



LEVEL 3

RIDING AND SCHOOLING RACEHORSES

Workbook



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INTRODUCTION

The technical skills used in the riding and schooling of racehorses are developed over many years and no amount of theory will replace practical experience. However, understanding the principles of riding racehorses can support practical skills developed over time that will produce rounded and intelligent horsemen and women.

This workbook has been designed to support the training and development of senior and work riders to enable them to make a key member of the workforce of a racing yard.

It can also be used to help learners working towards the relevant qualifications and to identify and collect evidence that is needed for assessment.

Each chapter is supported by a series of 'self-tests' or assignments that will help with portfolio building. These are designed to encourage the development of knowledge and understanding, presented in a form that can then be assessed.

RIDER POSITION

This chapter is about rider position in the saddle. It looks in depth at a generic riding position and how this is adapted for riding at speed.

When riding to and from the exercise ground it is important to both horse and rider that you ride at a comfortable length of leg. Experienced riders are expected to demonstrate their ability to adjust their stirrup length according to the specific discipline the horse is about to partake in. Riding with stirrups too short when riding to and from the gallops can compromise both horse and rider safety.

By studying this chapter you will have a knowledge and understanding of:

- the importance of a correct position in the saddle
- riding at the appropriate length
- how to maintain a balanced position.

RIDER DRESS AND EQUIPMENT

The rider should be dressed correctly with appropriate personal protective equipment, including skull cap and body protector to the appropriate industry standards, and suitable breeches and riding boots. Whether gloves are worn is up to the individual, but they can help with grip in wet weather.

THE BASIC RIDER POSITION

Traditionally the rider has adopted a position which gives him strength, stability and comfort in the saddle. This involves the following points:

- To sit in the deepest part of the saddle with equal weight on both seat bones and the pelvic arch. This position is known as the three point seat.
- Riding deeper in the saddle enables better connection between horse and rider.
- The upper legs lie around the saddle flap.
- The lower legs lie around the horse's ribcage.
- The balls of the feet are placed on the stirrups with the toes slightly raised above the heels to provide stability to the position through movement.
- When the upper and lower legs are both in the correct position, the stirrup leather will hang vertically down from the stirrup bar.

- The rider's back should be supple and straight, keeping their upper body away from the horse's neck and wither area.
- The shoulders should remain level and upper arms mainly at the rider's side.
- The lower arms need to stay soft with bent elbows and straight forearms through to the wrists and hands.
- The reins are held in a fist shape through the palm of the hand, with the thumbs uppermost.
- The rider looks ahead in the direction they are riding.



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Two imaginary lines drawn through the rider's body will help to maintain this balanced position on the horse:

- a line drawn from the point of the shoulders through the hips and into the heels
- a line drawn from the elbows through the wrists and hands to the horse's bit.



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THE RIDER POSITION AT SPEED

The generic riding position alters slightly when the rider is riding at speed. Riding with a shorter length of leg in the jockey position takes the rider's weight out of the saddle which will allow the horse to move freely underneath you. This position will also allow the rider to remain in balance with the horse through the transitions from one pace to another, jumping out of the stalls, jumping fences and riding a finish. This position will also help in creating better leverage, assisting the rider to maintain restraint and control when riding at different paces. To establish a balanced jockey position the rider must develop the following skill set:

- stirrup length – ride at the appropriate length to help maintain balance. Bear in mind the specific discipline to be carried out: riding shorter for all flat procedures, longer for schooling procedures
- head position – keeping the head still and looking ahead will aid balance and co-ordination in the saddle. The rider must be alert for potential hazards such as loose horses, tired horses and bad jumpers
- hand position – the hands must remain close to the horse's withers and be consistent in the contact down the rein to allow the horse to relax and work in a good rhythm
- body position – a straight and level back will help the rider to maintain a still hand and lower their centre of gravity to make the position more aerodynamic. Keeping the shoulders slightly higher than the hips when stood out of the saddle will assist the rider to find a balanced centre of gravity
- upper leg – the angle from the knee to the hip should be constant, allowing for slight movement to allow the knee to act as a shock absorber. If the knee is stiff it is easy for the rider to become unbalanced
- the knee – keeps the body central over the point of balance and allows for even weight distribution. If the rider's weight is too far forward, balance cannot be maintained. If the rider's weight is too far back, weight is drawn back into the saddle and the rider is forced to rely on the reins to balance
- the foot – a level foot in the stirrup is the basis of a balanced riding position. A short stirrup length will help to maintain balance and give increased lower leg stability
- the 'poised' or jockey position is one in which the rider's head and bottom form the base of a triangle with the knee creating the apex. This position isolates the rider's centre of gravity which allows the horse to move faster and more freely underneath them.



THE RIDER POSITION FOR JUMPING

To adopt the most advantageous position over fences, remaining in balance with the horse and enabling it to make the most efficient use of his body and technique, the following aspects should be considered:

- ride with a sufficient length of leg to help maintain balance and stability over the obstacles
- the rider's seat becomes lighter with the weight slightly out of the saddle and the upper body inclined slightly more forward than normal; this is known as the two point seat
- the rider's upper body must incline forward at the point of take-off to enable them to follow the movement of the horse over the jump
- the upper body needs to move back into its usual position away from the horse's shoulders on landing, keeping the legs forward
- the hands and arms move forward up the neck over the fence to allow the horse to 'bascule' (use his body in an effective shape to clear the obstacle).

Therefore the two imaginary lines will alter:

- shoulders, knees and toes should now all be aligned when jumping
- elbows, wrists and hands allow the horse to stretch his neck and use his shoulders over the fence.



THE AIDS – NATURAL AND ARTIFICIAL

This chapter is about the aids which will be used by the rider to communicate with the horse.

By studying this chapter you will gain a greater understanding of:

- the natural and artificial aids
- how a rider should use the aids to enhance a horse's performance.

The aids are the signals by which a rider communicates with his horse. These signals are taught to the horse during his initial training and when first ridden. The rider must apply the aids consistently and confidently in order that the horse understands exactly what is being asked of him.

There are two types of aids: those which are deemed natural such as the voice, hands, heels and seat; and artificial aids like whips and spurs.

NATURAL AIDS

SEAT AND BODY

The rider's seat and body are used to feel the horse's movement and react accordingly to move him forward or slow him down. When riding racehorses at faster paces and adopting a poised position, the rider does not derive his balance through using his seat in the saddle, and therefore upper body balance is important. Maintaining the poised position allows the rider to balance over the horse's centre of gravity and act like a shock absorber to the horse's movement. The rider brings the shoulders and upper body up to slow the horse and lowers his back to make his position more aerodynamic and allow the horse to find his speed and rhythm.

LEGS

The lower leg enables forward movement and the upper leg acts as a handbrake to slow the horse. A rider's lower leg position is vitally important, not only for self-balance but also to allow the horse to work and jump out of his stride unencumbered. The correct short stirrup length will increase lower leg stability and help the rider in staying close to the saddle on the approach to a fence. The lower leg must remain forward to keep the rider balanced. Any loss of lower leg position could result in the rider either tipping forward or getting behind the movement of the horse. The feet should stay straight and level in the stirrup, as if the heels are lowered the rider's weight moves backwards causing unsteadiness and a weak position in the saddle. Having lost basic balance the reins then become a balancing tool.



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HANDS

Hands should always be used in harmony with the seat and leg aids. The hands send the message down the rein to communicate to the horse moving forward, turning and stopping.



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VOICE

The voice is used to reassure the horse, encourage him when he lacks confidence or self-belief, and to praise him when he does something well. The tone of the voice is all important in gaining the horse's attention and its subsequent reaction.

ARTIFICIAL AIDS

Artificial aids available to the rider include:

WHIP

It is often at the trainer's discretion as to whether a rider will carry a whip or not, but even if carried it is rarely used. The techniques and skills required to use the whip correctly can be developed over time and through experience, however, the use of the whip by a rider must be appropriate and professional, and should only be used for safety and encouragement.



SPURS

Spurs are not used in racing but in other disciplines of dressage, showjumping and cross-country, where their purpose is to re-enforce the rider's leg. A highly trained dressage horse will be ridden in spurs to give a lighter, more subtle aid and create a quicker reaction to the rider's refined signals.

Only when the rider has a balanced position can the aids be applied effectively. Balance should be independent of the reins or holding the neck strap and gripping or resting on the knees. To attain balance, riders must develop their physique, which is muscle strength within the body that is used to support an unusual position. To maintain the position when riding at faster paces, physical and mental fitness and stamina are also needed. When a rider fatigues physically, weakness causes the position to collapse and control of the horse is lost. When a rider fatigues mentally, the capacity to react quickly to a situation or make decisions is lost.

FITNESS FOR RIDING

This chapter is about developing and maintaining riding fitness. It covers exercises and tips for building physique and stamina, and developing mental toughness, which in turn will enable a rider to obtain the best possible performance from the horses he/she rides.

By studying this chapter you will have a greater knowledge and understanding of:

- the reasons why mental and physical fitness are important in riding racehorses
- how to develop and maintain fitness.

It is recognised that the horses are the main athletes in horseracing, however, the job of the riders is also very demanding, and necessitates a specific set of physical characteristics.

- Work riders must be slight and reasonably light.
- Work riders need flexibility in their position.
- Riders must have good leg strength and stamina.
- Cardiovascular fitness is essential.

Rider fitness is becoming increasingly recognised as a key contribution to successful work with horses, with jockeys and work riders now working hard towards achieving mental and physical stamina off the racecourse, and developing the mindset of an athlete.

To work towards the fitness test it is helpful to understand the A, B, C of rider fitness training, which can be divided into three main categories:

- A Aerobic fitness
- B Balance
- C Co-ordination.

To attain the rider A, B, C the following fitness exercises, combined with a high protein, low fat diet, will produce a good result.

AEROBIC EXERCISES

- Circuit training – including push ups, squats, lunges, core work and use of a gym ball
- Skipping
- Spinning
- Running/jogging
- Cycling – using hills for leg strength and balance.



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BALANCE EXERCISES

- Yoga helps a rider develop core stability to maintain his upper body balance
- Pilates teaches a rider correct breathing techniques, together with spinal and pelvic alignment, which helps the rider learn how to control their own body movement. Pilates exercises develop a strong 'core', elongating, strengthening and improving muscle elasticity and joint mobility. A body with balanced strength and flexibility is less likely to be injured
- Sit ups
- The plank, which helps to build strength in the core, upper and lower body
- Lunges
- Squats.



CO-ORDINATION EXERCISES

- A racehorse simulator is a valuable training aid for any rider. The racing simulator can help develop:
 - technique
 - strength
 - muscle memory
 - balance
 - fitness.



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A simulator allows the rider to experience warm-up, aerobic riding into anaerobic riding and cool-down, without actually riding a racehorse. It is possible to improve reaction time and decision making by use of software which puts practising riding into a race/work riding scenario. In addition, riders can further develop their skills in:

- riding a racing finish – pushing technique
- use of the whip
- changing the whip
- changing hands
- double and single bridge of the reins.



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- Improving reaction time. Riders at any level need to practise improving their reaction time for both physical and mental development. This becomes a great benefit when riding or schooling racehorses, including awareness of other riders and horses, looking out for loose horses, recovering after a mistake at a fence and jumping out of the stalls. Other sports such as football, rugby, tennis, golf, cricket and hockey can help a rider improve their hand/eye co-ordination and reaction time.
- Decision making. Winning jockeys have the ability to create truly great performances in a race because they are excellent decision makers. Instead of letting things happen, they take control and make things happen. This skill set is often described as having motor skills. An experienced work rider will also develop similar skills; actions that the rider will take to avoid an adverse situation before it may happen. For example: pulling the whip through and gathering a horse up before it might duck or spook. Decision making is a process of problem solving.

In order to make a decision six steps need to be taken which are of great benefit to any rider:

1. **Recognition of a problem:** A rider must recognise what needs to change in order for him/her to develop a successful outcome, whether it is training on the gallops or in a race situation.
2. **Analysing the problem:** When the rider has identified the problem, they need to understand how the problem has occurred so that they can rectify it.
3. **Understanding the outcome to be achieved:** The rider must be confident about the outcome they want from the situation.
4. **Exploring the options:** The rider must make a decision based on past experiences as to the best way forward for the current situation. They must consider most eventualities but avoid falling into the trap of doing the first thing that comes into their head and making a mistake.
5. **Choosing the best fit option:** A decision must be made on the best way forward in this situation, at this particular time. The decision will take into account other horses on the gallops, the state of the going, the length of the canter work, fences etc.
6. **Taking action and responsibility:** A decision has been made and must now be carried out in confidence with all focus on achieving the best outcome for horse and rider.

THE PACES

This chapter is about recognising a horse's natural pace and how developing good paces can influence and enhance performance. Every skilled rider should be able to feel how a horse is moving underneath them. An understanding of the paces will not only help to develop this feel but will also aid in the rider's ability to feed back on a horse's way of going and performance.

By studying this chapter you will have a knowledge and understanding of:

- the footfalls of the basic paces of the horse
- the qualities of good paces
- how to enhance the paces.

THE HALT

Although not technically a pace, it is helpful to understand the qualities of a good halt so that the horse can be observed or shown at its best in a balanced and calm manner.

At the halt, the horse must stand quite still and straight with his weight distributed evenly over all four legs. It should stand square, with the forefeet in line with each other and the back feet also in line. The horse should be calm, attentive and accepting of the rider's contact.

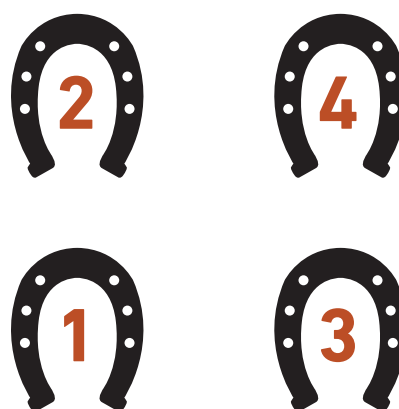


THE WALK

In the walk, the horse places each foot on the ground independently so no two feet hit the ground at the same time. This is known therefore as a 'four time' beat. The rider should be able to feel and count the four beats. In sound horses, the beats should be in the same rhythm and the walk should be regular with a marching and purposeful gait. The horse should be calm and active.

The walk is often the first pace viewed by both rider and trainer, and much can be gained from observing the horse at walk. The horse should 'over track', where the horse's hind foot should pass over and land in front of the print left by the forefoot on the same side. A long over track can be a good indication of the power and reach in the hindquarters and so very important in the racehorse.

Whilst observing the horse in walk, attention should be paid to its athleticism; a swinging back, free shoulder, active quarters and elasticity in the pace.



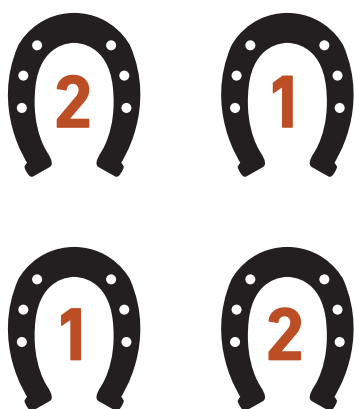
The sequence to the way the horse places each foot on the ground is as follows:

- 1 left hind
- 2 left fore
- 3 right hind
- 4 right fore.

THE TROT

The trot is a diagonal 'two time' pace, where the horse places its feet on the ground in diagonal pairs. This means there are two beats to every stride. The trot should appear regular, active and energetic without appearing to be hurried.

The horse springs from one diagonal pair of legs to the other with a moment of suspension, when all four legs are off the ground between each beat.



The sequence of the footfalls is:

- 1 left hind and right fore together
- 2 right hind and left fore together.

THE CANTER

The canter is an important pace when training racehorses as it is the preparatory pace for the gallop: the racing pace. Canter is a 'three time' pace with three beats to each stride. The rider will feel, and be able to count, the three beats as well as the moment of suspension when all four feet are off the ground.

Within the canter, the rider should be able to recognise the 'leading leg' which is the foreleg that has the most reach. When riding in a circle, it is important that the inside foreleg is the leading leg to ensure the horse remains balanced.



The sequence of the footfalls when the left foreleg is leading is:

- 1 right hind
- 2 left hind and right fore together
- 3 left fore (the leading leg) followed by a moment of suspension when all four legs are briefly off the ground.

THE GALLOP

The gallop is a four time movement with a rapid four beats to every stride, with a moment of suspension when the horse pushes forward and covers the ground.

At the gallop, the horse's frame and outline will lengthen considerably from the canter. As he increases speed, the stride will lengthen and the tempo of the pace will increase, but the horse should always remain in rhythm. The horse should work into the contact and remain in balance.



Again, like the canter, there is a leading leg. The sequence of footfalls with the left foreleg leading is:

- 1 right hind
- 2 left hind
- 3 right fore
- 4 left fore followed by a moment of suspension when all four legs are briefly off the ground.

ABNORMALITIES IN THE PACES

It is really important for any experienced rider to be able to recognise any abnormalities or lameness in each of a horse's natural paces. It is in the interest of basic horse welfare that all riders report to their trainer any concerns they may have with regards to how their mount is moving.

A horse which pulls out sound when first ridden may show abnormalities such as unlevelness or lameness for any number of reasons, but common ones include:

- injury such as a strained tendon or overreach
- sore shins
- stiffness from previous work or schooling session
- inability to act on a particular surface
- badly fitting tack
- footsore or lost shoe.

Early recognition and reporting of any abnormality can ensure swift action is taken to minimise long-term effects of the condition.

ENHANCING THE PACES

Every horse will have their own natural gait and way of going. It is the role of the rider and trainer to work with these natural paces to ensure that the horse achieves its maximum performance. Factors to consider when developing and improving the paces are:

• Outline

The outline describes the profile or frame of the horse. It is important that a racehorse moves in an athletic, confident manner with an outline that leads to the longest stride and balanced movement. The slightest deviation from the optimum outline can lead to restricted paces that can mean the difference between winning and losing a race.

The outline of a racehorse will naturally differ from that of a performance horse in other disciplines such as showjumping or dressage. However, the outline of the racehorse dictates other qualities sought after in the paces and shouldn't be disregarded.

• Straightness

In order to remain in balance a racehorse must be able to move directly forward, as if on railway tracks, with the hind foot on one side directly following the forefoot on the same side. He should be straight from the tip of his nose to the tail. Following this theme, the horse should also be able to bend throughout his body in a uniform way, again from nose to tail. With good training and riding, a horse can be taught to bend evenly on both sides, which will be of benefit at the faster paces, and enable him to race on both left-handed and right-handed tracks with equal success.

• Suppleness

Athleticism is a key component of a racehorse's ability to succeed on the track. It should be free and swinging in its paces and move without tension or restriction. The whole of the horse's body and frame should be considered when assessing its suppleness, with the neck moving freely, open shoulder, loose back and swinging tail.

• Impulsion

Impulsion is the energy and desire to go forward by the horse. Some horses are keen and have natural energy and enthusiasm, whilst others need to be encouraged by the rider. A horse moving forward with impulsion will be responsive to the rider's seat and leg, will be active and willing, have engagement of the hocks, and show elasticity in his paces. Impulsion should not be confused with speed, which is simply the rate at which the horse is covering the ground, rather than the energy with which it is moving.

• Rhythm

Rhythm is the regularity and evenness of the hoof beats and is important to the successful performance of a racehorse. Loss of rhythm can affect many of the other qualities of the pace which could adversely affect his performance in a race.

• Tempo

Tempo is the speed of the rhythm; the time it takes for the sequence of the footfalls to occur. The tempo of each pace should be consistent to help the horse remain in balance.

DISCIPLINES/ FORMATIONS WHEN RIDING AT EXERCISE

A rider may be instructed to ride in a string, single file, upsides, or in a bunch or group. It is important that all riders understand the reasons why racehorses are exercised in this way.

RIDING IN A STRING

Riding in a string with horses equally spaced apart one behind the other is a basic discipline when riding at exercise. Riding in this formation is the safest way to get horses to and from the gallops on the roads and aids in keeping horses relaxed. Being spaced apart one behind the other also prevents horses trying to kick each other.



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UPSIDES

When riding upsides, it usually involves two or three horses exercising alongside each other. This encourages horses to work well as they are naturally more competitive. This formation is generally used to either educate young inexperienced horses or to encourage competitive work when galloping.



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RIDING IN A BUNCH OR GROUP

Riding in this formation is generally used to educate young inexperienced horses to get them used to being in among a group of horses when moving at speed.



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TACK AND ITS EFFECT ON HORSE PERFORMANCE

This chapter is about the variety of racing tack in common use and the effect that each has on the horse's way of going.

By studying this chapter you will have a knowledge and understanding of:

- principles of biting
- specialist tack used in racing
- the effect of tack on horse performance.

Any tack and equipment used on racehorses should be selected to allow the horse to give his best performance, and for the rider to support and encourage this performance. The most influential parts of tack and equipment are described below.



BITS AND BITTING

The purpose of the bit is to enable a rider to control and guide the horse. Most correctly educated and trained racehorses will generally be ridden in a simple loose ring snaffle bit for the rider to be able to achieve optimum control. There are, however, occasions when a trainer or rider may need to consider alternative biting arrangements. As a general principle, bits fall into one of the following five categories:

- snaffle
- double
- pelham
- gag
- bitless bridle.



© NRC

Loose ring snaffle

When selecting and fitting a bit, the structure of the mouth should be considered. The areas that can be affected by the action of the bit are:

- corners of the mouth and lips
- bars of the mouth
- tongue
- roof of the mouth
- side of the face
- chin groove
- nose
- poll.

Problems in the mouth, which may affect the type and size of bit selected, include:

- sharp molars
- wolf teeth
- sensitivity of the skin covering the bars of the mouth
- length of the jaw or the position and size of the tongue in relation to the shape of the jaw.

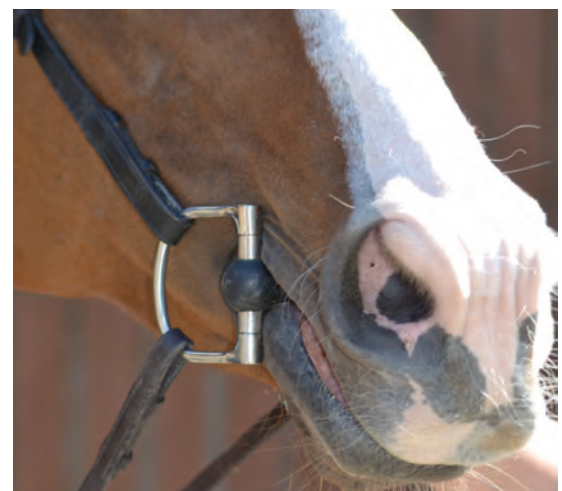
It is not intended for this workbook to cover the full range of bits available in each category due to the greatest reliance on the snaffle bit. However, it is important for riders to be aware of the other groups and to fully understand the purpose of the snaffle.

The snaffle is generally considered the simplest form of bit acting on the lips, tongue, bars and corners of the mouth.

The bit rings can be loose or fixed. The main types of snaffle are:

- loose ring
- eggbutt
- d-ring
- fulmer or Australian
- hanging cheek.

The difference between each type of snaffle is subtle but can have a slightly different effect on the corners of the mouth or the cheeks.



© NRC

D-ring rubber snaffle

MARTINGALES

There are several different types of martingale available according to the particular needs of the horse and rider. The most common types are:



Standing

This type of martingale prevents the horse lifting its head beyond the point of control and fixes at one end to the girth and the other end to the cavesson noseband, with a leather strap passing around the horse's neck.



Running

This type of martingale has the reins passing through the rings of the martingale, which helps to keep pressure on the bars of the horse's mouth when its head is raised. This helps to prevent the horse from putting its head above the point of control.



Bib

This type of martingale has a centrepiece of leather to prevent the horse from getting caught up in the branches of the martingale.



Irish

This is a short strap with rings at each end through which the rein pass. This martingale is designed to prevent the reins coming over the horse's head in the event of a fall. This type of martingale is normally used for racing.

BREASTPLATES

A breastplate is often used to prevent the saddle from slipping back. There are two main types.



© Mikaelle Lebraton/Mark Johnston Racing

Breastplate

This is similar to a martingale with straps running back to fasten on the saddle 'D'. Care must be taken not to fit this type of breastplate too tightly as it can cut into the horse's chest when jumping. Martingale attachments can be fitted to this breastplate.



© Jedd O'Keefe Racing

Breastgirth

This has a section of web or elastic and fastens to the girths underneath the flap of the saddle.

CHAMOIS LEATHER

A dampened chamois leather can also be used to prevent the saddle from slipping back. Chamois leathers are often used underneath a racing saddle.



© White Rose Saddlery Ltd

SCHOOLING AIDS

Although rarely used in racing, there are schooling aids available designed to assist the rider in promoting an improved outline and to encourage suppleness throughout the horse's neck and back, thus allowing the horse to engage the hindquarters. However, if misused they can cause accidents and so must only be used properly by those trained and skilled in their use. The most common schooling aids are:

- **Draw reins**

These start at the girth, pass between the front legs, through the bit rings and back to the rider's hands. Each rein passes from the inside to the outside of the bit ring. Draw reins should be used with a normal rein placed above the draw rein. The draw rein may also be fitted so that it runs from the girth straps of the saddle, through the bit rings and back to the rider's hands.

- **Chambon**

This runs from the girth, between the horse's front legs to the poll and then down the bit to put pressure on the poll and induce a lowered head carriage. It is used on the lunge with a mild snaffle bit.

- **de Gogue**

This is more advanced than the chambon and can be used for ridden work as well as on the lunge. On the lunge, the de Gogue has a strap running from the martingale body to the poll, to the bit and back to the martingale or saddle 'D', forming a triangle. For riding, instead of passing from the bit back to a fixed position, a rein is attached.





ANCILLARY RACING EQUIPMENT



© NRC

Blinkers

Blinkers are defined as a garment fitted over a horse's head with holes for eyes and ears, one or both eyeholes being fitted with cowls limiting the vision to the rear, but permitting full vision forward. They come in a range of cup sizes and may be fitted to a horse to help it concentrate during a race by reducing its range of vision, thus making it look ahead. By helping the horse to keep its mind on the job they can bring about a transformation in performance.



© White Rose Saddlery Ltd

Visor

A visor is similar to blinkers with a slit cut in one or both cowls allowing limited side or rear vision.



© Racingphotos.com

Hood

A hood is a garment similar to blinkers incorporating ear covers but without eye cowls. The hood is generally used on highly strung or nervous horses helping to eliminate some of the noise that may cause a horse to get wound up when at the racecourse. Cotton wool placed inside the ears underneath the hood is often used to aid in reducing noise.



© White Rose Saddlery Ltd

Earplugs

Custom made earplugs are used to eliminate noise. When earplugs are used on the racecourse they have to remain in situ for the duration of the race.



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Eyeshields

A horse with no, or very defective, vision in one eye may wear an eyeshield. This is similar to blinkers except that, in place of the eye cowls, one eye only is completely covered by an opaque cover.



Net

Occasionally a trainer will use a net attached to the noseband and fitted over the mouth. This helps to steady a hard puller by keeping the mouth closed and is thought to have a psychological effect.



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Tongue-strap

A tongue-strap may be used for horses that get their tongue over the bit or have other associated problems. Having first pulled the tongue forward, a leather tongue strap or a band of nylon is fitted round the horse's tongue and attached round the lower jaw.



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Boots

There is a wide range of protective boots available on the market with variations in weight, substance and fastening. All boots should be fitted carefully and securely. Most boots are now fitted with Velcro straps. It is important to remember that any straps should always run back to the rear of the horse when fastened. Badly fitting boots may cause, rather than prevent, problems, by either slipping down or rubbing.



© Jedd O'Keefe Racing

Australian cheeker/ racing noseband

This is a noseband with two rubber bit rings connected by a central rubber strap which fastens to the bridle headpiece. It's said to persuade pullers to 'back off' from the sight of the central strap and to have a psychological rather than physical effect. It also helps to keep the bit high enough in the mouth to prevent the horse putting his tongue over it.

THE PRINCIPLES OF RIDING AT SPEED

This chapter is about understanding the fundamental principles of riding at speed to train and educate racehorses leading up to racecourse performance.

By studying this chapter you will have a knowledge and understanding of:

- terminology of different paces
- how to enhance horse performance at speed
- dangers of incorrect or poor riding on horse performance.

It is important that horses are ridden, worked and schooled correctly. This enables the trainer to control and direct the horse's preparation to race. A competent work rider and schooling jockey should understand the principles behind good riding practices and should be able to carry these out.



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WARMING UP AND COOLING DOWN RIDING WORK

Racehorses and their riders are athletes and should be treated as such during all exercise routines. Therefore warming up and cooling down routines are an essential part of this routine and should not be ignored, or corners cut. Muscle damage and soft tissue injury are more likely to occur if the athlete has not been properly prepared for the activity.

Warming up is the rider and trainer's opportunity to assess the health and well-being of the horse prior to work. If the horse coughs, feels unlevel or displays abnormal behaviour it could be the sign of an underlying problem, which could be exacerbated if the routine continues.

This period also gives the rider time to assess the horse's basic paces and temperament. Is he relaxed? Tense and anxious? Lethargic and lazy? Finding this out before work commences will enable the rider to make the necessary adjustments and ride the horse accordingly.

Any concerns during the warm-up should be reported to the trainer immediately.

Routine fitness work is carried out at canter, but to develop full fitness the horse needs to work at the faster pace of gallop. Horses vary significantly on the amount of work they need for optimum fitness, and often a trainer will consider whether the first race of the season is part of the process to achieving ultimate performance with a particular race in mind.



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TERMINOLOGY

Depending on yard practice, riding work is done in a variety of ways and at differing speeds. Common terms used include:

- canter
- swinging canter
- half speed
- three-quarter speed
- gallop – extended or on the bridle
- breeze or blow out – short sharp piece of work just before the horse runs.

As these mean different things in different yards, the riders should establish with the trainer exactly what the horse is required to do.

The judgement of pace is a skill that only comes with experience. However, in gaining this experience it is helpful to consider the aims and purpose of working horses.

AIMS OF WORK

The aims of working a horse can vary and include:

- **Preparing to get the horse race fit**

As part of the horse's planned fitness programme work, mornings will be scheduled in to select the right time and day to ensure that the work achieves its maximum benefit.

- **Assessing the horse's ability**

This assessment gives the rider and trainer an opportunity to consider how good the horse might be and will often work with a horse of proven ability to gauge and compare a particular horse's aptitude and capability.

- **Assessing the horse's best trip**

Experienced riders will 'feel' whether a horse is likely to have stamina and stay over a distance, or whether they are more suited to shorter races, perhaps run at a faster pace. Horses should always work 'on the bridle', which means they are working into a regular contact with the riders' hands. The term 'off the bridle' means that the horse has dropped the contact and is not running forward freely with energy and impulsion.

- **Assessing the horse's best type of ground**

Working on different ground will enable the rider to feel which the horse prefers. For example, horses with a high knee action are better suited to going with more give than those with a low knee action. Many horses will operate effectively on a variety of going but it is important to a trainer when planning a horse's campaign to have a clear understanding of what its optimum going is, and what must be avoided.

- **Assessing the horse's fitness**

As the horse becomes fitter it will recover more quickly from each piece of work and will be able to cope with more work, at faster speeds and over longer distances. It is vital that the recovery rates are reported to the trainer; they will need to know how quickly the breathing and heart rates return to near normal. A horse will always 'clear' itself at some point after it has worked, and this is a sign that the horse has stopped blowing excessively and its heart rate is returning back to a more relaxed state. This is a good indication of the horse's recovery time and is something that you should be aware of and report back to your trainer.

- **Teaching young horses**

As a young horse progresses in its education and approaches its first few pieces of work, the rider has an important role in continuing its education and making the experience a positive one. Factors that the rider will be able to influence are to encourage the horse to keep straight, accept other horses either side of him, remain in balance and in rhythm, and be responsive to the rider's instruction.

- **Assessing a young horse's likely style of running in a race (first time out)**

It is impossible to accurately assess how a horse will run first time out, but in order to make the best possible plan it is important for the trainer to understand its strengths and weaknesses when galloping. For example, inexperience may mean that it becomes anxious when crowded by other horses, it might take time to establish a rhythm, it might be strong and need to be settled in behind other horses. The first few races may be the start of a learning process for both horse and connections, but it is helpful to be as prepared as possible and for the jockey riding the horse for the first time to be fully briefed.

In summary, general principles apply to the riding of work. These include:

- jumping off smartly
- settling the horse if possible
- riding according to instructions
- keeping the horse balanced and in rhythm
- working to the least capable horse
- doing best work at the end
- noting how the horse is moving on that particular surface
- not working the horse 'off the bridle' unless instructed
- pulling up gradually, keeping the horse balanced
- concentrating on the horse's gait, breathing and attitude.



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A good work rider can be as valuable to a trainer as a good jockey, and the skills in developing this role should not be underestimated.

DISTANCE AND TERRAIN

British racing still works in furlongs and miles, whilst many other jurisdictions have moved over to metric distances. Good work riders will develop a judgement of pace and distance, and be able to report how a horse was working at different stages of the gallop.

There are eight furlongs in a mile and many gallops will have furlong markers so that riders can develop this awareness of distance.

Terrain can be an important feature of the training process, with horses naturally having to work harder over inclines. The steeper the incline the harder the horse will have to work; potentially with less stress on its forelegs. Inclines will also develop the muscles in the hindquarters, which are the engine of the horse.

Although horses are rarely worked downhill, they should be trained and educated to keep their balance on declines as well as inclines. Racecourses are rarely completely flat.



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SCHOOLING THROUGH STARTING STALLS

This chapter is about educating horses to establish and maintain their confidence when entering the starting stalls and to teach them to leave the starting stalls swiftly with rhythm and energy. All flat racehorses should be trained to enter and leave starting stalls. Horses who have not been properly schooled may refuse to enter the stalls, behave dangerously in the stalls, or dwell or refuse to jump out, all of which will limit their potential as a racehorse.

By studying this chapter you will have a knowledge and understanding of:

- how to introduce a horse to starting stalls
- the principles of schooling through starting stalls
- how to avoid problems with starting stalls.

Although this subject cannot be taught from a book and proficiency only comes with practice, there are certain aims, principles and practices that should be known and considered when schooling racehorses through starting stalls.



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INTRODUCTION TO STALLS MAIN POINTS FOR RIDER

Young racehorses are normally introduced to starting stalls as part of their early training and education. The aim is to make each experience of stalls work calm and pleasant so the horse does not become either fearful of the activity or stressed about the process. A horse lacking confidence in this crucial part of its education can be adversely affected in later racecourse performances through either being reluctant to enter the stalls, misbehaving in the stalls or missing the break through anxiety and stress.

Most trainers will introduce the horse over a period of time. Normally, when breaking youngsters, the handler will drive the horse through the stalls to allow him to get used to the feeling of entering and leaving the stalls. Once the horse is being ridden away he will be walked around the stalls before following a quiet lead horse through in a quiet and calm manner. The horse will then be asked to load and the stalls released a few times to get used to the confined space and noise before being asked to jump out. When practised at this, the final stage is for it to become confident at jumping out in company.

The horse should be confident and calm at each stage before progressing and time spent ensuring this happens will reap rewards at a later stage of its career.



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Competent riders can improve a horse's performance when schooling through stalls. Key points include:

- confident approach and clear instructions to the horse and correct use of aids
- when entering the stalls the rider should keep their legs forward; doing this will prevent the feet being dragged out of the irons should there be any contact with the stalls on entry
- sit quietly until the last horse has entered the stalls, keeping your horse relaxed
- balanced body position throughout
- consistent but light contact on the horse's mouth; must not catch the horse in the mouth when leaving the stalls, use neckstrap, breastgirth or grab a piece of the mane
- carry the whip in the correct hand; if there are no horses on your right-hand side the whip should be carried in the right hand, and if there is nothing on your left-hand side the whip should be carried in the left hand
- correct reaction to different horses; be able to balance firmness with reassurance. Some horses will naturally jump out of the stalls quicker than others and show natural speed from the start. Some will jump well but take time to find their stride and rhythm. It is up to the rider to determine how their mount should be ridden from the stalls and adjust their style of riding accordingly
- the knowledge and ability to apply corrective and instructive measures.

With good schooling the horse should:

- be confident when entering the stalls
- stand quietly when in the stalls
- be attentive to the rider
- be quick to jump out of the stalls
- remain straight when leaving the stalls
- quickly establish a good rhythm.



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PREPARATION FOR SCHOOLING

To ensure an efficient and safe schooling process, the following points should be considered:

- stalls must be ready, checked for operation and left open
- a lead horse should be available
- equipment should be available and including lead ropes, quoits, blindfold
- an adequate number of assistants wearing suitable protective clothing, including skull caps
- communication links
- first aid kit.

Ground conditions and weather should also be taken into account to ensure the safety and welfare of horses and riders.

SCHOOLING PRACTICES

When schooling through stalls the processes below should be followed:

- an inexperienced horse should be led through the stalls a few times to acclimatise it (using lead horse if required)
- the horse should be led quietly and firmly into the stalls; the handler should duck out under the front gate only when the horse is loaded and the back gates are closed
- the back doors should be closed and locked
- the rider should keep the horse calm and relaxed

- the handler should advise riders when stalls will open using an agreed instruction
- the rider should adopt a forward position; a neckstrap, breastgirth or holding the mane can be used to avoid pulling on the horse's mouth
- the rider should allow the horse to jump straight out of the stalls and move quickly away into its stride
- on leaving the stalls the rider should go with the horse; if he gets left behind, both horse and rider will become unbalanced.

FEEDBACK

As with any schooling session, the rider should feed back accurately to the trainer on the horse's performance. This will include behaviour, performance, what went well and what needs to improve.



SCHOOLING OVER OBSTACLES

This chapter is about schooling horses to improve their jumping ability, be it early education or developing confidence and technique with an older horse.

By studying this chapter you will have a knowledge and understanding of:

- the reasons for schooling
- the principles of jumping
- basic common jumping faults and how to address them.

PRINCIPLES OF JUMPING

For a rider to get the best out of any horse when jumping it is important for them to understand the phases of the jump. The jump can be divided into five stages:

PHASE 1: THE APPROACH

The quality of the jump is closely related to the quality and suitability of the approach. The horse should be moving forward with impulsion, rhythm and in balance, and at the correct pace. Straightness cannot be overstated. All horses, and racehorses in particular, should be taught to approach the obstacle straight, which will increase the likelihood of the actual jump being straight and in balance.

As the rider approaches the obstacle, there should be a subtle lowering of the body to enable the horse to measure its stride and remain in balance.



PHASE 2: THE TAKE OFF

Before the moment of take off, the horse will lower its head and stretch its neck, preparing to use the power of its hindquarters to spring it forward and up.

At the actual moment of take off the horse will then slightly shorten its neck, raise its head, and bend the knees and fold the forelegs up. He brings the hocks underneath its body and as the hindquarters spring the body forward, the head and neck stretch forwards and upwards.



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PHASE 3: THE FLIGHT/MOMENT OF SUSPENSION

As the horse is in the air, it stretches its head and neck forward. The back should be relatively rounded with the forelegs tucked up. The hind legs will follow the curve of the body. If the horse hollows his back the jump will be inefficient, more effort will be required to clear the jump and the landing may be uncomfortable or unbalanced.



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PHASE 5: DEPARTURE FROM THE OBSTACLE

The first stride after the landing should be fluent, with the horse's hocks underneath him to propel him forward, so that rhythm, balance and impulsion of the pace are re-established as quickly as possible. It is of particular importance when racing that horses 'land running' and do not waste any time in re-gaining the forward momentum.



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PHASE 4: THE LANDING

The horse will straighten the forelegs and prepare to meet the ground. It momentarily raises the head to balance itself. The forelegs normally touch the ground one slightly in advance of the other, followed by the hind legs.

The horse's back should remain supple so that the hind legs can move under him as they touch the ground.



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REASONS FOR SCHOOLING

Schooling over obstacles is an essential part of the education and training of any horse which is being prepared to run in either point to points or over hurdles or steeplechase fences.

Schooling can be undertaken for a variety of reasons, including:

- to teach young horses to jump
- to improve the jumping performance or efficiency of inexperienced horses or those that have problems with jumping
- to sharpen horses up prior to a race
- to provide a change of routine
- to develop rider skills.

Any schooling session must have an aim, and the rider should liaise with the trainer to ensure they both understand the purpose and goal of the exercise.

With good schooling the horse should achieve:

- fluency
- efficiency
- confidence
- the ability to adjust stride
- response to commands
- speed and economy.

PREPARATIONS FOR SCHOOLING

Preparation is very important, and should include facilities, horse and rider. Poor preparation can lead to a poor schooling performance, which can take weeks or months to correct. Key points include:

FACILITIES

A good employer will undertake a risk assessment of the activity which includes checks to:

- ground conditions
- weather conditions
- fence conditions (including wings)
- availability of first aid equipment
- radio/mobile phone
- location details
- availability of assistance.

HORSE

The horse should be tacked up with suitable tack and protective boots. It should be warmed up whilst maintaining a relaxed outlook.

RIDER

The rider should be dressed correctly with appropriate personal protective equipment including skull cap and body protector to the appropriate industry standards, and suitable breeches and riding boots. Whether gloves are worn is up to the individual, but they can help with grip in wet weather.

GENERAL

Other considerations include the availability of a lead horse and the provision of clear instructions (understood by all participants).

DURING SCHOOLING

When schooling horses the following principles should be considered:

HORSES SHOULD BE SHOWN OBSTACLES

In racing it is common practice to show the obstacle to the horse and give it a reassuring pat. This familiarises the horse to the jump and gives him confidence.

HORSES SHOULD JUMP PROGRESSIVELY

To show improvement, progression must be planned. This might include increasing the speed to a fence or moving from being given a lead to jumping upsides and then in front.

HORSES SHOULD JUMP FROM A SENSIBLE SPEED

Horses should be started at a speed which enables them to learn the process and develop a good natural jump. Once this has been established they can be taught to jump at speed to prepare them for race conditions.

LEAD HORSES ARE USED ACCORDING TO EXPERIENCE AND REQUIREMENTS

A sensible and experienced lead horse, which jumps well and is reliable, is invaluable to developing jumping techniques in younger horses. An unsettled and anxious lead horse can have a disruptive effect on the others and will hinder the schooling process.

DIFFICULTIES ARE ADDRESSED AND REMEDIAL PLANS PUT IN PLACE

Even with the best preparation, sometimes schooling sessions do not go according to plan. Difficulties may include:

- **Rider losing position**

The rider may benefit from coaching, riding a more experienced schoolmaster and reviewing his riding through video playback to better understand where his/her weaknesses lie.



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- **The whip**

The rider should be mindful of carrying the whip in the correct hand. If there are no horses on your right-hand side the whip should be carried in the right hand, and if there is nothing on your left-hand side the whip should be carried in the left hand. If your horse is inexperienced in this discipline it may need gentle encouragement to fully commit to jumping the obstacle. To help maintain balance and momentum the whip can be used in the appropriate hand, keeping both hands on the rein to give the horse a slap down the shoulder. This allows the rider to minimise body movement and aids in keeping the horse focused without becoming unbalanced. This also aids in keeping your mount straight.

- **Horse refusing or running out**

This could be due to:

- inexperience; this can apply to all of the points below
- discomfort (lameness/problems in the back/pain in the mouth)
- lack of confidence through either poor riding, a bad experience or being over faced
- poor training leading to disobedience or a lack of understanding
- lack of confidence when asked to jump from a slippery surface.



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- **Rushing**

- Common causes include inexperience or weak riding, when the rider is unable to settle and relax the horse
- Incorrect training when the horse has not been taught to approach a fence in balance and rhythm
- Fear or pain, creating tension and anxiety.

- **Irregular rhythm/missing a stride or getting in too deep**

Finding the correct take-off point, with horse and rider in balance can be affected by:

- lack of confidence of both horse and rider
- horse's laziness
- too much speed early on in the approach
- riding, dropping the contact at the latter stages of the approach
- soreness or pain in the back, limbs or feet.

- **Poor shape over the fence**

Horses should be encouraged to make a good natural shape over obstacles and develop consistency in their jumping, which will help them to avoid making mistakes in a race. A horse which does not extend its head and neck or use his back properly could make errors when jumping at speed. Common causes include:

- incorrect training, leading to incorrect basic paces and a reluctance to accept the rider's contact
- the rider restricting the horse's freedom to jump correctly
- the horse suffering from pain or discomfort in its neck or back.



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- **Jumping left or right-handed**

Some horses have a natural tendency to jump left or right-handed, which should be corrected early in their training to avoid this affecting their performance during a race. If a horse has a tendency to jump either left or right the rider should always be conscious of carrying the whip in the correct hand. There is usually an underlying reason why some horses jump in this way and any physical issues should be investigated and addressed. Exercises to assist straightness include teaching a horse to shorten or lengthen its stride so that it can make adjustments in the approach to a fence and find the correct take-off spot. Some trainers will use exercises with poles and grid work to encourage and develop straightness.



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MONITORING AND ONGOING IMPROVEMENT

It is in the best interest of horse, rider and connections for the horse to develop a good, natural, fast and consistent method of jumping. To this end, video review is an excellent method of assessing how a horse is jumping and identifying areas for improvement.

Professional help should always be considered and may include veterinary or physiotherapy support for the horse, coaching for the rider or external professional training of horse and rider.

FEEDBACK ON HORSE PERFORMANCE

This chapter is about giving feedback on a horse's performance to a third party, normally the trainer, following either routine exercise, working or schooling.

By reading this chapter you will have a knowledge and understanding of:

- the importance of being able to assess a horse
- the significance of identifying a horse's strengths, qualities and areas for improvement
- how to develop communication skills, to enable you to put across information in a clear and concise manner.

THE FEEDBACK PROCESS

The rider's feedback is a vital piece of information and a good rider is invaluable to a trainer and measured by the quality of feedback he provides. This will enable the trainer to make sound decisions about a horse's level of fitness, education and inform future training plans.

BEFORE WORKING/SCHOOLING

The rider will be briefed by the trainers as to the purpose and intent of the work planned. The rider should listen carefully to instructions. They may not know the individual horse well so any information will help to form a plan to achieve the best possible outcome. Some horses will not be worked as often as others and these are the ones where there is limited opportunity to make the most progress. The rider must assimilate any information given and remember the instructions.

DURING WORK

Throughout the work or schooling, it is the rider's responsibility to look after the horse and maintain his well-being, as well as motivating him at strategic moments towards an improved performance. Although the rider will be riding to instructions, they must rely on their own instincts and reflexes during the activity, judging and assessing the horse's abilities and improving his performance where necessary.



AFTER WORK

Following work or schooling, the rider must now feed back as many aspects as possible to enable the trainer to gain an accurate picture of how the horse performed, what went well, and any areas that require further improvement. Answer questions from the trainer, owners and stewards about the race. The jockey should be able to recall every detail of the activity and put his opinions across in a clear and concise way. It is also the rider's responsibility to discuss anything that may have compromised the horse's performance during the work.

OBSERVATIONS

When discussing a horse's performance it is helpful to have a framework to ensure that important points are always covered.

The word 'ORBITS' provides a constructive framework for riders to discuss the performance of their horse when working or schooling. These are:

O Outline

The horse must remain between the rider's hand and leg aids, thrusting himself forward from the hind leg into the bridle to create a powerful stride and rhythm. By maintaining this optimum position the horse is able to use himself effectively and efficiently.

R Rhythm

This is probably the most important attribute in a racehorse. The ability to run and maintain a regular rhythm increases speed and saves valuable seconds over fences or exiting the starting stalls.

B Balance and bend

The horse is said to be balanced when he runs effortlessly and is attuned to the rider's every aid. As the horse naturally carries more weight on his head, neck and shoulders, the rider's main objective is to engage the hindquarters and re-dress the horse's natural balance to increase stride length and poise.

When working, a horse's legs have to support more than 1,000 pounds (over 450kg) of bodyweight when galloping at speeds up to 40 miles an hour. To increase the longevity of the horse's career, it is important to ask for suppleness and bend to the left and right-hand side in order to develop the muscles equally down both sides of the body, reducing uneven impact and subsequent injury to the legs and feet of the horse. In addition, a well balanced supple horse is more likely to perform equally well over left and right-handed courses.

I Impulsion

This is a term used to describe the movement of a horse when it is going forward with controlled power. Impulsion helps a horse effectively use the power in its hindquarters which in turn benefits balance and rhythm.

T Tempo

The tempo describes the speed or pace of the rhythm. The pace can be adjusted to improve the quality of the rhythm. For example a horse who becomes excited on the gallops will have a quick, fast tempo which can be improved by the rider sitting quietly and slowing the horse, until he relaxes and the tempo and rhythm slow down allowing him to take a longer and more stress-free step. A horse which is a little lazy about his work can be improved by quickening the tempo to develop a bigger stride and quicker rhythm. Others may move a little scratchy in their slower paces and by increasing the tempo could help them to move more freely and fluently.

S Straightness and stride

Straightness is a fundamental quality that is often overlooked in training. The rider must teach the horse to stay in a straight line (tunnelled) between both his heels and hands. The value of keeping the horse straight is proven on the racetrack in being able to prevent the horse from jumping left or right, interfering with other horses or diverting from a true line.

To understand about the stride length and pattern of a racehorse, it is important to have a basic knowledge of biomechanics. During each stride, every limb has a stance phase (when the leg is in contact with the ground) and a swing phase (when it moves forward) to prepare for the next stance phase. Research has shown that Thoroughbreds have greater muscle mass in their hind limb near the hip joint than other breeds of horse. The hip joint and the muscle surrounding it are the main source of energy generation throughout the stride. This increases the natural frequency of hind limb movement and enables a higher stride frequency which leads to the Thoroughbred being faster over the ground than other breeds of horse.

In addition, the elongated limbs permit the racehorse to achieve longer stance times and take longer strides. The slight frame and legs combined with fast twitch muscle fibres allow for more rapid transposing of the limbs during the protraction phase and this leads to higher stride frequencies, which make the horse faster over the ground.

HORSE CHARACTERISTICS AND BEHAVIOURS WHEN RIDDEN

This chapter is about recognising and understanding a horse's temperament and behaviours when ridden. It aims to provide riders with a greater knowledge and understanding of how to ride and school racehorses more effectively.

By studying this chapter you will have a knowledge and understanding of:

- the specific characteristics of the Thoroughbred temperament
- behaviour traits and how to manage them
- positive reinforcements of positive behaviour.

THOROUGHBRED CHARACTERISTICS

Traditionally the Thoroughbred horse has been bred for centuries to exhibit the following characteristics:

- highly strung and sensitive
- intelligent
- quick thinking and alert
- responsive
- supreme athlete
- pleasing disposition.

To further define the characteristics of temperament and behaviour, it is worth noting that temperament is inbred to be an integral part of the horse's nature, whereas behaviour is often a learned response to a situation or stimulus.

It is important to understand that racehorses are ridden and trained differently from a general leisure or competition riding horse. Although the breaking-in process is similar, once the horse has been backed and ridden away, the daily ridden work to produce the young horse is very different.

A young competition horse normally furthers his education in an enclosed all-weather arena, supplemented by hacking, working on obedience, transitions and suppleness. However the racehorse works much more on slow conditioning to build the correct musculature, fitness (aerobic and anaerobic) and speed work. Racehorses hack to and from the gallops on a light contact, with very little intervention from the rider. They usually go out in a string and are used to following a lead horse. When going up the gallops the rider takes a contact with the horse's mouth and leans forward slightly, standing up in the stirrups, which indicates to the horse to move off in canter. The rider then 'bridges' the reins giving him a secure hold and allowing the horse to lean against his hands and take a secure contact.

Occasionally, exercising or riding work does not go according to plan and racehorses can often exhibit undesirable behaviours when ridden and throughout training. As a work rider it is useful to understand how and why these behaviours occur.



CONFRONTATIONAL BEHAVIOUR

Confrontational or negative behaviour can be demonstrated in a variety of situations such as:

- refusing or reluctant to go on to the canter or gallop (temperament or self-preservation)
- refusing fences (self-preservation)
- refusing to enter the starting stalls (fear of confinement)
- shying (fear of a response to smell or something visual)
- bolting (running away from a threat)
- jogging (stressed and unresponsive to the aid to walk)
- pulling (running against the rider's hand).



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TYPICAL REACTIONS

Horses may react to pain and discomfort by displaying the following behaviours:

- cold back syndrome – a reaction to girthing up and mounting when the horse arches his back and runs forward
- bit evasion – placing head above or below the bit contact; tongue over the bit; pulling
- rolling under saddle – due to discomfort from saddle, girth or rider
- grunting or groaning when ridden particularly over fences, due to abdominal discomfort.



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Horses with poor conformation often show:

- insufficient athleticism due to poor conformation or lack of fitness
- muscular fatigue due to poor conformation
- poor locomotion leading to disuniting in canter, tripping, hitting fences
- excessive changing of legs.

The rider can cause the following behavioural reactions from the horse by:

- nagging – repeatedly asking for the same aid regardless of the horse's response; the horse will react by 'switching off' and ignoring the rider
- poor timing – asking for the reaction after the horse has already responded; the horse becomes confused and his behaviour is often seen as a negative response due to his lack of understanding
- inappropriate punishment – punishment for fear in an attempt to motivate the horse to work harder or faster
- poor rider balance masking the clear aids; the rider's signals become muddled and confuse the horse
- changing hands or increasing pressure down the rein can cause the horse to increase his speed and pace.



MANAGEMENT ISSUES

- Incorrect balance of feeding can cause hypersensitivity or conversely too many carbohydrates can cause the horse health issues such as 'tying up' (rhabdomyolysis).
- Stabling without opportunity to de-stress at grass or interact with other horses can cause the horse to become unsettled in his outlook and even develop stereotypical behaviours such as weaving, box walking, cribbing and wind sucking.

- A poorly fitted tack can cause pain, discomfort or sores and the horse may misbehave when ridden.
- Inappropriate shoeing or foot trimming can cause bruising to the sole of the foot, or corns.
- Dental issues will make the horse uncomfortable when bridled, evading the bit or pulling. Head shaking can be the result of poor dentistry or other issues.

COPING STRATEGIES

By learning how to manage the horse's idiosyncrasies, behaviours and traits, performance can be improved and enhanced. The following points should be considered:

- aim to keep the horse relaxed and happy in his daily routine by turning out where possible and providing interaction and company with other horses
- racing yards normally have a consistent daily routine and this helps the horses to unwind as they are creatures of habit and thrive on a set pattern every day
- quality time spent with the racing groom gives some horses a great sense of well-being
- a good stable manager will create the correct balance of work versus exercise to keep his horses happy in their job
- feed according to the horse's individual temperament, size, age and workload
- ensure tack and rugs fit comfortably and correctly
- routine attention from equine professionals such as the equine dentist and farrier help to prevent discomfort
- some racing yards employ the services of an equine physiotherapist to keep the horses supple and relaxed.

All horses exhibit varying characteristics and, like people, have very different personalities. Learning to recognise diverse behaviours, their causes and how best to respond to them is a much valued ability in a good rider and contributes towards helping the horse to live and perform at his best.

THE EFFECT OF FITNESS, EDUCATION AND OUTSIDE INFLUENCES ON HORSE PERFORMANCE

This chapter is about the factors that can affect a horse's performance, which can have a significant impact on its training plans, riding plans and way of going.

By studying this chapter you will have a knowledge and understanding of:

- a horse's level of training and education
- a horse's level of fitness
- external influencers such as weather and going.

FACTORS AFFECTING PERFORMANCE

Every horse is unique and what works for one may not work for another. Therefore individual preparation for a competitive performance is key to success. In preparing training and riding plans, there are a number of factors that should be considered that may either enhance or have a negative effect on a horse's performance. These factors should never be considered in isolation; sometimes they combine to have a positive or negative consequence.

FITNESS

To be successful on the racecourse and lessen the risk of injury, the racehorse must be supremely fit. A basic fitness programme will require an initial programme of slow conditioning exercise to build muscle tone and firm up tendons and ligaments in the lower leg.

The unfit horse starts with walking exercise, lengthening the time spent in the saddle daily. The use of a mechanical horse walker can be of great benefit in the early stages of getting the racehorse fit, saving staff time and settling the horse back into a work routine. Many trainers follow this with a period of trot. As time progresses it will become noticeable that the horse is sweating and blowing less each day.

When starting canter work the rider must learn to recognise the signs that the horse can keep a more regular stride (without changing legs) and begins to take a pull or become stronger in the hand. The training load can now progress by increasing:

- distance; lengthening the duration of the exercise
- intensity; increasing the degree of difficulty by cantering uphill, or on a softer surface
- regularity; changing the frequency of the exercise (some horses may be exercised more than once per day).

The most accurate way to measure the horse's fitness and recovery times is to use a heart rate monitor. Therefore it is helpful to know the parameters within which the horse's heart operates at rest and work, in beats per minute (bpm), which are:

- 30-40 bpm rest
- 40-80 bpm low-intensity exercise, e.g. walking
- 80-120 bpm low-medium intensity exercise, e.g. trotting
- 120-160 bpm medium-intensity exercise, e.g. canter
- 160-200 bpm medium-high intensity exercise, e.g. fast canter
- 200-240 bpm high intensity exercise, e.g. galloping.

The aim of understanding heart rate is to develop the horse's ability to use aerobic respiration (where energy is generated through oxygen levels in the blood) and to delay the onset of anaerobic respiration when a lack of oxygen in the system leads to fatigue and a build-up of lactic acid, causing cramp in the muscles in the hindquarters.

EDUCATION AND TRAINING

Part of the overall training programme for racehorse performance includes educating/training the horse, which is done for the following reasons:

- to enable them to become more amenable when ridden
- to improve abilities and performance
- to reduce the risk of injuries.

Training falls into the following two categories:

- physical training, where muscle strength is increased through exercise and canter work (fitness training)
- mental training, improving skills and behaviours, such as training the horse to respond to the rider's aids.

Educating the horse improves his stride pattern, rhythm and balance, which reduces the risk of injury. Training also improves the horse's mental agility making him more manageable and controllable.



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SPEED, DISTANCE AND TIME

Speed, distance and time all play an important part in the development of the racehorse into a swift athlete. However, controlled studies have shown a link between cantering at differing speeds over long distances with increased fracture risk. Therefore the rider must be aware of the impact of overtraining the horse and learn to recognise the onset of fatigue within the fast work regime.

WEIGHT CARRIED

As a racehorse becomes successful on the racecourse, weight is used to handicap the horse's chance of winning. The weight a horse carries has a direct bearing on his ability to run at speed and over longer distances. A galloping horse absorbs concussion through his feet and legs with each stride he takes. Weight-carrying ability depends on the size of the horse and his maximum oxygen consumption level.

GROUND CONDITIONS AND TERRAIN

It is important that riders and trainers consider the requirement for horses to adapt to different training surfaces in order to prevent injuries. Whatever the surface, horses will be more prone to injury if trained on a small circumference, which leads to strain or sprain injuries. Likewise, working uphill may contribute to hind limb stress fractures and strains.

Common injuries include:

- sore/bucked shins; inflammation of the bone skin surrounding the cannon bone in the forelegs. Occurs when young horses begin cantering work, causing concussion on immature legs
- splints; a bony enlargement which forms on the splint or cannon bone. Generally seen in young horses due to concussion



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- tendon strain; a strain to the deep flexor digital or superficial digital flexor tendon due to deep going, fatigue or conformational issues (low heels and long toes)
- suspensory ligament strain; a strain to the suspensory ligament which supports the fetlock. As with tendon strain the issue is caused by deep going, fatigue or poor conformation
- fractures; can occur if a horse falls or when it is fatigued, such as at the end of a race or on firm going.

CLIMATE

Changes in climate can affect the horse's well-being as well as his performance. The main climatic factors which impact on the horse are:

HOT TEMPERATURES

When working in hotter temperatures the horse's heart rate will be higher than it would be in normal conditions, leading to a quicker onset of fatigue and slower recovery rate. Humidity is also an important factor to consider as it can lead to dehydration which causes loss of body salts of sodium and potassium, leading to kidney failure. To counter any effects of dehydration, salt or electrolytes should be added to the drinking water or feed. In hot weather the horse suffers an early onset of fatigue during work, which leads to a lack of co-ordination.

COLD TEMPERATURES

When the weather is cold the horse will lose body heat, especially if stood in his stable, leading to thermal stress. Weight loss follows so keep body temperature up by layering lightweight rugs (to trap air between the layers) and using an exercise sheet during ridden work. In very cold conditions there may be an increased risk of fracture during training and cold airway induced inflammation of the respiratory tract.

WIND/RAIN

Many horses become anxious and stressed in very windy conditions and should be handled firmly but sensitively.

SNOW AND FROST

Icy conditions can affect work plans and lead to serious injury if a horse is exercised or worked in such conditions; even walking to and from all-weather surfaces should be undertaken with care.



PORTFOLIO DEVELOPMENT

Schooling, riding and working racehorses takes years of experience to develop the required practical skills and underpinning knowledge. However, it is a position many racing grooms aspire to and can be a well paid and rewarding position.

The British Horseracing Authority supports those wishing to seek positions as work riders to gain the qualifications that will indicate to employers exactly what skills and knowledge you have achieved.

To gain the qualification, a learner must demonstrate their practical skills and provide evidence of knowledge and understanding.

This sample portfolio will enable a learner to gather the evidence to present for assessment.



RIDER POSITION AND THE AIDS

1. On the photographs below list the strengths and weaknesses of the riders' positions.

Rider 1	Rider 2
	
<p>Good points</p>	<p>Areas for improvement</p>

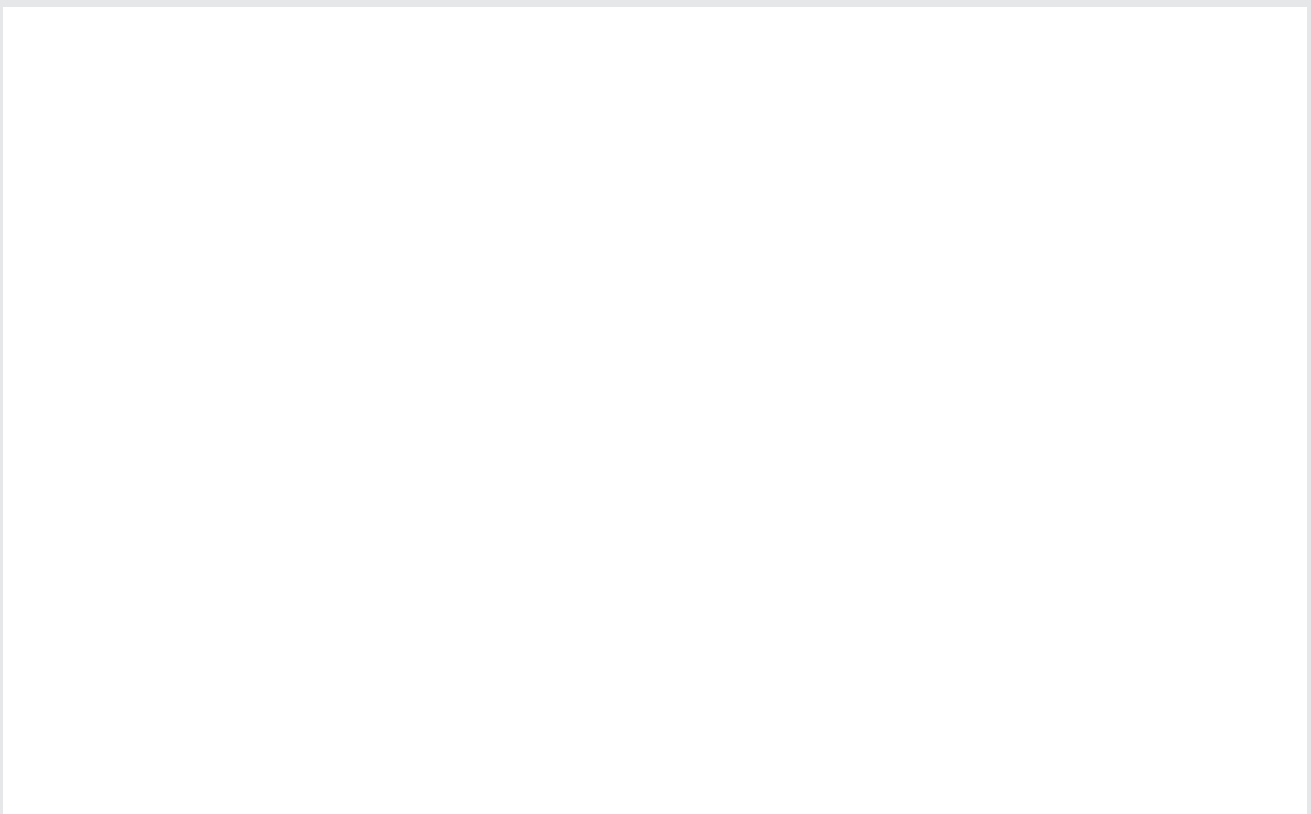
2. Ask a friend or colleague to take photographs of you in halt, walk and canter. Describe your position and state what is good and what you need to improve.

3. Complete the self-test below:

(a) List the two imaginary straight lines advocated to aid balance in the basic riding position.



(b) When the rider's leg is in the correct position, how should the stirrup leather hang?



(c) Why is it important to look ahead?

(d) Why is it important for a rider to adopt a poised or forward position when cantering?

(e) Why should a rider aim to keep the weight in the heel when the foot is in the stirrup?

(f) List five natural and two artificial aids used in all riding activities.

(g) What is the value of the voice as a natural aid?

(h) What are the main aims of the hand aids when riding?

FITNESS FOR RIDING

1. Keep a diary of your fitness regime and show an improvement in your fitness levels.
2. Complete the self-test below:
 - (a) List the physical characteristics which help riders to be successful.

- (b) Rider fitness training can be divided into three main categories. What are they?

- (c) Explain which exercises would best improve the rider's aerobic capacity.

- (d) How could a rider improve his balance off the horse?

- (e) What is the simulator useful for developing in a work rider?

THE PACES

1. Describe the footfalls of the following paces:

(a) walk

(b) trot

(c) canter

(d) gallop.

2. List five factors which could improve the paces of the horse.

3. Take a short video of a horse being ridden in walk, trot and canter. Write a brief description of the qualities of each of the paces.

TACK AND ITS EFFECT ON HORSE PERFORMANCE

1. List the parts of the horse's head and mouth that could be affected by the action of the bit.

2. What factors could affect the type and size of a bit being selected for use?

3. Take a photograph of a horse tacked up in your workplace. Describe the tack and the effect it has on the horse.

4. What is the purpose and use of the following racing equipment?

(a) blinkers

(b) visor

(c) hood

(d) net.

THE PRINCIPLES OF RIDING AT SPEED

1. Keep a diary of at least five horses you have worked. Describe their way of going, including positive aspects of their work and areas that you feel could be improved.

If you ride these horses regularly state how they are developing in their training and fitness.

2. List six reasons for working a horse:

(a)

(b)

(c)

(d)

(e)

(f)

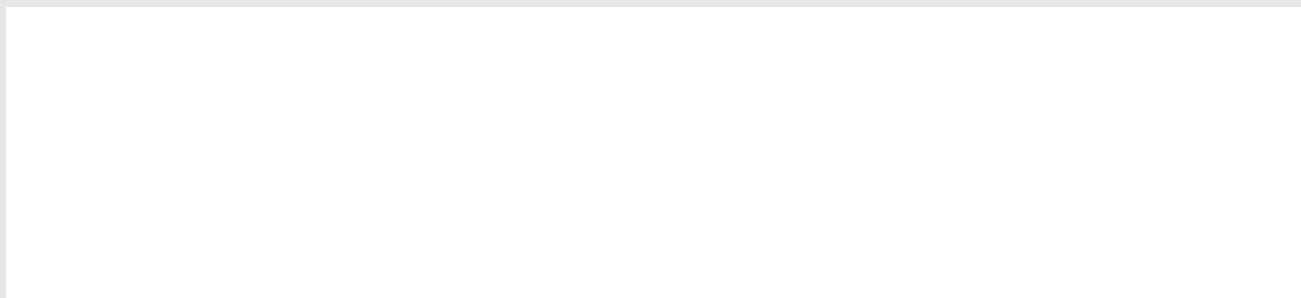
3. What effect will the following terrain have on a horse's performance?

(a) uphill

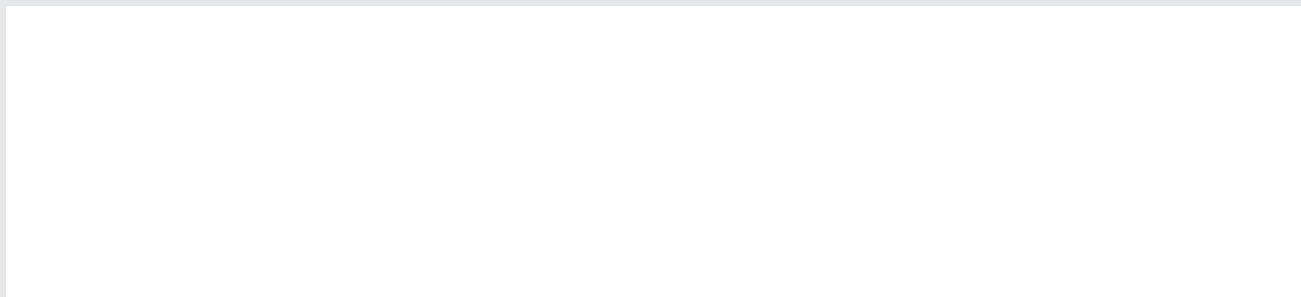
(b) downward incline

SCHOOLING THROUGH STARTING STALLS

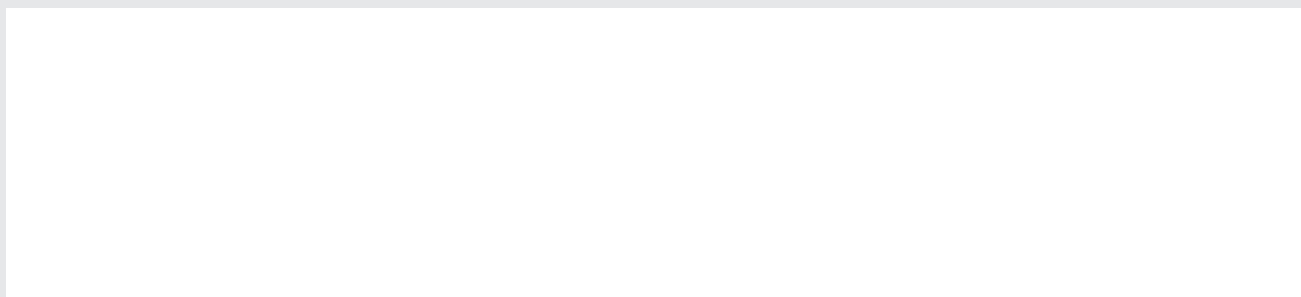
1. Describe the process for introducing a horse to starting stalls.



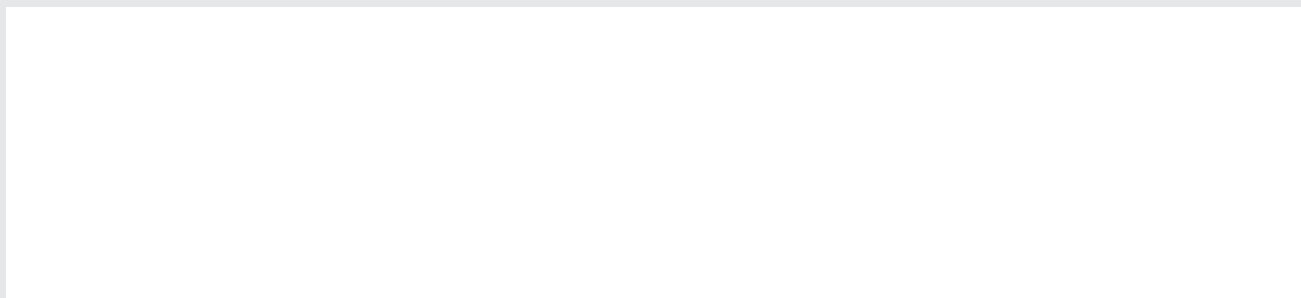
2. What safety precautions should be taken when schooling a horse through starting stalls?



3. What should a rider be aiming for during schooling through starting stalls?



4. Take a short video of you schooling through starting stalls. Explain what went well and what you could do to improve the session.

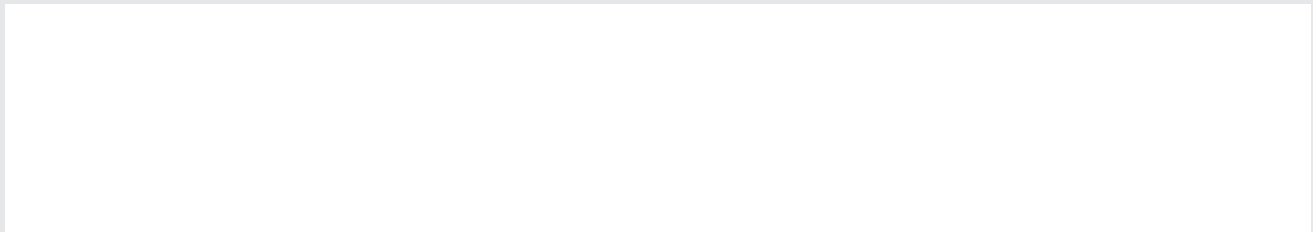


SCHOOLING OVER OBSTACLES

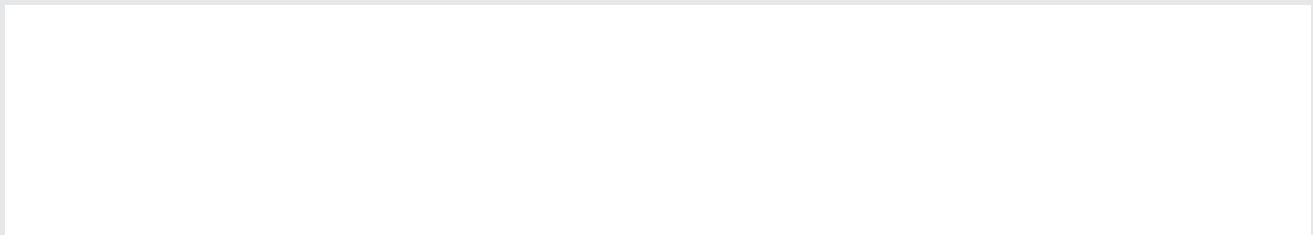
1. Describe the five stages of the jump.



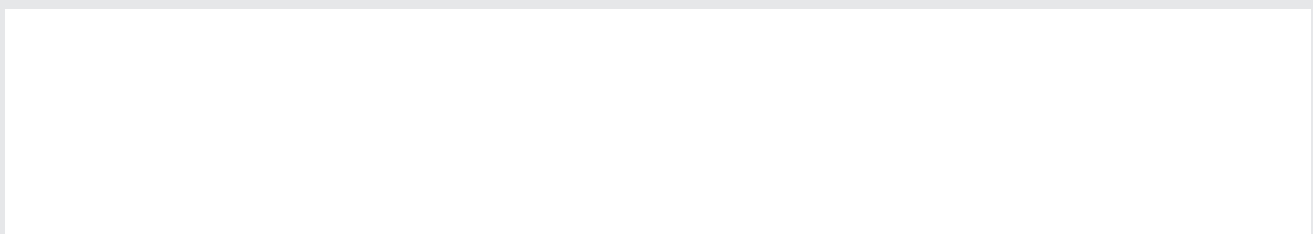
2. What checks to facilities, horse and rider should be carried out prior to schooling over obstacles?



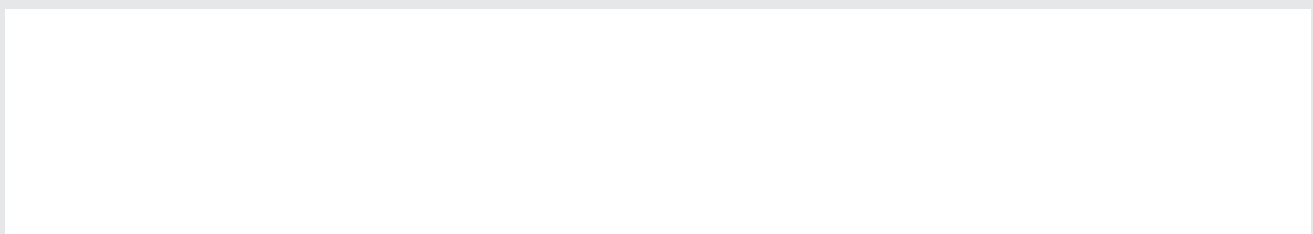
3. Take a short video of you schooling a horse over obstacles. Describe the process, what went well and what could be improved.



4. Keep a diary of at least five horses you have jumped. Describe their way of going, including positive aspects of their jumping performance and areas that you feel could be improved.



5. Describe three things that could go wrong when schooling horses over obstacles and explain how these could be addressed.

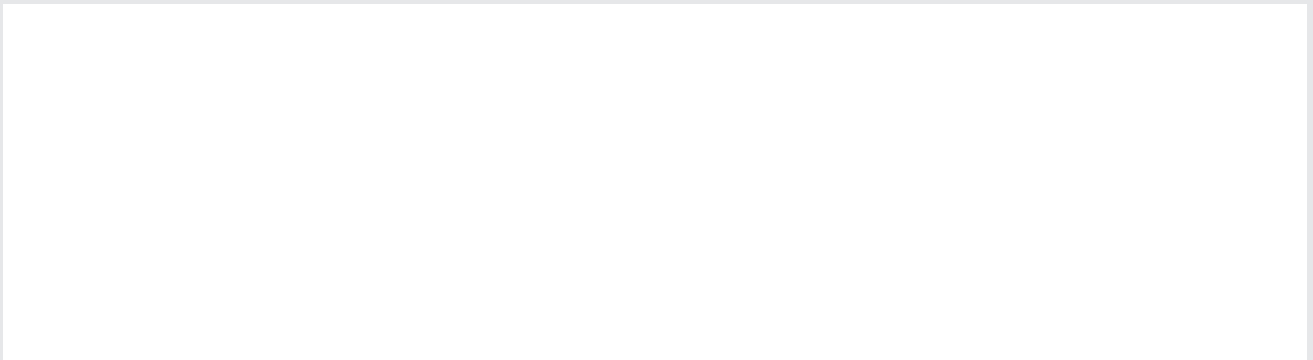


FEEDBACK ON HORSE PERFORMANCE

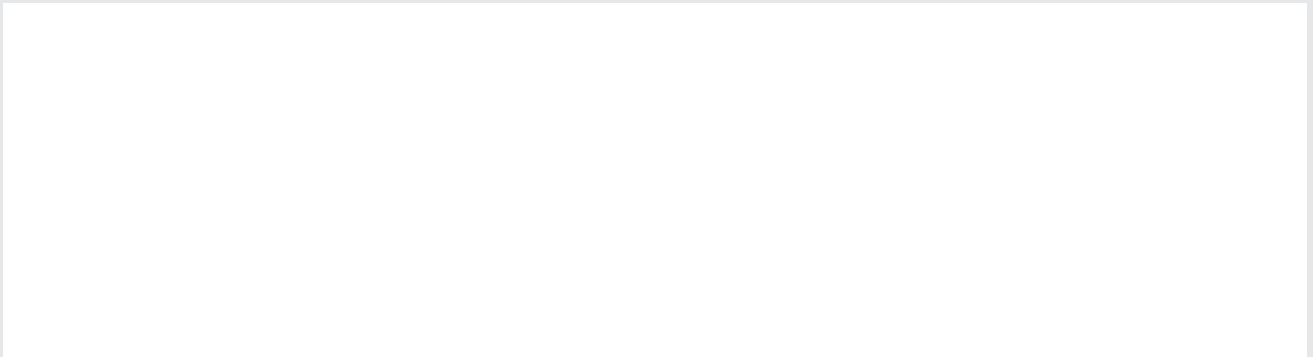
1. Why is the rider's feedback important to the trainer after exercise, work or schooling?



2. What can a rider learn from watching a video of working or schooling a horse?



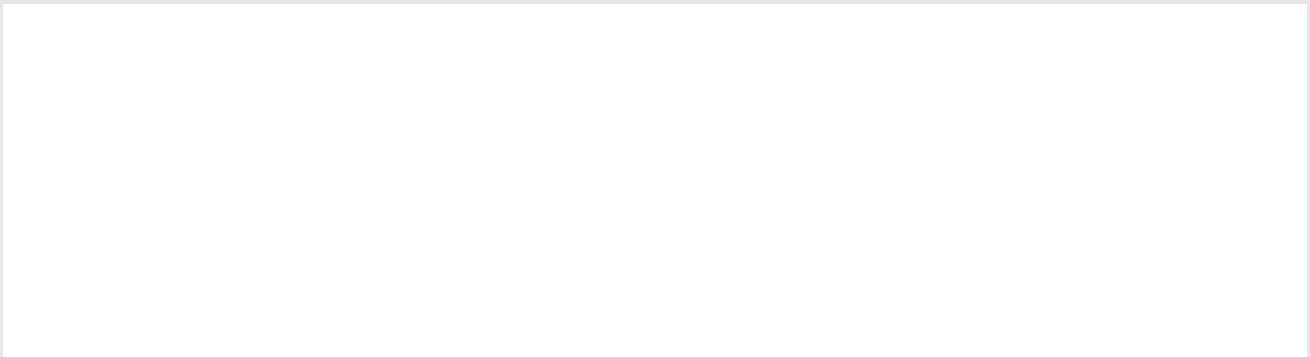
3. What is the word that provides a framework from which to construct valuable feedback?



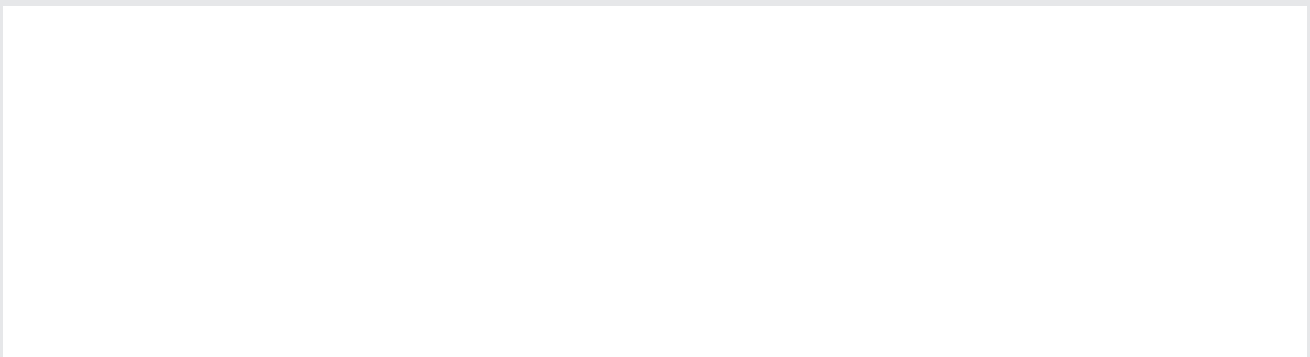
4. Discuss why rhythm and tempo are important to a horse's performance.



5. Explain how feedback on straightness and stride will help the trainer to further improve the horse's performance.



6. Write a summary of feedback you have recently given when feeding back after working or schooling a horse. What went well and how could you improve your feedback?

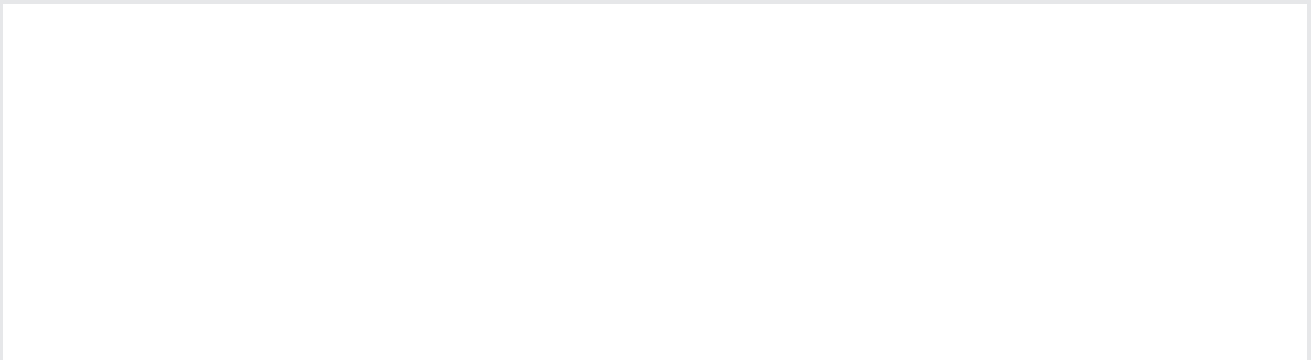


HORSE CHARACTERISTICS AND BEHAVIOURS WHEN RIDDEN

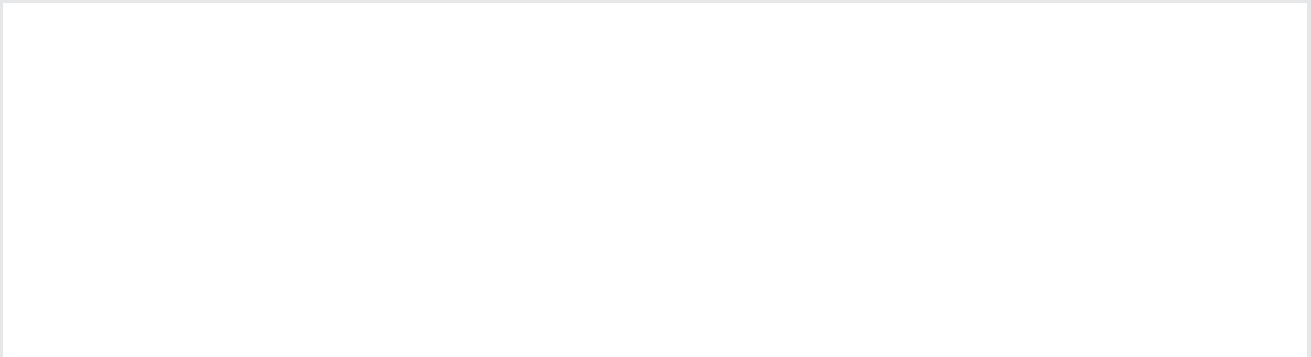
1. Describe the main characteristics of the Thoroughbred horse.



2. Outline the difference between temperament and behaviour.



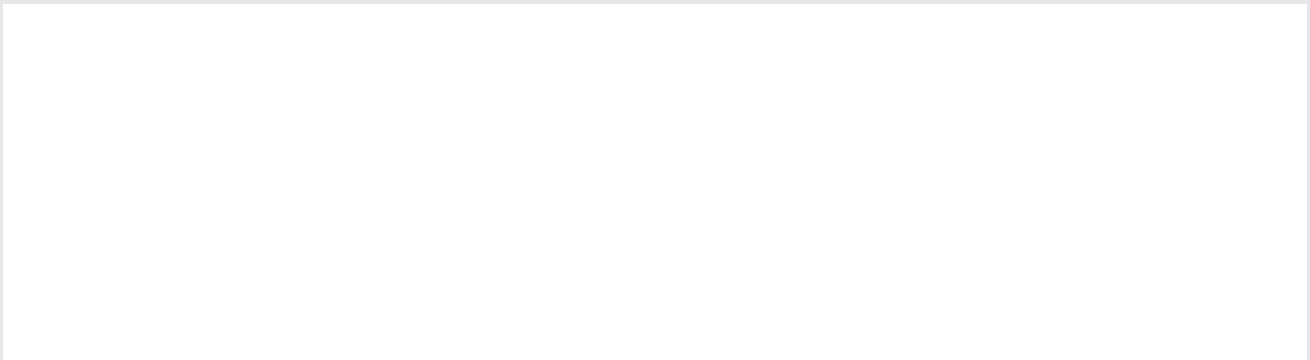
3. List three types of confrontational behaviour.



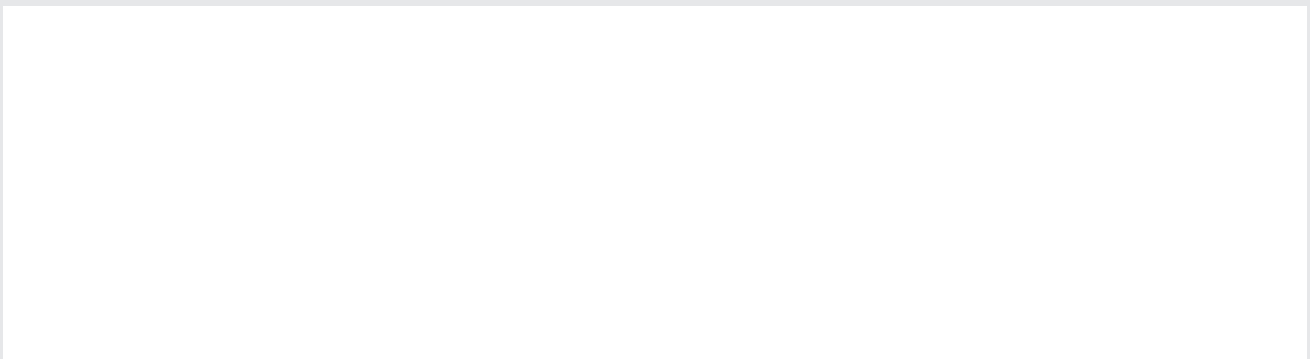
4. What behavioural reactions can the rider elicit?



5. What guidelines would you adhere to when organising a yard to keep horses relaxed and happy?



6. Describe the characteristics and behaviour of a horse that you ride regularly. How does this differ between it being stabled and ridden?



THE EFFECT OF FITNESS, EDUCATION AND OUTSIDE INFLUENCES ON HORSE PERFORMANCE

1. List three factors that could affect a horse's performance and state what could be done to manage those factors.

Three horizontal white lines for writing the answer to question 1.

2. Describe three occasions when outside influences have affected the performance of a horse you were riding.

Three horizontal white lines for writing the answer to question 2.

3. What safety factors should be considered when riding horses in prevailing weather conditions?

A large white rectangular area for writing the answer to question 3.

Make Your Passion

A woman wearing a dark riding helmet with goggles and a dark jacket is smiling and looking at the head of a dark horse. The horse is wearing a leather halter with a metal ring. The background is a wooden wall.

Your Work

For information on careers, jobs and training in horseracing

**Job profiles • Career case studies • Live job board
Education/curriculum resources • Taster days**

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