

2013 District Horse Bowl Contest Junior Division Round One

- 1) Q: What is the horse's dock?**
A: The tail bone or last part of the spinal column
Source: BH (12)

- 2) Q: What does the term "conformation" mean?**
A: The physical shape or build of the horse
Source: BH (58)

- 3) Q: What is the base coat color of a strawberry roan?**
A: Sorrel or chestnut
Source: EqSci (47)

- 4) Q: What is another term for the left side of the horse?**
A: Near side
Source: H&H 2001 (47)

- 5) Q: Where is lameness most likely to occur?**
A: In the front legs
Source: HS 2001 (4)

- 6) Q: Atrophy of the shoulder muscles of the horse, typically as a result of strain or trauma, is called what?**
A: Sweeney
Source: LOOK (55)

- 7) Q: What do you call a white leg marking that extends from the hoof to the knee?**
A: Stocking
Source: HS 2001 (6)

- 8) Q: What is the definition of horsemanship?**
A: The art of riding a horse and understanding its needs
Source: H&H 2001 (47)

- 9) **Q: A castrated male horse is called what?**
A: A gelding
Source: LOOK (26)
- 10) **Q: What lameness condition is caused by inflammation of the hoof?**
A: Founder or Laminitis
Source: HS 2001 (12)
- 11) **Q: What side of the horse should you mount from?**
A: Left or near side
Source: H&H 2001 (20)
- 12) **Q: What is a filly?**
A: A female horse three (3) years of age or less
Source: LOOK (23)
- 13) **Q: What is another term for a dorsal stripe?**
A: Back stripe, lineback, eel stripe, ray
Source: EqSci (38)
- 14) **Q: Proper equitation is important when riding or training a horse. Name three (3) natural aids that one may use while riding?**
A: Legs, hands, weight and voice
Source: H&H 2001 (20)
- 15) **Q: How often should you replace or reset your horse's shoes?**
A: Every 4-6 weeks
Source: 4-HHM (5)
- 16) **Q: What is the maximum height of a pony, in hands?**
A: 14.2 hands
Source: EqSci 20

- 17) **Q: If a horse is reddish brown in color with black points, what color is it?**
A: Bay
Source: BH (15)

TOSS-UP WITH BONUS ATTACHED

- 18) **Q: What is being referred to when using the word "sire?"**
A: The father of an equine
Source: EqSci (23)

- 19) **BONUS**

Q: There are three (3) main functions of the hoof. What are they?

A: Shock absorption, locomotion and circulation

Source: H&H 2001 (48)

- 20) **Q: Describe an unsoundness.**

A: An abnormality that interferes with the usefulness of the horse

Source: H&H 2001 (13)

- 21) **Q: What term describes a hard swelling on the back surface of the rear cannon about four (4) inches below the point of the hock?**

A: Curb

Source: HS 2001 (13)

TOSS-UP WITH BONUS ATTACHED

- 22) **Q: What is a blemish?**

A: An abnormality which may detract from the appearance of the animal, but does not affect it's serviceability

Source: 4-HJM (7)

- 23) **BONUS**

Q: Throughout history, humans have employed the horse for what five (5) primary uses?

A: Food, transportation, work, war and recreation (competition)

Source: EqSci (1)

- 24) **Q: Is a horse a carnivore, herbivore, or omnivore?**
A: Herbivore
Source: HS 2001 (27)
- 25) **Q: What conformational defect describes a horse whose front legs are curved outward at the knee?**
A: Bow-legged
Source: BYOV (96)
- 26) **Q: When tying a horse what type of knot is recommended?**
A: Quick-release knot
Source: BH (23)

TOSS-UP WITH BONUS ATTACHED

- 27) **Q: What term describes a horse with long sloping pasterns and low fetlocks?**
A: Coon-footed
Source: H&H 2001 (8)

28) **BONUS**

Q: When judging a conformation class, list four (4) balance faults.

A: Less symmetry or balanced; stands higher at the croup than withers; shorter or thicker neck set lower on steeper shoulder; shorter neck set lower on flatter withers; less angulation to shoulders; coarser/flatter withers; longer back, lower or weak back; loose/longer/lower croup; shorter hipped; shorter/steeper croup; shallow heated; pinched/shallow through heart girth; cut up in real flank

Source: 4-HJM (13)

- 29) **Q: What is another for dietary fat?**
A: Lipid
Source: EqSci (143)
- 30) **Q: What is the single most important nutrient for all living things?**
A: Water
Source: HS 2001 (28)

31) Q: What basic brush can be used over the whole body?

A: Soft-bristled brush

Source: BH (25)

32) Q: What are the three (3) main gaits of an english horse?

A: Walk, trot, canter

Source: EqSci (69)

END OF ROUND ONE

2013 District Horse Bowl Contest Junior Division Round Two

- 1) **Q: What breed of pony originated in Wales?**
A: Welsh Pony
Source: H&H 2001 (12)

- 2) **Q: What term describes a short, quick, choppy stride?**
A: Trappy
Source: H&H 2001 (13)

- 3) **Q: Describe an overo coat pattern.**
A: A paint horse whose white does not cross the back with one or more dark legs. The head markings are often bald, apron, or bonnet-faced. The tail is usually one color and the white markings have uneven borders.
Source: BH (17)

- 4) **Q: What is the name of the lower leg bone located below the knee and above the fetlock joint?**
A: Cannon bone or third metacarpal
Source: H&H 2001 (8)

- 5) **Q: Pawprints, bear paws and ink spots are seen in what kind of horses?**
A: Paints or pintos
Source: EqSci (39)

- 6) **Q: What is the name of the lower jaw bone?**
A: Mandible
Source: LOOK (37)

- 7) **Q: What are the two (2) basic types of forage?**
A: Grasses and legumes
Source: HS 2001 (37)

- 8) **Q: What term describes a horse who is eating manure?**
A: Coprophagy
Source: LOOK (15)
- 9) **Q: What part of the horse's mouth does the bit rest on?**
A: The bars
Source: H&H 2001 (21-22)
- 10) **Q: Two (2) part question. Who was the original ancestor of the horse? On what continent did it originate?**
A: Eohippus, originated in North America
Source: HS 2001 (4)
- 11) **Q: How many beats are in the gallop?**
A: Four (4)
Source: EqSci (78)
- 12) **Q: What breed is primarily used for harness racing?**
A: The Standardbred
Source: H&H 2001 (5)
- 13) **Q: What part of hay is the most nutrient dense?**
A: The leaf
Source: HS 2001 (38)
- 14) **Q: What is a vice?**
A: An acquired habit that is annoying, or may interfere with the horse's usefulness
Source: HS 2001 (4)
- 15) **Q: When a horse is said to be head shy, what does this mean?**
A: That it is sensitive around the head, face and ears and will jerk away when touched
Source: HS 2001 (4)

16) **Q: What are the five (5) primary gaits of the horse?**
A: Walk, trot/jog, canter/lope, gallop/run and back
Source: EqSci (69-70)

17) **Q: What is the ideal angle of the pastern joint?**
A: 45 degrees
Source: HS 2001 (10)

TOSS-UP WITH BONUS ATTACHED

18) **Q: What unsoundness is characterized by puffy swelling which appears on the upper part of the hock and in front of the large tendon?**
A: Thoroughpin
Source: HS 2001 (13)

19) **BONUS**

Q: For proper equitation, regardless of discipline, what four (4) things should align in the rider's body?
A: Rider's ear, shoulder, hip & heel
Source: BH (51)

20) **Q: What are the two (2) major functions of the digestive tract?**
A: Digestion and absorption
Source: EqSci (108)

21) **Q: How does the horse primarily grasp its food?**
A: By the upper lip (prehensile lip)
Source: HS 2001 (23)

TOSS-UP WITH BONUS ATTACHED

22) **Q: What term describes an inflamed swelling of the withers?**
A: Fistula of the withers
Source: HS 2001 (13)

23) **BONUS**

Q: What are the three (3) parts of the small intestine, in order?

A: Duodenum, jejunum, ileum

Source: HS 2001 (24)

24) **Q: What is the most important criterion when judging and placing a conformation class?**

A: Balance

Source: 4-HJM (8)

25) **Q: What is a rowel?**

A: The toothed wheel on a spur

Source: H&H 2001(29)

26) **Q: What do you call a horse race without jumps?**

A: Flat race

Source: LOOK (24)

TOSS-UP WITH BONUS ATTACHED

27) **Q: What is bug-eyed horse?**

A: A horse with eyes that protrude; they tend to have poor vision

Source: HS 2001 (8)

28) **BONUS**

Q: List the five (5) basic coat colors.

A: Black, brown, bay, chestnut and white

Source: BH (14)

29) **Q: Name two (2) types of western headstalls.**

A: Split ear, slip ear, conventional

Source: H&H 2001 (27)

- 30) Q: What term refers to a new bone growth on the long pastern bone, short pastern bone or coffin bone? This growth generally causes lameness.**
A: Ringbone
Source: H&H 2001 (50)
- 31) Q: What term describes tying a horse on both sides of its halter, typically in an washpit or barn aisle?**
A: Cross-tied
Source: LOOK (17)
- 32) Q: What breed carries the genetic disorder Lethal White Foal Syndrome?**
A: Paint or pinto horses
Source: EqSci (98)

END OF ROUND TWO

2013 District Horse Bowl Contest Junior Division Round Three

- 1) Q: Fill in the blank. _____ protect the back of the rear fetlocks from abrasion during sliding stops.**
A: Skid boots
Source: H&H 2001 (34)

- 2) Q: What is another name for the horse's chestnuts?**
A: Nighteyes
Source: H&H 2001 (8)

- 3) Q: The name eohippus, or "dawn horse," is derived from what Greek word?**
A: "Eos," which means dawn
Source: HS 2001 (5)

- 4) Q: What is a mudder?**
A: A horse that runs well on a track that is wet, sloppy or heavy
Source: LOOK (38)

- 5) Q: How can a splay-footed or pigeon-toed horse be corrected through hoof trimming?**
A: Splayed feet can be corrected by trimming the outer half of the hoof, pigeon toes can be corrected by trimming the inner half of the hoof
Source: H&H 2001 (38)

- 6) Q: What set of rules are followed when judging 4-H Western Riding classes?**
A: AQHA
Source: 4HR&R (48)

- 7) Q: What three (3) areas would you trim with clippers to prepare your horse for a show?**
A: Face, fetlocks, legs, ears, muzzle
Source: H&H 2001 (27)

- 8) **Q: Define "cast."**
A: The horse has fallen or laid down close to the wall and cannot get up without assistance
Source: BYOV (19)
- 9) **Q: Define "parturition."**
A: The process of delivering a foal
Source: LOOK (42)
- 10) **Q: What gait is being described: a slow, deliberate two (2) beat gait without forward motion?**
A: The back
Source: EqSci (79)
- 11) **Q: What is the term for a horse who holds its head too high and noses out?**
A: Stargazer
Source: H&H 2001 (9)
- 12) **Q: What must a horse do to see faraway objects?**
A: Lower its head
Source: BH (8)
- 13) **Q: What is another name for the cecum?**
A: Blind gut or fermentation vat
Source: HS 2001 (25)
- 14) **Q: What are two (2) quick tests a horse owner can perform to check for dehydration?**
A: A skin pinch test, and check the gums for moistness or tackyness or check capillary refill time (CRT)
Source: EqSci (164)
- 15) **Q: What term describes a horse who, when moving, has heavy contact with the ground instead of a desired light, springy movement?**
A: Pounding
Source: H&H 2001 (13)

16) **Q: What is a mule?**
A: The offspring that results from crossing a male donkey and a female horse
Source: EqSci (21)

17) **Q: What nutrient acts as both a lubricant and regulator of body heat?**
A: Water
Source: HS 2001 (28)

TOSS-UP WITH BONUS ATTACHED

18) **Q: Which of merychippus' three (3) toes touched the ground?**
A: The middle toe
Source: EqSci (9-10)

19) **BONUS**

Q: Name three (3) theories as to why the horse disappeared from the North American continent during the ice age.
A: Sudden climate change, disease or parasite epidemic, competition for food, or failure to adapt to the environment
Source: EqSci (8)

20) **Q: What is the name for the mechanical process of chewing?**
A: Mastication
Source: EqSci (107)

21) **Q: The Galvayne's Groove appears on the upper corner incisor at approximately what age?**
A: Ten (10) years of age
Source: HS 2001 (17)

TOSS-UP WITH BONUS ATTACHED

22) **Q: Describe a "roaning" coat color.**
A: A coat with white hairs individually scattered among intermixed base coat
Source: EqSci (45)

23) **BONUS**

Q: In addition to the five (5) basic coat colors, there are five (5) additional coat color variations. What are they?

A: Dun (buckskin), grey, palomino, pinto (paint) and roan

Source: H&H 2001 (7)

24) **Q: If a horse is fifteen (15) hands, how tall is it in inches?**

A: Sixty (60) inches

Source: BH (59)

25) **Q: Approximately how long ago did the first true horse appear?**

A: One (1) million years ago

Source: EqSci (6)

26) **Q: When discussing coat colors, what are referred to as the "points" of the horse?**

A: Mane, tail, lower legs and tips of the ears

Source: EqSci (36)

TOSS-UP WITH BONUS ATTACHED

27) **Q: What driving aid is approximately four (4) to five (5) feet in length, made of rawhide and has silk lashes at the tip?**

A: Driving whip

Source: LOOK (20)

28) **BONUS**

Q: Name four (4) breeds of horse that have originated in the United States

A: American Albino, American Saddlebred, Appaloosa, Missouri Fox Trotter, Morgan, Palomino, Pinto, Quarter Horse, Standardbred and Tennessee Walking Horse

Source: H&H 2001 (3-5)

29) **Q: What piece of equipment is used to listen to the sounds of the internal organs?**

A: Stethoscope

Source: BYOV (12)

30) Q: What is the period of time in which a mare will be receptive to breeding?

A: Estrus

Source: BYOV (61)

31) Q: How high should the quick release knot be tied?

A: At least as high as the horse's withers

Source: BH (23)

32) Q: What is impulsion?

A: How much drive or power a horse exhibits from its hindquarters

Source: 4-HJM (12)

END OF ROUND THREE

2013 District Horse Bowl Contest Junior Division Round Four

- 1) **Q: DNA is composed of different amino acids and proteins arranged in two (2) thread like strands that are twisted together like a coil. What is this coil like structure called?**
A: Double helix
Source: EqSci (87)

- 2) **Q: Name the three (3) breeds that can have a white coat color.**
A: Arabians, Thoroughbreds, Tennessee Walking Horses
Source: EqSci (45)

- 3) **Q: Define "serviceably sound."**
A: Serviceably sound means a horse may have a structural problem or deviation, but it may have only a limited affect on the animal's ability to perform.
Source: 4-HJM (9)

- 4) **Q: What is a "hoof level" used for?**
A: To determine the angle of a hoof
Source: H&H 2001 (41)

- 5) **Q: What does a strong digital pulse in a foot detect?**
A: An injury to the foot or leg/laminitis/bruise/abscess
Source: EqSci (161)

- 6) **Q: A mature stallion can be bred how often?**
A: Two (2) times per day
Source: BYOV (71)

- 7) **Q: Define "Jaquima."**
A: Spanish bridle or hackamore
Source: H&H 2001 (29)

- 8) **Q: When judging, the length of neck plays an important role in what?**
A: Length of stride
Source: HS 2001 (9)
- 9) **Q: What is the total length of the horse's large intestine in feet?**
A: Twenty-five (25) feet
Source: HS 2001 (15)
- 10) **Q: What is the common name for Distemper in horses?**
A: Strangles
Source: BYOV (241)
- 11) **Q: What does the term "non-contagious" mean?**
A: A disease that is unable to be spread from one animal to another
Source: EqSci (167)
- 12) **Q: Which overo pattern has extensive white on the head and legs, a speckled or flecked coat pattern and jagged edges around the spots?**
A: Sabino
Source: EqSci (49)
- 13) **Q: Most unsoundness associated with the feet and legs are caused by what?**
A: Injury or excess stress and strain
Source: HS 2001 (13)
- 14) **Q: Name three (3) breeds affected by Neonatal Isoerythrolysis.**
A: Arabian, Thoroughbred, Quarter Horse, Morgan, Warmblood, pony breeds, and Miniatures Horses
Source: EqSci (102)
- 15) **Q: What is the volume of the stomach?**
A: 8 to 17 quarts or 2 to 4 gallons
Source: EqSci (110)

16) **Q: How far apart, in feet, are the poles set in the stake race?**
A: 80 feet
Source: 4HR&R (66)

17) **Q: Pacing is most commonly seen in what breed?**
A: Standardbred
Source: EqSci (79)

TOSS-UP WITH BONUS ATTACHED

18) **Q: What is the major site of fiber digestion in the horse?**
A: Cecum
Source: EqSci (112)

19) **BONUS**

Q: List three (3) characteristics of high quality hay.
A: Color is green, leafy, no dust or mold, no foreign objects
Source: HS 2001 (38)

20) **Q: Name the two (2) main sources of forages?**
A: Dry forages (hay) and pastures (grass)
Source: HS 2001 (37)

21) **Q: What is another name for the third phalanx?**
A: Coffin bone, pedal bone
Source: BYOV (120)

TOSS-UP WITH BONUS ATTACHED

22) **Q: Name two (2) places where you can feel the horse's pulse.**
A: Edge of the jawbone & behind the horse's left elbow
Source: BYOV (11,12)

23) **BONUS**

Q: List three (3) congenital mouth defects.

A: Cleft palate, undershot jaw (monkey mouth), overshot jaw (parrot mouth)

Source: BYOV (257)

24) **Q: Which pony breed association accepts ponies taller than 14.2 hh in their registry?**

A: Welsh Pony Breed Association

Source: EqSci (28)

25) **Q: What is the average pulse of a foal at rest?**

A: 80 to 90 beats per minute

Source: EqSci (155)

26) **Q: How is water drawn into the horse's mouth?**

A: Through suction from the tongue

Source: HS 2001 (23)

TOSS-UP WITH BONUS ATTACHED

27) **Q: In what state did the American Saddlebred originate?**

A: Kentucky

Source: H&H 2001 (3)

28) **BONUS**

Q: Name the four (4) major ways to estimate age of horses by appearance of their teeth.

A: Occurrence of permanent teeth, disappearance of cups, angle of incidence, shape of the surface of the permanent teeth

Source: HS 2001 (15)

29) **Q: Perimeter fences for horses should be a minimum height of how many inches?**

A: 60 inches

Source: BYOV (760)

- 30) **Q: What are the recommended hoof-to-ground angles for the front and the rear feet?**
A: 45° front & 50° rear
Source: H&H 2001 (56)
- 31) **Q: A thousand (1,000) pound horse will produce how many pounds of manure daily?**
A: 40-50 pounds
Source: EqSci (114)
- 32) **Q: Approximately 65 to 75% of a horse's total body weight is made up of what basic nutrient?**
A: Water
Source: EqSci (115)

END OF ROUND FOUR

2013 District Horse Bowl Contest Junior Division Round Five

- 1) Q: What was the original use of the horse by man?**
A: A food source
Source: EqSci (12)
- 2) Q: What term describes a horse with an eyeball that is clear or some shade between white and blue?**
A: China-eyed, glass-eyed, cotton-eyed, or blue-eyed
Source: BH (18)
- 3) Q: What protein is the chief component of hair?**
A: Keratin
Source: LOOK (34)
- 4) Q: What is a radiograph?**
A: An x-ray
Source: LOOK (46)
- 5) Q: When too much protein is fed, how is the excess discarded?**
A: In the urine
Source: HS 2001 (27)
- 6) Q: What does the bacterial fermentation of fiber produce?**
A: Volatile fatty acids
Source: HS 2001 (30)
- 7) Q: What is the function of the placenta?**
A: It carries nutrients and oxygen from the mare to the fetus and carries waste products from fetus to mare
Source: HS 2001 (25)

- 8) **Q: When does foal heat occur?**
A: An average of nine (9) days after foaling- range from 4-18 days
Source: BYOV (61)
- 9) **Q: What is the aorta?**
A: The major artery that carries blood away from the heart
Source: LOOK (4)
- 10) **Q: Who rescued the Lippizan horses during the second World War?**
A: General Paton, US Army
Source: H&H 2001 (106)
- 11) **Q: What disease may caused by a tumor on the pituitary gland?**
A: Cushings Disease
Source: EqSci (181)
- 12) **Q: What breed's association used genetic selection to eliminate Aniridia from their breed by not allowing affected animals to be used as breeding stock?**
A: Belgians
Source: EqSci (100)
- 13) **Q: The microorganism that causes tetanus is commonly found where?**
A: In the soil
Source: LOOK (56)
- 14) **Q: How do you determine the effectiveness of your deworming program?**
A: Have your veterinarian conduct a fecal egg count
Source: HS 2001 (59)
- 15) **Q: What is the maximum height of a Shetland Pony in inches?**
A: 46 inches
Source: H&H 2001 (5)

16) **Q: What is the funnel-like membrane that surrounds the ovary?**
A: Infundibulum
Source: HS 2001 (16)

17) **Q: Define a "sex-linked" genetic disorder.**
A: A genetic disorder that is carried on a sex chromosome
Source: EqSci (99)

TOSS-UP WITH BONUS ATTACHED

18) **Q: What coat color patterns are described as "white on black" and "white on any color other than black?"**
A: Piebald and Skewbald
Source: EqSci (47)

19) **BONUS**

Q: In horses with a leopard white spotting coat pattern there are several named sub-patterns. Name four (4) of these sub-patterns.
A: Mottled, frost, snowflake, varnish roan, speckled, blanket, leopard, few-spot leopard
Source: EqSci (51)

20) **Q: How many total incisors, premolars, and molars do all adult horse's have?**
A: 36 (12 incisors, 12 premolars, 12 molars)
Source: EqSci (215)

21) **Q: What is anaphylactic shock?**
A: An acute, powerful allergic reaction; may follow an injection or medication
Source: BYOV (187)

TOSS-UP WITH BONUS ATTACHED

22) **Q: What is the Cleveland Bay's place of origin and what is its color?**
A: England and it is always a solid bay with black legs
Source: H&H 2001 (3)

23) **BONUS**

Q: List three (3) characteristics of high quality hay.

A: Color is green, leafy, no dust or mold, no foreign objects

Source: HS 2001 (38)

24) **Q: Sheared heels are a result of what?**

A: Overuse of one (1) heel compared to the other heel on the same foot

Source: BYOV (127)

25) **Q: Which part of the horse has no bone structure for support, making it the weakest part of the topline?**

A: Loin

Source: HS 2001 (10)

26) **Q: What is the term for meadow hay or green straw used as horse feed?**

A: Chaff

Source: LOOK (13)

TOSS-UP WITH BONUS ATTACHED

27) **Q: Name three (3) white color patterns of the horse?**

A: Grulla, palomino, cremello, white, gray, roan

Source: EqSci (45)

28) **BONUS**

Q: A hackamore is a bitless bridle that works by exerting pressure on three (3) specific areas of a horse's head. List these three (3) areas.

A: Underside of the jaw (chin), bridge of the nose and poll

Source: H&H 2001 (28)

29) **Q: What do geneticists use to determine expected outcomes and the percentages of offspring for simple inheritance traits?**

A: Punnett Square

Source: EqSci (92)

- 30) **Q: What is a sulky?**
A: A two-wheeled driving vehicle used for racing
Source: LOOK (54)
- 31) **Q: What is the term for when a horse's baby teeth in the cheek area are not shed properly?**
A: Retained caps
Source: BYOV (257)
- 32) **Q: At the State 4-H Horse Show, what is the penalty for knocking over a barrel during the barrel race?**
A: 5 seconds are added to the final time
Source: 4HR&R (64)

END OF ROUND FIVE

2013 District Horse Bowl Contest Junior Division Round Six

- 1) Q: Where are the chesnuts on a donkey located?**
A: Inside front leg, below the knee, NOT on the back legs
Source: EqSci (21)
- 2) Q: What is an embryo?**
A: An organism in the early stages of fetal development following fertilization
Source: HS 2001 (56)
- 3) Q: A highly contagious disease in horses that causes swelling of the legs and, in stallions, swelling of the scrotum, is called what?**
A: Equine Viral Arteritis
Source: LOOK (22)
- 4) Q: How many chromosomes does a zebra have?**
A: 32 to 46 chromosomes
Source: EqSci (89)
- 5) Q: Name three (3) characteristics of a cremello horse.**
A: Pink skin, blue eyes, basic coat color is cream. A cremello very palest coat color dilution that is not white.
Source: EqSci (43)
- 6) Q: When cantering, the last foot to hit the ground indicates what?**
A: What lead the horse is on
Source: EqSci (75)
- 7) Q: A dermatophyte is an organism that causes what skin condition?**
A: Ringworm or Dermatophytosis
Source: LOOK (18)

- 8) **Q: How many toes did the prehorse have?**
A: Five toes
Source: EqSci (11)
- 9) **Q: What is the master gland of the endocrine system?**
A: Pituitary Gland
Source: EqSci (213)
- 10) **Q: What is fish meal and what is it used for?**
A: Made from fish & fish by products; protein supplement
Source: EqSci (121)
- 11) **Q: What is meant by the term "good gaits"?**
A: A horse with smooth collected gaits that are easy for the rider to sit and that look good for an observer on the ground
Source: EqSci (69)
- 12) **Q: What type of base of support does the horse have in the walk?**
A: Triangular
Source: EqSci (70)
- 13) **Q: The testicle and epididymides of the stallion are located in the scrotum. Why is this important for sperm production?**
A: The scrotal temperature is several degrees cooler than that of the body cavity. This is necessary for normal development of sperm
Source: HS 2001 (22)
- 14) **Q: Give the number of chromosome pairs for Equus caballus and Equus przewalskii.**
A: Equus caballus has 32 chromosome pairs and Equus przewalskii has 33 chromosome pairs
Source: EqSci (88)
- 15) **Q: Gross energy is expressed as the sum of what?**
A: Digestible energy, metabolizable energy and net energy
Source: EqSci (149)

16) **Q: What is a symptom of a vitamin K deficiency?**
A: Nosebleeds and hematomas
Source: EqSci (125)

17) **Q: Where is the esophagus located?**
A: On the left side of the neck
Source: HS 2001 (28)

TOSS-UP WITH BONUS ATTACHED

18) **Q: What is one (1) disease caused by a rickettsial infection?**
A: Equine Ehrlichiosis or Potomac Horse Fever
Source: EqSci (175)

19) **BONUS**

Q: What are the three (3) types of organisms that can cause diarrhea in horses?
A: Protozoal, mycotic, and viral
Source: BYOV (268)

20) **Q: How long after an injury should cold therapy be used?**
A: The first 24 to 48 hours after injury
Source: BYOV (182)

21) **Q: Horses belong to what scientific family?**
A: Equidae
Source: EqSci (19)

TOSS-UP WITH BONUS ATTACHED

22) **Q: "Bowed tendon" is a term used to describe the severe strain of what tendon?**
A: Flexor
Source: BYOV (146)

23) **BONUS**

Q: Name three (3) tendons or ligaments of the lower leg.

A: Superficial check ligament, deep digital flexion tendon, superficial flexor tendon, deep digital flexor tendon, suspensory ligament

Source: EqSci (206)

24) **Q: What does the term "rate of passage" mean?**

A: How long it takes for liquids and dry matter to pass through the digestive system of the horse

Source: EqSci (110)

25) **Q: Where do small strongyles live?**

A: Large intestine

Source: BYOV (299)

26) **Q: What is bishoping?**

A: The practice of trying to replace the cups on the worn incisors in an attempt to make the horse appear younger

Source: HS 2001 (17)

TOSS-UP WITH BONUS ATTACHED

27) **Q: How is a foal's passive immunity obtained?**

A: Through the colostrum (first milk)

Source: EqSci (169)

28) **BONUS**

Q: Name three (3) respiratory conditions commonly seen in horses.

A: Roaring, Nosebleed (Epistaxis), Pulmonary Hemorrhage, Distemper (Strangles), Respiratory Tract Infections, Pneumonia, Pleuritis, Thumps, Heaves (COPD)

Source: BYOV (248)

29) **Q: Bacteria in the horse's digestive tract can produce all vitamins except which two (2)?**

A: Vitamins A and E

Source: EqSci (122)

- 30) Q: The first horse, also known as prehorse, lived approximately how many years ago?**
A: 75 million years ago
Source: EqSci (9)
- 31) Q: What hormone is responsible for milk production?**
A: Prolactin
Source: HS 2001 (23)
- 32) Q: What is the solid mass that forms from the follicle after ovulation of an egg? This yellow body secretes a hormone to maintain pregnancy.**
A: Corpus luteum
Source: HS2001 (22)

END OF ROUND SIX

2013 District Horse Bowl Contest Junior Division Round Seven

- 1) Q: What is the primary artery of the hind legs?**
A: Femoral Artery
Source: EqSci (208)

- 2) Q: Fill in the blank. The hairpin turn in the large intestine, which is a common site for impaction, is called the _____.**
A: Pelvic flexure
Source: HS 2001 (31)

- 3) Q: What two (2) types of hernias commonly rupture?**
A: Umbilical and scrotal
Source: HS 2001 (11)

- 4) Q: Identify the J-shaped sac that can only hold two (2) to four (4) gallons of digesta.**
A: The stomach
Source: HS 2001 (28)

- 5) Q: What is the primary nerve of the front limbs?**
A: Brachial plexus
Source: EqSci (212)

- 6) Q: What is Navicular Disease?**
A: Inflammation of the Navicular bone
Source: EqSci (182)

- 7) Q: What causes white markings that form from scar tissue on the horse?**
A: Melanocyte cells that have been destroyed
Source: EqSci (97)

- 8) **Q: Which micro-mineral aids in the production of elastin, which is needed for strength and flexibility in blood vessels?**
A: Copper
Source: EqSci (137)
- 9) **Q: The small intestine absorbs what kinds of vitamins?**
A: Fat soluble
Source: EqSci (p111)
- 10) **Q: After the body processes proteins, carbohydrates and fats, what is left over?**
A: Metabolic water
Source: EqSci (116)
- 11) **Q: Where does absorption of volatile fatty acids occur?**
A: Colon
Source: HS 2001 (25)
- 12) **Q: What is the scientific name for the insect that looks like a honey bee and lays its eggs on the hairs of the horses legs, chest, belly and neck?**
A: *Gasterophilus intestinalis*
Source: HS 2001 (56)
- 13) **Q: What term describes an overactive parathyroid gland?**
A: Hyperparathyroidism or Big-Head Disease
Source: EqSci (135)
- 14) **Q: Name two (2) tests that can be used to verify parentage.**
A: Blood-group tests, lymphocyte tests, DNA tests
Source: EqSci (102-103)
- 15) **Q: What is the average time food takes to travel through the horses body from intake to excretion?**
A: 36 -72 hours or 2-3 days
Source: EqSci (114)

16) **Q: What gene restricts color distribution to the points of the horse by means of a pair of alleles?**

A: Agouti Gene

Source: EqSci (95)

17) **Q: Hearing is measured in hertz. While the human hearing range is generally between 500 hertz to 8 kilohertz, the horse's hearing is much more sensitive. What is the normal range of hearing, in hertz, of the horse?**

A: 55 hertz to 33.5 kilohertz

Source: EqSci (64)

TOSS-UP WITH BONUS ATTACHED

18) **Q: How is neatsfoot oil made?**

A: Made from boiling the feet and shin bones of cattle

Source: LOOK (39)

19) **BONUS**

Q: List three (3) causes of a nosebleed.

A: Injury, nasal tumors, sinus infection

Source: BYOV (240)

20) **Q: What is the name of cells that develop out of embryonic tissue from the neural crest area that eventually become white markings?**

A: Melanocyte cells

Source: EqSci (96)

21) **Q: What is another name for Vitamin B-2?**

A: Riboflavin

Source: EqSci (127)

TOSS-UP WITH BONUS ATTACHED

22) **Q: If a Galvayne's Groove is about half way down a tooth of a horse, approximately how old is this horse?**

A: Approximately fifteen (15) years of age

Source: EqSci (217)

23) **BONUS**

Q: List three (3) things that may result from a diet lacking in adequate amounts of carbohydrates and fats.

A: Slowed growth rate in young animals, a decrease in body weight, unthrifty condition, fatigue in working or exercising animals, reduced milk production

Source: EqSci (144)

24) **Q: What is ascorbic acid?**

A: Vitamin C

Source: EqSci (130)

25) **Q: Fat, which is the second most important energy source fed to horses, is a more concentrated energy source than carbohydrates and proteins because they supply how much more energy per gram than the other two nutrients?**

A: 2.25 Times more energy

Source: EqSci (147)

26) **Q: Name the bones of the foot from proximal to distal.**

A: Long pastern, short pastern, coffin/pedal bone, or 1st, 2nd, 3rd phalanx, or p1, p2, p3

Source: EqSci (200, 203)

TOSS-UP WITH BONUS ATTACHED

27) **Q: Twenty (20) percent of the total iron in the horse's body is contained where?**

A: Myoglobin (in the muscle tissue)

Source: EqSci (139)

28) **BONUS**

Q: What are the four (4) B-Complex vitamins that do not have assigned numbers?

A: Biotin, folic acid, niacin and pantothenic acid

Source: EqSci (128)

29) **Q: What are the sac-like enlargements at the lower end of the ear canal called?**

A: Gutteral pouches

Source: LOOK (26)

- 30) Q: What is a vector?**
A: A living or non-living thing that can transmit infective agents to another living thing
Source: EqSci (169)
- 31) Q: Name four (4) functions of vitamin E.**
A: Enhances immune system, essential for normal cell function, DNA production, absorption & storage of vitamin A and partners with selenium as an "antioxidant".
Source: EqSci (124)
- 32) Q: What is the "TPR" for a normal, healthy horse?**
A: Temperature- 100-101.5°F, pulse- 45-60 beats per minute, respiration- 8-15 breaths per minute
Source: HS 2001 (51)

END OF ROUND SEVEN