

# HIGHAM LANE SCHOOL

## Y8 CORE PE

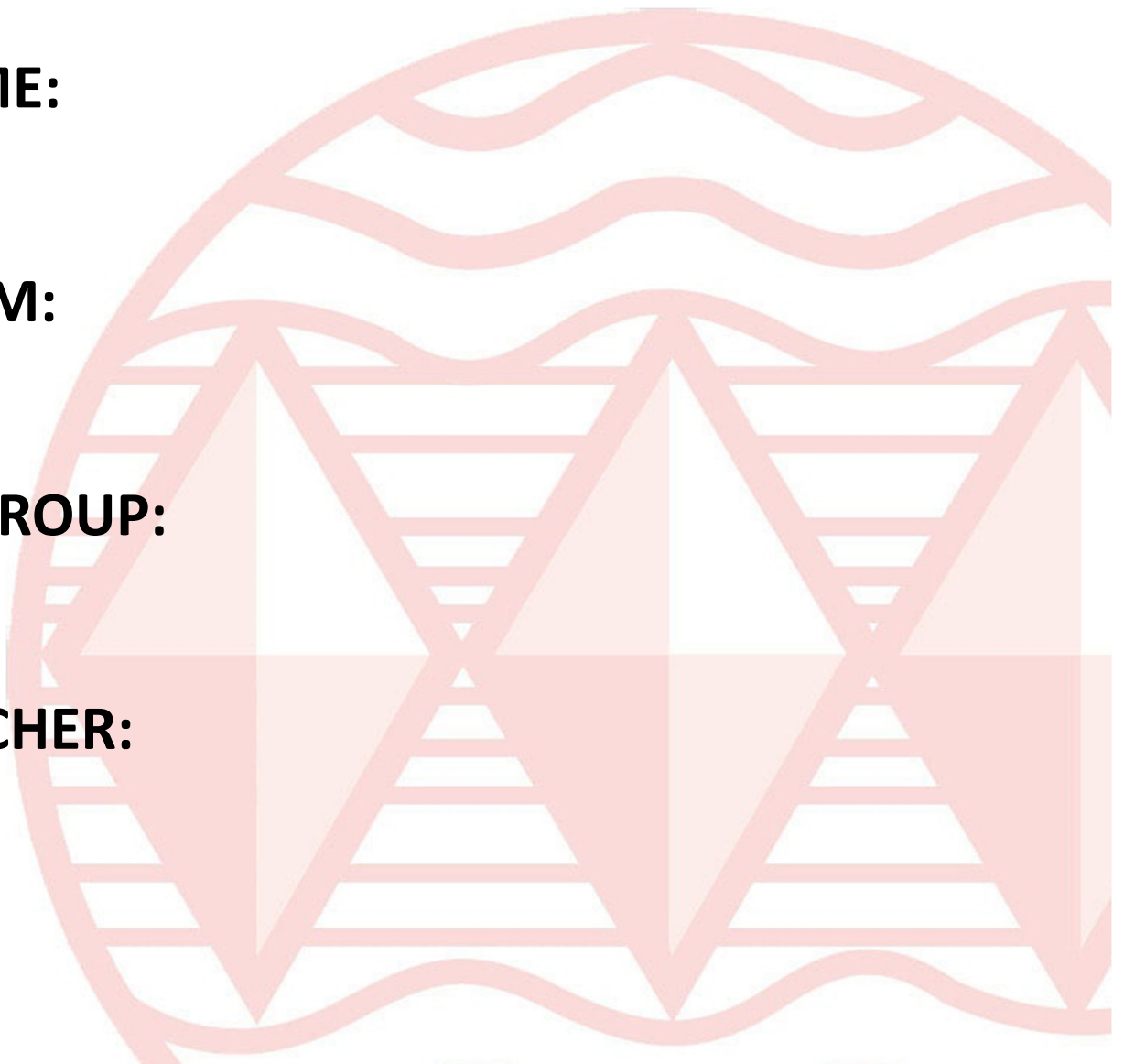
### Knowledge Booklet

**NAME:**

**FORM:**

**PE GROUP:**

**TEACHER:**



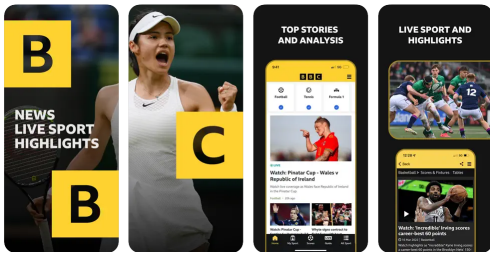


# Higham Lane School

## PE department

### Reading List

8	Ghost	Reynolds, Jason	Fiction	Running
8	Women in Sport	Ignatofsky, Rachel	Non-Fiction	Various
8	Booked	Alexander, Kwame	Poetry/Fiction	Football
8	Black History Makers: Sports People	Sutherland, Adam	Non-Fiction	Various
8	The Crossover	Alexander, Kwame	Comic	Basketball
8	Rebound	Alexander, Kwame	Poetry/Fiction	Basketball
8	The science behind athletics	Amstutz, Lisa	Non-Fiction	Athletics
8	The science behind gymnastics	Carmichael, L. E.	Non-Fiction	Gymnastics
8	Football School	Bellos, Alex	Non-Fiction	Football
8	The Squad: Black Op	Palmer, Tom	Fiction	Football
8	Over the Line	Palmer, Tom	Fiction	Football



Download the BBC sport app to keep up to date with the latest sports news!

**Summarize any reading you have done here!**

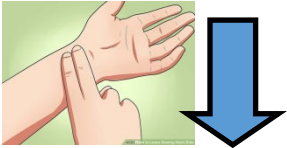
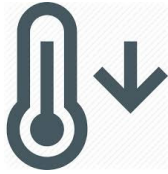

It could be writing a blurb for one of the sports books that you have read or summarizing a news article that you found interesting!!

# Warming Up

<i>Component ( part ) of warm up</i>	<i>Activities you should do</i>	<i>Why this part of the warm up is so important</i>
<b>Pulse raiser</b>	<p>Movements that get your heart beating faster and make your breathing</p> <p>Rate increase ( go up )</p>	<p>It gets the blood flowing quicker to deliver oxygen to your</p> <p>Muscles so they can make energy</p> <p>It gets your muscles warm so you are less likely to injure them.</p>
<b>Mobility</b>	<p>Movements that prepare your joints for exercise</p>	<p>To get your joints used to a full range of movement so you can perform skills really well and safely</p>
<b>Stretching</b>	<p>You need to stretch all the major muscles you will use in your sport</p>	<p>So you reduce the risk of pulling or straining your muscles as they will be able to stretch further</p>
<b>Dynamic movement</b>	<p>Movements that you will use in your sport.</p> <p>e.g. if you have to move sideways in your sport you should do sideways movements in your warm up</p>	<p>To get your body ready to do all the movement you need to do in the sport you are going to play.</p> <p>If you do this you should play well</p>
<b>Skill rehearsal</b>	<p>You should practice the skills you are going to use in your sport.</p> <p>e.g. if you were playing netball / basketball you should practice</p> <p>Throwing, catching and shooting.</p>	<p>This will make sure you are physically and mentally ready for the game by rehearsing important skill and getting you focused. This should help you to play well.</p>



# Cooling Down

Component ( part ) of cool down	Activities you should do	Why this part of the cool down is so important
<p>Pulse lowering activity</p> 	<p>Exercises which gradually Lower <i>heart rate</i> and <i>body temperature</i></p> 	<p>Doing gentle exercise keeps your B_____ flowing which helps you remove a waste product from your muscles called L _____ Acid. If this substance stays in your muscles they won't be able to work properly when you exercise again and they might get I _____</p>
<p>Stretching</p> 	<p>Exercises that help the <i>muscles to Relax from the activity you have done.</i></p> <p>You need to ensure that all the major muscle groups used in the sport are stretched.</p> <p>Stretch each muscle group for 10 to 30 seconds, 2 to 3 times.</p>	<p>This helps relax your muscles and restore them to their Resting length</p> <p>It will help improve your Flexibility.</p> <p>It will help you <i>recover</i> so your body is <i>ready</i> for your next training session or match and you won't <i>get hurt!</i></p>

# HEALTH

Fitness is the ability to *cope* with the *playing environment* you are in. Some sports are *physically harder* than others so you will need a *higher* level of fitness.

<b>Component of Fitness</b>	<b>Definition</b>	<b>Example—when do you need this in sport?</b>
<b>Cardiovascular endurance</b>	The ability to exercise the whole body for a long period of time without fatiguing/ tiring.	Being able to perform an aerobics routine for the whole duration without tiring.
<b>Muscular endurance</b>	The ability of your muscles to keep contracting for a long period of time.	Being able to contract the muscles for the whole song during a aerobics routine.
<b>Muscular strength</b>	The ability to apply force against a resistance.	Rounders player needs to generate a lot of force to bat the ball far.
<b>Flexibility</b>	The range of movement at a joint.	A gymnast will need this at the hip to do the splits.
<b>Speed</b>	The ability to move the body or parts of the body quickly.	Rounders player sprinting between 3rd and 4th to score a rounder.
<b>Agility</b>	The ability to change direction at speed.	Dodging to get away from the defender in netball.
<b>Power</b>	Strength x speed	Generating power in the legs to kick the ball hard in football.  Throwing the shot put over a large distance.
<b>Coordination</b>	The ability to move two or more body parts at the same time with control	Moving the arms and legs at the same time to return the shuttle in badminton
<b>Reaction time</b>	The time taken to respond to a stimulus.	Leaving the blocks when the starter pistol fires in a 100m race
<b>Balance</b>	The ability to remain stable over a base of support.	Performing a handstand in gymnastics

# FOOTBALL

## Positions and rules

### What are the basic rules of football?

- ⇒ If the ball goes off the side of the pitch it is a throw in to the opposing team.
- ⇒ If the ball goes off the end of the pitch it is a goal kick or a corner depending on which team is attacking or defending.
- ⇒ A free kick or penalty is awarded if a player in possession of the ball is illegally fouled.
- ⇒ The goalkeeper is the only player allowed to touch the ball with their hands and can only do this inside their area.
- ⇒ A football game lasts for 90 minutes.
- ⇒ If a player is past the opponent's last defender and in the opposition half when the ball is passed they are offside.



# NETBALL

## Key rules and skills

### What are the main defending skills in netball?

1st stage: side on to the person who is trying to get free for the ball

2nd stage: marking player with the ball - 1m away with both arms up.

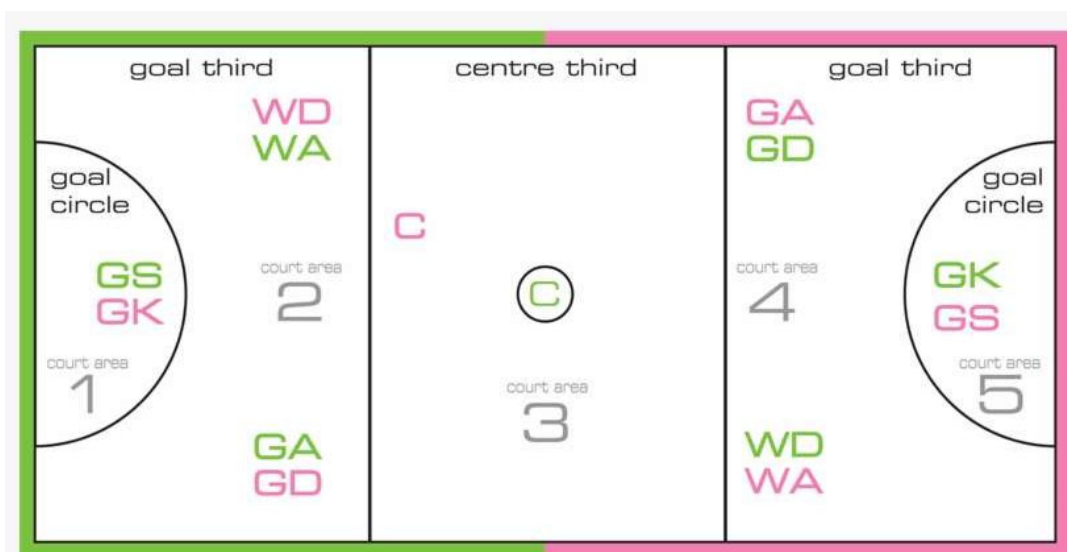
### Key rules

Obstruction: A player attempting to intercept or defend the ball must be at least 1m (3ft) away from the player with the ball.

Held ball: A player has 3 seconds to release the ball.

Offside: A player, with or without the ball, cannot move into an area of the court that is not designated for their position.

Contact: A player must not make contact with another player in order to gain an unfair advantage.



POSITION	RESPONSIBILITIES	COURT AREA
GS	To score goals & to work in & around the circle with the GA	1 & 2
GA	To feed & work with GS & to score goals	1, 2 & 3
WA	To feed the circle players giving them shooting opportunities	2 & 3
C	To take the centre pass & to link the defence with the attack	2, 3, & 4
WD	To look for interceptions & to prevent the WA from feeding the circle	3 & 4
GD	To win the ball and reduce the effectiveness of the GA	3, 4 & 5
GK	To work with the GD & to prevent the GS from scoring goals	4 & 5

# GYMNASTICS

## Key rules and skills

Women's gymnastics has 4 disciplines;



**Floor**



**Uneven bars**



**Beam**



**Vault**

**There is also acrobatic gymnastics which is scored as below.**

The 3 areas are added together to create an overall score:

### Difficulty– D score

This refers to how complex the routine was.

**This is marked out of ten!**

### Execution— E score

This refers to the execution of the routine aka how neat and tidy it is!

**This is marked out of ten** and then multiplied to create a maximum score out of 20.

What should you look out for?

- Straight legs, pointed toes and accurate body shapes
  - Good extension and posture
  - Good height in flight elements
  - Light, controlled landings

### Artistry– A score

**This is marked out of ten** based on:

- Partnership
- Expression
- Performance
- Creativity
- Musicality

# Badminton

## Key rules and skills

The main aim of the game is to win the best of three games of 21 points. A point is scored every time the shuttle lands inside the opponent's court or if a returned shuttlecock hits the net or lands outside of the court the player will lose the point.

Badminton can be played as a singles or doubles game.

### What are the main rules of Badminton?

1. At the start of the rally, the server and receiver stand in diagonally opposite service courts.
2. A legal serve is when the shuttle is served diagonally across the net and across the court.
  3. The shuttle must land over the service line.
  4. A second serve is not allowed.
5. A rally will then take place. Your opponent will try to reach the shuttle and send it back into your half of the court.
6. You can win rallies from your opponent's mistakes: if they hit the shuttle into or under the net, or out of court, then you win the rally.
  7. When you win the rally, you win a point and also win the serve.
  8. If the shuttle lands on the line, it is classified as in.
  9. You must not touch the net during the game.
10. You are not allowed to hit the shuttle with part of your body.

# Health

## Aerobics

An aerobics session includes 4 main components that are performed in time with music:

**WARM UP    AEROBIC    MUSCULAR    COOL DOWN**  
**(Body Conditioning)**

### WARM UP

Consists of a pulse raiser, mobility and stretching sections.

In your pulse raiser you should try to include a full range of movements and gradually increase the intensity by using more intense movements and more intense variations of movements. Remember to change movements every phase (4x8 beats).

### Aerobic component

You should be working between 60-80% of your maximum heart rate (aerobic training zone). It should raise your heart rate and breathing rate and increase your muscle temperature. This section is working on improving your cardiovascular endurance.

### Muscular component

In this section you are working on your muscles ability to contract for a long period of time without fatiguing—muscular endurance. You should do several repetitions of each exercise in time with the beat and target different muscles groups.

### Cool down

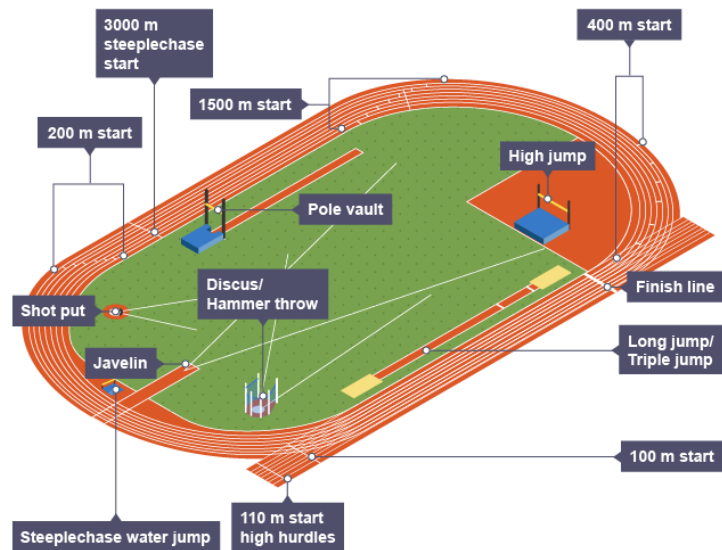
Consists of a pulse lowering exercise and stretches.

This section should be to a slower piece of music and aim to gradually lower heart rate, body temperature and breathing rate. This should also speed up the removal of lactic acid.

# ATHLETICS

## Key rules and skills

A typical athletics stadium is set out below. Several events will be taking place at one time.



**Sprint start:** It is important an athlete has a good reaction time to respond quickly to the starters signal at the start of a sprint. However competing in a race, you must not move before the signal. If you do it is called a false start and you will be disqualified.

**Relay:** During each leg run, the athlete has to carry a baton and hand it over to the next team member. The baton exchange has to happen within a 20m changeover box. If the baton is exchanged outside of the box, the team is disqualified. 1st runner needs to have a good sprint start and be able to run a bend; 2nd runner will run a straight; 3rd runner needs to be able to run a bend; 4th runner is normally the quickest straight-line runner.

**Anaerobic vs aerobic respiration:** Sprinters will predominantly use anaerobic respiration during the race as they need to produce energy quickly without waiting for oxygen—but this will build up lactic acid. Long distance runners will use aerobic respiration as they have time to use oxygen and do not want lactic acid to build up as this causes fatigue.

**High jump:** You must take off on one foot in high jump and clear the crossbar without knocking it off. If you do this, it is considered a legal jump. Athletes will normally use a scissor kick technique or the Fosbury flop.

**800m run:** This requires the athlete running 2 laps of the track. Athletes will pace this race to make sure they finish in the quickest time possible. It is important to cool down after a 800m to speed up the removal of lactic acid from the leg muscles.

**Throws:** Footwork is used in all of the throwing events to generate more power and momentum so the object travels further.

# ROUNDERS

## Key rules

### How can you score in rounders?

- 1 rounder if ball is hit and 4th post is reached and touched before next ball is bowled
- 1 rounder if ball is hit and 4th post is reached on a no ball (you can't be caught out on a no ball)
  - 1/2 rounder if 4th post reached without hitting the ball
- 1/2 rounder if ball is hit and 2nd or 3rd post reached and touched before next ball is bowled
  - Penalty 1/2 rounder for an obstruction by a fielder
  - Penalty 1/2 rounder for 2 consecutive no balls to same batter

### Rounders rules:

1. You must not step out of the batting box before hitting or missing a ball
2. You must not run inside a post (unless obstructed)
3. You must not overtake another batter on the track
4. Deliberately throw or drop the bat
5. You must stay in contact with the post with your hand or bat