

Horse gaits

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Gait - distinctive movement, specific rhythmic pattern at a particular speed

When the horse changes speed, they transition into another gait

Symmetrical gaits – walk & trot. Limb pattern on one side repeated on the other side

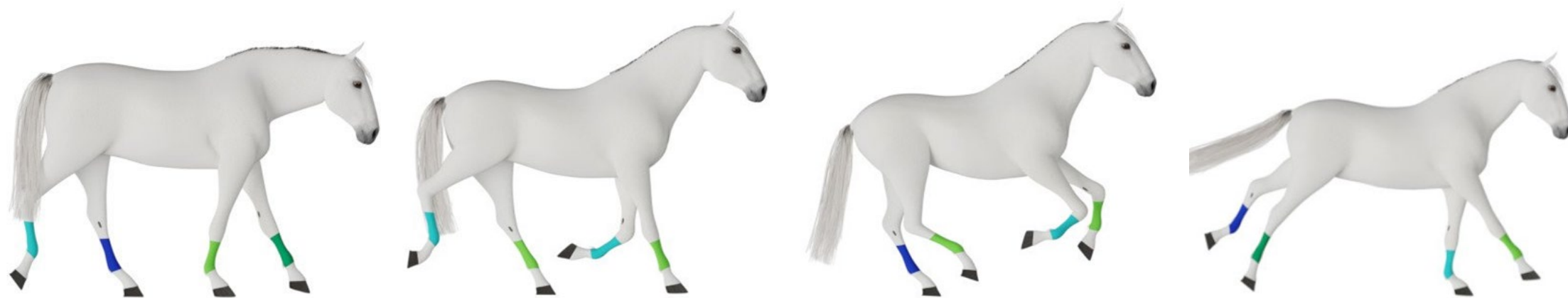
Asymmetrical gaits – canter & gallop. Limb pattern not repeated

Stride – gait cycle, all 4 limbs complete their movement

Beat – each individual footfall within a stride

Walk has 4 individual footfalls ~ 4 beat gait

Trot has 2 individual footfalls ~ 2 beat gait



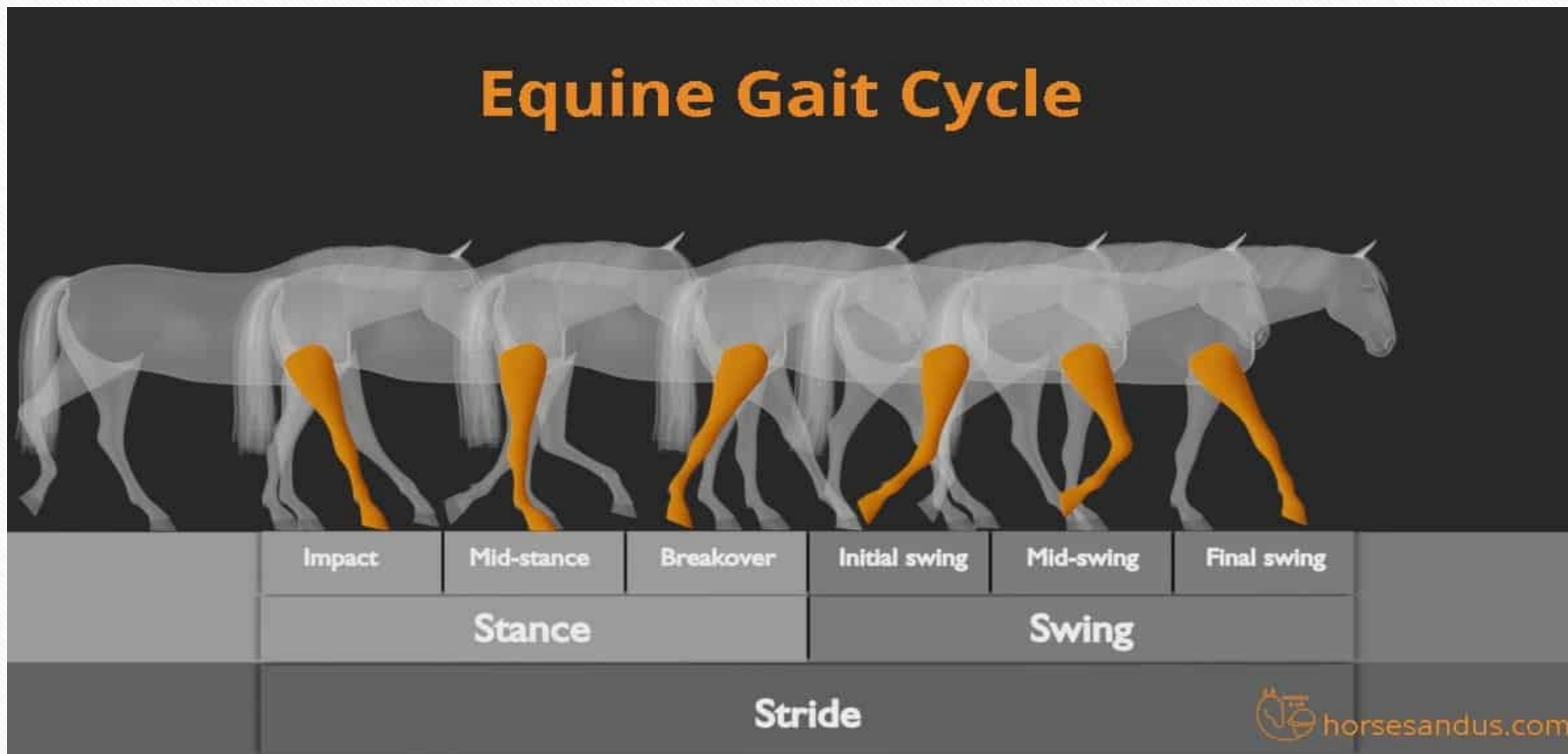
Walk

Trot

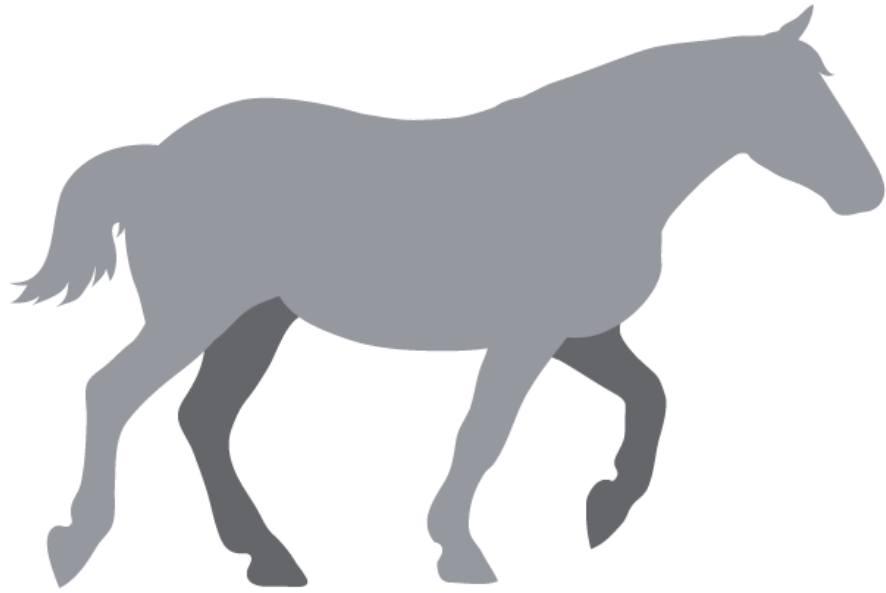
Canter

Gallop

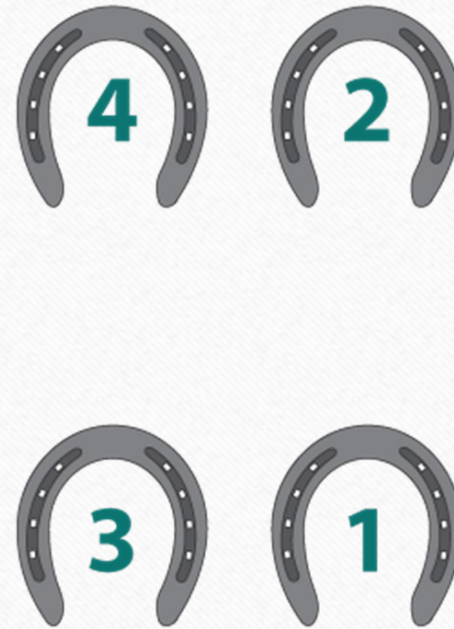
Stance phase – hoof in contact with the ground
Impact (footfall) when hoof hits the ground
Breakover (lift-off) when hoof leaves the ground
Swing phase – hoof has no contact with the ground



WALK

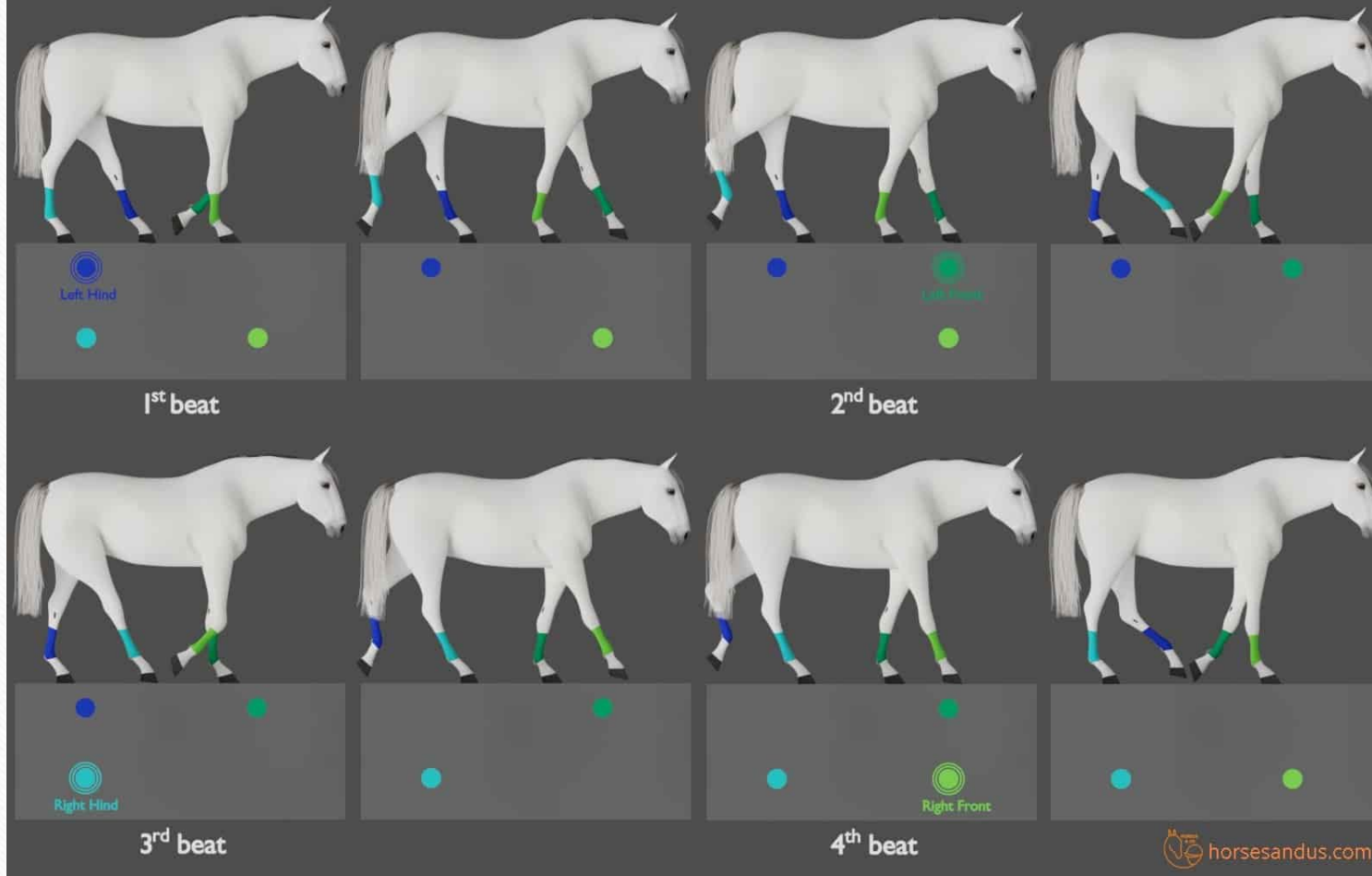


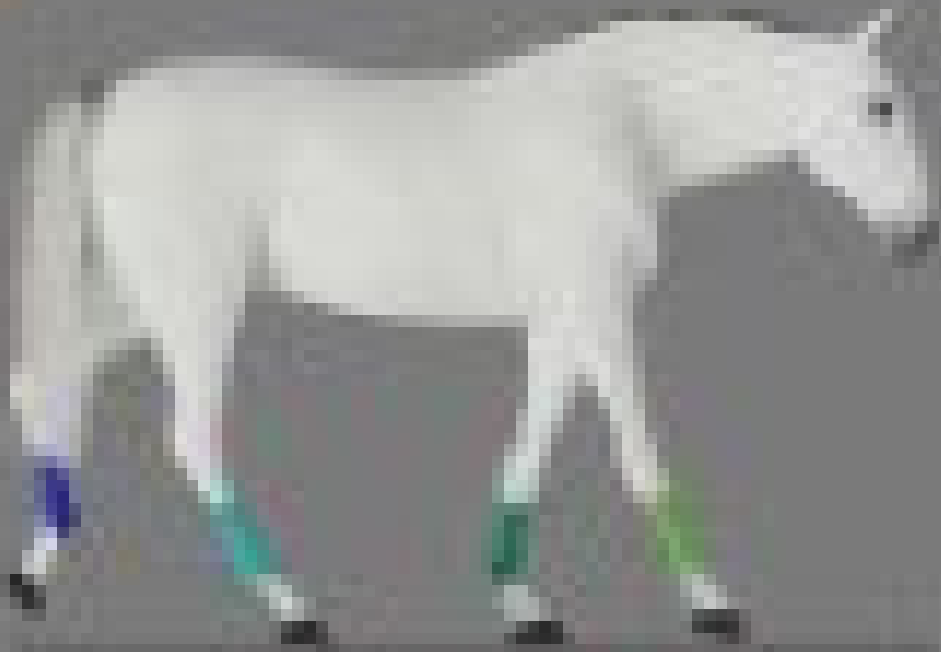
Four beats. No moment of suspension. 4 MPH



1st Beat: Right Hind
2nd Beat: Right Fore
3rd Beat: Left Hind
4th Beat: Left Fore

Horse Gaits - The Walk



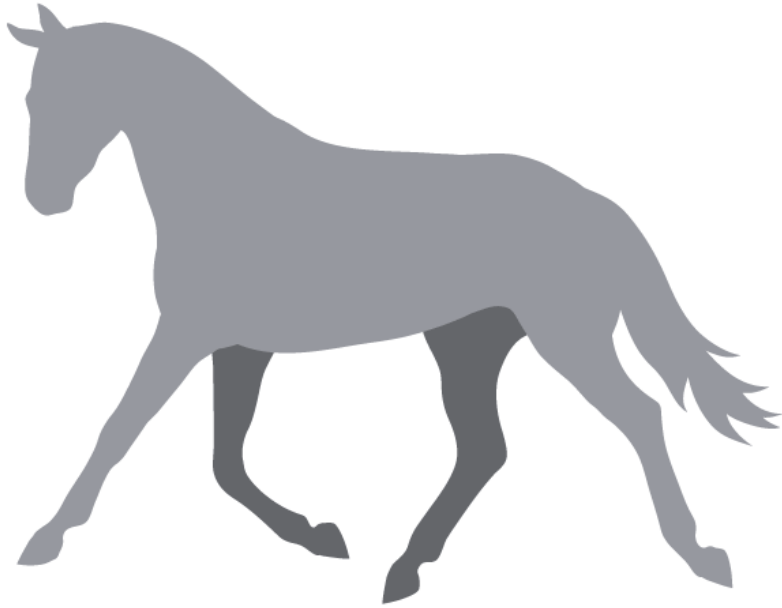


WALK

Is a slow, symmetrical four-beat gait

Each hoof hits the ground at a separate interval

Trot ~ best gait for lameness detection



Two beats, 6 MPH, moment of suspension, legs move in diagonal pairs

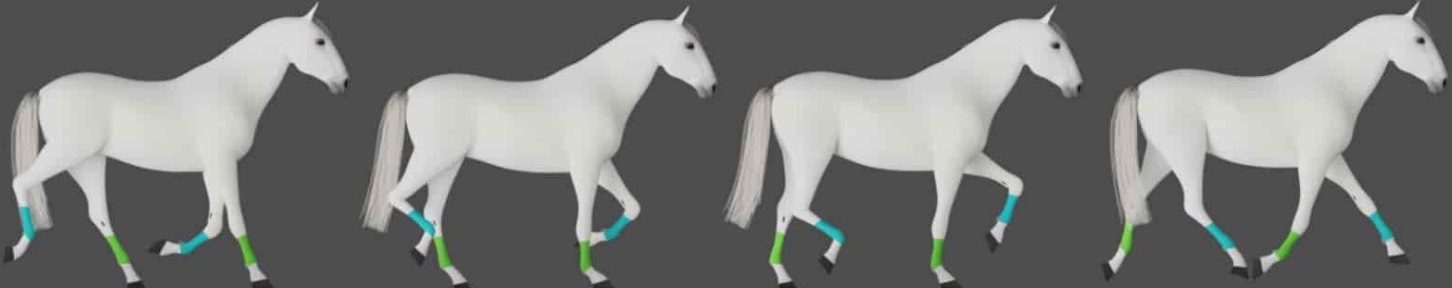


1st Beat: Left Fore Leg/Right Hind Leg



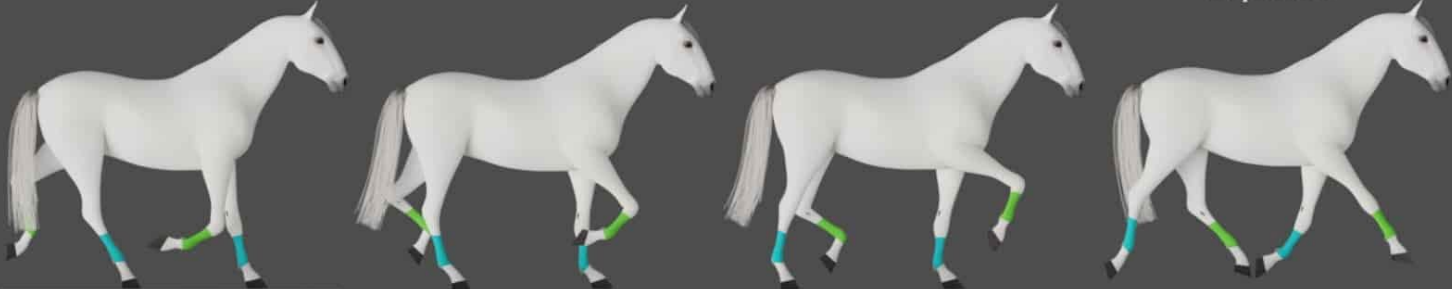
2nd Beat: Right Fore Leg/Left Hind Leg

Horse Gaits - The Trot

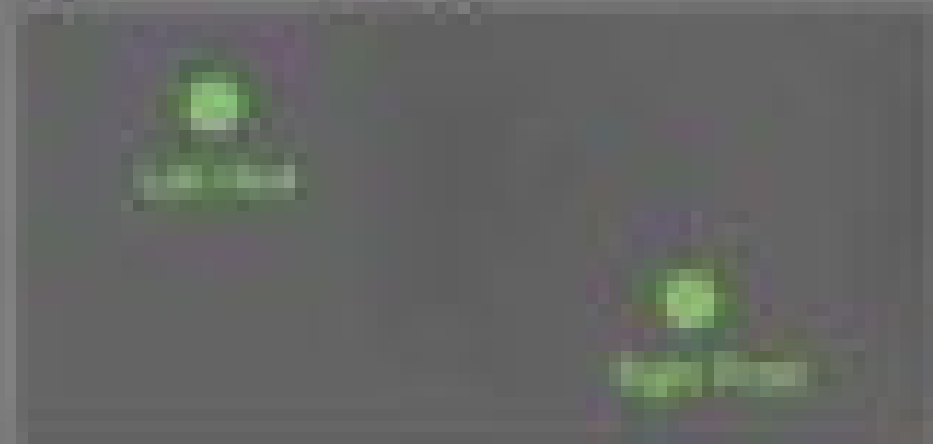


1st beat

Suspension



2nd beat



TROT

Is a fast, symmetrical, two-beat diagonal gait.

Each diagonal pair hits the ground at a separate interval, intercalated with a period of suspension.

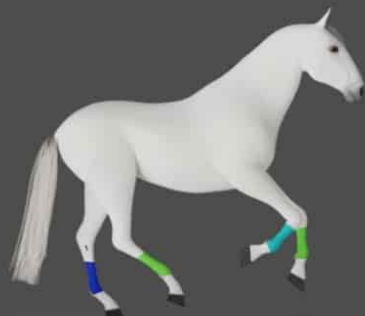


CANTER

Is a fast, asymmetrical, three-beat gait.

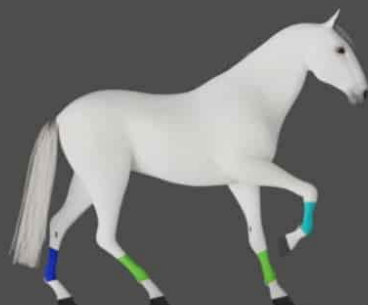
It's characterized by a rocking motion with a series of bounces and a moment of suspension.

Horse Gaits - The Canter



Left Hind

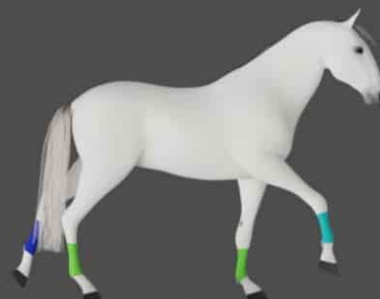
1st beat



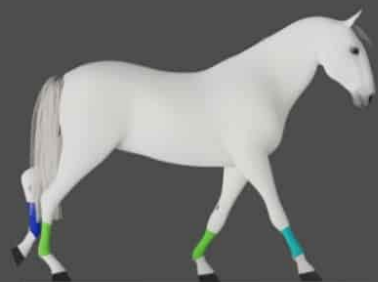
Right Hind

Left Front

2nd beat

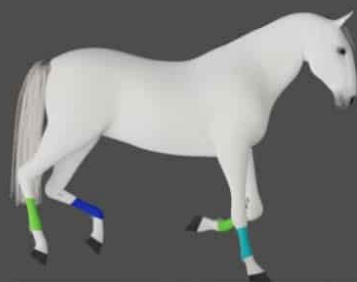


Right Front

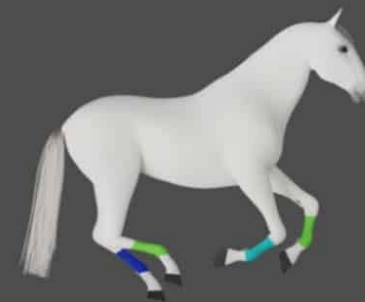


Right Front

3rd beat



Right Hind

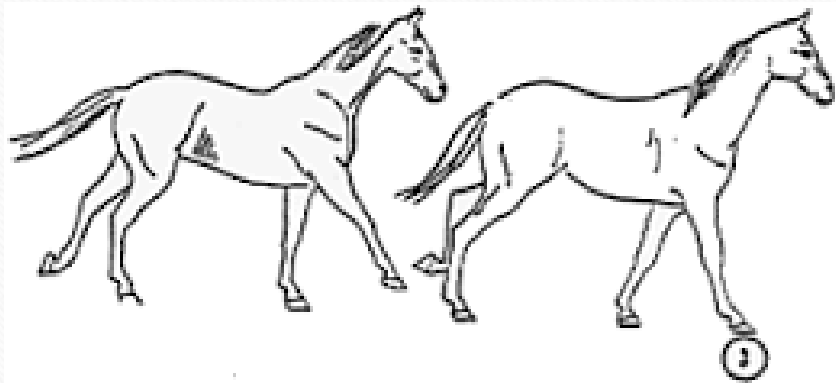


Suspension

Leads

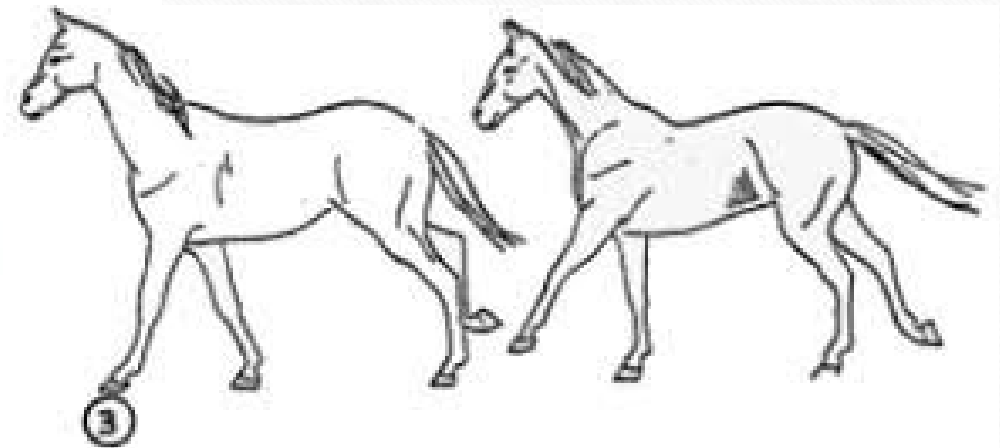
A leading front leg that stretches out further than the other leg.

Usually, the inside leg if you're riding in an arena. When cantering in the right direction, horse's right front leg should lead. When cantering in the left direction, horse's left front leg should lead.



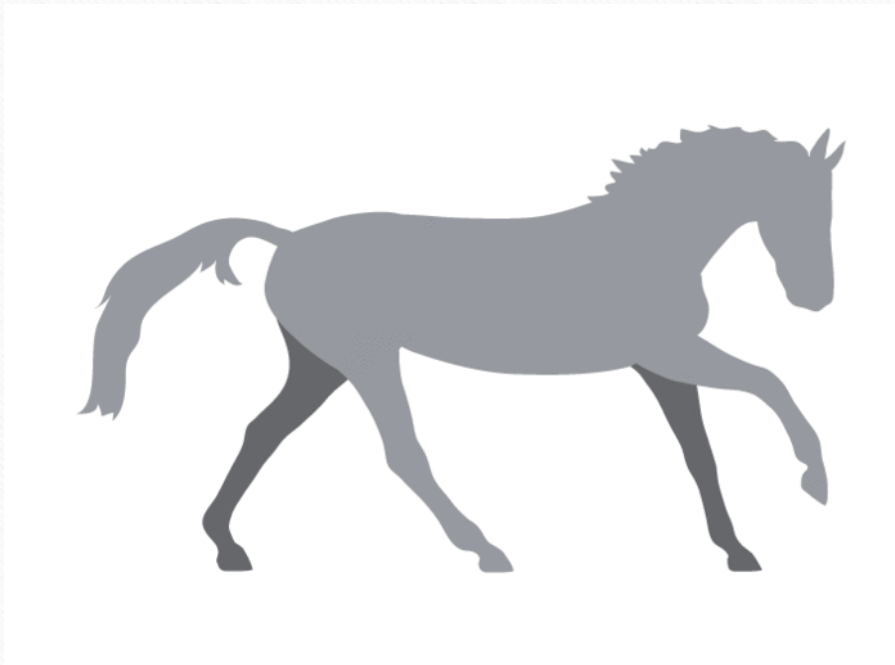
Right Lead

Left
Lead



Canter

Three Beats, 8 MPH, moment of suspension, western discipline called a lope

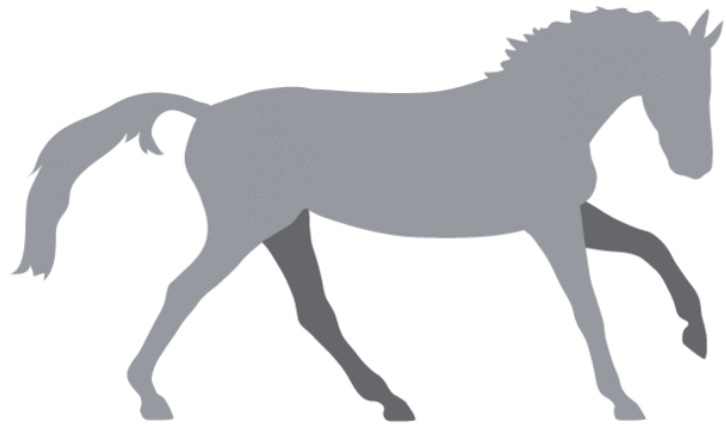


Right lead

- 1st beat left hind
- 2nd beat right hind, left fore
- 3rd beat right fore



Canter



Left lead

- 1st beat: Right hind
- 2nd beat: Left hind, right fore
- 3rd beat: Left fore



Gallop ~ four beats. 15 MPH. Moment of suspension. Faster canter



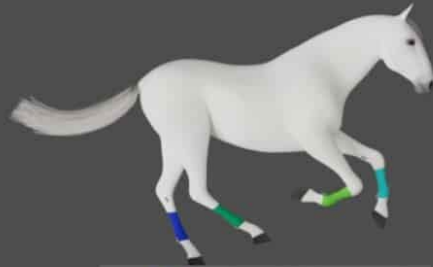
Right lead

1st beat left hind
2nd beat right hind
3rd beat left fore
4th beat right fore

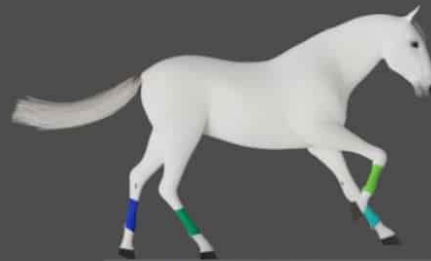
Left lead

1st beat right hind
2nd beat left hind
3rd beat right fore
4th beat left fore

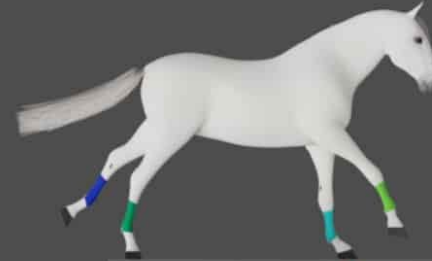
Horse Gaits - The Gallop



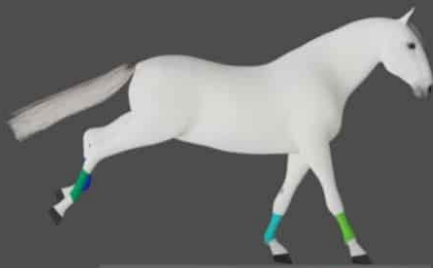
1st beat



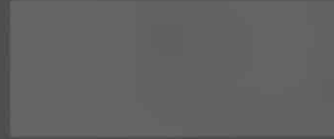
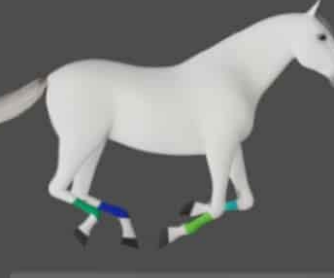
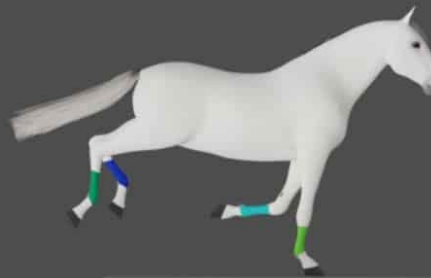
2nd beat



3rd beat



4th beat





GALLOP

Asymmetrical, four-beat gait. Is the fastest gait.

It's characterized by four distinct beats, one foot at a time, followed by a moment of suspension.

At any moment there are either 0, 1 or 2 feet on the ground.

References

- All Pony - <https://allpony.com/learn/gaits/>
- The 4 basic horse gaits explained (diagrams and animations)
<https://www.horsesandus.com/the-4-basic-horse-gaits-explained/>