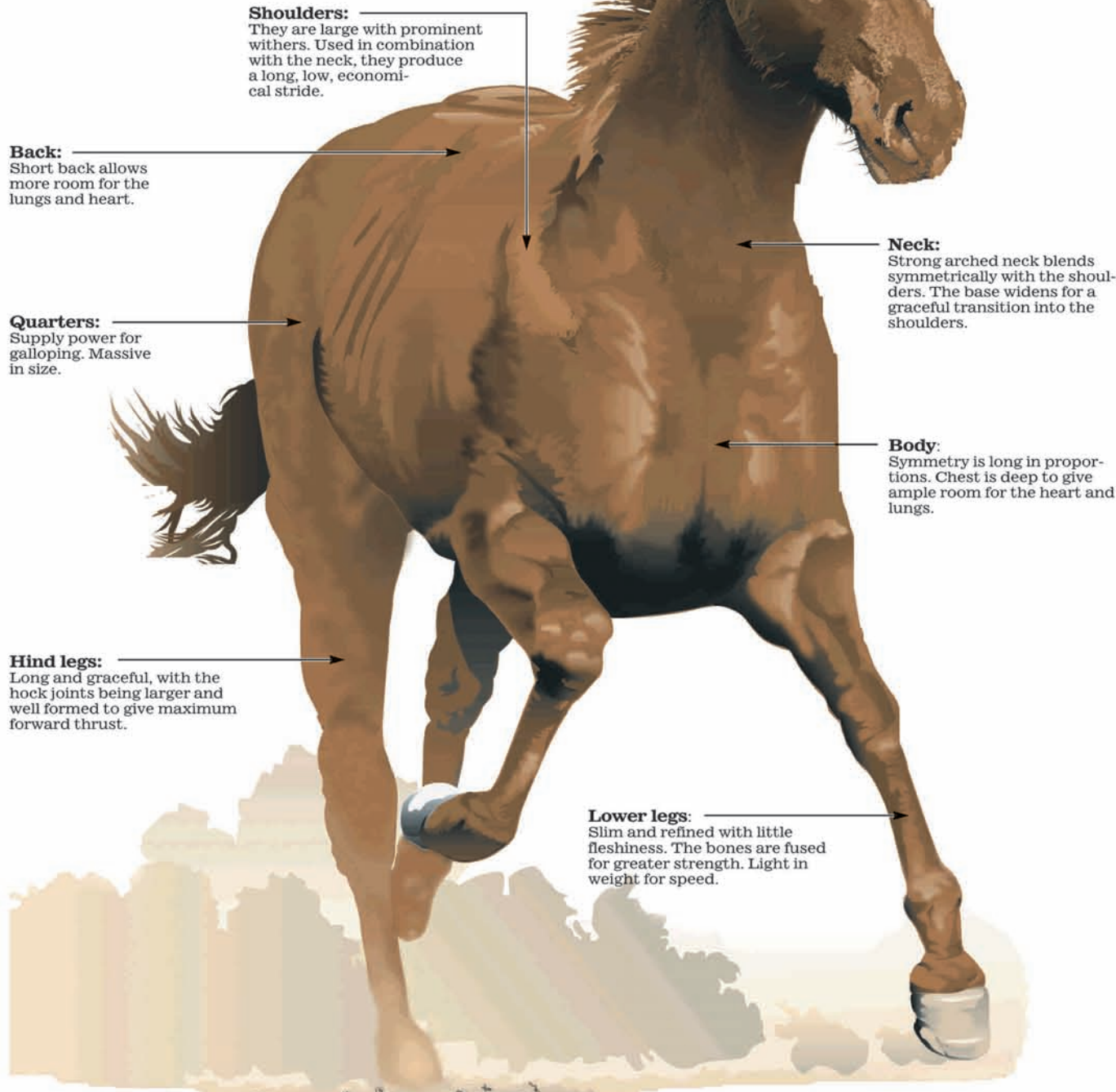


Born to run

Human interference in the evolution of the equine species, through breeding of race horses, has produced an animal built for speed.



Shoulders: They are large with prominent withers. Used in combination with the neck, they produce a long, low, economical stride.

Back: Short back allows more room for the lungs and heart.

Quarters: Supply power for galloping. Massive in size.

Hind legs: Long and graceful, with the hock joints being larger and well formed to give maximum forward thrust.

Lower legs: Slim and refined with little fleshiness. The bones are fused for greater strength. Light in weight for speed.

Head: Thoroughbreds' heads are refined and responsive. There is no fleshiness in the jaw.

Neck: Strong arched neck blends symmetrically with the shoulders. The base widens for a graceful transition into the shoulders.

Body: Symmetry is long in proportions. Chest is deep to give ample room for the heart and lungs.

Evolution of speed



Size: 14-15"

Eohippus (Dawn Horse): 60 million years ago, these tiny prehistoric animals lived in the forests. Gradually, the animal evolved, its four toes developing into a single hoof.



Size: 52"

Przewalski: The world's oldest breed of wild horse was probably used first by nomadic herdsmen on the Eurasian steppe c. 3500 B.C. as pack animals.



Size: 52"

Tarpan: Horses with heavy foreheads and high crests ideal for pulling chariots were imported into the Near East and Egypt in the second millennium B.C. Assyrian chariotiers began riding horseback in the 9th century B.C.



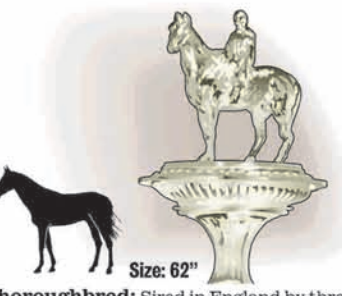
Size: 60"

Nisaeen: Bred and used by the Medes and Persians in the 6th century B.C. to build one of the world's largest empires. Cavalrymen praised their speed, endurance and fighting spirit.



Size: 59"

Arabian: Perhaps the oldest breed in existence, the descendants of the legendary mare Baz and stallion Hashaba in 3000 B.C. were praised for their intelligence and their ability to run distances with little food or water. Starting in the 7th century A.D., Muslim conquerors used Arabian mounts to spread their empire and religion to Africa, Asia and Europe.

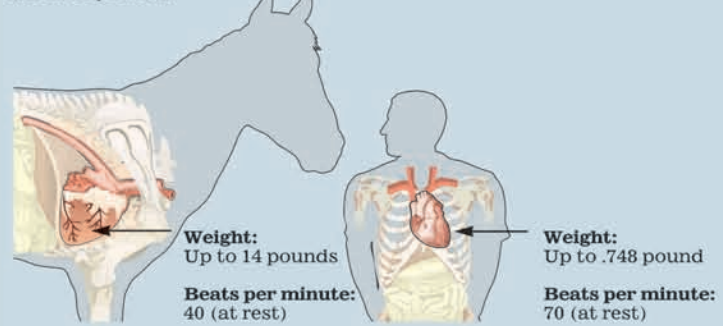


Size: 62"

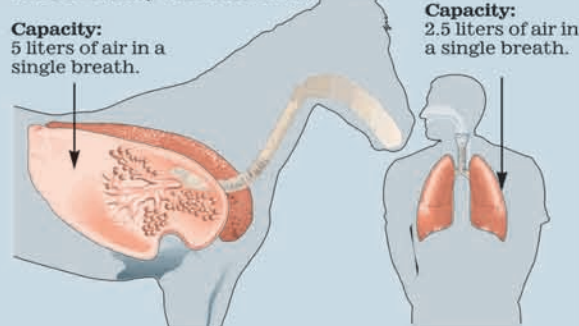
Thoroughbred: Sired in England by three imported Arabians—the Byerley Turk (1689), the Darley Arabian (1705)—and the Godolphin Arabian (1728), which were mated with local mares. Thoroughbreds were imported to Virginia about 1750 and became the basis for the stock used in today's Triple Crown.

How horses compare to humans

Heart
The horse's heart consists of four chambers with four sets of valves. Race horses have hearts that are larger than the average; that of Eclipse weighed about 14 pounds.

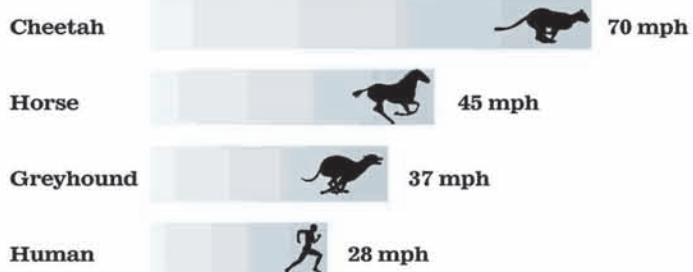


Lungs
Like humans, the more oxygen the blood carries to the muscles, the more efficiently the horse runs.



Speeds compared

Horses reach speeds nearly twice as fast as the quickest humans.



Pace setters

The 10 fastest times in Preakness history.

Year	Horse	Time
1996	Louis Quatorze	1:53 2/5
1985	Tank's Prospect	1:53 2/5
1984	Gate Dancer	1:53 3/5
1990	Summer Squall	1:53 3/5
1989	Sunday Silence	1:53 4/5
1971	Canonero II	1:54
1995	Timber Country	1:54
1979	Spectacular Bid	1:54 1/5
1980	Codex	1:54 1/5
1973	Secretariat	1:54 2/5
1977	Seattle Slew	1:54 2/5
1978	Affirmed	1:54 2/5



SOURCES: The Complete Horse Care Manual by Colin Vogel, Horses of the World by Daphne Macin Goodall, Encyclopedia of the Horse, 1994 and 1997 Editions by Elwyn Edwards and The Visual Dictionary of the Horse.