



Haydock High School – Excellence in Exams

Get Ready for...

Subject: GCSE PE

Exam Dates:

Unit: Theory

Worth: 70%

Revision Materials:

| Suggested Topics I Should Revise | Ways I could revise: |
|--|--|
| <p>know the name and location of the following bones in the human body:</p> <ul style="list-style-type: none">o craniumo vertebraeo ribso sternumo clavicleo scapulao pelviso humeruso ulnao radiuso carpalso metacarpalso phalangeso femuro patellao tibiao fibulao tarsalso metatarsals. | <ul style="list-style-type: none">• Use a ruler to underline all key words when answering questions.• Practice answering questions, to ensure that you have your timing correct. (use attached questions for each topic area)• Mind maps• Bullet points• Use key words to link topics together• Think of practical examples• Link topic areas to sporting examples• When answering 6 mark questions ensure that you include 6 or more pieces of information.• Revision Tuesday and Friday lunch time, 1.30pm |

understand and be able to apply examples of how the skeleton provides or allows:

- o support
- o posture
- o protection
- o movement
- o blood cell production
- o storage of minerals

know the definition of a synovial joint

know the following hinge joints:

- o knee – articulating bones – femur, tibia
- o elbow – articulating bones – humerus, radius, ulna

know the following ball and socket joints:

- o shoulder – articulating bones – humerus, scapula
- o hip – articulating bones – pelvis, femur

know the types of movement at hinge joints and be able to apply them to examples from physical activity/sport:

- o flexion
- o extension

know the types of movement at ball and socket joints and be able to apply them to examples from physical activity/sport:

- o flexion
- o extension
- o rotation
- o abduction
- o adduction
- o circumduction

know the roles of:

- o ligament
- o cartilage
- o tendons

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:

- o deltoid
- o trapezius
- o latissimus dorsi
- o pectorals
- o biceps
- o triceps

- o abdominals
- o quadriceps
- o hamstrings
- o gluteals
- o gastrocnemius

know the definitions and roles of the following and be able to apply them to examples from physical activity/sport:

- o agonist
- o antagonist
- o fixator – antagonistic muscle action

know the three classes of lever and their use in physical activity and sport:

- o 1st class – neck
- o 2nd class – ankle
- o 3rd class – elbow

know the definition of mechanical advantage

know the location of the planes of movement in the body and their application to physical activity and sport:

- o frontal
- o transverse
- o sagittal

know the location of the axes of rotation in the body and their application to physical activity and sport:

- o frontal
- o transverse
- o longitudinal

know the double-circulatory system (systemic and pulmonary)

know the different types of blood vessel:

- o arteries
- o capillaries
- o veins

understand the pathway of blood through the heart:

- o atria
- o ventricles
- o bicuspid, tricuspid and semilunar valves
- o septum and major blood vessels:
 - aorta
 - pulmonary artery

- vena cava
- pulmonary vein

know the definitions of:

- o heart rate
- o stroke volume
- o cardiac output

understand the pathway of air through the respiratory system:

- o mouth
- o nose
- o trachea
- o bronchi
- o bronchiole
- o alveoli

know the role of respiratory muscles in breathing:

- o diaphragm
- o intercostals

know the definitions of:

- o breathing rate
- o tidal volume
- o minute ventilation

understand about alveoli as the site of gas exchange

know the definitions of:

- o aerobic exercise
- o anaerobic exercise

be able to apply practical examples of aerobic and anaerobic activities in relation to intensity and duration

understand the short-term effects of exercise on:

- o muscle temperature
- o heart rate, stroke volume, cardiac output
- o redistribution of blood flow during exercise
- o respiratory rate, tidal volume, minute ventilation
- o oxygen to the working muscles
- o 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

understand the long-term effects of exercise on:

- o bone density
- o hypertrophy of muscle
- o muscular strength
- o muscular endurance
- o resistance to fatigue
- o hypertrophy of the heart
- o resting heart rate and resting stroke volume
- o cardiac output
- o rate of recovery
- o aerobic capacity
- o respiratory muscles
- o tidal volume and minute volume during exercise
- o capillarisation

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

Know the following components of fitness:

cardiovascular endurance/stamina

- o know the definition of cardiovascular endurance/stamina
- o be able to apply practical examples where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - Cooper 12 minute run/walk test
 - multi-stage fitness test

muscular endurance

- o know the definition of muscular endurance
- o be able to apply practical examples where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - press-up test
 - sit-up test

speed

- o know the definition of speed
- o be able to apply practical examples where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:

– 30m sprint test

strength

- o know the definition of strength
- o be able to apply practical examples of where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - grip strength dynamometer test
 - 1 Repetition Maximum (RM)

power

- o know the definition of power
- o be able to apply practical examples of where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - ‘standing jump’ or ‘vertical jump’ tests

flexibility

- o know the definition of flexibility
- o be able to apply practical examples of where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - ‘sit and reach’ test

agility

- o know the definition of agility
- o be able to apply practical examples of where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - Illinois agility test

balance

- o know the definition of balance
- o be able to apply practical examples of where this component is particularly important in physical activity and sport
- o know suitable tests for this component, including:
 - ‘stork stand’ test

co-ordination

- o know the definition of co-ordination
- o be able to apply practical examples of where

this component is particularly important in physical activity and sport

o know suitable tests for this component, including:
– ‘wall throw’ test

reaction time

o know the definition of reaction time
o be able to apply practical examples of where this component is particularly important in physical activity and sport
o know suitable tests for this component, including:
– reaction time ruler test

be able to collect and use data relating to the components of fitness

know the following definitions of principles of training and be able to apply them to personal exercise/training programmes:

o specificity
o overload
o progression
o reversibility

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:

o continuous
o fartlek
o interval
– circuit training
– weight training
– plyometrics
– HIIT (High Intensity Interval Training)

understand the key components of a warm up and be able to apply examples:

o pulse raising
o mobility
o stretching
o dynamic movements
o skill rehearsal

know the physical benefits of a warm up, including effects on:

o warming up muscles/preparing the body for physical activity

o body temperature

o heart rate

o flexibility of muscles and joints

o pliability of ligaments and tendons

o blood flow and oxygen to muscles

o the speed of muscle contraction

understand the key components of a cool down and be able to apply examples:

o low intensity exercise

o stretching

know the physical benefits of a cool down, including:

o helps the body's transition back to a resting state

o gradually lowers heart rate

o gradually lowers temperature

o circulates blood and oxygen

o gradually reduces breathing rate

o increases removal of waste products such as lactic acid

o reduces the risk of muscle soreness and stiffness

o aids recovery by stretching muscles

understand how the risk of injury in physical activity and sport can be minimised and be able to apply examples, including:

o personal protective equipment

o correct clothing/footwear

o appropriate level of competition

o lifting and carrying equipment safely

o 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:

o sports hall

o fitness centre

o playing field

o artificial outdoor areas

o swimming pool

be familiar with current trends in participation in physical activity and sport:

o using different sources (such as Sport England, National Governing Bodies (NGBs) and Department of Culture, Media and Sport (DCMS))

o of different social groups

o in different physical activities and sports

understand how different factors can affect participation, including:

- o age
- o gender
- o ethnicity
- o religion/culture
- o family
- o education
- o time/work commitments
- o cost/disposable income
- o disability
- o opportunity/access
- o discrimination
- o environment/climate
- o media coverage
- o role models

understand strategies which can be used to improve participation:

- o promotion
- o provision
- o access

be able to apply examples from physical activity/sport to participation issues

understand the influence of the media on the commercialisation of physical activity and sport:

- o different types of media
 - social
 - internet
 - TV/visual
 - newspapers/magazines.

know the meaning of commercialisation, including sport, sponsorship and the media (the golden triangle):

- o positive and negative effects of the media on commercialisation
- o be able to apply practical examples to these issues

understand the influence of sponsorship on the commercialisation of physical activity and sport:

- o positive and negative effects of sponsorship on commercialisation
- o be able to apply practical examples to the issue of sponsorship

know and understand:

- o the value of sportsmanship
- o the reasons for gamesmanship and deviance in sport

be able to apply practical examples to these concepts

know and understand the reasons why sports performers use drugs

know the types of drugs and their effect on performance:

- o anabolic steroids
- o beta blockers
- o stimulants

give practical examples of the use of these drugs in sport

know and understand the impact of drug use in sport:

- o on performers
- o on sport itself

know and understand the reasons for player violence

give practical examples of violence in sport

know what is meant by health, fitness and well-being

understand the different health benefits of physical activity and consequences of a sedentary lifestyle:

o physical:

- injury
- coronary heart disease (CHD)
- blood pressure
- bone density
- obesity
- Type 2 diabetes
- posture
- fitness

o emotional:

self-esteem/confidence

- stress management
- image

o social:

- friendship
- belonging to a group

– loneliness

be able to apply the above to different age groups

be able to respond to data about health, fitness and well-being

know the definition of a balanced diet

know the components of a balanced diet

o carbohydrates

o proteins

o fats

o minerals

o vitamins

o fibre

o 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

Analysing and Evaluating Performance (AEP)

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