Answers

For AS and A Level AQA Year 1 PE

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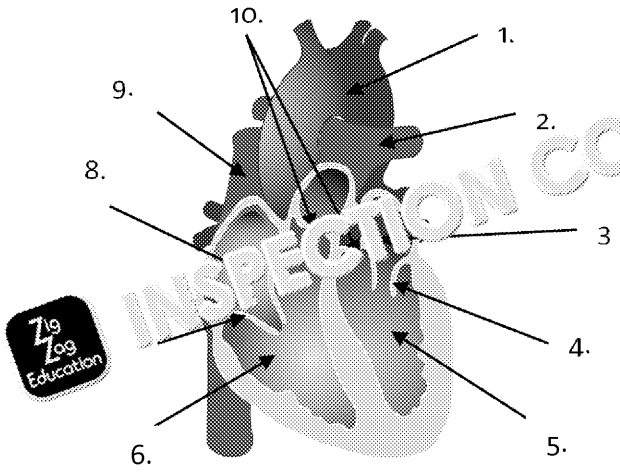
Contents

3.1.1 – Applied Anatomy and Physiology

Cardiovascular system 1: *Impact of Physical Activity on Health and Fitness and Reg*

Cardiovascular System 1	Questions	
	1. Label the diagram of the heart from 1–10. 	1. Aorta 2. Pulmonary artery 3. Left atrium 4. Bicuspid valve 5. Left ventricle 6. Right ventricle 7. Tricuspid valve 8. Right atrium 9. Superior vena cava 10. Aortic and pulmonary

Cardiovascular System 1

Questions	
2. **Define the terms 'coronary heart disease', 'high blood pressure', 'high cholesterol', 'stroke', 'atherosclerosis' and 'angina'.**	**Coronary heart disease**: a … in the arteries. This stops b… **High blood pressure**: a blo… the heart **High cholesterol:** an exces… coronary heart disease wh… **Stroke:** the restricted or cu… because of oxygen starvati… **Atherosclerosis**: a build-up … of blood through the coron… **Angina:** the pain felt in the … due to blockages and narro…
3. **For each of the four health issues, describe how exercise can reduce the risk of the health concern occurring.**	**Coronary heart disease**: Exercis… there i… heart a… vessels… **High blood pressure**: Exercis… blood v… **Cholesterol build-up**: Exercis… loweri… **Stroke**: Exercis… which … vessels… blocka…

Cardiovascular System 1

Questions

Define in terms 'heart rate', 'stroke volume' and 'cardiac output'.	**Heart rate:**	the nu… minute
	Stroke volume:	the an… beat/c…
	Cardiac output:	the an…
5. How is maximal heart rate of an individual estimated?	Maximal heart rate (HR_{max})	
6. Write an equation to calculate cardiac output.	Cardiac output (ml/min) = h…	

7. Fill in the grid on the right, identifying the correct average resting value for an average untrained individual (heart rate, stroke volume and cardiac output). Would the values increase or decrease in a trained individual?

Variable
Heart rate
Cardiac output
Stroke volume

8. Fill in the table, identifying the correct average values for an average individual (heart rate, stroke volume and cardiac output) during submaximal exercise.

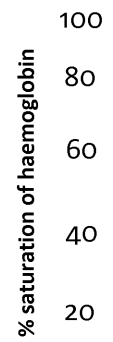
Values	At Rest
Heart rate (bpm)	70
Stroke volume (ml)	70
Cardiac output (ml/min)	4900

Cardiovascular System 1	Questions	
	…in the table, identifying the correct average values for an average individual (heart rate, stroke volume and cardiac output) during maximal exercise.	**Values** / **At Rest**: Heart rate (bpm) 70; Stroke volume (ml) 70; Cardiac output (ml/min) 4900
	10. What is meant by the te… …patory rise'?	The increase in heart rate … anticipation of exercise. It …
	11. Explain how the vascular shunt mechanism regulates blood flow depending on exercise intensity	When exercising, more blo… recognises that delivering … than delivering blood to o… Therefore, the body contra… that blood is not needed, … vasodilation – widening of …

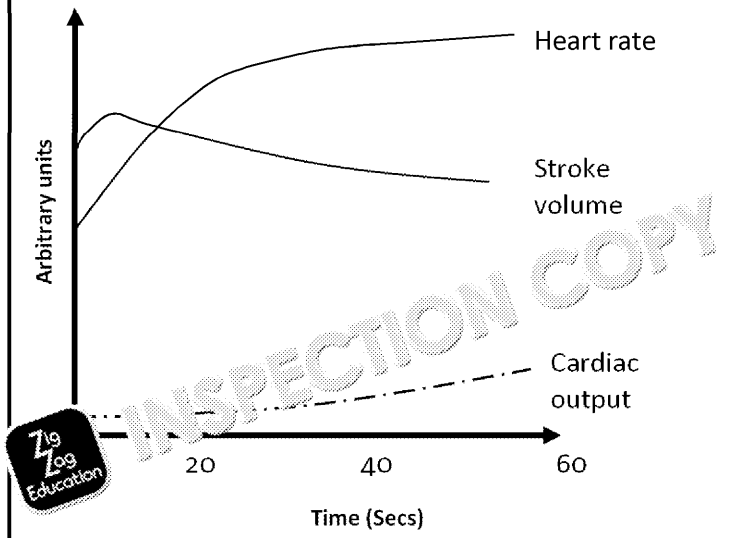
Cardiovascular System 1	Questions	
	12. Explain the process of diastole.	Diastole is the heart relaxi or the lungs (oxygenated) aided by the atrioventricu travelling out of the atria. is higher than that in the v into the ventricles.
	13. During systole, blood is ejected from the ventricles through which arteries? State which artery each artery takes the blood.	The aorta takes blood fro The pulmonary artery take
	14. The heart is able to start and continue its beating. Which feature starts off an electrical impulse to stimulate the heart muscle cells?	Sinoatrial node
	15. What does the impulse cause to happen in the atria?	The impulse causes the at
	16. Which heart feature does the impulse travel to next? What is its function?	The AV node. The AV nod with blood before the imp
	17. Fill in the missing words. **Once the ventricles have f** **which separates into** left	
	18. State the effect the Purkinje fibres have on the ventricles.	The Purkinje fibres cause t the electrical impulse.

	Questions	
Cardiovascular System 1	**19. Explain what happens to the electrical impulse [illegible] its circuit after the [illegible]ar.**	The heart relaxes, filling w process of a heartbeat.
	20. Describe and explain how the heart rate of a long-distance runner is regulated by neural factors during competition.	Neural factors regulate blo blood pressure and chang system; they are reported proprioceptors respective impulses to either increas parasympathetic (decreas
	21. How does the body [illegible] heart rate when increased amounts of carbon dioxide are [illegible] blood during exercise?	During exercise, there are The increased concentrati Chemoreceptors stimulate increase, helping to remov
	22. What is the role of baroreceptors, and how do they regulate blood flow during exercise?	Baroreceptors detect char changes. The barorecepto heart rate to deliver more
	23. Describe the role of proprioceptors and explain how they change heart [illegible] exercise.	Proprioceptors detect mov medulla oblongata to stim

	Questions	
Cardiovascular System 2	1. **What is the name of the protein in red blood cells that can transport oxygen to the working muscles?**	Haemoglobin
	2. **What is the name of the protein that transports oxygen within muscle cells?**	Myoglobin
	3. **Explain the process of oxygen dissociation from haemoglobin**	In areas where the part haemoglobin has a gre absorb more oxygen fr can release its oxygen i on the partial pressure haemoglobin releases o
	4. **A graph of oxygen saturation of the haemoglobin at rest and during recovery would show a shift of direction of the graph curve. In which direction does the shift occur and what is this called?**	Shift to the right = Boh

Cardiovascular System 2	Question	
	5. **Draw an approximate graph to show this shift. Remember to label your axes correctly.**	
	…es…be three factors that are responsible for …e increase in the dissociation of oxygen from haemoglobin.	**1.** Acidity (pH) of bloo… pH of the blood. A… oxygen from the ha… **2.** Partial pressure of … higher rate when t… **3.** Blood temperature … exercise, oxygen m…

Cardiovascular System 2	Question	
	7. **Describe the five mechanisms of venous return.**	1. **Pocket valves**: one prevent blood flow 2. **Skeletal muscle pu** contraction, causin 3. **Respiratory pump** this pressure gradi cavities apply press back to the heart. 4. **Smooth muscle**: m the heart. 5. **Gravity**: aids blood
	sc e the relationship between venous return d blood pressure.	As systolic blood press As systolic pressure de
	9. **Explain how venous return differs during exercise (Starling's law).**	**Exercise (Starling's law** • There is an increas blood filling the he • Before contracting more blood to ent • An increase in the venous return.

Cardiovascular System 2	Question	
	10. Usi[illegible] pl[illegible] below, describe cardiovascular drift  	• Cardiovascular drif[illegible] sustained steady-st[illegible] – continued dec[illegible] – small increase [illegible] – progressive inc[illegible] • This process occurs[illegible] fluid loss results in [illegible] and, therefore, ven[illegible] • For cardiac output [illegible] heart rate needs to [illegible] stroke volume × he[illegible] • The body attempts [illegible] temperature.
	11. **Describe arteriovenous oxygen difference (A-VO_2 difference)**	Gas exchange at the m[illegible] The arteriovenous diffe[illegible] oxygen between the ar[illegible] muscles.

Cardiovascular System 2	Question	
	12. Describe how arteriovenous oxygen difference changes in response to exercise.	• At rest, there is a s amount of oxygen b • As the muscles und oxygen, meaning th capillaries surround • The reduced amou oxygen in the arter the levels of oxyge difference).
	13. How does the A-VO_2 differ[illegible] of [illegible]ained individual differ fr[illegible] an untrained individual?	A trained individual is l untrained individual.
	14. What adaptations occur due to cardiovascular training, which influence A-VO_2 difference?	• As a result of cardi (increased number • Capilliarisation allo improved rate of g • A trained individua blood supply.

Respiratory System

Question		
1. Define the terms 'breathing frequency' and 'tidal volume'.	**Breathing frequency:**	the n
	Tidal volume:	the v
2. Write an equation to calculate minute ventilation.	Minute ventilation (l/min) = breathing f	
3. Fill in the grid on the right, identifying the correct average resting values for each variable (breathing frequency, tidal volume and minute ventilation) for an untrained athlete.	**Variable**	
	Breathing frequency	
	Tidal volume	
	Minute ventilation	
4. Fill in the grid on the right, identifying the correct average values for each variable (breathing frequency, tidal volume and minute ventilation) during submaximal and maximal exercise.	**Variable**	
	Breathing frequency (per minute)	
	Tidal volume (ml/min)	
	Minute ventilation (l/min)	

Respiratory System	Questions		
	Define the following terms: residual volume, expiratory reserve volume and inspiratory reserve volume.	**Residual volume:**	The v
		Expiratory reserve volume:	The m follo
		Inspiratory reserve volume:	The m follo
	6. Describe what happens to the diaphragm and external intercostal muscles during inspiration and expiration at rest.		
		Diaphragm:	cont
		External intercostal muscles:	cont the r
		Diaphragm:	relax
		External intercostal muscles:	relax, inwa
	7. Name three muscles that support inspiration during exercise to increase thoracic capacity.	Sternocleidomastoid, Pectoralis minor, S	
	Name the muscles that support inspiration during exercise, reducing thoracic capacity.	Internal intercostals, Rectus abdominus	

	Questions	
Respiratory System	9. Give a [illegible] diffusion'.	Diffusion is the movement of gas from a concentration.
	[illegible] Define 'partial pressure'.	Partial pressure is the pressure that a g
	11. How does gaseous exchange take place in the alveoli?	Alveoli of the lungs have a high volume alveoli's surrounding capillary network concentration of carbon dioxide which, pressure of certain gases controls the d partial pressure of oxygen will diffuse o
	[illegible] Wh[illegible] biological factors aid gaseous exchange between the alveoli and capillaries?	• Large numbers of alveoli provide a • Large capillary network increases s slowing the movement of red bloo • Thin membrane between alveoli an

Respiratory System	Questions	
	13. **Explain how gaseous exchange takes place at the muscles, and what factors aid the exchange.**	Diffusion of oxygen takes place f concentration of oxygen. Carbo capillary network. Gaseous exch of diffusion, and a large capillary diffusion. Gases are diffused between the move from high partial pressure muscles carry a lot of carbon dio carbon dioxide in the muscles is blood, which has a lower partial
	14. **Found in the medulla oblongata, what is the name given to the area of the brain that controls respiration?**	Respiratory Control Centre (RCC)
	What are the names of the two subsections of this area (identified in Q13)? Outline their roles.	Inspiratory Control Centre (ICC) Expiratory Control Centre (ECC)
	16. **What are the effects of the sympathetic nervous system and the parasympathetic nervous system on respiration?**	The sympathetic nervous system preparing the body for exercise The parasympathetic nervous sy

Respiratory System	Questions	
	plain how chemical control regulates breathing as we begin to exercise.	Changes in blood acidity due to a muscles) are identified by the ch responds by increasing breathin is done by sending information t to contract. Breathing rate is inc
	lov cural control help to gulate breathing rate during exercise?	Proprioceptors detect move stimulate the RCC. 2. As the lungs inflate – or 'stre and stimulate expiration. 3. Baroreceptors located in the pressure, stimulating the EC 4. Chemoreceptors detect cha length, more carbon dioxide 5. Receptors send information down the intercostal nerves contraction.
	19. Explair adrenaline in the eg or respiration.	Prior to exercise, adrenaline is re Chemoreceptors detect the adre centre. In turn, the respiratory c telling it to increase breathing ra

Respiratory System	Questions	
	Describe the reasons smoking can negatively affect the respiratory system and transport of oxygen.	• Carbon monoxide (found in c to the haemoglobin. This re working muscles. • Tar from cigarettes destroys Therefore, no harmful subst • Smoking causes reduced ela bronchioles or restrict the ef

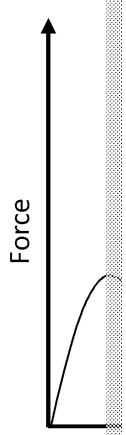
The Neuromuscular System

The Neuromuscular System	Questions	
	1. [illegible] motor unit?	A motor unit is the combination
	2. **Name the three types of muscle fibres and comment on the size of each fibre's motor neurons.**	**Fibre Type** Slow oxidative / type I Fast oxidative glycolytic (type IIa Fast glycolytic (type IIb)
	3. **How is the motor neuron connected to the muscle fibre?**	Via the neuromuscular junction
	4. [illegible] meant by 'action potential'.	Action potential is an electrical [illegible] transported by the motor neuro
	5. **What happens when an action potential reaches the neuromuscular junction?**	Neurotransmitters (made of ace
	6. **What happens to the muscle cells when depolarisation occurs at the motor end plate?**	[illegible] contract.
	7. **What does the [illegible] law state?**	A muscle fibre is either under fu at all.

The Neuromuscular System	Questions		
		Fibre Type	
	8. **State the three types of muscle fibre and give five characteristics for each fibre type.**	**Slow oxidative (type I)**	1. Slow contract 2. High oxidativ 3. High resistan 4. Low force pr 5. Low glycolyt
		Fast ...ative ...lycolytic (type IIa)	1. Fast contract 2. High oxidativ 3. Medium resi 4. High force pr 5. High glycolyt
		Fast glycolytic (type IIb)	1. Fastest contr 2. Low oxidative 3. Low resistan 4. Highest force 5. High glycolyt

The Neuromuscular System	Questions		
	9. Give an example of a sport that requires the athlete to use each muscle fibre type.	**Slow oxidative (type I):**	e.g. marathon, l… events)
		Fast oxidative glycolytic (type IIa):	e.g. 400 m sprin…
		Fast glycolytic (type IIb):	e.g. weightlifting…
	10. What is proprioceptive neurom…ular facilitation (PNF)?	PNF is a stretching process that …	
	11. D…cri…golgi tendon organs are and w…ere they can be found.	Golgi tendon organs are proprio… tendons join.	

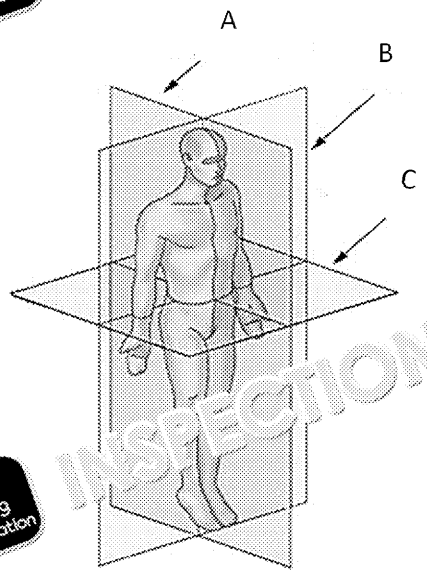
The Neuromuscular System	Questions	
	12. Describe the process of PNF.	• Golgi tendon organ – when tendon organ is activated • The Golgi tendon organ enc • The relaxation of muscles m overstretching – are inhibite • The inhibition of the muscle
	13. Using a sporting example, e... summation.	Spatial summation – to com if the muscles cannot contra recruited. • e.g. performing a serve in tab Therefore, fewer motor units throw the discus.
	14. Describe wave summation.	Wave summation is a method o contraction by increasing the fr This inhibits the muscle cells' ab contraction.
	15. Describe tetanic contracti...	Tetanic contraction is linked to of muscle cells occurs too frequ

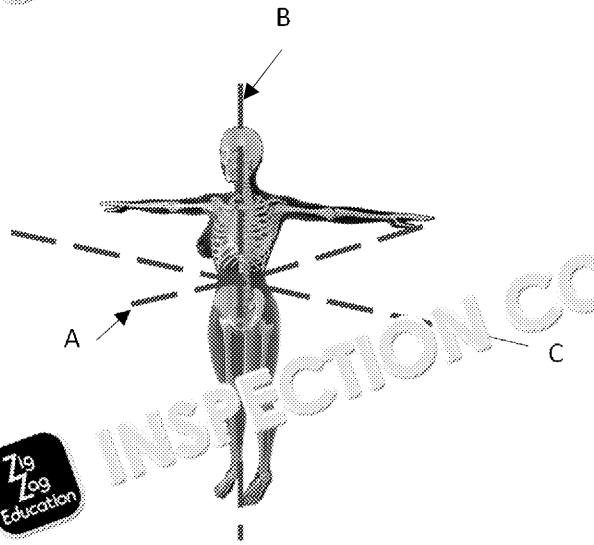
The Neuromuscular System	Questions	
	16. Draw a graph to show the effect of wave summation on the total force produced by muscles.	
	17. Rank the three fibre types in order of recruitment during exercise.	1. Slow oxidative (type I) 2. Fast oxidative glycolytic (ty 3. Fast glycolytic (type IIb)

Musculoskeletal System and Analysis of Movement

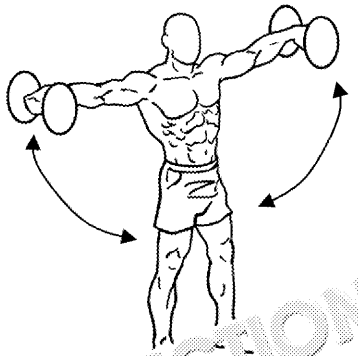
Question	Answer
1. Name the two types of joint found in the body and give two examples of where each can be found.	**Joint Type** 1. Ball-and-socket 2. Hinge
2. Define what is meant by agonistic and antagonistic muscles.	**Agonistic muscle** — An agonistic mu… movement. The… limb to move. **Antagonist muscle** — An antagonistic … muscle. It acts a… and provides res…
3. Using a sporting example, explain how agonistic and antagonistic muscles work together in a pair.	(accept any relevant example) For example, during a basketball… instigated by the agonist muscle… time, the antagonistic muscle, th… the shot (extension of elbow), th… antagonistic muscle. The tricep… returns the arm to its original po…
4. Define the term 'isotonic m… contraction'.	…sotonic muscle contraction is a … contraction. Isotonic muscle co… contractions.

	Questions	
Musculoskeletal System and Analysis of Movement	5. Describe and give an example of an isotonic concentric muscle contraction.	A concentric contraction is the s when lifting a weight in a bicep c place. (or other suitable examp
	6. Describe and give an example of an isotonic eccentric muscle contraction.	An eccentric contraction is the l when lowering a weight in a bic takes place. (or other suitable e
	7. What is meant by the term 'isometric contraction'?	Isometric contraction is a muscl cle. It is, therefore, the opp
	8. Identify th ntraction occurring th ing muscles, during the given ments.	**Biceps when lowering a weight bicep curl:**
		Deltoids when holding a hands gymnastics:
		Biceps femoris during upwards a squat:

Musculoskeletal System and Analysis of Movement	Questions		
	9. Name and describe the planes of movement below.  	**A: Sagittal plane**	Divides the bo motion occurs
		B: Frontal pla e	Divides the bo frontal plane.
		C: Transverse plane	Divides the bo occurs in the t

Questions		
10. Name and describe the axes of rotation ov  	**A: Sagittal axis**	Travels throug through to the this axis (e.g. a
	B: Longitudinal	Runs from the the floor. Rota
	C: Transverse axis	Runs from one gravity. Extens
11. In which plane and axis does plantar flexion and dorsiflexion of the ankle occur?	**Plane:**	Sagittal plane
	Axis:	Transverse axis
12. Give a sporting example of fle extension of the kne in the sagittal plan erse axis.		Any suitable example: preparati kicking a football / downwards p

Musculoskeletal System and Analysis of Movement	Questions		
	13. During a warm-up, footballers may complete sidesteps. Name the plane of movement and axis of rotation that the movement occurs in and identify the types of movement that occur at the hip.	Plane:	Frontal
		Axis:	Sagittal
		Movements:	Abduction and a
	14. When entering the water, a diver will lift their arms above their head. Name the plane of movement and axis of rotation that the movement occurs in and identify the type of movement that is occurring at the shoulder.	Plane:	Sagittal
		Axis:	Transverse
		Movement:	Flexion
	15. In which plane and axis would horizontal abduction and adduction of the hip occur?	Plane:	Transverse plane
		Axis:	Longitudinal axis
	16. Give a sporting example of flexion and extension of the elbow occurring in the sagittal plane and transverse axis.	Flexion:	Any suitable exa
		Extension:	Any suitable exa

Musculoskeletal System and Analysis of Movement	Questions		
	17. Name the type of movement occurring at the shoulder and the plane and axis the shoulders are moving in, during dumb-bell lateral raises. 	**Movement:**	Abduction (upwa
		Plane:	Frontal plane
		Axis:	Sagittal axis
	Running is an activity that requires movement in the sagittal plane and transverse axis. Name the types of movement that occur at the hip during running.	Flexion, extension (and hyperex	
	19. Give a sporting example of horizontal abduction and horizontal adduction at the shoulder, occurring in the transverse plane and longitudinal axis.	**Horizontal abduction:**	Any suitable exa
		Horizontal adduction:	Any suitable exa

Questions

A football player is kicking a ball.

20. Analyse the left ankle, knee and hip joint of the footballer during the preparation phase

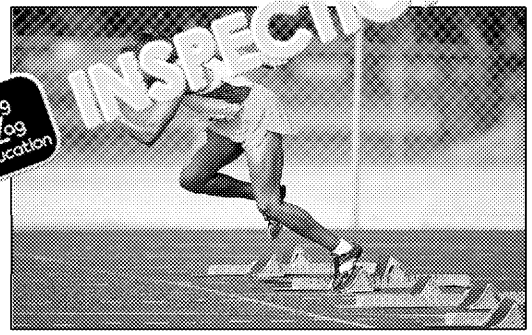
Joint type:	b
Articulating bones:	p
Movement:	h
Agonistic muscle(s):	g
Antagonistic muscle(s):	il
Muscular contraction type of the agonist:	is

Joint type:	h
Articulating bones:	fe
Movement:	fl
Agonistic muscle(s):	h te
Antagonistic muscle(s):	q in
Muscular contraction type of the agonist:	is

Joint type:	h
Articulating bones:	ta
Movement:	p
Agonistic muscle(s):	g
Antagonistic muscle(s):	ti
Muscular contraction type of the agonist:	is

Questions

21. Perform a performance analysis for the lower body of a 100m sprinter as they drive off the starting blocks. Focus on the trailing leg, used to push-off from the blocks.



Joint type:
Articulating bones:
Movement:
Agonistic muscle(s):
Antagonistic muscle(s):
Muscular contraction type:

Joint type:
Articulating bones:
Agonistic muscle(s):
Antagonistic muscle(s):
Muscular contraction type:

Joint type:
Articulating bones:
Movement:
Agonistic muscle(s):
Antagonistic muscle(s):
Muscular contraction type:

3.1.2 – Skill Acquisition

Skills, Skill Continua and Transfer of Skills

Skills, Skill Continua and Transfer of Skills	Questions		
	1. Name nine characteristics of a skill.	1. Efficient 2. Fluent 3. Consistent 4. Effective 5. Well-timed 6. Accurate 7. Correct technique 8. Controlled 9. Aesthetic	
	2. Which classification/continuum do *simple* and *complex* belong to? Define the two ends of the continuum.	**Classification:**	Difficulty contin
		Simple:	Transferable sk low in cognitive
		Complex:	Skills that requi composed of nu coordination.
	3. Which classification/continuum do *gross* and *fine* belong to? Define the two ends of the continuum.	**Classification:**	Muscular involv
		Gross:	Skills that utilise emphasis on po
		Fine:	Skills that utilise on accuracy and

Questions		
ic… classification/continuum do *…screte, serial* and *continuous* belong to? Define the categories of the continuum.	**Classification:**	Continuity
	Discrete:	Skills that have …
	Serial:	Skills that follow…
	Continuous:	Skills that have … produce contin…
5. Below, two ends of a continuum are described. Identify the two ends being described and state which continu… they belong to. (i) Skill takes pla… …dictable surro… …e skill must be …to respond to a stimuli. Skill takes place in predictable surroundings. There is no need to adapt technique to respond to a stimuli.	**Continuum:** Environmental (i) Open (ii) Closed	
6. Define 'low' and 'high' organisation skills and provide a sporting e… …p… f… both.	**Lo…**	Simple skills tha… e.g. long jump
	High:	Complicated ski… flow into one an… e.g. hurdles

Skills, Skill Continua and Transfer of Skills

Questions

ve [illegible] examples of how different ls can be categorised by pace.	**Self-paced:**	Dart throw, jav performer). (accept suitable
	Externally paced:	Tennis return, f performer is inf (accept suitable
8. Sporting move[illegible] as c[illegible] classified against [illegible] continua at one time. [illegible] m freestyle sprint imming) against each of the continua and justify your answer for each.	**Difficulty:**	Simple – limite
	[illegible]vironmental:	Closed – takes p change to suit e stimuli such as o
	Pacing:	External – swim
	Muscular involvement:	Gross – the spri instead of accu
	Continuity:	Continuous – d stroke.
	Organisation:	Low – the strok
9. What [illegible] positive transfer of lls	A positive transfer of skills is the a to the high degree of similarity be adjustments to their original skill s	

Skills, Skill Continua and Transfer of Skills	Questions	
	…ve … …ting example of positive …nsfer.	(Accept any appropriate example) A fly half in rugby can kick a rugby … player was asked to perform a foo… as they would only need to make … ball) to their previous skill set to p…
	11. Define 'negative transfer'.	Negative transfer is the negative e… performing a new skill. It may occ… skill, then struggles to break this h…
	12. Give a sporti… … m… …f negative transf…	(Accept any appropriate example) Negative transfer of a skill could o… squash forehand, the tennis playe… attempt to apply topspin to their … squash will not react the same wa…
	13. Why would a footballer need to use bilateral transfer to become an elite athlete? Give an example of a football skill that would require them to use bilateral transfer.	Bilateral transfer is the transfer o… elite level, a footballer would nee… of skills on both sides of their bod…
	14. Using a spor… … …e, explain what is m… …ero transfer of learning'.	Zero transfer means that a previo… newly earnt skill, due to both skills … For example, performing a somer… push pass in hockey.

	Questions	
Skills, Skill Continua and Transfer of Skills	**Outline two ways a coach can optimise positive transfer and limit a negative transfer of a skill.**	Any two of the following: • The two skills (original and ne • Subroutines of skills must be • Ensure the player is aware of • Start new skill by learning the • Ensuring one skill is well learn • Using positive feedback and g

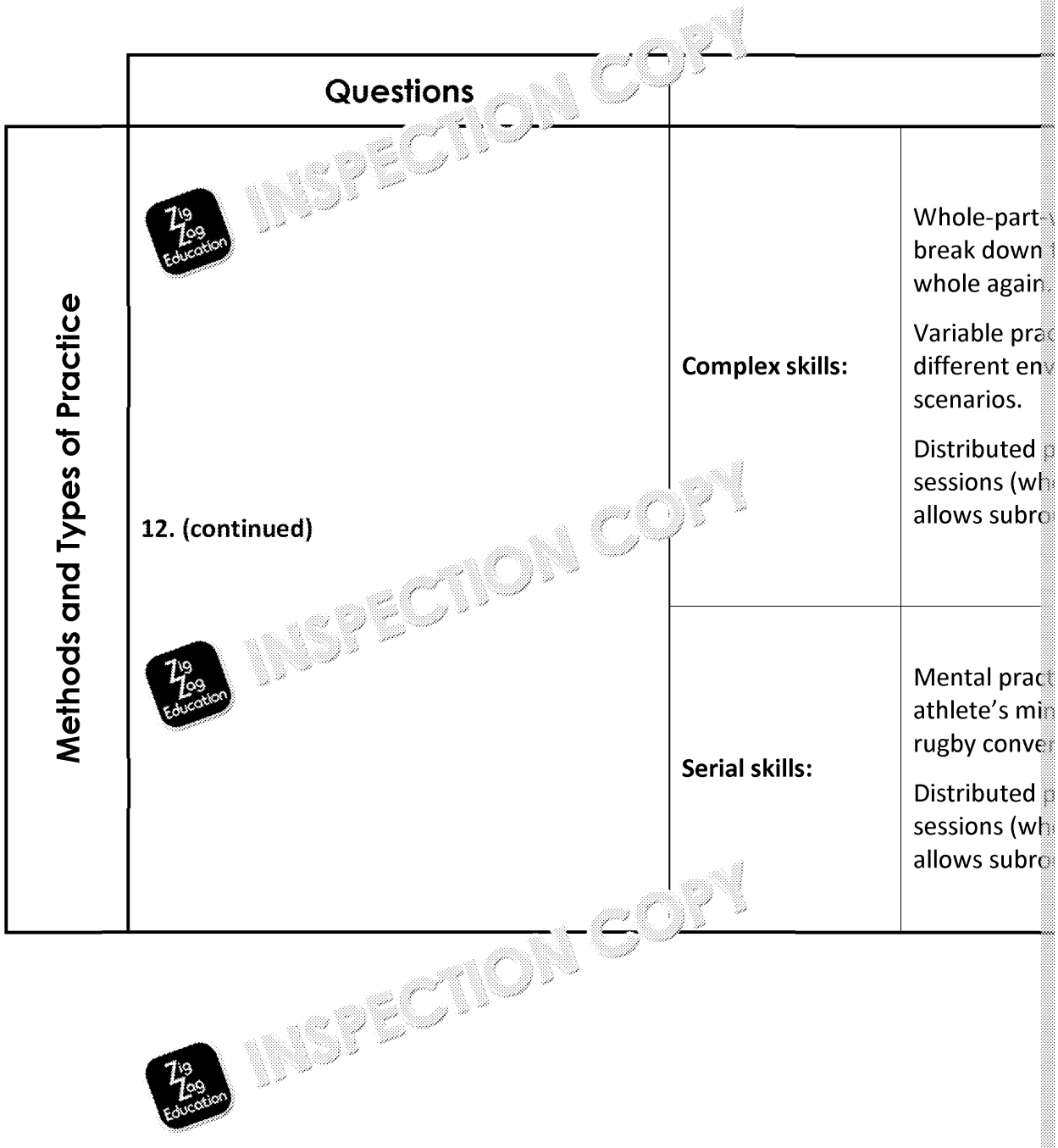
Practice for Learning

	Questions	
Methods and Types of Practice	**1. [illegible] a sporting example of when whole practice should be used.**	Whole practice should be used fo[r] doesn't benefit the athlete to bre[ak] shot in tennis.
	2. What benefit does whole practice have over part practice?	Whole practice enables the athlet[e] athlete to develop a kinaesthetic [sense]. Th[is] helps them in the future as th[ey]
	[illegible] when 'whole–part–whole' [practice] tice would be used. Give a sporting example of a skill that may use this practice method.	Whole–part–whole practice is us[ed] subroutines. The athlete perform[s] components, practises these com[bine] the whole skill again. For exampl[e] a whole routine. Then the kick ca[n] run-up, placement of feet, strikin[g] been practised, the skills are brou[ght]

Methods and Types of Practice	Questions	
	4. Explain the difference between 'whole–part–whole' practice and 'progressive–part' practice.	Whereas whole–part–whole prac completely separately to each ot progressive–part practice breaks bringing the subroutines togethe being kicked from the tee. The p they would practise the run-up a movement. Practice would then strik ng of the ball. Finally, the la mplete the whole skill of kic
	5. Define 'm ctice' and state which d kills would be completed using sed practice.	Massed practice is the continuou suits simple skills that can easily b swimming.
	6. Define 'distributed practice'.	Distributed practice is similar to m
	7. What advantages does 'distributed practice' have?	Distributed practice is beneficial t e to perform continuous pract and feedback to be given to the a more complex skills can be perfo
	cri e 'variable practice'.	Variable practice is the practising and changed by a coach.

Methods and Types of Practice	Questions	
	9. **Evaluate the advantages and disadvantages of 'variable practice'.**	**Advantages:** • This helps to improve the perf they learn the optimal respon • It is more realistic for a compe • Helps to break the monotony **Disadvantages:** • Cannot be used effectively for • n overwhelm beginners wh c rrect stimulus.
	10. **Using a s g ample, describe ctice'.**	Mental practice is when an athle without actioning it physically. F place a penalty kick prior to takin
	11. **Evaluate the advantages and disadvantages of 'mental p**	**Advantages:** • Can improve confidence as it successfully react to more dif • an be used as a stress mana seful for beginners to creat **Disadvantages:** • Not as effective as physical p • Not as effective for simple sk

Methods and Types of Practice	Questions		
	12. Provide the best type of practice or practice methods for each of the different skill classifications that could be used to optimise performance. Provide a brief explanation for your choice.	**Low organisational skills:**	Progressive p each subrou Distributed p sessions (wh allows subro
		Continuous skills:	Massed prac point and ar athletes to g Distributed p sessions (wh allows subro
		Closed and self-paced skills:	Whole prac breaking ski Massed prac unchanging be complete technique re



	Questions	
Theories of Learning	1. Name the three stages of learning.	Cognitive, associative, autonomo
	2. Identify which stage of learning a child who is learning how to rugby tackle for the first time would be in?	The child would be in the cogniti
	3. Describe the stage of learning the child is in (identified in question 2).	• The earliest stage of learning ithout cognitively processi • The tackles would also be inc time, as the child cannot ada • The child would rely heavily o (external, positive and termi • The child would make errors trial and error until the skill i
	4. Describe the characteristics of a learner in the second stage of learning.	• hift towards physical (as op he performance of a skill wi • A learner will make fewer er complex situations or adapti • Performer uses more intrinsi

Theories of Learning	Questions	
	5 …cribe the characteristics of someone in the final stage of learning.	• High level of skill performanc • Physical practice of the skill t • Performer has total knowlec • Learner can only make marg • The performer is able to ada
	…w …raph to show the 'learning …eau' and describe what it shows.	Performance
		…escription: A learning platea… no matter how h…

Theories of Learning	Questions	
	7. reasons why an athlete's learning may plateau.	• The performer is not skilled e • The coaching is not at a high • The performer is not motiva • The performer is too tired to • The performer finds the prac
	8. Suggest how a performer c ercome a learning platea when learning a new skill.	eparate and concentrate or • Develop and use intrinsic rew • Ask for extrinsic rewards fro • Use a more experienced coa • Allow sufficient recovery per • Make the practice more enjo
	9. Describe the three conditioning techniques, within oper conditioning, that can be used alte behaviour.	Positive reinforcement – if a perf urages the athlete to perfor Negative reinforcement – a nega correct behaviour. This reinforce Punishment – punishment is use someone (e.g. a coach). An indiv similarly in the future. This weak

Theories of Learning	Questions	
	10. Explain how cognitive theories of learning encourage the learning of new skills.	Cognitive theories of learning ack response to a stimulus (such as c individuals are constantly taking behaviour based on their percep that environment. Gestaltists believe that skills are no subroutines to study). It is th understanding a skill in its entire t theory breaks a skill into c an individual can often lead to a individual.
	me the four stages of Bandura's theory observational learning.	Attention, retention, motor repr
	12. Explain what Bandura meant by *attention* and *retention* in observational learni	Attention is the observer paying able to split the skill into subrout the kill being performed by som etention is the ability of the obs memory for later use. This enab their memories of the skill.

	Questions	
Theories of Learning	13. What would a performer do in the *motor reproduction* stages of Bandura's theory of observational learning?	In this stage, the observer attem (during the attention stage) base
	14. Name an important consideration when applying the *motor reproduction* stage of Bandura's theory.	The observer should be of a high performing the skill they witness
	15. Why is *motivation* an important consideration in Bandura's theory?	The individual must be motivated they reach a required standard.
	16. Observational learning is more likely to take place if there are key factors in place. Outline three factors that can increase the likelihood of behaviours being copied.	Any three from the following: • Reinforcement of behaviours • Demonstrations are clear and • The demonstrator is consiste • The learner can associate wit useful?) • The demonstrator is of a sim
	17. Briefly outline how Vygotsky suggested social development theory influences cognitive development.	Social development theory hypot are the primary influences in cog imitate individuals who are more
	18. Describe the process of interpsychological learning.	Interpsychological learning is the improve their skills on their own
	19. Outline the three stages within the zone of proximal development.	1. A performer is not able to co 2. A performer needs assistance 3. The performer can complete

Use of Guidance and Feedback

Use of Guidance and Feedback	Question	Type of Feedback	
	1. Name and describe the six types of feedback and identify which stage of learning the student would benefit from.	Positive	Providing good aspe
		Negative	Giving an good abo
		Extrinsic	Feedback person su
		Intrinsic	Feedback regarding type of ki
		Knowledge of results	An extern the outco example, m sprint.
		Knowledge of performance	An extern coach's co as video a intrinsic s performe

	Questions	
Use of Guidance and Feedback	2. Define 'verbal guidance'.	This is instruction from an externa movement. Instructions should be
	3. Define 'visual guidance'.	Visual guidance is any visual cue fr of a skill, for example, demonstrati guidance accurately replicates the s
	4. Define 'manual guidance'.	The physical moving of a performer karate fighter being moved into a c
	5. Define 'mechanical guidance'.	The use of physical aids or equipme to aid cognitive stage learners.
	6. Give a sporting example of mechanical guidance.	Any appropriate example that supp Or for dangerous activities –, e.g. c

Use of Guidance and Feedback

Questions

7. **Give the advantages and disadvantages of verbal and visual guidance.**

8. **Evaluate the use of manual guidance.**

	Advantages
Verbal	• Useful to target specific a weakness. • Can give additional feedb experienced performers. • Helps to motivate the lea
Visual	• Useful for beginners perf simple skills. • Can be used to show the as a whole, showing the what the skill should look performed correctly. • Helps the learner to deve mental image of the skill
	Advantages: • Increases confidence of perfor • Can be used to break a skill int • In some sports, can increase sa **Disadvantages:** • Performer may become relian • Inhibits the learner developing

Use of Guidance and Feedback	Questions		
	9. Discuss how mechanical guidance would be useful for a beginner learning how to swim.	**Useful for a beginner because:** • Increases confidence levels. • Can increase the safety in cert • Provides the learner with a ge **Not useful for a beginner because:** • Can lead to over-reliance of th • Learner may not get an exact f	
	10. Define 'intrinsic feedback' and provide the advantages and disadvantages of this type of feedback.	**Definition:**	Intrinsic feedbac regarding their o
		Advantages:	Can improve a pe adjust their perfo from an externa
		Disadvantages:	If a performer is should feel, and
	11. Define 'extrinsic feedback'.	Extrinsic feedback is feedback given	
	12. Which stages of learning are most suitable to extrinsic feedback?	Cog: ive and associative stages of	
	13. Describe the advantages and disadvantages of extrinsic feedback.	**Advantages:**	Can be used in e motivate a perfo
		Disadvantages:	Performer can b feedback can de

Use of Guidance and Feedback

Questions	
14. What are the benefits of positive feedback?	Positive feedback is used to compli… player to perform the same skill to … can strengthen the stimulus–respo…
15. What are the disadvantages of positive feedback?	A performer may become too depe… become unmotivated when they th… become overconfident if too much …
16. When would negative feedback be used and what benefits can it have to a performer?	Negative feedback is used when a p… motivate a player to perform a skil…
17. What are the disadvantages of negative feedback?	In the earlier stages of learning, a p… feedback due to an unsuccessful pe…
18. Explain how the use of positive and negative feedback should be adapted to someone in the cognitive stage of learning.	In the cognitive stage of learning, p… motivate them to continue their ef… be used a lot to maintain motivatio… much positive feedback as they ma… kept to a minimum as it can unmoti… shouting). Where possible, negativ… teaching (e.g. demonstrations) so t… communication.

Use of Guidance and Feedback	Questions		
	19. Describe 'knowledge of performance' and 'knowledge of results'.	Knowledge of performance is an ex visual feedback (such as video anal the performer is highly trained in t Knowledge of results is an external performance; for example, the tim	
	20. What are the advantages and disadvantages of knowledge of performance?	**Advantages:**	Can be used to e
		Disadvantages:	Too much inform the cognitive sta designed for cog
	21. What are the advantages and disadvantages of knowledge of results?	**Advantages:**	Provides a quick provide targets f completed).
		Disadvantages:	Does not provid unsuccessful. Re

3.1.3 – Sport and Society

Emergence of Globalisation of Sport in the Twenty-first Century

Pre-industrial Britain: pre-1870

	Questions		
Pre-industrial Britain: pre-1870	1. Name and describe six characteristics of popular recreation in pre-industrial Britain.	Irregular – the lower classes had days off – 'holy days'.	
		Unwritten/simple rules – the games were not written down (or e	
		Lower-class participation – t	
		Violent – sport reflected the	
		Wagering – the upper classes placed bets on the outcome	
		Local – limitations of transp meant that sport was rural.	
	2. In pre-industrial Britain there was a two-tier class system. Give an example of sports played by the upper class and lower class	**Upper class:**	Real tennis
		Lower class:	Mob football
	3. Explain how lack of leisure affected participation in sport during pre-industrial Britain	Living conditions for the low to this. Therefore, the game conditions. As such, the upp not have reflected their wea	

Pre-industrial Britain: pre-1870	Questions	
	4. How did the education and literacy of the lower classes shape sport during pre-industrial Britain?	As education and literacy ra games and sports had to be therefore, led to further vio regulations for people to fo
	5. Explain how *time* affected participation in sport during pre-industrial Britain	• There was a distinct lack Therefore, sport was pla • Long working hours also on days off. • Short amounts of time o • The upper classes had m participate in sport.
	6. Explain how *transport* affected the level of participation in sport during pre-industrial Britain	• Transport was limited in people could not travel f of advanced transport m participate in sport. • Bad road systems mean • Local games led to unwr • Upper classes were able time. Therefore, upper-c

Pre-industrial Britain: pre-1870	Questions	
	7. **Explain why the upper classes played different sports to those played by the lower classes.**	• Sports reflected the lifes sports with written, com violent sports. • The lower classes did no equipment, whereas the courts, to practise and pl • The upper classes had m classes could only partic
	8. **Describe what athletics looked like during pre-industrial Britain.**	• Athletics was referred to • Pedestrianism originate travel the furthest, in th outcome. • Gentry betted on the ou • Athletics had few writte • Athletics events were lo • Athletics events were g the participants (e.g. lo

Industrial and Post-industrial Britain (1780–1900)	Question	
	1. **Name the characteristics of sport and rational recreation in post-industrial Britain.**	• Regional • Religious • Revolution in urban and indust • Respectable • Regular • Codification • Purpose-built facilities • Amateurism and professionali • Controlled gambling • Played by all classes • NGBs in place • Positions of authority and offic • Fixtures and leagues emerged • Development of tactics used in
	2. **How did the Industrial Revolution change the class system in Britain?**	The emergence of factory owners, system, falling between the upper system.

Industrial and Post-industrial Britain (1780–1900)	Questions	
	3. **How did the emergence of a middle class develop sport in the nineteenth century?**	• Middle-class people tended to upper class who inherited wea • Therefore, many of the middle • Factory owners introduced ha participation. • Many middle-class men attend ke aspect of life. When they t ir rules to the masses. • Teams such as those of factori competitions and matches. • Factory owners paid the best a beginning of professionals.

Industrial and Post-industrial Britain (1780–1900)	Questions	
	4. **Explain the impact that urbanisation had *on* sport in post-industrial Britain.**	• An increase in work opportuni class to move to cities for work recreational activity within tow • Increase in spectatorship of sp • Factory owners allowed worke to participate in sport or spect • New facilities were built to fac • …lemand for sport and entert • Urbanisation led to less space f games, such as mob football, w
	5. **Explain how a change in transport changed participation in sport, in post-industrial Britain.**	• More affordable and efficient t • The working class could travel f • Increased travelling meant tour • Mass production of cars was n • Rural sports, such as rambling,
	6. **How did increased lit… …nd communicati… …t in post-indust… …n?**	A growth in the printing of newspa people could follow their favourite points' between the public about s

	Questions	
Industrial and Post-industrial Britain (1780–1900)	7 …t i… …uence did the Church have on … in post-industrial Britain?	• The Church supported sports a… • Sport was promoted as a way o… • Sport could be a method of spr… • The Church set up teams (e.g. f…
	8. After the Industrial Revolution, there was an emergence of professional and amateur status in sport. Define the terms 'professional' and 'amateur' and identify which classes belonged t… ea… h category.	A professional was an individual w… main source of income. As such, l… profe…sionals. In contrast, an amat… …oy…ent of it, without financial … …mateur athletes as they played s… event.
	9 …in …ow women were perceived in … and the effect their gender had on participation during post-industrial Britain.	Women were seen as the weaker … seen to reflect this. Violent game… middle-class and upper-class wom… lawn tennis.

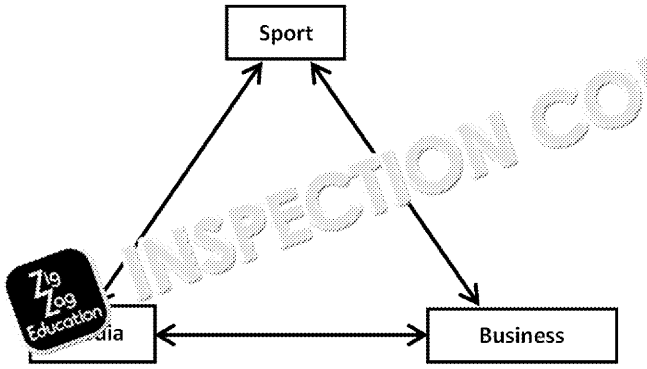
Industrial and Post-industrial Britain (1780–1900)	Questions		
	10. The British Empire spread sports and sporting ideas through its public schoolboys. Outline how each of the individuals/organisations h[illegible] spread these gam[illegible]	**Individuals / Organisation**	
		British officers	British soldiers emergence of of ideas, rules meaning sport with new spor
		Factory owners	Middle-class f introducing h best athletes set up, develo football club w
		Teachers	Teachers play sporting and r the army and

Industrial and Post-industrial Britain (1780–1900)	Questions		
	10. (Continued)	**Diplomats**	Diplomats are other countrie spread sport. society and so simple games
		rgy.nen	Clergymen an society (e.g. m church when spread the ide
	11. **Outline the reasons why NGBs were developed.**	• NGBs were required to meet • As local sports developed into allow competitions to take pl • More teams were being set u • As sport became more popul professionals in what were st all). There was increasing demand	

Industrial and Post-industrial Britain (1780–1900)	Questions	
	1. **...ribe how athletics underwent a ...wth in participation in post-industrial Britain.**	• Urbanisation caused an increa • The number of athletics even • People were able to participa • Amateurism and professionali class 'professionals' competin • The Amateur Athletics Associa • More structured athletics eve
	13. What were the aims of the Wenlock Games?	• To encourage personal develo • To provide a sporting event fo • Easy to understand with easy • Fun, non-competitive games f
	14. Identify and describe the key reasons why lawn tennis developed in nineteenth-century Britain.	• The equipment was only avai land). Therefore, they were r • Codification: the richer memb written and complex rules co played the sport. • Lawn tennis provided an oppo physical exertion of other spo • Lawn tennis was seen as an o • Many different clubs were se the space (e.g. gardens) and r • Lawn tennis became fashiona • The demand to play lawn ten Therefore, public courts and f participate.

Industrial and Post-industrial Britain (1780–1900)	Questions	
	15. Discuss four reasons that caused the development of association fo[illegible] nineteenth-century B[illegible]	**Any four from the following:** • Transport: as football became [illegible] transport of both football playe[illegible] railway system allowed this. • Urbanisation: football relied on [illegible] spectatorship as its popularity g[illegible] [illegible]ggregated people and allowe[illegible] • Spare time: football was a work[illegible] free time (e.g. half-days on Satu[illegible] factory work also allowed factor[illegible] • Disposable income: working-cla[illegible] This, combined with more free t[illegible] participate in football beyond th[illegible] • Class system: while football was[illegible] association football relied on th[illegible] upper classes to write rules and[illegible] structured, and paved the way f[illegible]

	Questions	
Emergence of Globalisation of Sport in the Twenty-first Century	**1. How have the terms 'amateurism' and 'professionalism' changed in sport from 1950 to today?**	The terms amateurism and p Instead, amateurism is just p professionals compete for fi However, many sports are s such as polo and dressage a and boxing are associated w
	2. How did the perc[illegible]on of women change following [illegible] World War?	After the war, the role wom seen to have completed a m reduction in the view that w participate in a wider range
	3. Explain how the roles and status of women has changed in the twenty-first century.	While some gender stereoty men in all areas of life (wage upsurge in female participat Further roles have been occ physiotherapists and team c

Emergence of Globalisation of Sport in the Twenty-first Century	Questions	
	4. **Below is the 'golden triangle'. Explain the ongoing relationship between sport, sponsorship and the media.**  	**Sport and the media:** • Sport uses the funding f and range of competitio • The media recognises sp millions of viewers. Bec sport, such as timings ar **Sport and business:** • Sport uses the funding This money is used to in • Businesses use sport to advertising platform for **Business and the media:** • Businesses use the med population; for example coverage a sport receiv • Media receives funding bid for broadcasting rig
	5. **Describe the effect that fre… movement has had on perform…**	Athletes can now participat the best competitors from support their teams

Emergence of Globalisation of Sport in the Twenty-first Century	Questions		
	6. How has media coverage changed since 1950 to develop sport?	**TV**	Broadcasting more sport sports (nota meaning no
		Radio	Dedicated sp radio allows national/inte
		Internet	Provides a p streaming o
		Social media	Fans have a news and up
	7. How has Wimbledon demonstrated a change in attitude towards elite female athletes in the twenty-first century?	Wimbledon offers the same the male winner. This demo influence spreads into othe career path.	

Emergence of Globalisation of Sport in the Twenty-first Century	Questions	
	8. **How has the commercialisation of sport impacted on player development?**	• Players can now receive sponsorship deals, allow • However, to receive impr must be one of the best to get to the top. • Commercialisation has l compete at the highest losing their sponsorship • To receive some financi personal time to produc • Commercialisation of sp must act responsibly, as
	9. **Using examples, describe the ways in which commercialisation of sport has impacted on the sports themselves.**	• Companies have more c as broadcasting. For ex a sports channel's TV sc • Companies have more c football pitches, adverti • Competition formats ar and, therefore, profitab scoring on the server's

	Questions	
Emergence of Globalisation of Sport in the Twenty-first Century	10. Defi[illegible]lisation'.	The increasing influence of b internationally.
	11. Give examples of globalisation of sport.	Accept any suitable answers For example: • Some Premier League t international supporter • Influence of sponsors a trophies/competitions) • Advertisements during A

The Impact of Sport on Society and Soc[illegible] Sport: Sociological Th[illegible] Applied to Equal Opportunities

	Questions	
The Impact of Sport on Society and Society on Sport	**1. Define 'society' and describe the impact sport has on it.**	Society is a community of indiv[illegible] Sport helps society as people w[illegible] society performs well in a spor[illegible] participate in sport.
	2. 'Socialisation' is the conformation of a grou[illegible] of people to meet the values and habi[illegible] of [illegible] society. **What is the [illegible] between primary [illegible]lisa[illegible] and secondary socialisation?**	Pr[illegible]mary socialisation is the soci[illegible] the interactions between a you[illegible] them. Secondary socialisation refers t[illegible] person from their teenage yea[illegible]
	3. Define 'social control' and 'social change' and explain how social processes can influence sports participation.	Social control – the regulation [illegible] a society. Social change – changes in soci[illegible] s[illegible]iety. Social processes are the progre[illegible] Social processes can limit spor[illegible] should fill certain roles in socie[illegible]

The Impact of Sport on Society and Society on Sport	Questions	Causes
	4. Social issues [illegible] sports participation [illegible] people. [illegible]ify the causes and consequences of social issues on sports participation.	• Socio-economic status / la • Lack of role models • Discriminatory attitudes (e stereotyping)
	5. Define 'social stratification' and explai[illegible] can impair sports participatio[illegible]	Social stratification is the hiera or social status. • People at the bottom of th top have access to sports f • Disadvantaged people do n • Evident in school and spor therefore, better facilities
	6. Describe how social stratification is evident in schools and education.	• Children from low socio-ec extracurricular activities. • State schools have less fun quality facilities. • Children from low-income f influence their participatio • However, as per the natio

The Impact of Sport on Society and Society on Sport	Questions	
	7. **Describe how social class impacts on participation in sports clubs.**	• Children from low-income f • Low-income families may r instead of participating in s • Working-class families livin sports (e.g. commonly mic • Many working-class childre clubs, as are these are com
	8. **e … ial action theory with relation to …eractionist theory.**	Social action theory states tha interaction (interactionist theo influence people have. For ex high socio-economic status is i other influential people. How likely to be developed as work have such a high socio-econon
	9. **What are the poten… …of social action theo… …participation?**	The creation or advancement o within a society. A society can as creating positive attitudes t Sport can help to develop new

Questions

10. Define the terms 'equal opportunities', 'discrimination', 'stereotyping' and 'prejudice'.

Equal opportunities	The as s
Discrimination	The whi gro
Stereotyping	A g hov
Prejudice	A b

11. Identify four barriers to sports participation for disabled people. What solutions are there to overcome the barriers identified?

Barrier
Poor facility access (e.g. no ra equipment (e.g. sports chairs).
Limited number of disability-fo trainers/coaches
k of advancement in disabl due to negative attitudes towa disabled sport
Lack of media coverage/expos lack of role models for disable

The Impact of Sport on Society and Society on Sport	Questions	
	12. ...e the term 'stacking' in terms of ethnic participation in sport and give an example of this.	Stacking is a form of stereotyp... in certain sports (or positions), ... sport. For example, in America... quarterbacks (decision-makers)... roles (speed) / or other suitabl...
	13. Define the term 'channelling' in terms of ethnic participation in sport and ...ve an example of this.	...hannelling is the act of intent... based on their ethnicity. For e... tennis instead of rugby.
	14. Ethnic ... an mind that people have a ...ti... attitude towards them (i.e. ...m). Give an example of football campaigns that have attempted to tackle discriminatory views.	• Kick It Out • Say No to Racism • Show Racism the Red Card
	15. Explain how the named barri... ...et... ...c minorities in sport c... ... ...ved.	**Barrier** **...tereotypical views that certai... groups are good or bad at cert... sports/positions** **Lack of role models**

The Impact of Sport on Society and Society on Sport	Questions	
		Barrier
	16. Identify the barriers that exist that ir[illegible]nc sports participation in gend[illegible] ha[illegible] solutions are there t[illegible]e the barriers identified?	**Sexist and stereotypical views women in sport**
		Females can be forced down r[illegible] p[illegible]ticipate in female-orientat[illegible] sp[illegible]rts, when they may want t[illegible] other sports
		Lack of media coverage
		Lack of role models
		Less sponsorship
		Lifestyles of women (e.g. seen domestic/child-minders)
	17. Describe [illegible] which sports [illegible]an [illegible] and local clubs can change in [illegible]r to cater for disadvantaged, low-[illegible]ncome families.	• Community-run projects t[illegible] to the participants) • Reduced membership fee[illegible]

The Impact of Sport on Society and Society on Sport	Questions	
		Health benefits
	18. Identify six health and fitness benefits that participation in sport can have on people.	• Keeps weight at a healthy l • Reduced risk of type II dia • Decreased risk of cancer • Reduced risk of cardiovasc diseases • Reduced blood pressure • Increased bone health • Reduced risk of depressio mental health issues
	19. Describe t… benefits that …tic… in sport can have.	• Sporting success can impr • Improved social skills of p • Lower crime rates as peop • Enhanced relationships fr
	20. Identify the roles and aims of Sport England.	• To promote participation i • To improve the standard o • Lottery funding provides s • Sport England supports go

The Impact of Sport on Society and Society on Sport	Questions	
	21. What is the role of local partners and how do they link with Sport England?	• Local partners are concern (county sports partnership participation rates. • Local partners are called c • CSPs are responsible for in • CSPs focus on participatio sport / better facilities / in sport. • Sport England oversees th
	2. t are the aims of national governing bodies (NGBs)?	• Organisation of and struct • Implementing plans to inc • Remove barriers that may • Invest time and money int

The Impact of Sport on Society and Society on Sport	Questions		
	23. National partners are linked with Sport England with specific aims to improve sport and participation in certain groups of people. For each of the national partners mentioned, provide their aims.	**National Partner**	
		English Federation of Disability Sport (EFDS)	• Improve
		UK Sport	• Work wi elite spo • Funding and rese
		Women in Sport	• To increa • To prom

3.1.4 – Exercise Physiology

Diet and Nutrition

Diet and Nutrition	Questions	Dietary Component	
	1. Name the seven c[illegible] of a healt[illegible] diet and [illegible]unctions of each.	Carbohydrates	Provide the largest amo[illegible] down into glucose for u[illegible]
		[illegible]ins	Made of amino acids, p[illegible] tissue and helping musc[illegible] small source of energy.
		Fats	Provide insulation to th[illegible] intensity and are also u[illegible] Fats also transport vitam[illegible]
		Mine[illegible]s	Provide numerous bene[illegible] calcium (bone growth a[illegible] balance and is key in se[illegible] accompanying vitamin [illegible]

Diet and Nutrition	Questions		
	1. (Continued)	5. Vitamins	Benefits dependent o strengthen the imm oxidative damage fr mineral to help that
		6. Fibre	Fibre aids the digest suits the exercise. F delayed or slow-rele
		7. Water	Water is key to perf fluids replaces wate avoid headaches, diz
	2. Identify the three types of fat and explain the difference between them.	• Saturated fats come from sources suc and desserts. Saturated fats are cons increased blood pressure and heart di • Trans fats primarily come from man-m r g t eir life. They are also synon diabetes in the UK. • Unsaturated fats are considered to be and vegetable oils. Unsaturated fats h heart disease.	

Questions	
sc..be the difference etween fat-soluble vitamins and water-soluble vitamins.	• Fat-soluble vitamins such as vitamins A soluble vitamins are stored in fat tissu be avoided. • Water-soluble vitamins are not stored these can be excreted in urine.
4. List five consequences of dehydration.	Any five from the following, or any other s • Increas breathing rate • Dizz ess • Loss of consciousness • Constipation • Heat exhaustion • Headaches • Decreased stamina • Decreased strength
5. Fill in the missing dietary components, matching th the correct food s .	**Dietary Component** |
	Fibre | **Bran cereal, brown**
	Water | **Drinks**
	P ns | **Meat, milk, eggs a**
	Carbohydrates | **Potatoes, rice and**
	Minerals | **Green vegetables,**
	Fats | **Avocados, butter,**
	Vitamins | **Fruit, seeds and wh**

Diet and Nutrition	Questions	
	6. **Explain the difference between simple and complex carbohydrates.**	Simple carbohydrates such as sugars from quick energy. Complex carbohydrates Co a long source (or delayed source) or energy
	7. **Name the health risks associated with eating too many saturated fats**	• Excessive weight gain / obesity • Coronary heart disease • High blood pressure • High cholesterol
	8. **When are fats used as a source of energy in physical exercise**	During low-intensity exercise
	9. **Describe the functions for the named vitamins and minerals that can help sports performance**	Vitamin C: Maintains the functionality bones and teeth to prevent osteoporosis. Vitamin D: Helps the body to absorb Vitamin B1: Helps to break down pro nervous system. Vitamin B2: Helps to break down carb the correct functioning o liver and skin.

Diet and Nutrition	Questions			
	9. (Continued)	Vitamin	B6	Aids the production of ho neurotransmitters which with the production of ha
			B12	Increases metabolism (bu health of nerve cells and
		Mine	Sodi	Helps in cell maintenance sodium helps to control b
			Iron	Key mineral in the creatio with the transport of oxy
			Calcium	Growth and developmen
	10. What is the recommended energy intake for men and women?	Men:		2500 kcal
		Women:		2000 kcal

Dietary Supplements and Manipulation

1. What kinds of athletes are likely to use creatine as a nutritional supplement? Give reasons for your answer.	Athletes that require high levels of creatine to supplement weight tra Creatine increases the stores of p the energy source of the body. If therefore, ATP – they have more
2. [illegible] disadvantages to using creatine as a supplement.	• Dehydration • Water retention (weight gain) • Muscle cramping • Some evidence of kidney dam • Muscle cramps
3. Why is sodium bicarbonate commonly used by athletes who compete in anaerobic events? Are there any disadvantages to using sodium bicarbonate?	[illegible]m bicarbonate acts as a buff [illegible]uch, anaerobic exercises can be p the pH levels of the blood and mu bicarbonate can cause stomach up

Dietary Supplements and Manipulation	Questions		
	4. Wh[illegible] benefits of consuming [illegible]ffeine before an event? What side [illegible]ffects can be caused by caffeine consumption?	**Benefits:**	increased alertnes metabolism for en
		Side effects:	dehydration/diure
	5. Give an example of an athlete who would benefit from carbohydrate loading and describe the benefits carbohydrate loading would give [illegible]en	Accept suitable examples, e.g. a r Carb[illegible]hydrate loading attempts to [illegible]dy as carbohydrates/glycogen. [illegible]uitable for aerobic events. This a	
	6. Pr[illegible]e and plan for an [illegible]hl[illegible] wanting to complete [illegible]rbohydrate loading in the week prior to an endurance event.	• 7 days before event: enduran • 6–4 days prior to event: athle continued at a similar intensi • 3–4 days prior to event: carb very low. Fatty foods should	
	7. What is a risk associated with carbohydrate loading?	• Digestive problems • [illegible]oating	

Testing: Important Considerations	Questions	
	1. Define 'validity'.	Validity is the degree to which a test
	2. Define 'reliability'.	Reliability is the 'repeatability' of a t produce the same, or similar, result
	3. An athlete was asked to jump as high as they could as part of a fitness test. They produced a jump once a week for five weeks, at the same time of day, using the same method. Their jump heights were 30 cm, 32 cm, 30 cm, 29 cm and 32 cm. Is this test reliable? Provide reasons for your answer.	te t is reliable. The methods us ne test is also performed at the sa performance, such as amount of sle The results show that the method u meaning the test and the athlete ar
	4. The sit-up test was used on an athlete to determine their maximal strength. This is not a valid test. Explain why this is not a valid test.	It is not valid because a sit-up test d determine the muscular endurance stren n of an athlete.

Testing: Important Considerations	Questions		
	5. What is quantitative data and what is qualitative data?	**Quantitative:**	Data that consists emotions and it is
		Qualitative:	Data that is com emotions, thoug
	6. What is objective data and what is subjective data?	**Objective:**	Measurable data testing.
		Subjective:	Data that consists measured.
	7. Give an example of a fitness test that provides quantitative, objective data.	Accept any suitable answers – fitnes • Sit-and-reach test • Jump-and-reach test • Bleep test • Handgrip dynamometry • One repetition maximum (1 RM • p test • Cooper 12-minute run	
	8. Give an example of qualitative, subjective data that could be collected during fitness testing and explain why it is qualitative and subjective.	Rate of perceived exertion (RPE) / B perception (thoughts and opinions) athlete.	

Warm-up and Cool-down and Principles of Training	Questions		
	1. **Describe the physiological benefits of completing a warm-up.**	Any from the following: • Increased temperature which in… likelihood of injury • Increased speed and strength of… • Increased heart rate increases o… • Increased breathing rate and de… muscles • Adrenaline is released (fight or f… • …cise • …ncreased muscle temperature w… oxygen and energy production r… • Increased speed and efficiency o…	
	2. **…ntify an athlete who would benefit from the stretching types given.**	**PNF**	e.g. A ballet dancer…
		Passive	e.g. An athlete reco…
		Dynamic	e.g. An athlete war…
		Ballistic	e.g. An elite gymna…
	3. **Describe the physi…g… …efits of completin… …n.**	• …ids the removal of lactic acid fr… • Reduces the likelihood of develo… • Helps to prevent blood pooling a… heart • Gently lowers of heart rate and … systems)	

Warm-up and Cool-down and Principles of Training

Questions		
4. Describe the two types of stretching an athlete can use to increase their flexibility.	**Static stretching**	Holding a stretch in t approximately 30 se assistance) and pass
	Ballistic stretching	Sudden, fast bouncin forces the muscle be due to its high risk o sudden, powerful m
5. ennis player wanted to improve their fitness by beginning a training programme. Name and describe the principles of training they should consider.	**Specificity**	Training should be sp would not improve t
	Progressive overload	Training should prog adaptations can cons court sprints they co
	Reversibility	Training needs to be training are not lost, week.
	Recovery	Training must includ the likelihood of inju

Warm-up and Cool-down and Principles of Training

Questions

co[illegible]ually improve performance fitness, athletes should make training harder each time. Describe the principles of training that can be used to progress training.	**Frequency**	The number of times
	Intensity	How hard the perfor
	Time	The duration of the s
	Type	The type of training s performance.
7. Describe the three [illegible] periodisation [illegible] they linked?	**[illegible]cycle**	A macrocycle is a lar Macrocycles are mad
	Mesocycle	A mesocycle is typica elements throughou
	Microcycle	Microcycles are typic
8. Apply the three principles of periodisation to a long-distance road cyclist.	The cyclist's macrocyle would be for of the year. The cyclist's macrocycle cycli[illegible]ay work on four key elemen in a month. Each mesocycle woul Each week will focus on one training spent increasing the cyclist's enduran	

Warm-up and Cool-down and Principles of Training	Questions	
	9. Name and describe the three phases of training.	1. Preparatory phase – commonly 'p… levels following a rest period to th…
		2. Competitive phase – commonly c… must maintain their performance … competing for.
		3. Transition phase – follows the co… This phase leads back to the prep…
	10. Why are phases of tra… b… …ning increasingly i… …ant?	As more sports become professional … of performance and fitness for longe… preseason to gradually get back to p… must then maintain performance ov…
	11. What is the concept of tapering?	Tapering reduces the volume of train… maintains the intensity during trainin…
	12. If tapering is performed correctly, 'peaking' can occur. What is 'peaking'?	Peaking is a direct result of good tap… …nce in time for an event or …

	Questions	
Training Methods	**1. Describe a training methods used to improve flexibility. Explain how the process is completed.**	Proprioceptive neuromuscular facilitat… muscle, then making it resist isometrica… PNF is carried out by passively stretchin… athlete then contracts the muscle isom… against the limb. Passive stretching is t… than the original active stretch.
	2. Name & describe two types of …in… that are used to improve …bic endurance.	**…pe of Training** |
		Continuous training | Training that in… no rest breaks, …
		Fartlek training | A mixture of int… low/medium int… then return to l…
	3. Define 'VO₂ max'.	VO₂ max is the maximal volume of oxyg…

Training Methods	Questions	
	4. **State three physiological features of an individual with a high VO_2 max.**	Any three of the following: • high capillary density • high proportion of slow-twitch mu • lower body fat percentage • higher levels of oxidative enzymes • greater cardiac output • large lung volume • large red blood cell count • strong respiratory muscles – diaph abdominus and intercostal muscle
	5. **Describe interval training. Whi element of fitness do pr e**	er training involves short bursts o ntensity exercise is then repeated. Interval training improves anaerobic po
	6. **te the ways in which interval training can be adapted to suit different athletes.**	Interval training can be adapted by cha • Recovery times • Work-to-rest ratio • Duration of exercises • Intensity of exercise completed
	7. **What main component of fitness does circuit training target?**	M r endurance (however, can be wer, agility, flexibility)

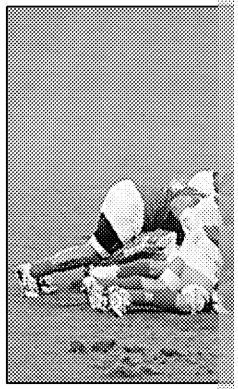
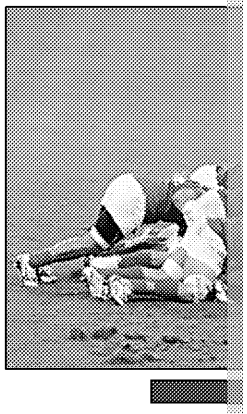
Training Methods	Questions		
	8. [illegible] benefits to a hockey [illegible] that circuit training can have [illegible] planned effectively.	Any of the following: • Can be adapted to work on relevan in hockey. • Whole team can participate, even • Can include sport-specific skills suc	
	9. Identify one disadvantage of circuit training.	Any one from: • A lot of equipment (including speci • A lot of space/facilities may be req • Ca[illegible]se high levels of fatigue	
	10. Weight training can be used to improve strength. Wh[illegible]e[illegible]by 'one repetition [illegible]m' (1RM)?	The amount of weight that can be lifte	
	11. [illegible]e the terms 'repetitions' and 'sets' with respect to strength training.	**Repetitions:**	Repetitions are sequence. It us set.
		Sets:	A set consists o repetitions.
	12. Complete the table of guidelines outlining the resistance s[illegible]e[illegible] for each type of st[illegible]ngth	**Ty[illegible]Strength**	**% 1RM**
		Muscular endurance	<70 %*
		Maximum strength	70–85 %*

3.1.5 – Biomechanical Movement

Biomechanical Principles

	Questions		
Biomechanical Principles	1. Define Newton's first law of motion and give a sporting example of it in use.	**Definition:**	The law of iner state of consta
		Sporting example:	A golf ball on a unbalanced fo (accept suitabl
	ine Newton's second law of tion and give a sporting example of it in use.	**Definition:**	The law of acc the force appli applied to it.
		Sporting example:	A golf ball bein (the direction t is hit by. The h acceleration. (accept suitabl

Biomechanical Principles	Questions		
	3. Define Newton's third law of motion and give a sporting example of it in use.	**Definition:**	The law of rea… reaction.
		Sporting example:	During a gymn… produce enoug… applies an equ… (through the g… (accept suitabl…
	4. Define 'net force'.	Ne… orce is the sum of all forces acti…	
	5. Define 'groun… …tion force'.	Ground reaction force is the force th… the force a mass exerts on the groun…	
	…ulate the force needed to …celerate a 0.5 kg mass by 50 m/s. Show your calculations.	Force (N) = mass (kg) × acceleration (… Force = 0.5 kg × 50 ms^{-2} Force = 25 N	

Biomechanical Principles	Questions	
	7. During a scrum in rugby, neither team has an advantage over the other. They are creating a balanced force. Draw two arrows on the diagram to represent the balanced force.	Arrows should be equal in length and acting directly opposite each other. 
	8. Another scrum occurs in the match and one team creates an unbalanced force in the scrum, forcing their opponents backwards. Draw two arrows to represent this unbalanced force.	One arrow should be noticeably larg Ensure arrows are acting directly opp 

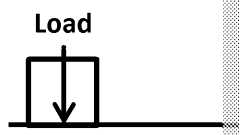
	Questions	
Biomechanical Principles	9. Define the term 'weight'.	Weight is the effect gravity has on th Also accept: Weight (N) = mass (kg) × acceleration Students must clearly differentiate b measured in Newtons.
	10. An athlete is completing a vertical jump test. Newton's third law states that for every action there is an opposite and equal reaction. What changes in force must the ... complete to move ... direction?	The ... te must produce an upward ... d (mass × gravity). For example ... 650 N, the athlete must create an up ...
	... ite ... equation to represent speed ... distance. Include units of measurement.	Speed (m/s) = distance (m) ÷ time (s)
	12. Define 'the centre of mass'.	The centre of mass is the point in or ... concentrated.

Biomechanical Principles	Questions	
	12. Explain the factors that affect the position of the centre of mass.	The centre of mass (CoM) is the loca concentrated. As such, CoM can be body, can change its shape to change a Fosbury Flop will have a CoM outsi Mass of an object (and the location o sumowrestler has a greater mass aro marathon runner.
	...la... ...ny a skier would bend their ...es to become more stable.	• Centre of mass (CoM) is related where the centre of mass is in re the CoM is inside, the body is sta • Objects with a lower CoM are m • By bending their knees, the skie • Bending the knees helps to wide • A combination of a lower CoM a

Lever Systems

Lever Systems

Questions	
1. Define the terms 'load', 'effort', 'fulcrum', 'effort arm' and 'load arm'.	**Load:** a weight that needs to **Effort:** the force required to **Fulcrum:** the point around whic **Effort arm:** the distance from the **Load arm:** the distance from the
2. Draw simple diagrams of first-, second- and third-class lever systems. Give a sporting example of the lever in work.	**First-class Lever System:** **Effort** ↓ **Sporting example:** extension of the blocks

Lever Systems	Questions	
	2. (Continued)	**Second-class Lever System:** 
		Sporting example: a rugby player
		Third-class Lever System: 
		Sporting example: flexion of the e throw

	Questions	
Lever Systems	**v[illegible] second-class lever [illegible]antageous over first- and third-class levers?**	Second-class levers allow large masse[illegible] producing a large force. This can be a[illegible] longer effort arm than the load arm. [illegible] moved, but this occurs at the expens[illegible]
	4. Give a sporting example of a third-class lever system. Identify the load, effort and fulcrum.	(accept any appropriate example) Third[illegible]s lever system: [illegible]cu[illegible] (elbow flexion) – upwards [illegible] Load = dumb-bell Effort = biceps brachii Fulcrum = elbow joint

3.1.6 – Sport Psychology

Psychological Factors that Ca... n... ence an Individual in Physical A...

Personality

	Questions	
Psychological Factors that Can Influence an Individual in Physical Activity: Personality	**1. Define 'personality'.**	Personality is the combination of ma...
	2. Define 'trait'.	A trait is an everlasting feature of a p...
	3. Outline the debate regarding 'nature vs nurture' in personality forma...	Perso...ty is the combination of cha... ...er...onality is an innate part of h... ...ture). However, some argue that ... personality from other people (nurtu...
	4. Outline the social learning theory of personality.	The social learning theory hypothesis... match the social situation they are in... experiences to apply the correct beh... imitated from people seen as signific... i.e. Behaviour = Function of environm...
	5. Outline the trait th...y ... personalit...	Trait theory states that personality is ... personality is innate and unchanging ... 'strongest' traits having larger effects... i.e. Behaviour = Function of personal...

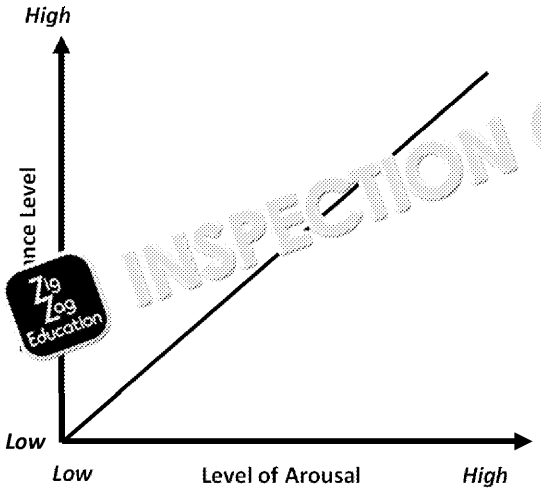
Psychological Factors that Can Influence an Individual in Physical Activity: Personality	Questions	
	Outline the interactionist theory of personality.	The interactionist theory suggests th personality traits and the environme adapting to their surroundings and s i.e. Behaviour = Function of (Persona
	7. Explain how Hollander's model supports interactionist theory.	Hollander's model demonstrates tha innate (trait). However, attitudes ca • [illegible] responses • [illegible]le-related behaviours • social environment
	8. Using a sporting example, explain how interactionist theory can impact on performance.	Interactionist theory states that peop the environment they are in. e.g. A netball player is normally calm opposition are aggressive and the cr behaviour and becomes more aggres their opposition, improving their per

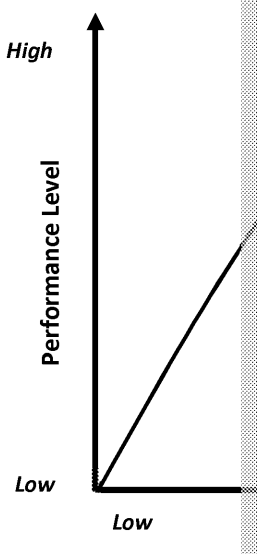
Psychological Factors that Can Influence an Individual in Physical Activity: Attitudes

Questions	
1. Define 'attitude'.	Attitude is an emotional feeling as a
2. Name and describe the factors that affect the formation of attitude.	**Factor**
	Personality type: The many d… response to
	Social influences: The effect t… individual's
	Personal experiences: Based on pr… situation in
	Conditioning: Reinforcem… can influenc… the future.
3. Outline the three components of attitude as proposed in the Triadic Model	**Component**
	Affective component: The emotio… towards it,
	Behavioural component: How an indi… positively to… attitude tow…
	Cognitive component: The individu… perceived p…

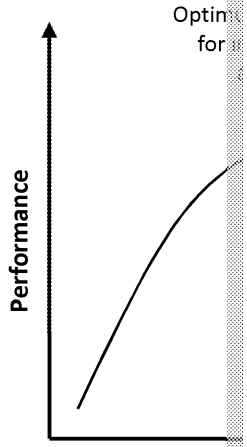
Psychological Factors that Can Influence an Individual in Physical Activity: Attitudes	Questions	
	4. **Explain how persuasive communication can aid attitude change.**	• This method uses communicatio numerous factors. • Firstly, the individual must be wil • They must also be willing to chan of someone with a stronger attitu • If the persuader is of a higher sta individual, the message is more li • The persuader should aim to pres re om of the individual throug Finally, the environment where t reflect the change in attitude. Th
	5. **What is meant by 'cognitive dissonance'?**	Cognitive dissonance is the change o towards something. A conflict in att change their behaviour to reduce the any of the three components of attit

Psychological Factors that Can Influence an Individual in Physical Activity: Arousal

Questions	
1. Define 'arousal'.	Arousal is an increase in mental and p
2. Identify the theory of arousal represented by the graph below and give a brief explanation of what the theory states.  	**Inverted-U theory** The theory that performance is p • Performance levels infinitely incr • As arousal increases, more focus what the athlete believes to be t
3. What are the limitations of the theory (from page 2)?	Drive theory assumes that arousal an does not apply well to sports that req player is too aroused in the lead-up t their excitement and get sent off the

Psychological Factors that Can Influence an Individual in Physical Activity: Arousal	Questions	
	4. **Explain the inverted-U theory and draw a graph to represent the theory.**	The inverted-U theory suggests that a However, it states that for each pers 
	5a. **Describe the differences in optimal arousal between a novice and an expert, or an introvert and an extrovert.**	The optimal arousal levels for a novic / extroverts. This is because introver

Psychological Factors that Can Influence an Individual in Physical Activity: Arousal

Questions	
5b. Draw a graph to show these differences.	
6. Describe the catastrophe theory of arousal.	Catastrophe theory is the theory tha an athlete to an optimal arousal leve in arousal level, past the optimal aro performance level.
7. Explain how performa ev can be recovered af a 'ca trophe'.	llowing a sudden drop in performa optimal) state of performance by red This if often done by motivation fron further arousal.

Psychological Factors that Can Influence an Individual in Physical Activity: Arousal	Questions	
	8. Explain what is meant by 'zones of optimal functioning' and how they vary from person to person.	A zone of optimal functioning refers t a task (see inverted-U theory and cat arousal to successfully perform a tas arousal to perform a task to the best
	9. Describe 'peak flow experience'.	Peak flow experience is the state of game. Athletes aim to experience pe
	10. What are the characteristics of someone in the peak flow state?	High self-awareness • Advanced levels of control over • Maintaining maximum focus on • Performance of a skill feels effo • State of relaxation • Time feels slowed down

Psychological Factors that Can Influence an Individual in Physical Activity: Anxiety	Questions		
	1. Define 'anxiety'.	Anxiety is a feeling of nervousness or a threat.	
	2. Name and describe the two types of anxiety.	**Competitive trait anxiety:**	A person's nat unchanging.
		Competitive state anxiety:	The response o temporary resp
	3. Describe somatic responses to anxiety.	• Headaches • Tension • Increased heart rate • Increased respiratory rate • Loss of appetite ('butterflies in st • Increased sweating • Irritability • Increased need to urinate	
	4. Describe the cognitive responses to anxiety.	• Loss of concentration • Confusion • Negative thoughts • Feeling weak • Reduced decision-making ability • Feelings of dissatisfaction	

Psychological Factors that Can Influence an Individual in Physical Activity: Anxiety

Questions

5. **The Sport Competition Anxiety Test (SCAT) is a self-report questionnaire designed to evaluate an athlete's feelings prior to competition and their attitudes towards sport in general.**

   Describe the advantages and disadvantages of SCAT.

Advantages:

- High reliability – the athlete is likely
- High validity – SCAT has been show

Disadvantages:

- Performers may not tell the truth o are more acceptable or that they th
- Coaches/trainers can adapt their tra to minimise the effects of anxiety.

6. **Name and describe two more methods of assessing anxiety in athletes. Identify any advantages or disadvantages of each method.**

Method	Description
Physiological tests	Measurements of physiological response such as heart rate and sweating to a number situations that may cause anxiety
Observational methods	An external person watches an athlete perform and records any signs of anxiety

Aggression

Psychological Factors that Can Influence an Individual in Physical Activity: Aggression	Questions	
	1. Define 'aggression' in a sporting context. How is assertive behaviour different from aggression?	Aggression is the intentional behaviour a… into either channelled aggression or host… Assertive behaviour is forceful behaviou… not involve harming others and is withir…
	2. Describe the instinct theory of aggression and highlight its limitations.	The instinct theory of aggression propos… characteristics that they cannot change. … instinctive aggression characteristics tha… everyone as a release of energy. It has b… aggression so the individual is calmer ou… However, the theory does not take into c… argue that sport doesn't provide a platfo… people. Aggressive behaviour can also b… evolutionary advantage (as it might have…
	3. What is meant by the term 'catharsis'?	A feeling of relief or calmness, following …

Psychological Factors that Can Influence an Individual in Physical Activity: Aggression

Questions	
4. **...cri... ...ocial learning theory ...gression and highlight its ...itations.**	The social learning theory proposes that ... others. An individual witnesses aggressi... behaviour in similar situations. The theory, however, does not acknowl... – suggesting that not all aggression can b...
5. **Using a sporting example, explain the aggressive cue hypothesis.**	The aggressive cue hypothesis suggests ... an individual, leading to increased arous... However, this aggression is not released ... exa... a ...otballer may get increasing... ...well. When the defender finally m... aggression towards the defender by pus...
6. **... d... ...rustration–...ssion hypothesis explain ...ression as a result of frustration?**	This hypothesis argues that there is a dire... aggression is the result of increasing frust... aggression and the source of the frustrati...
7. **Name and describe five strategies that could be used to control aggression.** Accept any s... ...vention ...oc...	**1.** Fines – clubs and players can be ...
	2. ...ation – players can be educ...
	3. Lowering arousal levels – arousa... controlling arousal may reduce t...
	4. Removal – removing a player fro... 'catastrophe' (catastrophe theor...
	5. Rewards – rewarding non-aggre... non-aggressive behaviour in the ...

Psychological Factors that Can Influence an Individual in Physical Activity: Motivation	Questions	
	1. Define 'intrinsic motivation'.	Intrinsic motivation is motivation that o individual's intrinsic feedback (positive o towards sport.
	2. Define 'extrinsic motivation'.	Extrinsic motivation is motivation that o of rewards that can motivate the indivic
	3. What are tangible and int rewards? Give ex ples	Ta gib rewards are rewards which car sponsorship. Intangible rewards are non-physical rew positive feedback such as praise from a
	4. Explain how extrinsic motivation would be used to motivate a beginner in gymnastics. Give examples of extrinsic motivation.	• Extrinsic rewards help to motivate s • Acts as a motivator to reinforce goo experiences (e.g. a treat after the le • Com tive young people can use e m va or to continue participation • ome young gymnasts will use extri the motivation to keep going.

Psychological Factors that Can Influence an Individual in Physical Activity: Motivation	Questions	
	Explain how intrinsic motivation could benefit an elite football player.	• At an elite level, footballers are able motivation. • Players can play for enjoyment / lov • Elite players are competitive and so
	6. Explain how a rugby player would be extrinsically motivated using tangible and intangible rewards.	• Tangible and intangible rewards are originate from sources external to t A rugby player would be motivated the season by winning their league term season as they have an end go • Intangible motivation would be prais the player to perform well in each in next match.

Psychological Factors that Can Influence an Individual in Physical Activity: Social Facilitation	Questions		
	1. Define 'social facilitation'.	The positive impact performing in front	
	2. Define 'social inhibition'.	The negative impact performing in front	
	3. What effect would an audience have on beginners and experts of a sport or skill?	**Beginners:**	High arousal leads t concentration to pe concentration.
		Expert	Social facilitation – the task or skill and
	4. Zajonc suggest[illegible] four types of [illegible] who can affect [illegible] responses during [illegible]rmance. Identify these others.	1. Audience/spectators 2. Other performers (not direct compe 3. Other performers (direct competitio 4. Coaches – social reinforcers	
	5. When low-level or experienced performers compete in front of an audience, they experience 'evaluation apprehension'. Describe evaluation a[illegible] and the effect [illegible] perfor[illegible].	Evaluation apprehension is the percepti your performance. [illegible] performers will display a nega of arousal. They start making mistakes, Experienced athletes will display a posit pressure of an audience, causing them t	

Psychological Factors that Can Influence an Individual in Physical Activity: Social Facilitation	Questions	
	6. **Would a ... lead to social ...hi... or social facilitation ...nen an athlete performs simple and complex skills? Explain why.**	Complex skills require higher levels of co... performance. This is because complex s... skill. The performance of a simple skill w... arousal, as simple skills are often more a...
	7. **Identify the strategies that can be implemented to minimi... social inhibition.**	Accept any suitable strategies: • Focusing on the important cues (skil... • Men... rehearsal • S... talk • Relaxation exercises • Positive reinforcement • Overlearning of skills (skills becomin... • Practising in front of an audience • Goal setting

Psychological Factors that Can Influence an Individual in Physical Activity: Group Dynamics	Questions		
	1. [illegible] group?	A group is a body of people that sha	
	2. Describe the four sta[illegible] formation, as [illegible] by Tuckman.	1. **Forming**	First meeti interrelatio focus on w
		2. **Sto.ming**	At this stag cause splin the next st performan
		3. **Norming**	Problem-so stage. Indi the team a resolved, t
		4. **Performing**	As a whole achieve the skills to hel
	3. What is group co[illegible]on?	Group cohesion is the effect of a gro group, to work towards a shared go	

Psychological Factors that Can Influence an Individual in Physical Activity: Group Dynamics

Questions	
4. [illegible] task cohesion and social [illegible]sion.	**Task cohesion:** Is concerned with the o[illegible] on the performance of [illegible] **Social cohesion:** How well a group of pe[illegible]
5. **Write an equation to represent Steiner's Model of Group Effectiveness.**	Actual productivity = best potential [illegible]
6. **Using sporting examples, describe the [illegible] factors that cause losses due to [illegible]lt[illegible] processes.**	• [illegible]rdination losses – group me[illegible] [illegible]otball team of talented indivi[illegible] • Motivational losses – an increas[illegible] losses in others (Ringelmann ef[illegible] many squad members so others
7. **Explain the Ringelmann effect and its relationship with social loafing.**	The Ringelmann effect is the reduct[illegible] This leads to members of the group [illegible] effort of an individual in a team due [illegible] sometimes, laziness due to the perc[illegible]
8. **What strategies cou[illegible] to strengthen [illegible]d team [illegible]**	Improve communication betw[illegible] • Ensure each member of the gr[illegible] • Make sure each member of a g[illegible] • The correct leadership style sh[illegible] • Group/team performance sho[illegible] • Allow group members to invol[illegible]

Psychological Factors that Can Influence an Individual in Physical Activity: Goal-setting

Questions		
1. Describe the named type of goals and provide a sporting example of each.	**Goal Type**	**Descr**
	Outcome goals	Goals that are only co result of a performanc losing)
	Task-orientated Goals	Goals that are only co at hand. These goals a the completion (not s task.
	Performance-related Goals	Goals that are concern or standard, of the pe
	Process goals	Goals concerned with execution of a task
2. How do goals affect confidence and self-efficacy of an athlete?	Setting, and therefore achieving, attain Completing tasks and increasing confid understan how to overcome similar c	
3. What effect does se ing have on task persis athlete?	Setting long-term goals helps to maint Having shorter-term goals (that are sti attention and motivation to keep push	

Psychological Factors that Can Influence an Individual in Physical Activity: Goal-setting

Questions		Answ
4. Using sporting examples, describe t... ...R... ...iple of goal-setting.	**S**	Specific – goals should have precise aims. This helps to di For example, a fly half focusing on the individual compon
	M	Measurable – goals that are able to be recorded allow the performance. For example, an athlete aiming to improve aerobic fitness
	A	Achievable – goals should be challenging, but achievable their confidence when they reach their goals. For example, a foot... ...aiming to win the ball in 60% of
	R	Realis... ...listic goals allow the performer to believe t ...the ...rmer. For example, a marathon runner aiming to improve their
	T	Time-bound – putting a time limit on achieving a goal cre motivation to complete the task. For example, being able to run the 800 m in 3 mins 30 se
	E	Evaluate – coaches and performers should analyse the su successful methods during this time helps to make future For example, a swim... ...ncing extrinsic motivation mor more extri... ...motivation will be used to achieve the nex
	R	...after evaluation, the performer should think abou completed. When this has been decided, the performer For example, a rower just misses out on a national qualify attempt this goal to reach the national qualifying time ag

3.1.7 – Sport and Society and the Role of Technology in Physical Activity and Sport

The Role of Technology in Physical Activity and Sport

	Questions		
Technology for Sports Analytics	1. **Explain the importance of video analysis programmes in sports performance.**	Video analysis allows coaches and athl • Technique • Efficiency of movement (e.g. gait a • Providing statistics (e.g. possession • Player positioning • Can be used to analyse opponent p	
	2. **Describe notational match analysis and sports biomechanics with regards to motion analysis. Give examples of how each could be used.**	**Notational match analysis**	The analysis of sp performance in w aspects of perfor monitored
		Sports biomechanics	Analysis of sporti studying why som (kinetics) and how moves (kinematic
	3. **How is a metabolic cart used to determine the fitness of an athlete?**	A metabolic cart determines the meta calorimetry which measures the volum provides data to calculate the energy b	

Technology for Sports Analytics	Questions	
	4. What is indirect calorimetry?	Indirect calorimetry is a method of stu analysing the gases (oxygen and carbo The equipment used in indirect calorim
	5. What is GPS used for and what sports can benefit from its use?	GPS (Global Positioning System) can tr acceleration and deceleration of an at athlete's body undergoes during comp rugby and hockey.
	6. Describe how GPS is being used by the general population to aid physical activity.	Modern phones and tracking systems and accessible to the general populati are completing daily and allows them phones and watches can monitor the calculation of acceleration and decele health and fitness levels.
	7. What is meant by the term 'data integrity'?	Data integrity is ensuring that data col sources of error enter the data. This m time between collecting the data and

Technology for Sports Analytics

Questions	
8. Identify methods a sports club could adopt to ensure and maintain data integrity.	Any three from the following: • Using trusted computers and not c • Using encryption software • Creating backups of files • Double-checking the data you inpu • Regularly scanning computers for v
9. What must data and data collection methods be, to maintain data integrity?	Reliable, valid and accurate
10. Name the ways that data integrity can be maintained.	• Ensuring testers have the correct l • Avoiding software malfunction and backed-up. • Password-protecting data to avoid • Using software to detect and respo
11. Give an example of qualitative data that may be collected in sports physiology and sports psychology.	**Sports physiology:** e.g. Rate of pe **Sports psychology:** e.g. Questionn example
12. Explain why it is important modern technology collects objective data.	Objective data is factual data, normally interpretation. Therefore, providing te from technology can be assumed to be
13. Explain why it is not always appropriate to collect subjective data from modern technology in sport.	Subjective data is not necessarily factu a situation, such as emotions, opinions different meanings, depending on wh