

LEARNING AREAS: SCIENCE, MATHEMATICS, ENGLISH

The Characteristics and Features of Thoroughbred Horses



The Characteristics and Features of Thoroughbred Horses

Horses can be grouped in different ways to help us understand more about their features.

Horses are **living** things because they move, respire, respond to their environment (sensitivity), grow, reproduce, excrete, and need nutrition.

Horses are **mammals** because they are warm-blooded (endothermic), have hair/fur covering their bodies, and give birth to live young. After birth, baby horses (called foals) drink milk from their mothers – this is an important feature of all mammals.

Horses are part of the **Equidae** family. They have large bodies with a slender neck and long legs. Equidae animals have a single toe on each foot, which is covered by a hoof. Zebras and donkeys belong to this family too.

There are many different **breeds** of horses that have unique features. Certain breeds of horses are more suited to particular activities. Large horse breeds like Clydesdales are used for heavy work such as pulling carts or ploughs on farms. Smaller breeds like Shetland ponies can be used to teach children how to ride. Strong, tall thoroughbreds are very fast and well suited for racing.



What is a thoroughbred horse?

Thoroughbreds are a breed of horse known for their speed and agility. These horses are mainly used for racing because they can run very fast over long distances.

Things you will notice about a thoroughbred

Thoroughbred horses have **short, sleek coats** that lie flat against their skin. Their coats can be different colours like bay (brown), chestnut (reddish-brown), black, and grey.

Horses have large **eyes on the sides of their heads**, which allows them to see almost all the way around their bodies. However, they cannot see directly in front of their noses or directly behind their tails. The areas where horses cannot see are called **blind spots**.

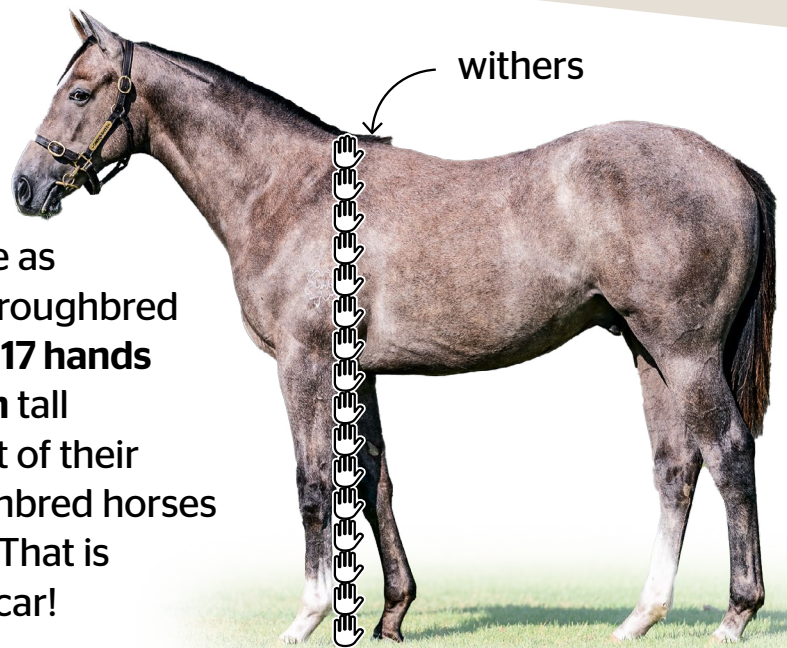


Horses have **ears** that can turn in **different directions** to detect sounds around them. This helps them hear noises that could be approaching predators or other types of danger. Their ears can also help us understand how a horse is feeling. When their ears are forward, it shows curiosity or interest. Ears pushed backwards against their head can mean they are annoyed, scared, or angry. Droopy ears pointing to the side can show they are relaxed or bored, while ears that are flicking around quickly mean a horse is nervous or interested in the sounds around them.



How big is a thoroughbred?

A “hand” is a unit used to measure a horse’s size. One hand is the same as approximately 10 centimetres. Thoroughbred horses are usually **between 15.2 to 17 hands high (hh)**, or **between 157 to 173 cm** tall from their **withers** (the highest part of their shoulders) to the ground. Thoroughbred horses **weigh** around **550 kilograms (kg)**. That is almost the same weight as a small car!



What makes a thoroughbred horse so fast?

Unlike humans, horses can only breathe through their nostrils. Thoroughbred horses have very **large nostrils**, which help them to breathe lots of air into their lungs quickly. This is important during racing because horses need a lot of oxygen to keep their muscles working hard and maintain high speeds.

Thoroughbred horses have long, thin legs that allow them to take big steps when walking, trotting, cantering, and galloping. The **large muscles** at the tops of their legs help them to speed up quickly and keep a fast pace as they race.

The **hooves** of thoroughbreds are hard and strong, which helps protect their feet when running on racing tracks.



Thoroughbred horses have **larger hearts** than other horse breeds. This helps them pump more blood to their muscles more quickly as they run, allowing them to maintain high speeds over long distances without getting tired quickly.

Characteristics - tracing

Tracing activity

Read and trace each of the words.



hoof



legs



hair



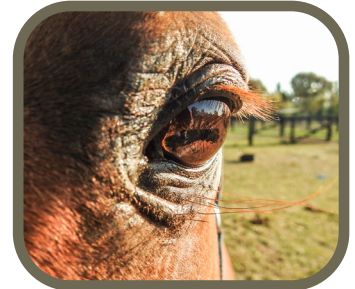
ears



eyes

Answer the questions to show what you know about the characteristics of thoroughbred horses.

a) Why can't thoroughbred horses see directly in front of their noses and/or directly behind their tails?



b) How do their long, thin legs help thoroughbreds to race?



c) What does it mean when a thoroughbred horse's ears are pointing forward?



d) Why are large nostrils helpful for thoroughbreds when they are racing?



Characteristics and features - cloze activity

e) Use the words below to fill in the blank spaces.

donkeys nutrition hair Shetland ponies mammals legs
breeds Clydesdales foals Thoroughbreds hoof



Horses are living things because they move, respire, respond to their environment (sensitivity), grow, reproduce, excrete, and need _____.

Horses are mammals because they are warm-blooded (endothermic), have ____ /fur covering their bodies, and give birth to live young. After birth, baby horses (called _____) drink milk from their mothers – this is an important feature of all _____.

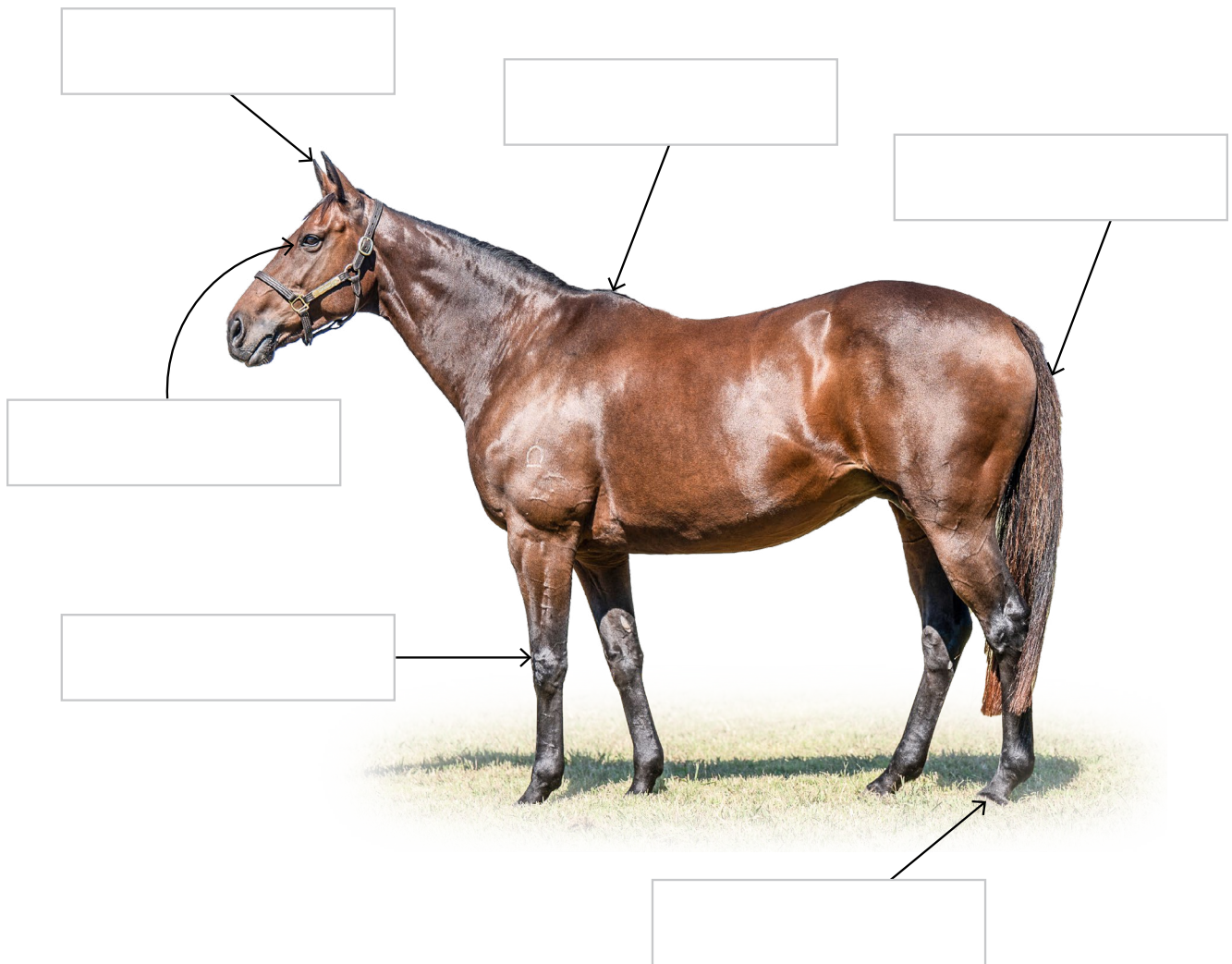


Horses are part of the Equidae family. They have large bodies with a slender neck and long _____. Equidae animals have a single toe on each foot, which is covered by a _____. Zebras and _____ belong to this family too.

There are many different _____ of horses that have unique features. Certain breeds of horses are more suited to particular activities. Large horse breeds like _____ are used for heavy work such as pulling carts or ploughs on farms. Smaller breeds like _____ can be used to teach children how to ride. Strong, tall _____ are very fast and well suited for racing.

Label the features of the thoroughbred horse

f) Cut and paste the words to label the thoroughbred horse.



hoof

ear

tail

eye

withers

leg



How many hands? Data sheet

The size and shape of thoroughbred horses' bodies allows them to take long strides as they move, helping them to cover more ground quickly and efficiently during races. **Read the information to learn about the height of different breeds of horses.**



Clydesdales are approximately **18 hands high (hh)** or **183 centimetres** tall from the ground to the withers.



Shetland ponies are approximately **10 hands high (hh)** or **102 centimetres** tall from the ground to the withers.



Winx is a famous Australian thoroughbred racehorse that won 37 of the 43 races she ran in. Winx is approximately **16.1 hands high (hh)** from the ground to her withers, or **164 centimetres** tall.

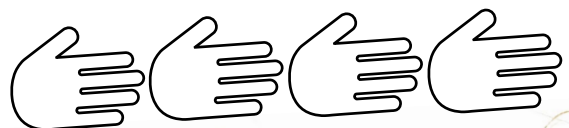
How many hands? Measurement activity



For many years, people have used “hands” to measure how tall horses are. This involved counting how many adult human hands would fit between the ground and the highest point of the horse’s back. Before rulers or tape measures were invented, this method made it easier for people to compare horse heights.

Follow the instructions to use your hands to compare the heights of these breeds of horses.

- 1** Use a metre ruler (or tape measure) and a piece of string to roll the string out to the height of the three breeds of horses on the data sheet.
- 2** Order the string from the shortest to the tallest horse.
- 3** Trace and cut out a copy of your hand.
- 4** Count the number of times your hand fits from the top to the bottom of the three pieces of string.
- 5** Record your measurements on the next page.



FOUNDATION - YEAR 4

Record your measurements in the spaces below.



g) A Clydesdale horse:

- 1) _____ of my hands in height
- 2) This is the same as _____ cm



h) A Shetland pony:

- 1) _____ of my hands in height
- 2) This is the same as _____ cm



i) Winx (a thoroughbred horse) is:

- 1) _____ of my hands in height
- 2) This is the same as _____ cm

j) Challenge: Can you find the difference between the standard hands high (hh) measurement of each horse and the number of your hands high each horse was in total?

For example, a Clydesdale horse is 18 hh.

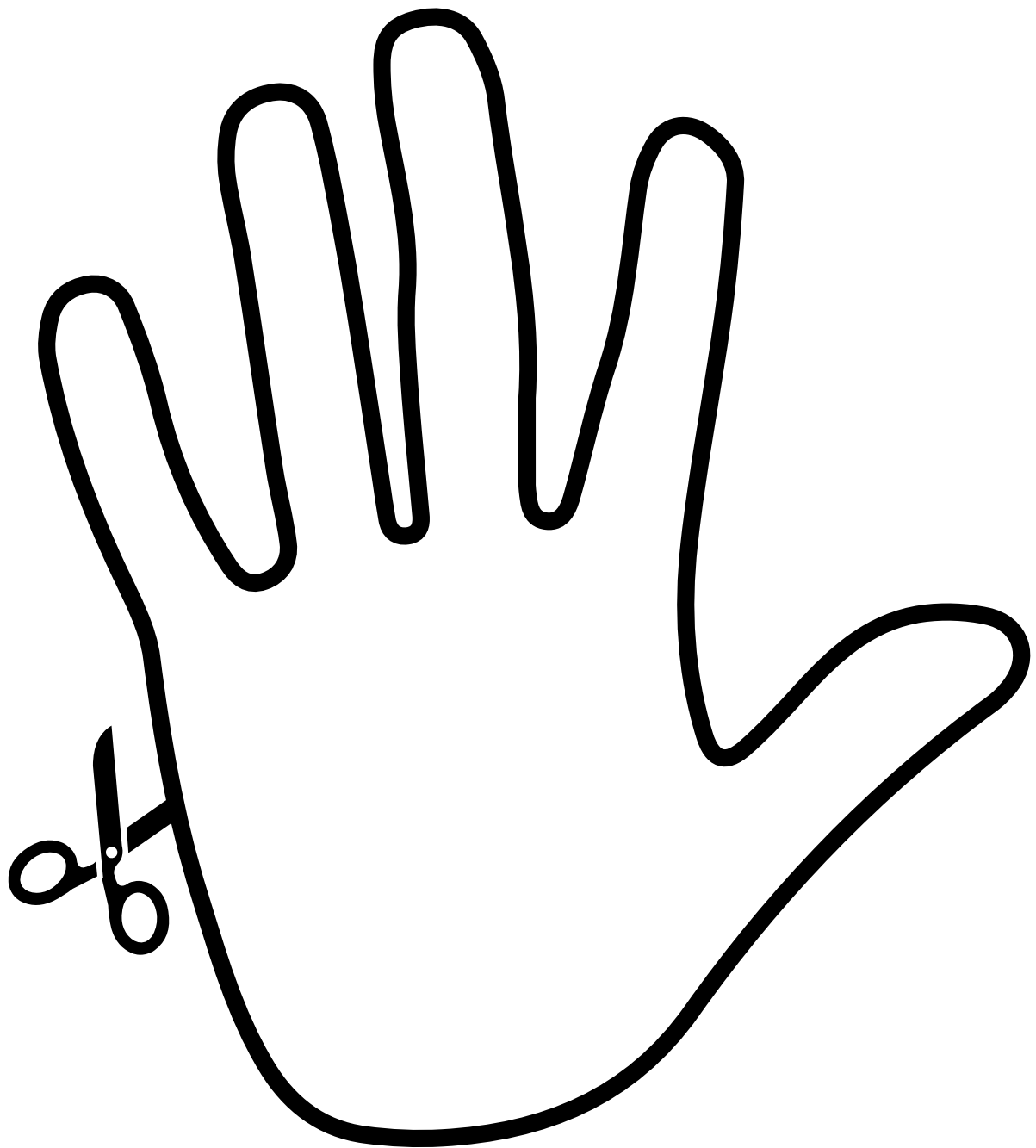
A Clydesdale horse is 25 of my hands in height.

The difference is: $25 - 18 = 7$ hh

Record your answers in a workbook or a digital document.

FOUNDATION - YEAR 4

Cut out the hand template and measure the number of times a 10 cm unit hand measure fits for the height of each horse. Compare this with the number of times your hand fits from the top to the bottom of the three pieces of string.



Learning Areas | Australian Curriculum Content:

Science

Observe external features of plants and animals and describe ways they can be grouped based on these features (AC9SFU01)

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals (AC9S3U01)

Mathematics

Compare directly and indirectly and order objects and events using attributes of length, mass, capacity and duration, communicating reasoning (AC9M1M01)

Measure the length of shapes and objects using informal units, recognising that units need to be uniform and used end-to-end (AC9M1M02)

Measure and compare objects based on length, capacity and mass using appropriate uniform informal units and smaller units for accuracy when necessary (AC9M2M01)

Measure and compare objects using familiar metric units of length, mass and capacity, and instruments with labelled markings (AC9M3M02)

English

Use comprehension strategies such as visualising, predicting, connecting, summarising and questioning when listening, viewing and reading to build literal and inferred meaning by drawing on vocabulary and growing knowledge of context and text structures (AC9E1LY05)

Read texts with phrasing and fluency, using phonic and word knowledge, and monitoring meaning by re-reading and self-correcting (AC9E2LY04)

Use comprehension strategies such as visualising, predicting, connecting, summarising, monitoring and questioning to build literal and inferred meaning (AC9E2LY05)

Read a range of texts using phonic, semantic and grammatical knowledge to read accurately and fluently, re-reading and self-correcting when required (AC9E3LY04)

Use comprehension strategies when listening and viewing to build literal and inferred meaning, and begin to evaluate texts by drawing on a growing knowledge of context, text structures and language features (AC9E3LY05)

Read different types of texts, integrating phonic, semantic and grammatical knowledge to read accurately and fluently, re-reading and self-correcting when needed (AC9E4LY04)

Use comprehension strategies such as visualising, predicting, connecting, summarising, monitoring and questioning to build literal and inferred meaning, to expand topic knowledge and ideas, and evaluate texts (AC9E4LY05)

ATTRIBUTION, CREDIT & SHARING

This resource was produced by Primary Industries Education Foundation Australia (PIEFA) in collaboration with Thoroughbred Breeders Australia. Primary Industries Education Foundation Australia's resources support and facilitate effective teaching and learning about Australia's food and fibre industries. We are grateful for the support of our industry and member organisations for assisting in our research efforts and providing industry-specific information and imagery to benefit the development and accuracy of this educational resource.

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