

**2012 State 4-H Horse Bowl Contest  
Junior Division  
Round One**

- 1) **Q- What is a female horse up to three (3) years of age called?**  
A- Filly  
S- H&H2001 (12)
- 2) **Q- What foot-flight pattern does a pigeon-toed horse perform when tracking?**  
A- Paddle or wing-out  
S- HS2001 (11)
- 3) **Q- What is NOT to be considered when judging a Showmanship Class?**  
A- The horse's conformation  
S- 4H R&R (15)
- 4) **Q- What does a horse do with its head when lame foot strikes the ground?**  
A- He will raise it  
S- H&H2001 (2)
- 5) **Q- What is the mare's first milk that contains antibodies for her foal called?**  
A- Colostrum  
S- HS2001 (19)
- 6) **Q- What is the primary gait exhibited by Standardbreds?**  
A- Pace  
S- EqSci (79)
- 7) **Q- What is a white patch of hair on the muzzle called?**  
A- Snip  
S- H&H2001 (24)
- 8) **Q- Calcium, magnesium, copper and iron are all examples of what class of nutrient?**  
A- Minerals  
S- HS2001 (27)
- 9) **Q- What term describes when an English rider rises with every other beat of the trot?**  
A- Post  
S- EqSci (72)
- 10) **Q- What term describes the exercising of a horse on the end of a long rope or line, usually in a circle?**  
A- Lunge  
S- H&H2001 (47)

- 11) **Q- What is the gait that is common to all breeds of horses and is the slowest of all gaits?**  
A- Walk  
S- EqSci (70)
- 12) **Q- What term describes a horse that does not want to leave the barn, typically because it feels safer there?**  
A- Barn Sour  
S- BH (10)
- 13) **Q- What disease of the frog is caused by a black, strong-smelling infection?**  
A- Thrush  
S- H&H2001 (50)
- 14) **Q- What vital measurement describes the rate at which the heart pumps blood through the body?**  
A- Pulse rate or heart rate  
S- EqSci (159)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is the most common color of the Welsh pony?**  
A- Grey  
S- BYOV (61)
- 16) **BONUS**  
**Q- Describe the order of footfall pattern for a horse loping on the left lead.**  
A- Right hind, left hind and right front at the same time, left front  
S- BH (45)
- 17) **Q- Which member of the genus *Equus* always has black and white striped coats?**  
A- Zebras  
S- EqSci (22)
- 18) **Q- What is it called when a horse is down in its stall and is unable to stand because its legs are trapped against the wall?**  
A- Cast  
S- BYOV (158)
- 19) **Q- What is another name for the olfactory sense?**  
A- Sense of smell  
S- EqSci (61)
- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is the medication "bute" used for?**  
A- To reduce pain, inflammation and lower fever  
S- BYOV (199)

- 21) **BONUS**  
**Q- Name the four (4) stages of the life cycle for most parasites.**  
A- Egg, larva, pupa, adult  
S- EqSci (184)
- 22) **Q- What is the general term used to describe any pain in the abdomen of the horse?**  
A- Colic  
S- BYOV (261)
- 23) **Q- What is the main purpose for branding horses?**  
A- Identification  
S- LOOK (9)
- 24) **Q- What is the entire amount of feed given to an animal during a 24-hour period called?**  
A- Ration  
S- HS2001 (32)
- 25) **Q- What breed's distinguishing characteristic is its ability to perform the running walk?**  
A- Tennessee Walking Horse  
S- H&H2001 (59)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- If a horse has a short, steep shoulder, how will it track?**  
A- It will have a shorter stride  
S- HS2001 (9)
- 27) **BONUS**  
**Q- Vitamins are classified into what two (2) categories?**  
A- Fat soluble and water soluble  
S- EqSci (122)
- 28) **Q- Ascarids are what type of parasite?**  
A- Internal  
S- H&H2001 (41)
- 29) **Q- Where is the pastern located?**  
A- Between the fetlock and coronet  
S- BH (12)
- 30) **Q- What is a "stag?"**  
A- A male horse castrated after reaching maturity  
S- H&H2001 (529)

- 31) **Q- Which vitamin is also referred to as the “sunshine vitamin?”**  
A- Vitamin D  
S- EqSci (123)
- 32) **Q- What are the three (3) MAIN parts of the bridle?**  
A- Reins, bit and headstall  
S- H&H2001 (24)

**END OF ROUND ONE**

**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Round Two**

- 1) **Q- What is a “parrot mouth?”**  
A- Where the lower jaw is shorter than the upper jaw  
S- H&H2001 (10)
- 2) **Q- What is a cataract?**  
A- A cloudy appearance of the eye  
S- HS2001 (10)
- 3) **Q- How many years can a horse be shown in the green division?**  
A- Two years  
S- 4HR&R (37)
- 4) **Q- What are the three (3) basic dark coat colors?**  
A- Black, bay and chestnut  
S- EqSci (39)
- 5) **Q- What is the most accurate method of determining a horse's age?**  
A- Examination of its teeth  
S- HS2001 (12)
- 6) **Q- What is the correct lead for cantering or loping in a counter-clockwise direction of the ring?**  
A- Left lead  
S- EqSci (74)
- 7) **Q- What is a curry comb used for?**  
A- To remove mud or caked dirt from the horse's coat  
S- BH (25)
- 8) **Q- The union of a sperm and egg is called what?**  
A- Fertilization  
S- HS2001 (24)
- 9) **Q- What is another name for the tactile sense?**  
A- Sense of touch  
S- EqSci (64)
- 10) **Q- What is the most common type of injection? This type of injection is placed directly into the muscle.**  
A- Intramuscular  
S- BYOV (189)

- 11) **Q- What is the last part of the horse's digestive system?**  
A- The rectum  
S- HS2001 (30)
- 12) **Q- The horse's total range of vision spans how many degrees?**  
A- 350 degrees  
S- EqSci (55)
- 13) **Q- What test was developed to screen for Equine Infectious Anemia?**  
A- Coggins test  
S- BYOV (327)
- 14) **Q- What do the initials "TPR" stand for?**  
A- Temperature, pulse and respiration (rates)  
S- EqSci (155)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What breed is most commonly affected by Equine Night Blindness?**  
A- Appaloosa  
S- EqSci (100)
- 16) **BONUS**  
**Q- In what country did the Cleveland Bay originate, and what coat color must these horses have?**  
A- England and it is always a solid bay w/black legs  
S- H&H2001 (3)
- 17) **Q- Which parent determines the gender of the offspring?**  
A- Stallion/male  
S- EqSci (91)
- 18) **Q- What is the name of the process that turns a stallion into a gelding?**  
A- Castration  
S- BYOV (310)
- 19) **Q- Name this hitch. The horses are hitched together one in front of the other.**  
A- Tandem Hitch  
S- LOOK (55)
- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- When riding, what is a horse's rhythm?**  
A- How well a horse maintains the correct pace and rate at all times  
S- 4HJM (13)

- 21) **BONUS**  
**Q- How can stress caused by splay-foot and pigeon-toe conformation faults be alleviated by corrective trimming?**  
A- Splayfoot can be helped by trimming the outer half of the hoof, and pigeon toe can be corrected by trimming the inner half of the hoof  
S- H&H2001 (38)
- 22) **Q- What should be put on a foal's navel right after birth to avoid infection?**  
A- Iodine tincture (or chlorohexidine)  
S- BYOV (78)
- 23) **Q- Which member of the *Equus* family has the greatest total number of chromosomes?**  
A- The horse  
S- EqSci (89)
- 24) **Q- What is another term for the tail bone?**  
A- Dock  
S- BH (12)
- 25) **Q- What is "parturition?"**  
A- Foaling - giving birth to the foal  
S- BYOV (75)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What B-Complex vitamin is used as a dietary supplement to promote hoof growth?**  
A- Biotin  
S- EqSci (128)
- 27) **BONUS**  
**Q- Why is sitting too far back in the saddle considered an incorrect riding position?**  
A- It puts you behind the center of gravity and it makes it more difficult for the horse to move.  
S- BH (48)
- 28) **Q- How many toes did eohippus have on its hind feet?**  
A- Three (3) toes  
S- EqSci (6)
- 29) **Q- Where can the navicular bone be found?**  
A- In the foot  
S- BYOV (135)

- 30) **Q- Name the two (2) types of grains most commonly fed to horses.**  
A- Oats and corn  
S- BYOV (35)
- 31) **Q- What is the most common internal parasite?**  
A- Strongyles  
S- BYOV (57)
- 32) **Q- What is another name for the disease Strangles? Hint- you vaccinate your dog for this disease.**  
A- Distemper  
S- EqSci (171)

**END OF ROUND TWO**



**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Round Three**

- 1) **Q- What is a horse's "phenotype?"**  
A- What the horse actually looks like; is based on the genetic interaction of the alleles present  
S- EqSci (91)
- 2) **Q- Where would a shoe boil be located?**  
A- At the point of the elbow  
S- HS2001 (11)
- 3) **Q- In 4-H, what is the maximum height of a pony?**  
A- 14.2 hands  
S- 4HR&R (45)
- 4) **Q- What type of bridle combines two (2) separate bits, a curb, or Weymouth, and a snaffle, or bridoon, into one (1) bridle?**  
A- Full bridle  
S- H&H2001 (27)
- 5) **Q- What term describes a mark or deformity that decreases the attractiveness of a horse but does NOT affect the horse's usefulness?**  
A- Blemish  
S- HS2001 (12)
- 6) **Q- What is the only four (4) beat gait that works off diagonal leg pairs?**  
A- Fox trot  
S- EqSci (81)
- 7) **Q- What anatomical term would describe something located "towards the horse's tail?"**  
A- Caudal  
S- EqSci (200)
- 8) **Q- What percentage of the horse's body weight is water?**  
A- 65 to 75 %  
S- HS2001 (32)
- 9) **Q- What is a zygote?**  
A- A fertilized egg cell  
S- LOOK (61)

- 10) **Q- What is the primary use of the Standardbred horse?**  
A- Harness racing, either trotting or pacing  
S- H&H2001 (5)
- 11) **Q- White markings on all horses are generally broken into two (2) basic categories. What are they?**  
A- Face and leg markings  
S- EqSci (29)
- 12) **Q- What kind of knot should ALWAYS be used when tying a horse?**  
A- Quick release knot  
S- BH (27)
- 13) **Q- Name two (2) members of the Equus genus that are usually sterile.**  
A- Mules and hinnies  
S- EqSci (21-22)
- 14) **Q- What is normal body temperature of the horse?**  
A- 99.5 to 101.4 degrees F  
S- BYOV (10)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is a "dummy mare?"**  
A- A padded structure that is mounted by a stallion while the semen is being collected  
S- LOOK (20)
- 16) **BONUS**  
**Q- Name five (5) of the eight (8) B-Complex vitamins.**  
A- Thiamin (B<sub>1</sub>), Riboflavin (B<sub>2</sub>), Pyroxidine (B<sub>6</sub>), Cobalamin (B<sub>12</sub>), Biotin, Folic Acid, Niacin, and Pantothenic Acid  
S- EqSci (126)
- 17) **Q- What do the initials "CRT" stand for?**  
A- Capillary Refill Time  
S- EqSci (162)
- 18) **Q- What is another term for chewing?**  
A- Mastication  
S- EqSci (109)
- 19) **Q- What is the most common cause of laminitis or founder?**  
A- Feeding problems  
S- BYOV (128)

- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- Explain the difference between meiosis and mitosis. Which type of cell uses which process?**  
A- Meiosis- formation of gamete, or sex cells, which contain only half the chromosome number; Mitosis- formation of new body cells, which are identical copies of the original cell  
S- EqSci (88)
- 21) **BONUS**  
**Q- Give two (2) instances which a horse would be referred to as "maiden."**  
A- A horse that has never won a blue ribbon in an approved competition or race, a mare that has never been bred  
S- LOOK (36)
- 22) **Q- Where are intra-articular injections given?**  
A- Into the joints  
S- BYOV (197)
- 23) **Q- What is the name of the lower jaw bone?**  
A- Mandible  
S- BYOV (37)
- 24) **Q- What are rowels?**  
A- The toothed wheels on spurs  
S- H&H2001 (29)
- 25) **Q- What are often referred to as the "building blocks of the body?"**  
A- Amino Acids  
S- EqSci (116)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What organ in the horse is equivalent to the appendix in humans?**  
A- The cecum  
S- EqSci (112)
- 27) **BONUS**  
**Q- Name five (5) major muscles of the horse.**  
A- Pectoral, arm, forearm, loin, thigh, stifle, buttock, gaskin, outer gaskin, inner gaskin  
S- 4HJM (9)
- 28) **Q- What organism causes ringworm?**  
A- A fungus  
S- BYOV (284)

- 29) **Q- How many types of amino acids are there?**  
A- Twenty three (23)  
S- HS2001 (33)
- 30) **Q- What is the advantage of having a necropsy done after the sudden or unexpected death of a horse?**  
A- To tell if there was an infectious or contagious disease, or management problems on the premise that might affect other horses  
S- BYOV (341)
- 31) **Q- The horse carries approximately what percentage of its overall weight on the front legs?**  
A- 60-65%  
S- BYOV (92)
- 32) **Q- What is the base coat color of a red roan?**  
A- Bay  
S- EqSci (47)

**END OF ROUND THREE**

**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Round Four**

- 1) **Q- What breed of pony originated in Wales?**  
A- The Welsh Pony  
S- H&H2001 (12)
- 2) **Q- What is a bone or jack spavin?**  
A- A bony growth usually found on the inside lower point of the hock  
S- HS2001 (13)
- 3) **Q- At a NC 4-H Horse Show, how soon before an equitation class must the pattern be posted?**  
A- At least one hour before the start of the class  
S- 4H R&R (48)
- 4) **Q- Define homozygous.**  
A- An organism whose chromosomes carry two (2) identical members of a given allele  
S- EqSci (90)
- 5) **Q- When a horse is fed high levels of protein, how is the excess discarded?**  
A- In the urine  
S- HS2001 (27)
- 6) **Q- What is a disunited canter?**  
A- When a horse is in one lead on the frond and on another in the hind  
S- EqSci (76)
- 7) **Q- In what state did the American Saddlebred breed originate?**  
A- Kentucky  
S- H&H2001 (3)
- 8) **Q- What muscle in the horse's stomach prohibits vomiting?**  
A- Cardiac sphincter  
S- HS2001 (28)
- 9) **Q- What sensory defect is found in some splashed white horses?**  
A- Deafness  
S- EqSci (50)
- 10) **Q- What vitamin is important for the production of blood clotting factors?**  
A- Vitamin K  
S- EqSci (125)

- 11) **Q- The primary energy source in a horse's diet is what?**  
A- Carbohydrates  
S- HS2001 (33)
- 12) **Q- What is the general term for any animal in the family *Equidae*, which includes horses, zebras, and asses?**  
A- Equine  
S- EqSci (19)
- 13) **Q- What breed of horse was developed by settlers of the Ozarks?**  
A- Missouri Fox Trotting Horse  
S- H&H2001 (57)
- 14) **Q- The length of a horse's neck plays an important part in its length of what?**  
A- Length of Stride  
S- HS2001 (9)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is secreted into the small intestine to emulsify, or break down, fat and is produced in the liver?**  
A- Bile  
S- EqSci (111)
- 16) **BONUS**  
**Q- Name the four (4) parts of a curb bit.**  
A- Mouthpiece, shanks, cheek rings/slats for reins and curb chain.  
S- H&H2001 (18)
- 17) **Q- The Galvayne's Groove appears at the gum margin of the upper corner incisor at approximately what age?**  
A- 10 years  
S- HS2001 (17)
- 18) **Q- What are the two (2) basic types of bits?**  
A- Curb bits and a snaffle bit  
S- BH (34)
- 19) **Q- A stallion with one (1) or both testicles retained in his belly or flank area is known as a what?**  
A- A cryptorchid  
S- BYOV (100)

- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- When determining the amount of food a horse should be fed per day, the food should always be weighed on what basis?**  
A- Dry Matter Basis  
S- EqSci (106)
- 21) **BONUS**  
**Q- List the primary function for the following minerals: iron, iodine, and potassium.**  
A- Iron- needed for oxygen storage and transport in the cells of the body  
Iodine- needed for the synthesis (production) of thyroid hormones  
Potassium- needed for regulating osmotic pressure and the acid/base balance of the body, nerve-impulse transmission, muscle contraction and carbohydrate metabolism (only need to give one of these answers!!)  
S- EqSci (135, 138-139)
- 22) **Q- What is a common name for a paralysis of the muscles in the larynx?**  
A- Roaring  
S- BYOV (239)
- 23) **Q- The horse has a blind spot approximately how many feet in front of its head?**  
A- 4 to 6 feet  
S- EqSci (59)
- 24) **Q- What is a "mudder?"**  
A- A horse that runs well on a track that is wet, sloppy or heavy  
S- LOOK (38)
- 25) **Q- Where do small strongyles live in the horse?**  
A- Large intestine.  
S- BYOV (299)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is the optic nerve?**  
A- The primary nerve of the eye  
S- EqSci (214)
- 27) **BONUS**  
**Q- What genetic condition is common in blue-eyed, white-colored foals with at least one (1) overo parent and causes death within a few days after birth?**  
A- Lethal White Foal Syndrome (must say the entire name)  
S- EqSci (98)
- 28) **Q- What term identifies a highly measured, collected, elevated and cadenced trot with little to no forward motion?**  
A- Piaffe  
S- BYOV (43)

- 29) **Q- List three (3) purposes the horse has served throughout history.**  
A- As a source of food, transportation, work, war, and recreation  
S- EqSci (14)
- 30) **Q- What does the term "horse" mean in Anglo-Saxon?**  
A- Swiftmess  
S- HS2001 (5)
- 31) **Q- What term is used to describe a gelding that still exhibits stallion-like behavior?**  
A- Proud-Cut  
S- BYOV (312)
- 32) **Q- What term describes a gray horse that has small black or reddish specks or spots on a predominantly white background?**  
A- Flea-bitten  
S- H&H2001 (6)

**END OF ROUND FOUR**



**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Round Five**

- 1) **Q- What is forging?**  
A- When the horse strikes the forefoot with the toe of the hind foot on the same side  
S- H&H2001 (12)
- 2) **Q- Which part of the horse has no bone structure for support, making it the weakest part of the topline?**  
A- Loin  
S- HS2001 (10)
- 3) **Q- What is the penalty for knocking over a barrel during a barrel race at a 4-H show?**  
A- 5 seconds are added to the final time  
S- 4H R&R (64)
- 4) **Q- What is another name for Vitamin C?**  
A- Ascorbic Acid  
S- EqSci (130)
- 5) **Q- What term is used to identify the condition in which a horse exhibits excessive jerking of the hind leg?**  
A- Stringhalt  
S- HS2001 (13)
- 6) **Q- What is the average length of stride at the canter or lope, in feet?**  
A- About 10-15 feet  
S- EqSci (74)
- 7) **Q- What is a romel?**  
A- A type of western rein where the rein hand guides the horse and the other hand holds the extra rein  
S- H&H2001 (20)
- 8) **Q- What is another term for trace minerals?**  
A- Micro-minerals  
S- EqSci (131)
- 9) **Q- What gene is controls the distribution pattern of black hair and restricts the distribution to the "points" of the horse?**  
A- Agouti gene  
S- EqSci (95)

- 10) **Q- What is a bit-less bridle that works by exerting pressure on the underside of the jaw, the bridge of the nose and the poll called?**  
A- Hackamore  
S- H&H2001 (28)
- 11) **Q- How does the fetus obtain nourishment from the mare?**  
A- Through the placenta  
S- HS2001 (25)
- 12) **Q- What zoological class does the horse belong to?**  
A- Mammalia  
S- EqSci (15)
- 13) **Q- What is a horny growth on the back of the fetlock joint called?**  
A- Ergot  
S- H&H2001 (46)
- 14) **Q- What is a vice?**  
A- An acquired habit that is annoying, or may interfere with the horse's usefulness  
S- HS2001 (4)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What another term for "stump sucking?"**  
A- Cribbing  
S- BYOV (107)
- 16) **BONUS**  
**Q- What are the four (4) blind spots of a horse?**  
A- Directly in front, under the head and neck, over the head and neck, directly behind the horse  
S- EqSci (59)
- 17) **Q- What micro-mineral acts as a partner with Vitamin E in the body?**  
A- Selenium  
S- EqSci (140)
- 18) **Q- In what type of weather does the hoof grow faster?**  
A- Warm climates, in the summer  
S- BYOV (120)
- 19) **Q- The brain and spinal cord make up what body system?**  
A- Central nervous system  
S- EqSci (212)

- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is a vector?**  
A- Any living or non-living thing that can transmit infective agents to another living thing, causing a health or disease issue  
S- EqSci (169)
- 21) **BONUS**  
**Q- Explain the difference between active and passive immunity.**  
A- Active Immunity- obtained by building antibodies in response to a disease or vaccination  
Passive Immunity- passed from offspring from the maternal parent; in the horse, passive immunity is transferred by ingestion of colostrum within one day of birth  
S- EqSci (169)
- 22) **Q- What do ligaments attach?**  
A- Bone to bone  
S- LOOK (35)
- 23) **Q- What part of the hind gut is known as the "fermentation vat?"**  
A- Cecum  
S- EqSci (112)
- 24) **Q- Name the piece of equipment used to stabilize and prevent a saddle from slipping.**  
A- Breastplate of breast collar  
S- H&H2001 (34)
- 25) **Q- What is it called when a temporary tooth does not release from the gum after a permanent tooth has come in?**  
A- Retained cap  
S- LOOK (47)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What term refers to horses at least twelve (12) years of age that exhibit worn surfaces on their incisors?**  
A- Smooth-mouthed  
S- BYOV (259)
- 27) **BONUS**  
**Q- The hindgut is made up of what four (4) parts?**  
A- Cecum, large colon, small colon and rectum  
S- EqSci (112)
- 28) **Q- Spasmodic, muscular, and impaction are three (3) types of what?**  
A- Colic  
S- EqSci (50)

- 29) **Q- The Percheron is known as the breed of what?**  
A- The breed of blacks and grays  
S- H&H2001 (58)
- 30) **Q- List two (2) effects a diet consisting of inadequate protein levels would have on a horse?**  
A- Decreased growth rate, decreased appetite, body tissue loss, slow hoof growth, poor hair growth, poor hair coat, lack of energy to do work or perform at peak performance levels  
S- EqSci (120)
- 31) **Q- Where in the stallion is spermatozoa stored?**  
A- The epididymis  
S- HS2001 (22)
- 32) **Q- What is a parasite?**  
A- An organism that lives off of another organism  
S- LOOK (42)

**END OF ROUND FIVE**

**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Round Six**

- 1) **Q- What is the tallest of the draft horse breeds?**  
A- Shire  
S- H&H2001 (132)
- 2) **Q- By what day of age would you expect to see the center incisors erupt in a foal?**  
A- Within 8 days of age  
S- HS2001 (15)
- 3) **Q- What paint coat color has extensive white on the legs and head, and can be described as speckled, flecked or jagged in pattern?**  
A- Sabino  
S- EqSci (49)
- 4) **Q- How many beats are in the gallop?**  
A- Four  
S- H&H2001 (17)
- 5) **Q- What is the most important factor affecting the nutrient composition of grasses and legumes?**  
A- Stage of maturity  
S- HS2001 (37)
- 6) **Q- What term describes the intermixing of two (2) slightly different shades of the same base coat color, creating a circular or ring-shaped pattern?**  
A- Dappled  
S- EqSci (38)
- 7) **Q- Define "breed type."**  
A- Those characteristics commonly accepted as ideal for a breed of horse  
S- H&H2001 (2)
- 8) **Q- What is the partner mineral of Calcium?**  
A- Phosphorus  
S- EqSci (135)
- 9) **Q- In the hind gut, what is the main function of the large colon?**  
A- Water absorption  
S- EqSci (113)

- 10) **Q- What item protects the back of the rear fetlocks from abrasion during sliding stops?**  
A- Skid boots  
S- H&H2001 (34)
- 11) **Q- What type of vision would the horse use to see long distances? This type of vision has little detail or depth perception.**  
A- Monocular  
S- EqSci (60)
- 12) **Q- In a North Carolina 4-H Horse Show, how far apart are the poles set for the stake race?**  
A- 80 feet  
S- 4HR&R (66)
- 13) **Q- What is the periople?**  
A- The varnish-like protective outer layer of the hoof  
S- H&H2001 (45)
- 14) **Q- Swamp Fever is the common name of what disease?**  
A- Equine Infectious Anemia  
S- EqSci (176)
- 15) **TOSS-UP WITH BONUS ATTACHED**  
**Q- Describe a "flexion test" and what is its purpose?**  
A- A handler flexes a joint tightly and holds it in a flexed position for one minute, the joint is then released and the horse is trotted in a straight line looking for evidence of soreness or lameness.  
S- BYOV (115)
- 16) **BONUS**  
**Q- Explain WHY a mule or a hinny is usually sterile.**  
A- Because they have sixty three (63) chromosomes, thirty two (32) from the horse and thirty one (31) from the donkey parent. The resulting chromosomes are not in pairs and it is usually the sex cells that end up without a complete set. (There is an imbalance in sex chromosomes)  
S- HS2001 (21)
- 17) **Q- What is seedy-toe?**  
A- A separation at the toe between the sensitive laminae and the hoof wall  
S- BYOV (127)
- 18) **Q- Approximately how long is the horse's digestive tract, in feet?**  
A- 100 feet  
S- HS2001 (27)

- 19) **Q- What drug is used to treat anaphylactic shock?**  
A- Epinephrine (or adrenalin)  
S- BYOV (188)
- 20) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What is the proper genetic term for the genetic makeup of a horse?**  
A- Genotype  
S- EqSci (91)
- 21) **BONUS**  
**Q- List three (3) types of injuries that would be treated with cold therapy.**  
A- Bruises, sprains, muscular strains  
S- BYOV (182)
- 22) **Q- What is the volume of a horse's stomach?**  
A- 2 to 4 gallons OR 8 to 17 quarts  
S- HS2001 (28)
- 23) **Q- What is a windpuff?**  
A- A soft swelling of the joint or tendons, usually in the fetlocks  
S- 4HJM (11)
- 24) **Q- What is another name for diarrhea in a foal?**  
A- Scours  
S- BYOV (267)
- 25) **Q- Foals are born without a proper bacterial population in their large intestine. How do foals inoculate their digestive tract?**  
A- By eating their dam's feces  
S- HS2001 (31)
- 26) **TOSS-UP WITH BONUS ATTACHED**  
**Q- What part of hay is the most nutrient-dense?**  
A- The leaf  
S- HS2001 (38)
- 27) **BONUS**  
**Q- Name three (3) of the five (5) ways you can tell permanent teeth from temporary teeth.**  
A- Permanent teeth are: 1) larger and longer 2) have a broader neck area 3) have parallel grooves and ridges on the face of the incisors 4) are darker 5) are flatter  
S- HS2001 (15)

- 28) **Q- What is bishoping?**  
A- The practice of trying to replace the cups on the biting surface of the worn incisors in an attempt to make a horse appear more youthful than it actually is.  
S- HS2001 (17)
- 29) **Q- What does "EVA" stand for?**  
A- Equine Viral Arteritis  
S- EqSci (177)
- 30) **Q- What is the primary purpose of the long hairs inside a horse's ears?**  
A- To help keep dirt and insects from entering the inner ear  
S- H&H2001 (39)
- 31) **Q- Energy not needed by the body at the time of digestion is stored what? Hint- this is typically stored in the liver, kidneys and muscle.**  
A- Glycogen (or fat if the glycogen stores are full)  
S- EqSci (146)
- 32) **Q- A sweat flap would be located where?**  
A- Underneath the side of an english saddle  
S- H&H2001 (373)

**END OF ROUND SIX**



**2012 State 4-H Horse Bowl Contest**  
**Junior Division**  
**Extra Questions**

- 1) **Q- Amino acids that CAN be synthesized by the horse's body are called what?**  
A- Non-Essential Amino Acids  
S- EqSci (118)
- 2) **Q- What is another term for an "inkspot?"**  
A- Pawprints or bearpaws  
S- EqSci (39)
- 3) **Q- What is a "Jenny?"**  
A- A female ass, burro or donkey  
S- EqSci (21)
- 4) **Q- What term describes a horse who moves with an extremely heavy ground contact, instead of a desirable, light, springy movement?**  
A- Pounding  
S- H&H2001 (13)
- 5) **Q- What is the approximate length of a pinworm, in inches?**  
A- Two to three inches  
S- HS2001 (45)
- 6) **Q- What is the term for gray on a red coat color?**  
A- Rose gray  
S- EqSci (45)
- 7) **Q- What is the definition of a "stride?"**  
A- The distance from one imprint to another imprint of a horse's foot when completing one step  
S- H&H2001 (18)
- 8) **Q- What is another name for COPD?**  
A- Heaves  
S- HS2001 (48)
- 9) **Q- What color eyes and skin does a Cremello horse have?**  
A- Blue eyes and pink skin  
S- EqSci (43)
- 10) **Q- What does the bit rest on in the horse's mouth?**  
A- The bars  
S- H&H (21-22)

- 11) **Q- What gland is located at the base of the brain and secretes hormones responsible for regulation of body functions?**  
A- Pituitary  
S- HS2001 (23)
- 12) **Q- What is the physical shape or build of a horse called?**  
A- Conformation  
S- BH (58)
- 13) **Q- Strongyles are also known as what?**  
A- Bloodworms  
S- EqSci (188)
- 14) **Q- What hormone is produced in the anterior pituitary gland and is responsible for milk production?**  
A- Prolactin  
S- HS2001 (23)
- 15) **Q- White markings are the result of what?**  
A- Melanocytes with no pigment granules  
S- EqSci (96)
- 16) **Q- What four (4) factors affect the severity of a bit?**  
A- The diameter of the mouthpiece, the type of mouthpiece, the amount of leverage, and the horse's head position  
S- H&H2001 (32)
- 17) **Q- What micro-mineral plays a role in keeping bone and blood vessels elastic and is involved in the production of melanin, a pigment that gives hair and skin its color?**  
A- Copper  
S- HS2001 (36)
- 18) **Q- What is the normal heart rate for an adult horse at rest?**  
A- 26 - 40 beats per minute  
S- BYOV (13)
- 19) **Q- What is the primary sex organ of the mare?**  
A- Ovary  
S- HS2001 (23)
- 20) **Q- "A "bowed tendon" is a severe strain of what tendon?**  
A- Flexor  
S- BYOV (146)

- 21) **Q- What are the three (3) parts of the small intestine?**  
A- Duodenum, jejunum, ileum  
S- HS2001 (24)
- 22) **Q- What are leukocytes?**  
A- White blood cells that fight infection  
S- LOOK (35)
- 23) **Q- What section of Welsh pony will accept ponies taller than 14.2 hands?**  
A- Section "C" or Welsh Cobs  
S- EqSci (28)
- 24) **Q- In what state did the American Paint Horse Association originate?**  
A- Texas  
S- H&H2001 (56)
- 25) **Q- What is the aorta?**  
A- The major artery that carries blood away from the heart  
S- LOOK (4)
- 26) **Q- When discussing directional terms, what term would be used to describe a structure located on the leg towards the body of the horse?**  
A- Proximal  
S- EqSci (200)
- 27) **Q- What are three (3) tests used to detect lameness?**  
A- Hoof testers, flexion test, wedge tests & x-rays  
S- BYOV (110)
- 28) **Q- A four wheeled white carriage having two seats and a flat top is called what?**  
A- A Surrey  
S- LOOK (55)
- 29) **Q- What causes Cushing's Disease?**  
A- A tumor on the pituitary gland  
S- EqSci (181)
- 30) **Q- What is impulsion?**  
A- How much drive or power a horse exhibits from its hindquarters  
S-4HJM (12)
- 31) **Q- What condition is the result of a reduction in the number of red blood cells?**  
A- Anemia  
S- HS2001 (56)

32) **Q- What is the purpose of a skin pinch test?**

A- To determine dehydration

S- EqSci (164)