

**Year 9 Girls  
Knowledge  
organiser Booklet  
For PE**

# Y9 BTEC Introduction

# Knowledge Organiser

# Theory

**Skill related components:**

- A**gility
- B**alance
- C**oordination
- P**ower
- R**eaction Time
- ABCPR**

## Agility

The ability to **change direction quickly** to allow performers to out-manoeuvre an opponent.

## Balance

The ability to **maintain centre of mass over a base of support**.

## Coordination

The ability to **move two or more body parts at the same time smoothly and efficiently**,

## Power

The product of **speed and strength** to allow for explosive movements in sport.

## Reaction Time

The **time taken to respond to a stimulus** (e.g. gun), useful in fast-paced sports to make quick decisions about

## 5 Body systems:

### Cardiovascular

### Respiratory

### Muscular

### Skeletal

### Energy

**Physical related components:**

- M**uscular Endurance
- A**erobic Endurance
- M**uscular Strength
- S**peed
- F**lexibility
- B**ody Composition
- MAMSF**

## Muscular Strength

The **maximum force** that can be generated by a

## Speed

Distance divided by time. To **reduce time taken to move the body**

## Aerobic Endurance

The ability of the cardiorespiratory system to **supply oxygen and nutrients to the muscles to sustain low to medium intensity work**

## Flexibility

The **range of motion possible at a joint**

## Muscular Endurance

The ability of the muscular system to **continue to contract at a light to moderate intensity**

## Body Composition

The **ratio of fat mass to fat-free mass in the body**

# Y9 BTEC Introduction

# Knowledge Organiser

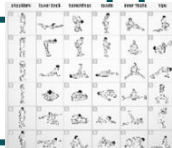
# Practical

## What is a warm-up?

A period or act of preparation for a match, performance, or exercise session, involving gentle exercise or practice.

## What do you need to include within a warm-up?

\*Pulse raiser \*Mobiliser \*Preparation stretches



## Delivering a warm-up

### Demonstrations

- \*Help understand the activity more.
- \*Explains the task in a different way.
- \*Helps students not be confused over what they have to do.

**T test** – Complete the course as quick as possible. Keep facing forwards.



When leading you need to ensure that individuals are supported. To do this you could:

- Observe participants
- Provide clear instructions
- Provide teaching points
- Providing feedback to participants

## Training Methods



**1 minute press up test** - complete as many press up's as you can in 1 minute.



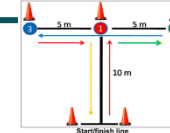
**1 minute sit-up test** – complete as many sit-ups as you can in 1 minute.

## Fitness Testing

**12 minute cooper run** - run around a 400m track or pitch for 12 minutes. Note down the distance.

### Standing Long

Athletes stand behind a marker and have to complete a two footed jump as far as they can. Without falling backwards. 3 attempts – best value stands.



**Shoulder flexibility test** – Put your right arm straight up and bend your elbow so it bends behind then use your other hand to try and touch it

### Measuring Heart Rate

- Measured in BPM.
- Count the beats for full 60 seconds
- Neck (Carotid Artery)
- Wrist (Radial Artery)



### Pulse raiser

A light exercise that slowly increases HR and body temperature.

**Examples;** jogging, skipping, cycling.

### Mobiliser

Activities that take the joints through their range of movement.

**Examples;** open the gate, close the gate.

### Preparation stretches

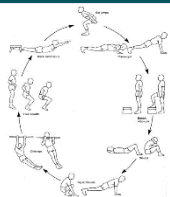
Activities to stretch the main muscles that will be used in the activity.

### Aerobic Endurance

- **Continuous training** - working for a prolonged period of time at a steady stress level.
- **Circuit training** - Each exercise is performed for a specified number of repetitions or for a set time before moving on to the next exercise. The exercises are separated by a short rest period.

### Power

**Plyometric training** - Plyometrics is a type of exercise training that uses speed and force of different movements to build muscle power.



# Table Tennis – Year 9

## Table Tennis Equipment

### The Racket



Red on one side --  
Black on the other  
side --Can be any  
shape, size or weight -  
-Must be a flat surface

### The Ball



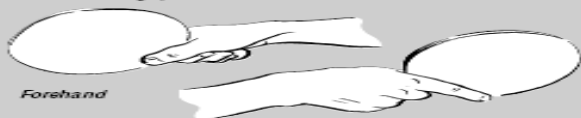
Colour: must be  
white or orange  
(Matt)---Spherical ---  
Weigh 2.7g ----  
Diameter of 40mm



The Table --Flat and sturdy --possibly on wheels and secured or static --Dark blue or green colour --2cm white border line with a 3mm centre line

**Fitness for Table Tennis:-** Players must have good reaction time and hand-eye coordination.

Shakehands grip

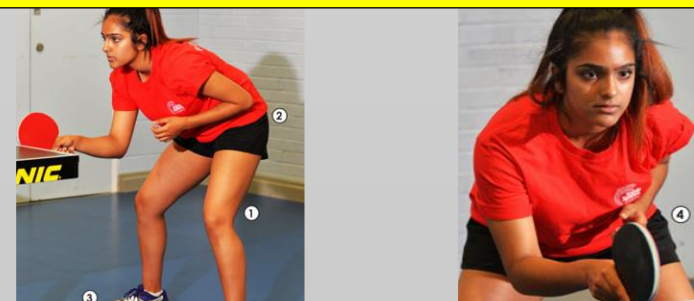


**Shake Hands Grip** Form a 'V' with thumb and forefinger -- Place thumb and forefinger flat against paddle -- Curl 3 remaining finger around handle -- Keep finger and thumb away from middle of

**Pencil Grip** Thumb and forefinger on same side of paddle --3 remaining fingers behind on the back of the paddle --Ensure fingers are away from the center of the paddle.

### Ready Position

1.Knees Bent 2. Leaning slightly forward so your weight is on the balls of your feet. 3. Feet shoulder width apart 4. Racket should be table height and in front of the body.



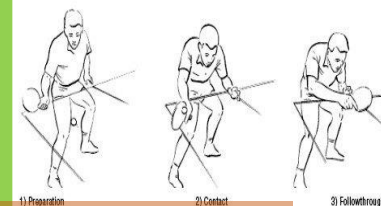
**Forehand Push** Forearm level with and close to the table—Bat angled at 45`---Right foot just behind left foot--- Contact with the ball as soon as it bounces— Push the ball forward the bat should not come up from table surface



**Backhand Push** Feet facing where the shot is to be aimed – Bat in front of body 45` angle close to table surface – Contact with the ball as soon as it bounces, push the ball forward, bat should not come up from the surface of the table. – Step in with right foot if the ball is short.



**Serving** -- Bouncing the ball on your side of the table, over the net and then landing on the opponent's side of the table-- 2 serves each (no 2nd serve) --Serve behind the white line at the end of the table --Ball thrown up 6 inches from the hand --Ball presented on an open hand/ palm --Hit the ball on to your side first and then onto opponents' side --Ball is not allowed to touch the net --'Let' ball touches net and hits opponents side of the table -- Single – serve anywhere on the table --Doubles – right to right --Non-racket hand cannot go on



**Rally:** The receiver must return the serve by hitting the ball after it has bounced. The ball is then hit alternately over the net onto the table by each player until one player fails to return the ball. The ball must be struck before it bounces twice on the table. The rally ends if the ball does not land on the table or if a player misses the ball, or if a player it's the ball without bouncing on their side of the table.



**A game:** A game shall be won by the player or pair first scoring 11 points unless both players or pairs score 10 points, when the game shall be won by the first player or pair subsequently gaining a lead of 2 points.



## Year 9 Netball Knowledge Organiser

Key Term	Description	Main Coaching Point
Centre Pass system	A pathway of passes from the centre to attacking D	All players must understand the system
Running Step	The high running pass is used when a player is trying to get the ball quickly into an attacking position.	Catch ball mid-run <u>then</u> <u>release</u> the ball before re-grounding landing foot
Holding Space	A method of using the body to protect space	Place body close to opposition without moving until ball is passed
Attacking circle work	Creating Space using the attacking D	Attacking players work together
Motorway Lines	Create space using vertical zones on the court.	No more than 3 players in a lane
Penalty Pass	Contact / Obstruction	Offending player must stand beside the pass

Examples of centre pass systems – can you demonstrate these in a game?



The footwork law states a player must release the ball before putting their landing foot down once it is raised if completing the running step.



Key points for centre pass systems. All players on the team know the system so talk. Players start initial movements or system a metre or two BEFORE the transverse line, to get opponents moving and help open up space when the whistle goes. Ideally, your WA and GA shouldn't both be over the transverse line on a centre pass. Have a fall back play if the designated team player can't get free.

A centre pass occurs after a goal has been scored, when the Centre passes the ball. A short pass is a pass between two players on the same team, where the length of the pass is so short that a defensive player cannot get between the two opposing players to intercept the ball.



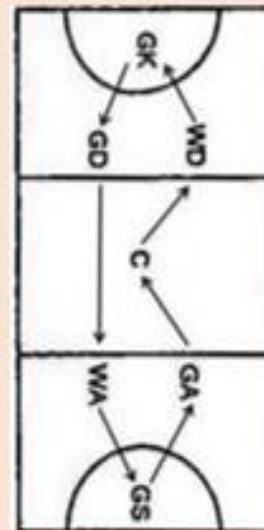
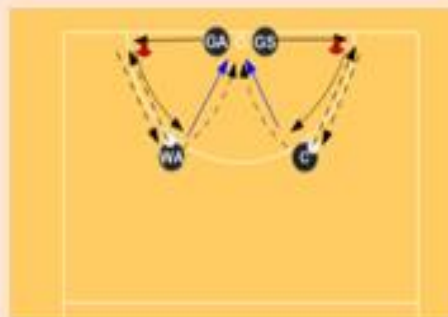
Holding Space

The player needs to work to **hold** this position by making slight adjustments with the feet to keep the defender contained. As the ball is passed into the **space** attacker holds position until last possible moment and then lunges, jumps or reaches to receive ball without allowing defender to reach the ball



Attacking Circle Work.

Can you show these strategies in a game?



Motorway Lanes

**PENALTY PASS (PENALTY SHOT** if in the goal circle) is awarded where the infringement occurred. The offending player must stand out of play beside the thrower until the pass or shot has been taken. Any opposing player allowed in that area may take the penalty



# Orienteering

## Area Symbols



## Key Terms

**Start time/ end time:** Time taken to complete the course.

**Control card:** Sheet to record answers on.

**Control marker:** The point on the map you are looking for. These have the answers on.

**Orienteer:** Align the map to match the features on the ground. Move around the map like a car goes around a roundabout.

**Catching feature:** a feature you will catch if you have passed your control marker.

**Aiming off:** Aiming towards a feature to guide you in the right direction towards the control marker.

**Attack point:** Head towards an obvious feature near the control point to help you locate the marker.

## Orienteering Skills

**Orienteering:** A competitive sport where participants travel with the aid of a map and/or compass.

**Communication:** Exchanging information with another person or team.

**Team work:** Combined action of a group, especially when effective and efficient.

**Problem solving:** action to overcome a challenge.



Control Marker

## Fitness Components

- Cardiovascular endurance
- Muscular endurance
- Speed
- Agility

## Line Symbols



## Point Symbols



# Fitness and preparing for BTEC Sport – Year 9 (1)

## Skill related fitness components (ABCPR)

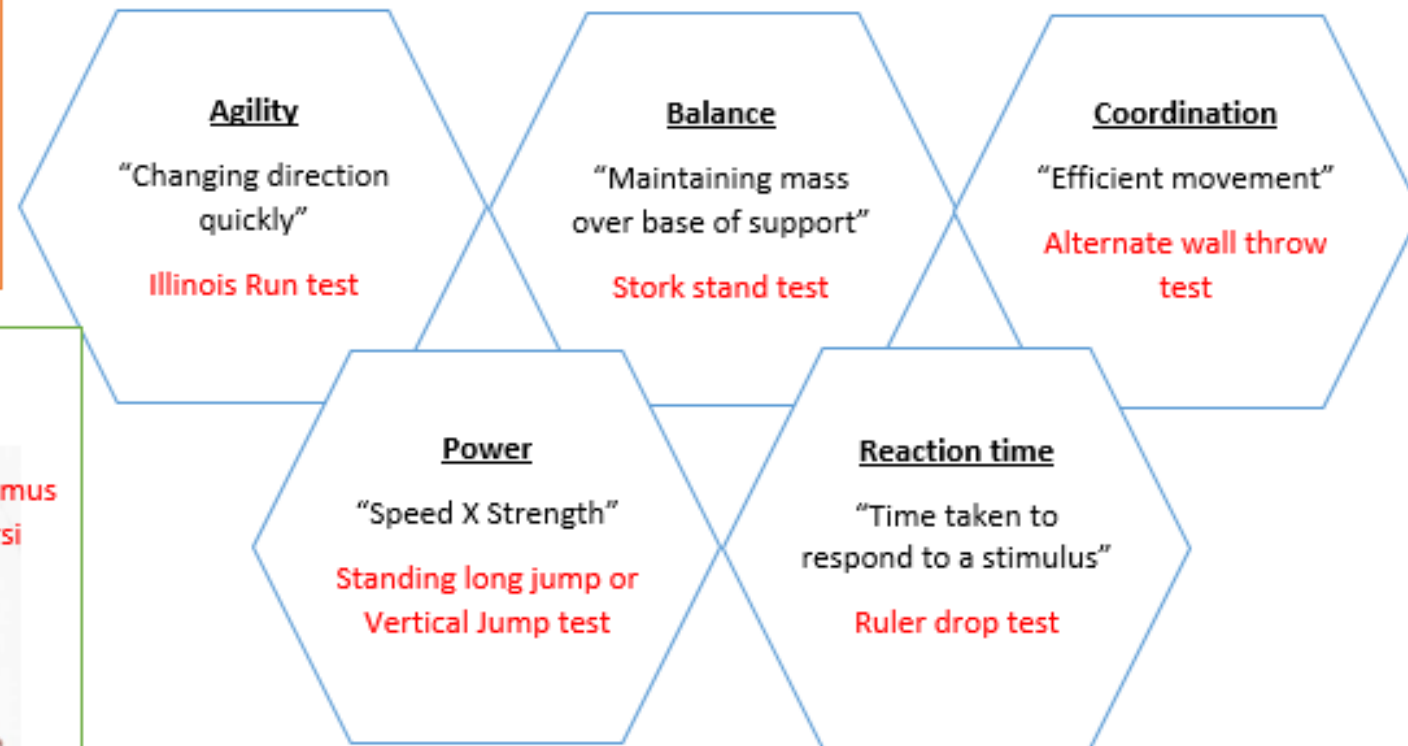
Is there a 3<sup>rd</sup> phase to a warm up?

### Sport Specific Phase

- Completed after Pulse raiser and Stretching – but before main
- Replicates the actions that will be used in the main sport
- E.g. Shooting or Passing

What muscles do I need to know?

Here are the main torso muscles to learn:



How do I plan my training so that it is safe and effective? – Use the Basic principles of training: FITT

### Frequency

Plan the right number of sessions per week

e.g.: twice a week to start with then build up

### Intensity

Plan the right intensity for the fitness component

e.g.: Speed = high intensity  
Endurance = low intensity

### Time

Make your session last the correct amount of time

e.g.: 30-60 minutes to start with then can build up

### Type

Select the right training method for your goal

e.g.: Speed = interval,  
Endurance = Continuous



# Fitness and preparing for BTEC Sport – Year 9 (2)

**When planning a goal, make sure it's:**

<b>S</b>	<b>Specific</b> - clear and meets your training/sports needs
<b>M</b>	<b>Measurable</b> – to see if improvements have been made
<b>A</b>	<b>Achievable</b> – and challenging for you personally
<b>R</b>	<b>Realistic</b> - in relation to ability and time
<b>T</b>	<b>Timed</b> - set a date to complete by
<b>E</b>	<b>Evaluated</b> - progress regularly & adapt if you're not on track
<b>R</b>	<b>Rewarded</b> - keep yourself motivated through rewards

## Energy – where does it come from?

- Energy comes from our diet (the food and drink that we take in)
- Different food/drink have different number of calories in that our body stores up and converts into energy when we begin to exercise
- The more calories we intake, the more exercise we need to do otherwise the body will store this excess as fat
- Good news is: our bodies burn calories without having to do anything approx. 1600kcal depending on body size
- Averages: Adult male needs: 2500kcal      Adult female needs: 2000kcal



RPE is another way to measure how hard your working  
It uses a scale of 6-20 to measure how hard you think your exercising

6		How you feel when lying in bed or sitting in a chair relaxed. Little or no effort.
7	Very, very light	
8		
9	Very light	
10		
11	Fairly light	Target range: How you should feel with exercise or activity.
12		
13	Somewhat hard	
14		
15	Hard	
16		
17	Very hard	How you felt with the hardest work you have ever done.
18		
19	Very, very hard	
20	Maximum exertion	
		Don't work this hard!

**What physical features might you see of someone working in the red zone?**  
Sweating, going red, tiring/ slowing down, poor technique, very high HR and BR



# Basketball – Year 9

## Defending:

**Full court press** – defensive team apply the man to man defence as soon as the opponents gain possession of the ball.

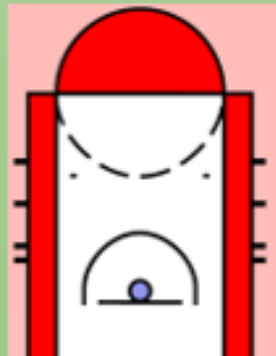
**Half court press** – defensive team apply the man to man defence when the opponents enter their half of the court.

## Screen:



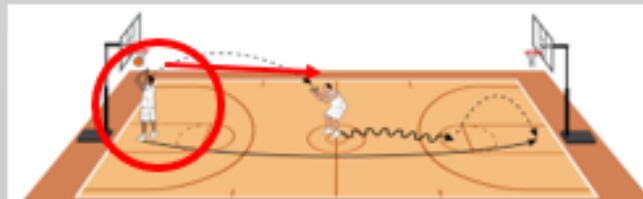
Is a blocking move by an attacking player in which they stand beside or behind a defender in order to free a teammate to drive to the basket.

## 3-second rule:



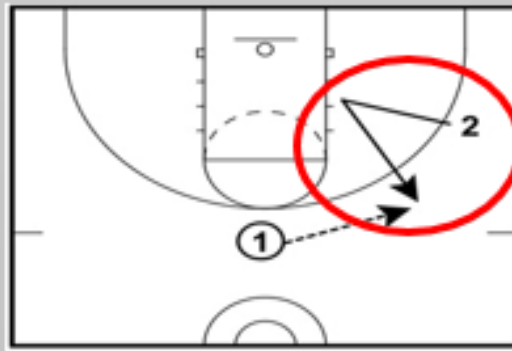
Attacking players can only spend 3 seconds in opponents key

## Outlet pass:



Defender rebounds the ball, pivots and passes the ball to a teammate. This leads to a '**Fast Break**'

## Cut:



Player 2 runs in and back out in a '**V**' shape.  
Player 1 passes him the ball.  
This creates space between number 2 and his defender.

## Dominant/ non-dominant hand:

**Dominant hand** = your strongest hand

**Non-dominant hand** = your weakest hand

## Fake and drive:

A player with the ball fakes/ pretends to shoot.

Hoping to trick the defender.

Putting the defender off balance, and they drive to the basket for a shot.

## 24-second rule:

When a team gains possession of the ball, they have 24 seconds to get a shot off.

**Why a time limit?**



## Substitutions:



In Basketball you are allowed an unlimited number of substitutions.

**Why unlimited?**

## Fast break:

After an **OUTLET PASS**.

A team attempts to move the ball up the court quickly as possible, so that the defence is outnumbered and does not have time to set up.

# Athletics – Yr 9

## Competition formats:

There are often qualifying stages before a final in Athletics

## Running races:

This means heats where the fastest runners from each race or 'fastest losers' = qualification to the next stage. This continues until the final.

## Throwing and Jumping events:

In the qualifying stages athletes have a number of attempts (usually 3) to achieve the best score possible. The top 8 or 12 athletes then qualify for a final.

## Medals for top 3 places

### Olympic record (OR):

Best score achieved by anyone at the Olympic games

### World record (WR):

Best score achieved by anyone at any formal competition (including Olympics)

### Personal best (PB)

Best score achieved by that person



## Relay Changeover

Receiver holds out hand with palm facing down



Receiver starts running when carrier reaches the 'mark' (10m away)

Carrier gives command 'Hand'

Receiver gives call when baton is in their hand



Carrier sweeps baton from low to high

Receiver holds out hand with palm facing up



Carrier sweeps baton from high to low

Relays include 4 runners who compete as a team to get the baton to the finish line first.

There are two main relays:

### **4 x 100m (1 lap race, each person runs 100m): Runners must stay in their lane**

1<sup>st</sup> leg (runner) – should have good reactions and a fast start (they run the first bend), 2<sup>nd</sup> leg – runs a straight, 3<sup>rd</sup> leg – runs the other bend, 4<sup>th</sup> leg (anchor) – runs the last 100m to the finish line (tactically this is often the fastest runner).

### **4 x 400m (4 lap race, each person runs 400m)**

1<sup>st</sup> leg (runner) – should have good reactions, a fast start and must run in their lane, 2<sup>nd</sup> leg – usually runs 100m in their lane they moves to the inside lane. 3<sup>rd</sup> and 4<sup>th</sup> legs can run on the inside lane. This race is also sometimes ran as a mixed gender race.

# Year 9 Knowledge organiser- ROUNDERS

## Key Words

Directional Batting  
Spin Bowl  
Donkey Drop  
Back up  
Support Play  
Last Batter  
Stump Box  
Miss Field  
Tournament Play  
Roles

## Advanced Bowling

### Spin Bowl

Rotation of wrist at release point. Make the ball spin by twisting the wrist when releasing the ball. 4 fingers on outside of the ball, thumb on inside of ball. Rotate thumb backwards and fingers forwards.

### Donkey Drop

Stand facing the batter; one or two paces back from the front line of the bowling square.

Hold the ball in your dominant hand

Step forward, transferring your weight from your back leg to your front leg (as in normal bowling action), keep lower to the ground than in a straight arm bowl

Swing your arm from back to front (like a pendulum) with an underarm action

Release the ball a little higher than your waist height

Flick your wrist upwards to send the ball looping up rather than straight out



## Roles and Responsibilities in a Tournament

**Two Umpires**, in charge of scorecard & scoring, seeing Batters bat in order. A tournament innings is 18 good balls, umpire calls these.

**Recorder**, collects score cards and records these on a tournament score sheet,

**Tournament manager**, oversees pitches, equipment, risk assessment.

**Scenario: Eight of the nine batters are out during an innings. The innings is not over.**

What options does the last batter have?

How can the fielders get the last batter out without stumping a post or catching them out?

## Back up/Support Play

Movement of fielders to support post players. Eg.

When ball hit backwards - Backstop moves to front of batting square and throws ball to second post. 2nd and 1st deep create a triangle with second post to retrieve an inaccurate throw from BS.

When a ball has been hit into deep field and fielders retrieve the ball to throw to 4th post BS will move behind the post in line with direction of throw to catch an over thrown ball.

## Miss Field - No Rule!!!

If a batter reaches 3rd Post as 4th was stumped and the ball is then no longer at the post or in the possession of the bowler in the bowling square (it does not have to be misfielded), the batter may wish to run on (especially if there are only a couple of batters left in) but would not score. If the batter was between 2nd Post and 3rd when 4th was stumped, this would not stop them from scoring in the usual way as it has to be the post immediately in front of the batter that is stumped to prevent scoring.



## Last Batter

When only one batter left in they will be given 'Best of three balls'. Bowler will bowl and batter can choose not to run on the 1<sup>st</sup> and 2<sup>nd</sup> delivery, however, they must take last ball. This continues until this batter is out

## Stump Box

Batting Square becomes a base that can be stumped if no batsman is waiting to bat.