Name: _____ Date: _____

How Are Horses and Ponies Different?

Reading level 11 (7th grade) · 1551 words

How are horses and ponies different? It was the first line of Nora's report, and the barn gave her two animals to start with. Pepper, a pony, stood about as high as Nora's chin, while Duke, a horse, stood a head above her. Nora guessed the answer was simple: ponies are small, and horses are big. Then the barn manager smiled. "That is part of it," she said. "Ask what a pony has to measure." Nora wrote the question in her notebook and underlined it twice.

Horse people do not measure in feet. They use hands, and one hand is four inches. They measure from the ground to the withers, the high spot at the base of the neck where the mane ends. A height such as 14.2 means fourteen hands and two inches, not fourteen and two tenths. US Equestrian's 2026 rulebook says a pony does not exceed 14.2 hands. That is 58 inches, since 14 times 4 is 56, plus 2. The barn manager had measured Pepper at 13.2 hands, or 54 inches, so she counted as a pony. Duke measured 17 hands, or 68 inches, so he counted as a horse.

Height is not the whole answer, though. Most people picture a pony as stocky, with short legs and a thick mane and tail, and the Shetland pony fits that picture. It comes from the Shetland Islands of Scotland, where some worked in mines. Yet the label can bend. A miniature horse stands about three feet tall or less, and people still call it a horse. A polo pony can be any height, because there the word names a job, not a size. And a pony is not a young horse. A pony foal grows up to be a pony.

The rulebook itself makes exceptions. US Equestrian's General Rules say that in a class where height is a rule of entry, "horse" means an animal over 14.2 hands. Then the rules list breeds the height line does not apply to. Arabians, Morgans, Icelandics, Connemaras and Welsh Cobs are on that list. Kentucky Equine Research adds that an animal between 46 and 58 inches tall can be registered both as a Quarter Horse and as a Quarter Pony. So a small body does not settle it either. Nora wrote a second line in her notebook: height starts the answer, and breed and job finish it.

Pepper was built differently too. Kentucky Equine Research describes the pony most people picture as smaller than a horse and more heavy-bodied for its size. The same article says small and medium ponies tend to be "easy keepers." They can hold their weight, or even gain it, on grass alone. Too much rich pasture or grain can make them sick. Nora noticed that Pepper wore a grazing muzzle in the paddock, which limits how much she can eat. The largest ponies, the article adds, can be fed much as horses are.

What a pony and a horse share is a body built for escape. Both are prey animals. One extension guide says a newborn foal can stand in under an hour and run by about an hour

and a half. Pepper's eyes sit on the sides of her head, so she sees a very wide view. Her two eyes overlap only straight ahead, across about 60 degrees, half of what a person has. Horse guides also list a blind spot right behind her, and another right in front of her face. Her ears can swivel about halfway around to point at one sound.

All of this explains the barn rules, which Nora copied into her notebook. Nationwide Children's Hospital says not to touch a horse unless someone in charge gives permission. Because of the blind spots, people walk up slowly toward a horse's shoulder and do not walk behind it. Boston Children's Hospital gives the same advice. Nationwide Children's adds that everyone on a horse, even an adult, should wear a riding helmet that fits well. Mississippi State's extension service says it should meet ASTM and Safety Equipment Institute standards. A bicycle helmet is not built to those standards.

Nora's report had one more question, a bigger one than the barn could answer: where did tame horses come from? The earliest clear signs of people keeping horses are at Botai, on the grasslands of Central Asia, about 5,500 years ago. Archaeologists found signs of bridling, milking and corralling there. But DNA added a twist. Studies in the journal Nature, in 2021 and again in 2024, compared hundreds of ancient horse genomes. They found that today's domestic horses do not come from the Botai horses. They come from a line that spread from the grasslands around the lower Volga and Don rivers, in what is now Russia. That was about 4,200 years ago.

That is the answer so far. It is not the last one. A 2018 study in Science called the exact nature of early horse domestication controversial, which means people argue about it. The 2024 study dated human control of the modern horse line to about 2200 BCE. It also found shorter generation times in Botai horses around 3500 BCE, which its authors read as local horse husbandry before that line began. But some researchers said that study ignored earlier signs of horse herding and riding. So Nora wrote her answer with a small "so far" attached.

Now for the unicorn, which Nora had saved for last. The oldest description of a one-horned animal in Greek writing is by Ctesias, a doctor at the Persian court, around 400 BCE. He wrote that India had wild asses as large as horses, with white bodies, dark red heads and a horn on the forehead about a cubit long, roughly a foot and a half. But Ctesias had never been to India. Britannica says his book rested on reports from travelers and merchants. More than four hundred years later, the Roman writer Pliny described a one-horned animal. It had a horse's body, a stag's head, an elephant's feet and a boar's tail.

Which real animal was behind it? Britannica says it was probably an Indian rhinoceros, though scholars still argue about it. One 2001 paper in a classics journal pointed to animals of Central Asia instead. Marco Polo shows how a rhinoceros looked to a traveler. In the 1200s he wrote about unicorns in a land called Basma. His translator, Henry Yule, took Basma to be Sumatra. Polo said the animals were almost as big as elephants, with hair like a buffalo, feet like an

elephant and one thick black horn. He called the creature "a passing ugly beast to look upon," nothing like the stories of a unicorn caught in a maiden's lap.

The horns people really held came from the sea. In 1577 the English explorer Martin Frobisher found a dead "great fish" on an island in northern Canada. A horn two yards long grew from its snout. He wrote that it "may truly thought to be the sea-unicorn." He gave it to Queen Elizabeth, and she had it kept with the crown jewels. The animal was a narwhal, and the "horn" was a tooth. For centuries, traders sold narwhal tusks as unicorn horns. Elizabeth was said to have paid as much for one as a castle cost. The Met Museum says plainly that a tusk cannot protect anyone from poison.

The unicorn never disappeared. It became a symbol, and it is the national animal of Scotland. The Royal Collection Trust says Scotland's kings used it before 1603. Since then the British royal coat of arms has shown the Scottish unicorn on one side and the English lion on the other. Look closely and the unicorn wears chains around its body and a crown around its neck. That means it has been brought under the monarch's command. At The Met Cloisters in New York, seven late Gothic tapestries show the hunt for a unicorn. In 2021 the Met said a narwhal tusk was on view in the same gallery.

One real animal does carry the name. Elasmotherium sibiricum, called the Siberian unicorn, was a rhinoceros. It weighed up to 3.5 metric tons, about 7,700 pounds by our arithmetic. It grazed on dry grassland from southwestern Russia and Ukraine to Kazakhstan and Siberia. No one has found its horn, but a large boss on the skull is thought to have held one. Radiocarbon dating of its bones shows it lived until at least 39,000 years ago. That is tens of thousands of years before Ctesias wrote. The Natural History Museum in London says there is no evidence that people had anything to do with its end.

Nora's report finally had its answers. A pony is an animal up to 14.2 hands, usually a stockier one, and the rule has exceptions. Horses and ponies share senses built for escape. Those explain the rules at the barn. A unicorn is a story that probably grew from travelers' reports of a rhinoceros. Many of the horns people held were narwhal teeth. A giant rhino of Siberia earned the nickname, though it vanished long before anyone wrote about unicorns. On the last page, Nora wrote one more question in pencil, because its answer could still change. Who first tamed a horse, and when? Scientists are still arguing about it.

Questions

1. What does a hand measure on a horse?

A. Four inches, from the ground to the withers

B. Four feet, from nose to tail

C. One inch, across the hoof

2. Why is a miniature horse called a horse and not a pony?

A. It is taller than any pony
B. The word pony can depend on type and use, not only size
C. Ponies cannot be small

3. Why do people walk up to a horse toward its shoulder and not from behind?

A. The shoulder is where a horse likes to be fed
B. A horse's ears point backward
C. A horse has blind spots right in front and right behind

4. What did the 2021 DNA study find about modern domestic horses?

A. They do not descend from the Botai horses
B. They descend directly from the Botai horses
C. They first appeared in Scotland

5. In the part about Frobisher, what does the word tusk mean?

A. A kind of horse
B. A fish's fin
C. A very long tooth

6. Why did Nora attach a small "so far" to her answer?

A. Scientists have stopped looking
B. New DNA can change a date or a place
C. Nobody can read DNA

Words to know

withers: top of shoulders
stocky: short and solid
narwhal: Arctic whale
tusk: long tooth
genomes: full DNA sets
controversial: still argued over

Answer key: How Are Horses and Ponies Different?

1. A. Four inches, from the ground to the withers
2. B. The word pony can depend on type and use, not only size
3. C. A horse has blind spots right in front and right behind
4. A. They do not descend from the Botai horses
5. C. A very long tooth
6. B. New DNA can change a date or a place