COACHING YOUTH RUGBY
DEVELOPING THE PLAYER

SCOTTISH RUGBY
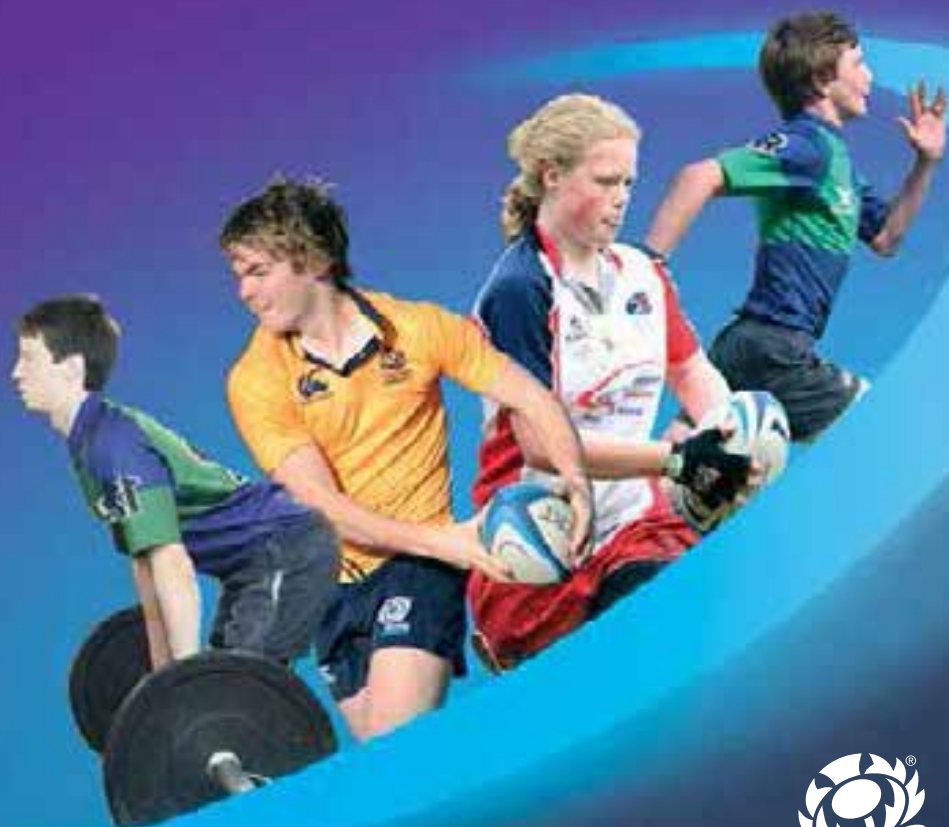
Long term player development (LTPD) stage 3
(Males aged 12-16. females aged 11-15)
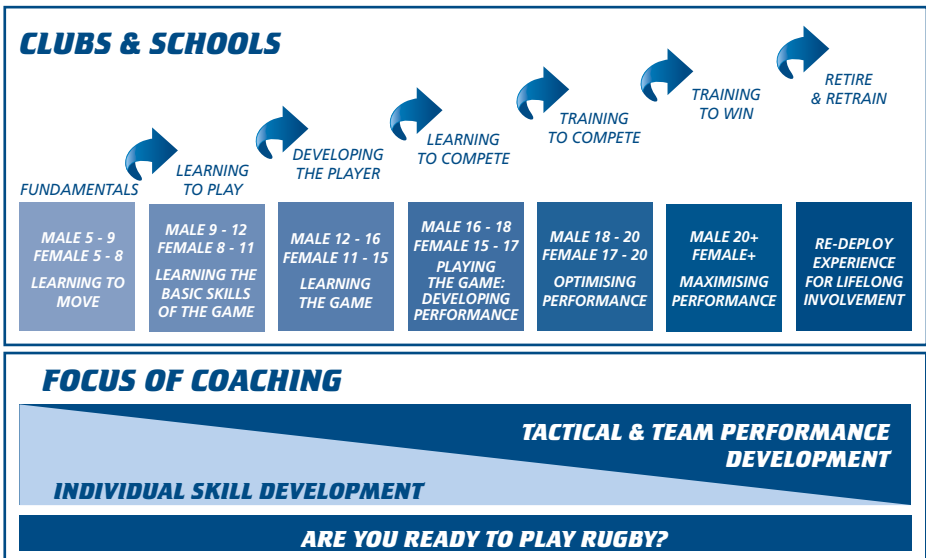
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INTRODUCTION

Following the launch of Scottish Rugby's Long Term Player Development (LTPD) Strategy and the subsequent production of our LTPD Guide for Clubs and Schools and our Coaching Tag and Mini Rugby resource, Scottish Rugby has produced this resource to support coaches and teachers who are working with youth players in the third LTPD stage:

Developing the player (Learning the game) (Males 12-16, Females 11-15)

Long term player development (LTPD) is a player-centred approach to achieving a player's full potential throughout their involvement in rugby.

The Scottish Rugby LTPD model represents a seven stage progression, each stage relative to the important physical, psychological and social developments in a young person's life. LTPD is about achieving appropriate training, competition and recovery throughout a player's career, particularly in relation to these important growth stages.

The following diagram below highlights the seven stages of our model as well as the coaching focus:

CLUBS & SCHOOLS

RETIRE & RETRAIN

TRAINING TO WIN

TRAINING TO COMPETE

LEARNING TO COMPETE

DEVELOPING THE PLAYER

LEARNING TO PLAY

FUNDAMENTALS

| MALE 5 - 9 FEMALE 5 - 8 LEARNING TO MOVE | MALE 9 - 12 FEMALE 8 - 11 LEARNING THE BASIC SKILLS OF THE GAME | MALE 12 - 16 FEMALE 11 - 15 LEARNING THE GAME | MALE 16 - 18 FEMALE 15 - 17 PLAYING THE GAME: DEVELOPING PERFORMANCE | MALE 18 - 20 FEMALE 17 - 20 OPTIMISING PERFORMANCE | MALE 20+ FEMALE+ MAXIMISING PERFORMANCE | RE-DEPLOY EXPERIENCE FOR LIFELONG INVOLVEMENT |

FOCUS OF COACHING

TACTICAL & TEAM PERFORMANCE DEVELOPMENT

INDIVIDUAL SKILL DEVELOPMENT

ARE YOU READY TO PLAY RUGBY?

This resource contains guidance to enable coaches and teachers to fully develop every player in their squad taking into consideration such factors as: physical competency, principles of play, attacking principles, defensive principles, open play, set piece (and play from), mental skills, teamwork skills and lifestyle factors. It must be remembered however that this resource is focused on developing the players over a four-year period and that a coach's planning, content and delivery should reflect this. Players should be competent in the basics of each area before progressing to more advanced activities. It may be relevant for the coach to utilise activities from the Coaching Tag and Mini Rugby resource depending on the experience and ability of their players. Focus during the first two years of the stage should be on developing the ability to train and to develop good training habits and routines which will provide the basis for progression through this stage and into the next.

LTPD - age and school year table

School Year	P1	P2	P3	P4	P5	P6	P7
Age of player	5	6	7	8	9	10	11
Age Group	U6	U7	U8	U9	U10	U11	U12
LTPD Stage Boys	FUNdamentals	FUNdamentals	FUNdamentals	FUNdamentals	FUNdamentals / Learning to Play	Learning to play	Learning to play
LTPD Stage Girls	FUNdamentals	FUNdamentals	FUNdamentals	FUNdamentals / Learning to play	Learning to play	Learning to play	Learning to play / Developing the player

School Year	S1	S2	S3	S4	S5	S6
Age of player	12	13	14	15	16	17
Age Group	U13	U14	U15	U16	U17	U18
LTPD Stage Boys	Learning to play / Developing the player	Developing the player	Developing the player	Developing the player	Developing the player / Learning to compete	Learning to compete
LTPD Stage Girls	Developing the player	Developing the player	Developing the player	Developing the player / Learning to compete	Learning to compete	Learning to compete

Every player must be suitably prepared physically to play the game - this is known as physical competence. Through development of their players' physical competence, coaches and teachers will prepare their players to play the game in the present and provide a strong foundation for their physical development through future LTPD stages.

To help you deliver appropriate physical competence, this resource provides guidance on warm-up and cool-downs as well as strength development, speed, agility and conditioning.

The activities are not exhaustive but provide guidance for novice and experienced coaches alike. Coaches and teachers are encouraged to create progressive sessions to continue to develop their players in this stage.

For ease of understanding and to aid the planning process, the game has been broken down into a number of key areas, each with descriptors and activities that are designed to develop the players accordingly. The key areas are as follows (activities in section 3):

- **Attack**
- **Defence**
- **Continuity & Breakdown**
- **Set Piece**

A player progress guide for this stage has been developed. This can be found on page 127.

CREATING A SAFE 'RUGBYREADY' ENVIRONMENT

The Are You Ready to Play Rugby? campaign was launched by Scottish Rugby at the start of 2009 to ensure that a consistent approach to player safety is adopted across Scotland by all coaches, teachers, referees and volunteers.

Rugby is a safe sport played by tens of thousands of people in Scotland each year however, like all contact sports there is a risk of injury. Although the instances of serious injury in rugby remain low, there was an increase in serious neck injuries between 2007 and 2009. As a result, it is paramount that we all work together to reduce the risk of serious injury.

The Are You Ready to Play Rugby? campaign resulted in a number of changes to the game at the start of season 2009/10. Early indications on the initial impact of these changes in the game are positive. However, it is too early to say if this is a result of the changes that have been made and conclusions can only be drawn after monitoring injury trends over a number of seasons.

Since 2008 Scottish Rugby has been working very closely with the Scottish Committee of Orthopaedic and Trauma Surgeons (SCOT) and the Scottish Government to implement safety changes. We would like to thank them for their continued support and guidance. Scottish Rugby would also like to thank the rugby clubs and schools for working with us to improve safety through implementing these policy changes.

The Are You Ready to Play Rugby? campaign covers the following four main areas of the game:
1. Age banding;
2. Age grade law variations;
3. Minimum standards for coaches, teachers and referees; and
4. Injury management.

Full information, including the relevant policies and forms, is available in the Are You Ready to Play Rugby? section of **www.scottishrugby.org.**

RECOMMENDED QUALIFICATIONS - coaching at the 'Developing the player' stage

Minimum standard - Every coach must complete the mandatory RugbyReady Practical Course on a yearly basis and complete the online assessment (available at **www.irbrugbyready.com**).

Recommended standard - Coaching should be delivered by a suitably qualified coach / teacher with the following qualifications;

- UKCC Rugby Union Level 2 qualification
- Scottish Rugby / UKSCA Level 1 Strength and Conditioning qualification
- Scottish Rugby Speed and Agility Module
- IRB online Strength and Conditioning Level 1 qualification available at **www.irbsandc.com**
- IRB Laws self-assessment each year - available at **www.irblaws.com**
- IRB Concussion self-assessment - available at **www.irbplayerwelfare.com**.

For information on these qualifications and Scottish Rugby's coaching structure please visit **www.scottishrugby.org/coaching** and **www.irbpassport.com**.

Scottish Rugby recommends coaches to attend appropriate coaching workshops and other seminars to keep their coaching skills up to date. Continual development for coaches can take many forms but in order to provide the best coaching for young players, coaches should challenge themselves to be the best they can be. Coaches should contact their Local Development Officer or Club Coach Co-ordinator for details.

Driving Philosophy - Learning the game, developing the rugby athlete

This stage is about playing and practicing to develop the player towards competence in individual and increasingly unit-based skills. During this stage, players enter peak height velocity (PHV: the growth spurt associated with the onset of puberty), which means that coaches will have to differentiate between early, normal and late maturing players when considering their planning and delivery. For example whilst a player may be 14 years old, they can be physically still 11 (late maturer) or up to 17 (early maturer). The physical developmental age of the player will dictate the physical input into their programme, which is a key emphasis of this stage.

As players' skill and game competence develops, technical-tactical development becomes more emphasised. The objective now is to progressively develop physical qualities such as strength, power and anaerobic (without oxygen) speed endurance. This is a key requirement of a rugby player, who needs to be able to recover between high intensity periods of play.

During this stage, players should develop their level of commitment towards their training and playing. This commitment should be reflected in the player being increasingly self-motivated, increasingly self-responsible, and being able to work towards goals and to be able to realistically evaluate their own ability. Being able to regulate the training and playing regime of individuals at this stage will prevent overloading of the players' capacities and provide equitable playing opportunities for young players regardless of their ability.

At 14 plus, players should have an annual plan for their rugby season based upon preparation, competition and transition phases which should integrate with a nationally structured season. This means taking a player-centred approach to balancing the demands put on talented players who may be approached to play for school, club and regional development squads in the final year of this stage.

The focus of training during this stage must remain on development; players' natural desire to win on the park should be fostered by the coaches however training should not be focused solely on preparing a team to win but on developing the individual player's capabilities over the longer term.

Role of the coach

The role of the coach during this stage should be focussed on promoting the development of every player's potential rather than the identification of talented players. Coaches should look to further develop players' core technical and tactical skills, physical and mental competency and game understanding.

During this stage there should be an increase in focus on developing unit skills as well as individual skills. Coaches should devise practices that develop players' decision-making abilities in understanding when and how to use specific skills, and also develop their understanding of the consequences of the decisions they make. This will inform their ability to understand and contribute to basic strategy and tactical development.

To help their players develop mentally, coaches should work with their players to foster an individual responsibility and commitment to set and achieve goals for their physical development, competitiveness, performance in training, lifestyle and other relevant areas.

Coaches should deliver or facilitate delivery of a well planned and monitored strength and conditioning training programme to prepare players for the rigours of the modern game. This must reflect the maturational state and physical requirements of each player. Time for strength development must be set aside in the programme during these formative years of physical development.

Research indicates that there is no evidence to suggest that the risk of injury associated with strength training in young players is greater than that associated with other recreational activities in which children and teenagers participate regularly.

Coaches should hold regular meetings with individual players to evaluate their development using their player progress guide. In order to maintain confidence and focus, it is vital for the coach to continually provide objective and constructive feedback in relation to goals set. Strengths should be highlighted and areas for development should be identified. The coach and player should then agree an action plan to work on these areas. Regular review meetings should be scheduled and recorded to monitor progress.

Coaching delivery   Warm-up / cool-down

The warm-up section of your session should last for approximately 15-20 minutes and should progressively prepare your players both physically and mentally for their session. Remember this is also an opportunity to coach specific skills appropriate to the objective of your session. Every warm up should follow the principles of RAMP:

R - Raise (heart rate and body temperature) - 2-4 minutes
The first part of the warm-up should be to raise body temperature and heart rate. This will kick-start the body's metabolic processes and will promote optimal energy supply. Start with low intensity / general movements and build up gradually.

A - Activate (muscles required in session) and
M - Mobilise (joints required in session) - 5-8 minutes
The next part of the warm-up should be to use dynamic movements to activate the muscles and mobilise the joints required for movement in the session. Ensure that the movements are dynamic in nature and players are not just going through the motions. Players should become increasingly familiar with these movements to enable them to develop their own warm-ups as they progress through the LTPD stages. This will give the players ownership and more responsibility over their warm ups.

P - Potentiate (movement patterns used in session) - 2-4 minutes
To potentiate something simply means to increase its potential effect. The final part of the warm-up therefore should be aimed at getting players ready for full intensity exertion and increasing their physical potential for the session ahead. The last part of the warm-up should include specific movements similar to those that will be used in the session.

The importance of a cool-down
It is important for players to cool-down appropriately after a session. Again this needs to be structured accordingly to enable the body and mind to return to resting activity levels. This can be an opportunity to continue coaching specific skills at a lower intensity. Each cool-down should contain the following elements:
- Generalised movements - ensure activity / games are not above jogging pace - 3 minutes
- Static stretching - this will improve players' levels of flexibility and lessen future injury potential - 5 minutes.

Content for warm-up and cool-downs
Warm-up and cool-down indices and activities can be found in section 1.

These provide direction and content to structure your warm-up and cool-down appropriately. Scottish Rugby runs a number of strength and conditioning courses to aid your development in this area. Please log on to **www.scottishrugby.org/coaching** for details.

Use of Development area to develop decision-making skills

Within their session, coaches should endeavour to maximise decision-making opportunities for their players within the context of the session outcomes. One way of making this happen is to structure your content within a game situation with development areas for players to practice in isolation prior to putting their skills back under pressure in a game situation.

Further top tips for developing decision-making skills:

- Design games and game-like activities which encourage the player to develop skills but to also identify different decisions to make and their consequence to the outcome
- Educate the players in what they need to look for
- Use scenarios in training
- Condition the attackers when coaching defence and vice versa
- Do not be prescriptive in training sessions
- It is essential that rugby coaches design activities that allow players to develop their ability to identify, organise and process cues
- Create a supportive climate where players are not afraid to make mistakes
- Don't shout useless information to players during games e.g. "flatter, deeper"
- Change the shape of working area
- Change starting position of attackers, defenders or both
- Change attacking partnerships and defensive partnerships
- Change the numbers in teams (overload)
- Introduce points system to encourage a certain skill to be used or to encourage successful decision making.

Suggested playing areas

Pitch for players' games Dimensions of the pitch will be determined by the challenge. Try to make the game numbers no more than 7 v 7 (thus maximising the number of touches of the ball per player during the games).

Pitches should be marked out using flexible cones.

Development area The coach can work with the full group on a specific skill or with smaller groups of players drawn from the main group while the game continues. The ideal situation is for one coach to work in the development area while another manages the game.

The development area can be marked out into grids and channels depending on the skill being developed.

Safety zone between both areas

**Developing the
player curriculum**
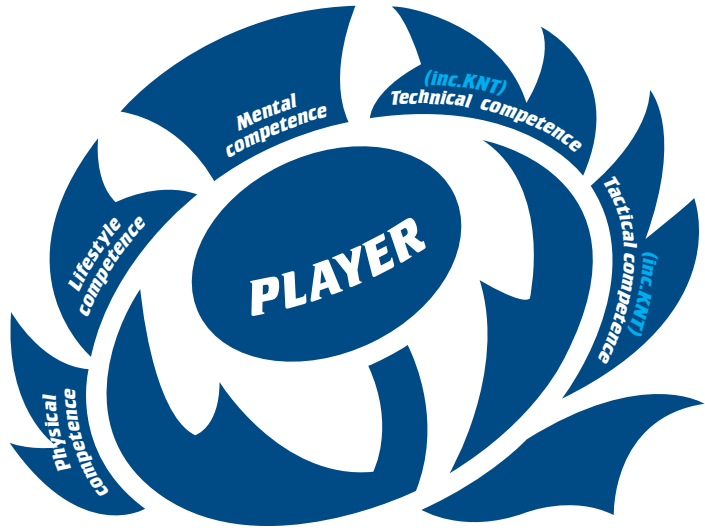
Physical Competence

Players must possess the physical competence to perform the technical skills to be able to perform the tactical skills.

During this stage the aim is to develop athletic abilities. Consideration must be given to the fact that most players will go through the adolescent growth spurt known as Peak Height Velocity (PHV) during this stage and this has major implications to the planning, content and delivery of coaching sessions.

PHV influences skeletal growth, nervous system development and hormonal development. At its simplest level, PHV can be monitored by recording weekly the players' standing and sitting height and weight - as growth accelerates, players are entering PHV. As the rate of growth slows over time, players can be seen to have finished PHV.

Speed sessions should focus on quality not quantity with the aim to improve players' ability to accelerate, decelerate, reaccelerate, change direction and sprint at top pace.

In the beginning of this stage, strength development should progress from an introduction to Olympic lifting techniques through the use of broom handles and body weight management activities to circuit-based activity and loaded barbell work. Dynamic postural control (being able to control the body when moving) should continue to be developed through effective warm-ups and cool-downs. Power is promoted by introducing multi-directional hopping and low intensity jumping, landing and rebounding (plyometrics) during the latter years of the stage. As strength develops, increasingly intense exercises can be incorporated.

Endurance is developed through multiple sprint activities with different lengths of work and recovery (e.g. 5-7 seconds effort with 3 minute active recoveries - these can be game or relay based activities). After PHV, as the player is able to work more anaerobically (without oxygen) then increasingly high intensity/longer working periods with less recovery can be introduced.

In order to improve physical competence and to reduce the prospect of injury it is important to increase flexibility. This should be developed through dynamic stretches in the warm-up and static stretching in the cool-down as per the previous two LTPD stages.

Movement Competence - by the end of this stage, players should be able to apply their athletic abilities and therefore demonstrate the following:

- Agility, balance and co-ordination at speed
- Running efficiently with and without the ball
- Jumping, hopping, and bounding with good posture and technique
- Spatial awareness and sensory awareness of body position
- Postural control in many different positions and activities, including in contact situations.

Technical / Tactical Competence - by the end of this stage players should be able to consistently perform core skills/techniques below with increased power, under increased pressure, and with increased accuracy under competitive conditions:

- Handling
  - Passing - appropriate passes and understand the implications of body position/ biomechanics upon the choice and outcome of pass
  - Catching and gathering - continue development of hand catch, catching the high ball and gathering the ball from ground and kicks from hand
  - Throwing - further develop throwing technique with attention to stance, grip, ball position, delivery and finish
- Running
  - continue development of sidestep and swerve, acceleration and deceleration, top speed to evade defenders, make and exploit space
- Kicking
  - introduced to and development of different types of kick (touch kick, goal kick, up and under, drop kick, grubber kick, chip kick, box kick, cross kick)
- Contact
  - further develop contact skills pre, during and post contact (tackle, ruck, maul, offload)
- Defending
  - develop basic systems and identify roles within systems. Go forward, line speed, line integrity, shape around breakdown
- Attacking
  - develop basic systems and identify roles within systems. Understand basic attacking principles - go through, go round, go over, understand how to manipulate defences
- Set piece - understand the role of set piece as a restart play with a contest for possession and an opportunity to create space for attack
  - Kick off
    - Team organisation
    - Appropriate tactical options in attack - chase, formation and contest
    - Appropriate tactical options in defence - receipt set-ups and play from
  - Scrum
    - Strong/safe body position maintained
    - Safe engagement procedure
    - Scrum process
    - Play from scrum including attack and defence
  - Lineout
    - Ability to outmanoeuvre and out-jump opposition in the lineout
    - Accurate throw to a moving jumper
    - Safe and effective support
    - Formation, delivery and play from lineout in attack and defence
- Teamwork
  - working as a team to attack space and defend, go forward in attack and defence, communication with team
- Continuity
  - Keeping the ball alive - Side-step-Offload-Setup (SOS)

- Key National Themes
  - be introduced to and be able to demonstrate competence in the four Key National Themes (these have been identified and agreed by national, pro-club and age-grade coaches, which will help develop a game structure that challenges individual players and their skills at all levels. These skills are vital if players are to have the option of attacking using the whole width of the field, speed up the contact area when tackled, speed up general play when on their feet in front of and in between defences, and improve the most important aspect of their defence).

By the end of this stage players should:
- understand the principles of play
- understand how tactics are affected by ability to perform with sound technique
- be able to play and understand different positions
- be aware of positional and unit requirements in attack and defence
- read and understand the game - undergo the early stages of tactical preparation (what, how, when, why).
- implement basic team and unit principles
- understand the laws of the game
- be consistently working on development areas as highlighted by their player progress guide and be receiving specialist skill training in these areas for development at the appropriate level from skilled coaches with access to specialist skills resources. Specialist skill areas delivered as part of Scottish Rugby's Specialist Skills programme to selected players are as follows:
- Scrum including scrum process, lineout, kicking, scrum-half play, back 3.
  Coaches are invited to observe delivery of this programme to up-skill in this area.

Mental competence - the focus for the player is to develop commitment and the foundations for excellence. By working with the player and their parents the coach should set the environment for the players to develop - this is one of the biggest developmental influences on the psychological qualities of the young player. By the end of this stage players should:

- be able to set goals in training and practice, both on their own (self-setting goals) and in conjunction with their coach
- be able to focus on relevant cues, at the right time. Through the introduction to attentional training
- develop and perform pre-performance routines to help develop focus
- develop and perform emotional control techniques before, during and after games
- develop their ability to keep highs and lows in perspective
- develop and perform mental coping strategies under pressure situations
- develop and perform further psychological skills including imagery, self-talk, commitment, goal setting and performance evaluation techniques
- in conjunction with the coach, have commenced individual profiling to guide goal-setting and training
- understand the importance of high quality training in relation to competitiveness.

Lifestyle competence - during this stage the focus for the player is to learn the lifestyle of a performer. By the end of this stage players should:

- take increasing responsibilities in regard to the factors of performance including rest, nutrition and hydration
- be aware of and adhere to doping control and substance abuse regulations
- be responsible for their own injury prevention and injury management processes in line with good practice
- use performance analysis to guide players' own approaches to training and playing development priorities
- be using a training diary / journal to record progress.

WARM-UPS AND COOL-DOWNS

WARM-UPS

R - **Raise** (heart rate and body temperature)
A - **Activate** (muscles required in session)
M - **Mobilise** (joints required in session)
P - **Potentiate** (movement patterns used in session)

RAISE

The first part of the warm-up should be to raise body temperature and heart rate.
This will kick-start the body's metabolic processes and will promote optimal energy supply.
Start with low intensity / general movements and build up gradually.

2 - 4 MINUTES

Pick one activity related to the session

Speed Based warm-up	Strength Based warm-up	Contact Based warm-up
Jogging	Wrestling movements	Wrestling movements
Cluttered handling	Judo movements	Judo movements
Passing	Gymnastic movements	Down-ups with movement

ACTIVATE and MOBILISE

The next part of the warm-up should be to use dynamic movements to activate the muscles and mobilise the joints required for movement in the session. Ensure that the movements are dynamic in nature and players are not just going through the motions.
Players should become increasingly familiar with these movements to enable them to develop their own warm-ups as they progress through the LTPD stages.
This will give the players ownership and more responsibility over their warm-ups.

5 - 8 MINUTES

Perform all activities from section one and pick two activities from section two

Section One

Speed Mechanics	Dynamic Flexibility	Postural
Squats	Squats	Overhead squats
Walking lunges	Walking lunges	Walking lunges
Side lunges	Side lunges	Side lunges
Hamstring kicks	Hamstring kicks	Hamstring kicks

Section Two

Speed Mechanics	Dynamic Flexibility	Postural
Walking high knees	Squat jumps	Split stance overhead throw and catch
Walking heel to butt	Split stance jumps	Press-up pass and catch
Ankle 'pops'	Lateral skips / carioca	Scarecrows
High knees	Inchworms	Core brace
Heel to butt	Press-ups (with twist)	YTWLs
Hamstring claws	Burpees with catch	Single leg SLDL

POTENTIATE

To potentiate something simply means to increase its potential effect. The final part of the warm-up therefore should be aimed at getting players ready for full intensity exertion and increasing their physical potential for the session ahead. The last part of the warm-up should include specific movements similar to those that will be used in the session.

2 - 4 MINUTES

Pick one activity specific to the session

Speed Based warm-up	Strength Based warm-up	Contact Based warm-up
Sprints	Wrestling	Wrestling
Resisted accelerations	Judo	Judo
Shadowing	Broomstick wrestle	Winning the space
1 v 1 evasion	Partner lifts	Resisted leg drives
Agility circuit (with ball)	Partner squats	Ball wrestle / rips

COOL-DOWNS

A cool-down should be performed after every session. If done properly, the cool-down can help aid recovery from exercise. Players should start rehydrating as soon as possible.

GENERAL MOVEMENT

2 - 4 MINUTES

The purpose of the cool-down is to return the body from a heightened state of exertion to resting levels. All exercises should be performed gently and there should be gradual but continuous decrease in intensity.

Perform two exercises from each category

General Movement	Dynamic Stretches
Jogging	Hamstring walk
Walking	Cross overs
Side skips	Side lunges
High knees / heel flicks	Lunge with torso rotation

STATIC STRETCHING

10 MINUTES

Static stretching helps the muscles that have been stressed during the main session to relax and it returns them to resting length.

Each stretch should be held for at least 30 seconds and performed twice (on each side if applicable) **Pick at least three stretches from lower body and two from upper body**

Lower Body	Upper Body
Calves	Upper back
Hamstrings	Partner pec stretch
Quadriceps	Shoulders
Hip flexors	Triceps
Glutes	Neck

Rehydrate throughout

		WARM-UPS AND COOL-DOWNS - EXERCISE DESCRIPTORS	
	RAISE		
SPEED BASED	JOGGING / RUNNING	A wide expansive area is required so that players can run and move about. A coach can add in extra movements to promote different skills, for example: touching the ground with either hand, jumping into the air and running backwards / sideways etc.	
	CLUTTERED HANDLING	Create a small grid (10m x 10m). Several players should pass the ball(s) to one another whilst avoiding contact and without stopping. Extra movements can be added in by the coach to promote different skills, for example: ball through the legs, ball round the waist, throw ball up and catch, roll the ball ahead etc.	
	PASSING	A wide expansive area is required so that players can run and move whilst passing a ball to a partner or in a group.	
STRENGTH BASED	WRESTLING MOVEMENTS	See below	
	JUDO MOVEMENTS	See below	
	GYMNASTIC MOVEMENTS	See below	
CONTACT BASED	WRESTLING MOVEMENTS	See below	
	JUDO MOVEMENTS	See below	
	DOWN-UPS WITH MOVEMENT	General movement (jogging / running / side to side / evasive) with or without a ball and then on a call players should (under control) hit the ground and then return to their feet as fast as possible.	
WRESTLING / JUDO MOVEMENTS	MULTI-DIRECTION BEAR CRAWL	On all fours, player crawls forwards, backwards or laterally maintaining straight back position with hips level with shoulders	
	BEAR CRAWL ROLL	In bear crawl posture, player rolls from front to back maintaining straight (firm) trunk.	
	BEAR CRAWL ROLL (WITH PRESS-UP AND BURPEE)	As above but player performs one press-up on moving to prone position followed by an explosive burpee.	
	FLOOR DRAGS	In pairs, one player drags their partner along the ground while maintaining strong body posture.	
	JACKNIFE CRAWL	Player lies on back with knees bent. Uses feet and legs to push body backwards and then twist into a jack-knife position.	
	ALTERNATE LEG STEP-UPS FROM KNEES	From kneeling position, player pulls foot through from behind hips and steps up into a squat position. Repeats on each leg fast. Maintaining upright torso.	
	KNEE JUMP TO FEET	From kneeling position player pulls both feet through from behind hips to land in a squat position. Maintaining an up-right torso with hands held forward. Swinging arms through vigorously to add to momentum.	
	KNEE JUMP TO FEET TO JUMP	As above but player jumps upwards explosively from squat position with arms extended above head.	

WRESTLING / JUDO	SIDE SKIP TO SIDE PLANK	Player skips fast to (right/left) and slides on to ground in a side plank position. Extending chest and with straight arm pulls up and back.	
	FORWARD ROLL	Player squats with knees together and places both hands flat on the floor in front, tucks head down whilst pushing legs. Keeps some weight supported with arms and rolls forward. Player should attempt to stand up without pushing on the floor with their hands.	
GYMNASTIC MOVEMENTS	COMMANDO ROLL	Player squats with knees together and tucks head down whilst pushing legs. Player should roll on to either shoulder without using hands to support. Players should attempt to stand up without pushing on the floor with their hands.	
	BACKWARDS ROLL	Player squats down, as their bottom moves towards floor, arches back and rolls backwards, chin and knees tucked into their chest. As they roll over, hands should make contact with floor pointing towards direction they have just rolled from. Player should finish standing up.	
	BANANA ROLL	Player maintains long banana shape. Rolls (right or left) maintaining banana shape. Keeping elbows and feet off ground. Rolls back again to starting position (right/left).	
	PARTNER HANDSTANDS	Player places hands on floor shoulder-width apart. Steps up under control into a handstand position. Uses a partner to stabilise if unable to perform individually.	
	PARTNER HANDSTANDS WITH FORWARD ROLL AND JUMP	Player steps into handstand position maintaining extension. Overbalances and gives with arms to allow forward momentum. Tucks legs and rolls forward into an explosive upwards jump.	
	FORWARD HOP AND HOLD	Player starts standing on a single leg, with other leg raised up to 90 degrees, then pushes forward off standing leg attempting to hop as far as possible - player should land on the same leg and stick in the position like a statue on landing for three seconds. Repeat with other leg.	
	LATERAL HOP AND HOLD	Same as forward hop and hold - but player attempts to move laterally (sideways) from starting position. Player moves one way then the other, holding each hop for three seconds.	
	SINGLE LEG BALANCES WITH BALL PASS	Same starting position as forward hop and hold. Player stands upright with one knee up toward chest, with both hands free. Player attempts to balance for ten seconds then changes legs. Progression - add ball, by catching and passing back with two / one hand in any direction.	
	STANDING LONG JUMPS	Player starts standing with feet shoulder-width apart and attempts to jump as far as possible and stick the position on landing, like a statue, for three seconds.	
	LATERAL HOPS	Player starts standing with feet shoulder-width apart and attempts to jump forward and sideways at a 45 degree angle onto one leg, sticking in the position on landing, like a statue, for three seconds. Then push off landing leg onto other leg and repeat.	

SECTION 1	Squats	DOUBLE LEG SQUAT	Player stands upright and puts hands on their head. Slowly sits back into a squat position (head up, chest up, back straight, and thighs parallel to the floor). Heels must stay in contact with the floor at all times and the trunk stays upright with neck aligned to the feet.	
		SINGLE LEG SQUATS	Player squats down in the same way as the double leg squat. Only this time squats down on one leg and holds the free leg straight out in front of the body. The same posture applies (head up, chest up and back straight). Start with the player going down to a knee angle of 120° then progress to 90° and parallel once each stage is perfected.	
		OVERHEAD SQUAT	Player stands upright, using broomstick (or ball) held across waist with hands a little bit more than shoulder-width apart. Once ready, moves bar overhead with straight arms in line with ears. Keeping chest and head up, and maintaining a strong posture, squats as low as possible, then returns to starting position and repeats.	
		OVERHEAD SQUAT WITH BALL THROW	Player faces a partner, and performs an overhead squat with a ball in their hand, progressing to passing the ball overhead to a partner while both maintaining the overhead squat position.	
		WALKING LUNGE	From a standing start, player lifts one knee up toward chest, leans forwards and strides placing foot in a controlled manner in front (not heavy landing). Player pushes off leg forwards and repeats for other leg as if marching whilst keeping chest up and back tight in a rigid position remaining stable throughout.	
		SIDE LUNGE	From a standing start, player lifts one knee up toward chest, leans to one side and strides placing foot in a controlled manner to that side (not heavy landing). Player pushes off that leg after landing and returns to the centre. Repeats for other leg, always returning to the centre whilst keeping chest up and inside leg straight in a rigid position remaining stable throughout.	
		HAMSTRING KICKS	Standing in a tall, upright position the player should swing (under control) one leg out in front of them keeping it completely straight with toes pulled towards shins. A full range of motion should be achieved and hips should be stable. Repeat and alternate leg each time.	
SPEED BASED MOVEMENTS		WALKING HIGH KNEES	At walking pace the player's weight should be on the balls of the supporting foot. The working leg is raised to 90 degrees with the toe pointing upwards. Make sure body is held in correct posture (chest up, shoulders back), the foot is driven into the ground by the hip and the hip reaches full extension.	
		WALKING HEEL TO BUTT	At walking pace, after each stride, the foot that has left the ground is immediately dorsi-flexed (toes towards shins) and heel is lifted to the hip (heel to butt). Only the ball of the foot (support leg) makes contact with the ground at any time. Make sure the player's body is held in correct posture (chest up, shoulders back) and heel comes to butt every stride.	
		ANKLE 'POPS'	In a tall, upright posture the player should take very small steps forward onto the balls of their foot. Upon impact with the ground, the player should explosively plantar-flex their foot (point toes) to 'pop' up. As soon as they have done this the foot is immediately dorsi-flexed (toes to shins). Whilst in the air the next small step is taken and the same action is repeated. Instruct players to stay in contact with the ground for the least amount of time possible.	
		HIGH KNEES	At high pace, the player's weight should be on the balls of the supporting foot. The working leg is raised to 90 degrees with the toe pointing upwards. Make sure body is held in correct posture (chest up, shoulders back), the foot is driven into the ground by the hip and the hip reaches full extension.	

SPEED BASED MOVEMENTS	HEEL TO BUTT	At high pace, after each stride the foot that has left the ground is immediately dorsi-flexed (toes towards shins) and heel is lifted to the hip (heel to butt). Only the ball of the foot (support leg) makes contact with the ground at any time. Make sure the player's body is held in correct posture (chest up, shoulders back) and heel comes to butt every stride.	
	HAMSTRING CLAWS	In a tall, upright posture the player should propel themselves forward without bending the knees (i.e. straight leg running). The drive should come from the hips and hamstrings. The balls of the feet should come in contact with the ground on every step to perform a clawing action.	
DYNAMIC FLEXIBILITY	SQUAT JUMPS	Player stands upright and puts hands on their head. Under control, sits back into a squat position (head up, chest up, back straight, and thighs parallel to the floor). Explodes on the way up to leave the ground.	
	SPLIT STANCE JUMPS	Player stands upright in a split stance position and puts hands on their head. Under control, performs a lunge type movement (head up, chest up, back straight, knee almost touching floor). Explodes on the way up to leave the ground and switches legs whilst in the air. Repeats on the other side and change legs each time.	
	LATERAL SKIPS / CARIOCA	Moving laterally, the rear foot of the player crosses the front of their body and then moves around the back. Simultaneously the lead foot does the opposite. Make sure the player's body is held in correct posture (chest up, shoulders back).	
	INCHWORMS	From a standing position, the player should bend at the hips keeping legs straight and in the same place. They should place hands in front and then proceed to walk them forward until they reach a press-up position. From there, the player should keep their hands in the same place and walk feet up to hands, keeping legs straight. Repeat so that the player inches forward.	
	PRESS-UPS (WITH TWIST)	Player performs a press-up, as the player rises they should remove one hand from the ground, twist their upper body whilst extending their arm above them (making a T-shape) and keeping both feet on the ground. Player returns to press-up position under control and repeat, alternating the hands that is extended above.	
	BURPEES WITH CATCH	Two partners should face each other, one with a ball. The other player performs a burpee. At the top of the jump the player with the ball throws the pass to the player in the air, challenging them to reach up for it. Repeat and alternate the partner who performs the burpee each time.	
POSTURAL	SPLIT STANCE OVERHEAD THROW AND CATCH	Player faces a partner and both perform a lunge a couple of metres apart. The players should pass a ball above their heads challenging each other to reach slightly. Players must ensure that proper posture is maintained throughout.	
	PRESS-UP PASS AND CATCH	Player assumes a press-up position. Pulls belly-button in as tight as possible, whilst squeezing glutes (bum-cheeks) together to maintain a rigid plank-like position for a set period of time. Two players should pass and catch a ball in one hand whilst retaining the same posture with the other extended arm.	
	SCARECROWS	Two partners face each, other one kneeling on the ground and the other who is standing, leans in (30-45 degrees) with arms extended from their side. The kneeling partner props the other up by holding just inside their elbow (biceps). The kneeling partner takes a hand away to create a rotational component on their partner. The working player must resist the rotation and maintain proper posture. Switch over after 20-30 seconds.	

POSTURAL	CORE BRACE	One partner assumes a position on hands and toes. Knees and hips bent to 90-120 degrees with flat back. The other partner challenges the worker by manipulating them and pushing them in different directions. The working player must resist by bracing their core and holding good posture. Switch over after 15 seconds.	
	YTWLs	Lying flat on the ground the aim is to make the corresponding letters with the upper body Y T W L. The aim is to squeeze the shoulder blades together for a second or so, performing five reps on each letter.	
	SINGLE LEG SLDL	From a tall, upright posture with arms extended to the side the player should hinge at the hip whilst balancing on one leg. The leg that is removed from the floor should be extended behind to maintain balance. The chest should be up, shoulders together and the hips should remain stable / square.	

POTENTIATE			
SPEED BASED	SPRINTS	Maximum effort sprints to get players up to full speed. Players should sprint over different distances (20-50 metres).	
	RESISTED ACCELERATIONS	Two partners are required, one who is working and the other provides the resistance. The worker assumes a good accelerative posture (leaning forward, chest up, head up with triple extension) while the other grabs their shorts and leans back. The worker then drives for 5 -10 metres whilst being resisted.	
	SHADOWING	Two partners facing each other, one is the attacker and the other is the defender. The attacker can move side to side only and the defender has to stay within an arms length by shadowing the attacker's movements. This can be progressed so that the attacker can move backwards and forwards as well as side to side.	
	1 V 1 EVASION	Set a grid of 5:5 metres. Two players stand in the middle of the square back to back, one is the attacker and the other is the defender. On a call from the coach the players run to the end of the grid they are facing, they then turn as quickly as possible and run towards each other whilst the attacker tries to beat the defender and reach the other side of the grid.	
	AGILITY CIRCUIT (WITH BALL)	Set a short circuit with forward, decelerating and side to side movement zones. The players go through the circuit at full speed. This can be progressed so that players have to accelerate out of the circuit onto a ball. Or you can set up multiple circuits within passing distance so that players accelerate onto a ball and pass along an attacking line.	
STRENGTH BASED	WRESTLING	See below	
	JUDO	See below	
	BROOMSTICK WRESTLE	Two partners grab opposite ends of a broomstick. On a call from the coach, the players try to knock each other off balance by pulling (like a tug of war). Another variation is the players grab the broomstick between them with alternating hands and they can twist, push and pull to knock each other off balance.	
	PARTNER LIFTS	One partner is the worker and the other is passive and provides the resistance. The worker has to lift their partner off the ground, maintaining the correct posture. The lifts can either be fireman, baby or deadlift. Different starting positions can be used, and additional movements can be added.	

STRENGTH	PARTNER SQUATS	Two players of similar size and weight get together. One player drapes their partner over their back and performs ten squats.	
	WRESTLING	See below	
	JUDO	See below	
CONTACT BASED	WINNING THE SPACE	Two players each lie on their front within an arm's reach from a ball. On a call from the coach both players must get to their feet as quickly as possible and win the space over the ball. To start with, the preliminary contact is only required and no driving is allowed. This can be progressed so that both players try to win the space and subsequently try to clear their opponent out.	
	RESISTED LEG DRIVES	Three players, one with a bag set up in the following way. The bag man stands in a strong position, the worker leans against the bag in a strong driving position with a ball tucked in an appropriate manner and the thrid player grasps the ball by reaching underneath the worker. On the bag man's call, the worker begins to drive for five explosive steps whilst the third player tries to wrestle the ball off the worker. Therefore the worker must control the ball and drive the bag man at the same time. This can also be progressed by the worker presenting the ball and the third player coming round through the gate to clear out the bag man.	
	BALL WRESTLE / RIPS	One player stands with a ball and tries to defend it from the attacker. The attacker simply tries to wrestle it off the attacker. If the attacker manages to get a hold of the ball then they should present it as if in a game.	
WRESTLING / JUDO	CUBAN WRESTLING	Player must attempt to wrestle opponent to ground or push out of wrestling area. Must not last more than 15 seconds.	
	HOLD ON FLOOR	One player lying on floor, other player lies across them. Player lying on floor must attempt to get up to their feet as quick as possible. Player lying across must attempt to keep opponent's back on the ground. Must not last for more than 15 seconds.	
	GRAPPLING SPARRING	Two opponents face each other and attempt to push (fending only) each other out of the wrestling area. Must not last for more than 15 seconds.	
	UNDER-HOOKS	Same as above, except opponents can hook one arm under opponent's armpit in an attempt to pin (shoulder touch ground) or push opponent out of wrestling area. Must not last for more than 15 seconds.	
	SPINNER	The defensive wrestler remains stationary on his hands and knees while the offensive wrestler assumes a starting position with their chest in contact with the defensive wrestler's back. On the coach's command the offensive wrestler initiates a spinning movement around the defensive wrestler, contacting the ground with only their toes and contacting his opponent with only their chest. Each time the offensive wrestler reaches their opponents head, they should change direction. The spinning should continue for intervals of 15 seconds to 1 minute.	
	KOALA BEARS	One wrestler gets on hands and knees and other is draped over his partner like a baby koala. On the coach's command the bottom wrestler initiates movement by crawling, turning, or sitting out, trying to shake his opponent off. The offensive wrestler must try to maintain the koala position for the entire interval (15 seconds to 1 minute).	

WRESTLING / JUDO	KNEELING STRUGGLE	The wrestlers assume a kneeling position facing each other in some type of tie-up position (hand to hand or shirt grab). On the coach's command, both wrestlers try to pull or push or twist each other to the ground while remaining on their knees and in tie-up position (ie maintain grip). Intervals should be 30 seconds to 1 minute.	
	PARTNER SCARECROWS	One player assumes a standing scarecrow position. The other player climbs on their back in a piggy-back position. Then the player on the scarecrow's back must attempt to move right round their partner's body without touching the ground.	
	ROLLING CLEAR-OUTS	One player assumes a 'hunter' like position. The worker should pretend that they are clearing the hunter out of an imaginary ruck by flipping / rolling / manipulating them to the side similar to a rolling judo throw.	

COOL-DOWNS

HAMSTRING WALK	Ensure the player has good posture and their hips and shoulders are square. Player keeps one leg straight, slightly in front and bends the other leg slightly. Rolls hand all the way down the shin to the ankle to stretch off the hamstring. Switches over legs by taking a step forward.	
CROSS OVERS	Ensure player has good posture "chest up". From a standing start, player crosses over one leg in front of the body maintaining hips in the same direction and squats down slightly. Player then stands up, positions the same leg behind, maintaining the hips in the same direction and squats down slightly. The player should then crab down the field if done correctly. The stretch should be felt in the outside of the buttocks.	
SIDE LUNGES	Ensure player has good posture "chest up". From a standing start player squats out to the side keeping the inside leg completely straight. Both feet should be pointing forward. Player switches legs by pivoting 180 degrees and performing the action on the other side. This stretch should be felt on the inside of the thigh.	
LUNGE WITH TORSO ROTATION	Player lunges forward with upright posture. At the bottom of the lunge position, player rotates the torso towards the leading leg. Player stands up and repeats for the other leg. This stretch should be felt in the quads and hip flexor.	

STATIC STRECHING

	Make sure that players maintain good posture whilst stretching, hold each stretch for 30 seconds and perform twice each (on each side if applicable).	
CALVES	Player leans against wall with split stance. Extends rear leg and pushes into ground to stretch calf.	
HAMSTRINGS	Player sits and brings one foot level with knee. reaches forward towards toes to stretch hamstring.	

Make sure that players maintain good posture whilst stretching, hold each stretch for 30 seconds and perform twice each (on each side if applicable).

QUADS	Player clasps ankle and pulls it up to their buttock.	
HIP FLEXORS	Putting one foot forwards, player keeps the front knee at 90 degrees. Player should keep this front leg position using the rear foot to creep the rear leg backwards. At the limit, player should push the groin area forwards as far as possible.	
GLUTES	Player crosses ankle over opposite knee and pulls flexed knee towards chest.	
UPPER BACK	Player starts on knees with arms extended in contact with the ground. Moves bottom backwards whilst keeping arms straight to strech out the back.	
PARTNER PEC STRETCH	Player A lies on ground with arms by side. Player B gently pushes player A's shoulders to the ground to stretch the chest.	
SHOULDERS	Player crosses arm over chest and pulls it towards the chest with the opposite arm making sure that the arm being stretched is not held directly on the elbow.	
TRICEPS	Player places hand behind neck and uses other arm to gently pull elbow towards head.	
NECK	Keeping shoulders square, player pushes ear towards shoulder to stretch opposite side. Ensures shoulders do not rise upwards.	

STRENGTH AND CONDITIONING - DEVELOPING PHYSICAL COMPETENCY

The factors affecting the physical development of players at this stage in their development are varied and complex and should be based on players already having received a sound background in the development of physical literacy skills (the ABCs of movement) and further development of Physical Competence skills in the earlier years of the players' development. (LTPD Stage 1 - FUNdamentals and LTPD Stage 2 - Learning to play).

Coaches and teachers should recognise that all players must continue to develop their fundamental movement skills and physical competences throughout the earlier stages of the LTPD continuum, and be given opportunities to reinforce the progress made in earlier years/stages of development.

**FUNDAMENTAL MOVEMENT SKILLS
+ FUNDAMENTAL SPORTS SKILLS
=
PHYSICAL COMPETENCE**

Coaches and teachers should therefore aim to keep physical competences developing one step ahead of rugby specific drills. This is a key issue in the development of the all-round player. As drills and other skill practices become more complex and intensive at this stage, so the required physical competence must be raised.

**PLAYERS MUST POSSESS THE PHYSICAL COMPETENCE
TO PERFORM THE TECHNICAL SKILLS
TO BE ABLE TO PERFORM THE TACTICAL SKILLS.**

During the 'Developing the player' stage (males 12-16, females 11-15), young players need to continue to build an aerobic base and consolidate their sport-specific skills. Towards the end of the stage, following Peak Height Velocity (PHV), they need to focus on strength and the anaerobic alactic energy system. Increased training hours are also needed at this stage to develop each player's long-term potential.

The ages that define the 'Developing the player' stage are based on the approximate onset and end of the adolescent growth spurt. This period is generally defined as ages 12 to 16 years for males and 11 to 15 years for females.

At this stage, coaches and teachers have the opportunity to 'build the engine' of the players, through an intense but gradual period of physical development, so that players are ready to consolidate their basic rugby specific skills and tactics.

The 'Developing the player' stage can make or break the player. Players may exhibit special talent, play to win, and do their best, but they still need to allocate more time to training skills and physical capacities than competing in formal settings. To maximize their long-term potential, winning should remain a secondary emphasis. The reason why so many players plateau during the later stage of their playing career is primarily because of an over emphasis on competition instead of training during this important period in their athletic development.

This approach is critical to the long-term development of talented all-round players and lifelong participants in the game.

To ensure their programme is following the correct training-to-competition ratio, along with other guidelines that describe training design and competition objectives at each LTPD stage, coaches, teachers and parents should use this resource as a useful guide for the physical development of their players.

More about Developing the player

During the 'Developing the player' stage of LTPD, physical changes take place faster in the player than at younger ages. Training programmes need to be designed to account for these rapid changes and the various advantages and disadvantages that they present in player development.
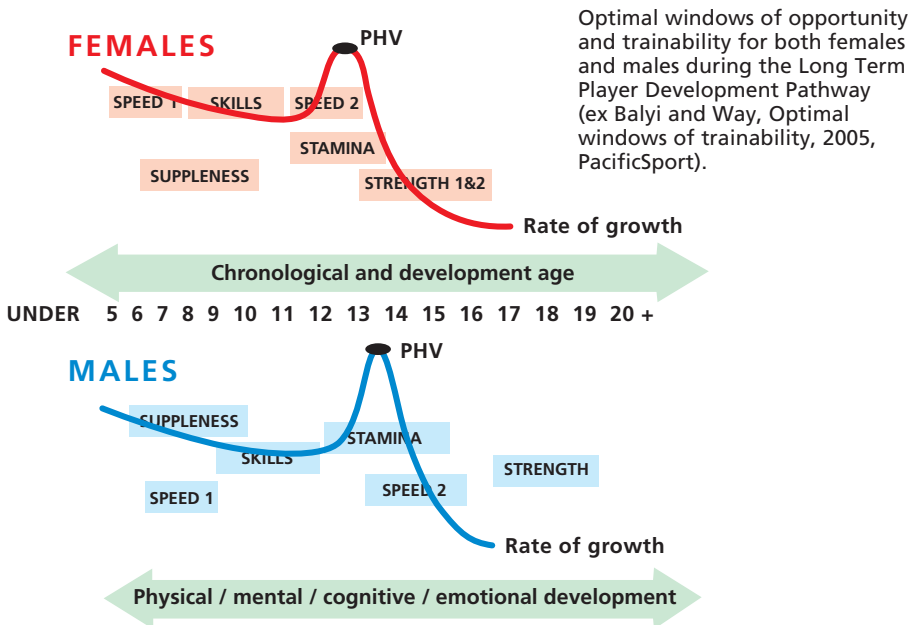
Players should be constantly monitored in order to understand how their growth and maturation is affecting their training and vice versa.

Peak Height Velocity (PHV)

During the 'Developing the player' stage, players are entering their growth spurt and passing through puberty. As they do so, their growth can be measured and plotted to calculate the time when they reach peak height velocity (PHV).

PHV is an important marker for determining which physical capacities can be trained effectively and safely during this stage.

FEMALES

SPEED 1 SKILLS SPEED 2

SUPPLENESS

STAMINA

STRENGTH 1&2

PHV

Rate of growth

Chronological and development age

UNDER 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 +

MALES

SUPPLENESS

SKILLS

SPEED 1

STAMINA

SPEED 2

STRENGTH

PHV

Rate of growth

Physical / mental / cognitive / emotional development

Optimal windows of opportunity and trainability for both females and males during the Long Term Player Development Pathway (ex Balyi and Way, Optimal windows of trainability, 2005, PacificSport).

Growth impeding performance

During the growth spurt - especially if this happens exceptionally quickly - a player's skills and movement abilities may be significantly impeded. Coaches may need to explain to the player why their motor skills and movement abilities have been negatively affected, so the player can understand that this is a natural event that will pass with time.

General considerations during the 'Developing the player' stage

- Emphasise suppleness (flexibility) training to accommodate the rapid growth of bones, tendons, ligaments, and muscles.
- Address the sensitive periods of accelerated adaptation to strength training. For boys, the sensitive period for strength begins 12 to 18 months after PHV. For girls, the sensitive period begins with whichever of the following occurs first in the individual: menarche or the onset of Peak Weight Velocity (PWV). Some girls will experience PWV prior to menarche, while others will experience menarche prior to PWV.
- Both aerobic and strength trainability are dependent on the maturation of the player. For this reason, the timing of training emphasis may differ between players depending on whether they are early, average, or late maturers.
- Players need to learn to cope with the physical and mental challenges of competition.
- Optimise training and competition ratios and follow a 60:40 percent training to competition ratio.
- Too much competition wastes valuable training time; too little competition reduces the practical application and development of technique, tactics, and decision-making skills under realistic competition conditions.
- A key reason why many players hit a plateau during later stages of their development has to do with too much competition and not enough training during this stage.
- Competition is most valuable when it is used to develop strategic and tactical understanding. The focus must be on the learning process and not the outcome.

The most important outcomes for athletes across this age range are to:

1) Enjoy training and therefore continue

2) Develop some level of technique and ability to train alone safely

3) Develop capacity to train hard relative to their ability.

In the beginning of this stage, strength development should progress from an introduction to Olympic lifting techniques through the use of broom handles and body weight management activities to circuit based activity and loaded barbell work. Dynamic postural control (being able to control the body when moving) should continue to be developed through effective warm-ups and cool-downs. Power can be promoted by introducing multi-directional hopping and low intensity jumping, landing and rebounding (plyometrics) during the latter years of the stage. As strength develops, increasingly intense exercises can be incorporated.

CHRONOLOGICAL AGE	12-13	13-14	14-15	15-16
TRAINING AGE (years of training experience)	3 - 4	4 - 5	5 - 6	6 - 7
Broomstick Lifting Technique Postural Integrity (control)				
Bodyweight Management Gymnastics - Movement skills				
Circuits - Bodyweight / Medicine balls				
Circuits - Loaded (Dumbells / Medicine balls				
Introduction to Barbell Lifts (Technique - Pre PHV)				
Loaded Barbell Lifts (Post PHV)				
Plyometrics Landing and Jumping Skills	Take-off and Landing Mechanics	Lower impact Jumping and Landing skills		Higher impact Jumping and Landing skills

BROOMSTICK EXERCISES

The use of broomsticks in a strength training programme for children and young adolescents is an invaluable tool for developing body management and body control and provides coaches with a simple and effective method (tool) for teaching the techniques of multi-joint lifting exercises in a safe and controlled manner. Lifting techniques can be **fun, safe and appropriate** for young players and the equipment required (i.e. broomsticks), is not expensive to provide for Clubs and Schools. The space required to teach and coach lifting movements and techniques is not large (four to five feet between players), and a session can be conducted easily in a small gym or Rugby clubhouse facility.

Broomstick lifting movements can be included in the warm-up of a coached rugby session or can be used as a stand-alone unit within a conditioning or physical competence development session. A mixture of broomstick movements, bodyweight circuits, medicine ball throws and gymnastics/judo movements can provide a stimulating and demanding physical workout for a group of players, which is also appropriate to the training age of the group.

BENEFITS OF BROOMSTICK LIFTING EXERCISES AND MOVEMENTS:

1. Body management/ body control
2. Lifting technique
3. Injury prevention
4. Dynamic flexibility - mobility
5. Agility, balance, co-ordination
6. Stability (especially hips and shoulders)
7. Multi-joint/multi-planar exercise
8. Appropriate for physical development stages 1-3 (ages 9-13).

EXERCISES SUITABLE FOR USE WITH BROOMSTICKS: (Suitability Level - 12-13 + 13-14)		
SQUATTING MOVEMENTS		
SQUAT	Feet - Shoulder width apart. Bar balanced on shoulders with elbows pulled back. Chest up, head looking forward. Player squats until tops of thighs are parallel to floor. Drives back up explosively until upright. Inhales before descending - exhales when ascending.	
OVERHEAD SQUAT	As above but broomstick held above crown of head. Arms straight with elbows locked out. Wider grip at top allows broomstick to be held over crown of head with straight arms.	
"BACK OF STEEL" SQUAT	As above but on dropping to parallel thighs position, player lowers bar to shoulders behind neck. Maintaining straight back with chest up, player drives bar back upwards behind neck until arms straight and then drives up with legs until standing.	
SINGLE LEG SQUAT (Pistol/Rear foot balance)	Bar balanced on shoulders with elbows pulled back. Chest up, head looking forward. Rear foot balanced on bench or box behind. Player squats until top of thigh is parallel to floor. Drives back up explosively until upright maintaining balance. Repeats on other leg after set of reps.	
OVERHEAD SINGLE LEG SQUAT (Rear foot balance)	As above but broomstick held above crown of head. Arms straight with elbows locked out. Wider grip at top allows broomstick to be held over crown of head with straight arms. Rear foot balanced on bench or box behind. Squats until top of thigh is parallel to floor. Drives back up explosively until upright maintaining balance. Repeats on other leg after set of reps.	
DROP SNATCH	Feet - hip width apart. Broomstick balanced on shoulders with elbows pulled back. Chest up, head looking forward. Player rises up on toes slowly and drops explosively under the broomstick to a parallel squat position. Lands in control with feet wider apart. Drives bar back upwards behind neck until arms straight and then drives up with legs until standing.	
LUNGING MOVEMENTS		
LUNGE	Broomstick balanced on shoulders with elbows pulled back Chest up, head looking forward. Feet hip width apart. Player steps forward maintaining foot, knee and hip in line until foot lands on floor. Maintains balance and pushes back upwards explosively until standing. Ensure that a stable position is maintained throughout the exercise. Knee should always be tracking over leading foot.	
WALKING LUNGE	As above, but pulls rear foot and knee through into next step of lunge. Maintains good balance and stability throughout.	
OVERHEAD LUNGE	As lunge but broomstick held above crown of head. With broomstick overhead, player steps forward maintaining foot, knee and hip in line until foot lands on floor. Maintains balance and pushes back upwards explosively until standing. Ensure that a stable position is maintained throughout the exercise. Knee should always be tracking over leading foot.	
OVERHEAD WALKING LUNGE	As with walking lunge but with broomstick held above crown of head.	
ROUND THE CLOCK OVERHEAD LUNGE	As with overhead lunge, but stepping out around the points of the clock (i.e. 12 - 3 - 6 - 9 - 12) Ensure that knee is always tracking in line with front foot.	

DEAD LIFT	Feet should be between hip and shoulder width apart, facing forwards or slightly turned out. Player squats down and gasps the broomstick with an approximately shoulder width grip. Arms should be outside the knees with elbows extended and pointing outwards. The broomstick should be over the shoelaces and close to the shins. Feet should be flat on the floor with bodyweight balanced between the balls and the middle of the feet. Head should be up and looking forward, or slightly upwards. Back should be tight and slightly arched or flat. Shoulders should be over or slightly in front of the broomstick. Maintaining a constant torso angle with the floor, player pulls the broomstick off the floor by extending hips and knees at the same rate. Player maintains the starting head position and keeps looking forward or slightly up throughout the ascent. Make sure the hips do not rise faster than the shoulders. Shoulders should remain over the broomstick with elbows fully extended and turned out. Player keeps the broomstick as close as possible to the shins, and shifts bodyweight back towards heels as the broomstick is pulled up. As the broomstick passes the knees, continue to simultaneously extend the hips and knees until torso is fully erect. During the ascent, breath held until the broomstick is past knees before exhaling. Bar should remain close to the body throughout the descent.	
PULL FROM THIGH	Player grasps the broomstick with an approximately shoulder-width, pronated (palms down) grip approximately at mid-thigh level. The feet should be flat and approximately hip width apart. Player bends the knees and ankles slightly, as if about to jump. The broomstick should be touching mid-thigh. The shoulders should be over or slightly in front of the broomstick. The arms should be fully extended with elbows turned out. Player pulls the broomstick from the thighs with a fast simultaneous extension of the hips, knees and ankles. Player keeps the arms extended throughout, and the broomstick close to the body. Continues by pulling on the broomstick by vigorously shrugging the shoulders to the ears. Player returns the broomstick to the mid-thigh by bending the hips, knees and ankles.	
PULL FROM FLOOR	See start position and first part pulling movement of Dead Lift. Once broomstick passes knees, player slides broomstick to mid-thigh level by pushing knees forward. Follow same movements for Pull from Thigh.	

PUSH PRESS	Player grasps the broomstick with a slightly wider than shoulder-width, pronated (palms down) grip. Steps under the broomstick so that the hips and feet are directly below it with a shoulder-width stance. The body should be centred on the broomstick. Squeezing the shoulder blades together and pinning the elbows back to create a shelf, player places the broomstick evenly across the front of the shoulders and chest. Drives the broomstick upwards forcefully, simultaneously extending at the hips and knees. Continues driving hard with the legs and when reaching the original standing position extends the elbows fully to push the broomstick from the shoulders to over head. Player keeps the wrists rigid when pressing and holds the broomstick overhead (position the broomstick in line with the back of the head). Slowly lowers the broomstick back onto the shoulders by flexing the elbows and catches the broomstick on the shoulders while keeping the knees slightly flexed.	

SPLIT JERK	Player adopts similar start position to Push Press (front). Takes a deep breath, pushes the hips back into a quarter squat while allowing the knees to travel forward and outward, and jump/'snap' into a one-foot-forward, one-foot-back receiving position. At the same time player continues the upward movement by assisting the already moving broomstick with a violent overhead push from the shoulders and triceps. The final position will be a split squat with the broomstick overhead. From this position, player moves the front foot back a half step, the back foot forward a half step and then again the front foot back a half step. This will put the feet side by side with little disturbance to the balance of the broomstick overhead. The 'jerk' portion of the clean and jerk is now completed.	
SNATCH	Player stands with feet shoulder width apart and takes a very wide grip on the broomstick. After taking a grip, drops the hips into a squat position, hips pushed back, shoulders over the bar, eyes up, chin down, core very tight. Arms should be straight; not slack or bending, but loose. Player stands with the broomstick by pushing the feet into the floor, and the moment the broomstick passes the knees, jumps explosively straight up, violently shrugging the shoulders upwards, and then immediately dropping the body downward. The broomstick will rise with straight arms until at full height, while simultaneously moving the body down, rotating it down and under the broomstick. In the full version of this movement, the final position will end in a full, wide, jumped out squat with the bar overhead, just behind the ears. Player stands to complete the movement.	

BODYWEIGHT MANAGEMENT - Gymnastic Movement Skills

HANDSTAND WALKOUT	Player places hands on floor shoulder width apart. Places feet on wall or wall bars and gradually walks up wall/wall bars until fully extended in handstand position. Maintaining contact with feet on wall/wall bars, player gradually walks out on hands until body is parallel with floor.	
HANDSTAND TO FORWARD ROLL & JUMP	Player steps into handstand position maintaining extension. Overbalances and gives with arms to allow forward momentum. Tucks legs and rolls forward into an explosive upwards jump.	
BACKWARD ROLL	Player starts on two feet and rolls backwards on to back. Keeping chin tucked into chest, rolls backwards on to right or left shoulder. Continues to roll hips and bent knees over shoulder to land on feet.	
BANANA ROLL	Player maintains long banana shape whilst rolling right or left. Keeps elbows and feet off ground. Rolls back again to starting position (right/left).	
SHOULDER ROLL & JUMP	Player rocks back onto shoulders. Rolls forwards aggressively onto feet and springs upwards explosively.	
BEAR CRAWL	On all fours, player crawls forward, backward or laterally maintaining straight back position ensuring hips level with shoulders.	
LATERAL BEAR CRAWL	As above, but move laterally.	
PRONE TO SUPINE ROLL ON HANDS & FEET	In bear crawl posture, player rolls from front to back maintaining straight (firm) trunk.	
PRONE TO SUPINE ROLL ON HANDS & FEET WITH PRESS-UP & JUMP UP	As above but player performs one press-up on moving to prone position followed by an explosive jump upwards.	
CARTWHEEL (RIGHT & LEFT)	Player performs sideways rotational movement by bringing the hands to the ground while the body inverts and the legs travel over the body, coming down to a standing position.	
FLOOR DRAG	Lying on front with arms and palms of hands extended, player pulls body forwards without using legs.	

PRONE HAND REACTION TIG	Player faces partner in press-up position. One partner leads and attempts to tap either of the other partner's hands. Other partner reacts and tries to lift hand away before being tapped.	
BACK FEET PUSH TO JACK KNIFE (RIGHT & LEFT)	Player lies on back with knees bent. Uses feet and legs to push body backwards and then twists (right/left) into a jack-knife position.	
DONKEY KICK	With hands held out in front of body, player drops on to hands. As hands hit the ground, kicks legs backwards and upwards explosively (like a bucking bronco). Repeats movement as soon as feet land on ground.	
ALTERNATE LEG STEP-UP FROM KNEES (RIGHT & LEFT)	From kneeling position, player pulls foot through from behind hips and step up into a squat position. Repeats on each leg fast maintaining upright torso.	
KNEE JUMP TO FEET	From kneeling position player pulls both feet through from behind hips to land in a squat position. Maintains an upright torso with hands held forward. Swings arms through vigorously to add to momentum. Progresses (when ready) to an explosive jump from squat position with arms extended above head.	
KNEE JUMP TO SINGLE LEG	As with double leg action but player lands on one leg (right/left). Progression - as with double leg action - jumps upwards explosively on one leg (right/left).	
SPLIT LUNGE JUMP	Player starts in lunge position. Jumps explosively upwards off both feet and changes legs before landing. Maintains upright torso with head up - using arms.	
SIDE SKIP (RIGHT/LEFT) TO LATERAL REACHING PLANK	Player skips fast to (right/left) and slides onto ground in a side plank position. Extends chest and with straight arm pulls up and back.	

CIRCUITS - bodyweights and medicine ball

Circuit training, using body weight and medicine balls, is an excellent way to improve general conditioning and in particular, strength endurance. Body weight circuits and medicine ball circuits are great introductory activities to weight training and prepare young players for the fatiguing effects of anaerobic work on the pitch and in the gym.

As with all exercise programmes, coaches must take care not to overwork players during the initial training sessions. Instruct the players to perform only one set of each exercise during the first two or three sessions. Quality of movement is more beneficial than quantity of exercise repetition or sets.

**Example programme format: (Suitability Level: Age 13-14)**

Choose a circuit of eight or ten exercises to work each body part as follows:
Total Body - Upper Body - Lower Body - Core/Trunk - Upper Body - Lower Body - Core/Trunk

EXERCISE			CIRCUITS	
WEEK	WORK	REST	NUMBER	REST
1	20 SEC	20 SEC	1	-
2	20 SEC	20 SEC	2	2 MIN
3	30 SEC	30 SEC	2	2 MIN
4	40 SEC	40 SEC	2	3 MIN
5	20 SEC	20 SEC	3	2 MIN
6	30 SEC	30 SEC	3	2 MIN
7	30 SEC	30 SEC	4	2 MIN
8	40 SEC	40 SEC	3	3 MIN

Complete the Circuit Training session twice a week with at least 48 hours between each session.
If players are carrying out other training units on the same day, then the circuit session should follow those after a suitable recovery period.

The diagram is an example circuit of ten exercises. Coaches should make up exercise cards for each station explaining the exercise, duration and recovery.
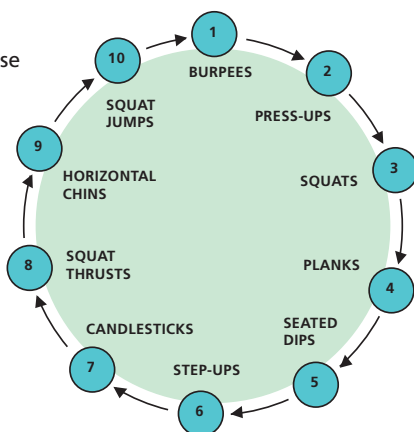
Medicine ball exercises and circuits

The ability to generate strength and power is a very important component for success in many sports, particularly for those involving explosive movements. Medicine ball training, in conjunction with a programme of weight training and circuit training, can be used to develop strength and power. Certain medicine ball exercises can also be used as part of a plyometric training programme (see section on plyometrics) to develop explosive movements. Medicine ball training is appropriate to all levels of ability, age, development and sport.

Planning a Medicine Ball session:

The following are some guidelines (Jones et al, Strength and conditioning with medicine balls, 1997, Coachwise) in planning and running a medicine ball session:

• Always ensure the players carry out a thorough warm-up and cool-down

• Before starting a session, explain the techniques for each exercise with your players

• Partners who feed the medicine ball on certain exercises should be well drilled on what is required

• Medicine ball exercises must precede high intensity work

• Start sessions with lighter, less dynamic exercises, then progress to heavier exercises

• The session should have exercises that relate to the explosive movements of the game of rugby

• Plan the session to exercise alternate body parts (legs, upper body, torso)

• You will need to have a number of different weights of ball available - heavy, medium and light (2kg - 5kg)

• Initially, players should use a light-weight ball and gradually progress to heavier ones

• Check there is sufficient space (including ceiling height) and that the structure of the walls are safe if any rebounding exercises are used

• Maintain good discipline as medicine balls can be dangerous if used incorrectly

• An effective workout with medicine balls can be achieved in about 30 to 40 minutes, if the player works efficiently

• Quality of movement is more beneficial than quantity of exercise repetitions or sets. Players must always attempt to move the ball fast (as explosively as possible).

MEDICINE BALL

EXERCISES	DESCRIPTION	
STANDING TORSO TWIST	Players stand back to back one metre apart. Keeping their hips facing forward and legs slightly relaxed, players pass the ball to one another by only twisting the torso.	
CHEST PASS	Players stand with feet together. Hands behind ball and elbows out. Step forward and push ball upwards and towards their partner.	
VERTICAL EXTENSIONS	Players stand back to back approx. 60cm apart. Ball is passed overhead. Ball is returned between the knees.	
OVERHEAD THROW	Players place one foot 50cm behind the other. Take the ball back, ensure hands are high, shoulders stretched and chest out. Step forward and throw the ball to their partner, keeping the arms straight.	
FALL BACK DOUBLE ARM THROW	Player A lies on ground. Player B throws medicine ball to player A. Player A catches and returns the ball to an overhead position for player B.	
DOUBLE LEG KICKS	Player A lies on their back with soles of feet facing player B who stands three metres away. Player B throws ball in a looping path onto the feet of player A who bends their knees back to their chest to then kick the ball back to player B. Player A must not lower their legs to the ground.	
HAMSTRING FLICKS	Player A lies flat on the ground. Player B rolls the ball along the back of player A's legs. On reaching the heels, player A flicks the ball back up to player B.	
WALL RUGBY PASS	Player stands 2-3m from wall. Ball is passed laterally to wall and caught on rebound. Repeat each side.	
RUSSIAN TWISTS	Player balances on hips with straight back at approx 45° angle. Ball is lifted from one side of body to other and then back again.	
HYPER CATCH & THROW	Player A lies face down. Player B feeds ball to top of head of player A who catches it whilst in an extended position. Ball is returned immediately.	
REVERSE OVERHEAD THROW	With undergrasp grip, from knee height, player throws ball aggressively, upwards and backwards, releasing when whole body is fully extended. (Triple extension).	
SLAMS	Player throws ball downwards towards ground aggressively from head height and catches on the rebound.	

How much?

An effective workout with medicine balls can be achieved in about 30 minutes, if the players work efficiently. Carry out two sessions per week with a recovery period of 36 to 48 hours between sessions. Each session should be made up of six to eight exercises with the player performing two to three sets of each exercise. If the athlete is to develop strength and muscular endurance then conduct six to 12 repetitions of each exercise. If the athlete is to develop muscular endurance rather than strength then conduct 12 to 20 repetitions.
The recommended weight of medicine ball - 3kg - 5kg for boys and 2kg - 3kg for girls.

Example Programme format: (Suitability Level: Age 13-14/14-15)

EXERCISE	REPS		SETS	
	POWER STRENGTH	MUSCULAR ENDURANCE	NUMBER	REST
Standing torso twist	5 - 10	12 - 20	2 - 3	3 minutes
Chest pass	5 - 10	12 - 20	for power / strength	
Fall back double arm throw	5 - 10	12 - 20		
Wall rugby pass	5 - 10	12 - 20	3 - 4	1 1/2 - 2 minutes
Russian twists	5 - 10	12 - 20	for muscular endurance	
'Slams'	5 - 10	12 - 20		

Technique and safety

To ensure personal safety and good technique while doing medicine ball exercises the following points should be remembered (Jones et al, Strength and conditioning with medicine balls, 1997, Coachwise):

- Complete throws with full extension of the arms
- On standing exercises plant feet before beginning to throw the ball
- Always use the full joint range in the correct sequence in carrying out each exercise
- Maintain technique - do not sacrifice control for distance
- Inexperienced players should not take the ball too far back behind the head when carrying out overhead throws
- When picking a ball, ensure the knees are bent and the back is kept straight
- When carrying out exercises lying on your back, ensure the lower back always remains in contact with the surface
- Prior to a catch, ensure you:
  - keep arms extended
  - keep hands together
  - keep eyes on the ball
  - reach out to meet the ball prior to making contact
  - do not attempt to catch balls thrown wildly.

INTRODUCTION TO BARBELL LIFTS

The most important outcomes for developing players across this age range (12-16), is to:
• Continue to enjoy training and prepare physically to play the game
• Develop a level of technique and ability to train safely after an introduction through Broomstick lifting techniques
• Develop the capacity to train hard relative to their ability and physical maturity.

Having been introduced to broomstick lifting techniques, it is important that coaches **continue to establish basic exercise technique under progressive loading** suitable to the physical maturity and training age of the players. There should be a seamless progression into loaded techniques to allow players in this age range to develop increasing postural strength suitable for a **physical contact game**.

There are different types of strength training ranging from body building techniques to competitive lifting techniques. What is important to remember is that young developing players should be introduced to multi-joint exercises which promote sound postural strength, flexibility and speed of movement. There are many advantages and benefits that young players can gain from regular strength training.

When working with young developing players, the attributes required in order for them to perform competently on the pitch should contain movements which promote explosive strength (**power)** and speed. It doesn't matter what sport you take part in, you have to be strong to produce power and speed. The key ingredient to success, whether you play rugby, cricket, basketball, golf or tennis, is speed of movement.

The most powerful movement that the body can generate is the EXTENSION of the ankles, knees and hips 'TRIPLE EXTENSION'. The combination of all three joints moving from a FLEXED position 'TRIPLE FLEXION' to extension generates force into the ground enabling a player to explode off the mark and react to the sport specific playing stimuli ahead. The majority of movements in all sports incorporate an element of triple extension. Take the vertical jump as an example; it is used by world class coaches as a reliable test of lower body power. The body is propelled off the floor with a triple extension movement, and there is probably no better way to do it and produce such good results. Acceleration, lateral quickness, trunk rotation, running, lunging, also require it. So, training and therefore, improving the triple extension and triple flexion movements are essential to enhancing players' on-pitch performance.

Triple extension lifting
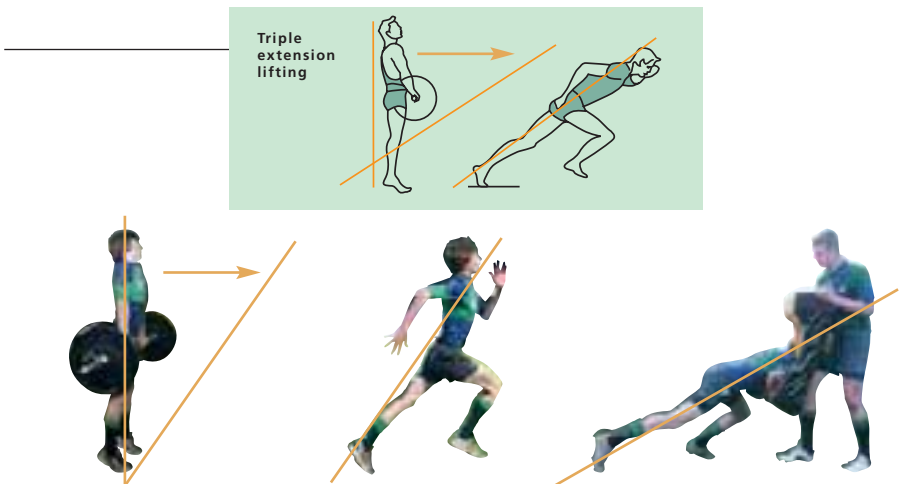
MULTI-JOINT EXERCISES SUITABLE FOR ALL STAGES OF DEVELOPMENT (LTPD STAGE 3 & 4)		
EXERCISE	DEVELOPS STRENGTH FOR MAJOR MUSCLE GROUPS	
BACK SQUAT	Player stands with feet shoulder-width apart. Bar balanced on shoulders with elbows pulled back. Chest up, head looking forward. Squats until tops of thighs are parallel to floor. Drives back up explosively until upright. Inhales before descending - exhales when ascending.	
	Running; tackling; scrummaging; rucking; mauling; jumping. Gluteals; hamstrings; lower back extensors; quadriceps.	
BENCH PRESS	Player adopts position on bench with both feet flat on floor and tucked in under knees. Grasps bar with closed pronated grip with hands slightly wider than shoulders. Places bar over chest with arms fully extended and lowers bar to chest. Keeps the wrists rigid and elbows close to the chest. Pushes bar upwards from chest explosively until arms fully extended. Inhales before descending - exhale when ascending. Never lift without a "Spotter".	
	Tackling; scrummaging; rucking; mauling. Pectorals, deltoids, triceps.	
STIFF LEGGED DEAD LIFT	Standing with straight legs (not locked), player lets the bar hang against the thighs on straight arms. Head should be up with shoulders retracted. Keeps the bar close to thighs and lowers to kneecaps. Maintains a flat slightly arched back during both descent and ascent. Maintains straight arms throughout. Inhales before descending - exhales when ascending.	
	Running; tackling; scrummaging; mauling; jumping. Gluteals; hamstrings; lower back extensors.	
DEAD LIFT	Player's feet should be between hip and shoulder width apart. Player squats down and gasps the bar with a shoulder-width grip and arms should be outside the knees. The barbell should be over the shoelaces and close to shins. Head should be up and looking forward, with chest up and shoulder blades retracted. Shoulders should be over or slightly in front of the bar. Maintaining a constant flat back, player pulls the bar off the floor by extending hips and knees at the same rate. Make sure the hips do not rise faster than the shoulders. Keeps the bar as close as possible to shins, shifts bodyweight back towards heels as the bar is pulled up. As the bar passes the knees, player extends the hips and knees until their torso is fully erect. Inhales before ascending - exhales when descending.	
	Running; tackling; scrummaging; rucking; mauling; jumping. Gluteals; hamstrings; lower back extensors; quadriceps; trapezius; rhomboids; deltoids.	

CLEAN PULL (FROM THIGH)	Player holds the bar at approximately mid-thigh height with a shoulder width pronated grip. Positions the feet under the bar so that the bar is over the shoelaces. Bends the knees and ankles slightly, as if about to do a jump. The bar should be touching the upper thigh. The shoulders should be over or slightly in front of the bar. The arms should be fully extended with elbows turned out. Maintains a flat back throughout the lift. Pulls the bar from the thighs with a violent simultaneous extension of the hips, knees and ankles. Keeps the arms extended throughout, and the bar close to the body and continues pulling on the bar by vigorously shrugging the shoulders to the ears. Player returns the bar to the thighs by bending the hips, knees, and ankles.	
	Running; tackling; scrummaging; mauling; jumping.	
	Gluteals; quadriceps; lower back extensors; trapezius.	
PUSH PRESS/SHOULDER PRESS	Bar balanced on shoulders with elbows pulled back and feet shoulder-width apart. Player drops into a quarter squat position to initiate lift. Drives the bar forcefully, simultaneously extending at the hips and knees and jumps up. Keeps looking forward / up with the shoulder blades pinned together. Continues driving hard with the legs and when the original standing position is reached, extends the elbows fully to push the bar from shoulders to overhead. Keeps the wrists rigid when pressing and holds the bar overhead (position the bar in line with the back of the head). Slowly lowers the bar back onto the shoulders by flexing the elbows. Player catches the bar on the shoulders while keeping the knees slightly flexed.	
	Running; tackling; scrummaging; rucking; mauling; jumping; lifting.	
	Gluteals; hamstrings; lower back extensors; quadriceps, anterior and medial deltoids, latissimus dorsi.	
BENT OVER ROW	Player grasps bar close to thighs with feet shoulder-width apart and lowers bar to kneecaps. The back should be tight and slightly arched or flat. Shoulders should be in front of the bar. Keeping the bar close to the thighs, player rows the bar upwards to contact the upper abdomen. The tight, parallel back position established during the set-up must not change. Player must avoid using the legs during the lift. Player lowers the bar back down until arms are straight.	
	Digging for ball; ripping ball; tackling; scrummaging; rucking; clearing out.	
	Entire upper back musculature; lower back extensors; biceps; rear deltoids.	
CHINS & HORIZONTAL CHINS	Player grasps the pull-up bar with closed pronated grip, just outside shoulder-width. Allows body to hang from the bar, with the elbows fully extended.	
Ascent	Pulls the body upward to the final position where chest nearly touches the bar and chin is over the bar. While pulling, player focuses on keeping body straight without arching or swinging.	
Descent	Allows the elbows to slowly extend back to the starting position.	
	Tackling; scrummaging; rucking; mauling; grip strength.	
	Latissimus dorsi; teres major; middle trapezius; rhomboids.	

DIPS	Player grasps two parallel bars that are approximately shoulder-width apart, and raises body up to an initial position with arms extended and supporting the entire weight of the body.	
Descent	While keeping elbows close to the body, and hips straight, player flexes the elbows slowly to 90 degrees. Allows the upper body to lean slightly forward.	
Ascent	Player pushes the body up until the elbows are fully extended and in the starting position.	
	Tackling; scrummaging; rucking; mauling.	
	Pectoralis major; triceps; deltoids.	
TRUNK STRENGTH (CORE):		
PLANKS	Player supports bodyweight horizontally on forearms and toes. Maintains a rigid, straight back by bracing abdominal muscles. Lower back should be flat not concave to ensure straight line from heels to forehead.	
ROLL OUTS	On knees, player grasps barbell shoulder-width apart. In the start position the barbell should be close to the thighs. In a controlled fashion player rolls barbell forward along the floor maintaining a braced core similar to plank. Arms remain straight and once player reaches full extension returns to start position. Lower back should be flat not concave to ensure straight line from knees to forehead. Good posture should be maintained throughout and not sacrificed for distance of roll.	
WINDSCREEN WIPERS	Lying on back, player spreads arms out at 90 degree angle from torso and lifts both legs up to 90 degrees from floor. Player lowers legs to either side in a controlled fashion keeping shoulders on the floor at all times. Player returns legs to upright to finish.	
CANDLESTICKS	Lying on back, arms by side, player keeps shoulders on floor and thrusts hips upwards to assume a straight line from shoulders to heels. In a controlled fashion player lowers hips slowly whilst maintaining leg flexion until hips contact the floor. Legs should then be returned to floor.	
V SITS	Player lies on back with arms extended and feet off the floor. Player contracts abdominal muscles to bring feet and hands together above waistline. In a controlled fashion player returns to starting position.	
RUSSIAN TWISTS	Player sits on floor with knees bent and torso at 45 degrees to floor. Holding medicine ball out in front with straight arms player then twists to either side keeping chest up and shoulders back prior to returning to midline. Feet should remain on the floor and torso angle should be maintained.	

An example of a typical lifting session for age group players

WEEK	1			2			3			4		
Beginning Date:												
SESSION 1	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS
1 Overhead squat												
2 Back squat												
3 Stiff legged dead lift												
4 Chins (under grasp)												
5 Dips												
6 Trunk strength												
SESSION 2	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS
1 Overhead lunge												
2 Dead lift												
3 Clean pull (thigh)												
4 Behind neck push press												
5 Four way neck												
6 Trunk strength												
SESSION 3 (optional)	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS	LOAD	REPS	SETS
1 Back squat												
2 Bench press												
3 Dumbell shoulder press												
4 Dips												
5 Four way neck												
6 Trunk strength												
				Option 1:			Option 2:					
	TRUNK STRENGTH OPTIONS:			Bar roll-outs 3 x 10			Plank (1 min) 3 x 10					
				Windscreen wipers 3 x 10			Candlesticks 3 x 10					
				V Sits 3 x 10			Russian twists 3 x 10					

Guidelines for loading:

The building of sound lifting technique must be paramount and should continue consistently throughout the different stages of development whether players are beginning to lift with broomsticks, learning to use light loads with Olympic bars, or progressing to loaded lifts according to their stage of development and training experience. It is important to remember that all young players are 'NOVICES' in terms of technique and strength development, so programmes and loading techniques should reflect this in their simplicity of design.

**THE BUILDING BLOCKS
FOR GAME SPECIFIC ATHLETIC PERFORMANCE ARE
TECHNIQUE, FLEXIBILITY and STRENGTH!**
Players cannot become faster and more powerful
without first becoming stronger!

Sets and reps - see following table.

NOVICE PLAYERS			
1st YEAR OF TRAINING	**3 x 10** Pre-season Early season	**3 x 10** Mid-season	**3 x 8** Main competitions Late-season
2nd YEAR OF TRAINING	**3 x 10** Pre-season Early season	**3 x 8** Mid-season	**3 x 5** Main competitions Late-season
INTERMEDIATE PLAYERS			
3rd YEAR OF TRAINING	**3 x 10** Pre-season Early season	**3 x 8** Mid-season	**3 x 5** Main competitions Late-season
4th YEAR OF TRAINING	**3 x 10** Pre-season Early season	**3 x 8** Mid-season	**3 x 5** Main competitions Late-season

Alternative session (with machines)

While 'free' weights are by far the most effective method of strength training for sports, most commercial gyms and fitness centres have machines that can be used if players cannot perform the 'free' weight exercises safely. It should be stressed that these do not transfer to the sporting environment as well as 'free' weights. The following are alternative exercises should players require them:

1. Leg press
2. Chest press
3. Seated row
4. Shoulder press
5. Biceps curls
6. Triceps press down

Guidelines for facility/gym use:

Not all clubs or schools are fortunate enough to have a properly equipped gym in order that players can have access to strength training to prepare physically to play the game. All clubs and schools do have a certain amount of space which can be utilised for such purposes even if it is a multi-purpose space within the building or facility.

1. **SPACE** - Filling an area with expensive equipment (especially machines or wall-mounted units) uses up valuable space which can be used more effectively for free weights lifting, which is more specific for the needs of all dynamic movements involved in sport.

2. **FLOORING** - Floor needs to be strong enough to withstand weights being dropped regularly. Ideally, the whole working area should be covered in a heavy duty rubberoid surface, which can be used for different lifting and jumping activities. It would also be very useful to have half a dozen gym mats (4' x 3') in the facility for trunk exercises, gymnastics skills and judo/wrestling activities.

3. **RACKS** - Power racks/squat racks again tend to take up space, are very expensive and we would recommend that individual (pairs) multi-purpose telescopic free-standing racks should be purchased so that they can double up as squat racks as well as bench press racks. They can be stored much more easily when not in use.

4. **EQUIPMENT** - Doesn't necessarily have to be too fancy! It's important that you have enough bars (Olympic) for the numbers working out at one time in the gym (1:4), enough rubber-plated bumper plates (5kg - 20kg) to go around if there are 2-3 players lifting at the same time (100kg - 300kg in total). Dumbbells are desirable with a set ranging from 2.5kg to 30kg plus storage racks. Medicine balls (1kg - 5kg) are also useful and are normally part of any performance gym.

5. **YOUNG PLAYERS** - If younger players are going to be given access under supervision, then a range of smaller Olympic bars should be available (7kg, 10kg and 15kg) as should broomsticks (minimum of a dozen).

6. **PLANNING** - It is important that the architects liaise and speak with strength and conditioning coaches regarding space and height of any new build facility or conversion. If you have a player 6'6"/ 2.00m lifting with a bar and plates, overhead, then you need a minimum of 10'6" / 3.2m clearance.

7. **EQUIPMENT SUPPLIERS** - There are many good equipment suppliers in Scotland and the UK and some deal in good second-hand reconditioned equipment. For specific advice on facility development and strength and conditioning equipment, you can contact the Athletic Development Department at Murrayfield.

RUGBY CLUB / SCHOOL - SMALL TRAINING AREA (5m x 5m) for WEIGHTS GYM

EQUIPMENT REQUIRED	SPECIFICATION
Rubber flooring	5m x 5m
1 set dumbells (10)	2.5kg - 30kg
1 set fixed barbells (10)	20kg - 42.5kg
2 Olympic bars	20kg
2 Olympic bars	15kg
2 Olympic bars	10kg
Olympic rubber Training disks	8 x 5kg
	8 x 10kg
	4 x 15kg
	4 x 20kg
Cast iron Olympic plates	4 x 1.25kg
	8 x 2.5kg
	8 x 5kg
Olympic style spring collars	8 sets
Olympic plate tree rack (6 pegs)	1
1 dumbell storage rack	10 pairs
1 fixed barbell rack	10 pegs
2 Telescopic independent free-standing squat racks	
1 multi-purpose bench with telescopic uprights	1
Wall mounted dip and chin station	1

OLYMPIC BAR RACK

DUMBELL RACK

FIXED DUMBELL RACK

MULTIPURPOSE BENCH WITH UPRIGHTS

LIFTING AREA

PLATE TREE

DIPS & CHINS STATION

SQUAT RACK

OPTIONAL	
Medicine balls	1 x 4kg, 1 x 5kg, 1 x 6kg, 1 x 8kg
Medicine ball rack	
Spin bike / exercise	
Rowing machine	
Exercise mats	2 x 2m x 1m

PLYOMETRICS LANDING AND JUMPING SKILLS

PLYOMETRICS GUIDELINES

PLAYER CHARACTERISTICS / EXERCISE INTENSITY	BIOLOGICAL AGE	TRAINING EXPERIENCE	RELATIVE STRENGTH	TECHNICAL COMPETENCE	VOLUME	GENDER
READY FOR HIGH INTENSITY EXERCISES	YOUNG ADULT	Intermediate or experienced player with experience of regular plyometric activities	Squat with 60% of bodyweight - Five Repetitions in five seconds	Competent single leg landing from 50cm drop	> 150 FOOT CONTACTS*	KEY CONSIDERATIONS MALE: Low Q angle (Angle between hips and patellar tendon) Lower joint laxity Tendon injuries during growth spurt (e.g. Osgood Schlatter's) More stable hormone status Higher strength levels FEMALE: High Q angle (Wider hips alter angle of pull on patellar tendon) Higher joint laxity Hormonal cycles Lower strength levels Increased risk of ACL injury
REASON FOR CAUTION WITH PLYOMETRIC EXERCISES	POST PUBERTAL	Beginner or Intermediate player with competent landing and take-off mechanics	1 rep max squat at 1.5 x bodyweight	Competent squat landing from 1 metre drop / Competent squat landing 50cm drop	> 100 FOOT CONTACTS*	
READY FOR HIGH INTENSITY EXERCISES	PUBERTAL	Beginner with no specific plyometric training, but some experience of landing and take-off mechanics	Bodyweight squat and lunge - Five repetitions in five seconds	Competent standing long-jump with landing / Competent single leg hop with landing / Competent single leg quarter squat	> 60 FOOT CONTACTS*	
INTRODUCTORY LEVEL PLYOMETRICS	PRE-PUBERTAL	Beginner with no specific plyometric training and average physical competence	Bodyweight squat and lunge only	Competent double leg squat technique / Poor double leg squat technique	30 FOOT CONTACTS*	

* Foot contact = Landing on one or two feet at a time
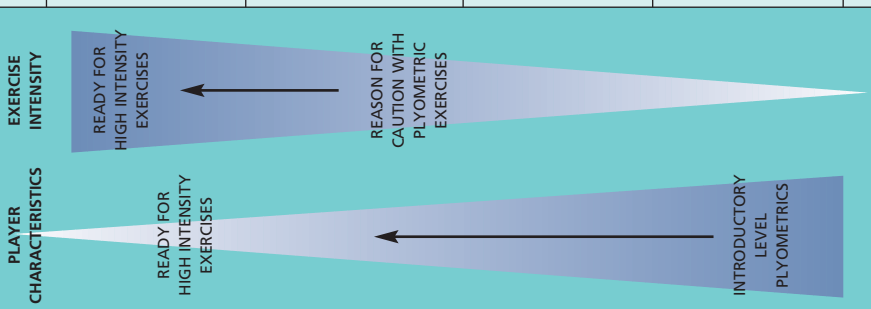
The fundamental reason to train with plyometrics (formerly known as jump training) is to **reduce the ground contact time that an athlete spends when running or jumping**. This time is reduced as players mature, get stronger and practice the skills of the game. To further enhance strength training, players spend considerable time practicing the specific movement skills they wish to improve; namely, **running, jumping, braking and changing direction**. These basic movement patterns are often thought of as genetic endowments and are affected little by outside influences such as training programmes. On the contrary, research has shown that virtually all players can positively influence their performance outcomes by using plyometric training on a regular basis.

When considering the inclusion of plyometric activities into training sessions, coaches and teachers should carefully consider the same programme variables that are considered in any exercise prescription:

- Technical competence in landing and take-off mechanics

- Volume of exercise

- Intensity of exercise

- Frequency of exercise

- Recovery / adaptation.

Landing and take-off mechanics

Children should be taught how to take off and land safely and effectively before taking part in any regular formalised plyometric activity in training sessions. All children from the age of eight should be given the opportunity to learn how to control their landings in any jumping activity. The potential for injury due to ankle, knee and hip instability in young players is considerable and the following should be considered in the teaching and coaching of landing and take-off mechanics:

- Hip alignment

- Trunk position

- Neutral foot position

- Ground reaction forces.

Hip alignment

- Two feet landings - even distribution
- Land on balls of feet initially
- Ankles, knees and hips bend on impact (knees 15°- 40°) to allow absorption and improved stability
- Good eccentric control which enables the hips to lower the body in controlled manner - early activation of leg muscles helps dampen landings
- Kneecap positioned directly over middle of each foot - not leaning in or out
- Hip alignment - legs not turning inwards or outwards.

Foot position
Feet should always be in a NEUTRAL POSITION.
(Not over-pronated or supinated as the feet provide impact absorption and also stability in the neutral position).
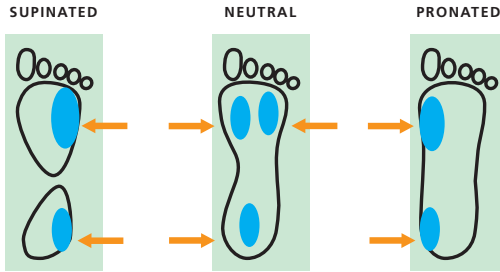

Keep the landing foot as close under the hip as possible.

What are the ground reaction forces?

In any running, jumping, landing and change of direction movement in sport, players must be able to absorb the amount of force being transmitted through the lower limbs. In any typical landing action whether a bi-lateral movement or unilateral movement (depending on the action), **anything from 2.5 to 4 x bodyweight of force can be transmitted through the lower limbs in less than 0.02sec**.

Ground reaction forces can be divided into two parts:

1. Vertical ground reaction force
2. Horizontal or breaking force
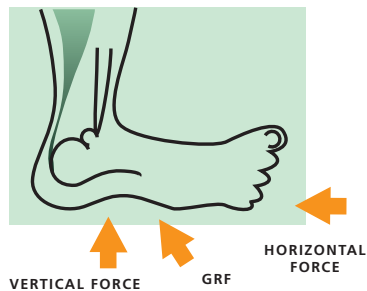
Forces on impact are mostly vertical with less horizontal. The intensity of a jump will depend on height (vertical) and/or distance (horizontal). Therefore the higher you jump or the further you jump, the greater the forces on impact.

It is important to minimise ground reaction forces if high intensity and too often repeated.

- Potential for injury (chronic)
- Cartilage/osteoarthritis
- Achilles Tendon / Patellar Tendon.

LANDING AND JUMPING EXERCISES		
TUCK JUMPS	Player jumps upwards drawing knees to chest. Lands on both feet in a strong, stable position.	
	Player jumps and spins round to land 90° / 180° / 270° from start position.	
BOX TRAINING	Player jumps off low box (30cm) and lands correctly.	
	Jumps up on to box (60cm) and lands correctly.	
	Jumps off low box and lands correctly on one foot.	
	Jumps up on to box (30cm) and lands correctly on one foot.	
	Jumps off low box and lands correctly (two feet) and as quickly as possible runs forwards, sideways or backwards .	
	As above, but lands on 1 foot. Aim for a 'SOFT' LANDING - FREEZE.	

HOPPING AND BALANCE DRILLS		
HOPPING	On spot catching a tennis ball.	
	Forwards and backwards.	
	Lateral hopping - controlled landings.	
BALANCE	Shut eyes - balance and push off wall and hold. Balance on uneven surfaces (i.e. Wobble board) Vary amount of knee bend during balances.	

How much and when to progress?

Once coaches are satisfied that young players are able to display control and balance in their jumping movements, then regular lower intensity jumping and landing activities should be included in coaching sessions, particularly in any speed related warm-ups at the beginning of sessions. The volume of exercises used in any session should be measured by the **number of foot contacts** and the volume should be kept low initially until players are competent at the intensity level of the exercises before progressing to more complex movements.

At all time quality of the movement should be stressed rather than quantity.

What is speed?

Different types of speed

Speed describes how fast a given movement can be performed. It can be used to describe a movement carried out by a specific limb or the body as a whole. Bearing this in mind, speed is therefore specific to the movement being performed. The concept of 'speed' is just general and can be broken down into the following components:

- Acceleration
- Deceleration
- Max speed
- Reactive speed

Acceleration and deceleration

Acceleration is the measurement of a change in speed.
To accelerate a player needs to produce force.
A force is an influence that causes something to change.
The change that we are primarily concerned with, when thinking about acceleration, is movement. Acceleration is governed by the amount of force produced on an object (which is the player's body) and influenced by the mass of that object. If a player wants to accelerate their body, they must produce a force (in the direction that they want to go) that is big enough to overcome their bodyweight. The more force a player can produce into the ground the faster they will be able to accelerate.

Deceleration is very similar to acceleration except the forces produced are used to slow something down rather than speed it up. In order to decelerate, a rugby player has to produce enough force in the opposite direction from which they are moving. Again, a larger amount of force produced in the opposite direction will result in a greater rate of braking.

Maximal speed

Maximal speed describes the ability to produce a movement in the quickest time possible. It usually refers to the fastest speed at which a player can run.
To be more precise maximal speed can also be viewed as the point where a player can no longer accelerate. In other words the player can no longer produce enough force to continue the increase in speed.

Reactive speed

Rugby is very unpredictable so players must react quickly to different situations. A player, during a game of rugby, will move about the pitch based on what is happening around them. This includes what the opposition are doing, what team mates are doing and where the ball is. Therefore it is important that they take in as much information as possible so that they can figure out the best course of action. Reactive speed is the time it takes a player to process what they are seeing and hearing before they start moving based on the information collected.

We are hopefully beginning to realise that speed is not just about how fast a player can run or move. Speed is dictated by the amount of force a player can produce which as a result causes movement or braking. Thus, a rugby player must be able to produce and withstand high forces in order to exhibit fast accelerations/decelerations and high speeds. The only way to prepare a player for the high forces required is to perform a structured strength programme as outlined elsewhere in this manual.

Why is speed important?

Speed is an important physical quality in rugby because it can allow a player to gain an advantage over their opponent in a variety of situations.

Acceleration is especially important in rugby because a player typically has to cover shorter distances during play. For example, how often do you see a player perform a 100 metre sprint in a game of rugby? Sprint distances vary between positions but it is unlikely that any player will have to sprint for more than 40 metres as fast as possible (without a break in play or a change in direction occurring). Therefore, a player will rarely achieve their true 'top speed' simply because of the nature of rugby. Thus, it is very important to be able to accelerate quickly (achieve the highest possible speed in the shortest amount of time) to gain an advantage over the opponent.

The ability to decelerate quickly and effectively is very important for a rugby player due to the stop-start nature of the game.

Maximal speed is also important to rugby players for longer sprints. It is obviously more important for a back three player to have a greater top speed than a front row player however all positions can benefit from being faster.

Reactive speed is important because the quicker a player can detect important events, then react to them, the faster they will able to complete the required movement and gain an advantage over their opponent.

How can speed be developed?

Speed is a skill and should be treated as such. Speed for rugby players is different from the speed demonstrated by top track sprinters. The time taken to reach top speed, the running posture and the arm actions are all different. Coaches should not attempt to train speed when players are fatigued (Brewer, Strength and conditioning for sport: a practical guide for coaches, 2008, Sportscoach UK). This has important implications for work to rest intervals, where players should be given plenty of recovery time so that they can give 100% on every effort.

It is worth noting that speed can only be developed by performing movements at maximum intensity. Improvements occur when muscles remember movements and perform them with increased speed, efficiency and control (Luger and Pook, Complete conditioning for rugby, Human Kinetics 2004). Movements that are not performed with full effort will not cause the body to adapt and become faster (Brewer, Strength and conditioning for sport: a practical guide for coaches, 2008, Sportscoach UK). If speed development is the target, all movements within training should be practised at full game speed.

Speed can be learned in isolation, but ultimately, rugby-specific speed is gained in drills that mimic the movement patterns performed during rugby.

Technical points of sprinting technique:

- **Posture**
  - Acceleration = forward leaning, chest up, flat back
  - Max Speed = tall and relaxed

- **Arm action (without ball)**
  - Aggressive arm drive
  - Elbow angle 90°
  - Elbows punch back

- **Action (with ball)**
  - Arm swing
  - Control over ball
  - Places more stress on dynamic core stabilising muscles
  - Increases emphasis on stride rate and balance

- **Leg action**
  - Swing = toes pulled up towards shins, knee driven up, use hips (*TRIPLE FLEXION*)
  - Propulsion = Piston action (*TRIPLE EXTENSION*)
  - Recovery = 'leg cycling', heel to bum.

Integrating speed into rugby sessions

An element of speed should be integrated into all sessions. The warm-up section of a session is an excellent opportunity to include speed drills. During the session the coach should use activities and exercises that will allow players to develop their speed and running mechanics, as well as the technical and tactical aspects of rugby.

What is agility?

Agility is highly related to speed and encompasses the ability to change speed, change direction or change body position quickly. Therefore, the ability to accelerate is very important when considering agility.

Why is agility important?

Rugby, as we know, is a multi-directional sport therefore being agile will give a player a performance benefit. Whether a player is trying to evade an opposition player in attack or making a tackle in defence they need to be able to control their body effectively and quickly.

How can agility be developed?

Since agility is a component of speed it should also be treated as skill.

An effective way to improve a player's agility is to initially develop their strength. The reason for this is because of the high forces required to change speed, direction and positions. Agility drills should be used to refine and reinforce their technical execution of the movements in question.

Agility drills should be performed from different starting positions. Players often have to recycle themselves from the ground. The quicker they can do this the more involvement that player can have in the game. Therefore, drills which encourage players to move from a variety of starting positions will help them develop their agility.

Technical points of agility technique:

- Low centre of gravity
- Low hips when decelerating or changing direction
- Quick, explosive steps
- Plant feet at various angles then drive to generate changes of direction / speed.

Integrating agility into rugby sessions

As evasion is a big part of the game, agility should be integrated into every session.

Again, the warm-up is an ideal opportunity to include some agility drills. Small conditioned games can be implemented where the emphasis is put on evasion and avoiding contact with other players.

The following training principles facilitate progress when performing speed and agility drills:
- Speed and agility drills should be performed at maximal intensity
- Recovery between drills should be maximal
- Players should not start a speed or agility drill when they are fatigued
- Players must perform a sufficient warm-up before speed and agility work is started
- Make sure players practise with and without a rugby ball as the mechanics are different.

Organising and planning a training week and the various sessions therein requires careful planning if coaches are to optimise the time available for coaching with the group of players. Consideration should be given to the following:

• Number of training sessions in each week
• Time available for each session
• Technical, tactical and strategy elements to be covered in each session
• Fitness elements and energy systems to be included in the course of each session.

The number of sessions available to coaches and players will vary from club to club and from school to school, so an element of prioritising in the planning process will be essential. Prioritising however, does not mean that key training units should be sacrificed in favour of other units, so an element of integration of fitness elements should be built into each planned technical session. Learning **HOW** and **WHEN** to include the fitness elements into a training week and individual sessions, requires a knowledge of the basic energy requirements for the game and how to include training units in a session which caters for the different energy systems (i.e. aerobic, anaerobic). Also, how coaches and teachers organise and manipulate the volume and intensity of the sessions is vital. To do this, coaches should understand and be familiar with the principles of ***WORK:REST RATIOS***.

Understanding work: rest ratios

The game is stop-start in nature, meaning that there is more time spent inactive and walking than there is in work. Work to rest ratios also vary between playing positions with outside backs having a greater rest period between work bouts than other playing positions. The work to rest ratio for forwards (1:7) is typically greater than for backs (1:20).

During work, the game places great demands on the primary and secondary energy systems, while during recovery periods, the aerobic system contributes significantly. As the nature of the game is stop-start there is little continuous steady state exertion. The bouts of work are interspersed with relatively longer periods of inactive and active recovery.

Implications for conditioning players

While work to rest ratios represent the averages found in the studies noted above, players will be required to work for longer and rest for shorter periods as well. Thus, a variety of work to rest ratios should be considered in the conditioning and preparation of young players.

The total distance covered by a player from a given position is composed of different speeds of locomotion. Outside backs will cover a greater total distance in sprint mode and their training distance may be longer compared to forwards and inside backs. Consequently, all players will require coaching and training in acceleration and deceleration.

The studies completed to date also identify position-specific demands with front row forwards being involved in more frequent physical contact activities than outside backs. Further, speed training over distances greater than 30 metres may be a more appropriate training activity for the outside backs compared to players in the front row position.

While forwards are engaged in intense physical activities (rucking, mauling, scrummaging and tackling) more frequently than backs, backs are still involved in intense physical challenges. General total body strength and power for exerting force provide a basis for the more specific activities of gripping, pushing, pulling and other forms of opponent contact. More specific conditioning methods that involve grappling, wrestling and tackling are also important and should be part of the conditioning programme. Further, dynamic mobility and agility is also an important component for developing during the integrated conditioning process. Such activities include players returning or recovering from a ground position to a playing position, changing direction and speed of movement during evasion drills and conditioned games.

The demands of the game

There is an obvious trend within the time-motion studies completed to indicate that the game is certainly a multi-activity sport with periods of high intensity play punctuated by varying durations of rest intervals. From the studies discussed in this module, it is clear that the higher the level of play, the greater the frequency and total duration of high intensity work.

Time motion analysis informs us that all rugby players will require highly developed levels of what we may call multi-component fitness. Acceleration training is a clear requirement, as is deceleration training. While time-motion studies have not focused on the agility demands of the game, it is clear that agility is an important component for all players. Strength and power training are also requirements for all players. The ability to reproduce high intensity bouts of activity with varying degrees of rest recovery between bouts is also a requirement.

While position specific differences exist, the implications for coaches are clear. Strength and power training (both general development and specific activity development), and speed acceleration training (which includes acceleration, deceleration and agility patterns) are central to the most demanding work efforts that we see during match play. Hidden within these physical activities is the player's efficiency in terms of expressing strength, power and speed repeatedly. Match play involves varying work to rest ratios and a player's ability to tolerate repeated high intensity bouts of activity for the duration of the game will also be dependent on their ability to recover between high intensity bouts.

Specific integrated conditioning is important here as it can be organised to mimic more closely the different work to rest ratios that occur in the game.

The golden rules for programme design:
• Recovery should follow performance
• Heavy training should be built into the early part of the training week
• Lighter loads with a tactics and strategy emphasis should feature towards the end of the week/close to competition/game
• Recovery and peaking should take place in preparation for the following weekend's competition/game.

Planning objectives
• How long is the training session?
• What units of fitness do you wish to include in the session?
• Where do you include fitness/physical competency units during session? i.e. order of units?
• Do the fitness objectives relate to your overall coaching objectives for the session? (i.e. support and continuity with a speed component, or a strength endurance component?)

Order of training units in a session or a training week
The order of units in a session follows the same principle as the order of the units in a week (i.e. speed and power early when players are fresh, followed by strength endurance or aerobic endurance).

ONE POSSIBLE COMBINATION: (TRAINING SESSION)		
Warm-up Speed and agility Strength/ground-based skills Strength endurance - continuity Recovery		
ONE POSSIBLE COMBINATION: (TRAINING WEEK)		
SESSION 1:	SESSION 2:	SESSION 3:
Dynamic warm-up	Dynamic warm-up	Dynamic warm -up
Speed/jumping activities	Speed - acceleration/deceleration	Speed - acceleration
Strength	Strength endurance	Speed endurance/team run
Aerobic activity	Small-sided games	Cool-down/flexibiity
Cool-down/flexibility	Cool-down/flexibility	

Principles of longer term planning of sessions (monthly)
• Try to work with training phases of four to six weeks
• Each block should contain units of work which reflects every fitness component (unit = 10-40 min duration)
• If the objective is to improve a particular component, then there must be at least two units in a week. (i.e. Speed)
• If the objective is to maintain a level, then one unit will do this for a period of 3 - 4 weeks
• Speed and power sessions should always be done when players are not fatigued from a high volume, high intensity session the day before
• The order of sessions in a week is important
• Every block should contain an easy week where volume of work is reduced
• Volume of work should be reduced in the lead up to each match.

TECHNICAL AND TACTICAL DEVELOPMENT

PRINCIPLES OF ATTACK

PRINCIPLES OF DEFENCE

CONTINUITY AND BREAKDOWN

THE SET PIECE

SCRUM

LINEOUT

KICK RESTARTS

PRINCIPLES OF ATTACK

Scanning

Attacking the gain line and alignment

Shape in attack

Avoiding the head on tackle

Roles and responsibilities of support

Kicking and fielding

Counter attack

SCANNING

Support players close to contact should look up as they approach the breakdown to scan for threats and act accordingly.

Players waiting for the ball to emerge from the ruck should look at what is happening in front of them and how the defence is organised. Attacking team should look to recycle the ball as quickly as possible. The key is for players to lift their eyes as they move into position for the next play and look for the following:

- Do we outnumber the defence? - openside or on the blind? Look for defenders who are still moving into position as these players will most likely not push forward and will create gaps to attack.
- How is the defence set up? Are there any clear spaces/gaps in the defence?
- What is the body language of the defenders? Are they set up square, aware of the attacking players in front of them and ready to push forward or are they upright and looking at the ruck?
- Are there any mismatches? Front row players lined up far away from the breakdown where backs can run at them?
- Is there space in behind or are the back three well positioned? Will a kick to the right area of the pitch put them under pressure?

Communication is crucial as an attacking player who identifies an opportunity needs to make team mates aware of this. Players need to align quickly in order to exploit the opportunity. The following five areas should be a focus:

Look for:
1. Numbers
2. Gaps
3. Body language   } Early scan; communication; prompt and confident action
4. Mismatches
5. In behind.

3D Scanning

Activity	3D Scanning
Objective	Scanning and identifying space. Attacking identified space.

Key Factors
1. Eyes up in order to scan (ball carrier and supporters)
2. Narrow defence = fix defenders (stop sliding defence) and attack wide
3. Wide defence = move defenders and attack space between defenders through effective angles of run.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	3 different colours	Suits	n/a	Players	10
Shields	n/a	Bibs	5	Time	10-15mins

Practice Description

Scrag game. A scrum half and five attacking players attack four defenders.
The defenders line up on the coloured cones (red/blue) nominated by the coach one second before the scrum half gets the pass away.
The attack needs to react to the defensive set-up. Keep players rotating between attack and defence as well as their positions. As an alternative option the coach can assume a position behind the attack and signal the option through colour cards or by holding up a number in order. This will challenge the attack as the audio cue is eliminated.

Note that the attacking team should keep playing until they score (work hard to create offload opportunities if contact can't be avoided). Priority should be to utilise extra players and attack space and avoid contact.

SET-UP DIAGRAM
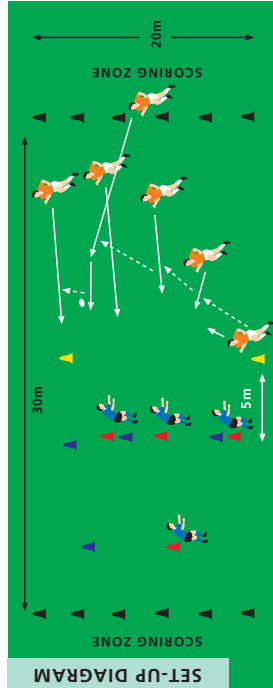
Practice Progression / Regressions
Condition defence - e.g. blitz, drift, scattered.
Add a defender to chase in behind the defence which adds significant pressure on the attack.

Drop off touch

Activity	Drop off touch
Objective	Scanning and identifying space. Attacking identified space.

Key Factors
1. Primary scan before ball appears from ruck; secondary scan with ball in hand.
2. Players attacking the space need to identify and communicate.
3. Supporting players need to attack the space as well by filtering through on support.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	10
Shields	n/a	Bibs	5	Time	10-15mins

Practice Description

The game is structured as a 5 on 5 six down (six chances to attack - when touched put the ball round waist then pass to support. The players from both teams have numbers assigned by the coach for example 'blue one' or yellow three'. With each touch the coach will shout a number of the defensive team with the effect that that particular player needs to drop back to their own try line before returning to play. A line break from the attacking team transfers the game to offload touch which will encourage the support runners to run towards the ball carrier.

SET-UP DIAGRAM
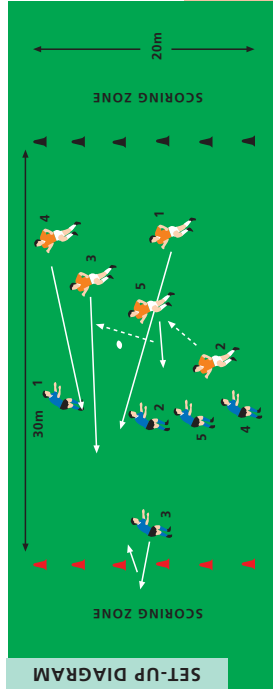
Practice Progression / Regressions
The later the defensive number is called the less time the attack has to react.
Two defensive numbers can be called which will present more options for the attack.

ATTACKING THE GAIN AND TACKLE LINES

The gain line is the imaginary line through the breakdown. The attacking team aim to get across this line in order to achieve a territorial advantage over the opposition. Conversely, the defending team should look to prevent the attack from crossing the gain line. The gain line is highlighted in the diagram below. The yellow line of cones running directly through the middle of the ruck in the photo is the gain line.

The tackle line is the point where the attack and defence meet and there are a number of factors that affect its position including:

        1. alignment (deep of flat) of the attack;
        2. skill level of the attack; and
        3. line speed of the defence.

Alignment in Attack
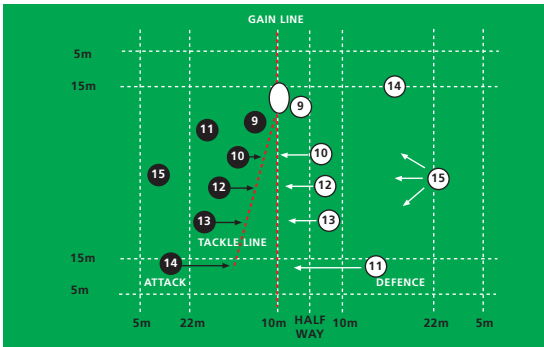
Flat Alignment

Aligning flat will give the attacking team the benefit of being closer to the gain line.
This places increased pressure on the defence and allows the attacking team to exploit spaces quickly. In order to exploit space, attackers require accurate and fast handling skills due to the proximity of the defence.
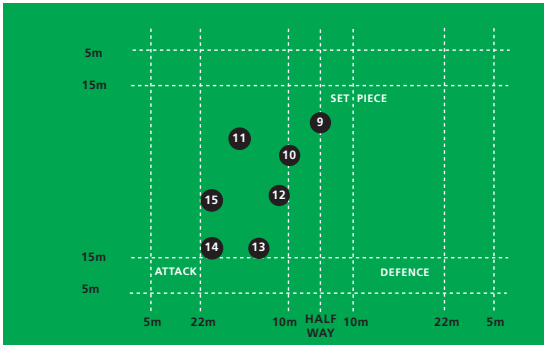
Deep Alignment

Deep alignment will give the ball carrier and support players more time on the ball making it easier to move the ball into the wide channels.

A deep alignment will allow attackers space and time to generate speed and forward momentum. Handling skills performed at high speed are required to challenge the defence and get over the gainline. Consideration should be given to the fact that players are much further away from the gain line when in a deeper alignment, thus risking losing the gainline race.

The coach should again ensure players are given the opportunity to practice using this type of alignment to allow them to understand why, where and when they may use this alignment.

Right Column

Activity	Continuous diamond support activity
Objective	Develop players' understanding of support play and attacking the gainline to create line-break opportunities

Key Factors 1. All attacking players to start in an active position and with sound hand-catch technique (see Key National Themes resource).
2. The three support players to communicate with first receiver regarding their position.
3. Ball carrier to attack the gainline, fix defenders to create space for support players.
4. Fix defenders by accelerating into space, and using positive evasion skills.
5. Support players to scan defence and communicate to ball carrier the space in front of them - aim is to get a line-break with no contact with defenders.
6. Support players to provide ball carrier with more than one option.

Equipment Requirements

Balls	2	Bags	n/a	Area	10-15m x 15-25m
Cones	1 stack	Suits	n/a	Players	6
Shields	n/a	Bibs	2	Time	10-15mins

Practice Description
One defender (orange) to pass first receiver then defend the gain line - both defenders then defend the gain line. Attackers (blue) attack the gain line and attempt to achieve a clean line-break by passing/running into space (4v2) If ball touched/tackled by a defender then they restart the activity by running through to the opposite diamond. Attacking players alternate roles before starting again - they then attack the same two defenders. Defenders must start from their cones each time.
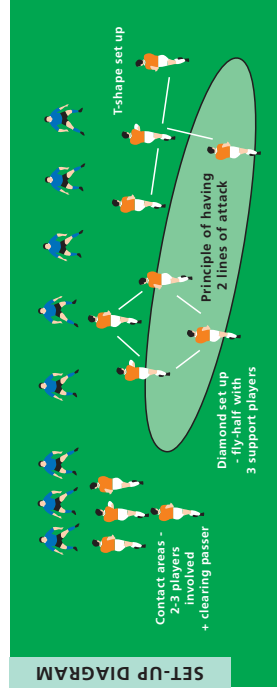
SET-UP DIAGRAM

GAIN LINE

15 - 25m

10 - 15m
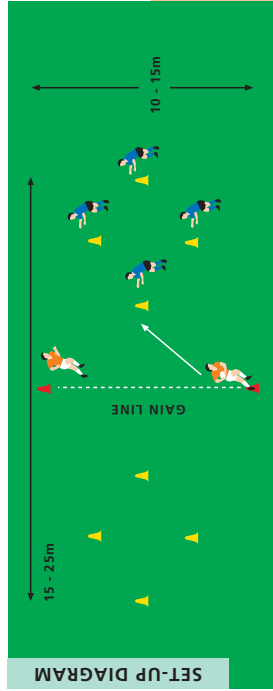
Practice Progression / Regressions
Regress - remove a defender to create a 4v1.
Progress - challenge the attacking players to pass the ball twice before attempting to make a line-break. Progress - challenge the attacking players to pass the ball twice before attempting to make a line-break. Progress - add in a defender. Progress - remove diamond shaped cones to allow players to align themselves.

Left Column

Activity	Wiper attack
Objective	Develop players' ability to attack the gain line. Developed through knowledge of deep and flat attacking principles

Key Factors
1. Get into position quickly.
2. Scan defence to identify space/attacking options.
3. All players to communicate on options available.
4. First receiver to communicate the chosen attacking set-up option (flat if defence wide or deep if defence narrow).

Equipment Requirements

Balls	1	Bags	n/a	Area	45m x 40m
Cones	1 stack	Suits	n/a	Players	10
Shields	n/a	Bibs	4 or 6	Time	10-15mins

Practice Description
Players split into three teams of six with one scrum half. Team A attacks team B, once completed team A become defence against team C. Team B then move to become attack for the next play once play has completed (against team C) - and repeat. Coach shouts BLUE or GREEN; the defending team align between breakdown (red cones) and relevant coloured cone. Attacking team scans defence and aligns accordingly - BLUE Defence (Narrow) - Attack align deep. GREEN Defence (Wide) - Attack align flat. First receiver is the only player who must align flat or deep (flat - in front of line, deep - behind line).

SET-UP DIAGRAM

Team A – realign left

C   A   Deep alignment

B   Flat alignment

3m   45m   5m

Practice Progression / Regressions
Increase or decrease the number of defenders to make the activity more challenging or easier for the attack.
Increase the depth of the 'flat alignment' to give the first receiver more time on the ball.
Increase the width of the pitch to create more space for the attacking team.

Activity	5v3 attacking shape
Objective	1. Develop attacking players' ability to align and attack space. 2. Develop attacking players' ability to manipulate/fix defenders to create space.

Key Factors

1. Attackers to align deep, flat or staggered depending the set up of the defence.
2. Attackers to scan defence to recognise space and attacking options.
3. Support to adopt varied lines of running to beat/manipulate defenders.

Equipment Requirements

|				
Balls	2	Bags	n/a	Area	30m x 15m
Cones	1 stack	Suits	n/a	Players	9
Shields	n/a	Bibs	3	Time	10-15mins

Practice Description

Four sets of three cones set up to determine defensive set-up from a breakdown.
Coach calls blue, red or yellow to determine the defensive set-up. Attackers first of all discuss how they might align to attack the defence - options include flat, deep, two flat + two deep etc. Attackers attempt to beat the defence and score a try before resetting.
Remember to utilise the player making the pass from the breakdown - can they be involved in the attack? Make sure that the ball is delivered from both sides so that players work off both hands.

SET-UP DIAGRAM

30 - 40m

▲ Narrow defence
▲ Spread defence
▲ Wide defence
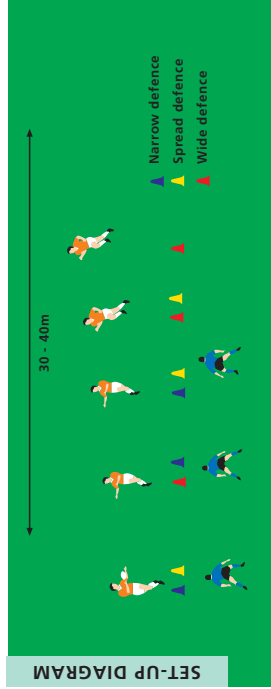
Practice Progression / Regressions

Regress - increase the width between defenders to increase space for attackers.
Progress - make the activity continuous - players run through once they've attacked and turn 180 degrees to attack again.
Progress - add in a floating defender - who can come into the defensive line wherever they decide.

Activity	Pattern of play
Objective	Develop players' ability to understand their roles and responsibilities in a basic pattern during open play. Including the link between forwards and backs, and encouraging the principles of play.

Key Factors

1. Players not involved in the contact area to align themselves in two groups (diamond and T-shape).
2. Diamond support group - players to align within 3-5m of the first receiver (e.g. fly-half).
3. First receiver and support to set-up in an 'active' position - ready to receive a pass.
4. T-Shape support group - players align 3 wide with one deep.
5. During play - players align (as illustrated) after each breakdown.

Equipment Requirements

Balls	1	Bags	n/a	Area	Pitch width
Cones	1 stack	Suits	n/a	Players	20
Shields	-	Bibs	8 (optional)	Time	20mins

Practice Description

12 v 8 players (S1 variations) on full S1 pitch.
Attacking players set-up in Diamond and T-Shape after every breakdown.
Coach uses voice or whistle to quicken/slow up the breakdown to allow the attack to align as illustrated. Coach explores with players the options available in attack when aligned in this way. Promote the principle of the ball carrier having more than one option to pass (e.g could pass to a support player in the diamond or first player in the T).

SET-UP DIAGRAM

T-shape set up

Principle of having 2 lines of attack

Diamond set up - fly-half with 3 support players

Contact areas - 2-3 players involved + clearing passer

Practice Progression / Regressions

Regress - remove defenders to reduce pressure on players
Progress - challenge players to attack a certain area of the pitch using the diamond and T-shape structure. Progress - in older age-groups (e.g. U16) - promote forwards aligning as second line of attack.

Activity	Holding runners
Objective	1. Develop attacking players' ability to manipulate defenders by using 'holding runners'. 2. Develop decision making skills of the ball carrier.

Key Factors 1. Hands in the ready position, with palms facing the ball and thumbs together. 2. Catch the ball in their hands. 3. Ball remains off the shirt. 4. Spatial awareness with and without possession. 5. Communication skills. 6. Evasion skills and footwork.
Holding Runner: 1. Always be in a position and be ready to receive a pass. 2. Run an out-to-in line - start running forwards and away from the ball carrier - aiming to move your opposite defender. Lastly change direction to run back towards the ball carrier - aiming to run back into the hole that has been created.
Deep Runner: 1. Hold depth so that the option to receive a pass is always on.
2. Communicate effectively with the ball carrier - is the pass on?
Ball Carrier: 1. Scan the defence to highlight potential areas to penetrate. 2. Look and listen to the two attacking options - option 1 = pass behind the holding runner to the deep runner; option 2 = pass to the holding runner.

Equipment Requirements

| Balls	2	Bags	n/a	Area	20m-30m wide
Cones	3	Suits	n/a	Players	6
Shields	n/a	Bibs	2	Time	10mins

Practice Description Three attackers (orange) v two defenders (blue) - continuous play. Feeder passes the ball to the first receiver. First receiver then starts the attack. Ball carrier makes a decision to either go alone, pass to the holding runner, or pass behind to the deep runner. Once the attackers score, or get touched, they run around the grid and play down the next channel. Defenders mirror the attackers and run around to the next channel. Feeder then starts play again from the centre. After four repetitions, attackers switch direction to ensure the practice works off both hands.

SET-UP DIAGRAM

TRY LINE · DEEP RUNNER · HOLDING RUNNER · FEEDER
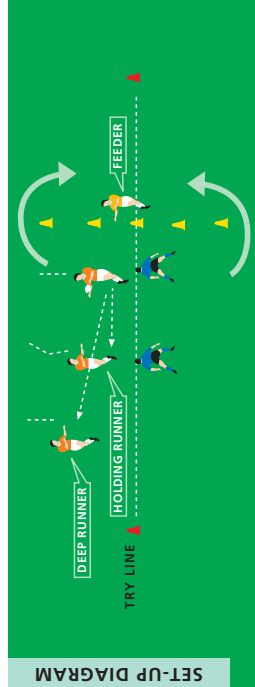
Practice Progression / Regressions
Regress - remove defenders altogether - allow attackers to practice the holding runner option. Progress - reduce the space for attackers to work within. Progress - add in a third defender to make it 3v3. Ask one defender to stay deep so it becomes a 3v2v1.

Activity	Overload touch
Objective	Develop players' attacking ability - passing (type and accuracy), running lines, alignment and support. The activity will also develop players ability to recognise space and identify attacking options in relation to defensive set-up.

Key Factors
1. All hand-catch key factors.
2. Attackers to align quickly after breakdown by communicating with teammates.
3. Wide players to communicate effectively with players infield regarding space.
4. Attack to align either flat, deep, staggered, wide, short etc - remember spacings etc.
5. Flat alignment = players align close to defence, with the aim of attacking nearer the breakdown.
6. Deep alignment = players align deep, away from the defence, with the aim of attacking wider.
7. Staggered = players not standing in one straight line - needs deeper and flatter players.

Equipment Requirements

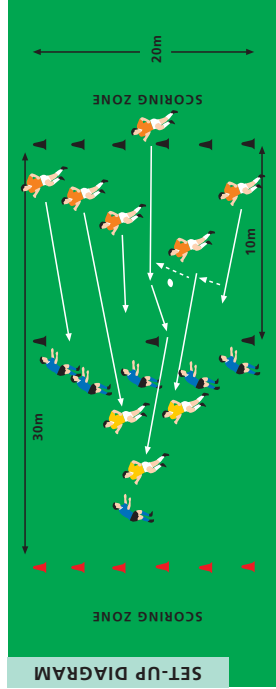| Balls	1	Bags	n/a	Area	60m x 40m
Cones	1 stack	Suits	n/a	Players	10
Shields	n/a	Bibs	4	Time	10-15mins

Practice Description
1. Six attackers v four defenders - attackers aims to utilise the two man overlap.
2. Attackers have to adopt a different attacking alignment (flat, deep or staggered) after each breakdown - depending on differing defences used.

SET-UP DIAGRAM

SCORING ZONE · 40m · 60m · TACKLE · SCORING ZONE
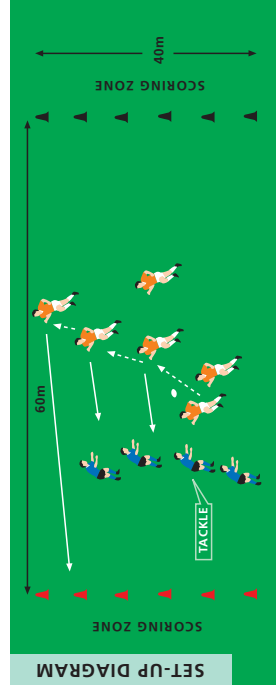
Practice Progression / Regressions
Regress - coach can manipulate defence so that they have to go to ground after each tackle. Progress - have four scoring zones and direction of play. Two zones are highlighted by the coach - alternate between zones to challenge attack.

Activity	Mirror drill
Objective	Attacker utilises clever and effective foot work to beat the defender in a man-on-man situation.

Key Factors

1. Drop centre of gravity in order to change direction effectively (drop hips).
2. Keep head in neutral and eyes up in order to read the defender's body language.
3. Manipulate defender through moving him/her in one direction followed by a step and acceleration in the opposite direction (usually only a slight turn of shoulders is needed).

Equipment Requirements

Balls	6 or more	Bags	n/a	Area	15m x 10m
Cones	1 stack	Suits	n/a	Players	In pairs
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description

Attacker starts with a ball in hand in the middle of the blue square facing the defender who is lined up in the middle of the red square. The attacker can move to any blue cone and return to the middle and the defender needs to mirror the movement. The aim is to move so quickly that the defender cannot follow. On the coach's whistle the attacker will run forward leaving the blue box at the front end and attempt to beat the defender and score without leaving the channel. The defender can leave the red box at the front end on the whistle and attempts to tackle the attacker - remember that the tackle is only completed once the tackler is back to his/her feet and contesting the ball!

SET-UP DIAGRAM
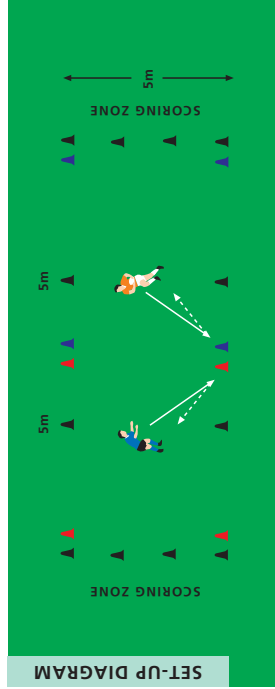
Practice Progression / Regressions

Progression 1: Attacker has the option of moving in any direction within the blue square and is not restricted to the blue cones.

Progression 2: Add a defender starting from behind the scoring zone on the whistle - this will force the attacker who will chase the attacker from behind the scoring zone on the whistle - this will force the attacker to accelerate and utilise footwork at pace which is more game specific.

Activity	Evasion touch/scrag
Objective	Encourage players to evade a head-on tackle/touch and utilising footwork to accelerate through the spaces. This will enable go-forward and create scoring opportunities.

Key Factors

1. Scan to identify space before the ball is received.
2. Avoid head-on tackles through effective footwork and acceleration through space whilst keeping the eyes up to read defence and look for support.
3. Support players run towards ball carrier after line break - anticipation is key.

Equipment Requirements

| Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description

Start with a 6 v 6 touch game on a 30m x 20m pitch where a head-on touch with two hands on chest forces the attack to retreat to their own try line. The defence can't get closer than 10m to the attacking try line. A side-on touch allows the player to offload within two seconds (encourage player to accelerate past the defender before offload).

SET-UP DIAGRAM

Practice Progression / Regressions

Progression 1: Head-on touch also becomes a turnover which will force players to work hard to get into the spaces.

Progression 2: Move onto scrag where the attack need to retreat to their own try line if the defence can get shoulder contact in the scrag.

Progress - If no support within 2 metres then turnover.

Activity	3 v 3 touch
Objective	To develop evasive, handling and scanning skills through a small-sided game.

Key Factors
1. Identify gaps in the defence through scanning.
2. Avoid head-on tackles through effective footwork and acceleration through space whilst keeping the eyes up to read defence and look for support.
3. Support to communicate and use lines of running to attack space / manipulate defenders.

Equipment Requirements

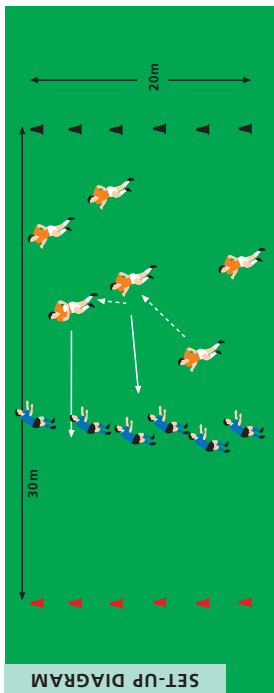| Balls	1	Bags	n/a	Area	10m x 15m
Cones	1 stack	Suits	n/a	Players	6 per pitch
Shields	n/a	Bibs	3	Time	10-15mins

Practice Description
The three attacking players attack the three defenders using evasive footwork and handling skills. Once touched (two-handed) the attacking player places the ball all the ground immediately and retires to their goal line with team mates and now become the defence.
The new attack may pick up the ball as soon as it is placed and attack the space in the disorganised defence
After a score, the attacking team continues in possession and attacks the opposite try line
A turnover only occurs if a mistake or touch is made.

SET-UP DIAGRAM

10m

15m
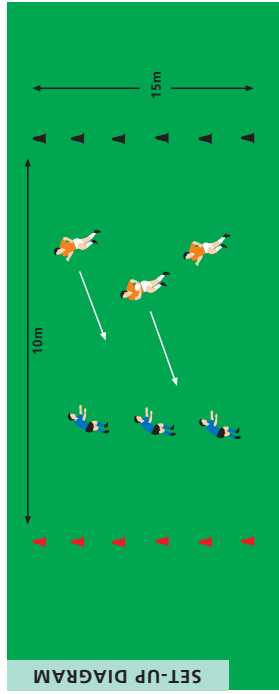
Practice Progression / Regressions
Progress by decreasing the size of the area to put players under greater pressure.
Progress to having a one-handed touch.
Regress by taking out one defender or adding an attacker.

Change the channel

Activity	Change the channel
Objective	To develop players' understanding of running lines and improve players ability to manipulate defenders.

Key Factors

1. Change direction/line of run to manipulate defenders (e.g. in to out / out to in etc).
2. Communicate line of run to ball carrier.
3. Scan to identify space.
4. Always expect the ball.

Equipment Requirements

Balls	1	Bags	n/a	Area	20m x 20m
Cones	1 stack	Suits	n/a	Players	7
Shields	n/a	Bibs	4+	Time	10-15mins

Practice Description

Practice begins with a scrum half feeding a group of four attackers against two defenders
Attackers must try to manipulate/beat defenders through changing channels.
Coach can condition defenders to move anywhere in order to challenge player to run different lines. Each player must change a channel before receiving a pass.
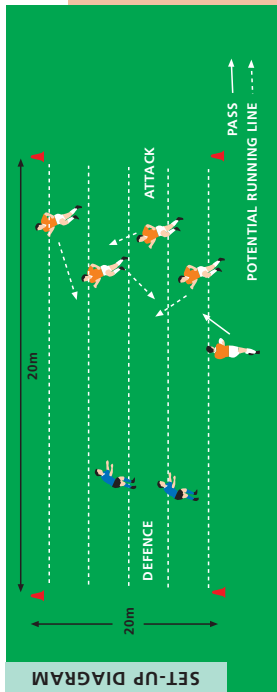
SET-UP DIAGRAM

20m

ATTACK

POTENTIAL RUNNING LINE

PASS

DEFENCE

20m

20m

Practice Progression / Regressions

Increase or decrease the size of the area to increase or decrease the degree of challenge.
Progress or regress by increasing or decreasing the number of defenders.

Close support touch

Activity	Close support touch
Objective	To develop players' ability to support effectively in numbers.

Key Factors

1. Attack to identify and attack space.
2. Ball carrier to win space behind the defender.
3. Support players anticipate and have hands out ready for the offload.
4. Support players funnel behind ball carrier.
5. Support players to run close support lines.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	12 to 16
Shields	n/a	Bibs	6 or 8	Time	10-15mins

Practice Description

Once touched, the ball carrier looks to offload to a support player running through.
If the player is not able to offload within two seconds the ball is turned over.
If team scores a try the attack turn and attempt to score at the other end.
Turnovers occur for common infringements.

SET-UP DIAGRAM

20m

30m

Practice Progression / Regressions

Progress so that ball carriers must have two support options for the offload or ball is turned-over.
Progress to scrag/contact to challenge supporting players timing of run.
Regress by decreasing the number or defenders.

Activity	Bust touch
Objective	To develop players' ability to attack space and finish through effective support.

Key Factors
1. Attack space between defenders using evasive footwork or running hard onto the ball.
2. Ball carrier to win space in behind using dynamic leg drive.
3. Support should anticipate and react to ball carrier.
4. Support to communicate available options to ball carrier.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 40m
Cones	1 stack	Suits	n/a	Players	12 to 16
Shields	n/a	Bibs	6 or 8	Time	10-15mins

Practice Description
6 v 6 or 8 v 8 game of touch (one player to play 'full back').
Move ball before the attack recognise a weakness or gap in the defence and attack through the line.
Player looks to offload once the defensive line has been broken.
Support runners to be on each side or in behind.
Beat the full back once the defensive line has been broken.

ROLES AND RESPONSIBILITIES OF SUPPORT

SET-UP DIAGRAM
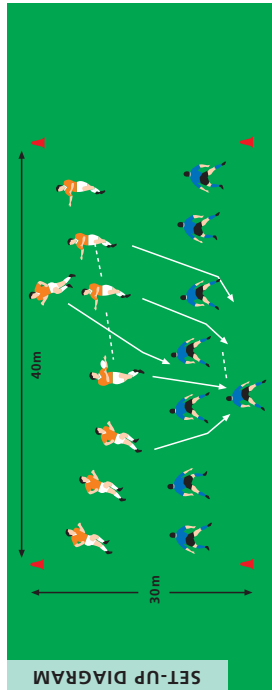
Practice Progression / Regressions
Progress to having all offloads within a one metre distance or turnover.
Progress by building in decision-making and scrag / contact allowing players to either pop from ground or present.
Increase or decrease the size of the area to increase or decrease the degree of challenge.
Regress by decreasing the number of defenders.

KICKING AND FIELDING

Kicking - Key Principles

Types of kick
- Punt
- Drop
- Goal
- High
- Grubber

Punt kick - technical aspects
The punt kick is the most commonly used kick in rugby.

The Technical Process

Pre-kick momentum

Attack the ball
(on the move)

Full arm extension

In control
(stable body)

Body posture
(tall, upright,
head slightly
forward)

Ball drop

Strong core
Leg cock
(hip and knee
extension

Point of contact

Post kick - momentum after kick

Opposite arm
finishes towards
target

Strong core

Leg speed
through contact

Foot position -
point toes to
floor

Opposite arm
finishing at
target

Body moving
towards target

Kicking leg finishes
at target

Non kicking
foot jumping
forward

Tactical kicking

A kicking strategy can encompass a number of key factors including players' ability to kick effectively, how the opposition are defending and field position.

For example a kicking strategy could include:

1. In own third / 22m - ball out of the pitch.
2. Middle third - ball into space, compete or gain metres.
3. Attacking third - score, compete or pressure opposition.

Or even simply, kick the ball into space.

Players need to be able to scan effectively in order to identify where the space is. There are other factors that could be taken into consideration such as weather conditions and time in the game.

Options for clearance kicks

Have various options (e.g. 9, 10 and 15 can all clear thier lines

Various options. Looking for maximum distance OR into space

Ideal two options - left and right foot
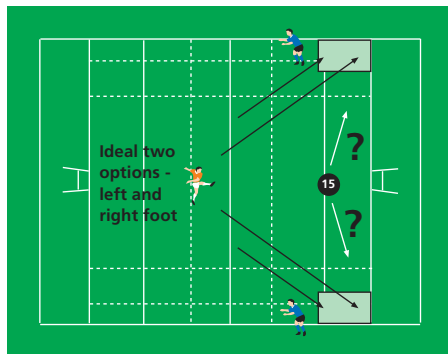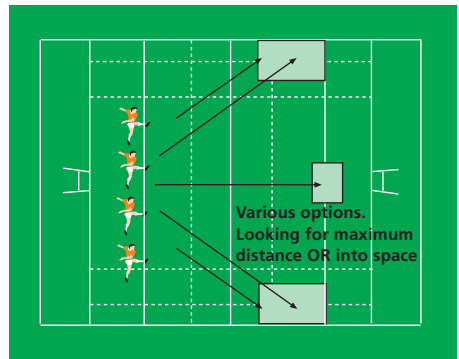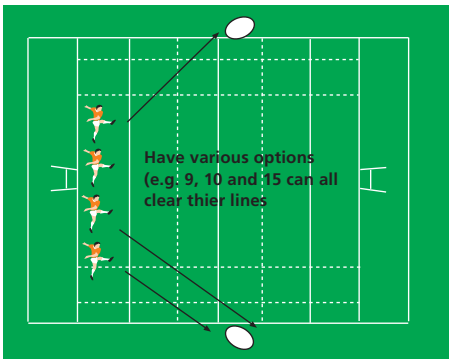
Kick chase

A kicking strategy is not only about the kick itself. An effective chase can sometimes turn a technically poor or unintentional kick into an advantage for the kicking team. The coach should encourage players to work together to create an effective kick-chase structure.

FIELDING KEY POINTS

1. Preparing to catch
- Communication amongst team mates
- Use footwork to get under ball
- Keep eyes on the ball.

2. Jump for ball
- Attack ball / come forward onto ball
- Time jump and jump off one foot
- Lead with knee
- Strong core, anticipate collision
- Keep eyes on the ball.

3. The catch and finish
- Stretch hands towards ball and keep elbows together - eyes still on the ball
- Bring ball into 'bread basket'
- Land in an athletic position ready to pass/evade/run/take contact /present to team-mates.

Activity	Kicking end ball
Objective	To develop kicking technique, accuracy and ability to identify space.

Key Factors Kick
1. Keep core switched on and over ball.
2. Keep square. Foot, hips, shoulders and head towards target.
3. Keep momentum moving forward.
Catch
1. Use footwork to get under the ball.
2. Attack ball/come forward onto ball.
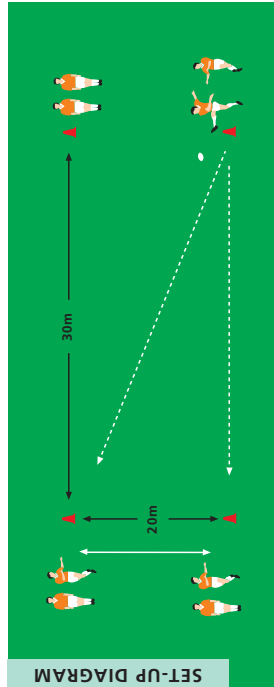3. Stretch hands towards ball, keep elbows in and get side on so ball goes back if dropped.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description
Very similar to end ball however there is no passing only kicking.
Player can run with ball however, if the defence touch a player in possession of the ball it is a turnover.
If a player gets a clean catch from a kick they cannot be touched and get a free kick.
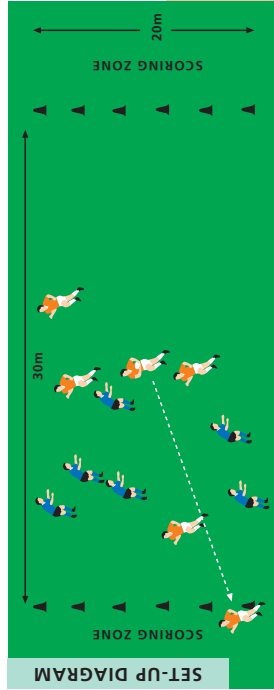
SET-UP DIAGRAM

Practice Progression / Regressions
Progress by adding in a time constraint of three seconds to kick ball after being caught.
Progress by increasing the size of the pitch.
Regress by adding in passing as well as kicking.
Progress - allow defenders to touch attackers when catch is made.

Activity	Kick to target
Objective	To develop kicking technique and accuracy.

Key Factors Kick
1. Keep core switched on and over ball.
2. Keep square. Foot, hips, shoulders and head towards target.
3. Keep momentum moving forward.
Catch
1. Use footwork to get under the ball.
2. Attack ball/come forward onto ball.
3. Stretch hands towards ball, keep elbows in and get side on so ball goes back if dropped.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	8 max
Shields	n/a	Bibs	n/a	Time	10-15mins

Practice Description
Set up cones in rectangle shape. 30m long by 20m wide.
Two players per cone so eight per rectangle.
Kick to opposite side (choose cone on left or right) and follow kick keeping forward momentum, join back of queue.
Player catches ball and passes to player on other cone, who kicks back to a cone at other side and repeat.

SET-UP DIAGRAM

Practice Progression / Regressions
Progress by getting players at other end to point to the cone the kicker must target.
Progress by adding in a time constraint of three seconds to get kick away.
Progress by adding in another ball.
Regress by having four players per rectangle to increase number of kicks for each player.
Regress by decreasing size of the area.

Left Column

Activity	Revolving kicking game
Objective	To develop kicking technique, accuracy of kick and ability to identify space.

Key Factors
1. Identify space and communicate.
2. Keep core switched on and over ball.
3. Keep square, foot, hips, shoulders head to target.
4. Keep momentum moving forward.
5. Stretch hands towards ball and keep elbows in.
6. Get into position quickly.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	6
Shields	n/a	Bibs		Time	4 or 6
					10-15mins

Practice Description
Set up a pitch with two squares at either end and line of cones down the middle.
Players work in teams of three with one player staying in middle of cones.
Player receives kick and passes to their team-mate who tries to find space with kick.
If the kick lands in space, a point is given to the team that kicked it.
The area in middle is dead zone and if ball lands in this zone it is a point to other team.
Once a player kicks a ball, they then replace the player that has been standing in the middle.
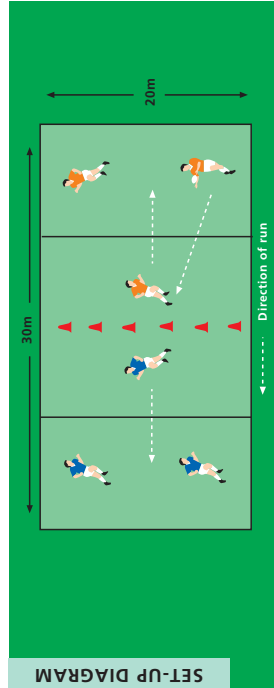
← 30m → ← 20m →

- - - - - ▶ **Direction of run**

Practice Progression / Regressions
Progress by increasing the size of the pitch.
Progress by having another player to charge down the kick.
Regress by having all three players fielding the kick.

Right Column

Activity	Chip 'n' grubber
Objective	To develop different types of kick under pressure.

Key Factors
1. Core switched on.
2. Keep momentum moving forward.
3. Eye on ball until foot strikes.
4. Keep square, foot, hips, shoulders head to target.
5. Keep eye on the ball during catch.

Equipment Requirements

Balls	1 per group	Bags	n/a	Area	30m x 10m
Cones	1 stack	Suits	n/a	Players	4 max per group
Shields	n/a	Bibs	optional	Time	10-15mins

Practice Description
The player starts on the blue cone by kicking the ball to themselves (just above head height) on the run.
Once caught the player then chips the static defender catching, ideally, on the full.
As soon as the defender has been beaten the player then grubbers the ball accurately into the square and scores a try. Each player gets a point for every successful run-through.

← 30m →

CHIP DEFENDER

RUN AND KICK TO SELF

GRUBBER

← 10m →
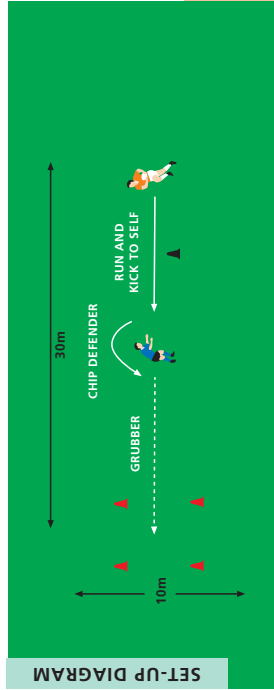
Practice Progression / Regressions
Progress by getting defender to put more pressure on attacker - pre-kick and on catch.
Progress by making the first kick a higher kick.
Progress by making the target square smaller.
Regress by making the target square bigger.

Activity	Kick to turf
Objective	To develop kicking technique, accuracy of kick and ability identify space.

Key Factors
1. Identify space and communicate.
2. Keep core switched on and over ball.
3. Keep square, foot, hips, shoulders head to target.
4. Keep momentum moving forward.
5. Stretch hands towards ball and Keep elbows in.
6. Get into position quickly.

Equipment Requirements

Balls	1 per group	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	2 per pitch
Shields	n/a	Bibs	n/a	Time	10-15mins

Practice Description

Set up a pitch with two squares at either end with four coloured cones in each box.

The practice starts by player trying to kick the ball into space.

After the kick, the coach will shout a colour and the player must touch this coloured cone before trying to field the next kick.

If the kick lands in space or the ball is dropped, a point is given to the player that kicked it.

The area in middle is a dead zone and if ball lands in this zone it is a point to the non kicking player.

SET-UP DIAGRAM
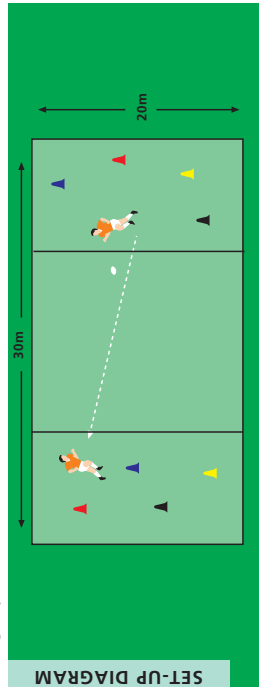
Practice Progression / Regressions

Progress by increasing the size of the pitch.
Progress by calling out two cones to touch before fielding ball.
Progress by only giving a point to the kicker if they hit the grass (e.g if fielding player gets slightest of touch on it then no point to kicker).
Regress decreasing size of pitch.
Regress by not calling out a colour.

Activity	Turnover touch
Objective	Develop players' understanding of how to play from a turnover. Players will gain an understanding of identifying space within the defensive line (from a turnover) and how to gain territory. The activity also looks at realignment from a defensive position into attack.

Key Factors
1. Clear communication that a turnover has been made - from the players nearest the ball.
2. Nearest attacking player scans the new defensive line and make judgements on options.
3. All attacking players realign quickly and accurately into an attacking position (from their defensive situation).
4. Players communicate attacking options with support players and take decisive action quickly to utilise the opportunity.

Equipment Requirements

Balls	1	Bags	n/a	Area	60m x 40m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	20mins

Practice Description
6 v 6 touch or tackle game.
When coach blows whistle or calls turnover (at the touch or tackle), the ball carrier presents the ball to the defence - this simulates a turnover. When a turnover is called, the attack must realign in a defensive position - vice versa for the attack. The attacks must communicate quickly that the turnover has happened and the first receivers to scan the defensive line.

SET-UP DIAGRAM

SCORING ZONE

40m

60m

TURNOVER

SCORING ZONE
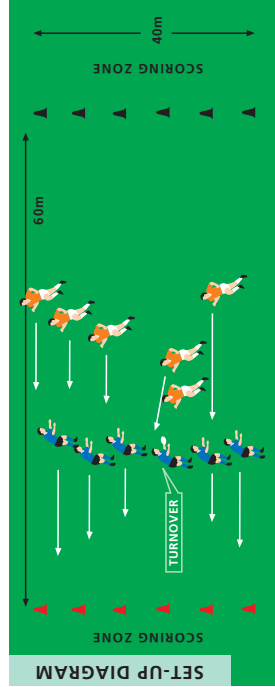
Practice Progression / Regressions
Regress - the coach can throw a ball to the defence to simulate a turnover instead of at the contact area.
Progress - Take the activity into full contact - coach limits the number of attackers in the ruck so that the defence can counter-ruck to win possession.

PRINCIPLES OF DEFENCE

Scanning in defence

Tackle technique

Basic defensive systems

SCANNING

Defending players should always be scanning to identify potential attacking threats. Players should look in front of them and try to avoid over focusing on the ball or contact area. This will allow players to take in all relevant cues and information on the attack which will allow players to react and get into position early. Players may also need to look left and right to ensure they are working appropriately with the defenders either side of them.

When scanning, players should look to identify:

- Is there an over- or under-load of attackers v defenders? Where and who?

- What is the alignment of the attacking player - narrow, wide, flat, deep?

- Are there any mismatches in the defensive line that need to be reorganised - e.g. slower players in wider channels?

Left panel

Activity	Man-on-man tackling
Objective	Identifying the attacking line through scanning and getting into a strong position to execute a dominant tackle.

Key Factors
1. Eyes up - identify attacking line early.
2. Manipulate attacking line to set up a dominant tackle.
3. Close down space quickly, drop hips and paddle once attacker is more or less 5m away.
4. Accelerate into the tackle with eyes on the target and head in neutral.
5. Leg drive and upper body effort will dominate the contact.

Equipment Requirements

| Balls	4 or more	Bags	n/a	Area	15m x 10m
Cones	1 stack	Suits	n/a	Players	In pairs
Shields	n/a	Bibs	4	Time	10-15mins

Practice Description

Attacker and defender start back to back in the centre of the grid. Both the attacker and defender have three possible cones to work around which will vary the angle. The coach will first shout a cone number for the defender directly followed by a cone number for the attacker. Both players circle around their nominated cones and the defender aims to execute a dominant tackle. The defender will be on the front foot with his/her number being called first. Once the defender becomes confident, the coach can call the attacking number first which will put the attacker on the front foot and cut the decision-making time for the defender. A tackle is only completed once the defender is back on his / her feet contesting the ball which has been well presented by the attacker. Set up more grids to engage more players at a time. Ask assistant coaches and players to help call the numbers.

SET-UP DIAGRAM
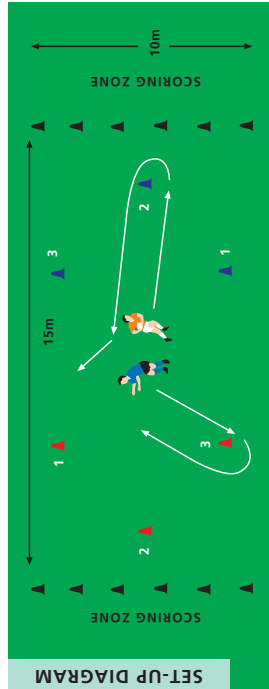
Practice Progression / Regressions

Two attackers against two defenders. The coach calls one number and the players circle the two cones not called. Communication and organisation will now come into play. Contest for possession after the tackle is made. Two grids can be utilised in order to engage eight players.

Right panel

Activity	Defence recognition
Objective	Identification of attacking lines or tactics and adjusting the functioning of the defensive unit.

Key Factors 1. Communication within the defensive unit is key.
2. Eyes up to analyse attack.
3. Defend channel rather than person.
4. Close down attacking options.
5. Pressure attack when defensive numbers match the attacking numbers; buy time if the attack outnumbers the defence.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	11
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description Five Defenders are working against five attackers with a scrum half in a scrag drill. The attacking scrum half has a starting point and the first defence need to be 5m away from this starting point. The defence need one defender in behind the defensive line. The coach will be positioned behind the defence and can give the attack cues (hand signal numbers) which will indicate a specific attacking pattern for example 1 = straight running hand to hand to create overlap; 2 = first and second receivers drift with a switch on either the first or second defender with a floating attacking player in behind the attacking line or even a dummy switch with the ball going to wide runners - there should always be a couple of options which will allow the attackers to react to the defence ; 3 = second receiver runs a short line which will give the first receiver the option of playing the short ball or go deep and wide in behind the back of the second receiver to create the overlap out wide.

SET-UP DIAGRAM
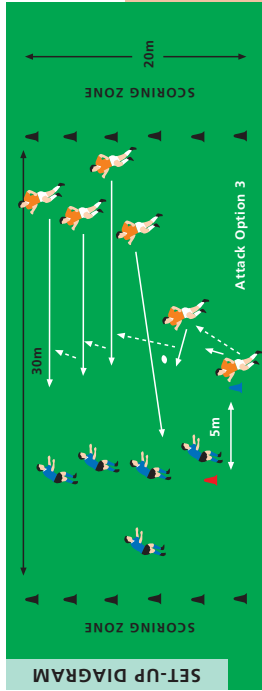
Practice Progression / Regressions

Progress to full contact. A further progression will be to add rucks which will allow a second phase where defence will need to realign and react to either the quick ball or the slow ball with numbers differing depending on the amount of players in the ruck. A progression to put the defence under more pressure will be to simply add an attacker. Progress by increasing the width of pitch.

COACHING THE TACKLE

A tackle is used by the defending team to stop the attacking team moving forward and is an opportunity for the defending team to contest for possession of the ball. Competence in tackling and taking a tackle is critical in developing a safer and more enjoyable game. Recent studies from Australia and the UK have shown that 58% of injuries result from tackle situations, so it's essential that this aspect of the game must be performed, coached and refereed with due care and attention, with good technique and safe, appropriate practice paramount.
This will enable players to become confident and competent in the tackle.

Law definition

A tackle occurs when the ball carrier is held by one or more opponents and is brought to ground. The tackler must immediately release the tackled player. The tackled player must immediately pass the ball or release it.

Individual Tackle Technique

Shoulder tackle - side-on

1. Maintain strong, stable and low body position
2. Target and make contact with the shoulder on the ball carrier's thighs
3. Squeeze the arms tight around the ball carrier's legs, drive with the legs and bring the ball carrier to ground
4. Roll to finish on top
5. Release the ball carrier and get back to feet quickly
6. Contest for possession.

Other types of tackle

Two-man tackle - nearly half of all tackles involve more than one tackler

1. The first tackler should follow the key points for the front-on shoulder tackle
2. The second tackler should look to target the ball and use the momentum built up from the first tackler to drive the ball carrier backwards
3. Both players should release the ball carrier as soon as possible and get back to their feet before playing the ball.

Rear Tackle

1. Chase the ball carrier, getting as close as possible.
2. With head to the side, tackle with shoulder slightly higher than normal (to avoid studs)
3. Squeeze arms tight around the ball carrier and slide down legs to landing on top
4. Release the ball carrier and get back to feet quickly.

Pictures reproduced with kind permission of the IRB.

Common faults within the tackle that could lead to injury:
1.   Head position of tackler
2.   Posture leading into tackle
3.   Feet not close enough to the ball carrier
4.   Plant feet too early and are then unable to react and move head
5.   Fatigue can play a big part in clumsy tackles.

Key points for players in every tackle situation

Tackler - contact with opponent(s)

1. Track the movement of the ball carrier and get the feet close enough to make the tackle
2. Prepare for contact - adopt a body position that is strong, stable and low
3. Keeping the eyes open, position the head behind or to one side of the ball carrier - never position the head in front of the ball carrier
4. Release the tackled player, get back to your feet immediately and contest for possession.

Ball carrier - contact with ground

1. Carry the ball in both hands
2. Protect the ball - hold it tight to your chest with elbows in to your sides
3. Make contact with the ground with the buttocks and then shoulder.
4. Don't break your fall with your hand or the ball
5. Turn towards your team and pass, place or present the ball
6. Get back to your feet as soon as possible
7. For specific key points, see the individual tackle types above.

Arriving players

- All arriving players must enter the tackle area through the gate
- Only players on their feet may compete for the ball
- Players arriving at an attempted but incomplete tackle should:
  - maintain a strong, stable and low body position
  - use the arms to grasp ball carrier
  - avoid contact with other players' heads and necks
  - bring the ball carrier safely to the ground.
- If clearing or driving out defenders:
  - maintain a strong, stable and low body position
  - chin off the chest, head up, hands up
  - sight the target
  - keep the spine in line with the direction of drive
  - start the drive from a low body position
  - make contact with defender using the shoulder and arms, not the head
  - close arms around opponent
  - drive the player away and clear the ball; and
  - bind with a team-mate to improve stability.

How the gate forms

For further guidance on how the tackle gate forms, including video and graphic representations, please visit **www.irbrugbyready.com** or refer to the IRB RugbyReady manual.

Red team

Blue team

Red team

Blue team

Before contact   Tackle completed
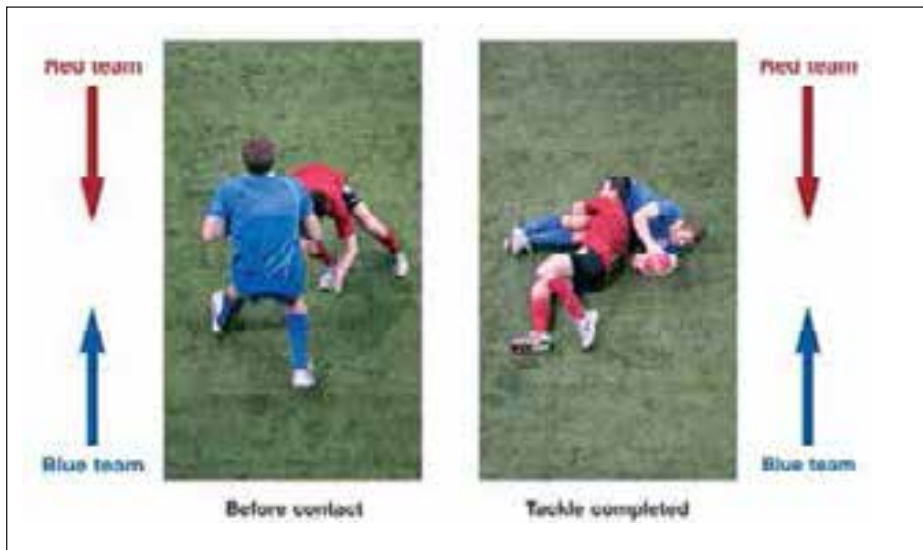
Coaching tips

Poorly executed tackles tend to be the result of poor positioning by the tackler rather than poor tackle technique. Correct positioning can and should be practised. It involves the tackler closing down the ball carrier's space and then establishing balance and stability before stepping in close with the lead foot to allow shoulder and arm contact, which should then allow leg drive in the tackle. Use the key points to improve the players' tackle skills in a safe manner. Focus on one or two key points at a time - don't try to coach too many key factors at once. Observe and analyse players to highlight good practice and correct faults. Provide positive and constructive feedback to improve players.

The tackle gate
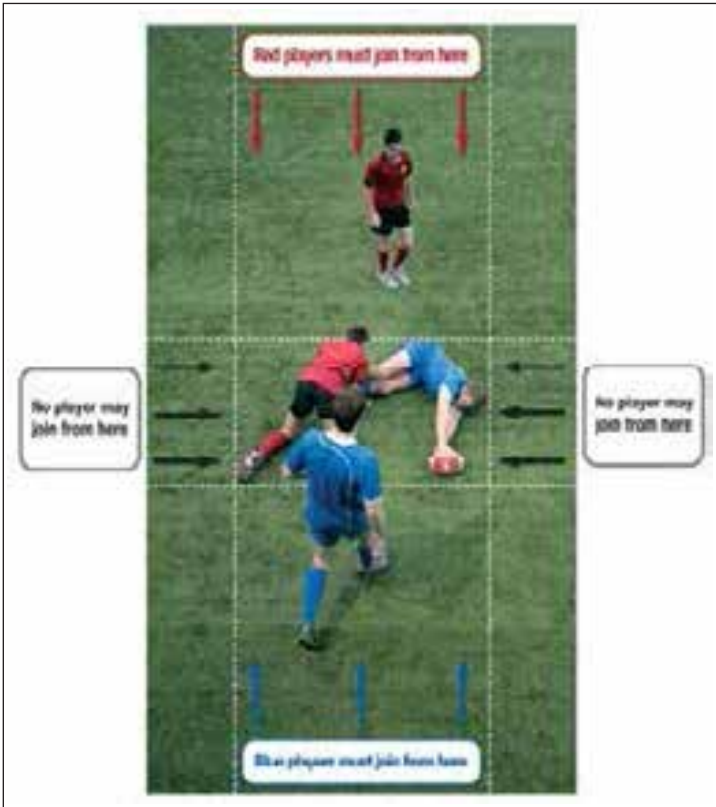
Drift / push defence

- In the drift/push defence, defenders use the touchline as an additional defender.
- The first movement is always forward - line-speed is key to any defensive approach. If defenders fail to get off their line quickly and pressurise the defence then it is likely that the attack will get over the gain line.

Key factors of a drift/push defence:

1. Defenders line up facing the inside shoulder (the shoulder closest to the breakdown) of the attackers. Lining up on the outside shoulder creates space on the inside of the defender.

2. Defenders in 'active' position (split stand ready to accelerate off the line, hands up ready to make a tackle, talking to each other to organise spacing between defenders).

3. The inside defenders (nearest the breakdown) lead the go-forward off the line. Players need to keep their inside defender slightly in front of them at all times to ensure no dog-legs occur in the defensive line.

4. Once ball is passed, defenders drift/push onto the next attacking player. Drifting too early (i.e. before the ball has been passed) will create gaps in the defensive line for attackers to exploit.

5. Defenders to keep their chests and hips facing the attacking line. If hips are angled towards the touchline, then this can create a 'weak-shoulder' on the inside.
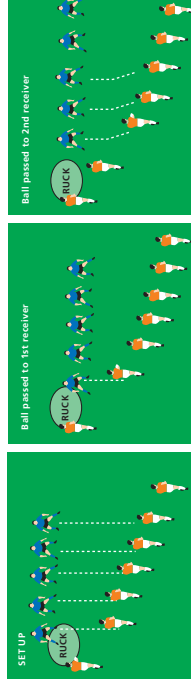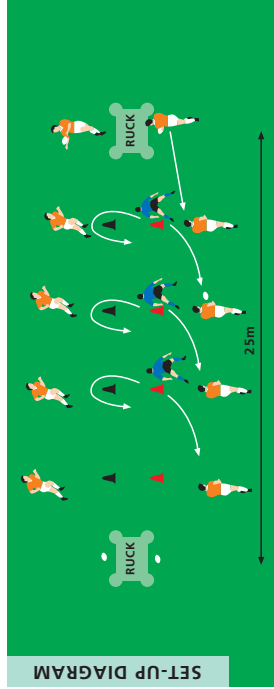

SET UP

Ball passed to 1st receiver

Ball passed to 2nd receiver

DRIFT DEFENCE

Activity	Drift / push defence
Objective	Develop the ability of your players to understand the roles and responsibilities of defenders when operating a drift/push defence.

Key Factors

1. Defenders align themselves on the inside shoulder of their nominated attacking player.
2. Defenders start in an active position with a split stance and loud, accurate communication between each other. 3. The first movement in a drift/push defence is forwards - aim to gain territory and close the space. 4. The defensive line is lead by the first defender, closest to the ruck - players should stay behind their inside man in a drift/push defence - this prevents dog-legs in the defensive line. 5. Once the ball is passed, a call of 'push' is made by the inside players. Defenders then drift onto their next available attacker, always ensuring they are aligned with the attacker's inside shoulder.

Equipment Requirements

Balls	4	Bags	n/a	Area	min 25m width
Cones	16 (3 colours)	Suits	3	Players	13
Shields	n/a	Bibs	n/a	Time	15 mins

Practice Description

Three defenders in tackle suits versus five attackers (two groups in orange). Defenders start on the cones nearest to the attackers.

Once the ball is passed, defenders run backwards to the green cones and begin their defensive duties. Attackers are initially instructed to attack using simple passing along the line. Defenders operate a drift defence to stop the attackers scoring past the red cones. Once the attack has finished, the defenders turn 180 degrees and play against the next attack.

SET-UP DIAGRAM

RUCK

RUCK

25m

RUCK

Practice Progression / Regressions

Progress - increase the number of attackers to challenge defence.
Progress - allow the attack to use more attacking options.
Regress - reduce the amount of attackers or remove completely.

Blitz defence

- The blitz defence is a very aggressive defensive system which, when performed accurately, puts the attacking team under a lot of pressure.

- The approach relies heavily on line-speed to go forward and eat up as much ground as possible between the defending line and the attackers. As with the drift/push defence, the first movement is always forward - line-speed is key to any defensive approach.

- The purpose of the Blitz defence is to shut off the attacker's options outside.

- There are risks associated with the blitz - it leaves space behind the defence which can be exploited by kicking options, gaps can open up inside as outside defenders rush up.

Key factors of a Blitz defence:

1. Defenders line up on defender's outside shoulder (the shoulder furthest away from the breakdown - opposite the drift) of the attackers.

2. Defenders in 'active' position (split stand ready to accelerate off the line, hands up ready to make a tackle, talking to each other to organise spacing between defenders).

3. Each defender gets off their line quickly to pressurise the attackers. Unlike the drift/push defence, defenders get slightly in front of their inside defender in an attempt to shutoff attacking options.

4. Players in the outside channels will typically call the 'blitz' system as they have a clearer view of the attacking set-up and level of threat.

SET UP

RUCK

Ball passed to 1st receiver

RUCK

Practice	Two zone attack - blitz identified by outside defender.
Objective	To develop the blitz defensive system under pressure.

Key Factors
1. All calling the 'Blitz' particularly the outside players, who initiate the call.
2. Defenders line up on defender's outside shoulder (the shoulder furthest away from the breakdown) of the attackers.
3. Defenders in 'active' position (split stance ready to accelerate off the line, hands up ready to make a tackle).
4. Each defender gets off their line quickly to pressurise the attackers.

Equipment requirements

Balls	2	Bags	n/a	Area	30 x 10 m
Cones	1 stack	Suits	optional	Players	9+
Shields	n/a	Bibs	6	Time	15-20 minutes

Practice description
Three attackers attack a defensive line of three.
All attackers are to be stopped - focus on same shoulder / same foot (not full tackle).
Once attack is stopped the defenders move across and defend a second attack in channel 2.
Defence is worked eight times before changing.
Intensity and full tackle can be changed as defence and tackle technique improve.

SET-UP DIAGRAM

10m

30m

1st ATTACK

2nd ATTACK

DEFENCE
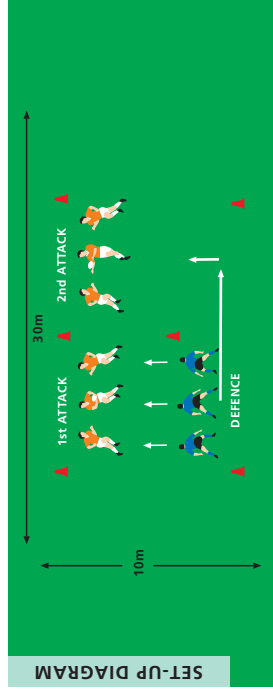
Progression / Regression guidance
Progress to full tackle focussing on players working in a chain of three.
Progress by increasing number of attackers.
Increase or decrease the size of the area to progress or regress.
Increase intensity to emphasise speed of realignment.

Coach to add in further key factors once players are performing consistently under pressure

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RUCK DEFENCE

Role Descriptions:

Guard (1):
- First defender at the ruck, responsible for stopping the pick and go
- Three point stance (one hand on ground - like a sprint start), outside leg forward
- If the scrum half runs or passes, the guard does not follow, they mark the space around the ruck.

Shield (2):
- Second defender at the ruck, responsible for the scrum half running or forwards coming on a one-pass play
- Outside leg forward and arms length from the guard. If the scrum half passes, the shield is responsible for looking after the inside shoulder of the A defender
- The shield is responsible for taking the defensive line up with the A defender.

A (3):
- Third player out from the ruck, responsible for the first receiver and the defensive line speed
- The A defender's alignment is on the inside shoulder of the first receiver, they should have their inside leg leading
- A defender leads the defence communication
- The A defender is responsible for tackling forwards on a one-pass play from the scrum half.

Bobby:
- The Bobby (usually scrum half) is responsible for policing the ruck. They need to be directly behind the ruck organising the forwards
- They are responsible for joining the defensive line if required or acting as a second line of defence (collecting chip kicks or snuffing out breaks).

General Principles:
- Players identify the opposition threat and fill accordingly
- Usually the first defender to arrive at the breakdown will fill the position on the far side of the ruck (as this can be a more vulnerable area) with the next defender filling the first position on the near side. This process then repeats itself, although is dependant on the area of the pitch
- The inside defenders make the call to push once the pass has been made
- Shield and A defenders line up slightly behind the guard - this helps prevent offside infringements.

Activity	Ruck defence
Objective	Develop the ability of your players to understand the roles and responsibilities of defenders close to the ruck/breakdown.

Key Factors
1. Identify the threat through looking forward and scanning.
2. Communicate roles prior to arriving at the ruck.
3. Players should be aware of their positioning and spacing in relation to each other.
4. Hands on call from inside out.
5. Appropriate line speed.

Equipment Requirements

Balls	4	Bags	4	Area	15 x 15m
Cones	4	Suits	n/a	Players	11
Shields	n/a	Bibs	4	Time	10mins

Practice Description

Seven defenders v four attackers (in suits) (can start with no attacker if beginners)

Four different coloured cones laid out in a square (15m x 15m approx).

Coach calls a colour and the defenders have to align themselves either side of the cone (cone is the ruck).

The defenders align three on each side of the ruck facing the coach. Coach calls 3-2-1 in their own time.

Attackers can only use one of 3 options - 1, pick and go, 2. 9-1st receiver, 3. 9 runs across the pitch with options to pass the ball back inside.

SET-UP DIAGRAM
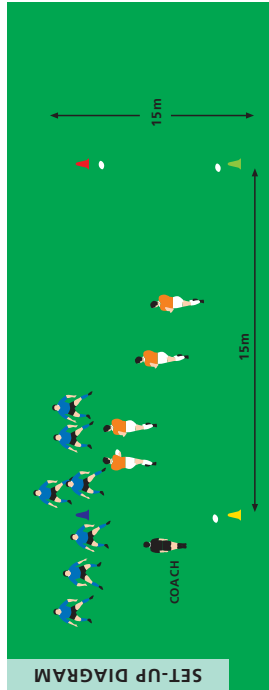
Practice Progression / Regressions

Progress - increase the number of attacker to challenge defence.
Progress - allow the attack to use more that three options.
Regress - reduce the amount of attackers or remove completely.

Back 3 defence

The back 3 should operate as a unit covering all areas of the back field whilst providing outside cover for the defensive line. The back 3 defend as if 'attached to a piece of string', working together (in a triangle). If the ball moves to the left winger's (11) side of the pitch, he/she should join the defensive line, the full back (15) should cover the left side on the back field while the right winger (14) should drop back to cover the right side of the back field.

Key Factors

1. Cover the back field.
2. Work and communicate as a team of three.
3. Link and communicate with front line defence.

Activity	Back 3 defence (10v8)
Objective	Develop players ability to defend effectively as a back 3 unit. Developed through knowledge of positioning depending on field and ball position.

Key Factors

1. Communicate with back 3 members and inside defenders.
2. Read the play of the opposite team and react accordingly.
3. The back 3 should operate as if they were attached to a piece of string.

Equipment Requirements

Balls	1	Bags	n/a
Cones	1 stack	Suits	n/a
Shields	n/a	Bibs	8 or 10
		Area	30m x 50m
		Players	18
		Time	10-15mins

Practice Description

8 players attack 10 . Can be touch, scrag or full contact but the attacking team always retain the ball. As the ball moves across the pitch the back 3 should react accordingly. The attacking team may run, pass or kick the ball into space.

When in open play, the full back should always be in line with the ball while the wingers should either sit back or join the defensive line.

If the ball moves to the left wingers (11) side of the pitch, he/she should join the defensive line, the full back (15) should cover the left side on the back field while the right winger (14) should drop back to cover the right side of the back field (See diagram).

SET-UP DIAGRAM
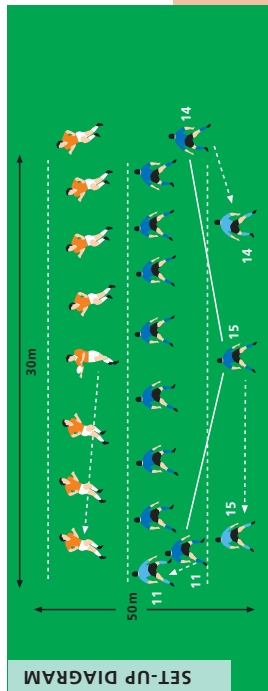
Practice Progression / Regressions

Increase the width of the pitch to create more space for the defence (Back 3) to cover. Progress by increasing numbers in attack or decreasing numbers in defence to make the back 3 work harder to cover more space.

CONTINUITY AND BREAKDOWN

Side-step - Offload - Set-up (SOS)

The Breakdown - Ruck

The Breakdown - Maul

SIDE-STEP - OFFLOAD - SET-UP (SOS)

Side-step - Offload - Set-up

Side-step - 'Beat the man'
- Attack the space between defenders
  Use evasive footwork to beat defender(s)
- Once comfortable with ball in two hands,
  a fend can be developed.

Offload to support (on feet)
- Use dynamic leg drive to win space
  in behind
- Once shoulders are past defender, turn
  to see support player
- Make short pass to support player
  attacking the ball.

Offload to support (off feet)
- Use dynamic leg drive to win space
  in behind
- Keep ball close to chest when going
  to ground
- Time short pass to communicating
  support player.

Set-up
- If offload is not on, keep ball underneath
  body away from opposition
- Keeping a tight core, pivot on hip and
  swing body around towards support
  using legs
- Present ball as far away from opposition
 as possible
- Supporting players should scan to identify
  threats
- Supporting players to make decision
  based on threats - pick, pass or clear over.

Acceleration scrag

Activity	Acceleration scrag
Objective	Get players to evade head-on tackles and accelerate through the space. If a side on tackle is made the acceleration will either break the tackle or create offload opportunities.

Key Factors
1. Scan to identify space before the ball is received.
2. Avoid head-on tackles through effective footwork.
3. Start acceleration before the contact line with powerful and rapid leg drive.
4. The support players run towards ball carrier after line break - anticipation is key.

Equipment Requirements

Balls	1	Area	30m x 20m
Cones	1 stack	Players	12
Shields	n/a	Time	10-15mins

Practice Description
Stage 1: Start with a 6-on-6 touch game on a 30m x 20m pitch where a head-on touch with two hands on chest forces the attack to retreat to their own try line. The defence can't get closer than 10m to the attacking try line. A side-on touch allows the player to offload within two seconds. Stage 2: Attacking players should accelerate after a side-on touch before they make the offload. Deceleration before the pass will be called by the game coach and the outcome will be a turnover of possession. Stage 3: Head-on touch also becomes a turnover which will force players to work hard to get into the spaces. Stage 4: Move onto scrag where the attack need to retreat to their own tryline if the defence can wrap up the ball carrier which will force the attack to accelerate through the contact and look for offloads.

Practice Progression / Regressions
Progress by adding live rucks. This can be done by starting with 1-on-1 rucking and progressing to 2-on-2 and then full scale. Focus should remain on the acceleration which will create line breaks or at least go-forward which will simplify the rucks.

Fending drill

Activity	Fending drill
Objective	Developing an effective fend as the final step in evasion. Note that the sequence for an attacker is first a step/change in direction and acceleration followed by a strong fend where the attacker has the aim to push himself/herself away from the defender.

Key Factors
1. Evade defender through attacking the space either side of the defender.
2. Shift the ball away from the defender to free the hand nearest the defender. Ensure both hands are used. 3. Aim for the defender's shoulder with a mindset of pushing yourself away from the defender. 4. The fend is followed by an acceleration with the ball transmitted back to both hands if needed.

Equipment Requirements

Balls	4 or more	Area	15m x 10m
Cones	1 stack	Players	2 per pitch
Shields	n/a	Time	10-15mins

Practice Description Attacker and defender start back to back in the centre of the grid. Both the attacker and defender have three possible cones to work around which will vary the angle. The coach will first call a cone number for the attacker directly followed by a cone number for the defender. First call the same numbers a couple of times to enable the attacker to become confident with the angle of the defender, the direction of evasion needed to get into a strong position to fend. Once all angles have been trialled the coach can call random numbers and the attacker needs to recognise the situation.

Practice Progression / Regressions
Progress by calling the defending number first which will put the defender on the front foot and cut the decision making time for the defender.
Regress by placing defender cones further away to give attacker more time.

Fending scrag

Activity	Fending scrag
Objective	Developing an effective fend as the final step in evasion in a game-specific environment. Note that the sequence for an attacker is first a step/change in direction and acceleration followed by a strong fend where the attacker has the aim to push himself/herself away from the defender.

Key Factors
1. Evade defender and accelerate as head-on tackle needs to be avoided.
2. Shift the ball away from the defender to free the hand nearest the defender.
3. Aim for the defender's shoulder with a mindset of pushing away from the defender.
4. Offload option if attacker dominates contact but fend is unsuccessful. 5. The fend is followed by an acceleration with the ball transmitted back to both hands if needed.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description Play 6 on 6 scrag where the attacking team need to return to their try line if they get wrapped up with the ball. Defenders can't get closer than 10m to the attacking try line. Attackers score 1 point for a try, 2 points for an attempted fend leading to an offload and 3 points for a successful fend.

SET-UP DIAGRAM
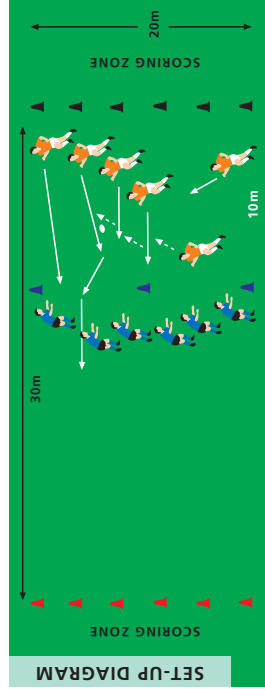
Practice Progression / Regressions
Progress to full on tackling with the attacking team not returning to their try line but passing from the breakdown where the tackled player presents the ball. Rucks can be added although the focus remains on evasion followed by a strong fend. Regress by decreasing number of defenders.


Offload breakout practice

Activity	Offload breakout practice
Objective	To develop evasion and offloading skills under pressure.

Key Factors
1. Attack the space on either side of the defender using evasive footwork or running hard on to the ball.
2. Win the space behind the defender by either using a strong fend or dynamic leg drive through impact.
3. Strong grip on the ball to make a successful pass to a support runner with a close pop-up pass to the chest area.
4. Support wait for ball carrier to win collision and run a close support line.

Equipment Requirements

Balls	1 per group	Bags	n/a	Area	10m x 5m space
Cones	1 stack	Suits	n/a	Players	3 per group
Shields	n/a	Bibs	n/a	Time	10-15mins

Practice Description
Players can simply find a space as cones are not essential.
Working in groups of three, the ball carrier looks to beat the defender through evasive footwork.
The ball carrier then offloads to the communicating support player.
This is then repeated with the three players taking on a different role each time (attacker, defender or support).

SET-UP DIAGRAM
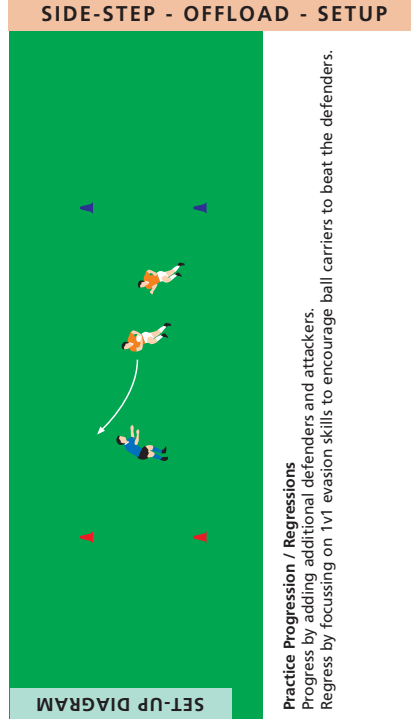
Practice Progression / Regressions
Progress by adding additional defenders and attackers.
Regress by focussing on 1v1 evasion skills to encourage ball carriers to beat the defenders.

THE RUCK

A ruck typically evolves from a tackle situation and can develop into an effective method of retaining or contesting possession. A ruck can commit defenders, therefore creating an opportunity to create space. On formation of the ruck, offside lines are created.

Law Definition

A ruck is a phase of play where one or more players from each team, who are on their feet, in physical contact, close around the ball on the ground. Open play has ended. Players are rucking when they are in a ruck and using their feet to try to win or keep possession of the ball, without being guilty of foul play.

Key Points

- After the tackle, the ball carrier should present the ball quickly as far away from the opposition as possible

- Arriving players should adopt a low, strong, stable body position with head and shoulders above hips at all times

- Players must join the ruck from behind the foot of the hindmost team-mate in the ruck

- Support players should always be looking for potential threats to clear out

- Clearing players should drive beyond the ball to make it more readily available.

Activity	Ruck touch
Objective	To develop rucking skills and roles and responsibilities of arriving players.

Key Factors
1. Support in behind ball carrier ready to react.
2. React to ball carrier's movements and identify potential threats.
3. Player with ball activates core and presents ball back to support player.
4. Clearing player lowers the height of shoulders in order to lift and clear threat away.
5. Leg drive up and through player to remove.

Equipment Requirements

Balls	1	Bags	n/a	Area	30m x 20m
Cones	1 stack	Suits	n/a	Players	14 - 16
Shields	n/a	Bibs	4 or 6	Time	10-15mins

Practice Description

Play normal two-handed touch.
When touched, the ball carrier goes to ground and presents. The tackler does a 'down and up' then competes for the ball.
The ruck now becomes live and attacking team need to clear out tackler to maintain possession.
Coach can condition by adding in additional defending players to compete for ball and challenge attack.

SET-UP DIAGRAM
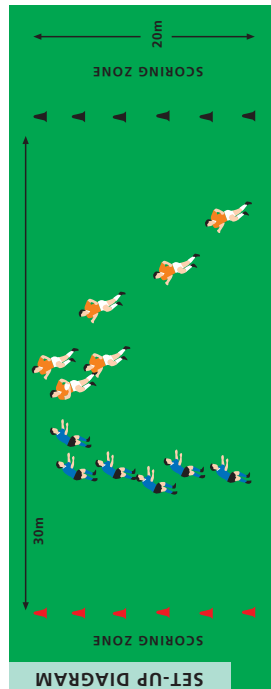
Practice Progression / Regressions
Progress by adding in additional defenders to compete for ball or counter-ruck.

Progress by overloading the attack.
Regress by only using tackler to compete for ball.

The Ruck - contest for possession

Generally most teams will attempt to sustain continuity however when a player has not been able to pass the ball to a player in a better position or to offload out of contact then the ball carrier could take the ball to the ground and attempt to present the ball back to their support. In this case the term 'breakdown' is used to describe the post-tackle competition for possession.

At the breakdown the defending team can force a turnover from the opposition by either 'ripping' the ball away or by forcing the opposition to commit a penalty offence in their attempts to retain possession. The breakdown is one of the key contests for possession in the game and is a crucial topic for coaches of youth rugby. This resource builds on the offload and ball presentation principles set out in Scottish Rugby Key National Themes resource.

Contest for possession - The 'hunter'

- A ruck is formed only when a player from both teams is in contact over the ball
- Prior to a ruck being formed a defending player (hunter) can attempt to rip the ball away as long as they are on their feet
- The hunter is responsible for hunting/stealing/ disrupting the ball (wide base, nose on the ball). The hunter could be the tackler or the assist depending on how the contact unfolds. The aim should be to have a hunter at every contact.

Key factors of hunter
- Speed over the ball, the hunter must target the ball and be in a strong position before the first support player arrives
- If a player intends to go from a position on the ground into the hunter they should attempt to release the player and regain their feet in one dynamic movement going straight into the strong 'hunter' position
- Establish strong base, low body height and tuck the chin against chest in order to minimise target for clearing players
- Hunter should attempt to gain strong grip of the ball by scooping underneath the ball with hands/forearms.

Removing the hunter
Once a defending player achieves a hunter position it is essential that they are removed from this position before they can either steal the ball or force a penalty.

Key factors of clearing hunter
- The arriving clearing player must lower their height prior to contact. Attempt to lower height on approach in order to drive up into contact

- Clearing player must attempt to get their own shoulders under the hunter's shoulder in order to lift and clear hunter player away. Continue to leg drive up and through hunter in order to remove threat
- If the clearing player is unable to get their shoulders underneath hunter the clearing player might twist and roll hunter away from the ball onto the ground
- In order to roll a hunter away successfully the clearing player should attempt to secure a firm hold around the hunter's shoulders then use their own core strength to generate momentum rolling onto the ground to the side of the breakdown.

Hunter touch

Activity	Hunter touch
Objective	Develop the ability of a player on their feet to compete for the ball at the tackle.

Key Factors
1. Regain feet in one dynamic movement.
2. Maintain strong base and low body height and minimise target for clearing players.
3. Scoop underneath the ball with hands/arms.
4. Tighten core and brace for contact.

Equipment Requirements

Balls	1	Bags	n/a	Area	n/a
Cones	n/a	Suits	n/a	Players	14
Shields	n/a	Bibs	7	Time	10-15mins

Practice Description
Two teams of seven play a standard game of two-handed touch rugby.
When a player is touched both the tackler and ball carrier go to ground.
Tackled player presents the ball back to their team.
The tackler regains their feet as quickly as possible and hunts for the ball, making the turnover.
The hunter must then present the ball back to their own team.
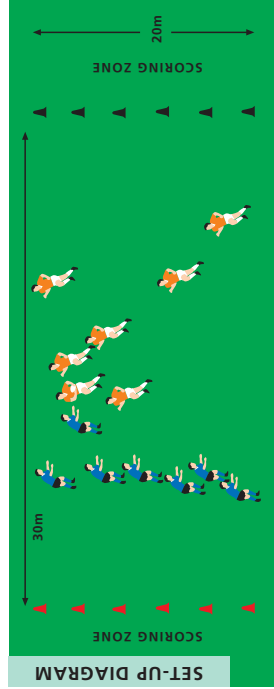
Practice Progression / Regressions
Progress to live rucks.
Progress by having the initial attacking team putting more than one player into the ruck to challenge the 'hunter'.

30m

SCORING ZONE

20m

SCORING ZONE

Competition for ball drill

Activity	Competition for ball drill
Objective	Develop the ability of a player on their feet to compete for the ball at the tackle.

Key Factors
1. Regain feet in one dynamic movement.
2. Maintain strong base and low body height and minimise target for clearing players.
3. Scoop underneath the ball with hands/arms.
4. Tighten core and brace for contact.

Equipment Requirements

Balls	1	Bags	2	Area	n/a
Cones	n/a	Suits	n/a	Players	2
Shields	n/a	Bibs		Time	10-15mins

Practice Description
Two players lie parallel to two tackle bags lying parallel to each other with a ball in the middle of the bags.
On the command from the coach both players regain their feet and compete for the ball between the two bags.
Players should continue to wrestle for the ball until one player has secured possession.
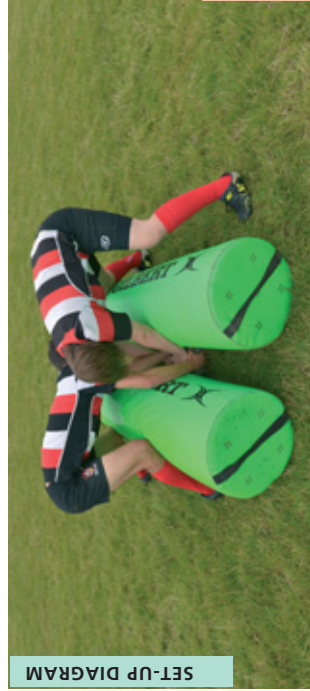
Practice Progression / Regressions
Progress by having one player already on the ball with other player clearing player out.

Activity	Attack clearout and defensive organisation at breakdown
Objective	Develop the ability of players to react to a tackle as an attacking support player and a defending player.

Key Factors
1. Attacker attempts to get over gainline while tackler attempts to tackle behind gainline.
2. Support players in attack react to positive/negative breakdown and clear accordingly.
3. Support players in defence react to positive/negative tackle and clear accordingly.

Equipment Requirements

Balls	1	Bags		Area	30m x 20m
Cones	stack	Suits	optional	Players	10 per group
Shields	n/a	Bibs	5	Time	10–15mins

Practice Description
Split group into two teams of five lined up facing each other along two parallel lines. Team A starts with the ball passing it laterally back and forward along the line. On the coach's command the player in possession of the ball attacks Team B's line. Defenders from team B make a tackle and then attempt to disrupt. Ball carrier in Team A attempts to get over gain line and support players clear threats to ensure ball retention.

SET-UP DIAGRAM

TEAM B

DEFENCE

TEAM A
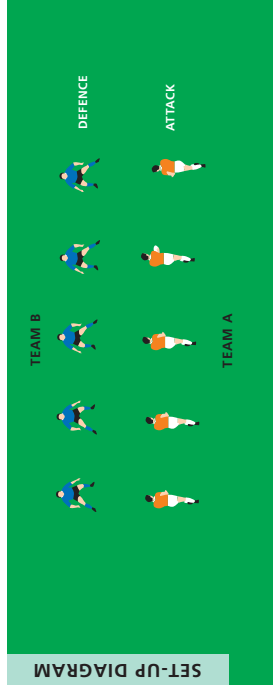
ATTACK

Practice Progression / Regressions
Progress - imbalance the teams i.e four attackers versus six defenders in order to focus on counter-ruck.
Progress by allowing defenders to move forward in defence.

Activity	Counter ruck
Objective	Develop the awareness of players competing for possession through counter rucking.

Key Factors
1. Recognise when there is an opportunity to counter-ruck..
2. Target ball and keep the counter ruck target narrow.
3. Stay on your feet and leg drive beyond the ball
4. First players arriving should remove players blocking access to the ball so that following players can target the ball.

Equipment Requirements

Balls	N/A	Bags		Area	10 x 10
Cones	4	Suits		Players	12
Shields	8	Bibs		Time	10–15mins

Practice Description
Four tackle bags are laid out with two players at each holding a ruck shield resembling a ruck. Each shield is marked with two matching coloured cones. A group of four players start at the centre, the coach will call a colour and the four defenders will then target that individual ruck. When the players are progressing forwards towards a ruck, this is classed as a positive breakdown (a tackle made behind the attacking gainline which creates the potential to a counter ruck). When the players are retreating this is classed as a negative breakdown as the defence is unlikely to have the momentum. In this situation the focus for the defending players should be on setting the defence around the breakdown. When counter-rucking the focus of the defender should be on the player between them and the ball. Counter-rucking player must stay on their feet and continue to leg drive beyond the ball.

SET-UP DIAGRAM

Practice Progression / Regressions
Progress by increasing the number of pads (attackers).
Regress by narrowing ruck.

THE MAUL

A maul typically develops from a contact situation where the ball carrier is held by an opponent on but is not brought to ground. It can develop into an effective method of retaining or contesting possession. It can be a dynamic attacking platform which pulls in defenders creating space in other areas. On formation of the maul, offside lines are created.

Law definition
A maul begins when a player carrying the ball is held by one or more opponents, and one or more of the ball carrier's team mates binds on the ball carrier. A maul therefore consists, when it begins, of at least three players, all on their feet; the ball carrier and one player from each team. All the players involved must be caught in or bound to the maul and must be on their feet and moving towards a goal line. Open play has ended.

Key points

- Maintain forward momentum making the ball available to team mates

- First arriving support player should attempt to secure possession by ripping the ball or driving beyond the ball

- All players should be bound and shoulders should be below hips.

- Drive forward in balanced, dynamic position with straight backs

- As additional support arrives move the ball, or person on the ball, further back from opposition

- Once the ball is at the back, the ball carrier can either continue driving, leave the maul or pass to a team mate.

Activity	Maul it
Objective	To develop mauling skills and roles and responsibilities of support players.

Key Factors
1. Maintain forward momentum making the ball available to team mates.
2. All players should be bound and shoulders should be below hips.
3. Drive forward in balanced, dynamic position with straight backs.
4. Move the ball, or person on the ball, further back from opposition.

Equipment Requirements

Balls	1	Bags	n/a	Area	15m x 10m
Cones	1 stack	Suits	n/a	Players	14 per group
Shields	n/a	Bibs	7	Time	10-15mins

Practice Description

Play two-handed grab touch. When touched/grabbed, the ball carrier stays on feet with first arriving player ripping the ball. The player now on the ball should maintain a dynamic body position with shoulders above hips and back straight. The next support players should look to bind onto the ball carrier and drive the maul forward. The ball can then be transferred to the back of the maul via moving the ball itself or manoeuvring the player back. Once at the back, the maul can be broken off left or right or the ball can be passed to a first receiver where the game continues. The ball must stay off the floor or the ball is turned-over to the other team.

SET-UP DIAGRAM

10m

15m

DEFENCE

ATTACK
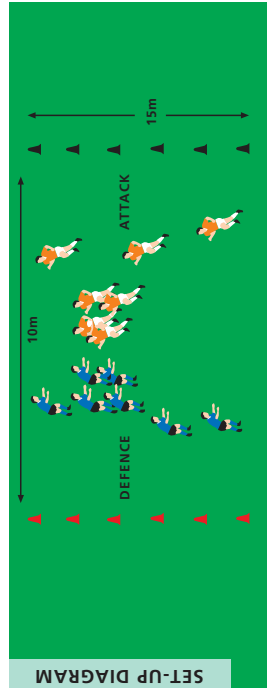
Practice Progression / Regressions
Progress by adding in additional defenders.
Challenge players by only allowing players to maul and not pass.
Regress by decreasing the number of defenders in game or just in the ruck.

THE SET PIECE

Scrum

Lineout

Kick restarts, chase and receiving

SCRUM

BODY POSITION DEVELOPMENT

Basic scrum position
Head in a neutral position
Chest out
Shoulder blades back
Tight core (stomach muscles clenched)
Hips tilted (bum pointing out/up)
Knees slightly bent
Feet shoulder-width apart.

1v1 crabbing exercises
One player goes down on all fours in a strong scrummaging position, with knees on the floor to start with. The second player lines up perpendicular to the player on the ground and rests their shoulders on the back of the player on all fours. They then anchor themselves to the player on the ground by wrapping their arms under the player they're resting on, making sure to get in a good scrummaging position. Once in position, the player on the ground raises his/her knees from the ground and crawls forward. The player resting on the back needs to crab sideways while maintaining a good scrummaging posture.

One Swiss ball exercise
Player gets into a good scrum position on the Swiss ball, with forearms resting on the ball, keeping the chest off the ball. Player works to maintain a good scrum posture, while shifting feet position, to rotate around the ball. Small foot movements are used.

Scrum position 1 and 2 ball balance
Player gets into a good scrum position with their arms outstretched below them and a rugby ball placed under each hand. This is held for 10 - 15 seconds. Progress to having one ball under both hands and have pressure from teammate pushing player off balance. Player works to stay in a good scrum position.

Scrum position versus shield
Player gets into a good scrum position, against a partner who is holding a shield. Player in the scrum position wraps their arms around the shield and person holding it. Player with the shield works to move the person who is in the scrum position forwards, backwards and sideways. The player who is in the scrum position must use small foot movements to keep his/her body in a strong scrummage position.

1 v1

Players work against a scrum sled or another player. Getting in a good scrum posture, they engage against the sled and work to drop their knees towards the ground while engaging. Their partner acts as a weight on the sled or as opposition if not using the sled. Progress to work on chasing the hit, using small quick steps to bring the feet back under the body following the engagement. Player works to try and get back into the optimum scrummaging position as fast as possible.

1 v1 - take turns to drive five steps

Players get into a good scrummaging posture, before folding in together to form a 1v1 scrum. Arms should bind on the opposite player's back. Once steady, the players lower themselves to the ground by lowering their knees to the ground. This should be done in a slow, controlled manner, while maintaining good body posture. Once in a low position, with knees nearly on the floor, players should rise up again, whilst keeping a good scrummaging posture.

2 v1

The player working in this exercise is the player on their own. The players fold in to form a 2v1 scrum, with the single player's head between the other two. The single player works to drive the two players back whilst maintaining a good posture. The couple working in the pairing resist, but allow the single player to drive them back.

Prop/lock v single sled or prop and hooker

Prop faces a single sled or prop and hooker and allows a second row to bind on to him/her. They start by just folding in to the sled, with no hit. Once in position they look to maintain good scrummaging posture. Progress to add a full engagement, while keeping a good posture. Progress further to add a flanker, as well as a second row.

Forming the scrum

Shoulders all square, and visible from the front.
Hips as close together as possible between all players.
Props stand with feet square and shoulder-width apart. Hooker stands in a split stance with right foot slightly further forward.

Players get into crouch position by bending from the hips and pointing bottoms out.
Hooker takes the weight of the scrum on their right foot and holds the props steady.

Second row bindings

Waistband bind
Pros   - Allows prop leg mobility
Cons   - Not very tight
         - Can pull prop down.
Pocket bind
Pros   - Very tight bind
         - Pulls scrum together
         - Second row won't slide over prop
Cons   - Can reduce mobility if too low.
Around the waist bind
Pros   - Pulls scrum together
         - Can be more comfortable
Cons   - Second row can slip up prop's back.

Back row setup

No. 8 - Set up:
- Bind onto second row's back
- Split stance with flat back to aid stability of second rows
- Release front foot (similar to hooker) when engaging.

Flanker - Set-up:
Option 1 - Same knee, same shoulder - same as tackle technique - helps keep shoulder tight on prop.

Option 2 - both feet parallel like props - can help keep power vertical through the scrum.

No. 8 & Flanker - Feet Position:
Keep both feet on ground during engagement.
Small steps forward during engagement.

The scrum needs to be strong both vertically and horizontally in order to be effective.

Vertical binding:
. Second row on front row - different bindings can be adopted by the second row to bind onto the prop.
  - If the second rows do not engage in unison with the front row, they may lose strength of the bind.
. Flankers on front row - flankers should bind onto the second row's back and ensure they make contact with the prop's upper leg/buttock with their shoulder.
. No.8 on second rows - no.8 binds with both hands onto the back of the second rows. With their head between the second rows, the no.8 should ensure their shoulders are in contact with the second row's upper leg/buttocks.
. The priority is that the vertical bind remains tight before and during the engagement.

Horizontal bindings:
. Front row - props can choose a number of options to bind onto the hooker:

- Bind on shorts - easy option. Can be difficult if height of front row is varied due to differences in arm length
- Bind on jersey - allows props more variety with height on bind depending on preference.
. Second row - bind around each other before going to ground on their middle knee.
. Flankers - bind onto second row with a 'full arm'.

The scrum process

Front Row
. Hooker stands with a split stance, right foot slightly in front of the left. This front foot acts as a brake, keeping the scrum stable.
. Loose-head prop binds first, followed by the tight-head.

Second Row
. Locks tell the props they are ready to bind by signalling with a tap on the prop's leg. Props roll their inside knee and ankle inward to allow space for the lock's head to come in without having to force it in.
. The lock behind the tight-head has his/her right foot forward and left knee on the ground.
. The lock behind the loose-head has his/her left foot forward and right knee on the ground.

Back Row
. Flankers take a position similar to that of the locks they are beside, but each with their outside knee on the ground and inside foot forward.

Referee calls "Crouch!"
. When the referee calls crouch, and the hooker is happy that the second rows and flankers are bound to the scrum, he/she gives a call of "ready". On this call the front row go down into a crouched position where their backs are flat and level with their hips.
. The second rows and flankers come off their knees, also with flat backs.
. The number 8 enters the scrum with arms around the locks and a split stance. His/her front foot acts as another brake. Along with the hooker's brake, this stops the scrum falling forward off-balance.

Referee calls "Touch"
. Both props touch their opposite prop on the outside of their shoulder.

Referee calls "Set!"
. The hooker and number 8 each release their brake foot as quickly as possible to allow the rest of the scrum to engage powerfully towards the opposition, with the aim of winning the race to the gain line.

Scrum Attacks

Scrum Attacking Options - 8-9-15 Blindside Attack
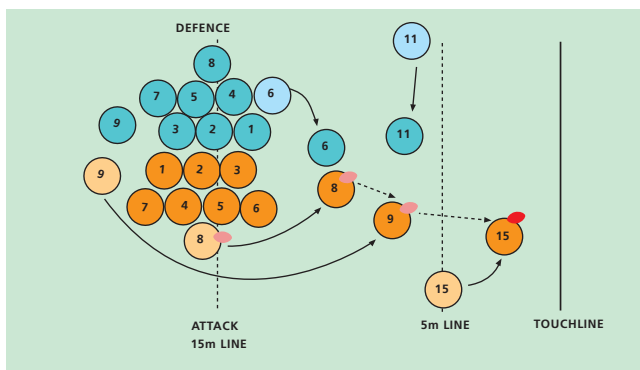
Aim:

■ Usually during a 15m scrum the defending team's scrum half won't defend the 'short side' e.g. to the left of the defending team's scrum in this case

■ Therefore an opportunity to isolate the defending team's winger (blue no.11) and create a 2v1 exists (orange nos.9 and 15 v's blue no.11).

Description:

1. Attacking number 8 picks up and attacks the opposition's first defender (in this case no. 6). Then passes to no.9 in support.
2. No.9 should hopefully face a 2v1 situation and either passes to attacking no.15 in support or dummies and goes alone.

Scrum Attacking Options - 8-12 Open side attack
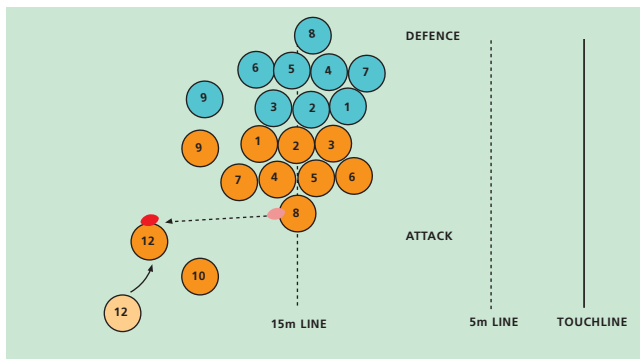
Aim:

■ To get quick ball to the backs direct from the scrum

■ To get a back line player over the gain line straight from the scrum to set up next phase attack.

Description:

1. No.8 manoeuvres the ball to left-hand side of their stance in preparation to pass the ball left.
2. No.8 passes directly to the backs (no.12 in this case).

Scrum Defence

Defending the No. 8 pick from the base of the scrum going right.

Option 1

Description:
- Blue no. 7 is responsible for defending the ball carrier (orange no.8 in this instance)
- Blue no.8 defends the area inside blue no.7 - in case of the pass from the orange no.8 to no.7
- Blue no.9 defends outside blue no.7. In this illustration they are responsible for defending the orange no.9.
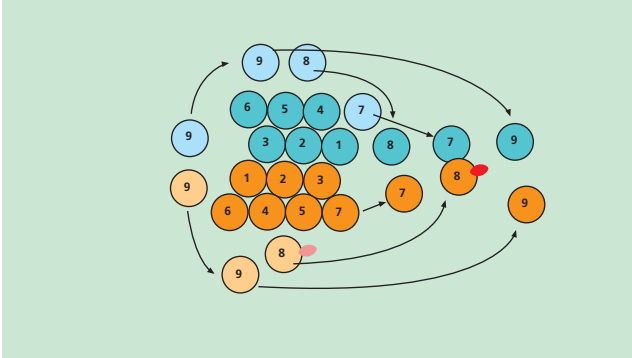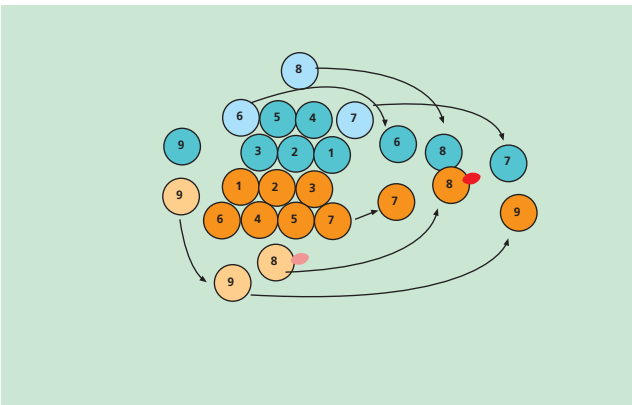

In this option blue no.6 isn't used. They can be used in place of blue no.9.

Option 2

Description:
- Blue no.7 is responsible for defending outside of the ball carrier - in this case defending orange no.9
- Blue no.8 defends the ball carrier (orange no.8)
- Blue no.6 defends inside blue no.8. In this illustration they are responsible for defending the orange no.7.

In this option blue no.9 isn't used. This frees up blue no.9 to defend on the opposite side of the scrum.

Back row attack touch (can be used for defence also)

Activity	Back row attack touch (can be used for defence also).
Objective	Develop back row players' ability to attack from the base of a scrum. Develops back row unit and individual skills - e.g. controlling the ball with feet, accelerating from the base of the scrum and link play between the back row and scrum half.

Key Factors
1. No.8 to control ball with feet - trap the ball with both feet then move ball to the right side/foot if possible to allow quick feed to 9 and to protect from opposition 9.
2. No.8/9 - accelerate away from the base, ball in two hands ready to pass or take contact.
3. Flankers react quickly to the No.8/9 attack - get into a position quickly to offer the ball carrier (no.8/9) options and support the attack.
4. Explore options to link up with backline players (e.g. 8-9-12) - either from the initial attack or the next phase.

Equipment Requirements

| Balls	1	Bags	n/a	Area	60m x 40m
Cones	1 stack	Suits	n/a	Players	16
Shields	n/a	Bibs	8	Time	20min

Practice Description
8v8 game of touch or contact rugby - coach can manipulate game rules to suit needs. When a common unforced error occurs (e.g. knock-on), a back row from each team set up opposite each other. The back rows set up a realistic distance apart from other - with both scrum halves in their respective positions. Coach calls crouch-touch-set - then scrum half rolls the ball to the no.8's feet who then controls the ball.
The attacking back-row proceeds to attack from their position - coach encourages players to try out new moves. Defensive backline must be back 5m - this is realistic.

SET-UP DIAGRAM
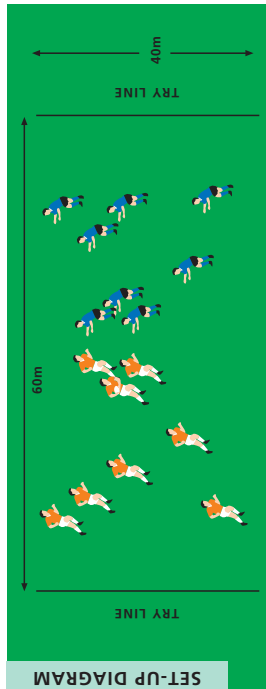
Practice Progression / Regressions
Regress - only the attacking team have a back row - all the defence are 5m back.
Progress - attackers must make a certain number of passes before contact.

Back row touch (can be used as defence practice also)

Activity	Back row touch (can be used as defence practice also).
Objective	To develop back row players' ability to attack from the back of a scrum.

Key Factors
1 Communicate where you are attacking.
2. Defenders communicating who is taking each attacker.
3. Number 8 to accelerate over gain line and draw defenders onto him/her.
4. Scan to attack space.

Equipment Requirements

Balls	1	Bags	n/a	Area	50m x 40m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description
Players play touch rugby, but every time there is an offence or after five touches are made, the game is restarted by bringing the nearest three players from each team together to create a circle simulating two back rows. The ball starts at the feet of the non-offending team and they must attack. As the laws state, the players in the flanker positions must not leave their positions before the ball is out of the scrum, and players must not attack or defend through the middle of the simulated scrum.
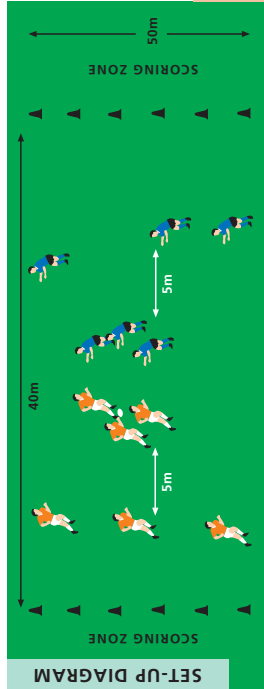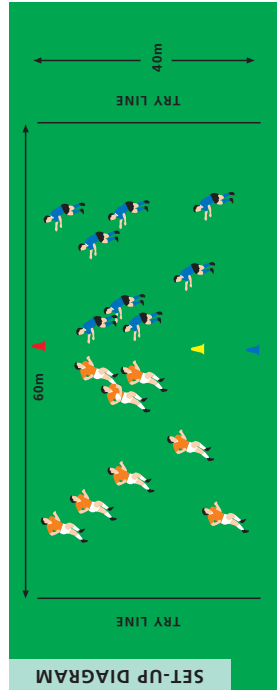
SET-UP DIAGRAM

Practice Progression / Regressions
Change the ratio of defenders to attackers to increase or reduce difficulty for the attack
Progress to the tackle.
Introduce scrum halves, working as they would normally work in a game.
If too easy for defence, start all flankers on their knees allowing number 8 to attack.

Activity	Scrum half pass touch
Objective	To develop players ability to perform a scrum half pass.

Key Factors
1. Rear foot close to the back of the ball.
2. Front foot slightly open towards target.
3. Power hand on back third of ball.
4. Ten point contact on ball.
5. Low squatting position.
6. Hands and hips toward target on exit.
7. Chase the pass.

Equipment Requirements

Balls	1	Bags	n/a	Area	50m x 40m
Cones	1 stack	Suits	n/a	Players	12
Shields	n/a	Bibs	6	Time	10-15mins

Practice Description

Players play touch rugby, but every time the player is touched, they put the ball on the ground and perform a scrum half pass. The player who makes the touch must stand opposite the passing player and wait until the ball is passed, before joining play. If six touches are made, or if there is an infringement, the ball is turned over.

SET-UP DIAGRAM

Practice Progression / Regressions
Change the ratio of defenders to attackers to increase or reduce difficulty for the attack.

Activity	Back row attack (can be used for defence also)
Objective	Develop No.8's ability to control the ball at the base of the scrum, pick up the ball and attack.

Key Factors
1. No.8 to start in a low scrummage position.
2. Keep eyes on ball at all times.
3. Control ball with feet - manipulate ball (if possible) to the right hand foot for easier pick.
4. Tap flanker before picking up the ball - lets them know you are about to attack.
5. Pick up ball with two hands, in a stable stance.
6. Stay low and accelerate away from the scrum.

Equipment Requirements

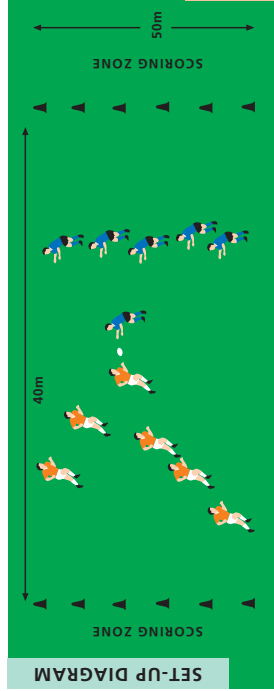| Balls	1	Bags	n/a	Area	15m x 15m
Cones	4	Suits	2	Players	16
Shields	n/a	Bibs	n/a	Time	20mins

Practice Description

Players play touch rugby, but every time there is an offence the game is restarted with two back rows as per 'Back row touch'. Three backrow v three backrow - set up max 6m apart and 3m wide. On coach's call - defenders roll a ball towards the attacking no.8. No.8 controls the ball with feet and manoeuvres it into position ready to be picked up. Coach calls RED, YELLOW or BLUE - No.8 then picks up ball and accelerates towards the relevant cone. Defenders (blue) can defend once the ball is picked up.
Attacking flankers link with the No.8 to manipulate the defence and ultimately make a line-break and score.

SET-UP DIAGRAM

Practice Progression / Regressions
Regress - Reduce the number of defenders - allows the players more space to attack
Progress - Challenge the no.8 skills at the base of the scrum by feeding the ball in differently - grubber kick.
Progress- Add in a no.9 for each side.

LINEOUT

The fundamental skills of the lineout are the throw, jump, catch and outmanoeuvring. Players within the 'Developing the play' stage can support the jumper, therefore the skills of supporting a player in the air also becomes an important technical aspect of the lineout. The lineout can be an extremely tactical area of the game and the technical areas need to be mastered prior to developing tactical options.

The Throw
- Strong base with feet together
- Dominant hand slight towards back of ball (generates the power)
- Other hand is used as a guide

- Move ball behind head to generate power
- Keep elbows in to help with direction of throw
- Throw ball in one smooth movement
- Keep elbows tight together as this will increase accuracy

- Follow through towards target
- Get back into the game as quickly as possible to support play.

Jump, Support and Catch

The Jumper
- Should get into the 'ready position' on balls of feet, knees slightly bent and hands up
- Outmanoeuvre opponent
- Drive upwards with legs using arms to maximise height
- Keep core tight throughout.

The Supporters
- Should start with a strong, low body position with knees bent, chest out and back straight
- Front supporter positions hands just above the knee
- Rear supporter positions hands just under jumper's bottom
- On the jump, supporters should drive upwards with legs and arms simultaneously
- Complete the lift by stepping in close underneath jumper
- Complete the movement by returning the jumper back down to ground safely in split stance to aid stability.

When coaching the lineout, it is easy to become overly concerned with tactical options (e.g. moves, plays etc). It is vital that the basic principles of the throw, jump, support and catch are worked on as a priority before developing tactical awareness of lineout set-ups (as seen below). Outmanoeuvring the opposition (either in the air and/or on the ground) is key to successfully winning possession at a lineout.

Key Lineout Principles:

Start:
- Call is made before set-up - key element here is speed of thought and call (recognise how many defenders in the opposition lineout and how they are set-up) - co-ordinating quick movement
- Lineout set-up - everyone in the line and ready
- Hooker set and ready - accurate throwing technique
- Jumpers and supporters in position, ready to move.

Middle:
- Movement forward and lateral - speed and dynamic jump and lift. Often the speed of movement will outdo the opposition.
- Jumpers - keep core tight, stay strong and straight in the air - keep eyes on the ball - hands in position to catch the ball at all times
- Supporters - movement and execution of lift is vital - focus on getting feet under the jumper, chest to chest with other supporter, hold the jumper for two seconds in the air (this reduces the pressure on the timing being 100% accurate)
- Hookers - ball in pre-throw position - accuracy in the speed and flight of the ball depending on call.
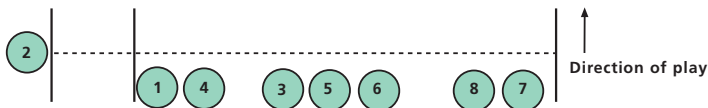
End:
- Jumpers - control of ball in the air - movement of body in the air - landing on a split stance and in a strong position for maul set-up
- Supporters - control of the jumper in the air and protection of jumper on the ground.
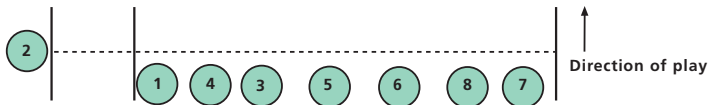

(Full lineout) 3-1-3 set-up - Benefits:
- Offers two easy options (1-4-3 and 6-8-7).
- A middle option (3-5-6) is managed by 5 jumping in space with 3 and 6 turning to support
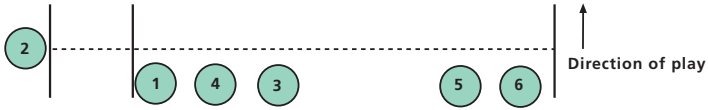

(Full lineout) 2-3-2 set-up - Benefits:
- Middle option (3-5-6) is a quick option if the defence doesn't recognise it. 1 and 4 must interest the front defence.
- Other options include: - 1-4-3 - 3 dummies middle, then turns to support 4 jumper
                             - 6-8-7 - 6 dummies middle, then turns to support 8 jumper
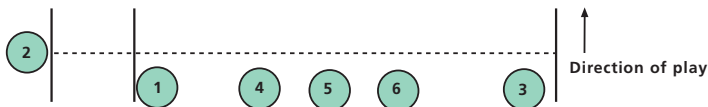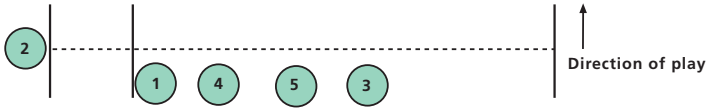

(5-man lineout) 1-3-1 set-up - Benefits:
- Quick middle option (4-5-6) if the defence doesn't recognise it. 1 to face 4 to interest the front defence.
- Other options include: - 4 1-5-6 - 1 and 4 swap. 1-5-6 - 5 jumps to provide and option.
                             Alternative is to throw to 4 (now at the front).

Direction of play

(5-man lineout) 3-2 set-up - Benefits:
- Quick front option (1-4-3) - this needs to be quick to beat the defence
- Back option (3-5-6) - 3 turns and runs to rear. 5 jumps with 3 and 6 supporting.

Direction of play

(4-man lineout) 2-2 set-up - Benefits:
- Quick front option (1-4-5) - this needs to be quick to beat the defence. 3 can run to the back to offer another option.
- Back option - the defence will likely line up opposite. 4-5-3 aim to take the defence to the back by moving back quickly. 1 is then left at the front (option A), or the ball can be thrown to 5 at the rear if the defence haven't followed.

LINEOUT OPTIONS

Catch and Drive

Stage 1
No. 4 catches ball and presents ball to no.6. Nos. 8 and 7 have the option of staying out of the maul to provide attacking options.


Direction of play
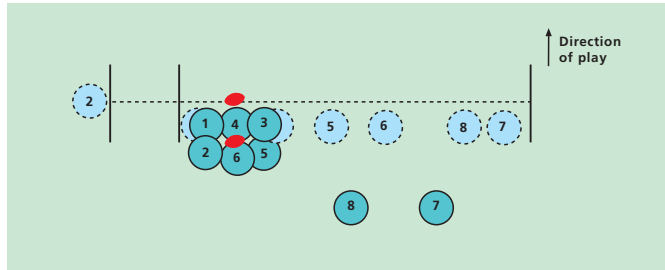
Description:
1. Ball is thrown to no. 4 (for illustration only).
2. Supporters (nos.1 and 3) bind onto no.4 to prevent tackle/sack being made.
3. No.6 makes an arced run and approaches no.4 in a low square position.
4. No.6 secures the ball whilst in a square stance.
5. Nos.2 and 5 approach the maul to support no.6.

Stage 2
No.6 remains with ball throughout drive.. No.4 attempts to get back into a dynamic forward facing position. Nos. 2 and 5 'pincer' whilst no.6 slips back.


Direction of play
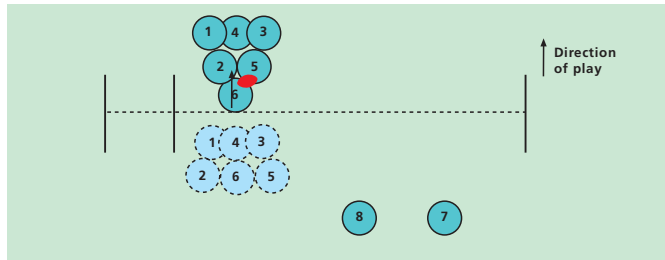
Description:
1. All players ensure they have a strong bind on their teammate and go forward.
2. No.4 to work hard to face forwards after presenting the ball to no.6.
3. Nos.2 and 5 move past no.6 and pincer no.6 to the rear of the maul.
4. No.6 reaches the back of the maul and remains there with the ball.
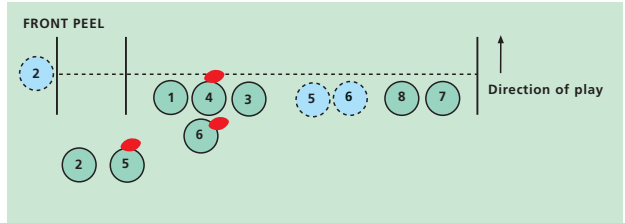
Off-Top and Front Peel option

Off-Top:
1. Ball is thrown to no.5
(for illustration only).
2. Supporters (nos.3 and 6)
ensure they maintain a
strong body position and
keep no.5 in air for minimum
two seconds.
3. No.5 catches ball with
two hands, and passes ball to no.9 whilst in the air.
4. No.5's pass should be aimed slightly in front of no.9 to allow no.9 to run onto the ball.

OFF TOP

Direction of play
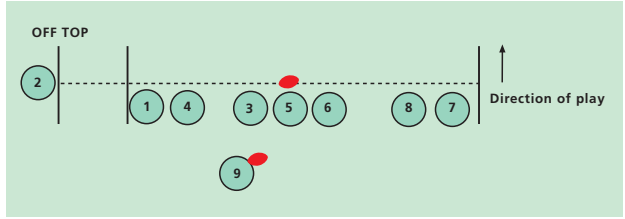
Front Peel:
1. Ball is thrown to no.4,
2-3m from the front
(for illustration only).
2. No.4 catches ball with
two hands, and passes
ball to no.6 whilst in the air.
The ball can also be passed once no.4 reaches the floor.
3. No.6 then passes to no.5, who has support from no.2, who has realigned after the
throw-in.
4. This provided an attacking opportunity in the 5m channel.

FRONT PEEL

Direction of play

Back Peel options

Option 1:
1. Ball is thrown to no.8
at the tail of the lineout
(for illustration only).
2. Supporters (nos.6 and 7)
ensure they maintain a
strong body position and
keep no.8 in air for minimum
two seconds.
3. No.8 catches ball with two hands, and passes ball to no.5 whilst in the air.
4. No.5 then passes wide to no. 3/4/1 who have made an arced run.

Direction of play
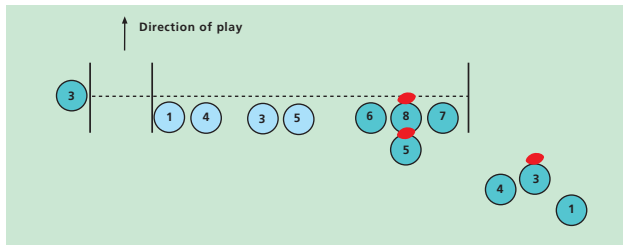
Option 2:
1. Ball is thrown to no.8
at the tail of the lineout
(for illustration only).
2. Nos.1 and 4 run on the
outside of no.8 as a decoy.
3. No.8 catches ball with two
hands and passes ball to
No.5 either whilst in the air
or on landing.
4. No.5 passes the ball late
to no.11 who starts their run
from the 5m channel.
5. There is also an option for no.11 to run outside no.3 with nos.1 and 4
running inside no.3 as a decoy.

Direction of play

Activity: Race to the cone

Objective

Develop jump, support and outmanoeuvre technique. Develop speed and timing of the jump/support/throw. Develops reaction skills of the defending pod of 3.

Key Factors
1. All jumping, supporting and outmanoeuvring key factors.
2. All throw-in key factors.

Equipment Requirements

Balls	1	Bags	–	Area	15m x 10m
Cones	1 stack	Suits	–	Players	7 per group
Shields	–	Bibs	3	Time	15mins

Practice Description

Two opposing pods set up on a cone - jumper on the cone.
Coach shouts a colour and the pods react - thrower works with the nominated attacking team.
Coach can shout more than one colour (sequence) to develop movement and reaction skills.
Defensive pod attempt to win ball.

SET-UP DIAGRAM

Practice Progression / Regressions

Progress - Nominated attacking pod control the movement - cones are in place for guidance at this point.
Progress - Lessen the space between cones - restrict movement between 3-5m rather than 10m.
Regress - remove the support in the air but supporting players remain.
Regress - the opposing team contest the movement but not the jump of the lineout.

Activity: Lineout end ball

Objective

Develop the ability of lifting pods to set-up and complete the jump, support, throw and catch quickly. Develops the ability of players to outmanoeuvre opponents using the principle of speed.

Key Factors
1. All jumping, supporting and outmanoeuvring key factors.
2. All throw-in key factors.

Equipment Requirements

Balls	1	Bags	–	Area	30m x 20m
Cones	1 stack	Suits	–	Players	14
Shields	–	Bibs	7	Time	20mins (approx)

Practice Description

Two teams of seven players (two pods of three players per team + thrower/hooker).
Thrower must stay static, whilst the lifting pods can move anywhere within the area/pitch.
Attacking pod aims to outmanoeuvre their opponents and win the ball in the air.
If ball is won, then the attacking team keeps the ball and attacks again - aim to win ball in the scoring zone.
If lost (e.g. opposition steal it, or ball goes to ground), then turnover.
Coach must ensure a 1metre gap is kept between pods.

SET-UP DIAGRAM
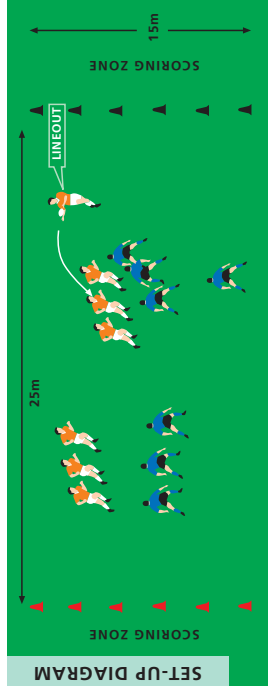
Practice Progression / Regressions

Regress - remove the supporting element of the pod - only promote the jump (any three can jump).
Progress - set minimum distance for the throw - challenge the players.
Progress - if ball won, then the ball must be delivered off the top back to the hooker.
Progress - increase number of players in each pod to four - more options.

KICK RESTARTS, CHASE AND RECEIVING

Description of chase options - SHORT restart

Three to five players advance close to landing zone (one contest, one beyond and two either side of zone) - others support - to start defence or attack.

Player A contests possession, leaping into the air to either catch or tap the ball back towards his team. Player B goes beyond the ball in the event that the ball is not touched or tapped back by the defensive team into that area.

Players C and D align on either side of the contest to receive the ball if tapped back or to form a maul around the receiver.
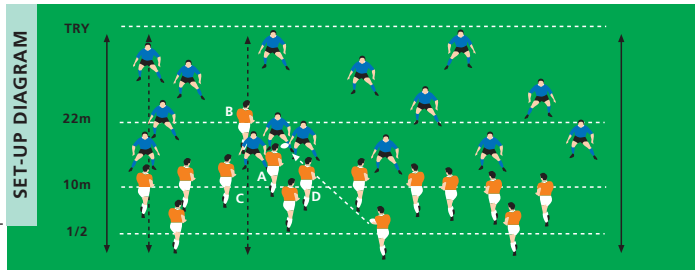
Description of chase options - DEEP restart

Maintain line, with number 8 and back 3 covering. Defensive line should advance to put pressure on the receiver - there should be no kinks in the defensive line to give an opportunity of a line break which should be anticipated at all times. Number 8 and back 3 should sit deep to receive clearance kick. The winger (W) and another player (P) can chase hard to put the receiver under pressure. An organised defence line should advance behind.
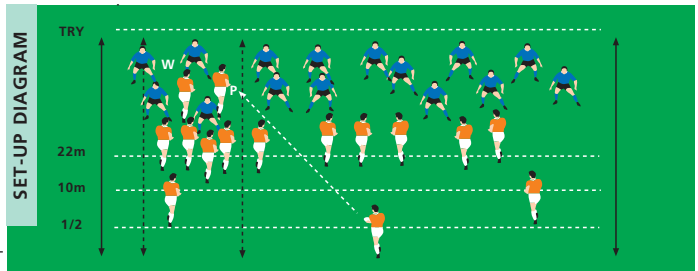
Description of chase options - WIDE restart

Chasing line advances from in to out, pressing the receiver towards the touchline. The touchline should be used as another defender while the defensive line shuts off in-field attacking options.

Depending on the depth of the kick, the chase should resemble that of the SHORT or DEEP restarts as above.

Description of aerial contest

Defending (receiving) team should nominate a receiver who should attempt to jump and catch the ball with hands above his head. Two support players may bind on to the receiver once he has landed and secure the ball. On a short restart, the attacking (kicking) team will have nominated a contestant for the ball. This pla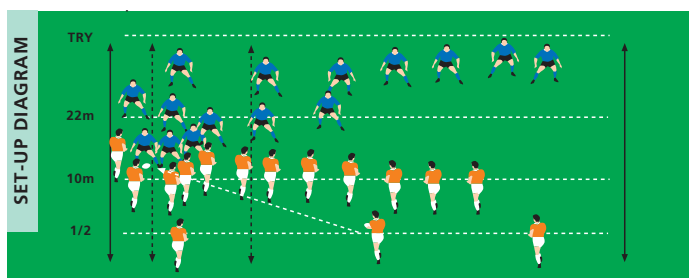yer should jump and attempt to catch or tap the ball back towards his team. Competing players should not be in contact in the air before the ball is touched.

Description of short, deep and wide 22m restarts

Short restart (A) - A short restart is performed to allow the attacking (kicking) team to contest for possession. If unsuccessful the defending team gain possession and good field position from which to attack or kick.

Deep restart (B) - A deep restart is most commonly used for territory, forcing the defending (receiving) team to play from deep within their own half. This commonly results in a gain in territory for the attacking team.

Wide restart (C) - A wide restart brings in the risk of the touchline but can be used to contest possession utilising the touchline to smother the defence. A well-placed kick will give the defence limited options as it creates a difficult angle to return a kick.

Activity	Restart - three area target practice with chase
Objective	To identify the best restart option and execute the kick and chase accurately, effectively and consistently.

Key Factors
1. Attack to identify the type of restart and chase formation.
2. Kicker to execute an accurate drop-kick restart and chase to advance in a line with either - two players out in front chasing a deep kick or four players around the landing zone, one contesting the ball in the air, one beyond the ball and two either side of the ball.
3. Defending team attempt to secure the ball - two players support one nominated receiver who jumps and attempts to catch ball with hands above their head.

Equipment Requirements

| Balls	1	Bags	0	Area	40m X 20m
Cones	12 (4x3)	Suits	0	Players	16
Shields	0	Bibs	0	Time	10mins

Practice Description
Set up three areas (red, yellow and blue) with nine defenders (three in each). Seven attackers line up on the halfwayline, one with a ball. On the coach's call of red, yellow or blue, the attacking team will communicate the colour and the chosen chase option. The attacking kicker will drop-kick the ball into that area and the rest of the attacking team will chase in the chosen formation. The defensive team should nominate a receiver and this player should jump into the air and attempt to catch the ball above his head with two hands. The two support players should bind onto the receiver once they land and secure the ball.

SET-UP DIAGRAM

TRY

22m

10m

1/2
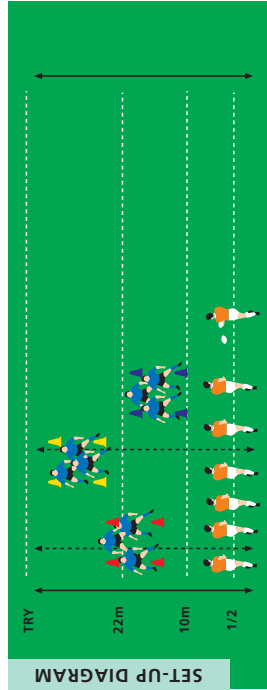
Practice Progression / Regressions
Progress by allowing the defensive support players to bind and 'lineout' lift the receiver.
Regress by varying the starting position of the chasing line - deeper (on own 10m line) to give the receiver more time, or flatter to give the receiver less time.
Regress by removing the chasing pack to allow the kicker to focus on an accurate drop kick and the defence to focus on an accurate kick receipt.
Progress by allowing the support players to 'line-out' lift the receivers.

Activity	Aerial contest activity
Objective	To work in a pod of three to contest, catch and secure the ball from a kick.

Key Factors
1. Eyes on the ball and communicate - call for the ball.
2. Jump into the air with hands above head.
3. Once collected, bring ball into bread basket with two hands.
4. Land with knees flexed, turn to face support.
5. Support bind onto ball carrier and drive.

Equipment Requirements

Balls	1	Bags	0	Area	10m X 10m
Cones	4	Suits	0	Players	7
Shields	0	Bibs	0	Time	10mins

Practice Description
Seven players (two pods of three plus feeder) in a square. The feeder will throw the ball into the air and both pods will compete to catch and secure the ball. One player from each team contests for the ball while the other players support, binding onto the receiver to secure possession. Support players have two options; 1) players bind onto and move beyond ball carrier to make the ball accessible; 2) players bind onto ball carrier and one player takes ball to move the ball to the back of the maul.
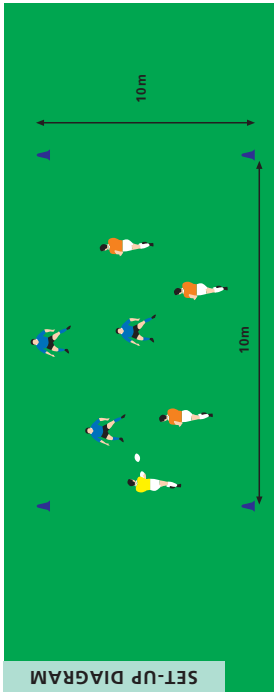
SET-UP DIAGRAM

Practice Progression / Regressions
Progress by allowing the support players to 'lineout' lift the receivers.
Allow the feeder to kick the ball from outside the grid, creating a more challenging game-like situation.

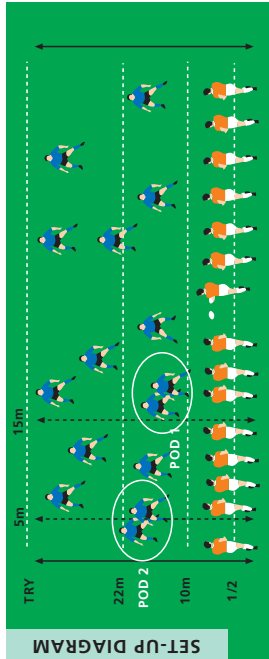| Activity	Standard set-up when receiving kick-off
Objective	To understand the principles around receiving and securing possession from restart.

Key Factors
1. Scan the attack to read where the chase is and where the ball is likely to go.
2. Communicate this message and align accordingly.
3. Call for the ball and supporting players should react accordingly.
4. Catch ball in air above head and land facing own team.
5. Support should bind onto ball carrier and secure ball.

Equipment Requirements

Balls	1	Bags	0	Area	Full pitch
Cones	0	Suits	0	Players	30
Shields	0	Bibs	15	Time	20mins

Practice Description
Two pods are set up, one on the 15m line and one on the 5m line slightly deeper on the same side of the field as the opposition have lined up. Two players are in each pod with a floating player (commonly the hooker) in between both ready to support either pod. The pods are set up near the 10m line as they may have to compete for the ball in the air. The pods should be able to move forward comfortably to field a restart which lands on the 10m line and should be positioned deep enough so they never have to retreat to field a restart. Pods are not required any deeper as a deep restart would rarely be challenged by an attacking player. Everyone is evenly spaced covering the rest of the field.

SET-UP DIAGRAM

Activity	Receipt formation and contest end-ball variation
Objective	To develop the catching of kicks.

Key Factors
1. Move into space.
2. Catch the ball in two hands above the head.
3. Land with bent knees in a strong body position, turned away from defence.
4. Two support players should bind onto receiver to secure ball.
5. Pass / kick accurately.

Equipment Requirements

Balls	1	Bags	n/a	Area	50m x 50m
Cones	1 stack	Suits	n/a	Players	16
Shields	n/a	Bibs	8	Time	10-15mins

Practice Description
Two teams of eight players. The object of the game is to pass the ball to a team mate standing in the scoring zone / over the try line. Players may pass / kick the ball in any direction. Players must attempt to catch the ball above head - Aussie rules style game. Defenders may only intercept the ball, they may not tackle or target the ball whilst in the other team's possession.

SET-UP DIAGRAM
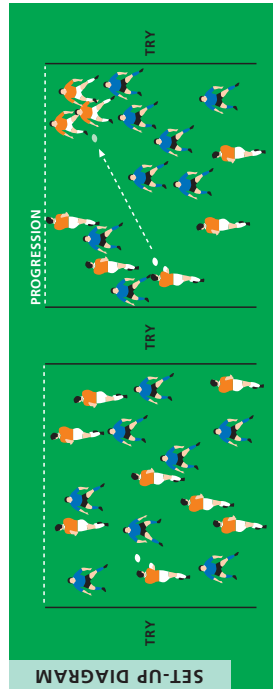
Practice Progression / Regressions
Defenders may target the ball. Two support players (attack) must secure ball and bind around receiver before play continues.

MENTAL SKILL DEVELOPMENT

GOAL SETTING   This is identifying what **you** want to achieve and how you can achieve it.

- Goals are specific targets with time limits that allow you to record achievement
- The effective use of the goal-setting process should help form action plans that help achievement.

SELF-TALK   This is the internal chat we have with ourselves, either in our head or out loud.

- Self-talk reflects our thoughts and so can contribute to feelings and performance
- Self-talk can be included into routines and other strategies regularly employed.

IMAGERY AND OBSERVATION   This is the internal experience we create in our minds without experiencing the real thing.

- Imagery can use all the senses (touch, sound, etc) kinaesthetic awareness and emotions.

CENTERING   This is a focusing technique that uses our breathing.

- Centering can be used for focusing, relaxation or for energising
- Centering can be learned to take moments and used anywhere.

ROUTINES   These are the consistent pattern of thoughts and behaviours used to bring about an optimal performance state.

- Routines can be used to plan weeks before a match or seconds before a skill
- Routines can included imagery, self-talk, centering and other strategies.

Mental skill development

Goal setting

What is setting goals?
The recognition and planning of aims and objectives.

Long term outcome goals	Recognise aspirations, direct training priorities
Medium term performance goals	Provide confidence, enhance motivation
Short term process goals	Focus attention, promote skill development

Benefits of setting goals? These include:

Motivation	Goals that players want to achieve
Confidence	Goals that recognise improvement and performance
Focus	Goals that require and direct attention to specific cues
Skill development	Goals help direct training effort towards desired gains.

How do we use goals?
Increase goal *commitment* and *ownership*
Set goals **WITH** players not **FOR** players.
Set achievable goals
The most effective goals are challenging and difficult but still realistic.
Recognise barriers to goal attainment
Consider obstacles and make action plans to overcome them.
Record goal attainment
Make sure goal attainment is recorded to boost confidence or readjust goals.

Key points Goals should be:

Specific	Tell you exactly what you want to achieve
Measured	Be recordable to recognise effort and improvement
Achievable	Challenging but realistic
Relevant	Meaningful to player's development and enjoyment of rugby
Timed	Include a deadline when a goal should be assessed and revised.

External rewards for outcome goals reduce quality of motivation.
Emphasise effort and improvement for high quality motivation!

Self-talk

What is self-talk?
The statements and dialogue we say to ourselves

Self-talk can be	**Motivational**	"Come on, let's all work hard".
	Technical	"Hands up".

Benefits of self-talk?

Skill development	"Hands up".
Confidence	"I've done this before".
Focus	"Eyes on ball".
Determination	"Run hard".
Motivation	"Have fun - this is what rugby is all about".
Emotional control	"Breathe - next job".

How do we use self-talk?
Ask yourself **"How do you coach yourself?"**

1. When do you find yourself saying negative/unhelpful things?
2. What negative/unhelpful things do you currently say to yourself?
3. What positive/helpful things can you say to yourself instead?
4. Provide players with consistent and positive statements.

Key points Self-Talk should be:

Short	Short statements can be said at any time
Positive	Positively framed statements direct attention more effectively
Specific	Clarity is important to get quick results
Meaningful	What is important is the meaning of the words to the individual.

Consistent self-talk can become habitual and be quick to use. Consistent team calls can be used as triggers to maintain the mental state of players.

Imagery and observation

What is imagery?
The images we create in our minds in the absence of the real thing.

Benefits of imagery? These include:
Skill development   Rehearsal of skills
Strategy development Rehearsal of team strategies
Motivational   Overcome obstacles
Confidence   'See' and feel correct performances.

How do we develop players' use of imagery?
1. Start with simple, familiar and controllable images.
2. Use demonstration or video to prompt images.
3. Practice images so that they can be used more quickly when necessary.
4. Images should replicate real life situations as much as possible.

Key points Images should often be:
Clear   Realistic, vivid and accurate
Controlled Controlling the image can help control the outcome
Multi-sensory Images can be visual, kinaesthetic, auditory, tactile etc
Positive   Positive images build confidence and direct attention.

Images should be tailored to the individual preference of each player to make sure the content is meaningful to them. This means giving players lots of different types of images to use and letting them choose what will work best for them.

Imagery, like physical skills, should be practised because our ability to create and control images is important for determining our response to the image.

Centering

What is it?
A quick and simple focusing exercise that requires breathing.

Benefits of centering?
Attentional focus   Clear the mind of distractions and focus on relevant stimulus.
Emotional control   Replace negative thoughts and feelings with positive ones.
Arousal control   Build intensity or calm down.

How do we use it? Centering has some key steps:

1. Focus on your breathing.
Become aware and begin to control breathing.
2. Breathe deeply through your stomach.
Breathe through stomach and relax shoulders.
3. Calm and empty mind.
Use a cue word as you breathe out to remove distractions.
If distracted, refocus on controlling breathing (e.g. to calm yourself - "calm", "think slow", "relax").
4. Focus on relevant cue for upcoming task.
Focus on cue word, trigger or process goal to direct attention for upcoming task
(e.g. to focus on next task - "hands up", "eye on the ball", "next job").

Key points
Cue words Develop cue words beforehand for different phases in the match.
Practice   Centering can be done quickly and on the move - if practiced.

Centering (like all mental techniques) needs practice. Introduce centering into training and gradually reduce time and increase pressure so players can develop this skill.

What are routines?
Routines are controllable and repeatable sequences of thoughts and actions that bring about consistent mental and physical states.

Benefits of routines?

Confirm action plan	Remind yourself of process goals and action plans.
Gain physical readiness	Consistent preparation ensures optimal physical state.
Gain mental readiness	Consistent desirable focus gains optimal mental state.
Build confidence	Confidence can come from a sense of preparation.

How do we use routines? Consider the table below (using example of scrum).

Phase	Desired State	Strategy
Scrum called	Confirm scrum strategy	Focus on scrum process goals
Scrum forms	Correct bindings	Check bindings with pack
	Confident, prepared	Imagery of past successful scrum
Crouch, touch, set	Correct body position	Check posture
	focused, aggressive	Simple motivational self-talk

Scrum engagement

1. What do you/the players want to achieve from a routine?
2. How long can the routine last? Can that be broken down?
3. How can you structure a routine to achieve your desired physical and mental state?

Key points
Incorporate physical and mental components
Be consistent in content and timings
Use simple repeatable techniques
Be flexible to changing circumstances

Competitive routines should be practised in ever increasingly pressured training situations before being used in matches.

NUTRITIONAL GUIDELINES

THE FOODS WE EAT AND FLUIDS WE DRINK CAN BE SPLIT INTO FIVE ZONES EACH OF WHICH IS VITAL FOR OPTIMAL HEALTH AND PERFORMANCE. YOU NEED TO GET A GOOD BALANCE OF ALL OF THEM BUT PRIORITISE CERTAIN ZONES AT PARTICULAR TIMES TO MAXIMISE PERFORMANCE.

CORE

PLAYERS SHOULD EAT AS MUCH OF THESE FOODS AS THEY WANT AND AS OFTEN AS THEY LIKE

All vegetables that grow above the ground, fresh fruit and berries

FLUIDS

VITAL FOR EXERCISE PERFORMANCE AND RECOVERY

Water, sports drinks (when exercising), tea (especially green tea, white tea, herbal and Rooibos tea), no added sugar diluting juice, diluted fresh fruit juice

FUEL

SUPPLIES THE ENERGY FOR TRAINING - PLAYERS SHOULD USE THEM OR EARN THEM

Pasta	Bulgar wheat
Root vegetables	Porridge/oats
Rice	Jams and honey
Cereals	Fresh and dried fruit
Breads	Fruit juice
Noodles	Sports drinks
Quinoa	Energy gels
Cous Cous	Cereal bars

RECOVER

SUPPLIES NUTRIENTS FOR GROWTH AND RECOVERY

Milk	Chicken / poultry
Eggs	Beef
Yoghurt	Fish
Skimmed milk powder	Soy
Cottage cheese	Beans and pulses

RESTORE

HELPS REPAIR DAMAGED TISSUE AND MAINTAINS HEALTHY FUNCTION

Salmon	Extra virgin olive oil	Spices and chillies	Cherry juice
Mackerel and sardines	Linseed oil	Fresh fruit and berries	Large oats
Grass fed beef and poultry	Virgin coconut oil	Green vegetables	Bulgar wheat
	Nuts and seeds	Avocado	Quinoa
		Beetroot	Cous cous

Core

Players should eat as much of these foods as they want and as often as they like.
All vegetables that grow above the ground, fresh fruit and berries.

- WHY? These foods are packed full of vitamins and minerals which help protect the body from infections and repair our muscles after exercise. They are essential for health and rugby and without them we wouldn't be able to exercise.
- HOW? Players should eat these foods as often as they like - they're great as snacks between main meals.

Players should eat plenty of brightly coloured fruit and vegetables as these are the best for an exercising body.

Fluids

Vital for exercise performance and recovery.
Water, sports drinks (when exercising), tea (especially green tea, white tea, herbal and Rooibos tea), no added sugar diluting juice, diluted fresh fruit juice.

- WHY? Our muscles contain a lot of water and when we exercise we lose this water through our sweat. If we lose too much water our body starts to slow down and we can't exercise as hard therefore it's important to keep well hydrated before, during and after exercise.
- HOW? Water is most often the best fluid to have and it's fine to flavour it with no-added-sugar diluting juice as well - SAVE SPORTS DRINKS FOR MATCH DAY ONLY
- HOW? Make sure you take a full water bottle with you to school and training each day
- HOW? Ensure you have something to drink during each training session and match - THIS IS VERY IMPORTANT
- HOW? After exercise make sure you have a drink to help with recovery and avoid dehydration.

A player's urine colour and volume can inform them about their hydration status - aim for urine colour to be 1-3 on the scale.
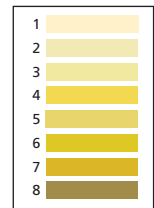
Fuel

Supplies the energy for training - players should use them or earn them.

Pasta	Breads	Bulgar wheat	Fruit juice
Root vegetables	Noodles	Porridge/oats	Sports drinks
Rice	Quinoa	Jams and honey	Energy gels
Cereals	Cous cous	Fresh and dried fruit	Cereal bars

- WHY? The 'Fuel' foods are high in carbohydrates and provide us with energy for exercise
- HOW? Some fuel foods release their energy very quickly (e.g. jams and honey) and therefore should be saved for times shortly before exercise
- HOW? Other fuel foods like pasta, root vegetables and porridge release their energy slowly so are good for breakfast and times when you need a sustained energy supply
- HOW? Fuel foods should be a large part of the plate before and after training but players should aim to keep their intake of 'sugary' foods low - particularly at rest
- HOW? Bowl of porridge, beans on toast, pasta with tuna and sweetcorn, cereal bar and Glass of milk. All of these are great options to supply energy for exercise or help recover after training or a match.

Have a carbohydrate-rich meal 2-4 hours before exercise to make sure you have enough energy for the session or match.

Supplies nutrients for growth and recovery.

Milk	Chicken / poultry
Eggs	Beef
Yoghurt	Fish
Skimmed milk powder	Soy
Cottage cheese	Beans and pulses

- WHY? The recover foods all contain a source of protein which is vital for growth and recovery
- WHY? Our muscles are made of protein and we need protein from our diet to repair damaged muscles and make them stronger
- WHY? We also need calcium from milk and cheese to build strong bones
- HOW? Try and include a source of recover foods at every meal and certainly in the first meal or snack after exercise
- HOW? Low fat milkshake, meat-filled roll, scrambled eggs and/or beans on toast, fish with rice, mince 'n' tatties and cottage cheese on oatcakes. All of these are excellent options as recovery meals or snacks after exercise.

Aim to have a fuel and recover food within 30 minutes of the end of exercise to maximise recovery.
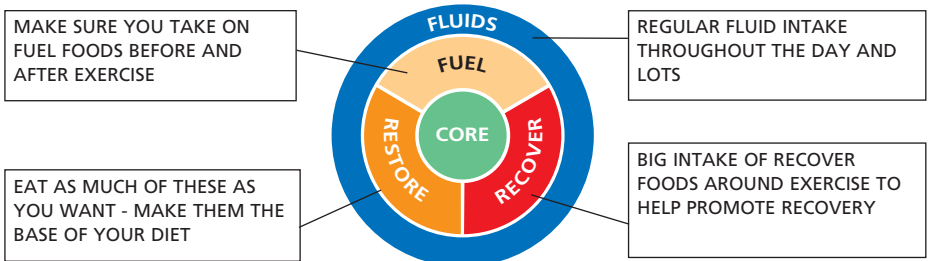
Restore

Helps repair damages tissue and maintains healthy function.

Salmon	Extra virgin olive oil	Spices and chillies	Cherry juice
Mackerel and sardines	Linseed oil	Fresh fruit and berries	Large oats
Grass fed beef and poultry	Virgin coconut oil	Green vegetables	Bulgar wheat
	Nuts and seeds	Avocado	Quinoa
		Beetroot	Cous cous

- WHY? Restore foods provide a lot of small nutrients that our bodies need to stay healthy, repair muscles and prevent them from getting damaged
- HOW? The restore foods can either be a main part of your meal or be included in a snack or as a side dish e.g. Salmon with beetroot and avocado salad
- HOW? Try and include 2-3 servings of restore foods each day and eat as wide a variety of them as possible.

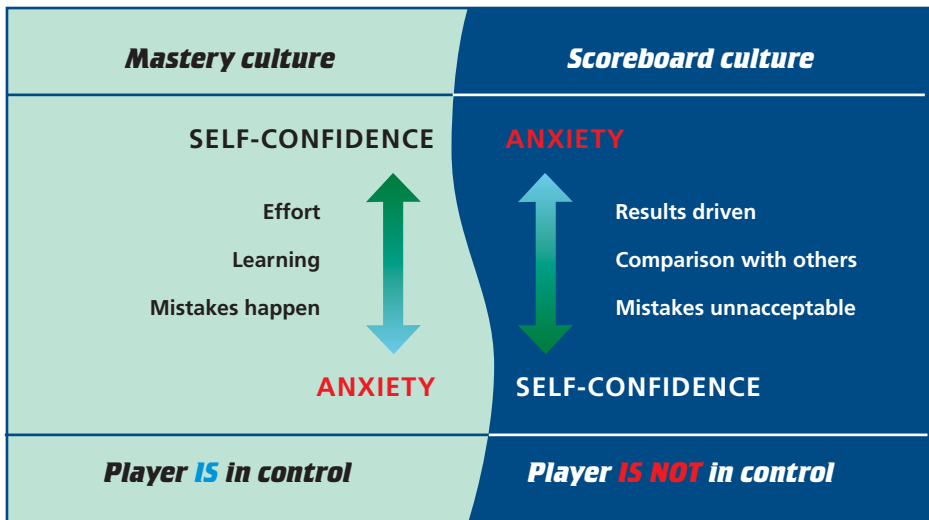Fresh fruit and berries are an ideal snack so combine them with a glass of milk for a complete meal providing core-fluids-fuel-recover-restore.

MAKE SURE YOU TAKE ON FUEL FOODS BEFORE AND AFTER EXERCISE

REGULAR FLUID INTAKE THROUGHOUT THE DAY AND LOTS

EAT AS MUCH OF THESE AS YOU WANT - MAKE THEM THE BASE OF YOUR DIET

BIG INTAKE OF RECOVER FOODS AROUND EXERCISE TO HELP PROMOTE RECOVERY

FLUIDS
FUEL
CORE
RESTORE
RECOVER

in association with The Bill McLaren Foundation

During LTPD stage 3 our aim is to optimise player development through building self-belief and confidence. We do this by focusing on the players' effort and learning to ensure that we create an uplifting team environment where players inspire and encourage each other and learn from their mistakes. If we create an excessively competitive environment where we only value the outcome we might increase the anxiety players experience and this will be detrimental to their overall progression. This is an age where players find themselves in different developmental stages. We need to cater not only for the early developer who is past the growth spurt, but also the late developer who might lack confidence and find competition intimidating. We would like to see our players compete capably in the future through mastering skills and physical competencies at present. Have a look at the figure below for some graphic representation of this concept.

Mastery culture	Scoreboard culture
SELF-CONFIDENCE	**ANXIETY**
Effort	Results driven
Learning	Comparison with others
Mistakes happen	Mistakes unacceptable
ANXIETY	**SELF-CONFIDENCE**
Player IS in control	*Player IS NOT in control*

As coaches we need a growth mindset where we believe in the potential of all players not only in rugby but also in life through emphasising the importance of hard work in order to achieve goals. The key to engaging young people through rugby is to create an enjoyable and challenging environment where a strong rugby ethos prevails.

For further information on the above programme please contact Scottish Rugby's Coach Development department or visit **www.scottishrugby.org/coaching**.

LONG TERM PLAYER DEVELOPMENT – **DEVELOPING THE PLAYER STAGE**
PLAYER PROGRESS GUIDE
By the end of this stage (16 years of age) *almost all* players should achieve competence in the facets below but *some* players may be able to achieve more. Note — this is a development guide NOT a selection tool.

SCOTTISH RUGBY

Player		Date	
Squad		Coach / Teacher	

PLAYER COMPETENCIES (√ = is able to, P = progressing X = is not able to)	√ /P/X	ACTIONS	PLAYER COMPETENCIES (√ = is able to, P = progressing X = is not able to)	√/P/X	ACTIONS
PHYSICAL COMPETENCE Refer to physical competence section for further guidance					
Sprint with sound technique			▪ Overhead squat		
Accelerate			▪ Double leg squats		
Decelerate			▪ Single leg squats		
Change direction			▪ Walking lunge		
Land and jump			▪ Standing long jump		
Fall to ground forwards, backwards and to both sides			▪ Forward hop and hold		
Get back to feet from landing on front, back and both sides			▪ Lateral hop and hold		
Wrestle opponents to the ground			▪ Press-up		
Perform the following with sound technique			▪ Pull-up		
▪ Prone stabilisation			▪ Horizontal pull-up		
▪ Lateral stabilisation			▪ Medicine ball rotations		
▪ Back extension			Link three gymnastic movements / animal walks fluidly in a confined environment - e.g. jump — forward roll — back to feet — accelerate away		
▪ Forward roll			Explain the importance of and demonstrate an effective stage specific warm-up and cool-down		
▪ Backward roll					
MENTAL SKILLS COMPETENCE					
Set and achieve realistic goals for self			Answer questions from coach / teacher to develop awareness		
Understand and apply a variety of other mental techniques as required			Review sessions with coach / teacher		
Optimally regulate their mental state throughout training and competition			Understand the outcomes of their actions (both good and poor practice) in relation to the principles of play		
Understand what they need to do to perform at their best			Cope with winning and losing		
Evaluate their own performance and develop strategies to improve			Communicate with team-mates effectively and undertake different roles during training and matches		
Take responsibility for their own rugby development			Develop mental skills through training and matches		
LIFESTYLE COMPETENCE					
Remember gumshield for every session			Explain why healthy nutrition and sleep are important to standard of play		
Remember water bottle for every session			Explain and display respect for officials, team mates and volunteers in the game and consistently display good sportsmanship		
Understand the benefits of healthy nutrition through a balanced diet of food and fluids					
USUAL EFFORT LEVELS					
Effort level consistently displayed by player. 1= best effort. 2 = hard ˉ very hard effort, 3= fairly hard effort, 4= very light effort, 5= very, very light effort			COMMENTS		

SKILLS COMPETENCE					

ATTACKING SKILLS

Perform the following passes to support in space with sound technique: lateral, switch, loop, pop, clearing, chest			Support effectively through anticipation and reaction		
Hand catch effectively (link to KNT)			Effectively communicates with team mates to ensure good decision making		
Scan effectively to identify space to attack			Kicking - technically proficient in different types of kick: punt, grubber, chip etc.		
Attack space and / or beat defenders through evasive footwork			Jump and catch the ball above head		
Show knowledge of gain and tackle lines			Understand the principle of counter attack		
Understand how to play with a basic structure					

DEFENDING SKILLS

Has effective individual tackle technique (link to KNT)			Scan to identify attacking threats		
Perform a safe and effective side, front-on and rear tackle			Understand different systems of defence for tackling, drift and blitz		
Go forward individually in defence			Understand their specific role in defence		
Work effectively in defensive chain of 3					

CONTINUITY SKILLS

Makes correct decisions pre, during and post contact			Present the ball correctly (link to KNT)		
Pass before contact through fixing defender			Support effectively through anticipation and reaction		
Get body behind defence to offload			Effectively communicates with team mates to ensure good decision making		

CONTACT SKILLS

Show confidence in contact situations			Identify threats to clear out at breakdown		
Maintain a strong body position pre, during and post contact			Maintain low, dynamic body position when clearing out		
Work to stay on feet through dynamic leg drive to maintain forward momentum			Understand how and when to counter ruck		
Present the ball correctly (link to KNT)			Understand the laws around the contact area		

KICKING AND FIELDING SKILLS

Kicking - technically proficient in different types of kick			Fielding - get into an effective body position keeping eyes on ball		
Kicking - identify the right time to kick e.g. into space, field position etc			Fielding - time jump and rotate body with hip leading		
Kicking - communicate kicking options with team mates			Fielding - understand positional role (scrum half, back 3 etc)		

SET PIECE SKILLS

Understands the role of the set piece as a restart and contest for possession as well as an opportunity to create space to attack

SCRUM			LINEOUT		
Maintain a strong and stable body shape during scrummage			Throw the ball accurately to a moving, jumping player		
Understand different binds that are used			Out-manoeuvre and out-jump an opponent		
Perform correct engagement sequence			Catch the ball above head whilst in the air		
Understand role once scrum is complete			Lift and support effectively then bring player back to ground safely		
			Understand role within different tactical options - catch and drive, off-top, peels		
			Understand role once lineout is complete		

TEAMWORK SKILLS

Work with team to go forward to attack and defence			Recognise and attack / defend spaces		
Communicate with team to attack and defend			Understand the team game plan and their role within it		

KNT SKILLS COMPETENCE

Demonstrate competence in the stage specific key factors of the hand catch / grab (refer to page 11 of guide)			Demonstrate competence in the stage specific key factors of ball presentation (refer to page 11 of guide)		
Demonstrate competence in the stage specific key factors of the offload (refer to page 11 of guide)			Demonstrate competence in the stage specific key factors of individual tackle technique (refer to page 11 of guide)		

SCOTTISH
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www.scottishrugby.org/coaching