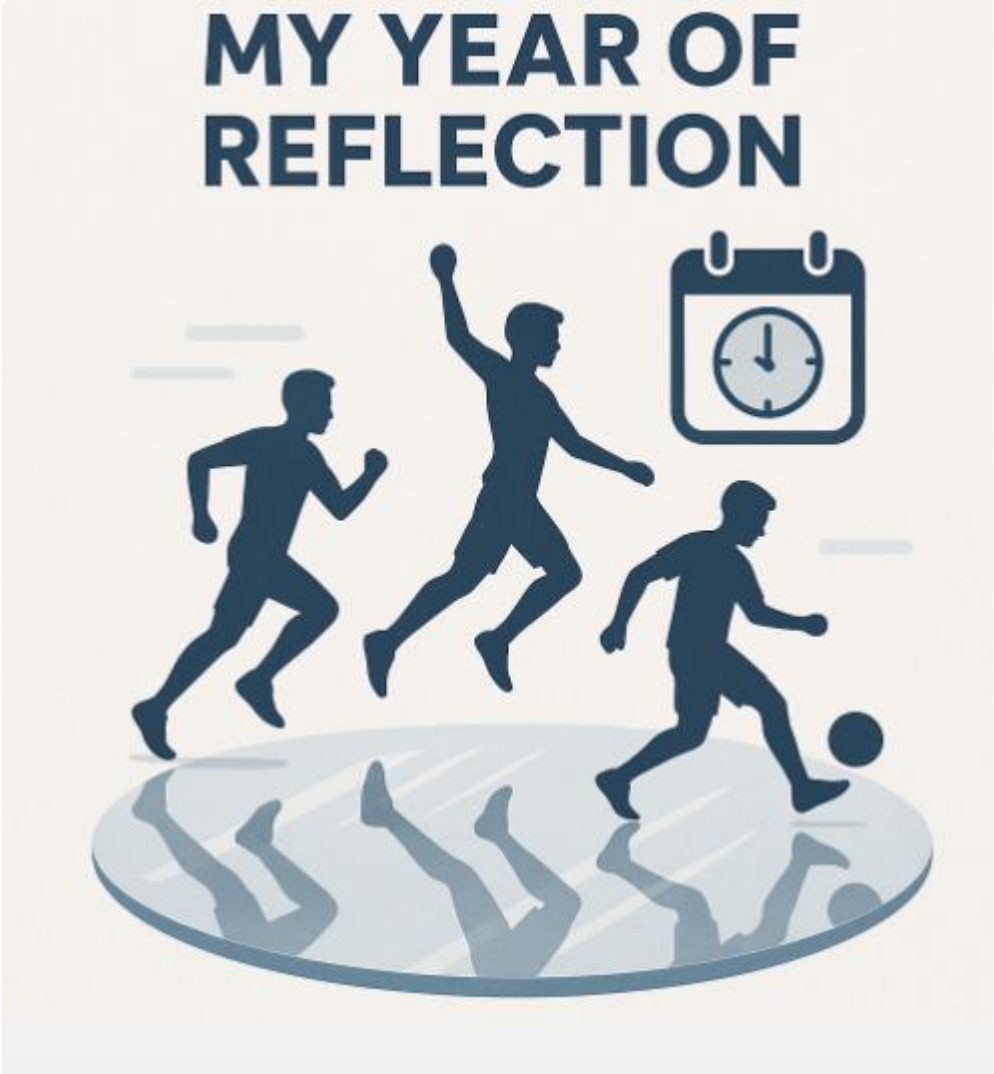
GCSE PE



Name:

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Task:

Complete the following Personalised Learning Checklists for the theory units you have studied in Year 10

Health, Fitness and Wellbeing
Personal Learning Checklist (PLC)

Content- Can you?	Red	Amber	Green
PHYSICAL, EMOTIONAL AND SOCIAL HEALTH, FITNESS AND WELLBEING			
- Define 'Health' (World Health organisation- WHO definition)			
- Identify the 3 different types of health			
- Know how increasing physical ability, through improving components of fitness improve health or reduce health risks and how this is achieved			
- Know how participation in physical activity can improve emotional health and how these benefits are achieved			
- Know how participation in physical activity can improve social health and how these benefits are achieved			
- Describe the impact of fitness on wellbeing- the potential negative effects of participation on an individual's health.			
- Explain how health can be improved through participating in a well designed Personal Exercise plan, Including descriptions of o Planning (**Aim** and **design)** o Continually **developing** o **Monitoring** o **Evaluating**			
- Describe how the following **lifestyle choices** can influence an individual's health (positive and negative)			
o Diet- Calorie consumption			
o Diet- choices			
o Smoking cigarettes			
o Activity levels			
o Work/rest/sleep balance			
o Alcohol consumption			
- SEDENTARY LIFESTYLE			
- Describe what is a sedentary lifestyle			
- List a series of consequences to the body due to inactivity and how they are caused			
- Define, compare and contrast the following terms: o Overweight o Overfat o Obese			
- DIET AND NUTRITION			
- Describe what constitutes a balanced diet (what should be in it and how much of each nutrient there should be)			
o Describe the '**Eatwell plate'**			
- Explain the role and importance of **Macronutrients** for performers in physical activity and sport (Including food examples) o Carbohydrates (Simple and complex) o Fats o Protein			
- Explain the role and importance of **Micronutrients** for performers in physical activity and sport (Including food examples) o Vitamins o Minerals			
- Explain the role and importance of **Non-nutrients** for performers in physical activity and sport (Including food examples) o Water o Fibre			
- Describe energy balance in terms of maintaining a healthy weight.			
- Describe the concept of **'Optimum weight'**			
- Outline why and how optimum weight varies and how the following factors can affect the optimum weight o Bone structure o Sex (Male/Female)			

○ Muscle girth ○ Height			
- Describe the process of carbohydrate- loading			
- Describe when a power athlete should intake protein			
- Describe the consequences of dehydration			
- Explain a strategy to ensure that performers remain hydrated			

Anatomy & Physiology
Personal Learning Checklist (PLC)

Content- Can you?	Red	Amber	Green
STRUCTURE AND FUNCTIONS OF THE MUSCULO-SKELETAL SYSTEM			
- Describe the 5 functions of the skeletal system o Protection of vital organs o Muscle attachment o Joints for movement o Platelet, red and white blood cell production o Storage of calcium & phosphorous			
- Classify the different types of bones and give functions for each: o Long (leverage) o Short (weight-bearing) o Flat (protection & muscle attachment)			
- Apply sporting examples to describe each classification of bone			
- Know the name and location of the 19 bones of the body			
- Know the name and location of the 5 regions of the vertebral column			
- Describe the use of each bone applied to performance in physical activities and sport			
- Classify the 4 different types of joint and give a location example for each: o Pivot o Hinge o Ball & Socket o Condyloid			
- Describe the impact on the range of possible movements at each of the 4 joint types, applying sporting examples			
- Describe the movement patterns available: o Flexion & extension o Adduction & abduction o Rotation o Circumduction o Plantar-flexion & dorsi-flexion			
- Give examples of physical activity and sporting skills and the techniques that utilize movement patterns in different sporting contexts			
- Explain the role of ligaments and tendons, and their relevance to participation in physical activity and sport			
- Classify and describe the characteristics of, and roles when participating in physical activity and sport, muscle types: o Voluntary muscles of the skeletal system o Involuntary muscles in blood vessels o Cardiac muscle forming the heart			
- Know the name, location and role of the 12 major muscle groups			
- Explain how antagonistic pairs of muscles work together, giving examples of pairs and the movement patterns they create. Apply sporting examples.			
- Know the characteristics of fast & slow twitch muscle fibre types (type I, type IIa and type IIx). Explain how this impacts on their use in physical activities			
- Analyse how the skeletal and muscular systems work together to allow participation in physical activity and sport			
- STRUCTURE & FUNCTIONS OF THE CARDIO-RESPIRATORY SYSTEM			
- Describe the 4 functions of the cardiovascular system applied to performance in physical activities			
- Identify the 10 components of the cardiovascular system and describe each of their role in maintaining blood circulation during performance			
- Describe the structure of 3 types of blood vessel and explain how his relates to function and importance during exercise including: o Blood pressure o Oxygenated and deoxygenated blood o Changes in the blood vessels during physical exercise			

- Explain vasodilation and vasoconstriction and the role vascular shunting plays in redistributing blood flow during physical activities compared to resting			
- Describe the function and importance of red and white blood cells, platelets and plasma for physical activity and sport			
- Identify the composition of inhaled and exhaled air and the impact of physical activity and sport on this comparison			
- Explain vital capacity and tidal volume including: o The change in tidal volume due to physical activity and sport o The reasons that make the change in tidal volume necessary			
- Identify the location of the 5 main components of the respiratory system			
- Explain the role of the components of the respiratory system in the movement of oxygen and carbon dioxide into and out of the body			
- Describe the structure of alveoli to enable gas exchange and explain the process of gas exchange to meet the demands of varying intensities of exercise			
- Analyse how the cardiovascular and respiratory systems work together to allow participation in physical activity and sport			
- AEROBIC AND ANAEROBIC EXERCISE			
- Explain energy, including: o The use of glucose and oxygen to release energy aerobically with the production of carbon dioxide and water o The impact of insufficient oxygen on energy release o The by-product of anaerobic respiration (lactic acid)			
- Explain energy sources, including food sources are used for which type of activity (aerobic & anaerobic)			
- Explain the role and importance of **Macronutrients** for performers in physical activity and sport (Including food examples) o Carbohydrates (Simple and complex) o Fats o Protein			
- THE SHORT- AND LONG-TERM EFFECTS OF EXERCISE			
- Describe the short term effects of physical activity and sport on the **muscular** system and explain the relevance of this on player performance			
- Describe the short term effects of physical activity and sport on the **cardiovascular** system and explain the relevance of this on player performance			
- Describe the short term effects of physical activity and sport on the **respiratory** system and explain the relevance of this on player performance			
- Analyse how the respiratory and cardiovascular systems work togetherto allow participation in and recovery from, physical activity in sport including: o Oxygen intake into lungs o Transfer to blood and transport to muscles o Removal of carbon dioxide			
- Describe the long term effects of physical activity and sport on the **muscular** system and explain the relevance of this on player performance			
- Describe the long term effects of physical activity and sport on the **cardiovascular** system and explain the relevance of this on player performance			
- Describe the long term effects of physical activity and sport on the **respiratory** system and explain the relevance of this on player performance			
- Correctly interpret graphical representations of heart rate, stroke volume and cardiac output values at rest and during recovery			

Task 2

Based on your feedback, produce revision resources for the areas that you have identified to be RED and AMBER

Remember our work on Flashcards:

What's on my Flashcard

A01 – KNOWLEDGE ON ONE SIDE

- Health Fitness & Wellbeing – Definitions of lifestyle terms e.g. Health, Fitness
- Skeletal – Bones, joints,
- Muscular – Muscles, connective tissue
- Cardiovascular - Components, vessels
- KISS IT – just key terms

A02 – APPLICATION
A03 – JUSTIFICATION ON THE FLIP SIDE

- Links AO1 terms with how they operate/work/purpose and sporting examples
- AO2 - Sporting examples – provide a skill as an example in your sport not just the sport AND explaining what AO1 term is

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Flash Cards

- Kornell and Bjork (2008): Repetition is needed to acquire fluency; thus, students should not 'drop' flashcards when they've learnt them. In this study, only 1% of students repeated cards they knew.

Variations

Deploy **Dual Coding** throughout these.

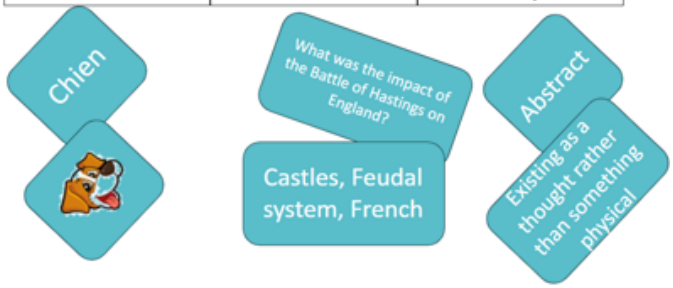
Try **visual mind flash cards** instead of written ones.

Put them along your staircase so you see them often! Hack your revision this way!

Use the **2, 3, 5 and 7 rule**. When you know an answer, put it in a separate pile to re-test after 2 days. Then when you get it right again, put it to 3 days. Or if you get it wrong, bring it back to every day. This is metacognitive! How to study flashcards using the Leitner system (youtube.com)

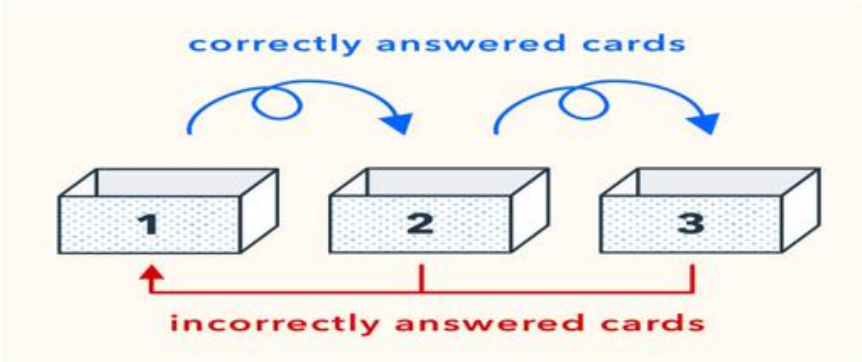
Make '**moving revision**' with interactive components.

Image one side, words the other (great for languages)	Question one side, answer the other (great for essay subjects)	Key word one side, definition the other (great for sports and arts)



Leitner System

https://youtu.be/oH-_3NBquSs?si=1rPJlTc5quH2eCpj



How can I achieve my stamp?

<u>To create a minimum of 10 flashcards per topic (there are four) and evidence this with Mr Hall/Mr Soper</u>

NB: There are an average of 20 key terms per topic for each syllabus topic so don't be shy!!!

Topics:

1. Health Fitness and Wellbeing
2. Applied Anatomy & Physiology Skeletal System
3. Applied Anatomy & Physiology Muscular System
4. Applied Anatomy & Physiology Cardiovascular System

<u>Deadline: On or by Wednesday 7th May (to show ORH/OAS)</u>