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
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
1) \(\text{Q:}\) What is the primary artery of the hind legs?  
\(\text{A:}\) Femoral Artery  
\(\text{Source:}\) EqSci (208)

2) \(\text{Q:}\) Fill in the blank. The hairpin turn in the large intestine, which is a common site for impaction, is called the _________________.  
\(\text{A:}\) Pelvic flexure  
\(\text{Source:}\) HS 2001 (31)

3) \(\text{Q:}\) What two (2) types of hernias commonly rupture?  
\(\text{A:}\) Umbilical and scrotal  
\(\text{Source:}\) HS 2001 (11)

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

5) \(\text{Q:}\) What is the primary nerve of the front limbs?  
\(\text{A:}\) Brachial plexus  
\(\text{Source:}\) EqSci (212)

6) \(\text{Q:}\) What is Navicular Disease?  
\(\text{A:}\) Inflammation of the Navicular bone  
\(\text{Source:}\) EqSci (182)

7) \(\text{Q:}\) What causes white markings that form from scar tissue on the horse?  
\(\text{A:}\) Melanocyte cells that have been destroyed  
\(\text{Source:}\) 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**