached

26. Q. (Two Part) What **specific** mineral imbalance does the term “Bob-tail disease” refer to and what is the reason for this reference?
- A. Selenium toxicity (excess) (must include **both** selenium and excess for correct answer); Horses lose the long hair from the tail resulting in a bob-tailed appearance
- S. Lewis p. 329 770/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

Bonus Question

27. Q. (Bonus) Give the common name for these **four** internal parasites...
- Parascaris equorum
 - Habronema
 - Strongyloides westeri
 - Cyathostomes
- A. Ascarid or roundworms (Parascaris equorum)
Stomach worm (Habronema)
Threadworms (Strongyloides westeri)
Small strongyles (Cyathostomes) (must specify “small” strongyles)
- S. Lewis p. 386, 392, 399, 406 835/4

Resume Open Questions

28. Q. A cervix that is pale in color, produces a thick, sticky mucus and is tightly closed indicates the influence of which hormone?
- A. Progesterone
- S. HIH 910-3; Evans p. 336 510/3
29. Q. What is the country of origin for the Highland Pony?
- A. Scotland
- S. DET p. 139 200/3

**2011 Eastern National 4-H Horse Bowl
Round 4**

30. Q. In general a complete feed is a commercially prepared diet that includes both forage and grain. It would meet all of the nutritional requirements of the horse **except** for which **two** nutrients?

A. Water and salt

S. Lewis p. 385 700/4

31. Q. What does the term “nicking” refer to in regards to the offspring from a linebreeding program?

A. Offspring that are superior to their parents

S. HIH 1080-1 550/3

Last Question of the Round

32. Q. What test would be indicated for a horse that is suspected of having Equine Infectious Anemia?

A. Coggins test

S. HIH 630-1 840/3

2011 Eastern National 4-H Horse Bowl Round 5

One-On-One

1. C1 Q. In the evolution of the horse, what term refers to the first 1-toed horse that lived 12 million years ago?
- A. Pliohippus
- S. ES p. 9 100/4
2. C2 Q. Which gait of the Paso Fino is also referred to as the short walk?
- A. Paso corto (paso fino is a fine walk and paso largo is a long walk)
- S. ES p. 82 640/4
3. C3 Q. How often should horses be offered water when trailering long distances?
- A. Every 3-4 hours
- S. YLM ADV 301-2L 960/3
4. C4 Q. What is the name of the first horse to win the Kentucky Derby?
- A. Aristides
- S. DET p. 15 1040/3

**2011 Eastern National 4-H Horse Bowl
Round 5**

5. C1 Q. What vein is located in the groove between the brachiocephalic and sternomandibular muscles in the neck?
- A. External jugular (also accept jugular)
- S. Kainer plate 61 440/4
-
6. C2 Q. What is the difference between a sole knife and a hoof or farrier's knife?
- A. Sole knife is used like a chisel when the sole is too hard to cut with the farriers knife (usually during hot, dry weather)
- S. Evans p. 728 900/4
-
7. C3 Q. Levels of acid detergent fiber (ADF) and neutral detergent fiber (NDF) indicate the maturity and digestibility of hay. Would low or high levels indicate better quality hay?
- A. Lower levels of ADF and NDF
- S. HIH 750-2 780/3
-
8. C4 Q. Galvayne's groove appears on the upper corner incisor at about 10 years of age. At what age has the groove completely disappeared from the tooth?
- A. 30 years
- S. HIH 240-4 435/3

**2011 Eastern National 4-H Horse Bowl
Round 5**

9. C1 Q. Consumption of Milkweed or Dogbane would be classified as what specific type of sudden death poisoning?
- A. Cardiac glycoside-induced sudden death (also accept cardiac sudden death)
- S. Lewis p. 334 770/3
-
10. C2 Q. What rare genetic disease results in foal death due to infection and the characteristic appearance of foals with missing patches of hair or skin at birth?
- A. Epitheliogenesis Imperfecta
- S. Evans p. 514 880/3
-
11. C3 Q. What is the name of the rings on the surcingle or harness that the reins pass through?
- A. Terrets (also pronounced turret)
- S. DET p. 265 1000/3
-
12. C4 Q. What organization reviews and updates the Horse Industry Handbook and Youth Leaders Manual reference books?
- A. American Youth Horse Council (AYHC)
- S. HIH 1940-2 220/3

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 5**

Begin Open Questions

13. Q. Would a **Standard** Diamond Brand size 1 shoe most likely be used for shoeing a pony, average horse or a large horse?

A. Average size horse

S. Evans p. 728 900/4

14. Q. Hackney ponies are typically what color?

A. Bay

S. Evans p. 64 200/3

Toss Up – Bonus Attached

15. Q. “Leaf shatter” may occur when hay is baled too dry. What nutrient contained in the leaves is lost when the leaves prematurely fall off the stems?

A. Protein (also accept carbohydrates)

S. HIH 750-3, 750-4 780/3

Bonus Question

16. Q. (Bonus) Identify **three bacterial** diseases that affect **both** humans and horses.

A. Tetanus, Botulism, Anthrax, Brucellosis, Lyme Disease

S. ES pp. 170-171; Lewis p. 362 800/4

**2011 Eastern National 4-H Horse Bowl
Round 5**

Resume Open Questions

17. Q. What type of medication is an alcohol based substance applied to the horses legs after exercise to prevent swelling?

A. Brace (also accept liniment)

S. DET p. 36, 169 805/3

18. Q. (Two Part) Where would you find an elliptic spring on a carriage and what is its purpose?

A. Spring under the seat; to absorb shock

S. DET p. 90 1000/4

19. Q. What is a flat race?

A. A race without jumps

S. DET p. 109 1040/2

Toss Up – Bonus Attached

20. Q. Fossa and tuberosity are terms used to describe bones. In general, what do these two terms describe?

A. Fossa – hollow or depressed area
Tuberosity – prominence or projection

S. DET p. 113, 275 410/3

2011 Eastern National 4-H Horse Bowl Round 5

Bonus Question

21. Q. (Bonus) You are the night attendant for a large breeding farm. One of the broodmares is lying down and in hard labor. The foal is in a normal presentation with the front feet, front legs and nose delivered, however, even with strong contractions and pushing by the mare the labor is not progressing with delivery of the shoulders. Give **three** guidelines on how to correctly assist the mare with the delivery.
- A. Grasp the foal's legs at the ankles with your hands
Maintain the correct position with one foot slightly forward
As the mare exerts pressure hold the foal at the level the mare has expelled the foal to so the foal does not slide back
Do not pull on the foal unless the mare is exerting pressure
When pulling only one person should exert slight pressure
When pulling exert downward pressure in an arc toward the mare's hocks to maintain correct delivery position
Strong traction on the forelegs can result in damage to the mare or the foal's chest
- S. HIH 940-4, 940-5 500/4

Resume Open Questions

22. Q. Who is credited with the development of the Appaloosa breed?
- A. Nez Perce Indians
- S. HIH 152B-1; Evans p. 32 200/2

**2011 Eastern National 4-H Horse Bowl
Round 5**

23. Q. You do the math... You are the owner of a construction company that specializes in designing equine facilities. You will be building a hunter/jumper barn that will have 30 stalls. What is the **minimum** length of ridge vent to be installed for adequate ventilation?

A. Minimum of 30 feet (at least 1 foot per stall)

S. HIH 320-8 920/3

24. Q. What is micturition?

A. Urination

S. Evans p. 119 470/3

25. Q. What horse was the foundation sire for the American Albino?

A. Old King

S. Evans p. 53 200/3

Toss Up – Bonus Attached

26. Q. Color is largely controlled by the pigment melanin. What are the **two** forms of melanin?

A. Eumelanin and Pheomelanin

S. ES p. 93 300/3

**2011 Eastern National 4-H Horse Bowl
Round 5**

Bonus Question

27. Q. (Bonus) Identify **four** types of **modifications** of a standard horse shoe that could be used by a farrier for corrective or therapeutic shoeing.
- | | |
|--------------------------------------|-----------------------------|
| A. Square toe on shoe | Trailer |
| Calks | Bar across break-over point |
| Toe extension | Rolled toe shoe |
| Slipper heels | Half-rim |
| Chadwick spring | Raise or lower toe of shoe |
| Toe clips | Raise or lower heel of shoe |
| Shorten or lengthen toe of shoe | |
| Raise or lower inside or outside rim | |
- S. Evans pp. 748-750 900/4

Resume Open Questions

28. Q. What is the common term for leukoencephalomalacia?
- A. Moldy corn disease
- S. Lewis p. 357 830/4
29. Q. When packing with horses, what is the name of the piece of canvas that covers and protects the load?
- A. Manta (also accept “manty”)
- S. HIH 1125-3 1020/3
30. Q. What is the common term for the Culicoides biting midge?
- A. “Punkies” or “no-see-ums”
- S. HIH 415-3

**2011 Eastern National 4-H Horse Bowl
Round 5**

31. Q. What is the purpose of applying a hot poultice?
- A. To increase the blood supply to an area, to draw out infection as with a sole abscess or puncture wound, to encourage an abscess to open and drain (only need to give one answer)
- S. HIH 440-6 805/3

Last Question of the Round

32. Q. In regards to the racing industry, what is a bug boy?
- A. Apprentice jockey (nickname came about because of the “bug” or asterisk denoting the 5 pound weight allowance)
- S. DET p. 42 1040/3

**2011 Eastern National 4-H Horse Bowl
Round 6**

One-On-One

1. C1 Q. What specific type of bacteria causes Tetanus?

 A. Clostridium tetani

 S. HIH 445-2 820/3

2. C2 Q. What is the common term for the deformity of the jaw referred to as prognathia?

 A. Monkey mouth or sow mouth

 S. Lewis p. 396 600/4

3. C3 Q. What is the cry of the hunt once the fox has been sighted?

 A. Tallyho

 S. DET p. 262 1080/2

4. C4 Q. What marking is described as a muscular depression of unknown origin, is usually seen on the neck and sometimes seen on the shoulder?

 A. Prophet's thumb

 S. DET p. 221 310/4

**2011 Eastern National 4-H Horse Bowl
Round 6**

5. C1 Q. What noseband is a cross between a cavesson and a figure eight noseband?
- A. Flash noseband
- S. DET p. 109 1000/3
-
6. C2 Q. Your horse is exhibiting the following symptoms...abrupt onset of open mouth with the tongue hanging out and **inability** to prehend or chew food. What type of plant poisoning do these symptoms indicate?
- A. Yellow star thistle or Russian knapweed (only need to give one answer)
- S. Lewis p. 315 770/4
-
7. C3 Q. What color would be the result of the silver gene on a chestnut horse?
- A. Chestnut (the silver gene only affects black areas and does not affect red areas)
- S. HIH 1040-2 300/4
-
8. C4 Q. What type of horse performs the gait known as the jiggle?
- A. Cow horse
- S. DET p. 157 640/4

**2011 Eastern National 4-H Horse Bowl
Round 6**

9. C1 Q. What type of trailer hitch must be securely attached to the frame **and** the truck bed?

A. Gooseneck

S. HIH 1155-1 960/3

10. C2 Q. What type of fence is low maintenance and has the longest life expectancy?

A. PVC/Vinyl

S. Evans p. 768; HIH 350-5 920/3

11. C3 Q. Inflammation of what specific anatomical structure results in the blemish referred to as a curb?

A. Plantar tarsal ligament (also accept plantar ligament)

S. Evans p. 165 620/3

12. C4 Q. What is the only basic modification of black that **does not** have black points?

A. Perlino

S. Evans p. 473 300/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 6**

Begin Open Questions

13. Q. Other than the characteristic curly coat, what is unique about the mane and tail of the Bashkir Curly?
- A. It often falls out completely each summer and re-grows during the winter
- S. DET p. 8 200/4
-
14. Q. What type of Rhinopneumonitis may invade the brain and spinal cord causing incoordination, paralysis and recumbency?
- A. EHV-1 (Equine Herpes Virus Type I)
- S. HIH 610-1 850/4

Toss Up – Bonus Attached

15. Q. What **three** main colors provide the basis for most other colors?
- A. Bay, black and chestnut
- S. HIH 1040-1 300/3

**2011 Eastern National 4-H Horse Bowl
Round 6**

Bonus Question

16. Q. Identify **four** causes of diarrhea in foals.

A. Nutritional causes

Foal heat

Parasites (threadworms, strongyles, ascarids)

Bacteria (E. coli, salmonella, clostridium, rhodococcus equi)

Virus (rotavirus, coronavirus, adenovirus)

Gastric ulcers

Sand ingestion

Combined Immunodeficiency

(also accept infection as general term that would include both viral and bacterial infections)

S. Lewis p. 259 830/4

Resume Open Questions

17. Q. What type of horse shoe would be used for a horse with a deep flexor tendon injury that is confined to stall rest?

It elevates the heels and temporarily transfers the weight to the suspensory ligament or superficial flexor tendon.

This shoe can be fabricated from a standard shoe by welding or bolting an elevation bar or ring to the heel of the shoe.

A. Patten shoe

S. HIH 515-5 900/4

18. Q. Wood is one of the most desirable materials for building stalls. What type of wood is considered to be the strongest and is less likely to be destroyed by horses chewing on it?

A. Rough cut oak (also accept oak)

**2011 Eastern National 4-H Horse Bowl
Round 6**

S. HIH 320-5 920/3

19. Q. The luteinizing hormone stimulates the production of what hormone in the stallion?

A. Testosterone

S. Evans p. 361 490/4

Toss Up – Bonus Attached

20. Q. Identify the **two** most palatable grasses for horse pastures.

A. Kentucky bluegrass and timothy

S. Lewis p. 109 780/3

Bonus Question

21. Q. (Bonus) There are many different nutritional deficiencies that may result in anemia. Identify **four** of these nutrients.

A. Iron	Copper
Vitamin E	Vitamin B6
Folic acid	Vitamin B12
Protein	Vitamin K

S. Evans p. 307; Lewis p. 51 700/4

Resume Open Questions

22. Q. Identify the following disease... Standing with the neck arched and stretched out, appears anxious, has saliva mixed with feed at the

**2011 Eastern National 4-H Horse Bowl
Round 6**

nostrils and is drooling saliva from the mouth.

A. Choke

S. Evans p. 611 830/611

23. Q. What is the common name for the medication Magnesium Sulfate that is used as a foot soak to promote drainage of a hoof abscess?

A. Epsom salts

S. HIH 540-2 805/3

24. Q. At what age does the hook on the upper corner incisor first appear?

A. 7 years

S. Kainer plate 49 435/3

25. Q. Which breed is known as the “Prince of Ponies” and “aristocrat of the show ring”?

A. Hackney Pony

S. Evans p. 61; HIH 158B-1 200/ 3

Toss Up – Bonus Attached

26. Q. A true genetic lethal results in embryonic death which is death before birth. Which **two** color genes are lethal when they are **homozygous**?

A. Roan and dominant white

S. HIH 1060-4 550/4

**2011 Eastern National 4-H Horse Bowl
Round 6**

Bonus Question

27. Q. Identify **four** of the general classifications of de-wormers used to control internal parasites.

- A. Avermectins
- Organophosphates
- Benzimidazoles
- Phenylguanidines
- Pyrimidines

S. HIH 430-7 805/5

Resume Open Questions

28. Q. In which joint would the calcaneus be found?

- A. Hock (tarsus)

S. Kainer plate 30 410/4

29. Q. What term refers to the shield-like bulge between the eyes of Arabian horses?

- A. Jibbah

S. HIH 153B-2 200/4

**2011 Eastern National 4-H Horse Bowl
Round 6**

30. Q. A saddle seat saddle is often referred to as a “cut back” saddle. The head of the saddle is cut back to accommodate what characteristic conformation aspect of the breeds that are most often shown in the saddle seat division?

A. High-withers (also accept anything that describes the high head and neck carriage)

S. HIH 1100-1 1000/3

31. Q. Poisonous plants that are classified as hepatotoxic primarily affect which organ?

A. Liver

S. Lewis p. 309 770/3

Last Question of the Round

32. Q. What is the common term for the external parasite *Stomoxys calcitrans*?

A. Stable fly

S. HIH 415-1 835/4

**2011 Eastern National 4-H Horse Bowl
Round 7**

One-On-One

1. C1 Q. The coat color of a dun and grulla are different, however, they **both** have what characteristic marking?
- A. Dorsal stripe (do not accept black points or head is darker than body)
- S.ES p. 43 310/3
-
2. C2 Q. What **specific** area of the digestive tract is the **primary** site for fiber digestion?
- A. Cecum
- S. ES p. 112 430/4
-
3. C3 Q. In general, what determines the severity of a snaffle bit?
- A. Diameter (thickness) of the mouthpiece (smaller the diameter the more severe)
- S. HIH 1100-8 1000/3
-
4. C4 Q. What terms refers to the canter when the front and hind legs are different leads?
- A. “Disunited” canter (also accept cross canter and cross firing)
- S. ES p. 76; DET p. 82 640/3

2011 Eastern National 4-H Horse Bowl
Round 7

5. C1 Q. What anatomical structure is located in the mediastinum, produces T-lymphocytes and is largest in foals at 6 to 8 weeks of age?
- A. Thymus
- S. Kainer plate 63 400/4
-
6. C2 Q. What sensory deficit is often present in horses with the splashed white color pattern?
- A. Deafness
- S. ES p. 50 825/4
-
7. C3 Q. In regards to evolution, what term refers to the first “true horse” that first appeared approximately 1 million years ago?
- A. Equus
- S. ES p. 6 100/3
-
8. C4 Q. In general, what phase of a foot flight pattern is being altered with shoe modifications such as heel calks, square toes or toe extensions?
- A. Break-over (also accept landing)
- S. Evans p. 748 900/4

**2011 Eastern National 4-H Horse Bowl
Round 7**

9. C1 Q. What is the haploid number of chromosomes in the ovum and spermatozoa of the Przewalski's horse?
- A. 33 chromosomes
- S. ES p. 89; Evans p. 550/4
10. C2 Q. What is the name for the breed of horse that was developed by the east coast Indian tribes?
- A. Chickasaw
- S. DET p. 55; Evans p. 55 200/4
11. C3 Q. In a pari-mutuel race you are placing an "across the board" bet on a horse. Where in the race must your horse place to collect prize money?
- A. You collect if your horse runs first, second or third
- S. DET p. 3 1040/3
12. C4 Q. Which joint is the most common location for osselets?
- A. Fetlock
- S. Evans p. 161 620/3

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 7**

Begin Open Questions

13. Q. Your mare is due to deliver her first foal. You have raised the mare since birth and she has never been bred before. She was bred to a stallion with an incompatible blood type. What should you do to prevent neonatal isoerythrolysis when this foal is born?

A. No risk to this foal (only to subsequent pregnancies when the mare develops antibodies to the incompatible blood type)

S. ES p. 102 510/4

14. Q. What type of knot forms the eye of a lariat?

A. Honda knot (Honda)

S. DET p. 141 1060/4

Toss Up – Bonus Attached

15. Q. Donkeys only have chestnuts on the front legs. Identify **two** types of equines other than horses and ponies that have chestnuts on **both** the front and hind legs.

A. Mules and hinnies

S. ES p. 21 460/4

Bonus Question

16. Q. (Bonus) Soil erosion of pastures is affected by what **four** environmental factors?

A. Soil type, slope of land (topography), precipitation (amount of rain or snowfall); vegetative cover

S. HIH 360-4 920/4

**2011 Eastern National 4-H Horse Bowl
Round 7**

Resume Open Questions

17. Q. What is the difference between jibbing and shying in regards to a horse's response to a frightening object?
- A. Shying-sudden quick movement away and usually to the side
Jibbing-horse freezes, refuses to move forward and may back away
- S. Lewis p. 378 910/4
18. Q. (Two Part) What specific type of blood cell is affected in a horse with leukemia and what is the difference between leukemia and leukopenia?
- A. Leukemia affects the white blood cells. Leukemia is an increased number of white blood cells and leukopenia is an abnormally low number of white blood cells.
- S. DET p. 168 840/5
19. Q. In regards to plant poisoning, what does the term teratogenic indicate?
- A. Plant toxins cross the placental barrier and cause abortion, stillbirths or deformed foals.
- S. Lewis p. 332 770/4

Toss Up – Bonus Attached

20. Q. Decreased blood level of which **two** electrolytes may be a contributing factor or cause for synchronous diaphragmatic flutter?
- A. Potassium and calcium (may also accept magnesium and chloride)
- S. Evans p. 273; Lewis p. 213 750/4

**2011 Eastern National 4-H Horse Bowl
Round 7**

Bonus Question

21. (Bonus) Give the scientific name for the common, nose and throat bot fly and the specific location where each type of bot fly lays their eggs.

- A. *Gastrophilus nasalis* (throat) – lays eggs between jawbone and on throat
- Gastrophilus hemorrhoidalis* (nose) – lays eggs on lips
- Gastrophilus intestinalis* (common) – lays eggs on forelimbs, shoulders chest, neck, belly, hindlegs and flank

S. Evans pp. 633-635; YLM INT 200-3L 835/4

Resume Open Questions

22. Q. Hirsutism is a common symptom of Cushing's Disease.
What is hirsutism?

- A. Abnormally long hair coat

S. DET p. 140 890/5

23. Q. What is the most popular type of 2 or 3-horse trailer in regards to how the horses are positioned in the trailer?

- A. Slant load

S. YLM ADV 301-1L 960/3

24. Q. At what age do the canine teeth erupt?

- A. 4 to 5 years (accept anything within this range)

S. YLM INT 205-2L 435/3

**2011 Eastern National 4-H Horse Bowl
Round 7**

25. Q. Changing the diet of a lactating mare 5 to 7 days before weaning and for at least 2 weeks following weaning will make the transition quicker and more comfortable. What should be eliminated from the mare's diet during this period of time?

A. Grain

S. Lewis p. 271 510/4

Toss Up – Bonus Attached

26. Q. What are the **three** characteristics required of **all** Appaloosas?

A. Eye is encircled with white (white sclera)
Skin is mottled (especially the nose and genitals)
Hooves are vertically striped black and white
(do not accept spotted coat pattern)

S. Evans p. 32; HIH 140-1 200/3

Bonus Question

27. Q. Identify **four** ways that horses use their olfactory sense.

A. To locate food
To ensure food/water are acceptable quality
To identify humans
To identify other horses
To identify objects
To smell potential predators or other dangers
To identify marked territory of other horses/herds
To initiate sexual and breeding behavior

S. ES p. 61 425/4

**2011 Eastern National 4-H Horse Bowl
Round 7**

Resume Open Questions

28. Q. You do the math... Approximately 75 percent of a horses total body weight is made up of water. If your horse weighs 1000 pounds, how much of this total weight is water?

A. 750 pounds

S. ES p. 115 700/3

29. Q. Identify the **two** bones that are fused together in the forearm?

A. Ulna and radius

S. Kainer plate 10 410/3

30. Q. What does the term “blow a stirrup” refer to?

A. To lose a stirrup

S. DET p. 33 1010/4

31. Q. What is the country of origin for the Falabella?

A. Argentina

S. Evans p. 67 200/3

Last Question of the Round

32. Q. What is the main symptom observed after ingestion of pokeweed?

A. Diarrhea

S. Lewis p. 303 770/3

**2011 Eastern National 4-H Horse Bowl
Round 8**

One-On-One

1. C1 Q. A deficit of what basic nutrient may increase the risk of impaction colic?

A. Water

S. ES p. 116 700/3

2. C2 Q. What is the name for the lower horn on the near side of a sidesaddle?

A. Leaping horn

S. DET p. 166 1000/4

3. C3 Q. Most foundation Quarter Horses trace their ancestry to which Thoroughbred stallion?

A. Janus

S. DET p. 157 200/3

4. C4 Q. What is the purpose of a swedge in a horse shoe?

A. To increase traction (also accept to protect the nail heads from wear)

S. DET p. 260 900/3

**2011 Eastern National 4-H Horse Bowl
Round 8**

5. C1 Q. Tobiano and overo coloring are both controlled by genes.
Which color is displayed only if the genotype is homozygous
for the recessive gene?

A. Overo

S. Evans p. 490 300/4

6. C2 Q. Your horse has chronic obstructive pulmonary disease.
To help manage this condition nutritionally it is helpful
to do what before feeding your horse hay?

A. Soak the hay 5 minutes before feeding (also accept anything
which indicates wetting down or soaking the hay)

S. Lewis pp. 291-292 700/3

7. C3 Q. What term refers to the atrophy or shrinkage of the
shoulder muscle due to a nerve injury?

A. Sweeny

S. DET p. 260 620/3

8. C4 Q. Give the location for the point team in an 8-horse hitch.

A. Team behind the leaders

S. DET p. 215 1050/4

**2011 Eastern National 4-H Horse Bowl
Round 8**

9. C1 Q. What is the longest muscle in the back?
A. Longissimus dorsi
S. DET p. 171 410/4
10. C2 Q. What is the slang term for the hobbles used on pacers
to prevent them from breaking into a trot or gallop?
A. Indiana pants
S. DET p. 151 1000/4
11. C3 Q. What breed is born brown, mouse grey or black-brown, but
typically turns white between the ages of 6 and 10?
A. Lipizzan
S. HIH 159B-1 200/4
12. C4 Q. What part of a pedigree is referred to as the top line?
A. Stallion side (or direct line of male descendants)
S. DET p. 271 220/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 8**

Begin Open Questions

13. Q. What is the minimum recommended size for a stall for a stallion?
- A. 14 foot x 14 foot
- S. YLM INT 207-2 920/3
-
14. Q. What term refers to the percentage of a horse's expressed trait that is due to genetics?
- A. Heritability estimate
- S. YLM ADV 335-2 550/4

Toss Up – Bonus Attached

15. Q. Give **two** terms commonly used to describe the condition of the racetrack footing.
- A. Fast, sloppy, muddy, heavy
- S. DET p. 272 1040/3

**2011 Eastern National 4-H Horse Bowl
Round 8**

Bonus Question

16. Q. (Bonus) The color terms alazán, tostado and ruano are South American descriptions of chestnut horses. Identify the specific color of chestnut that is associated with each of these terms.

A. Alazán – red-colored horse with red points
Tostado – red-colored horse with darker red-colored points
Ruano – red-colored horse with lighter-colored points or a flaxen mane and tail

S. ES p. 41 300/5

Resume Open Questions

17. Q. Which part of the digestive tract has the fastest rate of passage for ingesta?

A. Esophagus

S. ES p. 109 430/4

18. Q. You do the math...What is the cardiac output for a horse with a stroke volume of 1 liter and a heart rate of 40 beats per minute?

A. 40 liters per minute

S. Evans p. 111 440/4

**2011 Eastern National 4-H Horse Bowl
Round 8**

19. Q. This bit has a straight bar mouthpiece and shanks. It can be used as a snaffle or curb and is most commonly used on heavy harness or plow horses. Identify this bit.

A. Liverpool bit

S. DET p. 170 1000/3

Toss Up – Bonus Attached

20. Q. Lateral movement is defined as when the horse moves with the forehand and haunches on different tracks. Give **two** examples of lateral movements.

A. Shoulder in, haunches in (travers), haunches out (renvers), half pass, two track

S. DET p. 165 980/4

Bonus Question

21. Q. (Bonus) Identify **five** specific nutrients that are absorbed in the small intestine.

A. Protein, vitamin A, vitamin D, vitamin E, vitamin K, carbohydrates (non-fibrous), fat, minerals (calcium, phosphorus)

S. ES p. 111 430/5

Resume Open Questions

**2011 Eastern National 4-H Horse Bowl
Round 8**

22. Q. What specific type of glucose metabolism or glycolysis results in the production of lactic acid?
- A. Anaerobic
- S. HIH 850-2 410/4
23. Q. What is the common term for the chronic infection that is caused by the bacteria *Fusobacterium necrophorum*?
- A. Thrush
- S. Kaier plate 24 815/4
24. Q. Who is the foundation sire for the Morgan horse?
- A. Justin Morgan (Figure)
- S. Evans p. 36 200/3
25. Q. What are the **two** species of lice that infest the horse?
- A. Bloodsucking (Sucking) and Biting
- S. DET p. 168 835/3

Toss Up – Bonus Attached

26. Q. Identify **two** types of blood cells that are produced by the red bone marrow.
- A. Red blood cells (erythrocytes), white blood cells (leukocytes), platelets (thrombocytes)
- S. Kainer plate 63 440/4

**2011 Eastern National 4-H Horse Bowl
Round 8**

Bonus Question

27. Q. (Bonus) Identify **five** advantages of using open-front sheds in comparison with traditional stabling for horses.
- A. Inexpensive to build and maintain
Less labor and therefore more time available to handle horses, etc.
Can be cleaned with a tractor and loader
No daily stall cleaning
Require less bedding
Less space required for each horse than stalls
Better ventilation
Less respiratory problems
Less digestive problems
Better attitude of horses/Less stall vices
Improved muscle tone/Less injuries with free exercise
Fire safety/ Fires not likely to occur and horses not trapped
- S. Evans p. 772 920/5

Resume Open Questions

28. Q. Give **two** other terms for the conformation defect in which the back is concave and referred to as sway back.
- A. Easy backed, saddle backed, lordosis
- S. DET p. 172, 260 600/4
29. Q. The main function of the suspensory ligament is to prevent overextension of which joint?
- A. Fetlock joint
- S. Evans p. 708 410/4

**2011 Eastern National 4-H Horse Bowl
Round 8**

30. Q. What is the most common color for the Shire?

A. Black

S. Evans p. 72 200/3

31. Q. What is the most important winter feed given to horses?

A. Good quality hay

S. YLM INT 204-2L 700/3

Last Question of the Round

32. Q. Plant poisoning due to pyrrolizidine alkaloids (PA) results in damage to and eventual failure of what organ?

A. Liver

S. Lewis p. 313 770/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

One-On-One

1. C1 Q. What muscle causes the hair to stand on end and helps to keep the horse warm in cold weather?
- A. Erectores pilorum
- S. DET p. 99 410/4
-
2. C2 Q. Metamucil is a psyllium based soluble fiber and would be used to treat or prevent what type of colic?
- A. Sand-induced colic
- S. Lewis p. 293 805/3
-
3. C3 Q. A “live foal” guarantee in a breeding contract indicates the foal has met what **two** criteria after parturition?
- A. A foal that stands and nurses
- S. DET p. 170 940/3
-
4. C4 Q. Genetic defects are described as a true, partial or delayed lethal. What type of lethal would Combined Immunodeficiency be considered?
- A. Delayed genetic lethal (lethal that produces some characteristics that ultimately result in death after birth)
- S. HIH 1060-4, 1060-5 550/4

**2011 Eastern National 4-H Horse Bowl
Round 9**

5. C1 Q. What is the primary difference between the horses that are raced in the Kentucky Derby and the Kentucky Oaks?
- A. Both races are for 3 year old Thoroughbreds but the Kentucky Oaks is a race for only fillies
- S. DET p. 161 1040/4
-
6. C2 Q. In which joint is the olecranon bone located?
- A. Elbow
- S. DET p. 195 410/4
-
7. C3 Q. Which type of equine has a gestation period that is approximately 30 days longer than a mare?
- A. Jennet (donkey)
- S. Evans p. 76 510/4
-
8. C4 Q. In the Netherlands a horse described as an ancient dun color would have unusual body markings such as zebra stripes or teardrops over the barrel of the body. What is another term for this unique dun color?
- A. Brindle Dun
- HIH 154B-1 300/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

9. C1 Q. What is the slang term for the post parturient hypocalcemia that may occur in the lactating mare?
- A. Milk fever
- S. DET p. 180 510/5
-
10. C2 Q. What do the following terms describe? Pueblo, Montura and Texas
- A. Types of saddles
- S. DET p. 182, 222, 266 1000/4
-
11. C3 Q. What nutrient is absorbed in the small and large colon?
- A. Water
- S. ES pp. 112-113 700/3
-
12. C4 Q. When performing the “airs above the ground” dressage movement referred to as the capriole, which of the horses legs are off the ground?
- A. Both the front and hind legs (all legs)
- S. DET p. 22 1090/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 9**

Begin Open Questions

13. Q. The cells known as the Islets of Langerhans are found in which organ?
- A. Pancreas (insulin producing cells)
- S. Kainer plate 54 490/5
14. Q. What external parasite is the intermediate host for the Habronema species of the stomach worm?
- A. House fly (*Musca domestica*) or Stable fly (*Stomoxys calcitrans*)
(only need to give one answer)
- S. HIH 415-1; Evans p. 645 835/4

Toss Up – Bonus Attached

15. Q. A typical Hunter Hack class requires the horses to jump two fences and show on the rail at what **four** gaits?
- A. Walk, trot, canter and hand gallop
- S. DET p. 145 1010/3

Bonus Question

16. Q. Identify **four** breeds or types of equines that Neonatal isoerythrolysis is more likely to occur in.
- A. Arabian, Thoroughbred, Quarter Horse, Morgan, Warmblood, Miniature horses and pony breeds
- S. ES p. 102 550/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

Resume Open Questions

17. Q. In general, what are the **two** major functions of the digestive tract?
- A. Digestion and absorption
- S. ES p. 108 430/4
-
18. Q. The symbol A (capital A) represents the agouti gene which restricts the eumelanin or black color to what areas on the horse?
- A. Points
- S. ES p. 95 300/4
-
19. Q. When comparing the life expectancy of untreated wood fence posts, which of the following types of wood would last the longest?
White oak, black locust or yellow poplar
- A. Black locust
- S. Evans p. 770 920/4

Toss Up – Bonus Attached

20. Q. The speed index is a method of rating racehorses. What **two** criteria are used to calculate the speed index?
- A. Speed and distance
- S. DET p. 253 1040/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

Bonus Question

21. Q. Identify **four** ways that “excess” water is excreted from the horse’s body.
- A. Urine, feces, sweat, water vapor from the lungs (respiration)
- S. ES p. 116 400/5

Resume Open Questions

22. Q. When interpreting a Y-Tex Corporation freeze brand, what does the alpha character or letter brand identify?
- A. Breed of the horse
- S. Evans p. 810 940/5
23. Q. Are male or female horses primarily affected by genetic diseases that have an X-linked mode of inheritance?
- A. Male horses
- S. HIH 1060-3 550/4
24. Q. During a difficult delivery, repulsion would describe what action by the veterinarian or foaling attendant?
- A. Pushing the fetus back into the uterus (done before correcting any incorrect birthing positions)
- S. DET p. 232 500/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

25. Q. Flexor tendons in which **specific** joint “unlock” the fixed position of the stay apparatus in the hind legs?
- A. Stifle
- S. Kainer plate 36 410/4

Toss Up – Bonus Attached

26. Q. Identify **two** of the three rodeo events that are referred to as “rough stock events”?
- A. Bareback riding, saddle bronc riding and bull riding
- S. DET p. 237 550/4

Bonus Question

27. Q. (Bonus) Identify **five** indications or reasons for the use of bandages.
- A. Protection from trauma (shipping/travel wraps)
To absorb exudates
To control hemorrhage (bleeding)
To exert pressure which can prevent/reduce edema
To support an injured limb
To protect a wound from environmental contamination/infection
To aid in removal of necrotic tissue/for debridement
To provide comfort
- S. HIH 1160-1 400/5

**2011 Eastern National 4-H Horse Bowl
Round 9**

Resume Open Questions

28. Q. What specific type of cell division takes place in the ovaries and testes?

A. Meiosis

S. ES p. 88 550/5

29. Q. The highest mortality rate occurs in horses that develop neurologic disease as a result of which type of equine encephalomyelitis?

A. Eastern Equine Encephalomyelitis

S. HIH 625-3 850/4

30. Q. Hay should be baled at what ideal moisture level?

A. 17 to 20 percent (accept anything within this range)

S. HIH 750-4 780/4

31. Q. What term refers to a foal that is born prior to 320 days gestation?

A. Premature foal

S. HIH 950-9 500/3

Last Question of the Round

32. Q. When comparing the absorbency of types of bedding, which of the following would be the most absorbent?

Shredded newspaper, straw or pinewood sawdust

A. Shredded newspaper

S. HIH 330-2 920/4

**2011 Eastern National 4-H Horse Bowl
Round 10**

One-On-One

1. C1 Q. What is the only vein that carries oxygenated blood?
A. Pulmonary vein
S. Kainer plate 57 440/4
2. C2 Q. What is the scientific name for the organism that is the
 cause of the disease EPM (Equine Protozoal Myeloencephalitis)?
A. Sarcocystis neurona
S. HIH 670-1 820/5
3. C3 Q. What type of equine is more efficient in digesting fiber
 and therefore can be fed a diet that is higher in fiber?
A. Donkeys
S. ES p. 146 700/4
4. C4 Q. What is the common name for the practice of applying
 a hot iron or needle to a blemish or unsoundness
 as a treatment?
A. Firing (also accept pin firing)
S. DET p. 108, 212 800/4

**2011 Eastern National 4-H Horse Bowl
Round 10**

5. C1 Q. How old would a horse be that has the 1st and 2nd premolars in place?
- A. 2 ½ years old
- S. Evans p. 92; Kainer plate 49 835/5
6. C2 Q. How does the function of the placenta differ in passive immunity when comparing equines and humans?
- A. In the horse antibodies are **not** passed across the placental barrier (as in humans) (The foal must obtain antibodies by ingesting colostrum)
- S. ES p. 169 510/4
7. C3 Q. Linden Tree, Leopard and Max are the foundation sires for this breed of horse which is often mistaken for an Appaloosa. Identify this breed.
- A. Rangerbred Horse
- S. Evans p. 58 200/4
8. C4 Q. What is the common name for ileocolonic aganglionosis?
- A. White Foal Syndrome (also accept Lethal White Foal Syndrome and Lethal White Syndrome)
- S. HIH 1060-6 550/4

**2011 Eastern National 4-H Horse Bowl
Round 10**

9. C1 Q. What physiological event changes the follicle into the corpus hemorrhagicum?
- A. Ovulation
- S. Kainer plate 71; HIH 910-6 510/4
10. C2 Q. A rubefacient is a substance that reddens the skin and produces a mild irritation. What is the purpose of using such a substance?
- A. Improves circulation to the area (improves healing)
- S. DET p. 237 805/5
11. C3 Q. What is the proper term for the steel or wooden arms that are fitted to the collar of a harness?
- A. Hames
- S. DET p. 129 1000/4
12. C4 Q. What breed is referred to as “Skogsruss” in their homeland?
- A. Gotland
- S. Evans p. 75 200/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 10**

Begin Open Questions

13. Q. Identify **one** fibrous or cartilaginous joint that would become ossified as the horse matures.
- A. Sutures (skull); syndesmosis (between shafts of some long bones); symphysis (pelvis); growth plate (physis)
- S. Kainer plate 15 410/4
14. Q. The Ellensburg tree saddle is most commonly used for what type of activity?
- A. Bronc-busting
- S. DET p. 26, 90 1000/5

Toss Up – Bonus Attached

15. Q. A lactating mare's diet should include additional carbohydrates and fats which supply energy and additional protein. The diet should also include an increase in the amount of what **two** specific minerals?
- A. Calcium and Phosphorus
- S. Lewis p. 230 700/4

**2011 Eastern National 4-H Horse Bowl
Round 10**

Bonus Question

16. Q. (Bonus) Administration of intravenous fluids is essential for the correction of electrolyte and acid-base abnormalities when treating a horse with salmonellosis. Identify **three** of the most common electrolyte or acid-base abnormalities that occur.
- A. Hyponatremia (low sodium)
Hypochloremia (low chloride)
Hypokalemia (low potassium)
Hypocalcemia (low calcium)
Acidosis
- S. HIH 660-3 805/5

Resume Open Questions

17. Q. You do the math...What is the **minute respiratory volume** for a horse with a tidal volume of **6 liters**, a residual volume of **12 liters** and a respiratory rate of **15 breaths per minute**?
- A. 90 liters per minute (tidal volume x respiratory rate)
(Residual volume is not a value needed for this calculation)
- S. Evans p. 109 450/5
18. Q. Why would you limit or eliminate molasses, soybean meal or alfalfa hay from the diet of a horse with HYPP?
- A. These feeds and hay are all high in potassium
- S. DET p. 146, Lewis p. 298, pp. 419-425 750/5

**2011 Eastern National 4-H Horse Bowl
Round 10**

19. Q. The Taffy color common to the Australian pony is the same as what color seen in Shetland ponies.

A. Silver Dapple

S. Evans p. 489 300/4

Toss Up – Bonus Attached

20. Q. Volvulus and intussusception are veterinary terms for two conditions that may occur in the small intestine and result in colic. What anatomical abnormality does **each** of these terms describe?

A. Volvulus – twisting of the small intestine
Intussusception – telescoping of the small intestine
(segment of the intestine in-folds into an adjacent segment)

S. HIH 4351-1 830/5

Bonus Question

21. Q. (Bonus) Identify **six** conformation defects of the **front legs**.

A. Splay-footed	Bowlegged
Pigeon-toed	Knock-kneed
Base-narrow	Camped-under
Base-wide	Camped-out
Buck-kneed (over at the knees)	
Calf-kneed (back at the knees)	
Bench-kneed (deviated knee)	

S. HIH 230-1 to 230-6 600/5

2011 Eastern National 4-H Horse Bowl Round 10

Resume Open Questions

22. Q. Separation between the superficial and deep layers of the skin results in “stretchy” skin that is easily damaged or torn in this disease. Identify this disease that primarily affects Quarter Horses.
- A. HC, HERDA or Equine Hyperelastosis Cutis
- S. HIH 675-1 550/4
23. Q. What is a “FLT” insurance policy?
- A. A policy that covers injury or death that results from fire, lightning or transportation?
- S. HIH 1340-1 920/4
24. Q. Trismus is a symptom exhibited in a horse with Tetanus. The definition of trismus is the **same** as the common term for this disease. What is trismus?
- A. Lockjaw (paralysis of the jaw)
- S. HIH 645-1 820/4
25. Q. When introducing new horses into a herd” bio-security” measures would include isolating the new horses for a **minimum** of how many days?
- A. Minimum of 14 days
- S. ES p. 195 920/4

**2011 Eastern National 4-H Horse Bowl
Round 10**

Toss Up – Bonus Attached

26. Q. Identify **three** ways to **hot process** grains.
- A. Steam flaking, crimping, popping, micronizing, extruding or pelleting
- S. Lewis p. 76 790/4

Bonus Question

27. Q. (Bonus) Correctly follow the blood flow through the heart and lungs by organizing the following **eight** anatomical terms in the correct order.
- | | |
|------------------|----------------|
| Left atrium | Left ventricle |
| Pulmonary vein | Right atrium |
| Pulmonary artery | Lungs |
| Right ventricle | Aorta |
- A. Right atrium
Right ventricle
Pulmonary artery
Lungs
Pulmonary vein
Left atrium
Left ventricle
Aorta
- S. Kainer plate 57 440/5

**2011 Eastern National 4-H Horse Bowl
Round 10**

Resume Open Questions

28. Q. The combination of copper, nickel and stainless steel is known as what type of substance in regards to materials used to make bits?
- A. German Silver
- S. HIH 1100-10 1000/4
29. Q. Which accessory gland in the stallion provides the thin watery fluid that cleanses the urethra during ejaculation?
- A. Prostate
- S. Evans p. 360 480/5
30. Q. What term is used to describe the flowing movement of the forelegs of the Peruvian Paso in which the forelegs roll to the outside as the horse strides forward?
- A. Termino
- S. Evans p. 43 640/4
31. Q. What is the common name for the parasite Dictyocaulus arnfieldi?
- A. Lungworm
- S. Lewis p. 159 835/5

**2011 Eastern National 4-H Horse Bowl
Round 10**

Last Question of the Round

32. Q. What is the common name for the internal parasite *Trichostrongylus* which is usually only seen in horses grazed with ruminants?

A. Hairworms

S. Lewis p. 158, p. 407 835/5

**2011 Eastern National 4-H Horse Bowl
Round 11**

One-On-One

1. C1 Q. “Tick-bite paralysis” ultimately results in death from starvation in affected horses. What **specific** vector transmits this condition?
- A. Rocky Mountain wood tick (also accept Rocky Mountain tick)
- S. HIH 415-7 835/5
-
2. C2 Q. All permanent incisors have erupted by what age?
- A. 4 ½ years
- S. Evans p. 92; Lewis p. 178 435/3
-
3. C3 Q. Zebra marks, dorsal stripe and cob-webbing on the forehead are all referred to by what general term?
- A. Primitive markings
- S. ES p. 38 310/4
-
4. C4 Q. You do the math... You are judging a reining class and have given the last horse a total of -1 in penalties and + 1 in maneuvers. What is your final score for this entry?
- A. 70 points
- S. HIH 183D-1 1010/4

**2011 Eastern National 4-H Horse Bowl
Round 11**

5. C1 Q. What is the common or slang term for the medication Xylazine?

A. Rompun

S. DET p. 298 805/5

6. C2 Q. What is the name for the “extra set of swells” attached to the saddle horn to protect a rider when riding a bucking horse?

A. Bucking roll

S. DET p. 42 1000/4

7. C3 Q. What is the common name for the Anaplocephala species of flatworms that affect horses?

A. Tapeworms

S. Lewis p. 158 835/4

8. C4 Q. What is the most common symptom in horses that have been stabled on hardwood shavings that contain black walnut?

A. Lameness due to laminitis (accept lameness or laminitis)

S. Lewis p. 323 770/3

**2011 Eastern National 4-H Horse Bowl
Round 11**

9. C1 Q. It is painful for your horse to eat due to lesions in his mouth. Identify **one** change you can make to your horse's diet that would decrease the pain associated with eating.
- A. Provide green grass, feed a mash by adding water to a complete pelleted feed, alfalfa pellets, meal or bran
- S. Lewis p. 290 700/4
-
10. C2 Q. What is the slang term for Psoroptic mange?
- A. "Wet mange" or scab
- S. HIH 415-8 835/4
-
11. C3 Q. Identify **one** of the two colors that must be present in the genetic lineage of a cream colored horse.
- A. Palomino or Buckskin
- S. ES p. 43 300/5
-
12. C4 Q. What is the anatomical term for the musculo-membranous chamber common to both the digestive and respiratory systems?
- A. Pharynx
- S. Kainer plate 50 430/4

End One-On-One

**2011 Eastern National 4-H Horse Bowl
Round 11**

Begin Open Questions

13. Q. What two areas of the digestive tract are connected by the pylorus?

A. Stomach and small intestine (duodenum)

S. DET p. 224 430/4

14. Q. Stable cough is the slang term for which viral equine disease?

A. Rhinopneumonitis

S. DET p. 253 850/4

Toss Up – Bonus Attached

15. Q. Identify **two** colors that are caused by incomplete dominance.

A. Mottled, varnish roan, blanket, frost, leopard, few spot leopard, cremello

S. HIH 1040-3 300/5

Bonus Question

16. Q. (Bonus) Give the complete zoological classification of the horse.

A. Kingdom	Animalia
Phylum	Chordata
Class	Mammalia
Order	Perisodactyla
Family	Equidae
Genus	Equus
Species	Equus caballus

S. ES p. 15 100/5

**2011 Eastern National 4-H Horse Bowl
Round 11**

Resume Open Questions

17. Q. (Two Part) You are dismayed when you return from vacation and discover that the person taking care of your horse has fed moldy sweet clover hay to the horse. Your pregnant mare is now at risk for impaired blood clotting and possible abortion. What **specific** nutrient is the problem and is it a nutrient deficiency or toxicity?

A. Vitamin K deficiency

S. ES p. 125 740/4

18. Q. What type of fencing is considered to be the safest horse fence because its close weave prevents even a foal from catching a foot in it?

A. 5-Diamond V-mesh (also accept diamond v-mesh or v-mesh)

S. HIH 350-3 920/4

19. Q. What is the anatomical term for the ligament that extends from the poll to the withers and helps support the horse's head?

A. Ligamentum nuchae

S. DET p. 168 410/4

Toss Up – Bonus Attached

20. Q. Systemic describes diseases that affect the entire body. Identify **two** systemic fungal diseases that affect horses.

A. Aspergillosis, Blastomycosis, Coccidiomycosis, Histoplasmosis

S. DET p. 261; ES p. 173 800/5

**2011 Eastern National 4-H Horse Bowl
Round 11**

Bonus Question

21. Q. Identify **four** situations that may result in the occurrence of hyperthermia.
- | | |
|----------------|---------------------------------------|
| A. Hot weather | Poor stable ventilation |
| High humidity | Prolonged exposure to direct sunlight |
| Transportation | Obesity |
| Overwork | Insufficient water consumption |
- S. HIH 410-1 800/5

Resume Open Questions

22. Q. What term refers to the nitrogen content in a feedstuff that would actually be available to the horse during digestion?
- A. Digestible crude protein
- S. ES p. 119 760/4
23. Q. (Two Part) If a mare is a carrier for an X-linked genetic disease, what percent of her male foals will be affected with the disease and what percent of her female foals will be carriers?
- A. 50% males will be affected and 50% females will be carriers
- S. HIH 1060-3 550/5
24. Q. What term describes a stone-like mass that forms around a foreign object in the intestines of a horse?
- A. Enterolith (also accept fecalith)
- S. DET p. 93, 105 830/5

**2011 Eastern National 4-H Horse Bowl
Round 11**

25. Q. The horse flies and deer flies are known for their vicious and painful bites. This year they have been relentless with their attack of your horses. How can you manage your pasture turn-out to minimize exposure to these parasites?
- A. Turn horses out at night (horse flies and deer flies feed only during daylight hours)
- S. HIH 415-2 920/3

Toss Up – Bonus Attached

26. Q. Identify the **two** large veins that return blood from the body to the right atrium of the heart?
- A. Caudal vena cava (caudal caval vein)
Cranial vena cava (cranial caval vein)
- S. Kainer plate 59 440/4

Bonus Question

27. Q. (Bonus) What are the **three** forms of Botulism?
- A. Shaker foal syndrome, forage poisoning and wound botulism
- S. HIH 445-8 830/5

Resume Open Questions

28. Q. What type of stirrup iron is shaped like a heel-less slipper and hangs on a revolving bar from the stirrup leather?
- A. Devonshire slipper iron
- S. DET p. 80 1000/4

2011 Eastern National 4-H Horse Bowl
Round 11

29. Q. Lasix is a diuretic which lowers the blood pressure, especially in the lungs. For this reason it is sometimes used for racehorses with what condition?
- A. EIPH (Exercise Induced Pulmonary Hemorrhage) (Bleeders)
- S. DET p. 100, 164 805/3
30. Q. (Two Part) A neighbor's horse is pastured near some Bracken Fern and Horsetail, which he loves to eat! It is a young horse that is showing delayed growth, loss of appetite and body weight, ataxia and nervousness. What specific nutrient is the problem and is it a nutrient deficiency or toxicity?
- A. Vitamin B1 (Thiamin) deficiency
- S. ES p. 126 770/4
31. Q. Rarely is a horse poisoned by a single mouthful of a toxic plant. Identify the **two** plants that are the exception.
- A. Water hemlock and Yew
- S. Lewis p. 300 770/4

Last Question of the Round

32. Q. The foal receives initial immune protection from the mare. How long does it take for a foal's own immune system to become functional and provide adequate protection from infectious diseases?
- A. 2 to 4 months (accept anything within this range)
- S. YLM BEG 112-2L 500/4

**2011 Eastern National 4-H Horse Bowl
Extra One-on-One Questions**

100

1. Q. In regards to the history of the horse, what event took place during the Pleistocene epoch in North America?

A. The horse became extinct in North America

S. Evans p. 4 100/3

2. Q. In the history of Spain at the time of Queen Isabella, what was a Golden Isabella?

A. Palomino horse

S. Evans p. 50 100/4

200

3. Q. The Trottingbred is a synthetic pony breed developed for sulky racing. Similar to Standardbreds, some are trotters and others are pacers. What is the difference in the distance that they are raced?

A. They race ½ mile (Standardbreds race 1 mile)

S. Evans p. 67 200/5

4. Q. The Americana is a synthetic pony breed that resulted from the crossing of what **two** breeds?

A. Shetland and Hackney

S. Evans p. 66 200/4

**2011 Eastern National 4-H Horse Bowl
Extra One-on-One Questions**

300

5. Q. What term describes a splotch of dark color on a base coat color?

A. "Blood mark"

S. ES p. 39 310/3

6. Q. The Cheyenne Indians thought Spanish mustangs with what color pattern possessed supernatural powers of protection?

A. "Medicine Hat" pattern

S. Evans p. 56 310/3

400

7. Q. Where would you find the Purkinje fibers?

A. In the heart muscle (also accept heart or cardiac muscle)

S. Kainer plate 58 440/4

8. Q. What is the medical term for the tiny, finger-like extensions of the lining of the small intestine that increase absorption of nutrients by increasing the surface area?

A. Villi

S. DET p. 283 430/5

**2011 Eastern National 4-H Horse Bowl
Extra One-on-One Questions**

500

9. Q. When a foal is in the transverse ventral presentation for delivery, what part of the foal's body is lodged against the pelvis of the mare and preventing the delivery of the foal?

A. The foal's back

S. Evans p. 424 500/4

10. Q. What is the function of the arteries and veins known as the pampiniform plexus in the stallion?

A. Heat exchange to the testes

S. YLM 327-1 520/5

600

11. Q. A horse with a base-narrow, toe-out conformation in the forelegs would exhibit the gait defect known as plaiting. What is the common term for plaiting?

A. Rope walking

S. Kainer plate 39 640/4

12. Q. What slang term describes legs in which the tendons lack definition or do not stand out clearly?

A. Gummy-legged

S. DET p. 126 620/5

**2011 Eastern National 4-H Horse Bowl
Extra One-on-One Questions**

700

13. Q. The molds *Fusarium moniliforme* and *Fusarium proliferatum* cause what feed-related poisoning?

A. Moldy corn disease or Leukoencephalomalacia

S. Lewis p. 358 790/5

14. Q. What general type of hay is recommended for a horse with chronic renal failure?

A. Grass hay (lower in protein, calcium and phosphorus)

S. Lewis p. 296 780/4

800

15. Q. What is the common name for osteodystrophia fibrosa?

A. Big head Disease (also accept Miller's Disease or Bran Disease)

S. ES p. 132; Evans p. 227 7504

16. Q. What are the **scientific** names for the **three** types of large strongyles?

A. *Strongylus vulgaris*, *Strongylus edentatus*, *Strongylus equinus*

S. Lewis p. 155 835/4

**2011 Eastern National 4-H Horse Bowl
Extra One-on-One Questions**

900

17. Q. Pasture management guidelines recommend that horses be rotated to another pasture when the grass is a **minimum** of what height?

A. Minimum of 3-4 inches (accept anything within this range)

S. HIH 3604 920/3

18. Q. When talking about the management of horse facilities, what do the initials BMP stand for?

A. Best Management Practices

S. HIH 360-1 920/4

1000

19. Q. What is the slang term for a buck strap used by a novice when riding a bucking horse?

A. "Fraidy strap"

S. DET p. 42 1060/4

20. Q. Kur is the term for what type of musical freestyle performance?

A. Dressage

S. DET p. 162 1090/4

**2011 Eastern National 4-H Horse Bowl
Extra Toss Up Questions**

1. Q. Identify **two** of the three anatomical structures found in the umbilical cord.

A. Artery (two), vein and urachus

S. Kainer plate 72 500/4

2. Q. A horse with chronic renal failure would require a diet that has less of certain nutrients. Name **two** of these nutrients.

A. Protein, calcium, phosphorus

S. Lewis p. 296 700/4

3. Q. Identify **two** body systems where you would find the wave-like projections on cells known as cilia.

A. Respiratory and reproductive (mare) systems

S. Kainer plate 67, 70 450/480/5

4. Q. When your horse is carrying a pack load down a steep grade, what **two** items of tack will need to be adjusted or pulled tighter?

A. Breeching and cinch

S. YLM 118-1L 1020/3

**2011 Eastern National 4-H Horse Bowl
Extra Bonus Questions**

1. Q. (Bonus) Identify the **five** coriums that nourish the hoof.

A. Periopic corium Frog corium
 Coronary corium Sole corium
 Laminar corium

S. Evans p. 696 415/5

2. Q. (Bonus) What **three** boney structures form the thoracic cavity?

A. Spine (vertebrae), ribs and sternum

S. Evans p. 152 410/4

3. Q. (Bonus) Identify **four** “general” ways in which dried hay can be processed or packaged for feeding or storage.

A. Stacked Cubed (wafers)
 Chopped Pellets
 Baled (round, square or rectangular would be considered one answer)

S. Lewis p. 65 780/4

2011 Eastern National 4-H Horse Bowl Tie Breaker 1

1. Q. What type of reins are fastened to the girth and then passed through the rings of the snaffle bit and to the rider's hands?

A. Draw reins

S. DET p. 231 1000/3

2. Q. What is the base coat color of a horse that is red silver?

A. Bay

S. HIH 1040-2 300/4

3. Q. What judging term describes the upward or downward change between gaits?

A. Transition

S. DET p. 273 640/2

4. Q. What is the most common group of toxins that result in feed related poisoning?

A. Mycotoxins

S. Lewis p. 346 700/4

5. Q. What is the common term for the distal sesamoid bone?

A. Navicular or shuttle bone

S. DET p. 188 410/3

2011 Eastern National 4-H Horse Bowl Tie Breaker 2

1. Q. In regards to genetics, what term refers to the ability of a sire to consistently transmit physical characteristics to their offspring?

A. Prepotency

S. DET p. 220 550/4

2. Q. What type of martingale is a combination of the snaffle rein and the draw rein?

A. German martingale

S. DET p. 120 1000/3

3. Q. Two hormones affect the reproductive system of **both** the mare and stallion. In the stallion these hormones are responsible for stimulating spermatogenesis. Identify **one** of these hormones.

A. FSH (Follicle stimulating hormone) or LH (Luteinizing hormone)

S. Evans p. 127 490/4

4. Q. What is the common name for the external parasite *Damalinia equi*?

A. Biting louse

S. Evans p. 642 835/4

5. Q. What type of wire fencing is inexpensive but never appropriate for equine fencing due to the high incidence of injuries?

A. Barbed wire

S. Evans p. 764 920/3

**2011 Eastern National 4-H Horse Bowl
Tie Breaker 3**

1. Q. What is the common name for the disease Borreliosis?
A. Lyme Disease
S. HIH 655-1 835/4

2. Q. At what age do the first permanent teeth erupt?
A. 5 to 6 months (1st premolars referred to as wolf teeth)
S. Evans p. 93 435/4

3. Q. Identify **one** of the two muscles in the stallion which assist with temperature regulation of the testes.
A. Cremaster or tunica dartos
S. YLM INT 227-2L 480/4

4. Q. Rye grain is high in protein but is typically not fed to horses for what reason?
A. Poor palatability
S. YLM ADV 302-2L 790/4

5. Q. Horses that develop “dew poisoning” are typically grazed on pastures that contain what type of legume?
A. Alsike clover (do not accept klein grass since question specifies a type of legume)
S. Lewis p. 314 780/4