GCSE PE Revision Topics

Below are all the topic areas and what you need to know within each of those topic areas. Use your class folders, revision book, GCSE POD and internet research to ensure you know each area to the best of your ability. Perhaps highlight the bullet points within each topic area when you have revised them. Only tick the "know it" box if you are happy that you know that topic area and you could answer exam questions based on that topic area.

Some topic areas are more difficult than others. You do not need to revise the topic areas in the order below so plan out your revision to suit your needs, but make sure that over the next few months leading up to you exams, that you have covered and recovered all areas as much as possible.

	Topic Area	What you need to know	Revised	Ok with	Know it
1	Location of major bones	know the name and location of the following bones in the human body: • cranium • vertebrae • ribs • sternum • clavicle • scapula • pelvis • humerus • ulna • radius • carpals • metacarpals • phalanges • femur • patella • tibia • fibula • tarsals • metatarsals			
2	Functions of the skeleton	understand and be able to apply examples of how the skeleton provides or allows: • support • posture • protection • movement • blood cell production • storage of minerals.			
3	Types of synovial joint	know the definition of a synovial joint • know the following hinge joints: • knee – articulating bones – femur, tibia • elbow – articulating bones – humerus, radius, ulna • know the following ball and socket joints: • shoulder – articulating bones – humerus, scapula • hip – articulating bones – pelvis, femur			
4	Types of movement at hinge joints and ball and socket joints	know the types of movement at hinge joints and be able to apply them to examples from physical activity/sport:			

		• flexion • extension • know the types of movement at ball and socket joints and be able to apply them to examples from physical activity/sport: • flexion • extension • rotation • abduction • adduction • circumduction. know the roles of: • ligament • cartilage • tendons			
5	Location of major muscle groups	know the name and location of the following muscle groups in the human body and be able to apply their use to examples from physical activity/sport: • deltoid • trapezius • latissimus dorsi • pectorals • biceps • triceps • abdominals • quadriceps • hamstrings • gluteals • gastrocnemius			
6	The roles of muscle in movement	know the definitions and roles of the following and be able to apply them to examples from physical activity/sport: • agonist • antagonist • fixator – antagonistic muscle action.			
7	Lever systems	know the three classes of lever and their use in physical activity and sport: • 1st class – neck • 2nd class – ankle • 3rd class – elbow # • know the definition of mechanical advantage.			
8	Planes of movement and axes of rotation	know the location of the planes of movement in the body and their application to physical activity and sport: • frontal • transverse • sagittal • know the location of the axes of rotation in the body and their application to physical activity and sport: • frontal • transverse • longitudinal.			
9	Structure and function of the cardiovascular system	• know the double-circulatory system (systemic and pulmonary) • know the different types of blood vessel: • arteries • capillaries • veins • understand the pathway of blood through the heart: • atria • ventricles • bicuspid, tricuspid and semilunar valves • septum and major blood vessels: – aorta – pulmonary artery – vena cava – pulmonary vein • know the definitions of: • heart rate • stroke volume • cardiac output • know the role of red blood cells.			
10	Structure and function of the respiratory system	understand the pathway of air through the respiratory system: • mouth • nose • trachea • bronchi • bronchiole • alveoli • know the role of respiratory muscles in breathing: • diaphragm • intercostals • know the definitions of:			

		• breathing rate • tidal volume • minute ventilation • understand about alveoli as the site of gas exchange.			
11	Aerobic and anaerobic exercise	know the definitions of: • aerobic exercise • anaerobic exercise • be able to apply practical examples of aerobic and anaerobic activities in relation to intensity and duration.			
12	Short-term effects of exercise	understand the short-term effects of exercise on: • muscle temperature • heart rate, stroke volume, cardiac output • redistribution of blood flow during exercise • respiratory rate, tidal volume, minute ventilation • oxygen to the working muscles • lactic acid production • be able to apply the effects to examples from physical activity/ sport • be able to collect and use data relating to short-term effects of exercise.			
13	Long-term (training) effects of exercise	understand the long-term effects of exercise on: • bone density • hypertrophy of muscle • muscular strength • muscular endurance • resistance to fatigue • hypertrophy of the heart • resting heart rate and resting stroke volume • cardiac output • rate of recovery • aerobic capacity • respiratory muscles • tidal volume and minute volume during exercise • capilliarisation • be able to apply the effects to examples from physical activity/ sport • be able to collect and use data relating to long-term effects of exercise.			
14	Components of fitness	Know the following components of fitness: • cardiovascular endurance/stamina • know the definition of cardiovascular endurance/stamina • be able to apply practical examples where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – Cooper 12 minute run/walk test – multi-stage fitness test • muscular endurance • know the definition of muscular endurance • be able to apply practical examples where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – press-up test – sit-up test • speed • know the definition of speed • be able to apply practical examples where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – 30m sprint test • strength			

		• know the definition of strength • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – grip strength dynamometer test – 1 Repetition Maximum (RM)			
15	Components of fitness cont.	• power • know the definition of power • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – 'standing jump' or 'vertical jump' tests • flexibility • know the definition of flexibility • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – 'sit and reach' test • agility • know the definition of agility • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – Illinois agility test • balance • know the definition of balance • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – 'stork stand' test • co-ordination • know the definition of co-ordination • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – 'wall throw' test • reaction time • know the definition of reaction time • be able to apply practical examples of where this component is particularly important in physical activity and sport • know suitable tests for this component, including: – reaction time ruler test be able to collect and use data relating to the components of fitness.			
16	Principles of training	know the following definitions of principles of training and be able to apply them to personal exercise/training programmes:			

		• specificity • overload • progression • reversibility.			
17	Optimising training	know the definition of the elements of FITT (Frequency, Intensity, Time, Type) and be able to apply these elements to personal exercise/training programmes • know different types of training, definitions and examples of: • continuous • fartlek • interval – circuit training – weight training – plyometrics – HIIT (High Intensity Interval Training)			
18	Optimising training	understand the key components of a warm up and be able to apply examples: • pulse raising • mobility • stretching • dynamic movements • skill rehearsal • know the physical benefits of a warm up, including effects on: • warming up muscles/preparing the body for physical activity • body temperature • heart rate • flexibility of muscles and joints • pliability of ligaments and tendons • blood flow and oxygen to muscles • the speed of muscle contraction			
19	Optimising training	understand the key components of a cool down and be able to apply examples: • low intensity exercise • stretching • know the physical benefits of a cool down, including: • helps the body's transition back to a resting state • gradually lowers heart rate • gradually lowers temperature • circulates blood and oxygen • gradually reduces breathing rate • increases removal of waste products such as lactic acid • reduces the risk of muscle soreness and stiffness • aids recovery by stretching muscles.			
20	Prevention of injury	understand how the risk of injury in physical activity and sport can be minimised and be able to apply examples, including: • personal protective equipment • correct clothing/footwear • appropriate level of competition • lifting and carrying equipment safely • use of warm up and cool down • know potential hazards in a range of physical activity and sport settings and be able to apply examples, including: • sports hall • fitness centre • playing field • artificial outdoor areas • swimming pool.			
21	Physical activity and sport in the UK	be familiar with current trends in participation in physical activity and sport:			

		• using different sources (such as Sport England, National Governing Bodies (NGBs) and Department of Culture, Media and Sport (DCMS)) • of different social groups • in different physical activities and sports.			
22	Participation in physical activity and sport	understand how different factors can affect participation, including: • age • gender • ethnicity • religion/culture • family • education • time/work commitments • cost/disposable income • disability • opportunity/access • discrimination • environment/climate • media coverage • role models			
23	Participation in physical activity and sport	understand strategies which can be used to improve participation: • promotion • provision • access • be able to apply examples from physical activity/sport to participation issues.			
24	Commercialisation of sport	• understand the influence of the media on the commercialisation of physical activity and sport: • different types of media – social – internet – TV/visual – newspapers/magazines. • know the meaning of commercialisation, including sport, sponsorship and the media (the golden triangle): • positive and negative effects of the media on commercialisation • be able to apply practical examples to these issues. • understand the influence of sponsorship on the commercialisation of physical activity and sport: • positive and negative effects of sponsorship on commercialisation • be able to apply practical examples to the issue of sponsorship.			
25	Ethics in sport	know and understand: • the value of sportsmanship • the reasons for gamesmanship and deviance in sport. • be able to apply practical examples to these concepts.			
26	Drugs in sport	know and understand the reasons why sports performers use drugs • know the types of drugs and their effect on performance: • anabolic steroids • beta blockers • stimulants • give practical examples of the use of these drugs in sport. • know and understand the impact of drug use in sport: • on performers • on sport itself.			
27	Violence in sport	know and understand the reasons for player violence • give practical examples of violence in sport.			

28	Characteristics of skilful movement	know the definition of motor skills • understand and be able to apply examples of the characteristics of skilful movement: • efficiency • pre-determined • co-ordinated • fluent • aesthetic.			
29	Classification of skills	know continua used in the classification of skills, including: • simple to complex skills (difficulty continuum) • open to closed skills (environmental continuum) • be able to apply practical examples of skills for each continuum along with justification of their placement on both continua.			
30	Goal setting	understand and be able to apply examples of the use of goal setting: • for exercise/training adherence • to motivate performers • to improve and/or optimise performance • understand the SMART principle of goal setting with practical examples (Specific, Measurable, Achievable, Recorded, Timed) • be able to apply the SMART principle to improve and/or optimise performance.			
31	Mental preparation	know mental preparation techniques and be able to apply practical examples to their use: • imagery • mental rehearsal • selective attention • positive thinking			
32	Types of guidance	understand types of guidance, their advantages and disadvantages, and be able to apply practical examples to their use: • visual • verbal • manual • mechanical.			
33	Types of feedback	understand types of feedback and be able to apply practical examples to their use: • intrinsic • extrinsic • knowledge of performance • knowledge of results • positive • negative.			
34	Health, fitness and well-being	know what is meant by health, fitness and well-being • understand the different health benefits of physical activity and consequences of a sedentary lifestyle: • physical: – injury – coronary heart disease (CHD) – blood pressure – bone density – obesity – Type 2 diabetes – posture – fitness • emotional: – self-esteem/confidence – stress management – image			
35	Diet and nutrition	know the definition of a balanced diet • know the components of a balanced diet • carbohydrates • proteins • fats • minerals • vitamins • fibre • water and hydration • understand the effect of diet and hydration on energy use in physical activity • be able to apply practical examples from physical activity and sport to diet and hydration.			
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