



# **SIMON LANGTON GRAMMAR SCHOOL FOR BOYS**

## **SIXTH FORM**

### **Level Physical Education 2019-20**

If you were able to attend the Pre-Sixth Form course you have already completed the set tests.

If you were absent from the course or from the PE lessons with Mr Watson you will need to complete the set tests own before August.

Instructions for the tests are on pages 3-7 of this booklet. Yo-Yo Intermittent Recovery Test is on YouTube.

There are also some suggestions for on-feet sessions (running) and the JAD programme focuses on movement patterns. You are expected to work on this over the summer and return in September in good shape and in a position to improve you test scores.

# Personal Recording Sheet

Name: .....

Sport 1: ..... Sport 2: .....

## Standing Broad Jump

Fitness Component: .....

Raw Score: ..... Analysis: .....

## Illinois Agility Run

Fitness Component: .....

Raw Score: ..... Analysis: .....

## Sit and Reach Test

Fitness Component: .....

Raw Score: ..... Analysis: .....

## Yo-Yo Intermittent Recovery Test

Speed .....

Level .....

# Set Test 1: Standing Broad Jump

## Objective

To monitor the development of the athlete's elastic leg strength.

## Required Resources

To undertake this test you will require:

- Long Jump pit
- 30 metre tape measure
- Assistant

## How to conduct the test

- The athlete warms up for 10 minutes
- The athlete places their feet over the edge of the sandpit, crouches down and using the arms and legs jumps horizontally as far as possible landing with both feet into the sandpit
- The assistant measures and records the distance from the edge of the sandpit to the nearest impression made by the athlete in the sand pit
- The athlete repeats the test 3 times
- The assistant uses the longest recorded distance to assess the athlete's leg strength

## Normative data for the Standing Long Jump Test

The following data has been obtained from the results of tests conducted with world class athletes (Chu 1996)<sup>[1]</sup>.

% Rank	Females	Males
91-100	2.94 - 3.15 metres	3.40 - 3.75 metres
81 - 90	2.80 - 2.93 metres	3.10 - 3.39 metres
71 - 80	2.65 - 2.79 metres	2.95 - 3.09 metres
61 - 70	2.50 - 2.64 metres	2.80 - 2.94 metres
51 - 60	2.35 - 2.49 metres	2.65 - 2.79 metres
41 - 50	2.20 - 2.34 metres	2.50 - 2.64 metres
31 - 40	2.05 - 2.19 metres	2.35 - 2.49 metres
21 - 30	1.90 - 2.04 metres	2.20 - 2.34 metres
11 - 20	1.75 - 1.89 metres	2.05 - 2.19 metres
1 - 10	1.60 - 1.74 metres	1.90 - 2.04 metres

The following table is for male athletes (adapted from: Hede et al. 2011)<sup>[2]</sup>:

Age	Excellent	Above average	Average	Below average	Poor
14	> 2.11m	2.11 - 1.96m	1.95 - 1.85m	1.84 - 1.68m	<1.68m
15	>2.26m	1.26 - 2.11m	2.10 - 1.98m	1.97 - 1.85m	<1.85m
16	>2.36m	2.36 - 2.21m	2.20 - 2.11m	2.10 - 1.98m	<1.98m
>16	>2.44m	2.44 - 2.29m	2.28 - 2.16m	2.15 - 1.98m	<1.98m

The following table is for female athletes (adapted from: Hede et al. 2011)<sup>[2]</sup>:

Age	Excellent	Above average	Average	Below average	Poor
14	>1.91m	1.91 - 1.73m	1.72 - 1.60m	1.59 - 1.47m	<1.47m
15	>1.85m	1.84 - 1.73m	1.72 - 1.60m	1.59 - 1.50m	<1.50m
16	>1.83m	1.83 - 1.68m	1.67 - 1.58m	1.57 - 1.45m	<1.45m
>16	>1.91m	1.91 - 1.78m	1.77 - 1.63m	1.62 - 1.50m	<1.50m

The world record for the standing long jump is currently held by Arne Tvervaag (Norwegian) who, in 1968, jumped 3.71 meters.

## Analysis

Analysis of the test result is by comparing it with the athlete's previous results for this test. It is expected that, with appropriate training between each test, the analysis would indicate an improvement in the athlete's leg strength.

## Target Group

This test is suitable for active individuals but not for those where the test would be contraindicated.

## Reliability

Test reliability refers to the degree to which a test is consistent and stable in measuring what it is intended to measure. Reliability will depend upon how strict the test is conducted and the individual's level of motivation to perform the test. The following link provides a variety of factors that may influence the results and therefore the test reliability.

## Validity

Test validity refers to the degree to which the test actually measures what it claims to measure and the extent to which inferences, conclusions, and decisions made on the basis of test scores are appropriate and meaningful. This test provides a means to monitor the effect of training on the athlete's physical development.

## Advantages

- Minimal equipment required
- Simple to set up and conduct
- The test can be administered by the athlete

## Disadvantages

- Specific facilities required - long jump pit
- Assistant required to administer the test

## Set Test 2: Illinois Agility Run Test

Testing and measurement are the means of collecting information upon which subsequent performance evaluations and decisions are made but in the analysis we need to bear in mind the factors that may influence the results.

### Objective

The objective of the Illinois Agility Run Test (Getchell 1979) is to monitor the development of the athlete's agility.

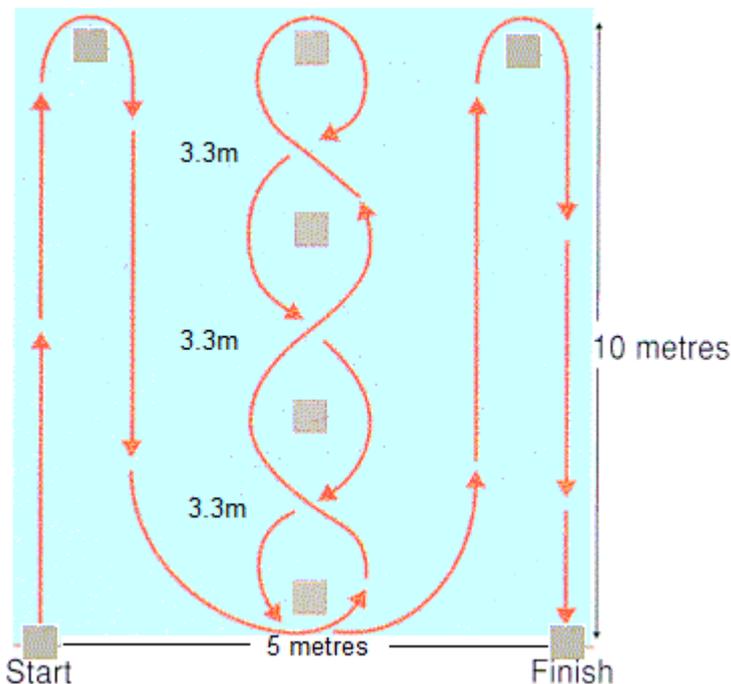
### Required Resources

To undertake this test you will require:

- Flat non-slip surface
- 8 cones
- Stopwatch
- Assistant

### How to conduct the test

This test requires the athlete to run the red line route in the diagram below as fast as possible.



- The athlete warms up for 10 minutes
- The assistance sets up the course as detailed in the diagram
- The athlete lies face down on the floor at the “Start” cone
- The assistant gives the command “GO” and starts the stopwatch.
- The athlete jumps to his/her feet and negotiates the course around the cones following the red line route shown in the diagram to the finish
- The assistant stops the stopwatch and records the time when the athlete passes the “Finish” cone

## Assessment

Normative data for the Illinois Agility Run Test

The following are national norms for 16 to 19 year olds (Davis et al. 2000):

Gender	Excellent	Above Average	Average	Below Average	Poor
Male	<15.2 secs	15.2 - 16.1 secs	16.2 - 18.1 secs	18.2 - 19.3 secs	>19.3 secs
Female	<17.0 secs	17.0 - 17.9 secs	18.0 - 21.7 secs	21.8 - 23.0 secs	>23.0 secs

## Analysis

Analysis of the test result is by comparing it with the athlete's previous results for this test. It is expected that, with appropriate training between each test, the analysis would indicate an improvement in the athlete's agility and speed.

## Target Group

This test is suitable for team sports but not for individuals where the test would be contraindicated.

## Reliability

Test reliability refers to the degree to which a test is consistent and stable in measuring what it is intended to measure. Reliability will depend upon how strict the test is conducted and the individual's level of motivation to perform the test. The following link provides a variety of factors that may influence the results and therefore the test reliability.

## Validity

Test validity refers to the degree to which the test actually measures what it claims to measure and the extent to which inferences, conclusions, and decisions made on the basis of test scores are appropriate and meaningful. This test provides a means to monitor the effect of training on the athlete's physical development.

## Advantages

- Minimal equipment required
- Simple to set up and conduct
- The test can be administered by the athlete
- Can be conducted almost anywhere

## Disadvantages

- Assistant required to administer the test

# Set Test 3: Sit & Reach Test

## Objective

The objective of this test is to monitor the development of the athlete's lower back and hamstring flexibility.

## Required Resources

To undertake this test you will require:

- A 'sit & reach table' or a bench with a ruler
- An assistant



## How to conduct the test

The Sit and Reach Test is conducted as follows:

- The starting position is sitting on the floor with shoes removed, feet flat against the table, and legs straight
- Reach forward and push the fingers along the table as far as possible
- The distance from the finger tips to the edge of the table represents the score for that person
- As the 'sit and reach' table has an overhang of 15 cm, a person who reaches 10 cm past their toes scores 25 cm
- It is important to have several warm-up attempts first, and to record the best score

## Analysis

Analysis of the result is by comparing it with the results of previous tests. It is expected that, with appropriate training between each test, the analysis would indicate an improvement.

## Normative data for the Sit & Reach test

The following are national norms for 16 to 19 year olds.

Gender	Excellent	Above average	Average	Below average	Poor
Male	>14	11 - 14	7 - 10	4 - 6	<4
Female	>15	12 - 15	7 - 11	4 - 6	<4

Table Reference: Davis B. et al; Physical Education and the Study of Sport; 2000

## SAMPLE ON FEET SESSION GUIDE

**Warm Up:** Ensure sufficient warm up is completed → Static mobilisation followed by dynamic mobilisation and running drills including accelerations

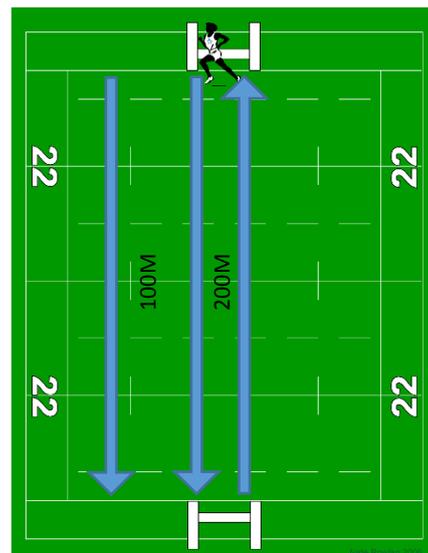
**Running Warm Up:** Start a running Clock – Do this before every 100M/200M Session

- Run 150M @70-80% Max
- Run on 1 Minute Mark  
(Repeat X4)

### Training Session - 100M/200M Repeated Efforts

**Equipment:** Stopwatch/Rugby Pitch or running track

**Explanation:** Start stop watch, run 100M Max, wait for the 1min mark then run 200M. Wait for 3min mark before starting the next 100m rep.



**Warm Up:** Ensure sufficient warm up is completed → Static mobilisation followed by dynamic mobilisation and running drills including accelerations

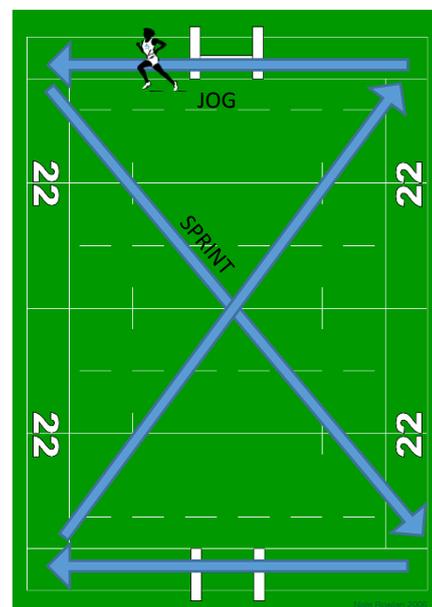
**Running Warm Up:** Start a running Clock – Do this before every 100M/200M Session

- Run 150M @70-80% Max
- Run on 1 Minute Mark  
(Repeat X4)

### Training Session – Figure of 8 Reps

**Equipment:** Stopwatch/Rugby Pitch or running track

**Explanation:** Start & finish in the same spot, jog the widths of the pitch & Sprint the Diagonals - 1 rep brings you back to your finishing point



**Warm Up:** Ensure sufficient warm up is completed → Static mobilisation followed by dynamic mobilisation and running drills including accelerations

**Running Warm Up:** Start a running Clock – Do this before every session

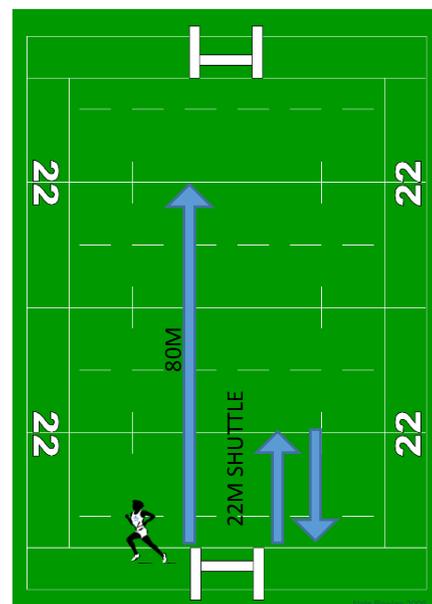
- Run 150M @70-80% Max
- Run on 1 Minute Mark  
(Repeat X4)

### Repeated Efforts

**Equipment:** Stopwatch/Rugby Pitch or running track

**Explanation:** Sprint 80M Max, walk back recovery. This will be followed by 22M Shuttle before resting for 30 SECONDS.

Repeat x 8





# Langton JAD 1



## Foam Rolling - 20 Seconds per Region

Body Part	Description
Quads	Roll through the entire muscle body at a moderate speed, continuously. If you hit a particular sore area of the muscle then pause and add a little extra pressure until the sensitivity reduces, before continuing to roll. You can also move laterally over the sensitive areas.
Calfs	
Glutes	
Hamstring	

## Mobility/activation (10 reps each exercise, work through full range)

Body Part	Description
Sumo Squat Y overhead get up	Take a slightly wider than shoulder width squat stance, bend down and touch your toes, holding onto your feet sit into a deep squat position with your weight through your heels, hold this bottom pose for 2 seconds. Move hands from feet to and overhead squat position (Y) keeping your elbows locked out, attempt to achieve a flat back, and stand up.
Static Front Lunge	Hands behind head to keep chest up and back straight. Frontal: Moderate Step Forward. Pause. Adjust weight to go through mid/rear of front foot as you drop down to the floor, Knees should both end up at 90 degrees with knee just stopping before hitting the floor. Power back the same position off front foot.
Lateral Lunge	Both feet facing forward. As above. When you step sit back as weight goes through heel and your bum sits back into a squat position, maintain a upright chest position
Drop Lunge	Starting in a neutral position, cross over one leg behind the other and sink into a lunge position. Putting your weight through that front leg heel, keep an upright position and push off the back foot into the starting neutral position
Stork Stance	Standing on one leg, bend over, maintaining a straight back and both standing and hanging leg, by hinging at the hips, work towards parallel but stop if form is broken. Stand back up straight by extending the flexed hips
Single leg bridge	Lying on your back with arms to your side, bend the working leg so your heel is next to your bum, keeping your relaxed leg straight, push through your working legs heel until your hips are raised and you are supported by your shoulders
Adductor Horizontal Squat into back bend	Start in a quadruped (all fours) position with both feet knees (knees slightly wider than your hips) and hands on the floor and your back in a neutral position, push down into a horizontal squat position, sit in a deep squat for 2 seconds before pushing forward until your hips are touching the floor and straighten your arms into a back bend position
Double leg jump and hold	Starting on two legs, jump forward and land in an athletic pose position, aim to create a stiff landing, don't allow knees to collapse inwards
Single leg eccentric squat	Start standing in front of a bench or chair (back to the chair as if sitting on it), squat down on one leg keeping control throughout the range and maintain a steady knee and flat back until you reach the bench/chair below. Stand back up with both legs
Plank	Lying face down keep your core activated ensuring the only points of contact to the floor are your toes/elbows/hands. Keep your body as flat as possible head to toe. Hold for 60 seconds.
Side Plank	Start by laying on your side ensuring your hips are fully extended through and your elbow is directly underneath your shoulder. From here raise your hips keeping head/shoulder/hip/knee/ankle alignment all in a neutral position. Hold for 30 seconds on each side – progress to 45 seconds each side if possible
Seated T Spine Rotation	In a seated upright position, place your hands on your head ensuring your elbows are as far back behind your head as possible. Whilst retracting your mid traps (squeeze your shoulder blades together) rotate from right to left ensuring you keep an upright position.
Wall/Floor Angels	Lying on your back, place your arms flat on the ground, palms facing up (supine) with your upper arm 90 degrees angle from your torso and your elbows at 90 degrees. Move your arms in an upward (going above head) and downward (elbows towards hips) motion whilst trying to ensure your lumbar spine, wrists and elbows remain in contact with the floor throughout the movement.

**If you do not have time to complete all of the exercises just do the red or the black!**

