PE A Level - Personal Learning Checklist

AQA A Level PE

	Paper 1	R	A	G
Paper 1	I understand the characteristics and impact on sporting recreation during the pre-industrial era (pre 1780).			
	I understand the characteristics of mob football, real tennis and Much Wenlock Olympic Games.			
	I understand the characteristics of popular and rational recreation linked to the two-tier class system. Upper and lower.			
	I understand the characteristics and impact on sporting recreation during the Industrial and post-industrial era (1780–1900).			
	I understand the characteristics and impact on sport (limited to development of association football, lawn tennis and rationalisation of track and field events).			
	I understand how the Industrial Revolution affected the development of rational recreation.			
	I understand how Urbanisation affected the development of rational recreation.			
	I understand how the development of transport and communication affected the development of rational recreation.			
	I understand how The British Empire helped to spread rational recreation around the world.			
	I understand how factories increased provision of rational recreation and sport.			
	I understand how Churches and local authorities increased provision of rational recreation and sport.			
	I understand the Three-tier class system (emphasis on middle class and working class).			
	I understand how the development of national governing bodies affected the development of rational recreation and sport.			
	I understand the characteristics of sport.			
	I understand the changing role of women in sport through the eras.			
	I understand the changing status of amateur and professional performers.			
	I understand the characteristics and impact on sporting recreation Post World War II (1950 to present).			
	I understand the characteristics and impact on sport (limited to development of association football, tennis and athletics) of the Golden triangle – the interrelationship between commercialisation (including sponsorship), media (radio, TV, satellite, internet and social media).			
	I understand the characteristics and impact on sport (limited to development of association football, tennis and athletics) of sports and governing bodies.			
	I can discuss the changing status of amateur and professional performers.			
	I understand the factors affecting the emergence of elite female performers in football (players and officials), tennis and athletics in late 20th and early 21st century.			
	I know the definitions of the following key terms in relation to the study of sport and their impact on equal opportunities in sport and society:			
	• society			
	• socialisation			
	• social processes			
	• social issues			
	• social structures/stratification.			
	I understand the effects of Primary and secondary socialisation.			
	I understand the concepts of Social control and social change.			
	I understand the causes and consequences of inequality. Eg schools/sports clubs.			
	I understand social action theory in relation to social issues in physical activity and sport.			
	I understand the Interactionist approach, impact of sport on society and of society on sport.			
	I know about underrepresented groups in sport.			
	• Disability.			
	• Ethnic group.			
	• Gender.			
	• Disadvantaged.			
	I understand and can define the terms equal opportunities, discrimination, stereotyping and prejudice.			
	I understand the barriers to participation in sport and physical activity and possible solutions to overcome them for underrepresented groups in sport.			
	I know the benefits of raising participation.			
	• Health benefits.			
	• Fitness benefits			
	• Social benefits.			
	I understand the interrelationship between Sport England, local and national partners to increase participation at grass roots level and underrepresented groups in sport.			
	I understanding of the impact of physical activity and sport on the health and fitness of the individual.			
	I have an understanding of factors of Health (heart disease, high blood pressure, effects of cholesterol, stroke).			
	I have an understanding of Fitness (cardiac output – trained and untrained individuals, maximal and sub-maximal exercise).			
	I understand the hormonal, neural and chemical regulation of responses during physical activity and sport.			
	I understand the concept of Anticipatory rise.			
	I understand the Redistribution of blood (vascular shunting, vasoconstriction, vasodilation).			
	I understand the Cardiac conduction system.			
	I understand the Sympathetic and parasympathetic nervous systems.			
	I understand the effects of Carbon dioxide.			

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Paper 1	I understand the role of Receptors involved in regulation of responses during physical activity. (Chemoreceptor, proprioceptor, baroreceptor.)			
	I understand the Transportation of oxygen and the role of Haemoglobin and Myoglobin.			
	I understand the Oxyhaemoglobin disassociation curve and the Bohr shift.			
	I understand the Venous return mechanisms.			
	I understand the Relationship with blood pressure (systolic, diastolic).			
	I understand Starling's law of the heart.			
	I understand Cardiovascular drift.			
	I understand Arterio-venous oxygen difference (A-VO2 diff) and the variations in response to an exercise session.			
	I understand variations between trained and untrained individuals.			
	I know the adaptations to body systems resulting from training			
	I have an understanding of lung volumes and the impact of and on physical activity and sport. (Residual volume, Expiratory reserve volume, Inspiratory reserve volume, Tidal volume, Minute Ventilation.)			
	I understand Gas exchange systems at alveoli and muscles in terms of Oxygen and carbon dioxide.			
	I understand Principles of diffusion and partial pressures.			
	I understand the hormonal, neural and chemical regulation of pulmonary ventilation during physical activity and sport.			
	I know the impact of Adrenaline and its use within the Sympathetic and parasympathetic nervous systems.			
	I understand the role of Carbon dioxide.			
	I know the receptors involved in regulation of pulmonary ventilation during physical activity. (Chemoreceptor, proprioceptor, baroreceptor.)			
	I understand the impact of poor lifestyle choices on the respiratory system. (Smoking and oxygen transport).			
	I understand the characteristics and functions of different muscle fibre types for a variety of sporting activities.			
	• Slow twitch (type I).			
	• Fast glycolytic (type IIx).			
	• Fast oxidative glycolytic (type IIa).			
	I have an understanding of the Nervous system. (Sympathetic and parasympathetic.)			
	I understand the Role of proprioceptors in PNF (Muscle spindles, Golgi tendon organs)			
	I understand the recruitment of muscle fibres and how the strength of muscular contractions can be varied through:			
	• Motor units.			
	• Spatial summation.			
	• Wave summation.			
	• All or none law.			
	• Tetanic contractions.			
	I know and can apply Joint actions in the sagittal plane/transverse axis.			
	• Shoulder and hip (flexion, extension and hyperextension).			
	• Elbow and knee (flexion and extension).			
	• Ankle (plantar flexion and dorsi flexion).			
	I know and can apply Joint actions in the frontal plane/sagittal axis.			
	Shoulder and hip (adduction and abduction).			
	I know and can apply Joint actions in the transverse plane/longitudinal axis.			
	Shoulder and hip (horizontal abduction and adduction).			
	I know the types of joint, articulating bones, main agonists and antagonists, types of muscle contraction.			
	Isotonic (concentric and eccentric) and isometric.			
	I understand the concept of Energy transfer in the body.			
	I understand the Aerobic energy system (glycolysis, Kreb/citric acid cycle, beta oxidation, electron transport chain) and can draw this process as a diagram.			
	I understand the Anaerobic energy systems (ATP-PC system, anaerobic glycolytic system), and can draw these in a diagram.			
	I understand the Energy continuum of physical activity. Consideration for physical activity and sport of different intensities and durations.			
	I know the differences in ATP generation between fast and slow twitch muscle fibre.			
	I understand Energy transfer during short duration/high intensity exercise.			
	I understand the Anaerobic energy system.			
	I understand the ATP-PC system.			
	I understand the Short term lactate anaerobic system (lactate accumulation, lactate threshold, OBLA, lactate producing capacity and sprint/power performance).			
	I understand Energy transfer during long duration/lower intensity exercise. (Aerobic energy system.)			
	I understand Oxygen consumption during exercise (maximal and submaximal oxygen deficit).			
	I understand Oxygen consumption during recovery (excess post-exercise oxygen consumption EPOC).			
	I know the factors affecting VO2 max/aerobic power.			
	I have knowledge of the measurements of energy expenditure.			
	• Indirect calorimetry.			
	• Lactate sampling.			
	• VO2 max test.			
	• Respiratory exchange ratio (RER).			

Paper 1		R	A	G
Paper 1	I understand the impact of specialist training methods on energy systems.			
	• Altitude training.			
	• High Intensity Interval Training (HIIT).			
	• Plyometrics.			
	• Speed Agility Quickness.			
	I know the characteristics of skill.			
	I can use the skill continua.			
	• Open – closed.			
	• Discrete – serial – continuous.			
	• Gross – fine.			
	• Self-paced – externally paced.			
	• High – low.			
	• Simple – complex.			
	I can justify skill placement on each of the continua.			
	I can define different types of Transfer of learning. (Positive, Negative, Zero, Bilateral)			
	I understand how transfer of learning impacts on skill development.			
	I understand and can apply the different methods of presenting practice.			
	• Progressive part.			
	• Whole.			
	• Whole–part–whole.			
	• Types of practice.			
	• Massed.			
	• Distributed.			
	• Variable.			
	• Mental practice.			
	I understand how knowledge of skill classification informs practice structure (presentation and type) to allow learning/development of skills.			
	I understand the Stages of learning and how feedback differs between the different stages of learning. (Cognitive, associative, autonomous.) Learning plateau. Causes and solutions.			
	I understand the theories of learning:			
	• Cognitive theories. Insight learning (Gestalt).			
	• Behaviourism. Operant conditioning (Skinner).			
	• Social learning. Observational learning (Bandura).			
	• Constructivism. Social development theory (Vygotsky).			
	I understand how theories of learning impact on skill development.			
	I know the different Methods of guidance and can define them:			
	• Verbal.			
	• Visual.			
	• Manual.			
	• Mechanical.			
	I understand the different purposes and types of feedback.			
	• Knowledge of performance.			
	• Knowledge of results.			
	• Positive and negative.			
	• Intrinsic.			
	• Extrinsic.			
	I understand how feedback and guidance impacts on skill development.			
	I understand information processes and the terms:			
	• Input.			
	• Senses.			
	• Receptors.			
	• Proprioception.			
	• Perception.			
	• Selective attention.			
	I understand Decision making and can apply the Baddeley and Hitch, working memory model.			
	I understand the memory system.			
	I understand the Functions and characteristics of components of working memory model.			
	• Output.			
	• Feedback.			
	I can apply Whiting's information processing model to a range of sporting contexts.			

Paper 1		R	A	G
Paper 1	I have an applied understanding of information processing terms within a sporting context.			
	• Environment.			
	• Display.			
	• Sensory organs.			
	• Perceptual mechanism.			
	• Translatory mechanism.			
	• Effector mechanism.			
	• Muscular system output data.			
	• Feedback data.			
	I know the definitions of and the relationship between reaction time, response time, movement time.			
	• Simple reaction time.			
	• Choice reaction time.			
	I understand the factors affecting response time. Hick's law.			
	I understand and can apply Psychological refractory period to sporting situations.			
	I understand and can apply Single channel hypothesis to sporting situations.			
	I know definitions of anticipation. (Temporal. Spatial.)			
	I know and can apply strategies to improve response time.			
	I understand and can apply Schmidt's schema theory. (Recall, Recognition, Initial conditions, Response specifications, Sensory consequences, Response outcomes, Parameters).			
	Application of schema theory in sporting situations.			
	I know and can apply strategies to improve information processing. (Input – selective attention decision making process – chunking, chaining, response time, schema).			

Paper 2		R	A	G
Paper 2	I know the characteristics and functions of key concepts and how they create the base of the sporting development continuum.			
	• Physical recreation.			
	• Sport.			
	• Physical Education.			
	• School Sport.			
	The similarities and the differences between these key concepts.			
	I understand the personal, social and cultural factors required to support progression from talent identification to elite performance.			
	I understand the generic roles, purpose and the relationship between organisations in providing support and progression from talent identification through to elite performance.			
	• National governing bodies.			
	• National institutes of sport.			
	• UK Sport.			
	I know the key features of national governing bodies' Whole Sport Plans (WSP).			
	I understand the support services provided by national institutes of sport for talent development.			
	I understand the key features of UK Sport's World Class Performance Programme, Gold Event Series and Talent Identification and Development. Or equivalent current named programmes.			
	I understand concepts of ethics in sport, including Amateurism, the Olympic Oath, sportsmanship, gamesmanship, win ethic. Positive and negative forms of deviance in relation to the performer.			
	I know the causes and implications of violence in sport in relation to the performer, spectator and sport.			
	Strategies for preventing violence within sport to the performer and spectator.			
	I understand the social and psychological reasons behind elite performers using illegal drugs and doping methods to aid performance.			
	I know the physiological effects of drugs on the performer and their performance. Erythropoietin (EPO).			
	• Anabolic steroids.			
	• Beta Blockers.			
	I understand the positive and negative implications to the sport and the performer of drug taking.			
	I know the Physiological adaptations of taking drugs in sport.			
	• Erythropoietin (EPO).			
	• Anabolic steroids.			
	• Beta Blockers.			
	I understand the Social and psychological rewards of taking drugs (for the sport and the performer).			
	I understand the negative impact on current and future health of taking drugs.			
	I understand the social and psychological repercussions of taking drugs (for the sport and the performer).			
	I know strategies for elimination of performance enhancing drugs in sport.			
	I understand arguments for and against drug taking and testing.			
	I understand the uses of sports legislation from the point of view of the			
	• Performers (contracts, injury, loss of earnings).			
	• Coaches (duty of care).			
	• Officials (negligence).			
	• Spectators (safety, hooliganism).			
	I understand the positive and negative impact of commercialisation, sponsorship and the media on the			
	• Performer.			
	• Coach.			
	• Audience.			
	• Sport.			
	• Official.			
	I understand the use of technology for sport analytics.			
	I understand the use of technology in data collection (quantitative and qualitative, objective and subjective, validity and reliability of data).			
	I understand the use of			
	• Video and analysis programmes.			
	• Testing and recording equipment (metabolic cart for indirect calorimetry).			
	• GPS and motion tracking software and hardware.			
	I understand maintaining data integrity.			

	Paper 2	R	A	G
Paper 2	I understand functions of sports analytics for			
	• Monitoring fitness for performance			
	• Skill and technique development			
	• Injury prevention (vibration, electro stimulation)			
	• Game analysis			
	• Talent			
	• ID/scouting.			
	I understand the development of equipment and facilities in physical activity and sport, and their impact on participation and performance.			
	I understand the impact of material technology on equipment – adapted (disability, age). Facilities – Olympic legacy, (surfaces, multiuse).			
	I understand the role of technology in sport and its positive and negative impacts on the			
	• Sport			
	• Performer			
	• Coach			
	• Audience			
	I understand the adaptations to the body systems through training or lifestyle, and how these changes affect the efficiency of those systems.			
	I understand the exercise-related function of food classes.			
	• Fibre.			
	• Carbohydrate.			
	• Fat (saturated fat, trans fat and cholesterol).			
	• Protein.			
	• Vitamins (C, D, B-12, B-complex).			
	• Minerals (sodium, iron, calcium).			
	• Water (hydration before, during and after physical activity).			
	I know the positive and negative effects of dietary supplements / manipulation on the performer.			
	• Creatine, sodium bicarbonate, caffeine, Glycogen			
	I know and understand key data terms for laboratory conditions and field tests. Quantitative and qualitative.			
	• Objective and subjective.			
	• Validity and reliability.			
	I know the physiological effects and benefits of a warm-up and cool down.			
	I understand stretching for different types of physical activity (static and ballistic).			
	I know the Principles of training. Specificity, progressive overload, reversibility, recovery, Frequency Intensity Time Type of training (FITT) principles.			
	I can apply the principles of periodisation. Macro cycle, Meso cycle, Micro cycle. Preparation, competition, transition. Tapering, peaking.			
	I understand the Training methods to improve physical fitness and health.			
	• Interval training (anaerobic power).			
	• Continuous training (aerobic endurance).			
	• Fartlek (aerobic endurance).			
	• Circuit training (muscular endurance).			
	• Weight training (strength).			
	I understand Proprioceptive Neuromuscular Facilitation (PNF) (flexibility).			
	I understand types of injury. Acute (fractures, dislocations, strains, sprains). Chronic (Achilles tendonitis, stress fracture, 'tennis elbow').			
	I understand different methods used in injury prevention. Injury prevention methods:			
	• Screening.			
	• Protective equipment. Warm up, flexibility training (active, passive, static and ballistic), taping and bracing.			

	Paper 2	R	A	G
Paper 2	I understand Injury rehabilitation methods (proprioceptive training, strength training, hyperbaric chambers, cryotherapy, hydrotherapy).			
	I understand Recovery from exercise (compression garments, massage/foam rollers, cold therapy, ice bath, cryotherapy).			
	I know the physiological reasons for methods used in injury rehabilitation.			
	(Hyperbaric chambers, cryotherapy.)			
	I understand the importance of sleep and nutrition for improved recovery			
	I understand aspects of personality.			
	I understand attitudes.			
	I understand the theories of arousal.			
	I understand the theories around anxiety.			
	I understand the theories of aggression.			
	I know the types of motivation.			
	I understand achievement motivation theory.			
	I understand social facilitation and inhibition.			
	I understand the theories of group dynamics.			
	I understand Newton's three laws of linear motion applied to sporting movements.			
	I can define Force, Speed, distance, Centre of mass and know equations and units of example scalars.			
	I understand factors affecting stability including height of centre of mass, area of base of support, position of line of gravity and body mass.			
	I understand the three classes of lever and examples of their use in the body during physical activity and sport.			
	I understand the mechanical advantage and mechanical disadvantage of each class of lever.			
	I have an understanding of the forces acting on a performer during linear motion.			
	Gravity, frictional force, air resistance, internal muscular force, weight.			
	I know definitions, equations and units of vectors and scalars for			
	Mass, weight, speed, velocity, distance, displacement, acceleration and momentum.			
	I understand the relationship between impulse and increasing and decreasing momentum in sprinting through the interpretation of force/time graphs.			
	I can apply Newton's laws to angular motion.			
	I know definitions and units for angular motion. Angular displacement, angular velocity, angular acceleration.			
	I understand conservation of angular momentum during flight, moment of inertia and its relationship with angular velocity.			
	I understand the factors affecting horizontal displacement of projectiles and factors affecting flight paths of different projectiles. (Shot put, badminton shuttle).			
	I know Vector components of parabolic flight.			
	I understand Dynamic fluid force. Drag and lift.			
	I understand factors that reduce and increase drag and their application to sporting situations.			
	• The Bernoulli principle applied to sporting situations.			
	• Upward lift force (discus).			
	• Downward lift force (speed skiers, cyclists, racing cars).			
	I understand the importance of goal setting.			
	I understand attribution theory.			
	I understand the concepts of self-efficacy and confidence, and the associated theories.			
	I know the different styles of leadership and the characteristics of an effective leader.			
	I know and can apply a range of stress management techniques.			