

# Anatomy and Physiology

**Identify** the structure of the skeletal system

- .....
- .....
- .....
- .....
- .....

**Explain** the function of the skeletal system

- .....
- .....
- .....
- .....
- .....
- .....

What is meant by the term 'antagonistic pairs'?

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.....  
.....

Using 2 sporting examples, explain how Antagonistic pairs work.

- 1.....  
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- 2.....  
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**Muscle contractions**

Explain the following terms-

- Isotonic.....  
.....
- Isometric.....  
.....
- Concentric muscle contractions.....  
.....
- Eccentric muscle contraction.....  
.....
- Provide a sporting example for a concentric and eccentric muscle contraction.....  
.....  
.....  
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.....

Draw a picture of a synovial joint and label it below

**Explain** the role of the following parts of a joint;

Cartilage-

.....  
.....

Ligaments.....

Joint capsule-

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.....

Synovial fluid-

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.....

Bursae-

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.....

Provide a definition for each of these joint movements;

Flexion-

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Extension-

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Abduction-

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Adduction-

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Rotation-

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Provide a sporting example below

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Draw and label the pathway of air below and explain the role of each part

Explain the mechanics of breathing

Inspiration

Expiration

**Heart structure and the cardiac cycle**

Draw and label and picture of the heart.

Trachea-

Bronchi-

Bronchioles-

Lungs-

Alveoli-

**Redistribution of blood**

Vasoconstriction

Vasodilation

Explain the pathway of blood below

- .
- .
- .
- .
- .
- .

Explain the process of gaseous exchange

Identify the key features that allow gaseous exchange to take place

- .
- .
- .

Explain the structure and function of the following blood vessels

Arteries-

Veins-

Capillaries -

# Aerobic and Anaerobic Exercise



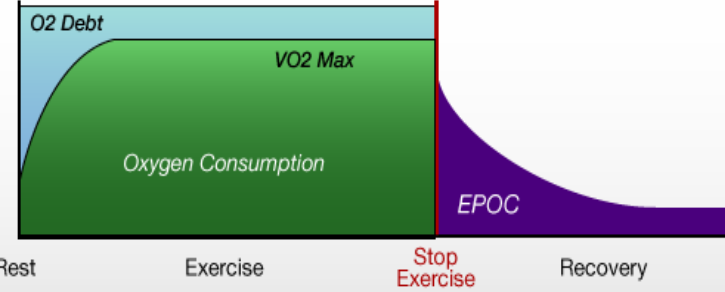
Aerobic Equation

Anaerobic Equation

Name 3 anaerobic sporting activities

Name 3 aerobic sporting activities

Excess Post-Exercise O<sub>2</sub> Consumption



Rest                      Exercise                      Stop Exercise                      Recovery

## EPOC

What does EPOC stand for?

.....

When does EPOC occur? (*aerobic OR anaerobic exercise*)

.....

Explain the process of EPOC

.....

.....

.....

.....

.....



Name the 5 recovery processes

1. ....

2. ....

3. ....

4. ....

5. ....

Recovery Process	Name one benefit of each recovery process
1.	
2.	
3.	
4.	
5.	

# Immediate, Short and Long Term Effects of

## Exercise

Immediate Effects of Exercise  
Notes

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DURING EXERCISE

**Immediate**

**Short**

**Long**

Immediate	Short	Long

Long Term Effects of Exercise  
Notes

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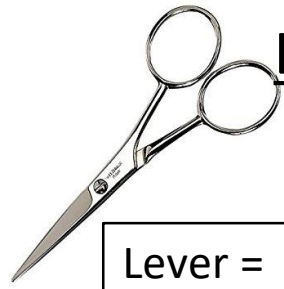
MONTHS & YEARS

Short Term Effects of Exercise Notes

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24-36 HOURS

Lever	Part of Body	Symbol
	Bone	—
	Joint	▲
	Muscle	↑ ↓
	Weight or resistance	■



Lever =



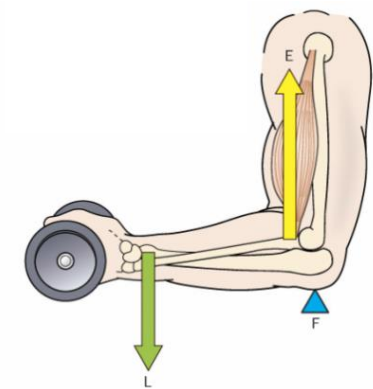
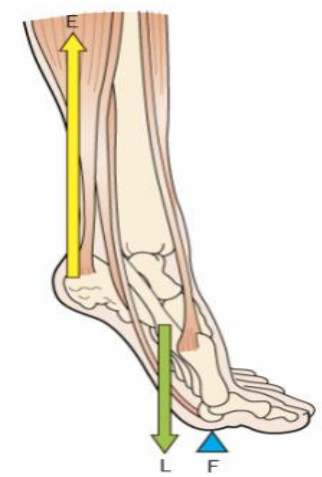
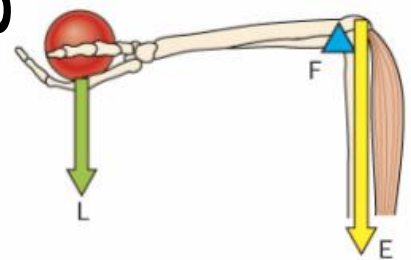
Lever =



Lever =

## Lever Systems

Label the following



Lever =  
 ..... at the elbow  
 Draw the lever system below

Lever =  
 .....&..... at the ankle  
 Draw the lever system below

Lever =  
 ..... at the elbow  
 .....&..... at the knee  
 Draw the lever system below

## Mechanical Advantage

.....





# Health & Fitness Components of Fitness



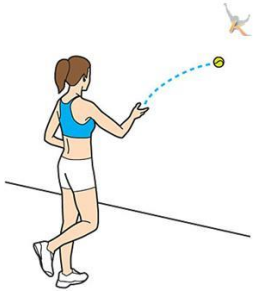

Health	
Fitness	

Name 5 ways you could improve your general health:

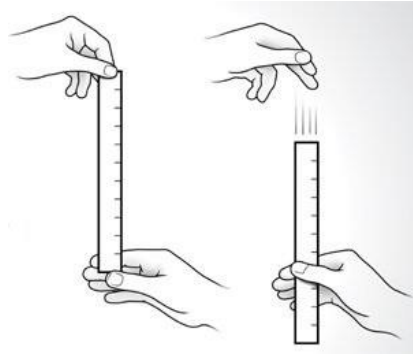


1. \_\_\_\_\_
1. \_\_\_\_\_
1. \_\_\_\_\_
1. \_\_\_\_\_
1. \_\_\_\_\_

Component of Fitness	Definition	Sporting Example
Agility		A hockey player needs to be agile, whilst dribbling around the opposing players to keep possession and control of the ball
Balance		
Cardiovascular endurance (aerobic power)		
Coordination		
Flexibility		
Muscular endurance (dynamic strength)		
Power/Explosive strength (anaerobic power)		
Reaction time		A batsman in cricket needs to react quickly to a fast spin to make good contact on the ball and score more runs
Speed		
Strength		
Static strength		

Component of Fitness	Fitness Test	Image	Fitness Test Procedure
Balance	Stork Stand Test		<p>Stand on both feet with hand on hips and lift one leg. Place the toes of that foot against the knee of the other. Time starts with the heel is raised off the floor. Balance for as long as possible without either, moving the foot away from the knee of placing the heel on the ground</p> <p>Equipment: Stopwatch Measurements: Seconds</p>
			<p>The feet are placed flat against a box, shoulder width apart and both knees are flat against the floor. With the hands on top of each other and palms facing down, the performer reaches forward as far as possible. After 3 practises, the 4th is held for at least 2 seconds and the result is recorded</p> <p>Equipment: Sit and reach box Measurements: CM</p>
			<p>Performer lies on their back, with their knees bent at a 90-degree angle and feet are flat on the floor. Performer's arms are placed at either side of the head. One repetition: curl trunk forward until sat in an upright position and the return back to the floor. The activity is repeated until the performer can no longer continue</p> <p>Equipment: Mats, sit-up bleep test recording and music player Measurements: Number of times</p>
			<p>The device is squeezed with maximum isometric effort for 5 seconds with no other body movement allowed. Record the result from 2 attempts</p> <p>Equipment: Handgrip dynamometer Measurements: kg or lbs</p>

Component of Fitness	Fitness Test	Image	Fitness Test Procedure
			<p>Performer stands sideways on to the vertical jump test and reaches up as high as possible with the hand closest to the wall but keeping the feet flat on the ground. The performer then jumps up vertically as high as possible using both arms and legs to help momentum. The performer then touches the wall at the highest point of their jump            Equipment: Vertical jump measurement board            Measurements: CM</p>
			<p>The performer has to lie down on their front (head towards the start line) with hands by their shoulders. When told to start, they have to get up as quickly as possible and run around the course of set out cones to the finishing line where the watch is then stopped. The course is 10m by 5m with 4 cones marked out at the start, finish and turning points. Another 4 cones are placed down the centre an equal distance apart            Equipment: Stopwatch and cones            Measurements: Seconds</p>
			<p>A mark is placed 2m from the wall and the performer stands behind the line and faces the wall. The ball is thrown from 1 hand in an underarm action against the wall and caught with the opposite hand. The ball is then thrown back against the wall and caught again with the initial hand            Equipment: Tennis balls and cones            Measurements: Number of times</p>
			<p>Performer lifts the maximum weight they can lift in one repetition. Rests should be taken in between the lifting of weights. This is repeated until the performer cannot lift one repetition of their chosen weight            Equipment: Free weights            Measurements: KG</p>



Component of Fitness	Fitness Test	Image	Fitness Test Procedure
		 <p>The diagram illustrates the ruler drop test. On the left, a hand holds a vertical ruler at the top, with another hand positioned below it. On the right, the ruler is shown falling, and the hand below is shown catching it at a certain point.</p>	<p>1m ruler to be held by an assistant between the outstretched index finger and thumb of the performer's dominant hand. The performer's thumb should be level with the zero CM line of the ruler. The performer has to catch the ruler as soon as possible after it has been dropped</p> <p>Equipment: 1m ruler Measurements: CM</p>
		 <p>A photograph showing a person in athletic wear running a sprint on a track. The person is captured in mid-stride, leaning forward, indicating high speed.</p>	<p>30m length is marked out. The performer starts in their own time and sprints as fast as possible over 30m. The stopwatch is started on the first stride and stopped once the performer crosses the 30m line</p> <p>Equipment: Cones and stopwatch Measurements: Seconds</p>
		 <p>A photograph showing a group of people participating in a multi-stage fitness test on a gym floor. They are arranged in a line, and some are in motion, suggesting they are performing a series of exercises or sprints.</p>	<p>A 20m section is marked out with cones being placed at either end of this section. The bleep test recording is then started and the performer participates in the test. If the performer arrives at the end of the section before the beep they must wait for the beep before setting off again. If the performer fails to reach the end of the section before the beep, they should be allowed 2 or 3 further attempts</p> <p>Equipment: Cones, multi-stage fitness test recording and music player Measurements: Stages</p>

## Types of training

### Circuit training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Continuous training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Fartlek training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Circuit training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Circuit training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Circuit training

How is it carried out?

.....  
.....  
.....

Which component of fitness does it improve?

.....

Which athletes would use it (A02)and why (A03)?

.....  
.....  
.....

### Principles of training

Complete and explain each letter below

S

P

O

R

T

F

I

T

T

### Training intensities

Calculating maximum heart rate = .....

Aerobic training zone = .....% to .....% of maximum HR

Anaerobic training zone = .....% to .....% of maximum HR

### Explain the following training seasons

#### Pre season

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.....  
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#### Peak season

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#### Post season

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.....

### Explain why an athlete would use high altitude training

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# Sports Psychology

## Types of Guidance

Visual(seeing).....  
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.....  
Verbal(hearing).....  
.....  
.....

Manual.....  
.....  
.....  
Mechanical.....  
.....  
.....

Explain the following letters providing a sporting example (A02)

S-

M-

A-

R-

T-

## Skill classifications- Identify 4 skills on each line

Basic |-----| Complex  
Open |-----| Closed  
Self-paced |-----| Externally paced  
Gross |-----| Fine

## Explain the following providing a sporting example (A02)

Performance goals

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.....  
.....

Outcome goals

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.....  
.....

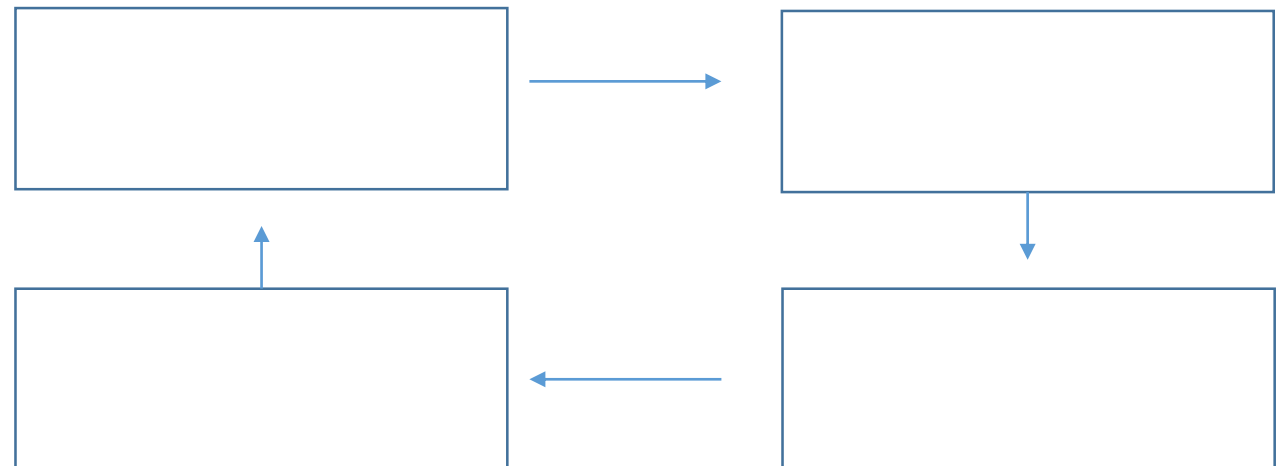
Definition of skill

.....  
.....

Definition of Ability

.....  
.....

## Basic information procession model- use each box to explain each stage



**Types of feedback**

Compare the types and feedback stating the type of athlete that it would benefit

Positive/negative.....  
.....  
.....

Knowledge of results /knowledge of performance

.....  
.....  
.....

Extrinsic/intrinsic.....  
.....  
.....

Explain how following stress management techniques are carried out

Deep breathing  
.....  
.....

Mental rehearsal / visualisation / Imagery

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.....  
.....

Deep breathing

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.....

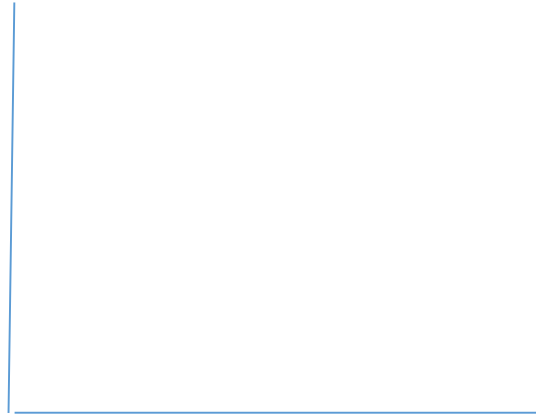
**Definition of arousal**

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Explain a sport that requires high levels of arousal (A02)

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**Draw and explain the inverted U. Link to a sporting performance**



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Compare the difference between intrinsic and extrinsic motivation.....

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**Personality**

Explain they key differences between an introvert and extrovert

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Using sporting examples (A02), analyse the difference between direct and indirect aggression (A03).

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# Engagement Patterns

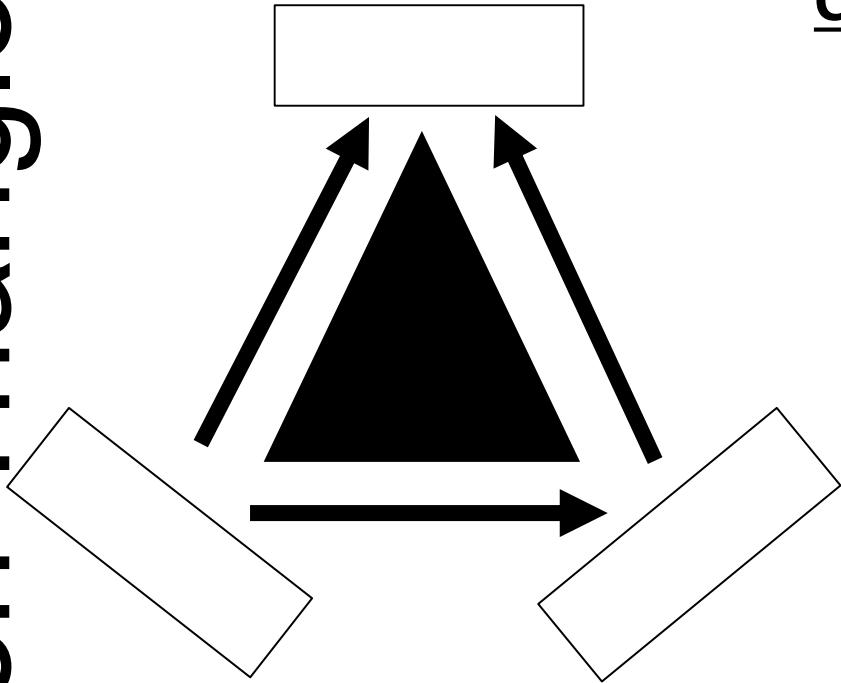
Name the 5 social groups

1. ....
2. ....
3. ....
4. ....
5. ....

<b>F</b>	
<b>A</b>	
<b>C</b>	
<b>T</b>	
<b>E</b>	
<b>R</b>	
<b>S</b>	

Social group	A factor that can influence engagement patterns	Positive influence of factor	Negative influence of factor
F.....	Socio-economic status	..... ..... .....	..... ..... .....
R.....	Attitudes	..... ..... .....	Some religions may not approve of certain physical activities or the clothing worn.
D.....	Accessibility	Sports and leagues with specific disabled teams have been set up, such as wheelchair basketball teams.	..... ..... .....
G.....	Media coverage	Sports such as tennis have televised games that include both women and men.	..... ..... .....
A.....	Adaptability	Sports and leagues such as over-60 football teams have been set up specifically for certain age groups.	..... ..... .....

# The Golden Triangle



## Commercialisation

Definition of commercialisation

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Definition of sponsorship

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Definition of Media

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**Sport**

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**Media**

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**Sponsor**

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.....

Name the four types of sponsorship




Name the five types of media

- 1).....
- 2).....
- 3).....
- 4).....
- 5).....

## Advantages & Disadvantages of Commercialisation

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Player/Performer</b>		
<b>Sport</b>		
<b>Sponsor</b>		
<b>Spectator</b>		
<b>Official</b>		

## Advantages & Disadvantages of Technology

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Player/Performer</b>		
<b>Sport</b>		
<b>Sponsor</b>		
<b>Spectator</b>		
<b>Official</b>		



## Conduct of Performers

Conduct of Performers	Definition	Examples
Etiquette		
Gamesmanship		
Sportsmanship		
Contract to Compete		

Conduct of Performers:  
Performance Enhancing Drugs

Advantages

Disadvantages

Performance Enhancing Drug	Reason for Use	Positive Effects	Sport	Side Effects
Anabolic steroids				
Stimulants				
Beta blockers				

<b>Performance Enhancing Drug</b>	<b>Reason for Use</b>	<b>Positive Effects</b>	<b>Sport</b>	<b>Side Effects</b>
Diuretics				
Narcotic analgesics				
Peptide hormones				
Blood doping				

Definition of **etiquette**

.....

Sporting example-.....

Definition of **Sportsmanship**

.....

Sporting example-

.....

Definition of **Gamesmanship**

.....

Sporting example-.....

Advantages / disadvantages of taking PEDs

Advantages

Disadvantages

1).....

1).....

2).....

2).....

3).....

3).....

4).....

4).....

Spectator behaviour

**Positive influences of spectators at events / matches**

1).....

.....

2).....

.....

**The negative influence of spectators at matches**

1).....

.....

2).....

.....

3).....

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4).....

.....

Prohibited substance	Positive and negative effects	Athletes that would use them (A02)

Why does hooliganism occur at sporting events? (3marks)

.....

.....

.....

.....

.....

Evaluate strategies used to combat hooliganism

1).....

.....

2).....

.....

.....

.....

Health and wellbeing

Reasons for participating in physical activity

<b><u>Physical</u></b>	<b><u>Mental</u></b>
<b><u>Social</u></b>	<b><u>Fitness</u></b>

What is meant by the term 'sedentary lifestyle'?

.....  
.....

Explain the consequences of a sedentary lifestyle

- .....
- .....
- .....
- .....

Obesity

How does obesity impact on the following?

<b><u>Physical</u></b>	<b><u>Mental</u></b>
<b><u>Social</u></b>	<b><u>Fitness</u></b>

Somatotypes

Explain the somatotypes below and explain how their body type would influence their performance in a selected sport



