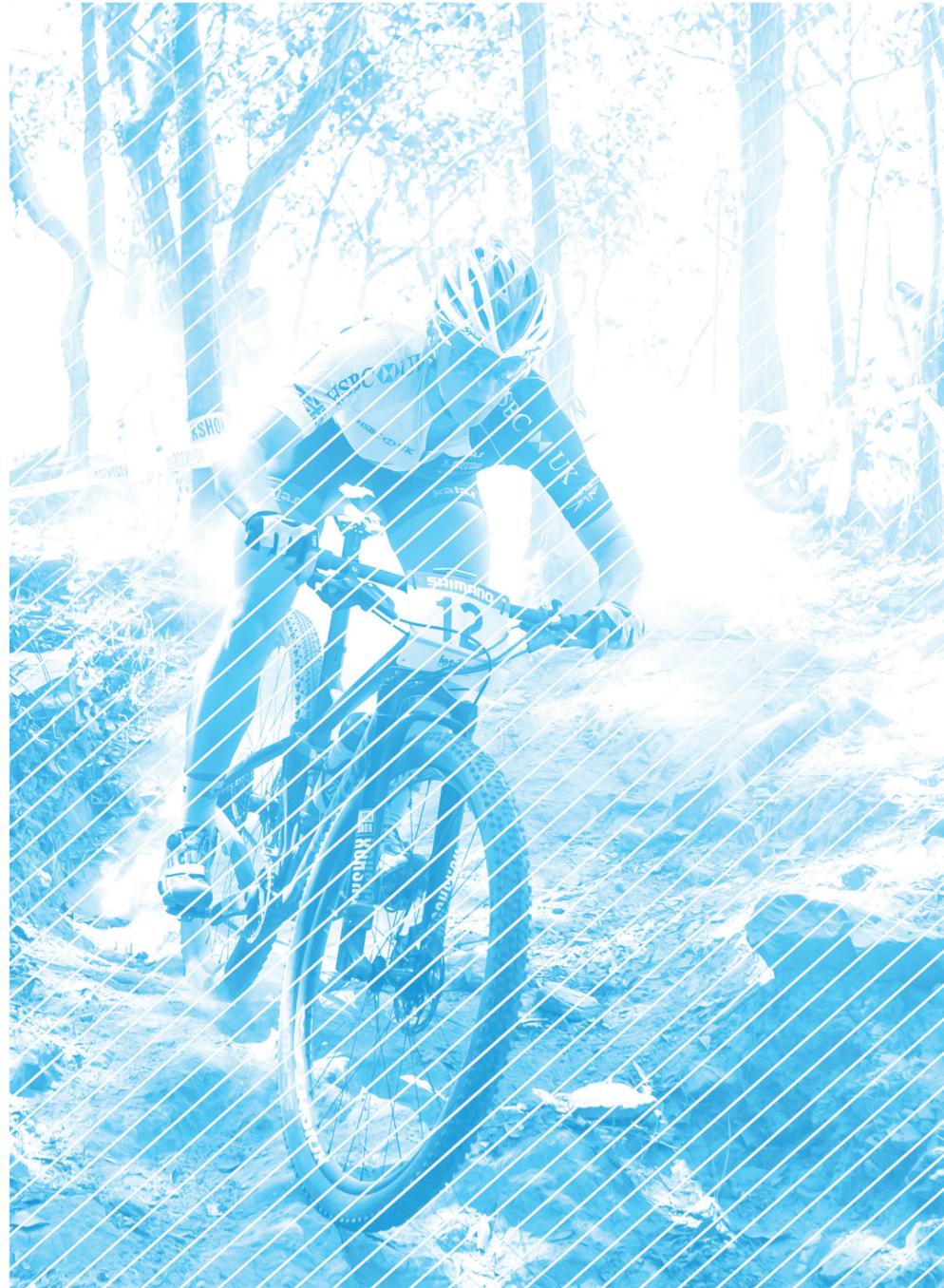


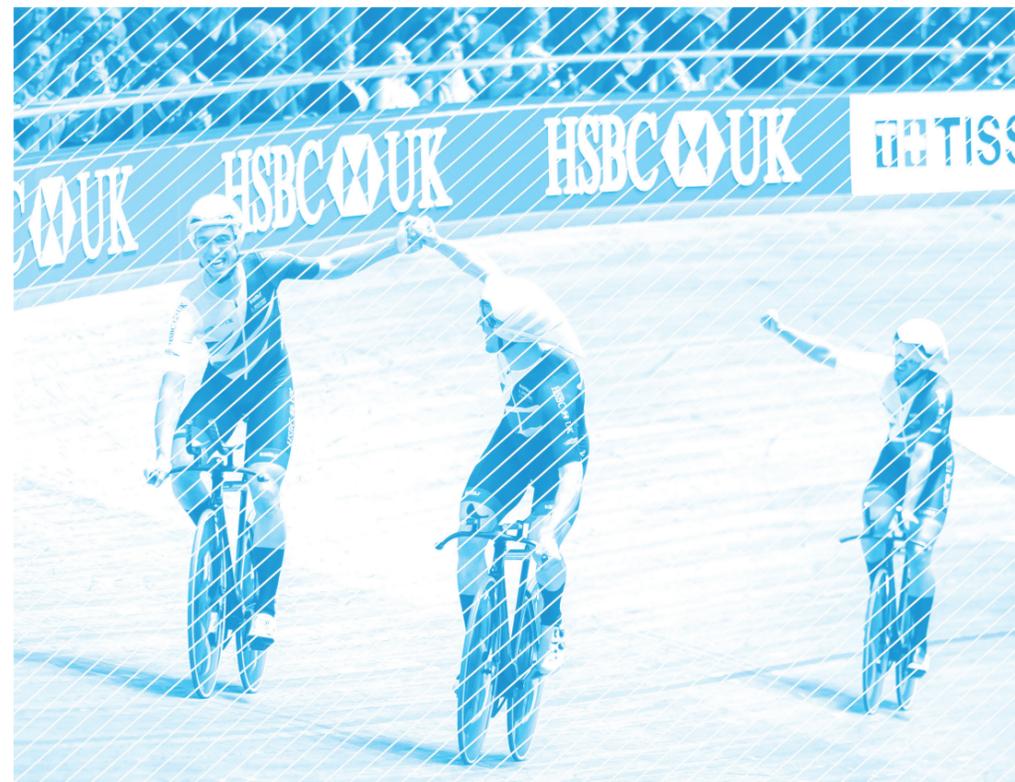


# TALENT DEVELOPMENT PATHWAY



## HOW TO USE THIS GUIDE

This booklet details the progress we expect you to make technically, tactically, and physically to ensure that you are doing the correct sessions. We have labelled this to show how we see progression happening, from your entry at club level (CN), to a Development Centre (DC), into Regional Schools of Racing (RSR) and finally into National Schools of Racing (NSR). A rider achieving NSR would be at the top of the class and has Great Britain Cycling Team (GBCT) status in their sights.



Our hope is that you will use the booklet to monitor how you are doing and tick off each of your accomplishments. You, your club coach and your family will be able to see exactly what you need to express next to keep pushing your development.

Have a look through and see what you can already do and, most importantly, see what you need to do next – we are looking forward to seeing how far you can get.

**GET STUCK IN!**



## PLANNING YOUR ROUTE

Before starting on your cycling journey it is important to understand where you want to go and where you want to get to. Your first step is to map where you are and how you are going to get to the destination, you should think about the following questions:



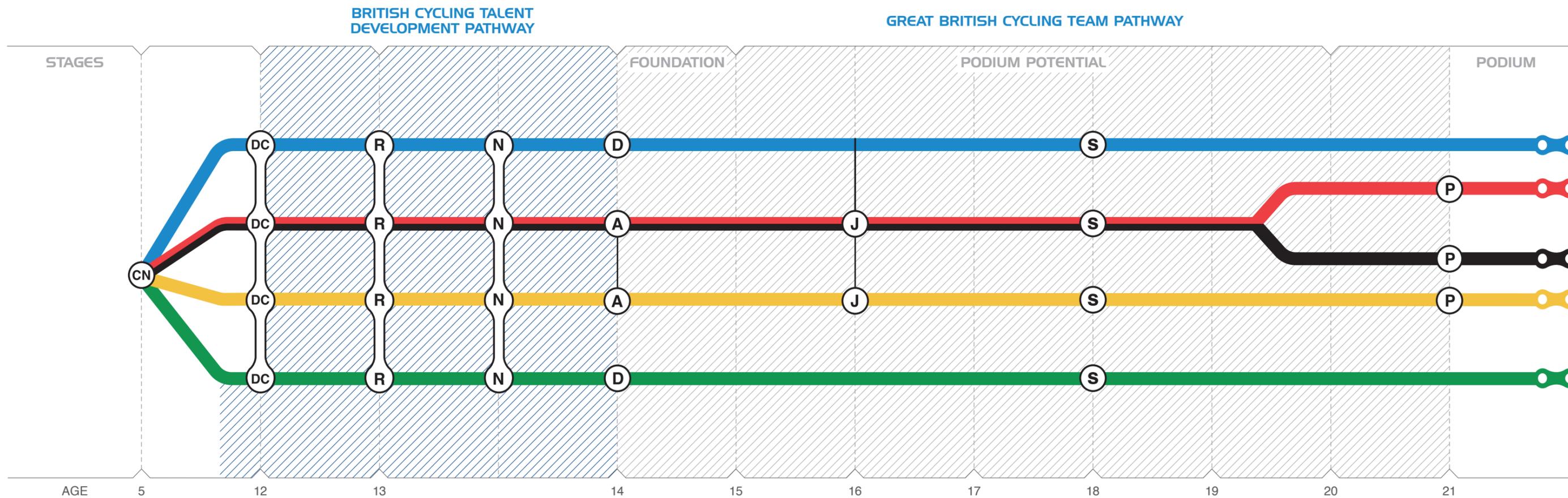
**1** Who can help me get to my destination?

**2** What coaching sessions can help me?

**3** What races do I need to take part in?

**4** What training technical/tactical and physical components do I need?

Bike riding is much like planning a journey, this is why we have produced this booklet – a step-by-step guide to the progress we believe youth bike riders need to make to be successful in the future.



**KEY**

Local, Regional and National competition pathway

- MTB XC
- ENDURANCE
- SPRINT
- BMX

**BRITISH CYCLING PROGRAMMES**

- Club Network
- Development Centre
- Regional School of Racing
- National School of Racing

**GREAT BRITAIN CYCLING TEAM PROGRAMMES**

- ENDURANCE & SPRINT**
- Apprentices
  - Junior Academy
  - Senior Academy
  - Podium Programme
- MTB XC & BMX**
- Development Squad
  - Senior Squad

**CONNECTIONS**

- COMBINED**  
Riders are expected to train and race in more than one discipline to further their development.
- ENDURANCE**  
Riders should train and race on the track and the road before they specialise in one as a senior.
- CROSSOVER**  
Riders may have a primary discipline but they will still train and race in others.

Whether you want to go pro, stand on the podium, wear the jersey or bear the #1 plate, the Rider Route will help you achieve your goal. Although the diagram is linear, your actual route will evolve depending on your discipline, location, priorities, education, opportunity and injury. The most important thing is that you make the most of the resources available to you at any given time.

# TRACK

The words in **bold** are key phrases, terminology or expressions that you need to understand as a bike racer. If you are unsure what these words and phrases mean, make sure you check with your coaches.

Where relevant, final progression in this table should be expressed at national level races.

RIDER'S NAME:

---

<b>STARTS</b>	Present the bike in the correct starting position. <input type="radio"/>	Perform a <b>held start</b> with correct body and pedal position. <input type="radio"/>	Perform <b>start phases one and two through turns one and two.</b> <input type="radio"/>	Perform start <b>phases one and two</b> , transferring into <b>phase three</b> in the back straight, continuing through <b>turns three and four.</b> <input type="radio"/>	Perform a start from a <b>start gate</b> and deliver all start phases efficiently in a race. <input type="radio"/>
<b>RIDING IN LINES</b>	Follow another rider at a bike length gap on the black, red and blue lines and perimeter fence. <input type="radio"/>	Follow another rider within half a wheel sized gap on any line and the perimeter fence. <input type="radio"/>	Show control in all positions in a line when riding a <b>Lumps and Bumps</b> activity. <input type="radio"/>	Consistently ride the <b>World Class line</b> during a <b>Team Pursuit</b> effort. <input type="radio"/>	Ride within the racing line during a <b>Madison</b> and follow the <b>live rider</b> during changes. <input type="radio"/>
<b>SLOW SPEED SKILLS</b>	Ride one handed in the straights. <input type="radio"/>	Ride a lap with either hand off the bars. <input type="radio"/>	Ride a lap at the top of the track that takes longer than 25 seconds. <input type="radio"/>	Ride a lap at the top of the track that takes longer than 30 seconds. <input type="radio"/>	Ride a lap at the top of the track that takes longer than 35 seconds. <input type="radio"/>
	Ride in the straight at slower than walking pace and perform a complete stop on the <b>apron</b> and roll away <input type="radio"/>	Perform a <b>trackstand</b> in a straight. <input type="radio"/>	Track stand in the straights at any height. <input type="radio"/>	Track stand on the 25m and 100m marks. <input type="radio"/>	Track stand at any height at the 25m and 100m marks. <input type="radio"/>
<b>GROUP RIDING</b>	Ride in pairs, within a handlebar width gap apart on the black, red and blue lines and perimeter fence. <input type="radio"/>	Ride from the back to the front of a group of riders in pairs, threes and fours. <input type="radio"/>	Ride dynamically and escape when surrounded by or boxed in by other riders. <input type="radio"/>	Perform a <b>tandem change</b> from second position in a Madison. <input type="radio"/>	Can ride an <b>elimination race</b> in a variety of different ways consistently. <input type="radio"/>
<b>CHANGES</b>	Change from the front of a line to the back when riding on the blue. <input type="radio"/>	Perform <b>Team Pursuit</b> changes consistently and efficiently when riding on drop handlebars. <input type="radio"/>	Take up a position within the front quarter of an active racing line after changing from the front. <input type="radio"/>	Perform <b>Team Pursuit</b> changes consistently and efficiently when riding on <b>aero-bars.</b> <input type="radio"/>	Time your changes and positioning to be placed to score points or contest the win in a bunch race. <input type="radio"/>
<b>ACCELERATION</b>	Perform a seated acceleration in a straight line, maintaining <b>race position.</b> <input type="radio"/>	Accelerate out of the saddle in a straight line for a whole straight. <input type="radio"/>	Accelerate out of the saddle anywhere on the track while holding a line <input type="radio"/>	Accelerate out of the saddle whilst <b>tracking a line</b> , using track height and gradient to assist with the acceleration. <input type="radio"/>	Accelerate out of the saddle for at least 20m during a <b>Flying 200m lead-in</b> and hold the fastest line for the track. <input type="radio"/>
<b>ATTACKING</b>	Perform a staged attack during a bunch race <input type="radio"/>	Perform a counter attack <input type="radio"/>	Perform a well-timed attack and counter attack <input type="radio"/>	Perform a well-timed attack; over, under and through the bunch. <input type="radio"/>	Can follow or instigate a lap-take on the bunch. <input type="radio"/>
<b>FINISHING</b>	Perform a lunge at the end of every race and sprint <input type="radio"/>	Perform a co-ordinated team pursuit finish <input type="radio"/>	Win a race from the front of the bunch and from the back of the bunch <input type="radio"/>	Deliver a 2-lap squeeze at the end of a race <input type="radio"/>	Perform a well-timed sprint to the line <input type="radio"/>
<b>OBSERVATION</b>	Look over both shoulders whilst in <b>race position.</b> <input type="radio"/>	Look over both shoulders whilst in a line of riders from any position in the line. <input type="radio"/>	Ride anywhere on the track and be able to look continuously over either shoulder. <input type="radio"/>	Observe bunch movement in races to <b>pick-up</b> and <b>follow wheels</b> for effective bunch placement and anticipate <b>attacks.</b> <input type="radio"/>	Consistently show correct resting order and timing of changes to the <b>new live rider</b> for a points sprint during a <b>Madison.</b> <input type="radio"/>
<b>GAP MANAGEMENT</b>	When in a line, moderate the gap to the rider in front using pedals. <input type="radio"/>	Use track gradient to moderate the gap <input type="radio"/>	Maintain a consistent gap using the track gradient when riding as the rear rider in a <b>Hide and Seek</b> exercise. <input type="radio"/>	Execute a well timed gap rush in a race scenario. <input type="radio"/>	Show <b>rushing the gap</b> and <b>holding a rider on the hip</b> in a range of sprint and bunch sprint scenarios. <input type="radio"/>

# MTB XC

The words in **bold** are key phrases, terminology or expressions that you need to understand as a bike racer. If you are unsure what these words and phrases mean, make sure you check with your coaches.

Where relevant, final progression in this table should be expressed at national level races.

RIDER'S NAME: \_\_\_\_\_

<b>STARTS</b>	Clip-in on the first attempt when starting. <input type="radio"/>	Clip-in on the first attempt and accelerate out of the saddle - changing gear smoothly as required. <input type="radio"/>	Gain places during a start effort against other riders. <input type="radio"/>	Start consistently and confidently and gain places from any grid position. <input type="radio"/>	Deliver a <b>start</b> using a range of physical, technical and tactical elements to gain places. <input type="radio"/>
<b>GROUP RIDING</b>	Ride side-by-side making contact with another rider <input type="radio"/>	Ride in at least four-a-breast formation in a bunch of riders, making contact with the riders next to you. <input type="radio"/>	Navigate through a bunch, gaining position in the group as required. <input type="radio"/>	Consistently <b>hold a wheel</b> in a line of riders in a race and gain places at every opportunity in training. <input type="radio"/>	Defend and gain position throughout a race. <input type="radio"/> Sprint to defend placing at the finish. <input type="radio"/>
<b>CORNERING</b>	Perform correct <b>cornering posture</b> and line choice to take the quickest line on a <b>flat corner</b> . <input type="radio"/>	Negotiate uphill downhill <b>switchbacks</b> . <input type="radio"/>	Negotiate uphill and downhill corners in a group. <input type="radio"/>	Identify and ride different cornering lines, <b>rail</b> berms and ride <b>low-high</b> and <b>high-low</b> . <input type="radio"/>	Maintain or gain position in any corner type in a race. <input type="radio"/>
<b>STEP-UPS, STEP-OVERS AND BUNNY HOPPING</b>	Perform a rear wheel lift consistently and with control using flat pedals. <input type="radio"/>	Link the timing of a <b>manual</b> and <b>rear wheel lift</b> to step-over an object or step-up a kerb. <input type="radio"/>	<b>Bunny-hop</b> at least 20 cm high and half a bike length in distance from a jogging pace run-up. <input type="radio"/>	<b>Bunny-hop</b> cleanly and consistently to avoid trail obstacles and carry momentum without needing to change line. <input type="radio"/>	Consistently apply these technical elements to advantageously change line throughout a race. <input type="radio"/>
<b>FRONT WHEEL LIFTS AND DROP-OFFS</b>	Move dynamically from <b>ready position</b> then manual. <input type="radio"/>	<b>Manual</b> on flat ground for at least five meters. <input type="radio"/>	<b>Manual</b> over a <b>table-top jump</b> . <input type="radio"/>	<b>Manual</b> through a double jump. <input type="radio"/>	Utilise the Manual to maintain speed and flow in all trail environments <input type="radio"/>
	Perform a controlled lift of the front wheel using the pedals. <input type="radio"/>	Drop-off a kerb-height drop using a power assisted front wheel lift <input type="radio"/>	Carry momentum over hub-height drop-offs using a front wheel lift. <input type="radio"/>	Carry momentum over wheel-height drop-offs in the trail using either type of front wheel lift. <input type="radio"/>	Consistently negotiate any <b>drop-off</b> featuring in a race, maintaining or gaining pace. <input type="radio"/>
<b>DESCENDING</b>	Negotiate straight line descents, bomb-holes and chutes whilst consistently maintaining <b>ready position</b> . <input type="radio"/>	Negotiate technical descents, <b>bomb-holes</b> and <b>chutes</b> whilst consistently staying <b>centred</b> . <input type="radio"/>	Consistently negotiate <b>B-Line</b> descents. <input type="radio"/>	Consistently negotiate <b>A-Lines</b> . <input type="radio"/>	Ride all <b>A-lines</b> and descents smoothly and consistently, linking all sectors with <b>flow</b> in races. <input type="radio"/>
			Apply <b>manual</b> and <b>bunny-hop</b> techniques to a straight-line descent. <input type="radio"/>	Apply <b>manual</b> and <b>bunny-hop</b> techniques to any descents. <input type="radio"/>	
<b>CLIMBING</b>	Maintain traction throughout a steep climb with a solid surface and ride into a <b>track stand</b> , moving off again without wheel lift or spin. <input type="radio"/>	Maintain traction throughout a steep climb with a loose surface and ride into a <b>track stand</b> , moving off again without wheel spin or lift. <input type="radio"/>	Negotiate step-ups on steep climbs with good surfaces. <input type="radio"/>	<b>Clean step-ups</b> and change line on steep, loose, rocky and muddy surfaces. <input type="radio"/>	<b>Clean</b> any climb to carry pace during a race to maintain or gain placings. <input type="radio"/>
			Climb a series of very tight switchback bends. <input type="radio"/>	<b>Drive</b> through switchback turns and <b>transition</b> climbs. <input type="radio"/>	Consistently <b>transition</b> every climb in race. <input type="radio"/>
<b>JUMPING AND PUMPING</b>	Use a <b>table-top jump</b> to get both wheels off the ground. <input type="radio"/>	Jump a <b>table-top</b> a bike length or longer, smoothly and quietly. <input type="radio"/>	Link <b>pumping</b> and <b>jumping</b> on a <b>pump track</b> . <input type="radio"/>	Identify sections of trail that can be <b>pumped</b> to gain momentum. <input type="radio"/>	Maintain speed in races by identifying obstacles and features to use as lips to jump or <b>pre-jump</b> . <input type="radio"/>
	<b>Pump</b> a whole lap of a <b>pump track</b> . <input type="radio"/>	<b>Pump</b> multiple laps of a <b>pump track</b> . <input type="radio"/>	<b>Shape</b> a jump. <input type="radio"/>		

# ROAD

The words in **bold** are key phrases, terminology or expressions that you need to understand as a bike racer. If you are unsure what these words and phrases mean, make sure you check with your coaches.

Where relevant, final progression in this table should be expressed at national level races.

RIDER'S NAME:

---

<b>BIKE CONTROL</b>	Ride one-handed, maintaining <b>race position</b> using the drops or tops of the bars. <input type="radio"/>	Maintain <b>race position</b> whilst removing and replacing bottles from cages and items from jersey pockets. <input type="radio"/>	Remove and replace arm-warmers in less than a minute. <input type="radio"/>	Remove a gilet in less than a minute. <input type="radio"/>	Remove and replace a race-cape in less than a minute. <input type="radio"/>
	Maintain race position whilst riding using only one leg and one hand. <input type="radio"/>	Ride in a line and take a bottle from a helper from either side of the road. <input type="radio"/>	Perform a clean front and rear wheel lift over a kerb. <input type="radio"/>	Perform a bunny hop lifting both wheels off the ground. <input type="radio"/>	Receive a bottle in a race <b>feed-zone</b> . <input type="radio"/>
<b>RIDING IN LINES</b>	Consistently manage a gap to riders in front in training. <input type="radio"/>	Ride in a <b>team time trial format</b> and in a <b>chain-gang group</b> of any size. <input type="radio"/>	Utilise <b>team time trial</b> and <b>chain-gang</b> riding in a race situation. <input type="radio"/>	Can understand and be part of an echelon and lead-out train with at least three team mates. <input type="radio"/>	Can organise and deliver an echelon and a lead-out train. <input type="radio"/>
			Sit-on in a group to conserve energy or rest. <input type="radio"/>		
<b>CORNERING</b>	Perform left and right turns using the drop bars. <input type="radio"/>	Perform correct cornering posture and line choice to take the safest, quickest line. <input type="radio"/>	Corner in a line of riders and <b>hold a wheel</b> at race pace. <input type="radio"/>	Consistently maintain position in a line or bunch through corners. <input type="radio"/>	Utilise corners in races to make up or gain time or positions. <input type="radio"/>
<b>DESCENDING</b>	Descend on the drop bars in a relaxed, controlled and comfortable style. <input type="radio"/>	Descend in a relaxed, controlled and comfortable style in a line of riders. <input type="radio"/>	Descend in a relaxed, controlled and comfortable style from any position within the bunch. <input type="radio"/>	Maintain or gain position at will when descending in bunch. <input type="radio"/>	Shows consistent and competent performance on all descents regardless of group size or technical severity. <input type="radio"/>
<b>CLIMBING</b>	Can perform <b>tracking a line</b> and <b>throwing</b> techniques when riding out of the saddle. <input type="radio"/>	Understands when to ride out of the saddle in training and races. <input type="radio"/>	Consistently change onto a harder gear to lift out of the saddle and into easier gear getting into the saddle <input type="radio"/>	Gain position at the front of a bunch by the bottom of a climb to create <b>sliding room</b> . <input type="radio"/>	Paces the climb and attacks over the top in races <input type="radio"/>
			Get out of saddle without the bike going backwards and maintain position using a controlled throwing technique. <input type="radio"/>		
<b>GROUP RIDING</b>	Ride side-by-side with a partner, maintaining contact for at least one minute. <input type="radio"/>	Ride in four-a-breast formation in a bunch of at least 20 riders, making contact with the riders next to you. <input type="radio"/>	Navigate through a bunch to any position in the group as requested or required. <input type="radio"/>	Ride within the first ten places of a bunch within a race. <input type="radio"/>	Ride in the front fifteen for at least three quarters of race <input type="radio"/>
<b>ATTACKING</b>	Accelerate in and out of saddle on drops and tops whilst holding a line. <input type="radio"/>	Perform and follow attacks in races. <input type="radio"/>	Perform and follow counter attacks in races. <input type="radio"/>	Deliver an attack and counter attack during a race, demonstrating correct timing, road position and tactics. <input type="radio"/>	Repeatedly execute attacks and counter attacks that result in a breakaway. <input type="radio"/>
<b>FINISHING</b>	Perform a lunge at the end of every race and sprint. <input type="radio"/>	Sprint alongside other riders and accelerate off another wheel. <input type="radio"/>	Commits to a solo breakaway for victory. <input type="radio"/>	Can finish from the front of a bunch and from the wheels. <input type="radio"/>	Read the race finish to set-up and execute a technically and tactically sound bunch sprint. <input type="radio"/>
<b>OBSERVATION</b>	Look over both shoulders whilst in <b>race position</b> using either the drops or hoods of the bars. <input type="radio"/>	Show good use of observation skills to out perform another rider in a <b>Hide and Seek</b> exercise as the lead rider. <input type="radio"/>	Observe bunch movement to <b>pick-up</b> and <b>follow wheels</b> to move forward in a group. <input type="radio"/>	Observe bunch movement in races to <b>pick-up</b> and <b>follow wheels</b> for effective bunch placement and anticipate <b>attacks</b> . <input type="radio"/>	Consistently <b>Slide and Glide</b> in races. <input type="radio"/>

# BMX

The words in **bold** are key phrases, terminology or expressions that you need to understand as a bike racer. If you are unsure what these words and phrases mean, make sure you check with your coaches.

Where relevant, final progression in this table should be expressed at national level races.

RIDER'S NAME:

---

<b>GATE TECHNIQUE</b>	Stand in the gate, maintaining correct body position and balance through all <b>points of contact</b> .	<input type="radio"/>	Deliver an effective and well timed body movement against the <b>start commands</b> .	<input type="radio"/>	Deliver a <b>progressive gate effort</b> at high intensity.	<input type="radio"/>	Perform a <b>World Class start</b> from a BMX gate.	<input type="radio"/>	Perform a <b>World Class start</b> from a <b>gate</b> on a <b>supercross hill</b> .	<input type="radio"/>
<b>START HILL</b>	Roll out of a <b>5m start hill</b> .	<input type="radio"/>	Perform an individual start at speed on a <b>5m start hill</b> .	<input type="radio"/>	Perform a <b>start</b> at speed alongside other riders on a <b>5m start hill</b> .	<input type="radio"/>	Roll out of an 8m <b>supercross start hill</b> .	<input type="radio"/>	Perform an individual <b>start</b> at speed on an 8m <b>supercross start-hill</b> .	<input type="radio"/>
<b>JUMPING</b>	Use a <b>table-top jump</b> to get both wheels of the ground.	<input type="radio"/>	Clear a medium sized <b>step up</b> or <b>double jump</b> , landing to <b>backside</b> consistently, smoothly and quietly.	<input type="radio"/>	<b>Shape a jump</b> and clear larger jumps of all types in training sessions.	<input type="radio"/>	Maintain or generate speed off a jump.	<input type="radio"/>	Always maintain or generate speed off a jump in racing.	<input type="radio"/>
<b>MANUALLING AND PUMPING</b>	<b>Manual</b> over a <b>tabletop</b> .	<input type="radio"/>	<b>Manual</b> through a double or Stepup.	<input type="radio"/>	Perform a <b>double manual</b> .	<input type="radio"/>	Gain speed through a <b>manual</b> .	<input type="radio"/>	<b>Manual</b> multiple jumps on a <b>rhythm straight</b> .	<input type="radio"/>
	<b>Pump</b> a roller and a <b>table top</b> .	<input type="radio"/>	<b>Pump</b> a double and a triple.	<input type="radio"/>	Exit a national level <b>rhythm section</b> with greater speed than you entered with.	<input type="radio"/>	<b>Manual</b> at least half a national <b>standard rhythm section</b> .	<input type="radio"/>		
<b>PEDALLING</b>	Perform <b>BMX pedalling technique</b> on flat ground.	<input type="radio"/>	Perform a <b>controlled acceleration</b> from a rolling start on flat ground.	<input type="radio"/>	Continue to accelerate up to <b>peak cadence</b> from a rolling start and track a line on flat ground.	<input type="radio"/>	Perform a <b>sprint effort</b> side-by-side with at least three other riders on flat ground.	<input type="radio"/>	Perform effective <b>sprint efforts</b> at every opportunity in every race.	<input type="radio"/>
							Perform a <b>sprint effort</b> wherever possible on the track during a full-lap effort.	<input type="radio"/>		
<b>CORNERING</b>	Perform correct <b>cornering posture</b> and line choice on a <b>flat corner</b> .	<input type="radio"/>	<b>Rail a berm</b> and show <b>high-low, low-high</b> and the <b>racing line</b> through corners.	<input type="radio"/>	Apply <b>high-low, low-high</b> and the <b>racing line</b> through corners while riding with another rider.	<input type="radio"/>	Perform cornering moves instinctively to maintain speed when riding with other riders.	<input type="radio"/>	Pre-empt cornering scenarios in racing to maintain or gain placings and protect line.	<input type="radio"/>
<b>GROUP RIDING</b>	Ride side-by-side with another rider for a full lap.	<input type="radio"/>	Ride with eight riders in at least four-a-breast formation, making contact with riders.	<input type="radio"/>	Perform a <b>staged effort</b> in a group over different sections of the track.	<input type="radio"/>	Maintain position by the end of the first turn of a race	<input type="radio"/>	Ride at speed when surrounded by other riders.	<input type="radio"/>
								<input type="radio"/>	Gains a position by the end of the first turn.	<input type="radio"/>
<b>FINISHING</b>	Pedal all the way to finish after the last jump.	<input type="radio"/>	Sprint all the way to the finish after the last jump.	<input type="radio"/>	Perform a <b>lunge</b> at the end of the race.	<input type="radio"/>	Sprint side-by-side with riders either side all the way to the finish	<input type="radio"/>	Perform an effective sprint and lunge while in close contact with other riders	<input type="radio"/>

## PROTOCOLS – THE RATIONALE

These protocols will support readiness for bike riders from an on the bike point of view, these should be used in conjunction with the technical benchmarks. Some of the protocols measure explosiveness, some speed, others measure a mixture of technique as well as endurance.

You should carefully look at what is required from each discipline and plan to measure these benchmarks at least every 6 weeks as part of your training.

### Roller Rev Out

The ability to change speed quickly or go from stationary to maximal is a huge advantage for a youth bike rider. Completing roller rev outs will support the development of this skill.

### 10 Mile Roller Time Trail

This protocol focuses on the ability to deliver a time trial effort over a set distance. It supports the development of pace judgement as well as supporting the ability to pedal fast for a long period of time which is enormously important for youth riders who race on restricted gearing in road and track.

### Figure of 8

The best youth riders have to be able to corner at speed as well as accelerate hard and fast out of corners, the figure of 8 targets all of the skills required.

### Stand Up/Sit Down Wheelie/ Manual and Bunny Hop

All 3 are fundamental to the development of a BMX and MTB rider. Being able to deliver these techniques well will help support your development during racing.

### 3 hour average club run

A good level of endurance is key for all youth bike riders, spending time out on the road will develop a good baseline of fitness and will support progression to the next step on the pathway.

### Speed Trials

The ultimate test of skills and technique. This test represents what you would expect to find in a MTB and elements of a BMX race. Break the skills down to practice and then deliver this test against the clock to see who the most skilful rider is.

### 50 Meter Standing Start

As well as developing good technique, standing starts help develop explosiveness and strength, all riders should be doing at least one session on starts session each week in their training.



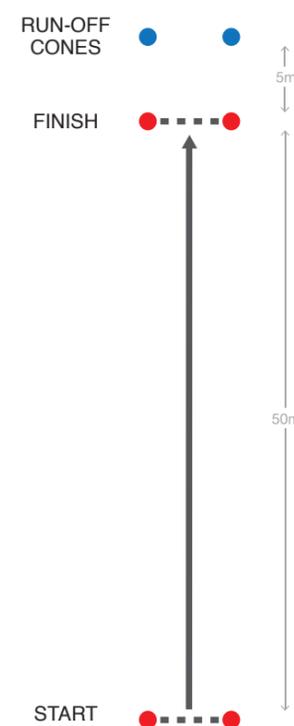
# PROTOCOLS

These protocols have been designed to help you develop your race skills as well as improve your speed, strength and endurance. They should be used as regular training sessions and not be seen as specific tests. Doing these protocols means you will get better at them and in turn you will get better at racing. By monitoring yourself you will be able to see if you are progressing - you will not be able to express good data without having a good skill base.

## 50 Meter Standing Start

1. Mark out cones as shown in Figure 1.
2. From a held start, you should sprint maximally through the run off cones, starting in your hardest youth gear.
3. Repeat three times with three minutes between efforts, five to 10 mins between sets. This can be done in sets; complete three to six sets.
4. The fastest time will represent the session result.
5. Conduct a cool-down or repeat a desired number of sets with desired recovery between.

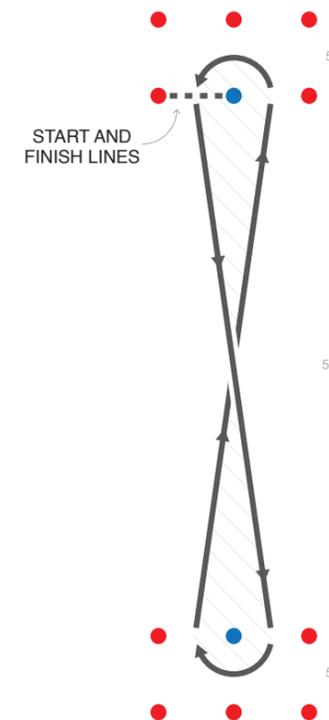
Figure 1



## Figure of 8

1. Course to be set up as shown in Figure 2.
2. Start at the start/finish line using a one-footed standing start.
3. Complete 10 figure-of-eight laps, turning round the green cone and staying within the red cones. Repeat sets of three to six with three to five mins recoveries.
4. The time to complete the 10 laps will represent the session result.
5. Conduct a cool-down or repeat a desired number of sets with desired recovery between.

Figure 2



## Roller Rev Out

1. On your road bike, inflate your tyres to 100 psi and select your hardest youth gear.
2. Mount the rollers and complete a World Class Warm-up.
3. Ensure the bike computer is zeroed.
4. Adopt race position - hands on drops and flat back.
5. Build cadence gradually for five seconds then seated sprint for 10 seconds, maintaining good position.
6. Two minutes recovery
7. Repeat x 3 (three efforts in total)
8. The maximum speed will represent the session result

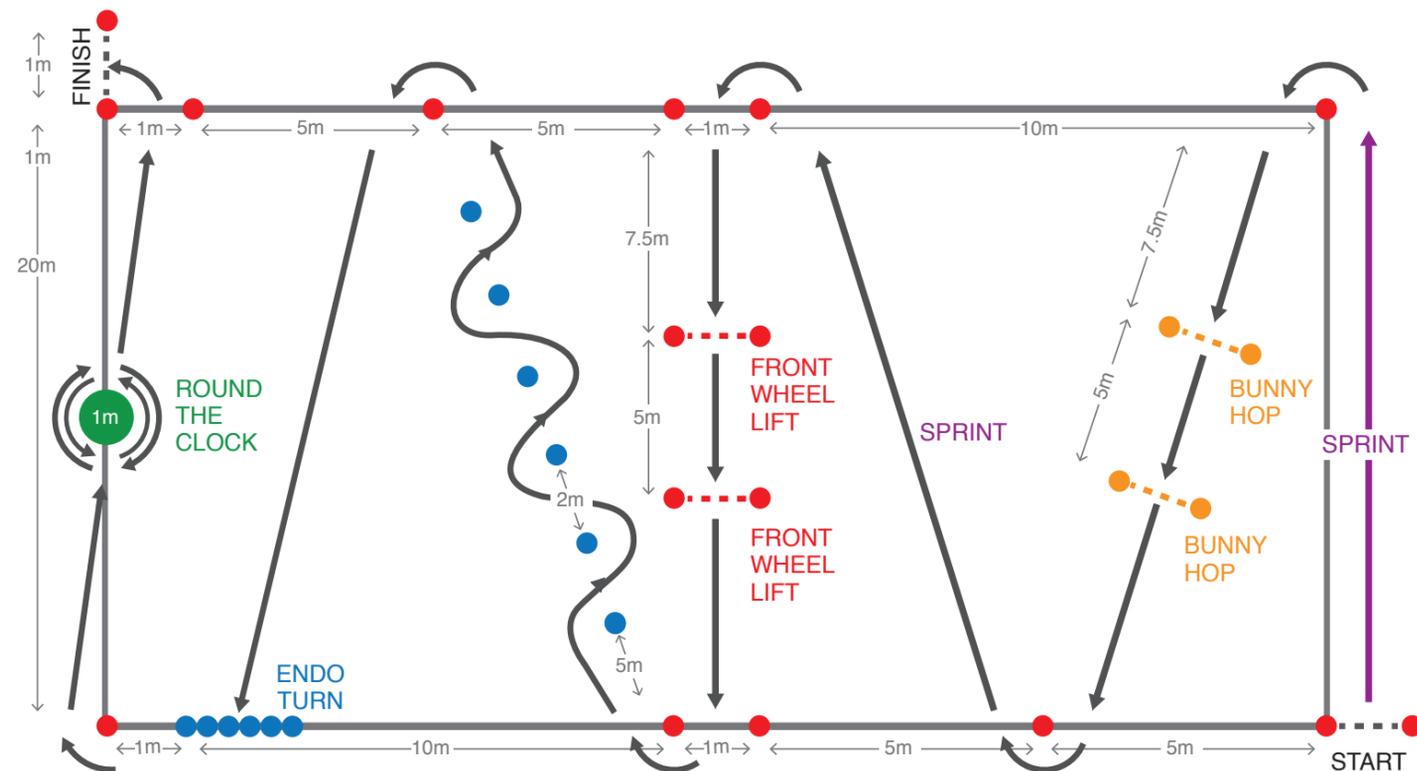
## 10 Mile Roller Time Trial

1. On your road bike, inflate your tyres to 100 psi and select your hardest youth gear.
2. Mount the rollers and complete a World Class Warm-up.
3. Ensure the bike computer is zeroed.
4. From a stationary start, accelerate hard and fast completing 10 miles on the rollers as quickly as possible.
5. The time to complete the time trial will represent the session result.
6. Conduct a cool-down.

## Speed Trials

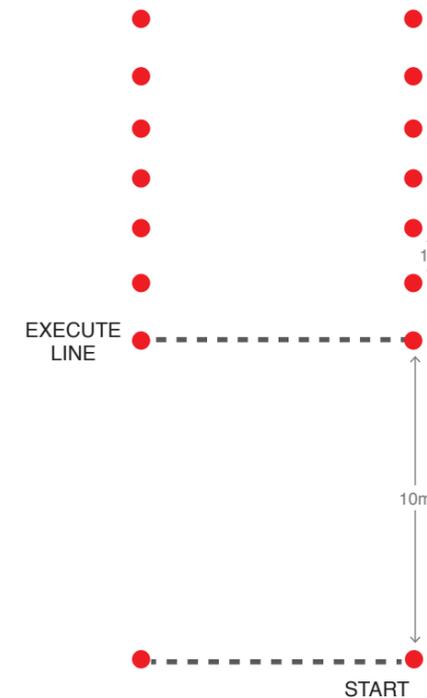
From a one-footed standing start and using flat pedals, you must negotiate the five obstacles whilst completing the course as fast as you can. If you hit a cone, knock down an obstacle or fail a task, your penalty is to put the bike down, run around it, remount and carry on. This penalty mimics the panic created by a technical mistake and also create an element of fatigue to be carried into the next feature as would be the case in a race situation.

- Cone
- Multi-Marker
- Bean can
- Circle with 1m diameter rear wheel stays in for Round the Clock (180 degrees to 6 o'clock and 180 degrees back to 12 o'clock)



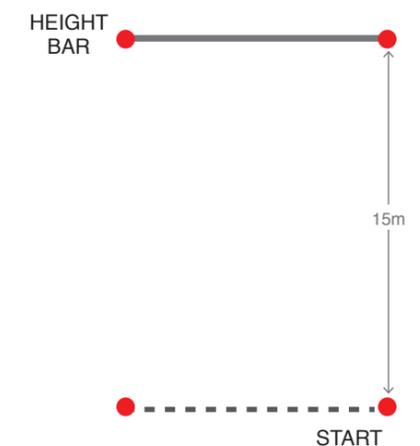
## Wheelie/Manual

1. Mark out the course as shown
2. You should be on flat pedals for this. Start at the start line with one foot on the ground
3. Ride controlled to the second line and then execute the desired technique
4. Deliver the technique for as long as possible until your front wheel meets the floor
5. Measure how far you completed the technique and this will represent your score
6. Repeat as often as you like



## Height

1. Start at the start line with one foot on the floor
2. You should be on flat pedals for this. Sprint maximally and then execute a jump aiming to clear the height bar
3. If you clear the bar raise it and go again, if you hit the bar this is a fail, reset and go again at the same height
4. Continue until you cannot clear the bar
5. Your result will be how high the bar was set when you last cleared



# BENCHMARKS

ACTION	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	TRACK	ROAD	MTB	BMX
<b>ROLLER REV OUT</b>	> 49 mph	> 45 mph	> 50.5 mph	> 46.5 mph	> 52 mph	> 48 mph	> 53.5 mph	> 50 mph	> 55 mph	> 52 mph				
<b>10 MILE ROLLER TIME TRIAL</b>	< 20 mins 7 sec	< 21 mins 45 sec	< 19 mins 1 sec	< 21 mins 7 sec	< 18 mins 36 sec	< 20 mins 30 sec	< 17 mins 50 sec	< 19 mins 52 sec	< 17 mins 5 sec	< 19 mins 15 sec				
<b>FIGURE OF 8</b>	< 2 mins 59 sec	< 3 mins 24 sec	< 2 mins 56 sec	< 3 mins 18 sec	< 2 mins 53 sec	< 3 mins 12 sec	< 2 mins 50 sec	< 3 mins 6 sec	< 2 mins 47 sec	< 3 mins				
<b>50M STANDING START</b>	< 7.5 sec	< 7.8 sec	< 7.3 sec	< 7.6 sec	< 7 sec	< 7.4 sec	< 6.8 sec	< 7.1 sec	< 6.6 sec	< 6.9 sec				
<b>3HR CLUB RUN AVERAGE SPEED</b>	> 16 mph	> 16 mph	> 16.5 mph	> 16.5 mph	> 17 mph	> 17 mph	> 17.5 mph	> 17.5 mph	> 18 mph	> 18 mph				
<b>STAND-UP AND SIT-DOWN WHEELIE</b>	> 3m	> 3m	> 5m	> 5m	> 7m	> 7m	> 10m	> 10m	> 15m+	> 15m+				
<b>MANUAL</b>	> 3m	> 3m	> 5m	> 5m	> 7m	> 7m	> 10m	> 10m	> 15m+	> 15m+				
<b>BUNNY HOP</b>	> 15cm	> 15cm	> 20cm	> 20cm	> 30cm	> 30cm	> 35cm	> 35cm	> 40cm+	> 40cm+				
<b>SPEED TRIALS</b>	< 1 min 6 sec with 1-2 errors	< 1 min 15 sec with 1-2 errors	< 1 min with 1-2 errors	< 1 min 10 sec with 1-2 errors	< 54 sec with 1-2 errors	< 1 min 5 sec with 1-2 errors	< 50 sec with 0 errors	< 1 min 12 sec with 0 errors	< 44 sec with 0 errors	< 1 min 6 sec with 0 errors				



British Cycling  
Stuart Street  
Manchester M11 4DQ  
T +44(0) 161 274 2000  
[britishcycling.org.uk](http://britishcycling.org.uk)

