

RUGBY UNION REFEREES PRESEASON FITNESS TRAINING PROGRAM

ADVANCED LEVEL

‘Train hard ref easy’

By Ross Hanbury

Rugby union referee's pre-season fitness programme: advanced level

Welcome to the Advanced level pre-season fitness programme 2016-17 for rugby union referees. This programme has been put together as a guide for those referees who followed a structured programme last year and are looking to step up their fitness levels once again this season. Referees who are looking to achieve level 16.2 or more on the YOYO test will also benefit from following this programme. This programme is 12 weeks long and requires the participant to complete between two and four training sessions each week, with each session lasting between 60 and 80 minutes in total. Before starting this fitness training programme though, it is imperative that if there are any medical or previous injury issues that you feel could impact or be made worse by a change in your physical activity levels; then you need to get in contact with your doctor, or myself on the e-mail address below.

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In order to handle the physical demands of refereeing a game of rugby it is imperative that the modern day referee is physically fit. If a referee is unfit and not able to keep up with play; then it is unlikely that they will be in the right place at the right time to make the correct decision relating to the game.

‘Being fit allows you to focus on making the right decision and not how out of breath you are! ’

At this point in time it is actually very difficult to accurately quantify the physical demands of refereeing a game of rugby; however with the recent development of global positioning system (GPS) technologies, we are now starting to get a bit more of an understanding of the physical demands at the elite level. An IRB study run by Matt Blair between 2009 and 2013 used GPS technologies to look at trying to quantify some of the physical demands placed on referees across 360 top level games.

The study showed that:

1. Referees on average covered 6.8 kilometers in a game

2. Of the 6.8 kilometers covered, 1.5 kilometers were covered at high* Intensity speeds

***metres covered above 51% of each referees maximum speed.**

3. Time spent running at high intensity speeds averaged 5.47 mins per game.

4. Time spent above 80% of heart rate maximum (individualised to each referee) accounted for 43.43 mins in total.

5. Referees on average performed 13 sprints a game ranging from 6 to 40 metres in distance.

Simplifying the IRB study findings we can say that the modern referee at any level of the game needs to have:

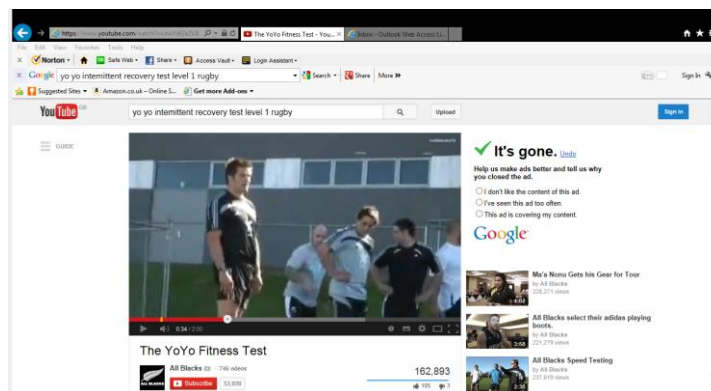
A high level of aerobic fitness/endurance

The ability to handle the high intensity running that occurs during the game

To fall in line with the International Rugby Board, Rugby Football Union and National Panels testing protocols, many societies use the YOYO intermittent recovery test level 1 (YYITRTL1), to assess the fitness levels of its members across all levels.



The YYITRTL1 is similar to the 'bleep test' requiring participants to run between two cones which are 20 metres apart. However the YYITRTL1 allows participants a 10 second rest after the second 20 metre run. The speed at which the 2 x 20 metre runs must be completed at increases progressively for the YYITRTL1, until the participant can no longer complete the runs or choose to stop. An example of some 'ok' players doing performing the YYITRTL1 can be seen in the video clip below:



<http://www.youtube.com/watch?v=nwYx62e2VJI>

The YYITRTL1 better reflects and assess the physical demands of refereeing, as it is intermittent in nature (stop and start) which is similar to the activity profile whilst refereeing. The test provides participants with a quantifiable insight as to how their fitness compares to other referees across the refereeing standards, all the way up to IRB (international) standard. With this information referees can determine how much time they need to spend on extra fitness work, in accordance with their refereeing aspirations. One of the focuses of this programme is to help the referee achieve a score of 16.2 on the YO YO test.

For more information on the YYITRTL1 (YO YO Test) please feel free to get in touch with me via e-mail.

Ok so let's start to put the programme together!

In order to get the most out of any training programme there are three training principles that need to be adhered to during this programme:

Specificity: So that your training has the desired effect and gets you fitter for refereeing, it is important that all the training sessions you do are 'referee specific'. We can design sessions that are referee specific by using the research on the physical demands of refereeing (such as that by Blair 2013, above) to guide our programme design. A classic mistake which is often made, is when referees simply 'go for a run' in order to get fit to referee and don't consider the intensity they are working at. Now going for a run will keep you healthy, however it will not address and get the body used to handling the intermittent, high intensity nature of refereeing. An example of a session that would be more beneficial for a referee would be one that is done on grass and is interval based with multiple changes in direction (such as those found in the programme below). This would then prepare and improve all the physical fitness qualities a referee needs during a match.

Overload: In order to get fitter, you are going to need to push your body and current fitness above what it is used to (within reason). When pushed beyond its current capacity, your body will adapt and make improvements, which means in the long run you will get fitter!

To assist with this process (overload), it is imperative that you consider a few things. The first of these is your pre and post diet.

Your diet should consist of:

Lean proteins: chicken, fish and eggs etc

Complex carbohydrates: brown rice, brown bread and sweet potatoes etc

Nutritious vegetables: broccoli, spinach and kale etc

Water: 2 litres every day, 3 litres on training days (includes fluids from teas, coffees and fruits)

For more information on the sorts of foods and meal plans please see the Muscle Building or Weight Loss guides for referees*

*drop me an e-mail if you would like a copy

Secondly as you are looking to step up your fitness levels it is essential that you include some core stability (injury prevention/performance enhancement) work and strength exercises in the gym. In order to assist you in this area I have put together two programmes (found towards the end of this document: one which targets the muscles that will keep your body strong as you exercise (core stability programme). Whilst the other programme looks at some examples of stretches and foam rolling exercises that will help you stay injury free and recover faster between sessions.

Also during this pre-season programme period, I will look to get strength and conditioning info, such as exercises to optimize your running performance out on social media platforms.

Finally, as you are undertaking the advanced programme which will push your body hard over the next 12 weeks; recovery strategies need to be in place for after each session (in an ideal world!).

Some recovery strategies to consider (in addition to good eating and drinking practices) are:

Passive Recovery: Other

Post-game and heavy training sessions (options include...)

Contrast water therapy (CWT) 'Hot & Cold' - limit in hot/humid environment

Hot (38°C)	Cold (8-10(12))°C	
2 mins	1(2) min	x3 (5) rotations

Cold water immersion (CWI) 'Cold' - useful in all environments (?very cold)

Cold (8-10(12))°C	Out of cold	
5 mins	2 mins	x2 (3) rotations

Compression garments

Wear for an extended period of time, as practical

Note.

Various brands available

Ensure qualified advice on brand chosen, e.g. from National Referee Physical Conditioner

Choose garments that you feel comfortable in, e.g. avoid those that cause skin rash

Massage

Light full body... (include appropriate partner assisted stretching)

9 Pool Recovery

- 1 5-10 minutes: 'Easy-somewhat hard' (RPE 2-5/10⁺) jog/swim patterns
[Fluid & ROM](#)
- 2 5-10 minutes: 'Somewhat hard' (RPE 5/10⁺) alternate upper (e.g. Baseball swing) and lower body (e.g. Leg kicks) muscle endurance exercise
[Fluid & ROM](#)
- 3 5-10 minutes: 'Very hard - maximal' (RPE 7-10/10⁺) 5-10 sec in place sprints
[Fluid & ROM](#)
- 4 Other considerations:
 - Balance activities (e.g. Deep water stand. float board)
 - Swimming races
 - Bombs
 - Muscle activation in / side of pool

Passive Recovery: Sleep

Amount and quality of sleep is super important for recovery from physical activity.

Aim for 8-10 hours of **good-great** sleep each night

Note. To be monitored if considered an issue

Things to be mindful of before going to bed:

Avoid

- TV and computers
- Reading anything too stimulating
- Caffeine and alcohol
- Snacks - particularly grains and sugars

Instead consider

- Listening to relaxing music
- Taking a sleep supplement, e.g. Tart Cherry juice (capsules), Dr Mercola Melatonin **SLEEP SUPPORT**
- Going to bed as early as possible
- Sleeping in complete darkness
- Taking a hot bath or shower before bed
- Having an established 'time to bed' and 'time to wake'**

Now the important point to remember with these recovery strategies is that some of these are not possible due to the facilities not being available to you. So therefore just make sure above all else you get some good food and a night's sleep post every training session. Then where possible 'top up' your recovery with any of the three strategies above. If you have any questions on any of the above then do not hesitate to e-mail me.

Progression: So that you keep improving your fitness levels, you need to keep pushing your fitness work along (by manipulating either the intensity or volume of the, day, week or training period etc). However it is important to note that progressing your programme too quickly could potentially result in over training and injury. Conversely progressing your training too slowly could do the opposite and result in no improvements in training at all. Similar to overload, the programme below has suitable rates of progression to ensure that you achieve your goals safely.

Individuality: The fourth and probably most important principle of training (accompanying the other training principles above) is the principle of individuality. In order for a programme to be successful and effective, it needs to work for you. It needs to fit into your life/work schedule and allow you to put as much energy into the training sessions as possible. Therefore, no two people's programmes should be the same. This is where I come in; if you feel that the programme below does not fit into your routine/lifestyle then let me know and we go look to change a few things around so that it does.

The following programme has been put together so that you are in the optimum physical shape for the fitness testing sessions and the season.

For the preseason it is advised that you follow a session to rest ratio of 1:1, in other words you train 1 day and then rest the next day (1).

Page 8 onwards in this document will now show you to develop and build your fitness levels in a progressive and safe way, however before looking at that it is important to explain how the charts in the programme work.

The programme is broken down into three key areas:

1. The programme over view, like below. This shows an overview of the training week
2. The gym based sessions
3. The outdoor sessions (these are sessions that are very similar in terms of the areas of fitness worked on as the gym based sessions; but can be done outside).

Pre-Season Training Programme Overview									
Focus: Game specific aerobic capacity/endurance									
Day		WK NO	Intensity Level + Gym Session Codes			Intensity Level + Outdoor Session Codes			
Day 1	Monday	1	Light Week	Session 1		Light Week	Session 1		
Day 2	Tuesday			Session 3			Session 3		
Day 3	Wednesday			OFF			OFF		
Day 4	Thursday			Session 2			Session 2		
Day 5	Friday			OFF			OFF		
Day 6	Saturday			GAME			GAME		
Day 7	Sunday			Regen: Light swim/bike			Regen: Light swim/bike		
EXTRA SESSION IF REQUIRED				Session 3		Session 3			

The programme shows the day number, day of the week and week number.

This is the session code. Instructions for the session and how to carry it out can be found in the gym sessions document.

The weeks are titled light to hard, this indicates how tough the week will be, fear not though as after a hard week comes a light week!

For those of you who do not have access to a gym, I have put together a parallel 'outdoor' programme, which is a similar programme that does not require you to work out in a gym.

The table below is an example of a session (session 1 on the programme) break down that is found after the programme overview table in this doc. This is where the instructions for the training sessions can be found.

The session codes table shows the session number out of 10, how hard the session should be and what piece of kit you would ideally do the session on.

To help you plan and fit the session into your diary, there is an estimation of how long the session should take.

Session Plans (Gym Based)									
Session	RPE Intensity (10 Highest)	Modality	Session Content/Instructions	Work Res Ratio	Sets	Work (Mins,Secs or Metres)	Rep Rest Durations	Rest Duration btw Sets	Session Duration
1	6	Row	<div style="text-align: center;"> 1. Warm Up 2. Row 1KM 3. Rest 3 Mins/core work 4. Row 1KM 3. Rest 3 Mins/core work 6. Row 1 KM </div>	1 To 1	1	1KM, 1KM, 1KM	3 Mins	N/A	25-35 Mins

There is a detailed description of the session content, so that you know what you are doing step by step.

As for the rest of the info, don't worry too much about this, as and when you develop your fitness, these will become more important.



Finally, this document is designed as a guide, not as a comprehensive programme of what every referee should do. As I said, the fourth and most important principle of training is the principle of individuality. In order for a programme to be successful and effective, it needs to work for you. It needs to fit into your life/work schedule and allow you to put as much energy into the training sessions as possible. Therefore, no two people's programmes should be the same. So as long as you follow a basic outline of this programme and don't choose sessions outside their allocated weeks you will see and feel the improvements in refereeing fitness.

LSRFUR Fitness Advisor

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LSRFUR Pre Season Training Plan (Advanced)						
		27th June - 7th July				
Day	Date	WK NO	Intensity Level + Gym Session Codes		Intensity Level + Outdoor Session Codes	
Mon	27/06/2016	1	Light	Session 1	Light	Session 1
Tues	28/06/2016					
Wed	29/06/2016			Session 2		Session 2
Thur	30/06/2016					
Fri	01/07/2016			Session 8		Session 8 - Pyramid Session
Sat	02/07/2016					
Sun	03/07/2016			20 Min Recovery Session		20 Min Recovery Session
Mon	04/07/2016	2	Moderate	Session 2	Moderate	Session 2
Tues	05/07/2016					
Wed	06/07/2016			Session 5		Session 5
Thur	07/07/2016					
Fri	08/07/2016			Session 8		Session 11 (Triangles)
Sat	09/07/2016					
Sun	10/07/2016			20 Min Recovery Session		20 Min Recovery Session
Mon	11/07/2016	3	Hard	Session 1	Hard	Session 1
Tues	12/07/2016					
Wed	13/07/2016			Session 4		Session 4 (End to End)
Thur	14/07/2016					
Fri	15/07/2016			Session 5		Session 5
Sat	16/07/2016					
Sun	17/07/2016			Session 6 and SnC Workshop		Session 10 (Shuttle)
Mon	18/07/2016	4	Light		Light	
Tues	19/07/2016			Session 2		Session 2
Wed	20/07/2016					
Thur	21/07/2016			Session 14		Session 14 - Centre Circle Session
Fri	22/07/2016					
Sat	23/07/2016			20 Min Recovery Session		20 Min Recovery Session
Sun	24/07/2016					
Mon	25/07/2016	5	Moderate if not testing otherwise just do	Session 7	Moderate if not testing otherwise just do	Session 6
Tues	26/07/2016			Session 9		Session 4 (End to End)
Wed	27/07/2016			Testing @ UEL		Testing @ UEL
Thur	28/07/2016					
Fri	29/07/2016			Session 5		Random Ramp Run
Sat	30/07/2016					
Sun	31/07/2016			20 Min Recovery Session		20 Min Recovery Session
Mon	01/08/2016					

LSRFUR Pre Season Training Plan (Advanced)





8th August - 18th September



Focus: Aerobic Endurance, Aerobic Power and Lactic Acid Tolerance

Day	Date	WK NO	Intensity Level + Gym Session Codes	Intensity Level + Outdoor Session Codes
Mon	08/08/2016	7	Light week if not testing, if testing then just do 20 min recovery session	Light week if not testing, if testing then just do 20 min recovery session
Tues	09/08/2016		Agility Session	Agility Session
Wed	10/08/2016		Testing @ Hampton School	Testing @ Hampton School
Thur	11/08/2016		Speed Session	Mixed Cross Session
Fri	12/08/2016			
Sat	13/08/2016		20 Min Recovery Session	20 Min Recovery Session
Sun	14/08/2016			
Mon	15/08/2016	8	Moderate week if not testing, if testing then just do session 3 and 7	Moderate week if not testing, if testing then just do session 3 and 7
Tues	16/08/2016		Session 8	Session 8 (Pyramid Session)
Wed	17/08/2016		Testing @ Black Prince	Testing @ Black Prince
Thur	18/08/2016		Session 10	Session 10 (Shuttle)
Fri	19/08/2016		Session 3	Session 3
Sat	20/08/2016			
Sun	21/08/2016		Session 7	Curves Session
Mon	22/08/2016	9	Hard week unless testing, if so then just session 10	Hard week unless testing, if so then just session 11
Tues	23/08/2016		Session 8	Session 11 (Criss Cross)
Wed	24/08/2016		Testing @ Black Prince	Testing @ Black Prince
Thur	25/08/2016		Session 9	Session 14 (Mixed Pryamid)
Fri	26/08/2016			
Sat	27/08/2016		Session 10	Session 11 (Triangles)
Sun	28/08/2016			
Mon	29/08/2016	10	Moderate	Moderate
Tues	30/08/2016		Agility Session	Agility Session
Wed	31/08/2016			
Thur	01/09/2016			
Fri	02/09/2016		Speed Session	Speed Session
Sat	03/09/2016			
Sun	04/09/2016		20 Min Recovery Session	20 Min Recovery Session
Mon	05/09/2016	11	Moderate	Moderate
Tues	06/09/2016		Session 12	Cross Step Session
Wed	07/09/2016			
Thur	08/09/2016		Session 10	Session 10 (Shuttle)
Fri	09/09/2016			
Sat	10/09/2016		Session 1	Session 1
Sun	11/09/2016			

<div>  Session Plans (Gym Based)  </div>									
Code	Heart Rate	Modality	Session Content	Work Res Ratio	Sets	Work (Secs or Metres)	Rep Rest Durations	Rest Duration btw Set	Session Duration
1	65-75% HR Max	Row	1. Warm Up	1 To 1	1	2KM, 2KM, 1KM	3 Mins	N/A	25-35 Mins
			2. Row 2KM						
			3. Perform 3 Mins of core work						
			4. Row 2KM						
			5. 3 Mins of core work						
2	65-75% HR Max	Run	6. Row 1 KM	N/A	1	15KM OR 60 MINS (Which Ever Comes First)	N/A	N/A	60 Mins
			1. Warm Up						
			2. Set 3% Incline on treadmill						
3	65-85% HR Max	Bike	3. Run 60 Mins	N/A	3	20,15,10 (Mins)	5 Mins	5 Mins	75 Mins
			1. Warm Up						
			2. Cycle 20 Mins @ 65% +						
			3. Cycle 5 Mins (Easy)						
			4. Cycle 20 Mins @ 75% +						
4	90% + HR Max	Bike	5. Cycle 5 Mins (Easy)	1 to 1	1	60 to 15 Secs	60 to 15 Secs	N/A	45 Mins
			6. Cycle 20 Mins @ 85% +						
			7. Cycle 5 Mins (Easy)						
			1. 10 x 60 secs work with 60 secs rest						
5	85% + HR Max	Run	2. 10 x 45 secs work with 45 secs rest	1 to 1	1	60 Secs	60 Secs	N/A	35 Min
			3. 10 x 30 secs work with 30 secs rest						
			4. 10 x 15 secs work with 15 secs rest						
			1. Warm Up						
			2. 1 Min Max Effort Run	1 to 1	1	60 Secs	60 Secs	N/A	35 Min
			3. 1 Min Rest Between Reps						
			4. Repeat 15 Reps						

Session Plans (Gym Based)

Code	Training Stimulus	Modality	Session Content	Work Rest Ratio	Sets	Work	Rep Rest Durations	Rest btw Sets	Session Duration
6	Aerobic Power: 90% HR Max +	Run	1. Warm Up	2 to 1.5	1	4 Mins	2 Mins	N/A	40 Mins
			2. Run 4 Mins						
			3. Rest 3 Mins						
			4. Repeat 5 Times						
7	Aerobic Power: 90% HR Max +	Run	1. 9 Mins fast run, 3 mins slow jog	N/A	1	9 - 3 Mins	3 - 1 Mins	N/A	40 Mins
			2. 6 Mins fast run, 2 mins slow jog						
			3. 3 Mins fast run, 1 min slow jog						
			4. 6 Mins fast run, 2 mins slow jog						
8	Aerobic Power: 90% HR Max +	X-Trainer	1. Warm Up	1 to 1.25	3	45 Secs	1 Min	3 Mins	45 Mins
			2. 45 Secs Max Effort						
			3. 1 Min Rest						
			4. Repeat 6 Times						
			5. Rest 3 Mins						
			5. Repeat 2 more sets						
9	Aerobic Power: 90% HR Max +	X-Trainer	1. Warm Up	1 to 1	2	30 Secs	30 Secs	5 Mins	40 Mins
			2. 30 Secs Max Effort						
			3. 30 Secs Rest						
			4. Repeat 15 Reps						
			5. Rest 5 Mins						
			6. Repeat 1 more set of above						
10	Aerobic Power: 90% HR Max +	X-Trainer	1. Warm Up	1 to 1	2	15 Secs	15 Secs	5 Mins	40 Mins
			2. 15 Secs Max Effort						
			3. 15 Secs Rest						
			4. Repeat 10 Reps						
			5. Rest 5 Mins						
			6. Repeat 1 more set of above						

Session Plans (Gym Based)

Code	Training Stimulus	Modality	Session Content	Work Rest Ratio	Sets	Work	Rep Rest Durations	Rest btw Sets	Session Duration
11	Aerobic Power: 90% HR Max +	Treadmill	1. Warm Up 2. 90 Secs Max Effort 3. 2 Mins Jog Recovery 4. Repeat 6 to 8 Reps 5. Rest 5 Mins	2 to 1	1	90 secs	2 Mins	5 Mins	40 Mins
12	Aerobic Power: 90% HR Max +	X-Trainer	1. Warm Up 2. 15 Secs Max Effort 3. 15 Secs rest 4. 30 Secs Max Effort 5. 30 Secs Rest 6. 15 Secs Max Effort 7. 15 Secs Rest 8. 4 Mins Rest 5. Repeat 4 Sets	1 to 1	4	15 to 45 secs	15 to 45 secs	4 Mins	40 Mins
13	Peripheral Muscle Endurance	Body Weight Exercises Circuit (Beginner)	1. Warm Up 2. Perform 30 secs of each exercise (see DVD) 3. Rest for 30 secs between each exercise 4. Rest for 3 mins after last exercise 5. Repeat circuit 3 times	1 To 1	3	30 Secs	2 Mins	N/A	35-40 Mins
14	Peripheral Muscle Endurance	Gym Circuit (See separate tab)	1. Warm Up 2. Perform 3 mins cardio 3. Rest for 60 secs	2 To 1	4	60 Secs to 3 Mins	3 Mins	N/A	35-40 Mins

<div>  Sessions Plans (Outdoors)  </div>									
Code	Heart Rate	Modality	Session Content	Work Res Ratio	Sets	Work (Secs or Metres)	Rep Rest Durations (Secs)	Rest Duration btw Sets	Session Duration
1	65-75% HR Max	Run	1. Warm Up	1 To 1	1	360 secs	120 secs	N/A	30-35 Mins
			2. 6 Mins @ 65-75% HR Max						
			3. 2 Mins of core work						
			3. 6 Mins @ 65-75% HR Max						
			5. 2 Mins of core work						
			6. 6 Mins @ 65-75% HR Max						
2	65-75% HR Max	Run	1. Warm Up	N/A	1	60 MINS	N/A	N/A	60 Mins
			2. Run for 60 Mins						
3	65-85% HR Max	Run or Cycle	1. Warm Up	N/A	3	15,10,5 (Mins)	5 Mins	N/A	50 Mins
			2. Cycle/Run 15 Mins @ 65% +						
			3. Cycle/Run 5 Mins (Easy)						
			4. Cycle/Run 10 Mins @ 75% +						
			5. Cycle/Run 5 Mins (Easy)						
			6. Cycle/Run 5 Mins @ 85% +						
			7. Cycle/Run 5 Mins (Easy)						
4	80% + HR Max	Run End to End Session. See Separation	1. Warm Up	N/A	3	15-20 Secs	10 Secs	4 Mins	40 Mins
			2. Run touch line						
			3. Jog try/goal line						
			3. Repeat 6 times (runs)						
			4. Rest 3 Mins						
			5. Perform 3 sets						
5	80% + HR Max	Run	1. Warm Up	1 to 1	1	60 Secs	60 Secs	N/A	35 Mins
			2. 1 Min Max Effort Run						
			3.1 Min Rest Between Reps						
			4. Repeat 15 Reps						




Sessions Plans (Outdoors)

Code	Training Stimulus	Modality	Session Content	Work Res Ratio	Sets	Work (Secs or Metres)	Rep Rest Durations (Secs)	Rest Duration btw Sets	Session Duration
6	Aerobic Power: 90% HR Max +	Run	1. Warm Up	2 to 1.5	1	4 Mins	2 Mins	N/A	40 Mins
			2. Run 4 Mins						
			3. Rest 2 Mins						
			4. Repeat 6 Times						
7	Aerobic Power: 90% HR Max +	Run	1. Warm Up	2 to 1	1	4 Mins	2 Mins	N/A	40 Mins
			2. Run 4 Mins						
			3. Rest 2 Mins						
			4. Repeat 5 Times						
8	Aerobic Power: 90% HR Max +	Run Pyramid Session. See separate sheet	1. Warm Up - Start on try line	N/A	1	N/A	3 Mins	N/A	30 Mins
			2. Run to 5M Line and back						
			3. Run to 22M Line and back						
			4. Run to Half way line and back						
			5. Rest 3 Mins - Repeat 6 times						
9	Aerobic Power: 90% HR Max +	Run Speed Endurance Twister, See Separate Sheet	1. Warm Up	1 to 1	1	10 secs	10 Secs	N/A	36 Mins
			2. Run width of pitch						
			3. Jog 10 metres						
			4. Run width of pitch						
			5. Repeat 10 Times						
10	Aerobic Power: 90% HR Max +	Run Anaerobic Shuttle	1. Warm Up	1 to 1	2	30 secs	30 secs	N/A	30 Mins
			2. 6 cones 5M apart						
			3. Run to each cone and back or for 30 secs						
			4. Rest 30 Secs						
			5. Repeat 5 more reps						
			4. Rest 6 Mins - Repeat one more set						

Sessions Plans (Outdoors)

Code	Training Stimulus	Modality	Session Content	Work Res Ratio	Sets	Work (Secs or Metres)	Rep Rest Durations (Secs)	Rest Duration btw Sets	Session Duration
11	Aerobic Power: 90% HR Max +	Triangles	1. Warm up	1 to 1	1	45 secs	90 Secs	N/A	20-40 Mins
			Run Triangle on one side of pitch (see separate sheet)						
			3. Jog recovery Triangle on other side of pitch						
			4. Repeat as required						
11	Aerobic Power: 90% HR Max +	Criss Cross	1. Warm up	1 to 1	1	45 secs	90 Secs	N/A	20-40 Mins
			Run Triangle on one side of pitch (see separate sheet)						
			3. Jog recovery Triangle on other side of pitch						
			4. Repeat as required						
13	Peripheral Muscle Endurance	Body Weight Exercises Circuit - Outside	1. Warm Up	1 To 1	3	30 Secs	2 Mins	N/A	35-40 Mins
			2. Perform 30 secs of each exercise (see DVD)						
			3. Rest for 30 secs between each exercise						
			4. Rest for 3 mins after last exercise						
			5. Repeat circuit 3 times						
14	Peripheral Muscle Endurance	Body Weight Circuit in centre circle (See separate sheet)	1. Warm Up	2 To 1	4	60 Secs	3 Mins	N/A	35-40 Mins
			2. Perform 30 secs of each exercise (see DVD)						
			3. Then run to one of corners in pitch or 60M straight line						
			4. Perform 8 exercises with run after						
			5. Rest 30 secs after each run						
			6. Rest 3 Mins Between Sets						
			5. Repeat circuit 1 to 3 times						

Advanced Gym Conditioning Circuit










No	Name Of Exercise	Strengthens	Sets	Reps	Rest (secs) Between Sets	Picture	Coaching Points
1	Warmup	5 Mins X-Trainer					
2	Rower	3 Mins @ level 10 sub 1.45/500M	1	1	1 Min		
3	Leg press followed by lunges	80kg for leg press and 10 kg for dumbbells	3	15 reps on leg press followed by 10 lunges on each leg	1 Min		
4	X-Trainer	3 Mins @ level 10 Speed 160 RPM +	1	1	1 Min		
5	Step Ups followed by pushups	6kg for step ups and body weight for pushups	3	15 reps each leg for step ups followed by 15 reps of pushups	1 Min		
5	Bike	3 Mins Level 5 RPM 90+	1	1	1 Min		
6	Backward Lunges and shoulder press	6kg dumbbells for both exercises	2	15 reps each leg for backward lunges and 15 reps for shoulder press	1 Min		
7	Rower	3 Mins @ level 10 sub 1.45/500M	1	1	1 Min		
8	Tricep dips and swissball hamstring curls	Body Weight for both	3	15 reps for both	1 Min		
9	X-Trainer	3 Mins @ level 10 Speed 160 RPM +	1	1	1 Min		
10	Side Planks and front planks	Body Weight for both	3	30 Secs for each	30 Secs		

RECOVERY/FLEXIBILITY SESSION

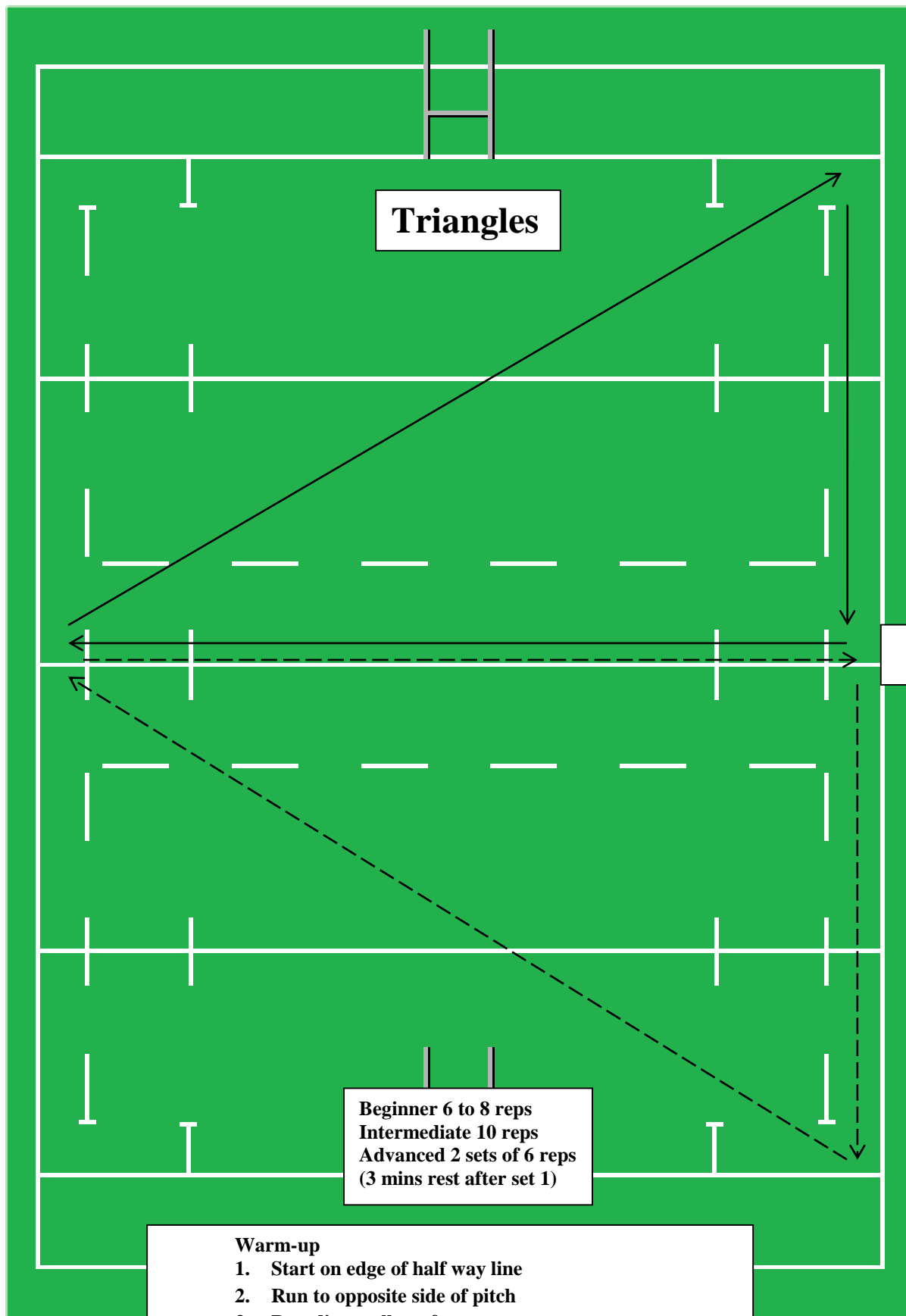
(DONE BEFORE AND/OR AFTER SESSIONS)

No	Name Of Exercise	Sets	Reps		Picture	Coaching Points
The aim of this session is to improve the condition of your muscles						
1	Foam Roll - Calf	1	6 times up and down foam roll			
2	Foam Roll - Leg	1	6 times up and down foam roll			
3	Foam Roll - Hip	1	6 times up and down foam roll			
4	Foam Roll - Groin	1	6 times up and down foam roll			
5	Foam Roll - Back	1	6 times up and down foam roll			
6	Stretch - Calf	1	20 Sec Hold			
7	Stretch - Hip	1	20 Sec Hold			
8	Stretch - Hip	1	20 Sec Hold			
9	Stretch - Lower Back	1	20 Sec Hold			
10	Stretch - Upper Back	1	20 Sec Hold			
11	Stretch - Groin	1	20 Sec Hold			

Core Session

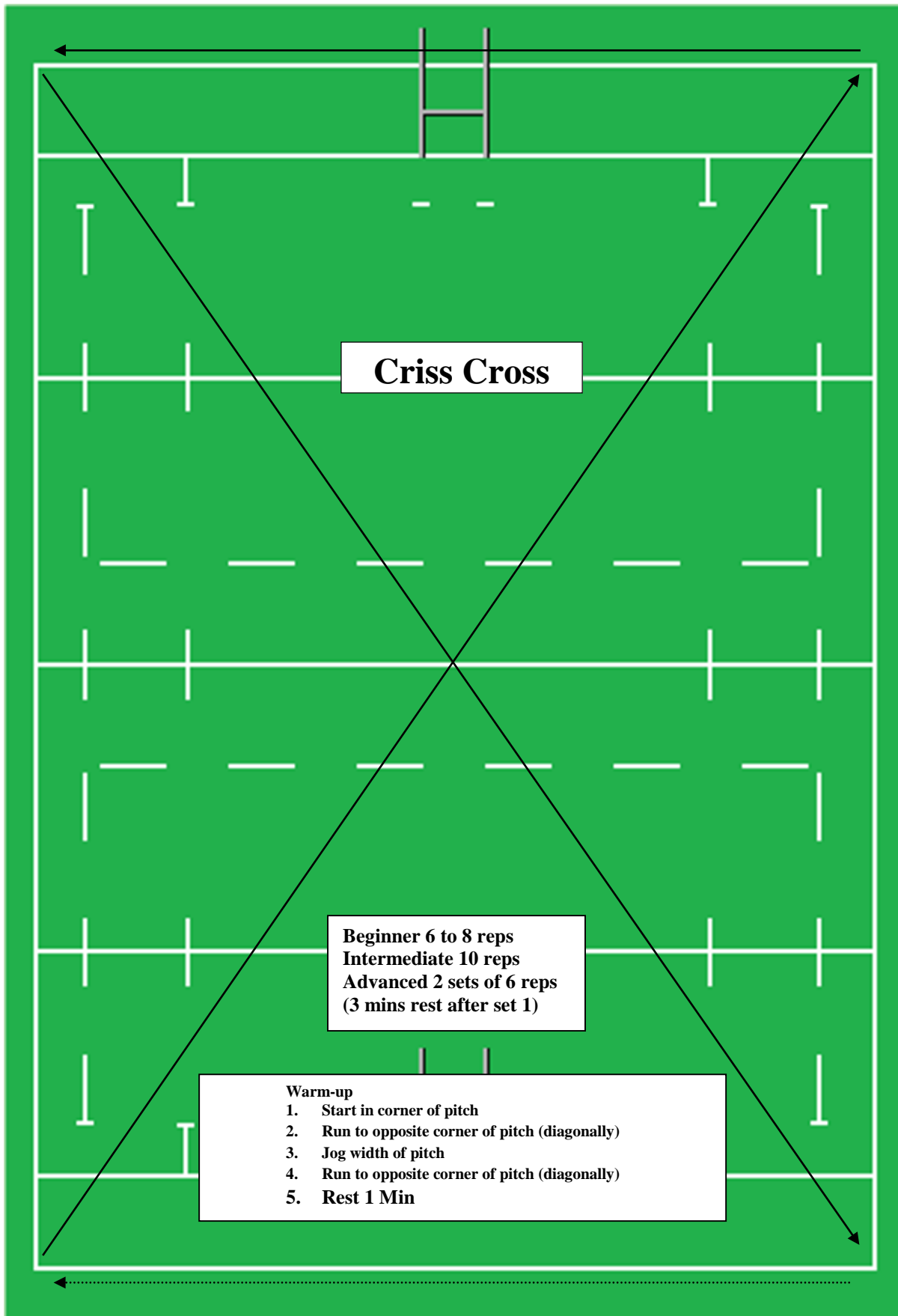
No	Name Of Exercise	Sets	Reps		Picture	Coaching Points
The aim of this session is to improve RUNNING EFFICIENCY						
1	Shoulder Bridge	2	15	30 Secs		Lye on your back, with your knees bent, take your toes off the floor, push your hips up, activate glutes as you do. Repeat required number of sets and reps
2	Plank	2	1 x 60 Secs	30 Secs		Lye on your front, lift yourself up so that your elbows are beneath your shoulders, keep your hips and back in line, hold for required time.
3	Cobra	2	15	30 Secs		Lye on your front with your head down, take your arms off to your side so that they are in line with your chest. Squeeze shoulder blades together and lift arms off the floor, hold for 1 second in top position, slowly take arms back to start position.
4	Seated Twists	2	20 (10 each side)	30 Secs		Sit on hips, bend knees and take feet off the floor. Keep your balance. Take arms from side to side (touching floor) slowly.
5	Plank with leg lift	2	10 each leg	30 Secs		In the plank position, lift 1 leg an inch off the floor, hold, then return foot to floor, ensure that hips and back stay in line
6	Side Plank with leg lift	2	10 each leg	30 Secs		Start by lying on your side, elbow positioned beneath shoulder, position leg nearest floor at 90 degree angle. Lift body away from floor, hold in top position then return to floor, repeated required number of sets.
7	Superman	2	10 each side	30 Secs		On all fours, lift up your right arm and left leg, hold when arm and leg are parrell to floor, return to start position, then lift up left arm and right leg to same position. Repeat required number of reps each side.
8	Push Ups	2	15	30 Secs		
9	Single Leg Squats	2	10 each leg	30 Secs		Standing on one leg. Lean forward pushing hips back, bend knees to lowest position that you can balance in. Return to standing position. Repeat required number of reps.

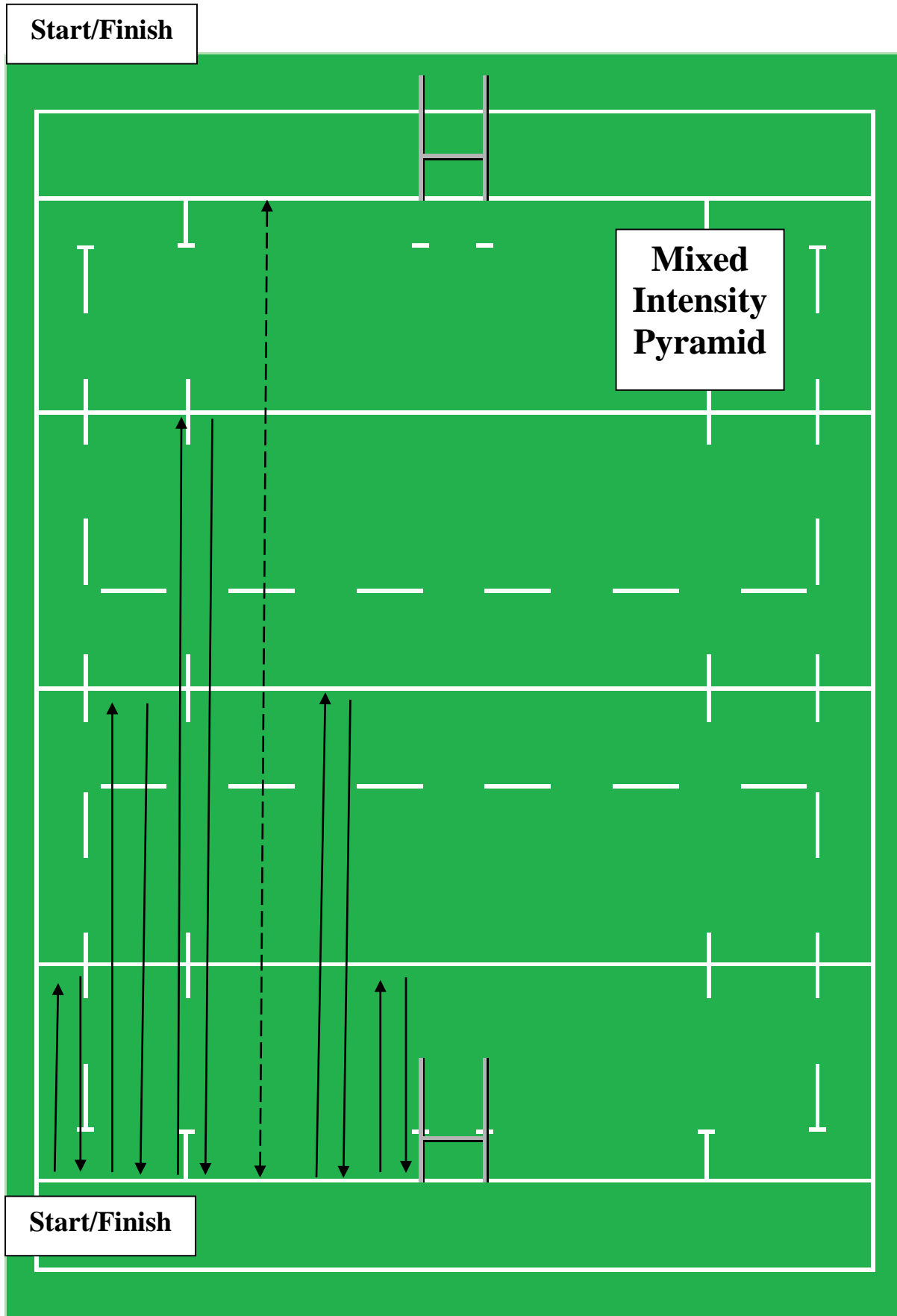
Pitch based sessions



Warm-up

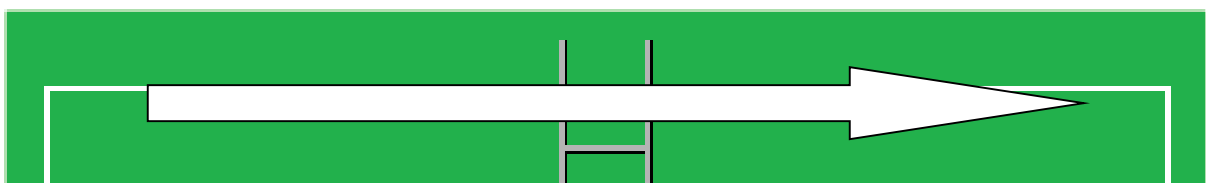
1. Start on edge of half way line
2. Run to opposite side of pitch
3. Run diagonally to far corner
4. Run touch line of pitch to starting position
5. Repeat same pattern (jogging) on other side of pitch





1. Sprint to 22m line and back
2. Jog to half way line of pitch and back
3. Sprint to opposite 22m line and back
4. Fast walk to opposite try line and back
5. Sprint to half way line and back

Beginner 1 to 2 reps
Intermediate 2 to 3 reps
Advanced 3 to 4 reps
4 Mins rest between reps

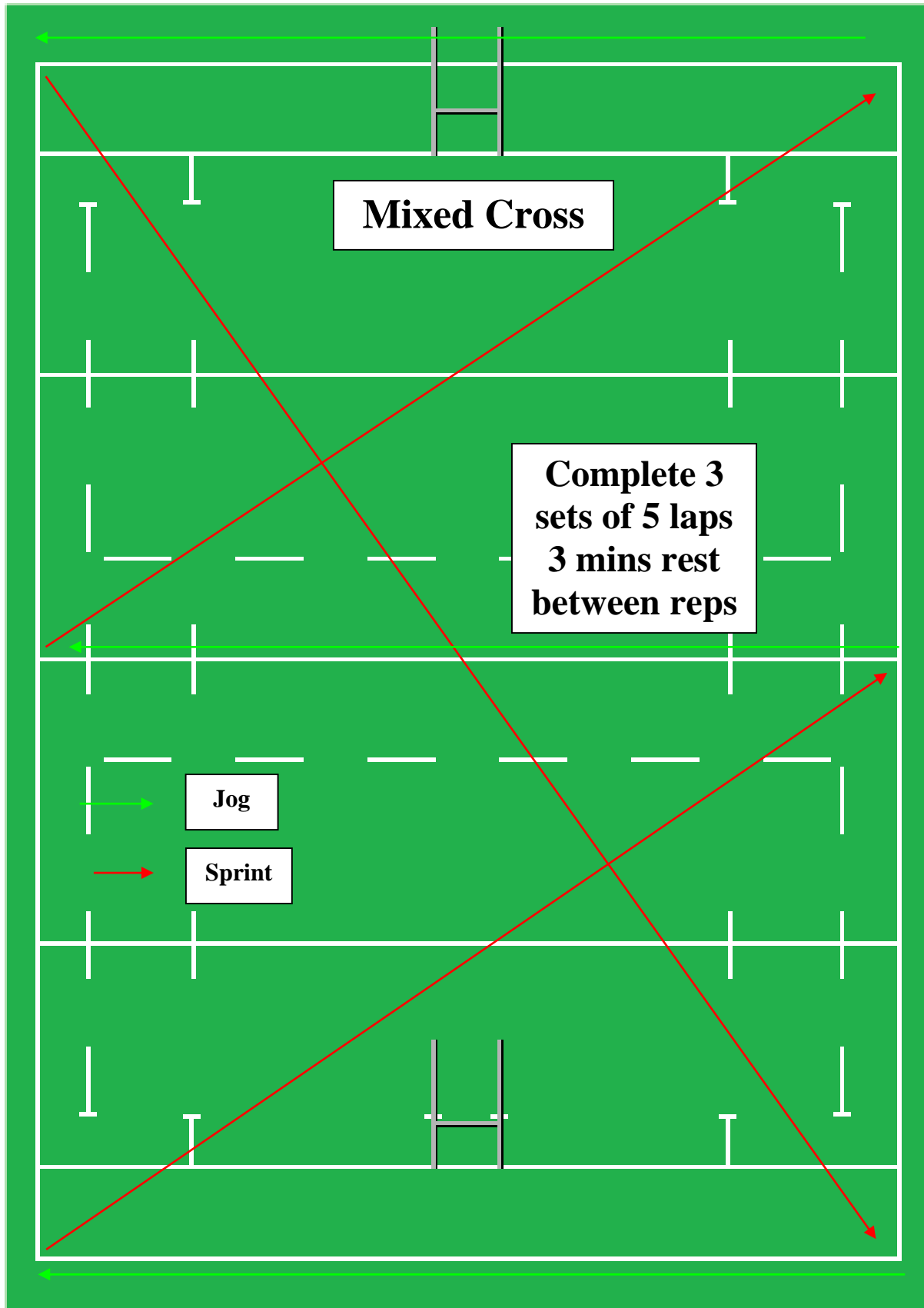


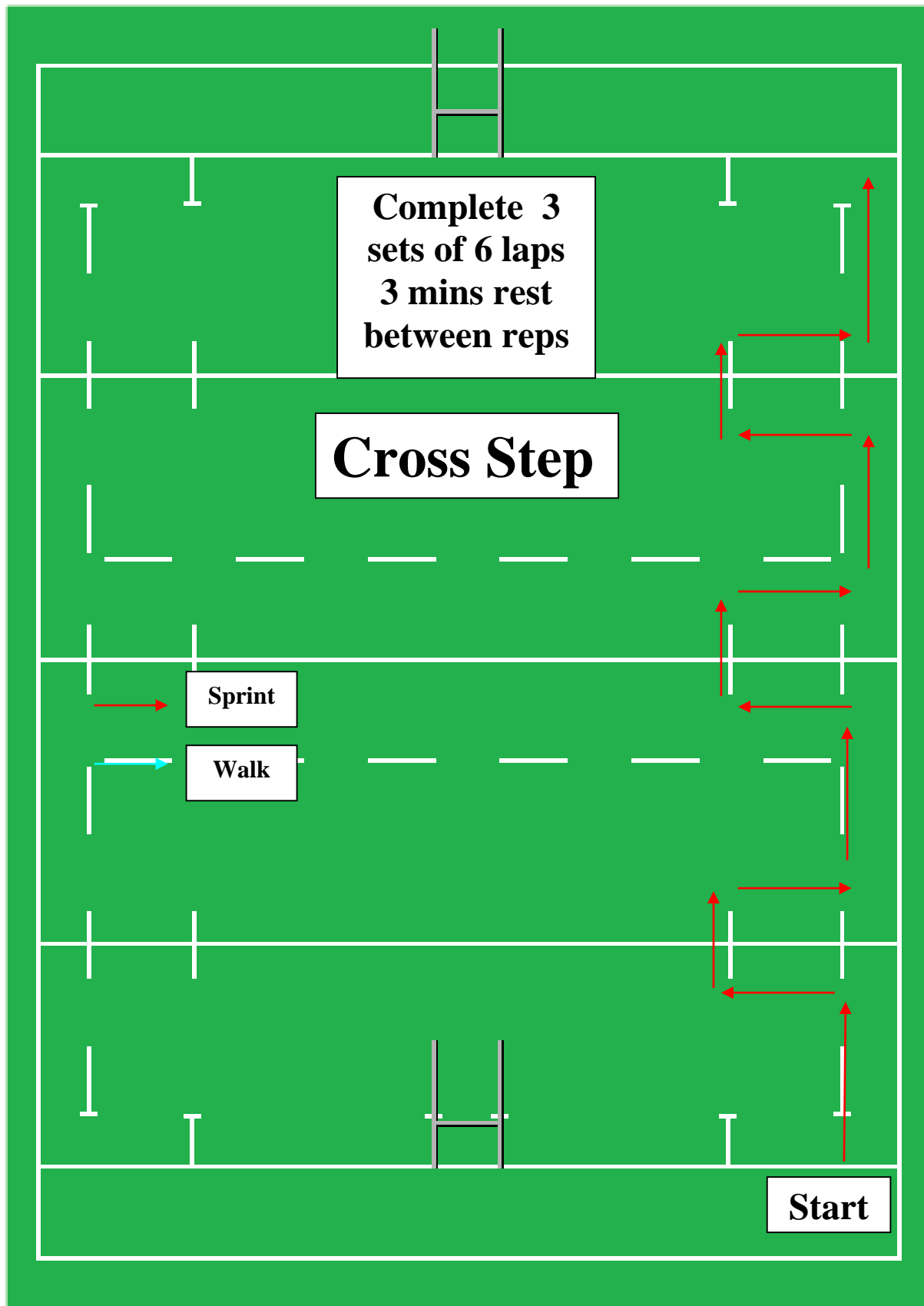
Start

Curves

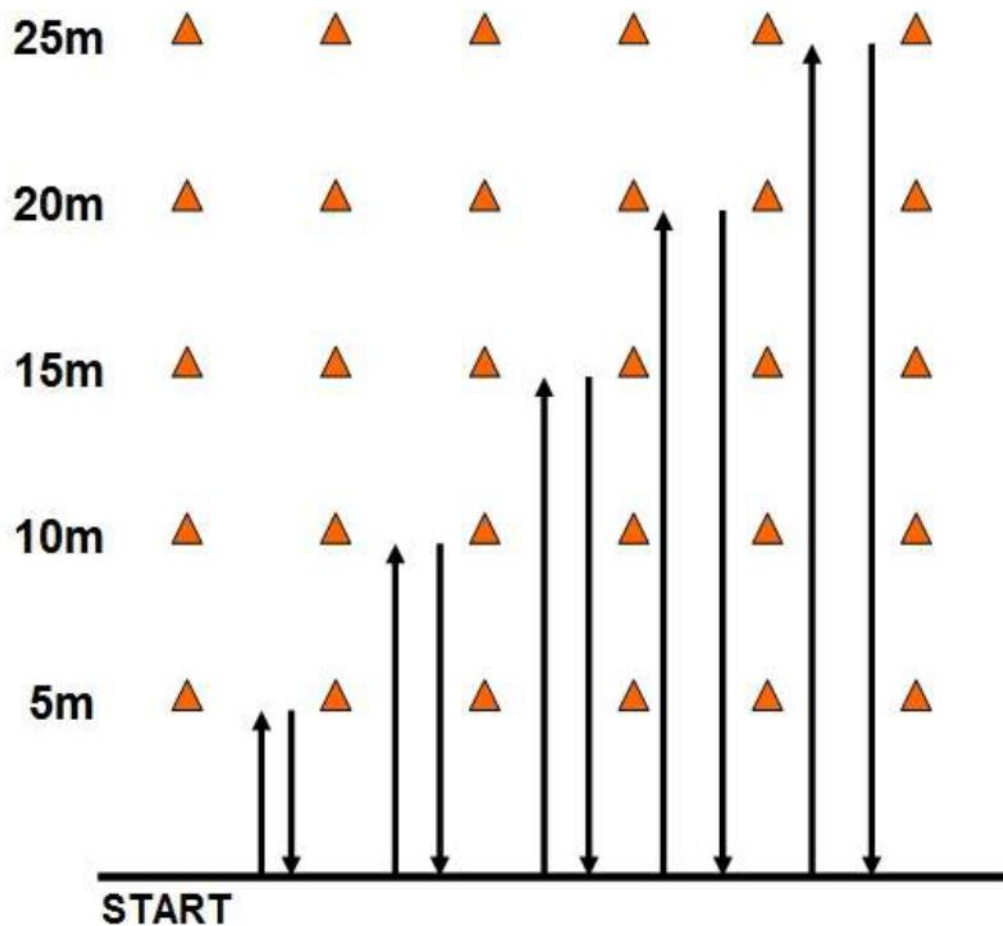
Start from corner of pitch, make a curved run towards the centre of the field. At the centre of the field make another curved run towards the bottom of the field. At the bottom of the field jog across the dead ball line and back up towards the opposite corner along the touchline. Return back to starting position

**Complete 2
sets of 4 laps
4 mins rest
between
reps**





Shuttle Run

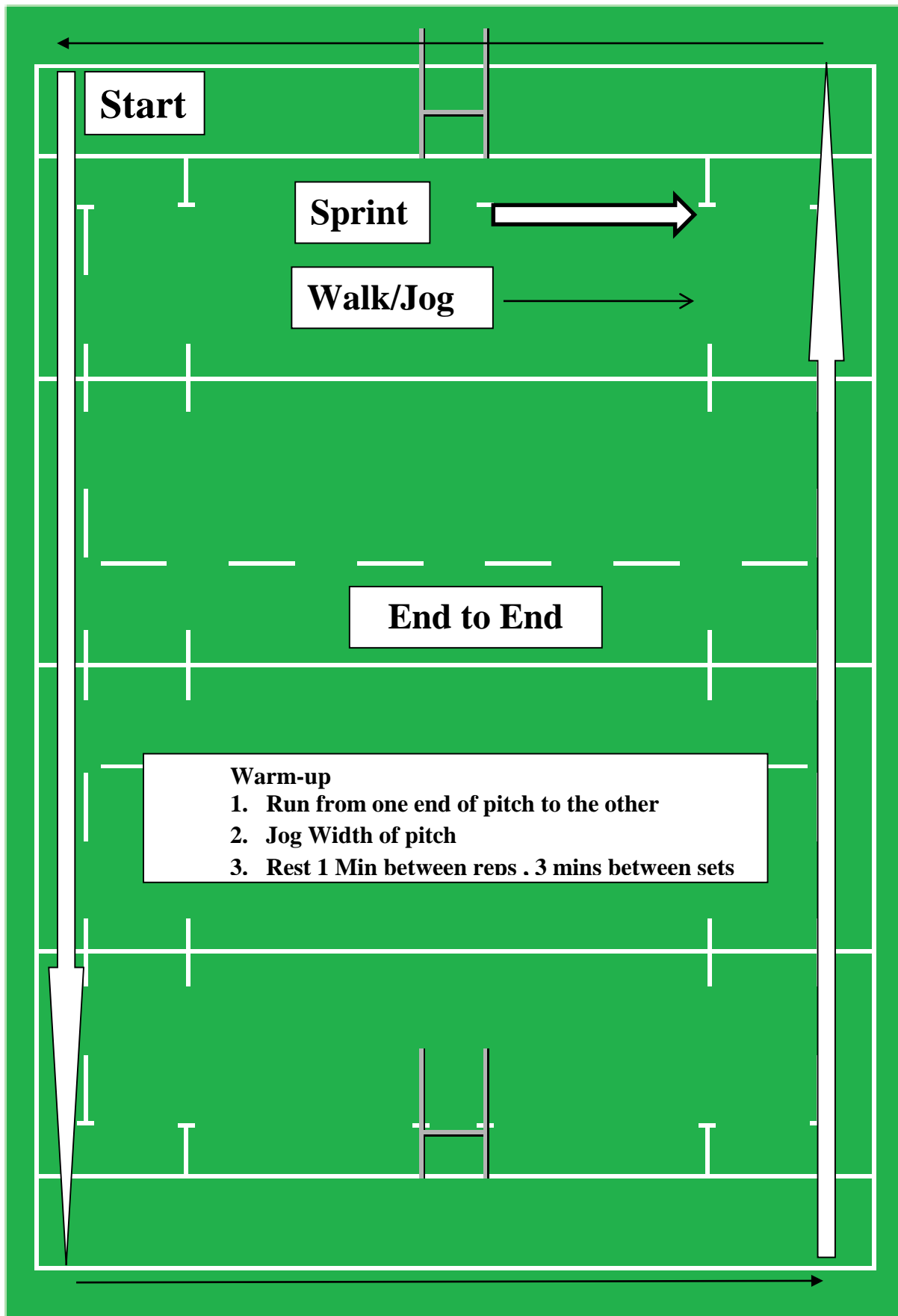


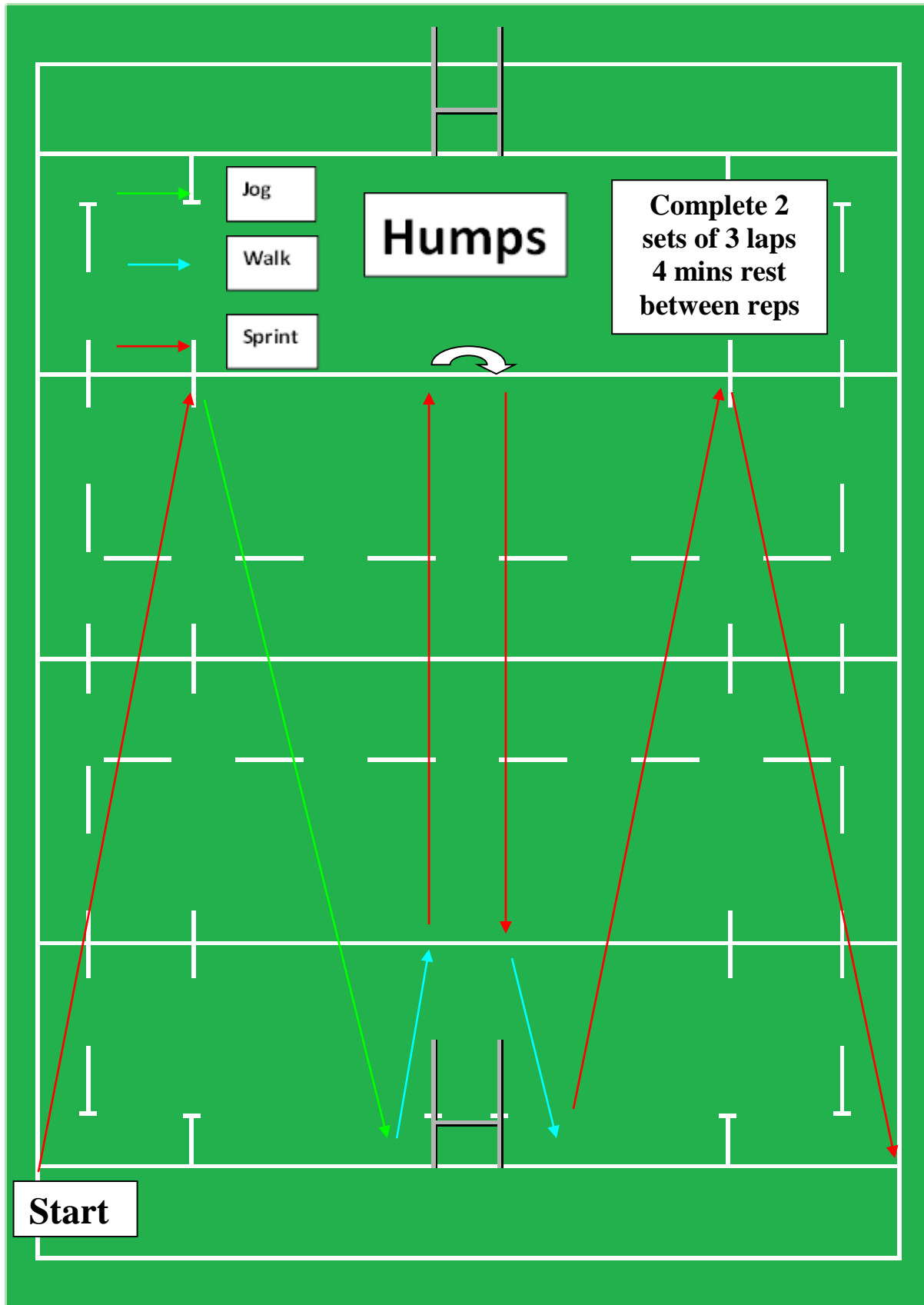
1. Place 6 cones out in a straight line 5 metres apart
2. Set iphone or stopwatch to 30 secs
3. Run to 5 m cone and back
4. Run to 10 m cone and back
5. Run to 15 m cone and back
6. Run to as many cones as you can and back in 30 secs
7. Rest 30 secs, repeat 6 more reps
8. Rest 5 mins and repeat required number of sets

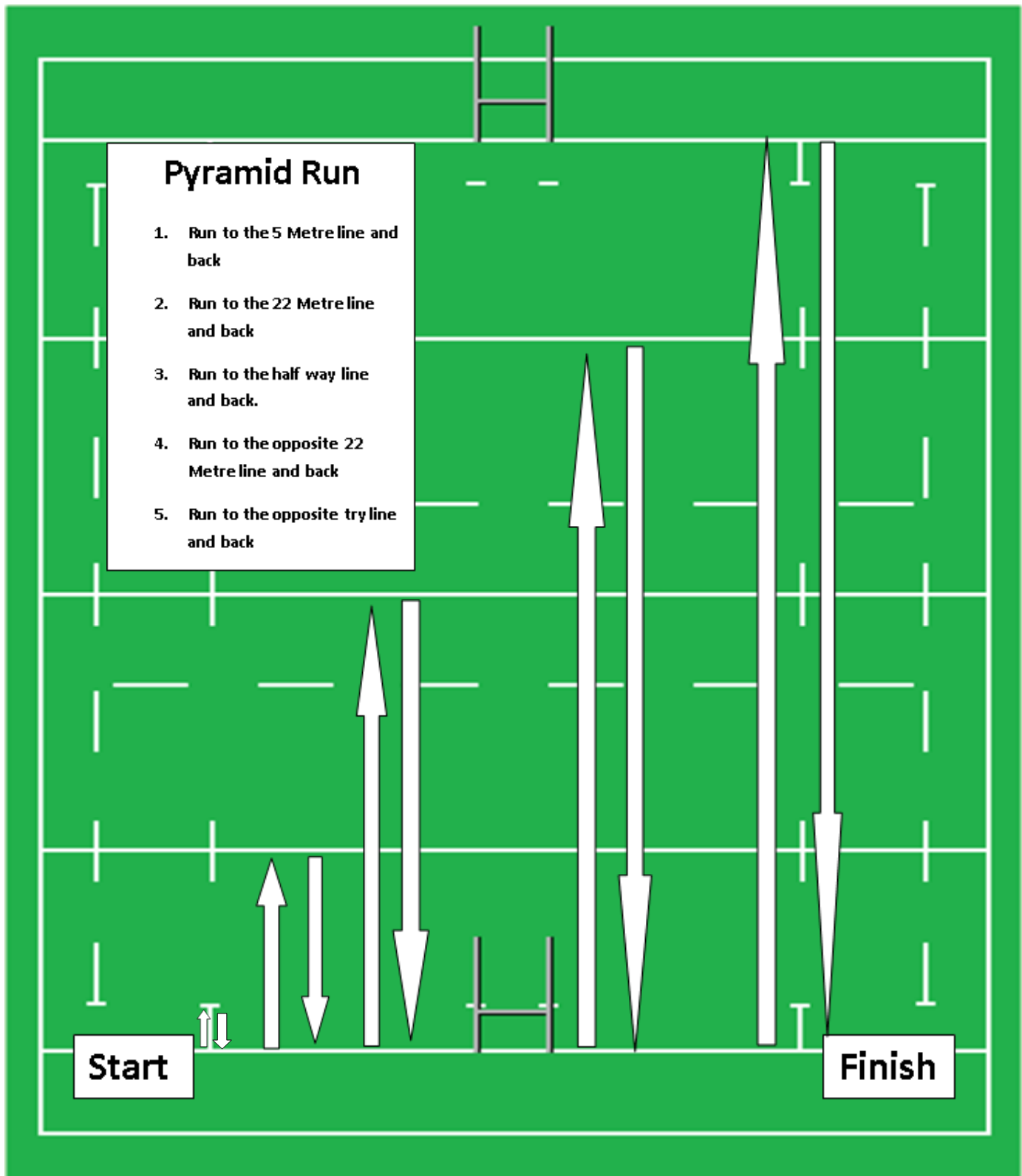
Beginners 2 sets

Intermediate 3 sets

Advanced 3 to 4 sets

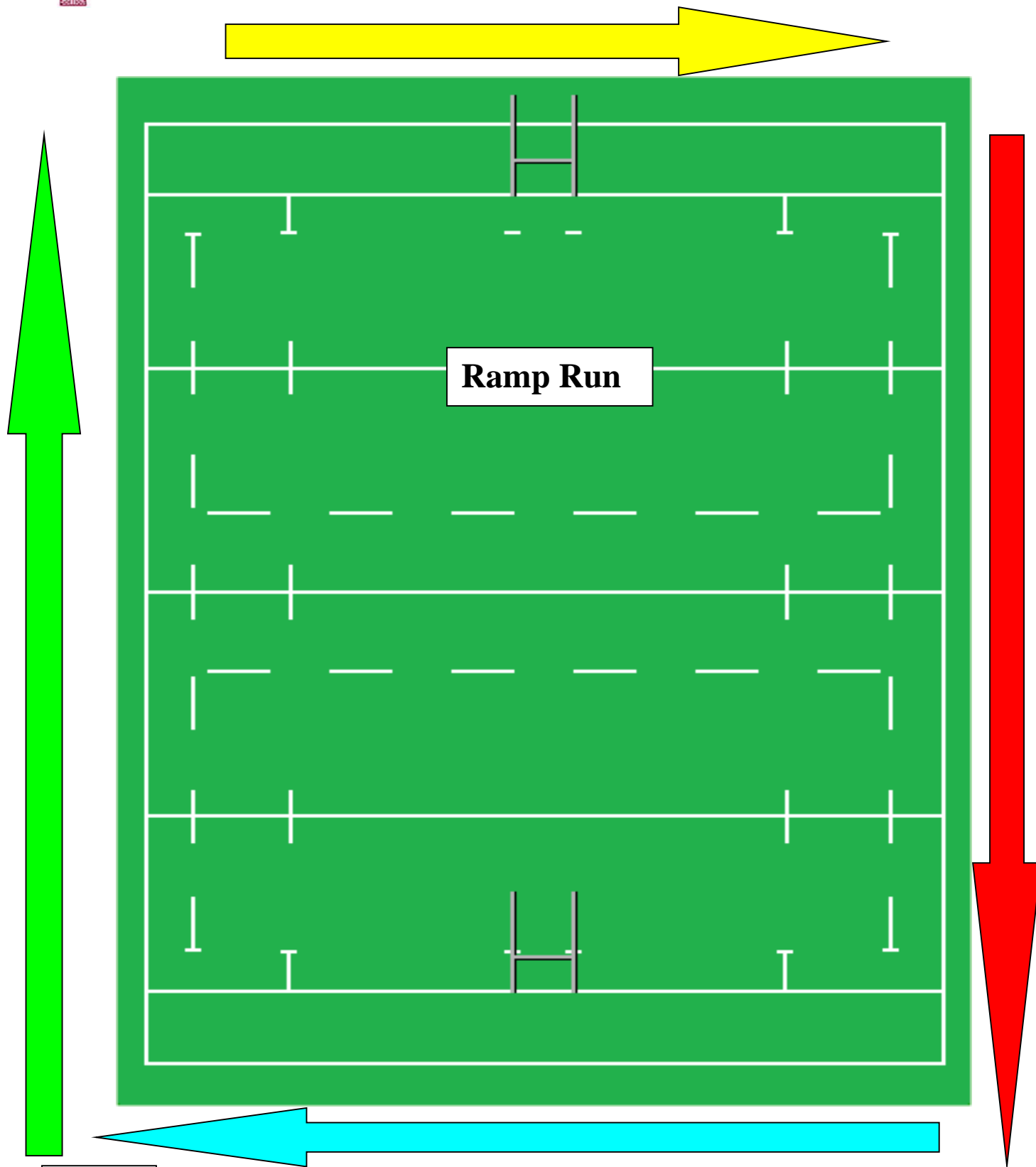






1. Warm-up: following protocol laid out in DVD
2. Perform sequence of runs (as shown above)

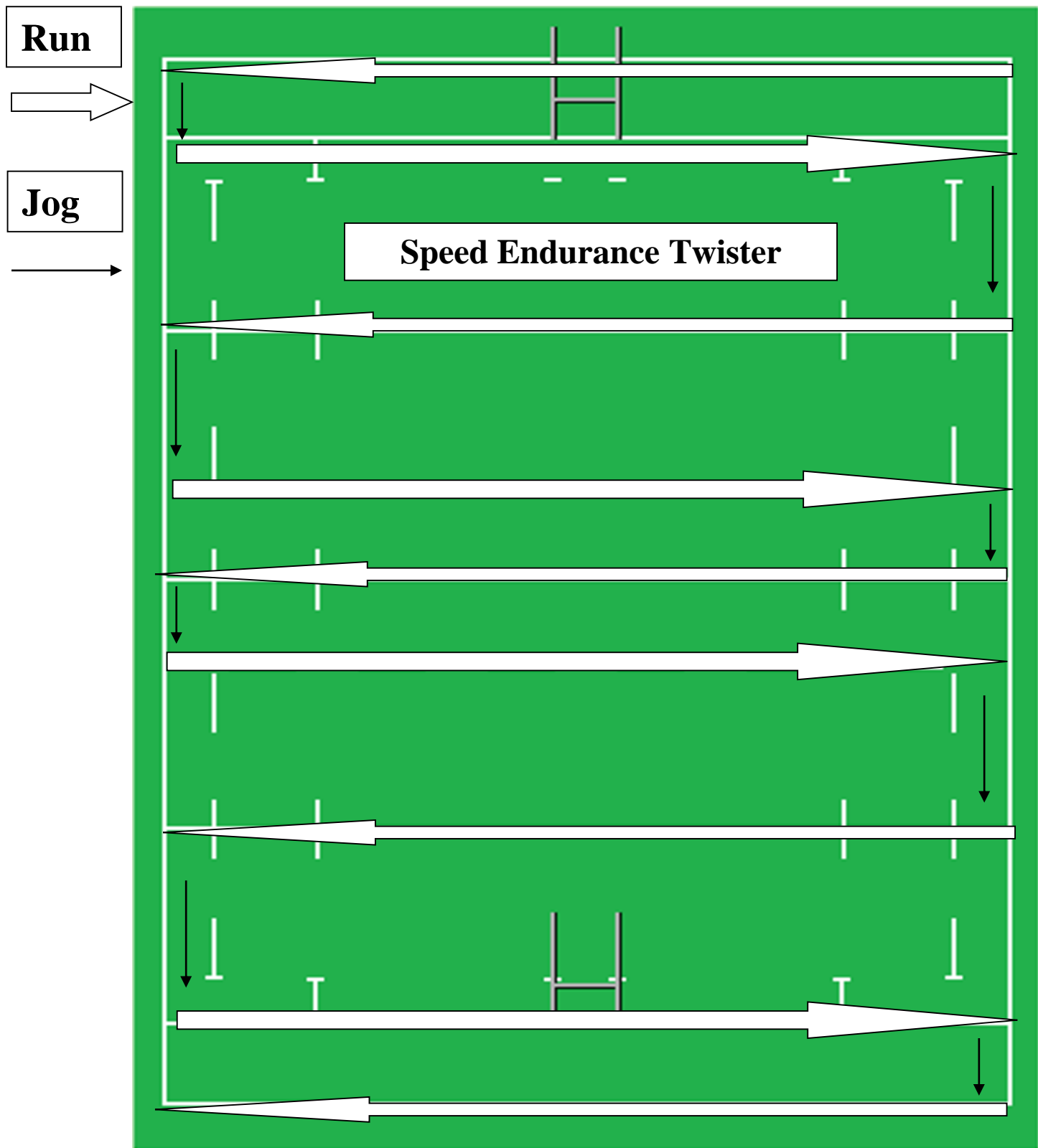
Beginners complete 4 reps with 3 mins rest between reps
Intermediate complete 6 reps with 2 mins rest between reps
Advanced/elite complete 8 reps with 2 mins rest between reps



Start

1. Ramp Run
2. 2 sets of 6 reps (laps) 4 mins recovery between sets
3. Green – Run at 50% of Max
4. Yellow – Run at 70% of Max
5. Red – Run at 90 % of Max
6. Blue – walk (60 secs recovery before beginning again)

Beginner 2 sets
Intermediate 3 to 4 sets
Advanced 4 to 5 sets



1. Warm-up: following protocol laid out in DVD
2. Perform sequence of runs (as shown above)

Beginners complete 4 reps with 3 mins rest between reps
Intermediate complete 6 reps with 2 mins rest between reps
Advanced/elite complete 8 reps with 2 mins rest between reps

