

**2022 Horse Project Record Book**  
**DUE MAY 1st**

Score \_\_\_\_\_

Everyone complete

Exhibitor's Name: \_\_\_\_\_

Club Name: \_\_\_\_\_

Number of years in horse project area? \_\_\_\_\_

Age \_\_\_\_\_ ( as of Jan 1<sup>st</sup> 2022)

Name of your project animal \_\_\_\_\_

Please print the above information

Circle One Age Division

This is your 4-H age as of

January 1, 2022

Age=8

Age = 9-10

Age = 11-12

Age = 13-14

Age = 15-16

Age = 17 and over

Attach Project Photo Here

Members Signature: \_\_\_\_\_

Parent Signature: \_\_\_\_\_

OR

Leader Signature: \_\_\_\_\_

Resources to be used to complete this record book include: "4-h Horses and horsemanship", "Horse Science", "Horseless Horse", "State 4-h Horse and Pony Show Rules and Regulations", "SCC4-h and Youth Fair Book", "4-h Miniature Horse Show Guidelines" and other resources provided in this project record book

\_\_\_\_\_/9 points

**Project Record Book Point Sheet**

**Project record book must be complete, have completed photo page, and exhibitors name and signatures along with parent or leader signatures, in order to be graded.**

<u>Name of page</u>	<u>Points available</u>	<u>Age group</u>	<u>Your score</u>
<i>Front Cover</i>	9	<i>Everyone</i>	_____
<i>Horse project record book</i>	2	<i>Everyone</i>	_____
<i>Requirements</i>			
<i>Horse name and info</i>	13	<i>Everyone</i>	_____
<i>Project Photo Page</i>	8	<i>Everyone</i>	_____
<i>Horse Parts</i>	38	<i>Everyone</i>	_____
<i>Horse project ground rules</i>	43	<i>Everyone</i>	_____
<i>Miniature Horse</i>	25	<i>Everyone</i>	_____
<i>Interesting horse facts</i>	4	<i>Everyone</i>	_____
<i>Western color</i>	2	<i>8yrs - 12yrs</i>	_____
<i>AQHA Words</i>	20	<i>8yrs-12yrs</i>	_____
<i>Brushes</i>	12	<i>8yrs-12yrs</i>	_____
<i>True and False</i>	10	<i>8yrs-12yrs</i>	_____
<i>Horse markings</i>	11	<i>8yrs-12yrs</i>	_____
<i>Safety First</i>	58	<i>13yrs and over</i>	_____
<i>Inheritance and Genetics</i>	20	<i>13yrs and over</i>	_____
<i>Inheritance and genetics cont</i>	29	<i>13yrs and over</i>	_____
<i>State 4hHorse and pony project</i>	15	<i>13yrs and over</i>	_____
<i>Horse and horsemanship/Science</i>	19	<i>13yrs and over</i>	_____
<i>Laminitis</i>	29	<i>13yrs and over</i>	_____
<i>Color Page</i>	2	<i>Everyone</i>	_____

*14 pages are required to be completed by age group 8 - 12 year olds with 199 points Possible*

*15 pages are required to be completed by age group 13 and over with 314 points Possible.*

**End page will be used for the coloring contest with awards in each age division given out Monday of fair.**

Your Total Score \_\_\_\_\_ Rating \_\_\_\_\_

## Horse Project Record Book Requirements

4-H Horse Project Members may elect to participate in 4-H Winter Achievement with a Horse Science Project (See WA event catalog for details) **INSTEAD** of completing the required Project Record Book.

1. Resources to be used to complete this record book and **SCORE:** "4-H Horse and Horsemanship", "Horse Science", "Horseless Horse", "State 4-H Horse Show Rules and Regulations", "SCC 4-H & Youth Fair Book", "SCC Miniature Horse Show Guidelines 2019" and the other resources directly provided in record book **ONLY**.
2. All books must be signed by exhibitor and parent or leader.
3. **ALL PAGES** that are listed as required for your division **MUST BE COMPLETED** regardless of incorrect answers. **DO NOT LEAVE ANY BLANK ANSWERS.** If the line does not apply to you please put N/A.
4. **INCOMPLETE** books will **NOT BE SCORED** and will automatically received "C" rating. All books not scored for requirement violations will receive a "C" rating.
5. Books which contain obvious adult contribution or inappropriate content will not be scored.
6. Creativity, effort, correctness and completeness will all be used in judging this record book.
7. Coloring is allowed and encouraged.
8. **ALL PROJECT RECORD BOOKS MUST BE TURNED "IN" IN THE FOLDER PROVIDED OR 25 POINTS WILL BE TAKEN OFF YOUR TOTAL SCORE.**
9. Please **NO OTHER BINDERS, NO PUFF PAINT OR PUFFY STICKERS and NO SHEET PROTECTORS.**
10. This project record book **MUST** be completed and turned in **MAY 1.**
11. **Incomplete or late book will not be eligible for championship classes during fair. This book is part of your 4-H Project.**
12. Books will be judged and the top 10 scores in each division will receive placing awards, with Grand & Reserve awarded if warranted.
13. You are welcome to complete pages from other age divisions, no extra credit points will be given. Points will be earned in your appropriate age division only. "However", extra pages could be used to determine top awards if needed.

Lets get started! Start Date of Book \_\_\_\_/\_\_\_\_/\_\_\_\_

Goal for this project year? \_\_\_\_\_

\_\_\_\_\_/2 points

Horses Name: \_\_\_\_\_

Breed \_\_\_\_\_ AGE \_\_\_\_\_

SIZE \_\_\_\_\_ HH. Color \_\_\_\_\_

Horses' markings: \_\_\_\_\_

Do you own your horse? \_\_\_\_\_

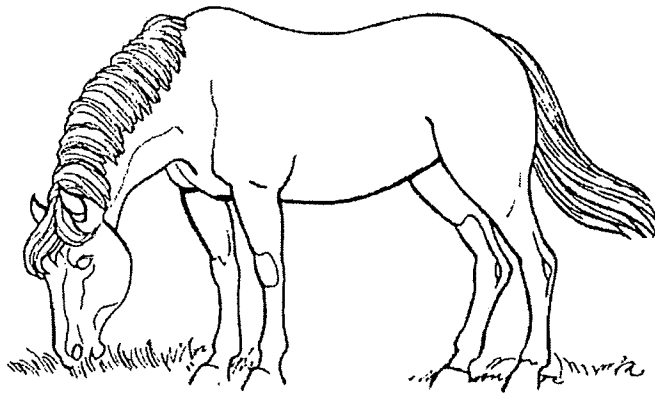
Who takes care of your horse? \_\_\_\_\_

What is something special about your horse? \_\_\_\_\_

What goals have you set for you and your horse? \_\_\_\_\_

What is your favorite class at fair? \_\_\_\_\_

What would you like to see new at fair? And why? \_\_\_\_\_



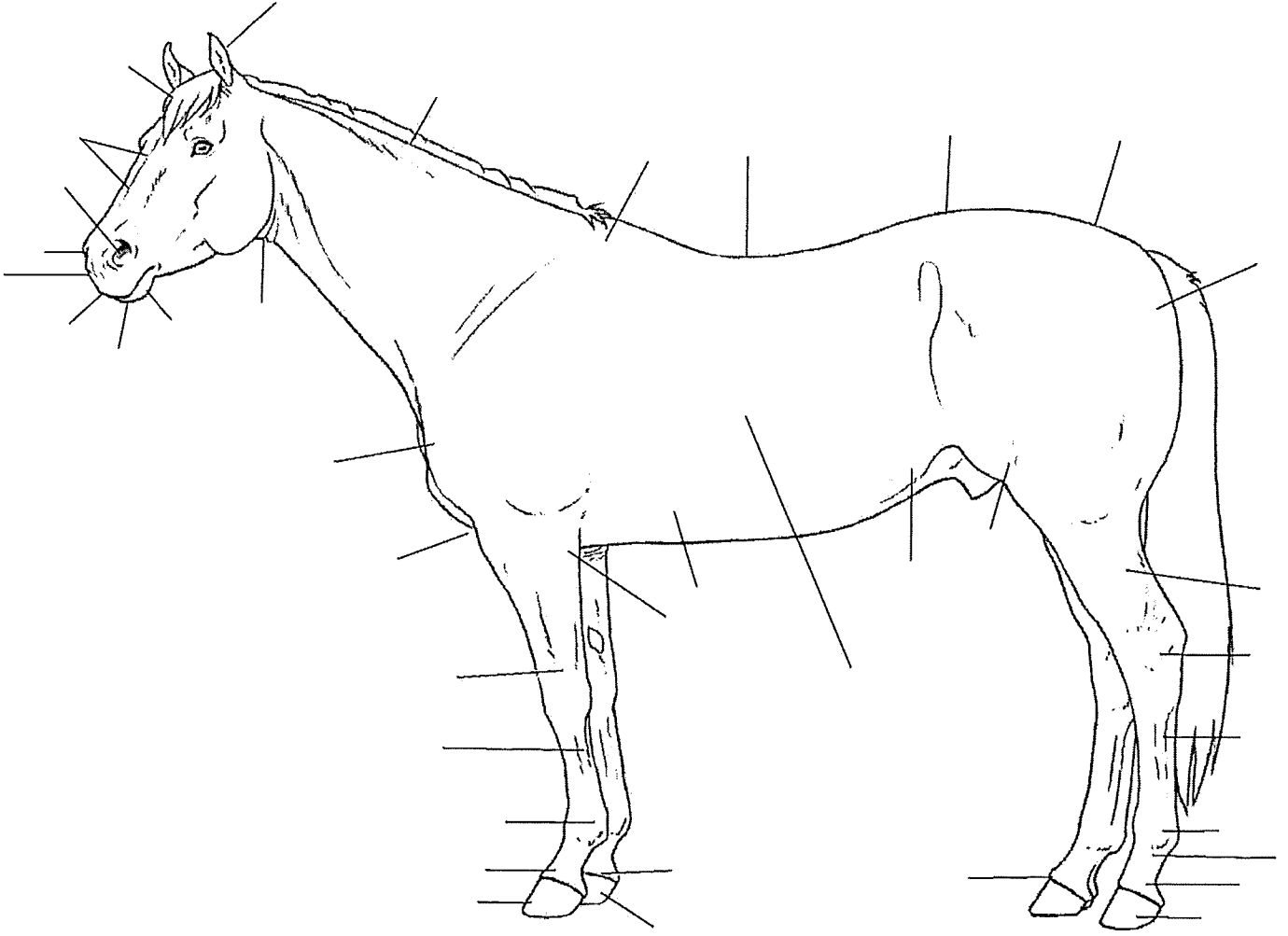
\_\_\_\_\_/13 Points

## ***Project Photo Page***

***Below attach at least 4 pictures with captions that reflect what you do with your horse and/or how you take care of them.***

\_\_\_\_\_ /8 Points

**Below fill in the horse parts.**



\_\_\_\_\_/38 Points

## Horse Project Ground Rules

### Fill in the blanks

1. Authority of the \_\_\_\_\_ is to be \_\_\_\_\_ at all times.
2. No \_\_\_\_\_ or \_\_\_\_\_ on horses in or around the \_\_\_\_\_.
3. No coffee \_\_\_\_\_ / \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ kitchen appliances are to be \_\_\_\_\_ in or maintained in any \_\_\_\_\_ or \_\_\_\_\_ surrounding barns.
4. \_\_\_\_\_ for early releases must be on file with the \_\_\_\_\_ \_\_\_\_\_ per their deadline. \_\_\_\_\_ releases \_\_\_\_\_ be cleared by the Fair Board.
5. No animal is to be taken into \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ areas at any time.
6. \_\_\_\_\_ may ride in \_\_\_\_\_ / \_\_\_\_\_ ring, or other \_\_\_\_\_ areas assigned by \_\_\_\_\_ and the \_\_\_\_\_ only.
7. All participants in Hunter, \_\_\_\_\_, Bareback, Saddle Seat, and \_\_\_\_\_ classes are required to wear properly fitting \_\_\_\_\_ \_\_\_\_\_, with the \_\_\_\_\_ secured.
8. Helmets must meet the specifications of the \_\_\_\_\_ for Testing and \_\_\_\_\_ (ASTM), must be manufactured and distributed by a participant in the Certification Program of the \_\_\_\_\_ (SEI) and must bear the SEIT \_\_\_\_\_ label.

\_\_\_\_\_/43 Points

# MINIATURE HORSE

Use the Michigan 4-H Miniature Horse Show Guidelines 2019 to complete this page – found on Horse Leaders Website

## Answer True or False to the following.

Horses need to be registered to show at Michigan 4H shows \_\_\_\_\_  
or the Michigan 4H State Miniature Horse Shows. \_\_\_\_\_

Any exhibitor may wear protective headgear in any division \_\_\_\_\_  
or class without penalty from the judge(s). \_\_\_\_\_

A hunter/jumper miniature horse must be 3 years or under. \_\_\_\_\_

A miniature horse is 38 inches or over when measured \_\_\_\_\_  
at the last few hairs of the mane. \_\_\_\_\_

An exhibitor's outfit should not be the dividing factor in \_\_\_\_\_  
placings. \_\_\_\_\_

## Fill-In the Blanks on the following

Jumper In-Hand class is designed to test the \_\_\_\_\_  
of the horse. The class is judged on \_\_\_\_\_ and \_\_\_\_\_.

Color class is judged \_\_\_\_\_ on color. The classes should be \_\_\_\_\_  
into \_\_\_\_\_ color and \_\_\_\_\_.

In-Hand Trail / Obstacle class is judged on the performance of the horse over the  
\_\_\_\_\_, with emphasis on \_\_\_\_\_, response to the  
\_\_\_\_\_ and \_\_\_\_\_.

There are a \_\_\_\_\_ of different styles of \_\_\_\_\_  
and the driver's \_\_\_\_\_ should coordinate with the driving  
\_\_\_\_\_. Driving \_\_\_\_\_ and gloves are  
\_\_\_\_\_ but optional. Attire should be \_\_\_\_\_.

\_\_\_\_\_ / 25 Points



## **Interesting Horse FACTS**

### **1. Horses can't breathe through their mouth**

Horses are "obligate nose breathers" meaning that they can only breathe through their nose, not through their mouth as humans can.

### **2. Horses can sleep standing up**

Horses have what's called a "stay-apparatus" which is a system of tendons and ligaments that allows the horse to lock their legs in position so they can relax without falling over. When not sleeping, horses also use this apparatus to rest while standing for long periods of time so they don't fatigue. This allows them to conserve energy while standing so they are ready to take flight if needed. But it is a myth that horses never lay down – they do spend a short amount of time each day laying down for deeper sleep.

### **3. Horses have lightning fast reflexes**

Should a situation arise when they need to fight, they can go from standing still to delivering a powerful kick in just 0.3 seconds, whereas human reaction time is 1.6 seconds.

### **4. Horses have 10 different muscles in their ears**

This allows them to rotate nearly 180 degrees and move independently of one another. Humans only have three muscles in their ears.

### **5. Horses have a nearly 360 degree field of vision**

This is due to the positioning of their eyes on the sides of their head. However, they have two blind spots – one directly behind them, and the other just in-front and below their nose. This means that they cannot see the grass they are grazing on, or the carrot you are sticking out to them! Instead they use their mobile and sensitive lips, whiskers and sense of smell to know what is in-front of them and decide if they want to eat it.

### **6. Horses do not have teeth in the middle of their mouth**

You can also estimate how old a horse is by looking at their teeth.

### **7. Horses are highly intelligent animals**

They can be taught many different tasks through positive reinforcement and clicker training, just as dogs can. One study showed that horses have the ability to communicate their needs to their guardians; these horses learned to communicate whether they wanted a blanket on or off through touching symbols on a board.

**8. The earliest ancestor of the horse is estimated to have lived 55 million years ago**

This ancestor was only the size of a Labrador retriever. Horses were domesticated around 6000 years ago, estimated from evidence found at archaeological sites. They were first domesticated as a food source.

**9. Horses have a fixed pelvis, so they cannot do the splits**

They do have some lateral movement though, allowing them to scratch their ears with their hind feet.

**10. Horses are very social animals**

Since horses are prey species, they find safety in a herd and form strong social relationships with each other. They use their senses to recognize familiar horses and spend time with those they have formed friendships with. In the wild, one horse will stand guard to keep watch while the other horses in the herd take time to eat, rest and sleep

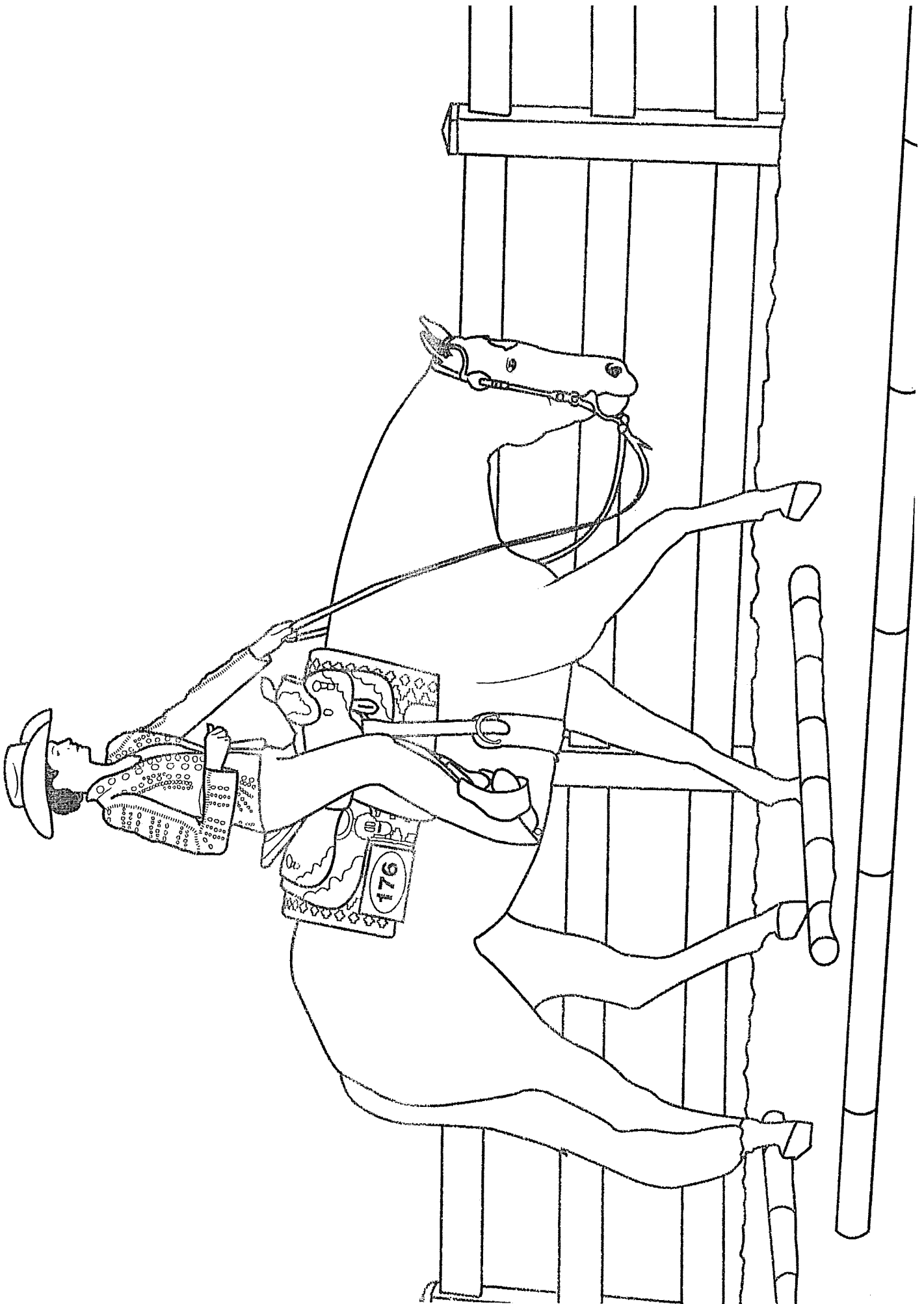
Fill in the blank with a sentence. If left blank will be marked wrong.

What is your favorite horse fact? why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What fact do you think every horse person should know? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Do you know an interesting fact? Please share it with us. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_/4 Points



# AMERICAN QUARTER HORSE WORDS



V S A D D L E C G O P Y L G J  
H M K Z V S S O R R E L M Z C  
W E I A V B O O T S H V W K S  
E S L R P V T O L N T Y E C M  
Z T K M E W N I J T A C B E B  
R Z Q P E I A Z H B T R O T O  
Y W O D R T R J O H T G W N P  
B O M M O H E E O D N P G Y A  
I R X A A E I O F I E C B S L  
K L Y N N R N G P L U A A N O  
T D M E G S S M D A C U O J M  
Z S U Z Y R U I U T F H X W I  
T H G A G J R R H B S J A Z N  
R O J A O B R L O P E V S P O  
I W V S T I R R U P R F K R S

BAY	HOOF	REINS	STIRRUP
BOOTS	JUMPING	ROAN	TAIL
BRIDLE	LOPE	ROPE	TROT
CHAPS	MANE	SADDLE	WITHERS
HELMET	PALOMINO	SORREL	WORLD SHOW

\_\_\_\_\_ /20 Points

*Below draw the different types of brushes. And then tell me how they are used.*

	CURRY COMB _____ _____ _____ _____ _____
	Dandy brush _____ _____ _____ _____ _____
	Grooming cloth _____ _____ _____ _____ _____
	Hoof pick _____ _____ _____ _____ _____
	Mane and tail comb _____ _____ _____ _____ _____
	Sweat scraper _____ _____ _____ _____ _____

\_\_\_\_ /12 Points

# TRUE OR FALSE

\_\_\_\_\_ A brown horse with black mane and tail is a bay.

\_\_\_\_\_ Do not run up behind a horse

\_\_\_\_\_ The age of a horse is determined by its size

\_\_\_\_\_ Grooming is important to avoid sores and skin problems.

\_\_\_\_\_ Boots and helmets are worn for safety.

\_\_\_\_\_ You never have to check your tack for wear and cracks.

\_\_\_\_\_ Gallop is the slowest gait.

\_\_\_\_\_ Arabians are the oldest and purest of all breeds.

\_\_\_\_\_ A whinny is a loud, piercing sound a horse makes.

\_\_\_\_\_ Horses have bad hearing and cannot hear as well as we can.

\_\_\_\_\_ /10 points

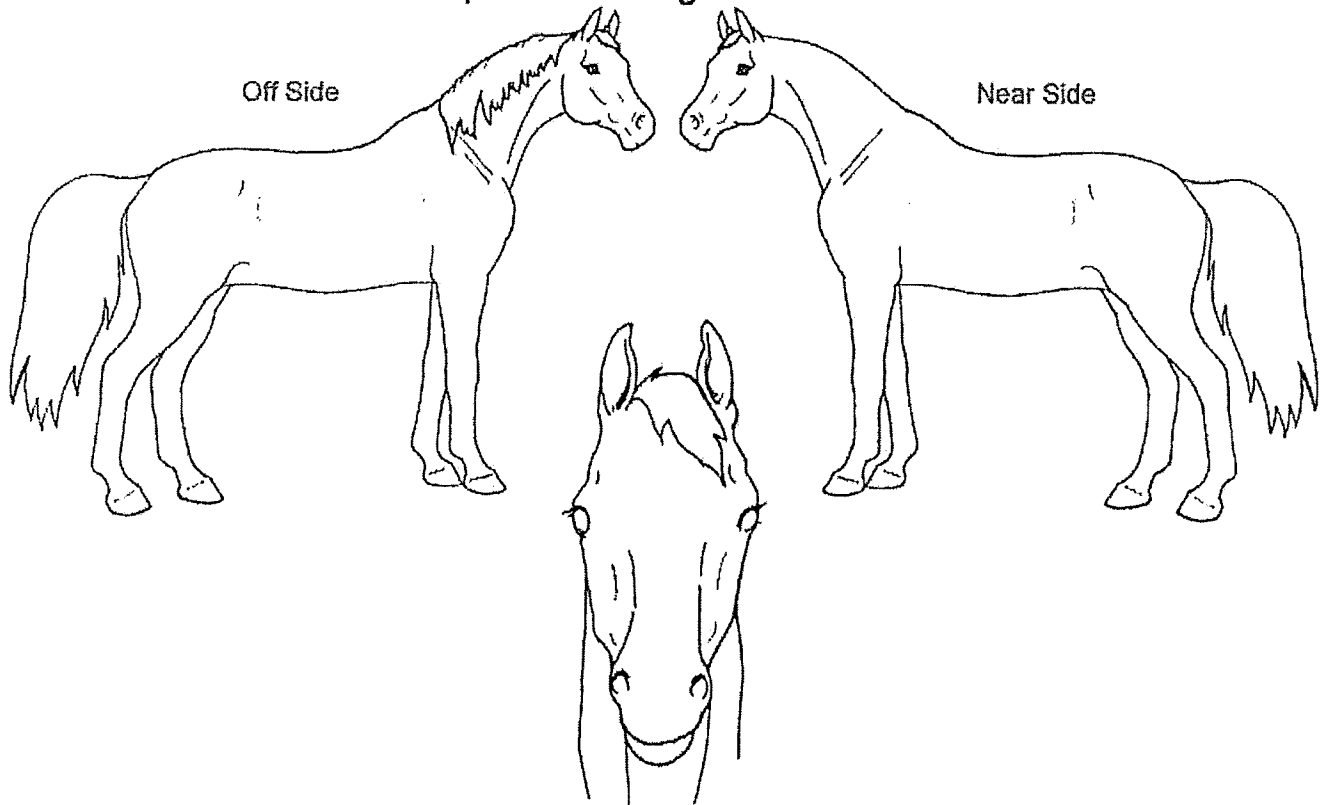
***Below is a horse with no marking. Read the description and color the horse like the description.***

This horse is a bay. With both front feet have white pasterns. Back right foot has a white sock.

Its face has both a stripe and a snip. This horse has a star brand on its left shoulder.

All 4 hoofs are the color of straw.

### Equine Markings Worksheet



\_\_\_\_\_ /11 Points

## Safety First

1. No \_\_\_\_\_ around horses.
2. Never run up \_\_\_\_\_ a horse.
3. Because of where his \_\_\_\_\_ are in his head a horse cannot see directly \_\_\_\_\_ of or \_\_\_\_\_ him.
4. If you have to \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ or \_\_\_\_\_, don't do it around horses.
5. They seem to \_\_\_\_\_ if you are \_\_\_\_\_ which makes them more \_\_\_\_\_.
6. Always walk around your \_\_\_\_\_. Never walk \_\_\_\_\_ the tie rope or step \_\_\_\_\_ it.
7. Wear \_\_\_\_\_ that will protect your \_\_\_\_\_ if the \_\_\_\_\_ steps on you.
8. Never wrap the \_\_\_\_\_ or \_\_\_\_\_ around your hand.
9. Always untie the \_\_\_\_\_ or \_\_\_\_\_ before taking the \_\_\_\_\_ off your horse. This may prevent it from \_\_\_\_\_ and becoming a \_\_\_\_\_.
10. Walk beside the horse when leading, not \_\_\_\_\_ or \_\_\_\_\_.
11. SEI approved \_\_\_\_\_, with harness \_\_\_\_\_ should be worn when mounting or driving.
12. Adjust the \_\_\_\_\_ carefully and tighten the \_\_\_\_\_ ensuring it will not turn when you mount.
13. Lead the horse a few \_\_\_\_\_ before \_\_\_\_\_.
14. Horses often \_\_\_\_\_ up when first \_\_\_\_\_, and failure to \_\_\_\_\_ later can result in serious accidents.
15. When your horse is \_\_\_\_\_ and attempts to \_\_\_\_\_, turn it in a \_\_\_\_\_ and \_\_\_\_\_ the circle until it \_\_\_\_\_.



16. Don't try to \_\_\_\_\_ a \_\_\_\_\_ horse. Teach the horse at \_\_\_\_\_ not in the \_\_\_\_\_.
17. Be a good \_\_\_\_\_; win without \_\_\_\_\_ and lose without \_\_\_\_\_.
18. Do not punish your \_\_\_\_\_, except at the \_\_\_\_\_ of the \_\_\_\_\_.
19. Horses require \_\_\_\_\_, \_\_\_\_\_, but firm \_\_\_\_\_.
20. Always treat other people on \_\_\_\_\_ and \_\_\_\_\_ in the same way you would \_\_\_\_\_ to be treated.

\_\_\_\_\_/58 points

## Inheritance and Genetics

### Fill in the blanks:

1. The study of how characteristics are passed from the parents to offspring is called \_\_\_\_\_.
2. \_\_\_\_\_ are the only links of inheritance an animal has with its parents. A \_\_\_\_\_ cell from the sire and an \_\_\_\_\_ cell from the dam.
3. Complex chemical compounds which are the carriers of inheritance are called \_\_\_\_\_ and \_\_\_\_\_.
4. Horses have \_\_\_\_\_ pairs of chromosomes in each cell.
5. Characteristics are passed from parents to offspring through \_\_\_\_\_ which are the "\_\_\_\_\_ " of the cell.
6. The formation of egg and sperm cells is called \_\_\_\_\_.
7. One pair of genes causes the coat to be either \_\_\_\_\_ or \_\_\_\_\_, depending on which particular combination of the \_\_\_\_\_ genes is present.
8. The \_\_\_\_\_ gene is dominant.
9. \_\_\_\_\_ means genetic makeup.
10. Consider these circumstances:
  - a.) A red (chestnut) mare(bb) is bred to a truly black stallion (BB). What color will the foal be? \_\_\_\_\_
  - b.) A black stallion that has a Bb genotype is bred to a red (bb) mare, what color will the foal be? \_\_\_\_\_
  - c.) A (Bb) stallion bred to (Bb) mare, what color will the foal be? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_/20 Points

**Inheritance & Genetics continued**

11. List 6 traits in horses that are influenced by genes:

_____	_____
_____	_____
_____	_____

12. Many equine crosses have been made, the most popular between the \_\_\_\_\_, as the male parent, and the horse \_\_\_\_\_ producing the \_\_\_\_\_.

13. A stallion bred to a jennet produces a \_\_\_\_\_.

14. The \_\_\_\_\_ and the \_\_\_\_\_ are usually sterile.

15. Stallions have one x \_\_\_\_\_ and one \_\_\_\_\_ chromosome, Their sex genotype is \_\_\_\_\_.

16. Mares have \_\_\_\_\_ x chromosomes. Their sex genotype is \_\_\_\_\_.

17. In reduction division in the stallion, half the \_\_\_\_\_ contain an \_\_\_\_\_ chromosome and half contain a \_\_\_\_\_ chromosome. In the mare all \_\_\_\_\_ cells contain an x \_\_\_\_\_.

18. If a sperm carrying an x chromosome \_\_\_\_\_ the egg, the foal will Have an xx genotype, and would develop as a \_\_\_\_\_.

19. If a sperm carrying a \_\_\_\_\_ chromosome happens to fertilize the egg, the foal genotype would be \_\_\_\_\_ and would be a stallion.

20. The chances are \_\_\_\_\_ for the foal to be \_\_\_\_\_ or \_\_\_\_\_.

\_\_\_\_\_ /29 Points

**State 4h horse and pony project show rules and regulations.**

Name two Gymkhana disqualifications

1. \_\_\_\_\_

2. \_\_\_\_\_

True or False

\_\_\_\_\_ Electronic timers are preferred over stopwatches?

\_\_\_\_\_ The start/finish timing line must be minimum of 15 feet from the end of the arena?

\_\_\_\_\_ The timing line must be visibly marked in the arena?

\_\_\_\_\_ The barrel bending pattern is run around 10 barrels?

\_\_\_\_\_ Cloverleaf barrel race riders have the option of riding course A or B?

What are the 8 general gymkhana rules?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

\_\_\_\_\_

8. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

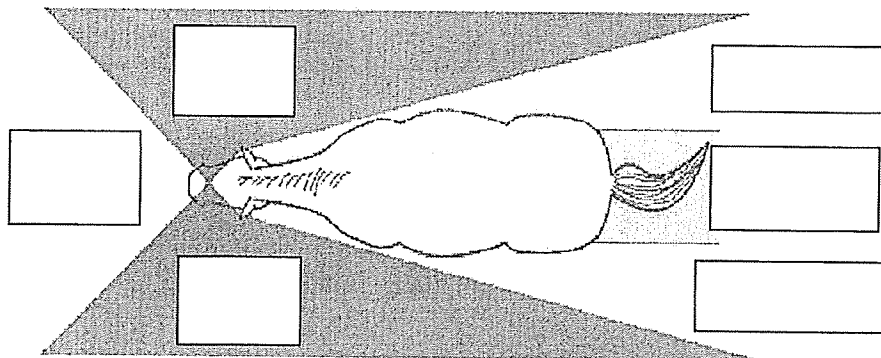
\_\_\_\_\_

\_\_\_\_\_ /15 Points

## Horses and horsemanship and horse science

1. What is a canter? \_\_\_\_\_
2. Which side of the horse is the near side? \_\_\_\_\_
3. The sequence of footfalls at walk, when it is begun with the left hind leg is:
  1. \_\_\_\_\_ 2. \_\_\_\_\_
  3. \_\_\_\_\_ 4. \_\_\_\_\_
4. What is the wooden or metal frame of the saddle called? \_\_\_\_\_
5. What is a "cooled out" horse? \_\_\_\_\_
6. What is a slow trot called? \_\_\_\_\_
8. The normal temperature of a horse is? \_\_\_\_\_
9. A horses pulse may be taken by pressure of the fingers on the artery which passes? \_\_\_\_\_  
\_\_\_\_\_
10. What makes up most of the blood? \_\_\_\_\_
11. Can a horse vomit? \_\_\_\_\_

Below is vision of the horse Fill in the boxes



\_\_\_\_\_/19 Points

## Laminitis: Prevention and Treatment

### Laminitis defined

Laminitis results from the disruption of blood flow to the sensitive and insensitive laminae. These laminae structures within the foot secure the coffin bone (the wedge-shaped bone within the foot) to the hoof wall. Inflammation often permanently weakens the laminae and interferes with the wall/bone bond. In severe cases, the bone and the hoof wall can separate. In these situations, the coffin bone may rotate within the foot, be displaced downward ("sink") and eventually penetrate the sole. Laminitis can affect one or all feet, but is most often seen in the front feet concurrently.

The terms "laminitis" and "founder" are used interchangeably. However, founder usually refers to a chronic (long-term) condition associated with rotation of the coffin bone, whereas acute laminitis refers to symptoms associated with a sudden initial attack, including pain and inflammation of the laminae. While the exact mechanisms by which the feet are damaged remain a mystery, certain precipitating events can produce laminitis. Although laminitis occurs in the feet, the underlying cause is often a disturbance elsewhere in the horse's body. The causes vary and may include the following:

- Digestive upsets due to grain overload (such as excess grain, fruit or snacks) or abrupt changes in diet.
- Sudden access to excessive amounts of lush forage before the horse's system has had time to adapt; this type of laminitis is known as "grass founder."
- Toxins released within the horse's system.
- High fever or illness; any illness that causes high fever or serious metabolic disturbances has the potential to cause laminitis, e.g., Potomac Horse Fever.
- Severe colic
- Retained placenta in the mare after foaling.
- Excessive concussion to the feet, often referred to as "road founder."
- Excessive weight-bearing on one leg due to injury of another leg or any other alteration of the normal gait.
- Various primary foot diseases.
- Bedding that contains black walnut shavings.

Although controversial, prolonged use or high dose of corticosteroids may contribute to the development of laminitis in some horses. Factors that seem to increase a horse's susceptibility to laminitis or increase the severity of the condition when it does occur include the following:

- Heavy breeds, such as draft horses
- Overweight body
- High nutritional plane (feeding large amount of carbohydrate-rich meals)
- Ponies, Morgans, miniature horses and donkeys.
- Unrestricted grain binges, such as when a horse breaks into the feed room (if this happens, **do not wait** until symptoms develop to call your veterinarian- **Call immediately so corrective action can be taken before tissue damage progresses.**)
- Horses who have had previous episodes of laminitis
- Older horses with Cushing's disease.

## Signs

Signs of acute laminitis include the following:

- Lameness, especially when a horse is turning in circles; shifting lameness when standing.
- Heat in the feet.
- Increased digital pulse in the feet (most easily palpable over either sesamoid bone at the level of the fetlock).
- Reluctant or hesitant gait (“walking on eggshells”).
- A “sawhorse stance,” with the front feet stretched out in front to alleviate pressure on the toes and the hind feet positioned under them to support the weight that their front feet cannot.

## Signs of chronic laminitis may include the following:

- Rings in hoof wall that become wider as they are followed from toe to heel.
- Bruised soles or “stone bruises.”
- Widened white line, commonly called “seedy toe,” with occurrence of seromas (blood pockets) and/or abscesses.
- Dropped soles or flat feet.
- Thick, “cresty” neck.
- Dished hooves, which are the result of unequal rates of hoof growth (the heels grow at a faster rate than the rest of the hoof, resulting in an “aladdin-slipper” appearance).

## Treatment

The sooner treatment begins, the better the chance for recovery. Treatment will depend on specific circumstances but may include the following: \

- Diagnosing and treating the primary problem (laminitis is often due to systeming or general problem elsewhere in the horse’s body).
- Dietary restrictions; stop feeding all grain-based feeds and pasture. Feed only grass hay until advised by your veterinarian.
- Treating with mineral oil via a nasogastric tube to purge the horse’s digestive tract, especially if the horse has overeaten.
- Administering fluids if the horse is ill or dehydrated.
- Administering other drugs such as antibiotics to fight infection; anit-endotoxins reduce bacterial toxicity; and anticoagulants and vasodilators to reduce blood pressure while improving blood flow to the feet.
- Stabling the horse on soft ground, such as in sand or shavings (not black walnut) and encouraging the horse to lie down to reduce pressure on the weakened laminae.
- Opening and draining any abscesses that may develop.
- Cooperation between your veterinarian and the farrier (techniques that may be helpful include corrective trimming, frog supports and therapeutic shoes or pads.)
- Your veterinarian may be able to advise you on new therapies that may include standing your horse in ice water to prevent the onset of laminitis after a predisposing cause such as a retained placenta or known grain overload.

## **Long-term outlook**

Some horses that develop laminitis make uneventful recoveries and go on to lead long, useful lives. Unfortunately, others suffer such severe, irreparable damage that they are, for humane reasons, euthanized.

Your equine practitioner can provide you with information about your horse's condition based on radiographs (X-rays) and the animal's response to treatment. Radiographs will show how much rotation of the coffin bone has occurred and may also illustrate abscesses or gas accumulation that will affect the therapy of your horse. This will help you make a decision in the best interest of the horse and help the farrier with the therapeutic.

## **Management**

It's important to note that once a horse has had laminitis, it may be likely to recur. In fact, a number of cases become chronic because the coffin bone has rotated within the foot and the laminae never regain their original strength. There may also be interference with normal blood flow to the feet as well as metabolic changes within the horse. Extra care is recommended for any horse that has had laminitis, including:

- A modified diet that provides adequate nutrition based on high quality forage, digestible fiber (beet pulp) and oil. Avoid excess carbohydrates, especially from grain.
- Routine hoof care, including regular trimming and, in some cases, therapeutic shoeing (additional radiographs may be needed to monitor progress).
- A good health -maintenance schedule, including parasite control and vaccinations, to reduce the horse's susceptibility to illness or disease.
- Possibly a nutritional supplement formulated to promote hoof health (biotin supplements are popular for promoting hoof growth).
- Avoid grazing lush pastures, especially between late morning and late afternoon hours, since plant sugars are the highest during these times. Restrict pasture intake during spring or anytime the pasture suddenly greens up.

## **Summary**

The best way to deal with laminitis is preventing the causes under your control. Keep all grain stored securely out of the reach of horses. Introduce your horse to lush pastures gradually. Be aware that when a horse is ill, under stress or overweight, it is especially at risk. Consult your equine practitioner to formulate a good dietary plan. Provide good, routine health and hoof care. If you suspect laminitis, consider it a medical emergency and notify your veterinarian immediately.



## Laminitis

### 1. Definition of Laminitis:

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### 2. What is the difference between Laminitis and founder?

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### 3. Causes of Laminitis

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

### 4. Signs of Laminitis: True or False?

- a. \_\_\_ 1. Turning in circles; shifting lameness when standing.
- b. \_\_\_ 2. Cold in feet.
- c. \_\_\_ 3. No reluctant or quick gait.
- d. \_\_\_ 4. A sawhorse stance with the front feet stretched out.

### 5. Signs of chronic laminitis, true or false?

- a. \_\_\_ 1. Rings in hooves that become narrower.
- b. \_\_\_ 2. Widened white line, commonly called apple toe.
- c. \_\_\_ 3. Dropped soles or flat feet.
- d. \_\_\_ 4. Thick crusty mane .

### Factors that increase Laminitis:

- 1. \_\_\_\_\_ breeds such as \_\_\_\_\_ horses.

2. \_\_\_\_\_ body.
3. \_\_\_\_\_ grain binges.
4. \_\_\_\_\_ horses with \_\_\_\_\_ disease.

**Treatment:**

Give four treatments for laminitis,

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_

T or F Long term outlook and management:

1. \_\_\_\_ All horses recover
2. \_\_\_\_ Radiographs won't show how much rotation of the coffin bone there is.
3. \_\_\_\_ Avoid grazing lush pastures especially between late morning and late afternoon hours.
4. \_\_\_\_ A good health maintenance schedule, including parasite control and vaccinations reduces the horses chances of becoming ill.

\_\_\_\_\_/29 Points

Color Contest



Finished Date: \_\_\_\_\_

\_\_\_\_\_/2points