1) Q: What is the single most important nutrient for all living things?
   A: Water
   Source: HS 2001 (28)

2) Q: What is the maximum height of a pony, in hands?
   A: 14.2 hands
   Source: GRIFFITHS (20)

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

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

5) Q: When cleaning out your horse's feet describe the proper way to use your hoof pick.
   A: Smoothly pull the pick from the heel toward the toe
   Source: BH(26)

6) Q: What is the base coat color of a blue roan?
   A: Black
   Source: GRIFFITHS (47)

7) Q: What is another term for the cavesson?
   A: Noseband
   Source: H&H2001(27)

8) Q: What basic brush can be used over the whole body?
   A: Soft-bristled brush
   Source: BH (25)
9) Q: What is another term for a dorsal stripe?
   A: Back stripe, lineback, eel stripe, ray
   Source: GRIFFITHS (38)

10) Q: What term describes a horse who is biting a solid object while sucking air?
    A: Cribbing
    Source: LOOK (16)

11) Q: A finely chiseled head, dished face, long arching neck, and high tail carriage are characteristics of what breed?
    A: Arabian
    Source: H&H 2001 (57)

12) Q: What color is a horse that has a golden coat, a black mane and tail, and a dorsal stripe?
    A: Dun
    Source: GRIFFITHS (42)

13) Q: What is the term for an abnormality that interferes with the usefulness of the horse?
    A: unsoundness.
    Source: H&H 2001 (13)

14) Q: The brown horse coat color is the modification of what base coat color?
    A: Black or Bay
    Source: GRIFFITHS (41)

TOSS-UP WITH BONUS ATTACHED

15) Q: What is the cantle?
    A: The back of a saddle
    Source: H&H 2001 (27)
16) **BONUS**  
**Q:** List three (3) different types of English saddles.  
**A:** Eventing, Jumping or Close contact, Racing, Cutback or Saddleseat, All-purpose, Dressage, Endurance, Australian, Plantation  
**Also accept:** Hunt or Forward, Dressage and Saddle Seat  
**Source:** Look (49) H&H 2001 (32)

17) **Q:** What is the ideal angle for properly sloped shoulders and pasterns?  
**A:** 45 degrees  
**Source:** HS 2001 (11)

18) **Q:** What is the base coat color of the Red Roan?  
**A:** Bay  
**Source:** GRIFFITHS (47)

19) **Q:** What the term for a female horse three (3) years of age or less?  
**A:** Filly  
**Source:** LOOK (23)

**TOSS-UP WITH BONUS ATTACHED**

20) **Q:** What term is used to describe the muscular part of the hind leg above the hock and below the stifle?  
**A:** Gaskin  
**Source:** H&H 2001 (46)

21) **BONUS**  
**Q:** Identify five (5) basic pieces of grooming equipment.  
**A:** Hard-bristled brush        Mane & Tail Comb  
    soft-bristled brush        sweat scraper  
    hoof pick        curry comb  
**Source:** BH (25)

22) **Q:** How many beats are in the canter?  
**A:** Three (3)  
**Source:** LOOK (12)
23) Q: What term describes the area on top of the horses's head just behind the ears?
   A: The poll
   Source: H&H 2001 (9)

24) Q: What is the name of the disease of the frog that causes a black and strong smelling infection?
   A: Thrush
   Source: H&H 2001 (50)

TOSS-UP WITH BONUS ATTACHED

25) Q: What is the name for the wooden or metal frame of a saddle?
   A: Saddle tree
   Source: H&H2001 (29)

26) BONUS
   Q: Name four (4) draft breeds.
   A: Belgian, Shire, Percheron, Clydesdale, Suffolk, Suffolk Punch
   Source: GRIFFITHS (47)

27) Q: What is the correct term for a person who shoes horses?
   A: Farrier
   Source: H&H 2001 (47)

28) Q: How often should you replace or reset your horse's shoes?
   A: Every 4-6 weeks
   Source: 4-HHM (5) H&H 2001 (48)

29) Q: What is the purpose of branding a horse?
   A: For identification
   Source: LOOK (9)
30) Q: What do you call the conformational fault where the top profile of the neck is concave like that of a female sheep?  
A: Ewe necked  
Source: H&H 2001 (9)

31) Q: What do you call the father of an equine?  
A: sire  
Source: GRIFFITHS (23)

32) 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)

END OF ROUND ONE
2015 State 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: 2 part Question: What was the original ancestor of the horse called and where did it originate?
   A: Eohippus, originated in North America
   Source: HS 2001 (4)

3) Q: How many beats are in the gallop?
   A: Four (4)
   Source: GRIFFITHS (78)

4) Q: What breed is primarily used for harness racing?
   A: The Standardbred
   Source: H&H 2001 (59)

5) Q: What do you call a horse that is sensitive around the head and will jerk away when touched?
   A: headshy
   Source: HS 2001 (4)

6) Q: What does the horse use to grasp its food?
   A: The upper lip (prehensile lip)
   Source: HS 2001 (27)

7) Q: What term describes an inflamed swelling of the withers?
   A: Fistula of the withers
   Source: HS 2001 (13)
8) Q: What is the most important criterion when judging and placing a conformation class?
A: Balance
Source: 4-HJM (8)

9) Q: What term describes tying a horse on both sides of its halter, typically in a washpit or barn aisle?
A: Cross-tied
Source: LOOK (17)

10) Q: What breed carries the genetic disorder Lethal White Foal Syndrome?
A: Paint or pinto horses
Source: GRIFFITHS (98)

11) Q: A horse that is not responsive to the bit is referred to as what?
A: Hardmouthed
Source: BH (59)

12) Q: What breed looks like a smaller version of an Appaloosa?
A: Pony of the Americas
Source: H&H 2001 (58-59)

13) Q: What term means “how well a horse ‘compresses’ its frame? It also means engaging the hindquarters.
A: Collection/Collected
Source: 4H HJM (12); LOOK (14)

14) Q: There are two (2) types of incorrect hock angle as viewed from the side. What are they?
A: Sickle-hocked or post-legged
Source: 4H H&H (29)

TOSS-UP WITH BONUS ATTACHED

15) Q: What is the port?
A: The part of the bit mouthpiece curving up over the tongue
Source: 4H H&H 47
16) **BONUS**

**Q:** The equine digestive tract is composed of 5 major parts, what are they?
**A:** Mouth, esophagus, stomach, small intestine, large intestine

**Source:** GRIFFITHS (108)

17) **Q:** What does a horse do with his head when a lame foot strikes the ground?
**A:** Raise its head

**Source:** HS2001 (13)

18) **Q:** To stay maintain current weight and condition, what percent of body weight should a horse be fed daily?
**A:** 0.02 (2%)

**Source:** GRIFFITHS (106)

19) **Q:** What is meant by the term "flaxen" when referring to horse coloring?
**A:** Straw yellow or dirty white

**Source:** H&H2001 (7)

**TOSS-UP WITH BONUS ATTACHED**

20) **Q:** What is the term given to a gelding who exhibits stallion-like behavior?
**A:** Proud cut

**Source:** BYOV (312)

21) **BONUS**

**Q:** Name four (4) breeds of horse that have originated in the United States.
**A:** Saddlebred, Appaloosa, Missouri Fox Trotter, Paint Horse, Morgan, Palomino, Pinto, Quarter Horse, Standardbred and Tennessee Walking Horse, American Albino

**Source:** H&H 2001 (56-58) & 4-HHM (3)

22) **Q:** Where is the stifle located?
**A:** Between the horse's rear thigh and flank

**Source:** H&H 2001 (9)
23) Q: What is the term used for a horse who refuses to leave a group of other horses?
   A: Herd bound
   Source: LOOK (29)

24) Q: What does "bloom" mean when referring to a horse?
   A: A hair coat that is clean and glossy, thus denoting a healthy appearance
   Source: H&H2001 (35)

TOSS-UP WITH BONUS ATTACHED

25) Q: How many amino acids are there?
   A: Twenty-two (22)
   Source: GRIFFITHS (117)

26) BONUS
   Q: Name five (5) parts of the English saddle.
   A:
      Pommel     sweat flap     gullet
      Cantle     seat           front panel
      knee roll  billets       rear panel
      stirrup leather  stirrup iron  stirrup leather keeper
      saddle flap  girth         stirrup bar
   Source: BH (28)

27) Q: What are the two (2) basic types of bits?
   A: Curb & snaffle bits
   Source: BH (34)

28) Q: Name two sensitive spots on a horse.
   A: Head, mouth, inside the mouth including the teeth, ears, side of the neck, muzzle including the nose, withers, girth area, rib area, flank area, back. Lower legs.
   Source: GRIFFITHS (65)
29) Q: Mules and hinnies are the result of breeding what two animals?  
A: Asses/Donkeys and Horses/Ponies  
Source: GRIFFITHS (21)

30) Q: Where are chestnuts on a horse located?  
A: Inside the knees on the front legs and hocks on the rear legs  
Source: BYOV (120) & GRIFFITHS (20)

31) Q: A horse whose coat carries white hairs intermingled with one or more base colors is called a what?  
A: Roan  
Source: H&H2001 (7)

32) Q: What is the best control for flies?  
A: Removal of waste and decaying vegetable material.  
Source: GRIFFITHS (52)

END OF ROUND TWO
2015 State Horse Bowl Contest
Junior Division Round Three

1) Q: What do you call a horse that runs well on a track that is wet, sloppy or heavy?
   A: Mudder
   Source: LOOK (38)

2) Q: What breed association rules are followed when judging 4-H Western Riding classes?
   A: AQHA
   Source: 4HR&R (62)

3) Q: What is the term for a horse who holds its head too high and noses out?
   A: Stargazer
   Source: H&H 2001 (9)

4) Q: What is another name for the cecum?
   A: Blind pouch or fermentation vat
   Source: HS 2001 (31)

5) 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
   Source: GRIFFITHS (164)

6) Q: If a horse is fifteen (15) hands, how tall is it in inches?
   A: Sixty (60) inches
   Source: BH (59)

7) Q: Approximately how long ago did the first true horse appear?
   A: One (1) million years ago
   Source: GRIFFITHS (6)
8) Q: What is the term for the period of time in which a mare will be receptive to breeding?
   A: Estrus or Heat
   Source: BYOV (61)

9) Q: How high should a quick release knot be tied?
   A: At least as high as the horse's withers
   Source: BH (23)

10) Q: What part of the Equine is said to be like the "fingerprint" of a human; no two are alike?
    A: Chestnuts
    Source: GRIFFITHS (20)

11) Q: What is the name of the color when the horse is golden with no black points?
    A: Palomino
    Source: GRIFFITHS (43)

12) Q: How are the front legs connected to the main skeleton of the horse?
    A: Muscular structures or By soft tissue (muscles, etc.)
    Source: HS 2001 (6)

13) Q: What is the average length of stride in a trot or jog (measured in feet)?
    A: 8 or 9 feet
    Source: GRIFFITHS (72)

14) Q: When a horse is cantering, what is it called when all four feet are off the ground?
    A: Period of Suspension
    Source: GRIFFITHS (74)
15) Q: What are eye-shields on a harness or bridle, used to keep a horse focused on where its head is pointed, called?
   A: Blinkers
   Source: LOOK (8)

16) BONUS
   Q: Name four (4) of the seven (7) pressure points on which a bit can work.
   A: The corners of the mouth (or lips), the bars, the tongue, the roof of the mouth, the curb (or chin) groove, the nose, and the poll
   Source: H&H 2001 (29)

17) Q: What is a circular or ring shaped pattern in horse's coat called?
   A: Dapple
   Source: GRIFFITHS (38)

18) Q: What are crowhops?
   A: Mild bucking motions
   Source: LOOK (17)

19) Q: At what age does a horse have a complete set of permanent incisors and has what is known as a full mouth?
   A: Five (5) years of age
   Source: HS 2001 (14)

20) Q: What happens if hay is stored wet?
    A: It molds. It can also ferment and become so hot that is will spontaneously combust and start a fire.
    Source: HS 2001 (38)
21) **BONUS**

Q: Name three (3) protein supplements or high protein sources that can be fed to horses.

A: Soybean meal, Cottonseed meal, Peanut Meal, Linseed meal, Canola meal, Corn gluten meal, Sunflower meal, Brewer's Yeast, Rice Bran

**Source:** HS2001 (40) GRIFFITHS (121)

22) Q: What is the term for the study of how characteristics are passed from parents to offspring?

A: Genetics

**Source:** HS2001(18)

23) Q: What type of horse show allows anyone to enter, regardless of the breed?

A: Open Show

**Source:** LOOK (40)

24) Q: Name the two major functions of the equine digestive tract

A: digestion and absorption

**Source:** GRIFFITHS (108)

**TOSS-UP WITH BONUS ATTACHED**

25) Q: What is the sex genotype of a mare?

A: XX

**Source:** 4H HS (21)

26) **BONUS**

Q: List three (3) reasons to shoe your horse.

A: Protect the hoof against excessive wear; correct defects of stance or gait; better traction; help cure disease and pain relief

**Source:** H&H2001 (48-49)
27) Q: What must you do to qualify at the district level to attend the NC State 4-H horse show?
A: You must get at least one (1) point in a qualifying class at the district level
Source: 4H R&R (10)

28) Q: What is the term for the normal bout of diarrhea that occurs in a foal at the time the mare comes in to foal heat?
A: Scours or Foal Heat Diarrhea
Source: LOOK (50)

29) Q: What is another name for the horse's sense of touch?
A: Tactile sense
Source: GRIFFITHS (64)

30) Q: What is the muscular reproductive organ of the mare where the unborn foal develops?
A: Uterus
Source: HS 2001 (24)

31) Q: What are a few white hairs in the center of the forehead called?
A: Flame
Source: H&H 2001 (4)

32) Q: How many cervical vertebrae are in a horse's neck?
A: Seven (7)
Source: GRIFFITHS (203)

END OF ROUND THREE
1) Q: Name two (2) symptoms of a horse with colic.
   A: A horse may show restlessness, paw at the ground, sweat, kick at its abdomen, lie down and roll, show signs of discomfort and pain
   Source: HS2001 (50)

2) Q: What is the entire feed allowed an animal during a 24-hour period called?
   A: Ration
   Source: HS2001 (32)

3) Q: What is another name for Tetanus?
   A: Lockjaw
   Source: HS 2001 (49)

4) Q: Give the proper term for when a horse prances instead of walking flat-footed.
   A: Jig
   Source: LOOK (33)

5) Q: What is a plant or animal living in, on, or with another living organism (its host), at whose expense it obtains food and shelter?
   A: Parasite
   Source: GRIFFITHS (56)

6) Q: What type of bridle has two (2) sets of reins and two (2) bits?
   A: Full, weymouth or double
   Source: H&H 2001 (29)

7) Q: What does the abbreviation TPR stand for?
   A: Temperature, pulse and respiration
   Source: GRIFFITHS (155)
8) Q: How many temporary teeth does a young horse have?
A: Twenty-four (24)
Source: HS 2001 (15)

9) Q: Of the colors chestnut, white, black or bay, which is the dominant color for horses?
A: Black
Source: HS2001 (20)

10) Q: Name this bone: It is the small, flat bone which lies inside the hoof. It lies beside the coffin bone and underneath the short pastern bone.
A: Navicular bone
Source: BYOV (135) LOOK (38)

11) Q: What is the purpose of the hair inside the ears?
A: To help keep dirt and insects from entering the inner ear
Source: H&H 2001 (39)

12) Q: Describe a piebald hair coat pattern.
A: Pinto/paint horses with black pigmented skin and coat color; Or white on a black horse.
Source: BH (17) GRIFFITHS (47)

13) Q: What type of medicine is used to treat infectious diseases caused by bacteria?
A: Antibiotic
Source: HS 2001 (33)

14) Q: What do you call minerals that are needed in very small amounts?
A: Trace minerals
Source: HS 2001 (33)
15) Q: What is it called when a horse exhibits an exaggerated flexion of the hock while it is in motion?  
A: Stringhalt  
Source: LOOK (54)

16) BONUS  
Q: Name three (3) respiratory conditions or diseases commonly seen in horses.  
A: Roaring, Pneumonia, Nosebleed (Epistaxis)  
   Pulmonary Hemorrhage, Distemper (Strangles), Influenza  
   Pleuritis, Thumps, Heaves (COPD)  
Source: BYOV (248); HS2001 (49)

17) Q: What was the original purpose of the horn on a Western saddle?  
A: To tie and hold roped calves or cows in need of medical attention  
Source: H&H2001 (32)

18) 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: GRIFFITHS (87)

19) Q: What term means a horse may have a structural problem or deviation, but it may only have a limited affect on the animal's ability to perform?  
A: Serviceably sound  
Source: 4-HJM (9)

20) Q: Name the farrier’s tool that are described as a “scissor-like” tool, used to trim the hoof.  
A: Nippers  
Source: H&H 2001 (47)
21) **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
   Failure to adapt to the environment

Source: GRIFFITHS (8)

22) Q: What does a strong digital pulse in a foot detect?

A: An injury to the foot or leg/laminitis/bruise/abscess

Source: GRIFFITHS (161)

23) Q: What is the total length of the horse's large intestine in feet?

A: Twenty-five (25) feet

Source: HS 2001 (30)

24) Q: What is the common name for Distemper in horses?

A: Strangles

Source: BYOV (241) & GRIFFITHS (171)

TOSS-UP WITH BONUS ATTACHED

25) Q: What does the term “non-contagious” mean?

A: A disease that is unable to be spread from one animal to another

Source: GRIFFITHS (167)

26) **BONUS**

Q: Name the body system that these 3 parts are located in: Aorta; Diaphragm; Patella.

A: Aorta= Circulatory
   Diaphragm=Respiratory
   Patella=Skeletal

Source: GRIFFITHS (203, 208, 209)
27) Q: How far apart, in feet, are the poles set in the stake race?  
A: 80 feet  
Source: 4HR&R (91)

28) Q: Pacing is most commonly seen in what breed?  
A: Standardbred  
Source: GRIFFITHS (79)

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

30) Q: Name one place where you can feel the horse's pulse.  
A: Facial artery which is just inside the jaw or cheek groove; behind the horse's left elbow; the digital artery on the legs  
Source: GRIFFITHS (160) & BYOV (11,12)

31) Q: In what state did the American Saddlebred originate?  
A: Kentucky  
Source: H&H 2001 (58)

32) Q: Which evolutionary stage of the horse is the forerunner of the modern horse and was thought to be the size of a pony?  
A: Pliohippus  
Source: GRIFFITHS (9)

END OF ROUND FOUR
2015 State Horse Bowl Contest  
Junior Division Round Five

1) Q: What legume hay is high in protein, calcium and vitamins A and D?  
   A: Alfalfa hay  
   Source: BYOV (29)

2) Q: What term describes an inflammation or infection of the membranes  
   around the eye and possibly inside the eyelid?  
   A: Conjunctivitis  
   Source: BYOV (273)

3) Q: Foals are born without a bacterial population in their large intestine. How  
   do they obtain it?  
   A: By eating their dam's feces  
   Source: HS2001 (31)

4) Q: Where does the digestive process begin?  
   A: The mouth; the grasping of feed by the lips (prehension)  
   Source: GRIFFITHS (109) & HS2001 (27)

5) Q: What is the most common equine internal parasite?  
   A: Strongyles or blood worms  
   Source: HS2001 (57)

6) Q: A horse that lacks vigor and upon a blood test is determined to have a  
   reduced number of red blood cells would be described as having what  
   condition?  
   A: Anemia  
   Source: LOOK (4)

7) Q: What protozoal disease primarily effects the spinal cord and nervous  
   system of the horse? A spinal tap is typically required for diagnosis.  
   A: EPM - Equine Protozoal Myeloencephalitis  
   Source: HS 2001 (49)
8) Q: What term describes the unborn foal as it develops inside the mare’s uterus?
A: Fetus
Source: LOOK (23)

9) Q: This term involves keeping biological or living things --both plants and animals--from being infected with agents that can cause health and disease issues.
A: Biosecurity
Source: GRIFFITHS (193)

10) Q: List two (2) symptoms of Strangles.
A: Fever, increased respiration, nasal discharge, swollen lymph nodes
Source: HS2001(49)

11) Q: When feeding your horse or allowing him to graze, it is important that you feed from a tub and that he grazes in adequate pasture to avoid what type of colic?
A: Sand colic
Source: BYOV (266)

12) Q: What is the name for the greenish solution, secreted by the liver, whose purpose is to dissolve fats?
A: Bile
Source: HS2001 (29)

13) Q: What are the 2 main sources of vitamin D?
A: Sunshine and sun cured hay
Source: HS 2001 (35)

14) Q: Why are wolf teeth removed?
A: To prevent dental problems and aid in properly fitting the bit
Source: HS2001 (17)
15) Q: What part of the digestive tract does the term hind gut refer to?
A: Large intestine
Source: GRIFFITHS (112)

16) BONUS
Q: What four (4) elements are present in all amino acids?
A: Carbon, hydrogen, oxygen, and nitrogen
Source: HS2001 (26)

17) Q: What kind of samples can be submitted for DNA testing?
A: Blood, or Mane/tail/coat horse hair
Source: GRIFFITHS (103)

18) Q: Calcium, magnesium, copper and iron are all examples of what nutrient?
A: Minerals
Source: HS2001 27)

19) Q: What is the examination of a deceased horse called? This procedure is typically performed to determine cause of death.
A: Necropsy
Source: BYOV (339)

20) Q: What is the most important factor affecting the nutrient composition of grasses and legumes?
A: Stage of maturity
Source: HS2001 (37)

21) BONUS
Q: The term Overo includes three coat patterns. Name them.
A: Frame, Sabino, Splashed white
Source: GRIFFITHS (49-50)
22) Q: Rotating horses to "fresh" pastures every two (2) weeks will reduce the occurrence of what?
A: Internal parasite infestation
Source: HS2001 (39)

23) Q: What is the most common emergency affecting horses?
A: Colic
Source: GRIFFITHS (180)

24) Q: What is the term for one third of the gestation period?
A: Trimester
Source: Look (57)

TOSS-UP WITH BONUS ATTACHED

25) Q: What is the proper genetic term for the outward appearance of the horse?
A: Phenotype
Source: GRIFFITHS (93)

26) BONUS
Q: At the NC State 4-H Horse Show, 16 championship and reserve championship awards are presented to the individual horse and rider that earn the most points in each division. Name 6 of the 16 divisions.
A:
- Saddle Seat
- Senior Hunter Horse
- Junior Speed Events
- Junior Non-Trotting
- Western Pony
- Senior Speed Events
- Senior Non-Trotting
- Junior Western Horse
- Combined Training
- Junior Pony Hunter
- Senior Western Horse
- Dressage
- Junior Hunter Horse
- Short Stirrup
- Senior Hunter Pony
- Little Britches

Source: 4-H R & R Rule I-D.5. (p.14)
27) Q: Name this unsoundness: It is a bony growth above and toward the rear quarter of the hoof head. It can also be described as a partial or total replacement of the lateral cartilage with bone on the third phalanx.
   A: Sidebone
   Source: BYOV (142)

28) Q: When holding double reins, which rein goes on the outside?
   A: The wider, snaffle rein
   Source: H&H2001 (27-28)

29) Q: What region of the world was the donkey most likely domesticated?
   A: Middle East or Egypt
   Source: GRIFFITHS (16)

30) Q: What should be put on a foal's navel right after birth to avoid infection?
    A: Iodine
    Source: BYOV (78)

31) Q: Melanin controls what visible feature of the horse?
    A: Hair coat color
    Source: GRIFFITHS (93)

32) Q: What is another name for a radiograph?
    A: An x-ray
    Source: LOOK (46)

END OF ROUND FIVE
2015 State Horse Bowl Contest
Junior Division Round Six

1)  Q:  Bits rest on the part of the mouth called the bars, which is an area located between what two sets of teeth?
A:  Molars and Incisors
Source:  H&H2001 (29)

2)  Q:  What is required for vitamins A, D, E, and K to be absorbed?
A:  fat
Source:  HS2001 (34)

3)  Q:  An abnormal condition that is possessed at birth is called known by what term?
A:  Congenital
Source:  HS2001 (18)

4)  Q:  What is the common term for the olfactory sense?
A:  sense of smell
Source:  GRIFFITHS (61)

5)  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)

6)  Q:  A dressage test may call for how many different walks?
A:  Five
Source:  H&H2001 (17)

7)  Q:  What is the second step in digestion? This occurs after prehension.
A:  Mastication, or chewing of feed
Source:  HS2001 (27)
8) Q: What part of the horse includes the corpora nigra, aqueus anterior chamber, vitreous humore, pupil, lens, cornea, retina, and sclera?
   A: Eye
   Source: GRIFFITHS (214)

9) Q: The afterbirth is also known as what?
   A: The placenta
   Source: HS2001 (23)

10) Q: Where is the bone spavin located?
    A: On the inside lower point of the hock
    Source: HS2001 (13)

11) Q: A horse that stands close at its heels is said to have what problem?
    A: Contracted heels
    Source: H&H2001 (49)

12) Q: A horse’s center of gravity is located about six inches behind the elbow. How can a rider alter the position of a horse’s center of gravity?
    A: By shifting weight from side to side or from front to rear.
    Source: HS2001 (7)

13) Q: What is a treble?
    A: A jump composed of 3 fences close together.
    Source: LOOK (57)

14) Q: What is a Brumby?
    A: Australian wild horse
    Source: LOOK (10)

TOSS-UP WITH BONUS ATTACHED

15) Q: What is a rope made of horsehair, cow tail, or mohair; used as the rein on a hackamore bridle?
    A: Mecate
    Source: LOOK (37)
16) **BONUS**  
**Q:** Strangles is a highly contagious bacterial disease caused by *Streptococcus equi*. Name 3 ways to prevent the spread of this disease within a horse facility.  
**A:**  
- Quarantine infected animals  
- Disinfect contaminated equipment  
- Boot-dip  
- Burn and bury infected manure/bedding  
- Wear protective clothing and latex gloves  
- Do not use infected areas for a minimum of 2 months  
**Source:** EqSci 171

17) **Q:** What is another name for ink spots?  
**A:** pawprints or bear paws  
**Source:** GRIFFITHS (39)

18) **Q:** Name the breed of pony that originated by crossing a Shetland pony stallion and an Appaloosa mare.  
**A:** Pony of the Americas or P.O.A.  
**Source:** GRIFFITHS (98)

19) **Q:** What is the hollow space on the wearing surface of an incisor?  
**A:** cup  
**Source:** HS2001 (14)

---

**TOSS-UP WITH BONUS ATTACHED**

20) **Q:** In racing terms, what is the post?  
**A:** Starting point of a race  
**Source:** H&H2001 (40)

21) **BONUS**  
**Q:** The Missouri Fox Trotter has what three natural gaits?  
**A:** Fox Trot, rapid flat walk and canter  
**Source:** H&H2001 (57)
22) Q: Why would the size of the nostrils be important?
A: Large nostrils allow for maximum air intake.
Source: HS2001 (9)

23) Q: Name the ground-covering walk of the Tennessee Walking Horse that is a fast, 4-beat, lateral gait.
A: Running Walk or Plantation Gait
Source: GRIFFITHS (81)

24) Q: What are the 2 basic energy producing nutrients?
A: Carbohydrates and fats (lipids)
Source: EquSci 143

TOSS-UP WITH BONUS ATTACHED

25) Q: Ascarids are what type of parasite, internal or external?
A: Internal
Source: HS2001 (57)

26) BONUS

Q: Name three of the 5 recommended procedures that have been identified by the USEF to properly measure the height of a horse or pony.
A: 1. Place animal on a level surface such as concrete or pavement.
2. Stand the animal squarely on all 4 feet.
3. Hold head such that the highest point of the withers is revealed.
4. The animal must be free of all tack or appliances other than a halter and lead rope.
5. Place the crosspiece or arm of the measuring device over the highest point of the withers.
Source: GRIFFITHS (27)

27) Q: Research indicates that horses can see in colors. What color do they seem to have more difficulty seeing?
A: Red
Source: GRIFFITHS (60)
28) **Q:** What is the Spanish word for lasso?
   **A:** reata
   **Source:** H&H2001 (29)

29) **Q:** What color is skin that lacks pigment granules?
   **A:** Pink
   **Source:** GRIFFITHS (97)

30) **Q:** This type of vision allows the horse to see in three dimensions, permitting better depth perception.
    **A:** Binocular vision
    **Source:** GRIFFITHS (58)

31) **Q:** The word horse comes from the Anglo-Saxon word "hors" which has what meaning?
    **A:** swiftness
    **Source:** HS2001 (5)

32) **Q:** What is the response called when a horse lifts his lip from a smell?
    **A:** Flehmen Response
    **Source:** GRIFFITHS (61)

END OF ROUND SIX
1) Q: The horse's stomach can hold how many gallons of digesta?
   A: 2-4 gallons
   Source: HS2001 (28)

2) Q: Name the offspring that is the result of a cross between a male horse and a female donkey.
   A: Hinny
   Source: GRIFFITHS (22)

3) Q: What are the sex chromosomes of the stallion?
   A: XY
   Source: GRIFFITHS (91)

4) Q: At what age do permanent incisors begin to erupt?
   A: 2.5 years
   Source: HS2001 (15)

5) Q: What is the offspring of horse and zebra cross called?
   A: zebroid
   Source: LOOK (61)

6) Q: Name one thing that a lack in odor in hay indicates?
   A: overmaturity, bleaching, leaching or old hay
   Source: HS2001 (38)

7) Q: What does the "coggins test" test for?
   A: Equine Infectious Anemia
   Source: BYOV (327, 328)

8) Q: Which part of the western saddle connects the cinch ring to the D-ring?
   A: Latigo
   Source: BH (28)
9) Q: This South American term describes a red-colored horse with lighter-colored points or a flaxen mane and tail.  
A: Ruano  
Source: GRIFFITHS (41)

10) Q: How many thoracic vertebrae does a horse have?  
A: 18  
Source: GRIFFITHS (203)

11) Q: How many degrees can each individual ear of the horse rotate?  
A: 180 degrees  
Source: GRIFFITHS (62)

12) Q: What percentage of an adult horse's body weight is water?  
A: 65-75%  
Source: HS2001 (32)

13) Q: How many toes did Eohippus have?  
A: 4 on the front and 3 on the rear.  
Source: HS2001 (4)

14) Q: If a horse will have canine teeth, at what age will they appear?  
A: 4-6 years  
Source: GRIFFITHS (216)

TOSS-UP WITH BONUS ATTACHED

15) Q: A horse inherits two genes for each trait from each parent. If it inherits a dominant trait from the sire and a recessive trait from the dam, the horse is known as what for that trait?  
A: heterozygous  
Source: GRIFFITHS (91)
16) **BONUS**

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

**A:**
- 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

**Source:** 4-HJM (13)

17) **Q:** What do you call a dark colored "splotch" on the basic coat color. Many horsemen refer to this type of mark as a "handprint".

**A:** Blood Mark

**Source:** GRIFFITHS (39)

18) **Q:** The nucleus of each cell contains these structures, which come in pairs and contain genetic information.

**A:** Chromosomes

**Source:** GRIFFITHS (86-87)

19) **Q:** What cranial nerve has to do with the sense of vision?

**A:** optic

**Source:** GRIFFITHS (214)

**TOSS-UP WITH BONUS ATTACHED**

20) **Q:** When referring to a chestnut horse what does the term tostada describe?

**A:** A red colored horse with darker red-colored points

**Source:** GRIFFITHS (41)

21) **BONUS**

**Q:** 2 part question: What does SCID stand for & what breed does it affect?

**A:** Severe Combined Immunodeficiency, Arabians.

**Source:** GRIFFITHS (99)
22) Q: What is another name for ascarids?
A: Roundwords
Source: LOOK (39)

23) Q: At what age does the Galvaynes's groove extend the full length of the tooth?
A: 20
Source: GRIFFITHS (217)

24) Q: Horses of draft-horse breeding generally tend to be heavier in body weight, slower-moving, and big-boned. These horses are known as coldbloods. What type of horses come from Arabian descent and include most of the modern light-horse breeds?
A: Hotbloods
Source: GRIFFITHS (24)

TOSS-UP WITH BONUS ATTACHED

25) Q: According to the United States Department of Agriculture did the equine population increase or decrease from 1920-1960?
A: Decreased
Source: GRIFFITHS (3)

26) BONUS
Q: What are the three phases of a mare's estrous cycle?
A: Diestrus (quiet period), proestrus (preparation), and estrus (heat).
Source: HS2001 (24)

27) Q: On what part of the horse would you find the stratum tectorum?
A: Hoof
Source: LOOK (54)

28) Q: The topline of the horse is made up of what 3 parts?
A: Back, loin, croup
Source: H&H 2001 (10)
29) Q: What term identifies a highly measured, collected, elevated and cadenced trot in place?
   A: Piaffe
   Source: LOOK (43)

30) Q: What group registers and records Thoroughbred horses?
   A: The Jockey Club
   Source: H&H2001 (58)

31) Q: What is the canal between the cervix and the vulva called?
   A: vagina
   Source: LOOK (59)

32) Q: The pupil in a horse is shaped differently than in other animals. In a horse, what is the basic shape of the pupil?
   A: Horizontal
   Source: GRIFFITHS (56)

END OF ROUND SEVEN
1) Q: The pair of chromosomes carrying the genes that determine the sex of the offspring are called what?
A: Sex chromosomes; Also accept: Mare (XX) and Stallion (XY)
Source: GRIFFITHS (91)

2) Q: What is it called when there is a blockage of the intestinal tract with feedstuffs or foreign materials?
A: Impaction colic
Source: HS2001 (50)

3) Q: The macro-mineral calcium is the “partner” mineral to what?
A: Phosphorus
Source: GRIFFITHS (132)

4) Q: The first and second cervical vertebrae are commonly referred to as what
A: Atlas and axis
Source: GRIFFITHS (203)

5) Q: What term can be defined as the ability of the horse to maintain a correct and distinct footfall pattern throughout the class?
A: Cadence
Source: 4-HJM (12)

6) Q: What unsoundness can be found in a horse’s hind leg and is a soft, puffy swelling located in the hollows of the hock?
A: Thoughpin
Source: 4-HHM (4)

7) Q: Name one place in the body where a horse can make Vitamin C?
A: Liver or Kidneys
Source: HS2001 (35)
8) Q: Name 2 common external parasites which are communicable to man.
A: Ringworm, mange, mites
Source: HS2001 (13)

9) Q: Besides biting flies, name another way that the viral infection EIA is spread.
A: improper use of hypodermic needles
Source: LOOK (22) & GRIFFITHS (176)

10) Q: Name the condition where there is a separation at the toe between the sensitive laminae and the wall.
A: Seedy Toe
Source: BYOV (127)

11) Q: What vitamin is essential in blood clotting?
A: Vitamin K
Source: HS2001 (35)

12) Q: The material that makes up chromosomes and carries genetic information for every cell is called what?
A: DNA (deoxyribonucleic acid)
Source: LOOK (18)

13) Q: What is the term for sex cell division?
A: meiosis
Source: HS2001 (20)

14) Q: Zebras are members of what family?
A: Equus
Source: GRIFFITHS (22)

**TOSS-UP WITH BONUS ATTACHED**

15) Q: Caused by ruptured air vesicles in the lungs, this disorder is characterized by abnormal breathing and a dry, unproductive cough.
A: Heaves, COPD, Recurrent Airway Obstruction or Emphysema
Source: 4-HHM (4) & GRIFFITHS (181)
16) BONUS
Q: List the three (3) accessory sex glands of the male horse.
A: Prostate, seminal vesicles, and cowper's gland (bulbourethral gland)
Source: HS 2001 (22)

17) Q: Name the substances which are the building blocks of protein and are the basic materials from which bones, muscles, soft tissue, blood, hair and hoofs are made.
A: Amino Acids
Source: GRIFFITHS (117)

18) Q: What would you expect to happen if 20% or more of a horse's body water were lost?
A: death
Source: GRIFFITHS (115)

19) Q: What do the abbreviations AI stand for in regards to reproduction?
A: artificial insemination
Source: LOOK (3)

20) Q: What does CRT stand for?
A: Capillary Refill Time
Source: GRIFFITHS (163)

21) BONUS
Q: 2 part Question. There are two types of immunity in the horse. Name these 2 types and explain how horses obtain them.
A: Passive- foals obtain antibodies from the dam's milk or colostrum
    Active- the body builds antibodies in response to disease or vaccination
Source: GRIFFITHS (169)

22) Q: There are many gaits that can be classified as "single-foot" gaits. In these gaits there is a brief moment in the movement when a horse has only one foot on the ground. Give two examples of a single-foot gait.
A: Running walk, slow gait, rack, fox trot
23) Q: What is bute used for?  
A: To reduce pain, inflammation and lower fever  
Source: BYOV (199)

24) Q: What is the scientific name for white blood cells that fight infection?  
A: leukocytes  
Source: LOOK (35)

TOSS-UP WITH BONUS ATTACHED

25) Q: When designing a working hunter course, the jumps should be spaced a minimum of how many feet apart?  
A: 48 feet  
Source: 4-HR&R (50)

26) BONUS  
Q: Define the difference between signs and symptoms.  
A: Symptoms are subjective evidence of a health issue such as not eating and decreased activity rate. Signs are measurable evidence of a health issue such as temperature, pulse, respiration or a diagnostic test  
Source: GRIFFITHS (166)

27) Q: What word means “a hot, moist mass applied to a sore or inflamed area?”  
A: Poultice  
Source: LOOK (45)

28) Q: The process of passing genetic material to the next generation is known as what?  
A: Inheritance  
Source: GRIFFITHS (89)

29) Q: What are the two main branches of the trachea?  
A: bronchi  
Source: LOOK (10)
30) Q: This measurement is of how fast the heart is pumping blood throughout a horse's body. What is this measurement called?
   A: Pulse rate or Heart rate
   Source: GRIFFITHS (159)

31) Q: What shape is the lower central incisor of a 20 year old horse?
   A: triangular
   Source: GRIFFITHS (218)

32) Q: Cocked ankle is a partial dislocation of the ankle brought about by what condition?
   A: A shortening of the tendons
   Source: 4-HHM (4)

END OF ROUND EIGHT
1) Q: This genetic disorder affects Quarter Horses, American Paint Horses and Appaloosas that were bred or crossbred out of the genetic lineage of the sire Impressive. The disorder may cause episodes of muscle tremors, weakness, stiffness, and paralysis. Name this genetic disorder.
   A: Hyperkalemic periodic paralysis (HYPP)
   Source: GRIFFITHS (98)

2) Q: What is another name for the disease “swamp fever?”
   A: Equine Infectious Anemia
   Source: GRIFFITHS (176)

3) Q: What is the scar tissue that builds up in excess at the site of a healing wound called?
   A: proud flesh
   Source: LOOK (45)

4) Q: What is the term given to a tearing of the periosteum on the front of the cannon bone?
   A: Bucked Shins
   Source: BYOV (150)

5) Q: How often do most mares come into heat?
   A: Every 21 days. May vary from 17 to 30.
   Source: BYOV (61) & HS2001 (24)

6) Q: Approximately how long is the stomach?
   A: .5 to 1 foot
   Source: GRIFFITHS (110)

7) Q: What comes next? Prehorse, Eohippus, Mesohippus…..
   A: Merychippus
   Source: GRIFFITHS (13)
8) Q: What does the term "railroad tracks" refer to?
A: In reining, the descriptive term used to describe the skid marks left by the horse's hind feet in a sliding stop.
Source: LOOK (46)

9) Q: The cecum in the horse is the physiological equivalent to what organ in the human?
A: The appendix
Source: GRIFFITHS (113)

10) Q: What is the main function of the large colon?
A: Water absorbtion
Source: GRIFFITHS (113)

11) Q: What is another name for gametes?
A: Sex cells.
Source: GRIFFITHS (88)

12) Q: What is the most common delivery method for injections?
A: Intramuscular
Source: BYOV (189)

13) Q: Liverpool bits are most commonly used for what type of horses?
A: driving horses
Source: H&H2001 (31)

14) Q: Name the disease from the following description: This disease is a worldwide problem. It is a potentially fatal viral infection that can also occur in humans. It is usually associated with a bite from an infected animal.
A: Rabies
Source: GRIFFITHS (178)
15) Q: How are excess simple sugars stored in the body?
A: As fat
Source: GRIFFITHS (146)

16) BONUS
Q: What is the whole zoological classification of the modern horse?
A: Kingdom – Animalia
Phylum – Chordata
Class – Mammalia
Order – Perissodactyla
Family – Equidae
Genus – Equus
Species - Equus Caballus
Source: GRIFFITHS (15)

17) Q: Name the infection of the sensitive parts of the hoof that gains access through the cracks in the white line on the sole.
A: Gravel
Source: H&H2001 (50)

18) Q: What two vitamins cannot be manufactured in the horse's body?
A: Vitamin A and Vitamin E
Source: HS2001 (34)

19) Q: In the horse's daily diet, grain or concentrate should not exceed more than what percent?
A: not more than 40%
Source: GRIFFITHS (107)

20) Q: Name the structural deviation from the following description: The hoof is extremely upright in appearance and has a different, steeper angle than the pastern, as compared to the other hoof; the coronary band when viewed from the rear is higher off the ground.
A: Club-foot(ed)
Source: 4-HHJM (11)
21) **BONUS**

**Q:** Name the three (3) of the five (5) categories of organisms that may cause infectious disease in the horse.

**A:** Bacteria, virus, rickettsia, fungus, protozoa

**Source:** GRIFFITHS (168)

22) **Q:** What is the name of the early form of horse that lived approximately 58 million years ago and had four toes on its front feet?

**A:** Eohippus

**Source:** GRIFFITHS (9)

23) **Q:** What breed does aniridia primarily effect?

**A:** Belgians

**Source:** GRIFFITHS (100)

24) **Q:** This genetic disorder is seen in Thoroughbreds, Standardbreds, and Quarter Horses. It’s only seen in colts and causes the inability of the blood to clot, resulting in hematoma, internal bleeding, anemia, and death.

**A:** Hemophilia A

**Source:** GRIFFITHS (99)

---

**TOSS-UP WITH BONUS ATTACHED**

25) **Q:** What is a living or non-living thing that can transmit infective agents to another living thing, causing a health or disease issue?

**A:** Vector

**Source:** GRIFFITHS (169)

26) **BONUS**

**Q:** Name 6 of the ten amino acids essential to the horse’s diet.

**A:** lysine, threonine, methionine, phenylalanine, valine, tryptophan, histidine, arginine, leucine, and isoleucine

**Source:** HS2001 (33)
27) Q: What muscle prevents the horse from vomiting?
   A: Cardiac Sphincter
   Source: HS2001 (28)

28) Q: Protein makes up approximately 8-15% of a horse's dietary needs while energy makes up approximately 80-90%. Energy itself is not a nutrient; however, there are several "energy-producing nutrients" that are fed to horses. Name two of these energy-producing nutrients.
   A: Carbohydrates, starch, sugar, fiber, fat
   Source: GRIFFITHS (115)

29) Q: Enteritis in an inflammation of the what part of the body?
   A: intestinal lining
   Source: LOOK (21)

30) Q: The small intestine absorbs what kinds of vitamins?
    A: fat soluble
    Source: GRIFFITHS (111)

31) Q: Why is it recommended that horses be fed small and frequent meals, rather than larger and less frequent meals?
    A: They have a small stomach and the rate of passage of food is relatively fast.
    Source: GRIFFITHS (110-111)

32) Q: Where do the egg and sperm unite?
    A: oviduct
    Source: HS2001 (16)

END OF ROUND NINE
EXTRA TOSS UP QUESTIONS

1) Q: When a horse is performing the running walk, how many feet are on the ground and how many are in the air?  
   A: 3 on the ground and 1 in the air  
   Source: LOOK (48)

2) Q: What is pointing?  
   A: Standing with a front leg extended more than normal; a sign of lameness.  
   Source: HS2001 (4)

3) Q: What is the weakest part of the topline?  
   A: The Loin  
   Source: HS2001 (10)

4) Q: A collection of horses is called a what?  
   A: Cavy  
   Source: HS2001 (4)

5) Q: An equine foal that has been taken from its mother or dam and is no longer allowed to nurse is known as a what?  
   A: Weanling  
   Source: EqSci (23)

6) Q: What gait is known as the "foundation gait?"  
   A: Walk  
   Source: H&H 2001 (17)

7) Q: Toe, quarter and heel are specific areas of what part of the horse?  
   A: Hoof  
   Source: H&H 2001 (46)
8) Q: What was the horse’s primary use prior to World War II?
A: Used as a war machine
Source: HS2001(4)

9) Q: On a roan horse what are the small dark colored spots called?
A: Corn Spots
Source: EqSci (47)

10) Q: Where is the center of gravity?
A: 6 inches behind the elbow or just behind the withers
Source: HS 2001 (6)

11) Q: Describe a horse that is splay-footed.
A: The front toes turn out, heels turn in
Source: 4H H&H 38

12) Q: What is forging?
A: When a horse strikes the forefoot with the toe of the hindfoot on the same side
Source: H&H 2001 (12)

13) Q: What is the progeny of a stallion?
A: Get
Source: HS 2001 (18)

14) Q: What is the conformation defect in which the knees appear to be pushed backward in relation to the rest of the front leg?
A: Calf-kneed
Source: BYOV 96

15) Q: What are the small teeth, generally are found in male horses three years of age or older, called? They are located in front of the upper molars.
A: Wolf teeth
Source: HS 2001 (15)

16) Q: What is the tallest of the draft horse breeds?
A: Shire
Source: H&H 2001 (132)
17) Q: About how many miles per hour can a horse go at a canter?
   A: about 12 mph
   Source: EqSci (74)

18) Q: Grulla horses are a subgroup of what colored horses?
   A: Dun
   Source: EqSci (43)

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

20) Q: What is a sulky?
    A: A two-wheeled driving vehicle used for racing
    Source: LOOK (54)

21) Q: Equine Night Blindness primarily affects what breed?
    A: Appaloosa
    Source: GRIFFITHS (100)

22) Q: What can be used to stabilize and prevent a saddle from slipping backwards?
    A: Breastplate or breast collar
    Source: H&H 2001 (37)

23) Q: What is the basics structural unit of the saddle called?
    A: Tree
    Source: H&H 2001 (31)

24) Q: Cushing’s disease results from a tumor on what gland?
    A: Pituitary
    Source: GRIFFITHS (181)
25) Q: Pepsin is an enzyme that helps digest what?
   A: Protein
   Source: HS 2001 (29)

EXTRA BONUS QUESTIONS

1) Q: What four (4) factors effect 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&H 2001 (29)

2) Q: Water is contained in all cells and fluids in the body. Identify 3 body functions for which water is essential.
   A: production of saliva, regulation of body temperature, chemical reactions involved in digestion, absorption, and metabolism, normal cell function, lubrication of body parts
   S: GRIFFITHS (116)

3) Q: List four (4) factors that can cause nutrient requirements to vary from horse to horse.
   A: Size, age, health, environment and activity
   S: HS2001 (32)

4) Q: When giving reasons in horse judging, what are the four (4) areas that a judge uses to determine the value of your reasons?
   A: Accuracy, Presentation & Delivery, Completeness and Terms
   S: H&H 2001 (15&16)

5) Q: What three (3) types of injuries can be treated with cryotherapy?
   A: Bruises, sprains, muscular strains
   S: BYOV (182)