Active Revision – GCSE PE
Assessment Point -Year 10

Research shows that students who do frequent chunks of revision across all 3 stages of revision below are more likely to reach their full potential.

- ✓ **Upload – consolidate your knowledge**
- ✓ **Process – active retrieval practice**
- ✓ **Download – apply your knowledge**

TOPIC: Skeletal and muscular systems

- Draw the outline of a person/skeleton and label all relevant bones and muscles.
- Draw or print off a synovial joint
- Create a table including different joints
  - Elbow joint
  - Shoulder joint
  - Hip joint
  - Knee joint
  - Ankle
- Muscle contractions – create flash cards defining
  - The difference between an agonist and antagonist
  - the different muscles contractions.

- Apply AO3-name type of bone and provide an example of its use in sport
  - for example, cranium flat bone to protect the head when heading he all in football
- Label all structures of the synovial joint. Describe what the structure does to assist movement in sports activities
- For each joint you must add the type of joint it is e.g. hinge, ball and socket, etc. The bones associated with the joint and the different movements that happen at that joint.
- For agonistic pairs provide two different sports examples in action labelling which muscle is the agonist and which is the antagonist

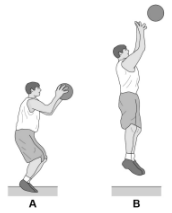
- …

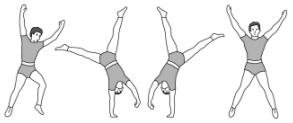
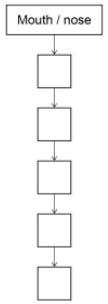
0 8 **Figure 2** shows a person performing a wall sit.

Figure 2

0 8 . 1 Identify the type of muscular contraction taking place in the legs in **Figure 2**. **[1 mark]**

0 8 . 2 Justify your answer to **Question 8.1**. **[1 mark]**

	• For muscle contraction provide two sporting examples of the contraction taking place	
TOPIC: Movement analysis		
• Create separate A4 revision cards for specific sporting to include: football throw-in, push up, running, kicking, standing vertical jump, squat and shoulder action in cricket. • Create different planes and axes with jelly babies, watch tutorial: https://www.youtube.com/watch?v=_9pFdSQejg0 • Watch video on planes and axes: https://www.youtube.com/watch?v=2ai5iwWsC2E • Create an Olympic podium for the levers assign each lever to a podium based on the direction of movement. Include: diagrams of the three different lever systems (first, second and third class) and definitions of the fulcrum, load and effort. Provide a sporting example for each lever system.  • Watch this video on mechanical advantage: https://www.youtube.com/watch?v=9-oFDZYsd5Q	• For each sporting action label, the movements (flexion, extension, adduction, abduction, rotation) happening at the following joints elbow, shoulder, hip, knee and ankle • For each sporting image the plane and axis the movement is taking place • For each sporting action add in what lever system is in operation	13 **Figure 3** shows a basketball player in two different positions (**A** and **B**) as they perform the jump shot. Use **Figure 3** to help you answer **Questions 13.1** to **13.3**. **Figure 3**  13.1 Identify the joint action taking place at the **knee** as the basketball player moves from **A** to **B**. **[1 mark]** 13.2 Identify the main agonist at the **knee** as the basketball player moves from **A** to **B**. **[1 mark]** 13.3 Identify the type of muscle contraction that is taking place at the **knee** as the basketball player moves from **A** to **B**. **[1 mark]**

		1 4 **Figure 4** shows a gymnast performing a cartwheel. **Figure 4**  Identify the plane and axis when the gymnast in **Figure 4** is performing a cartwheel. **[2 marks]** Plane _____ Axis _____ 1 5 **Figure 5** shows a shot putter in two different positions (**A** and **B**) as they release the shot. **Figure 5**  1 5 . 1 Identify the class of lever used at the **elbow** as it moves from **A** to **B**. **[1 mark]** _____
TOPIC: Cardiovascular and respiratory systems		
Respiratory System • Pathway of air: Draw the pathway of air, identifying all structures involved with this process, using the correct order. Alternatively, create a physical pathway of air structure. • Draw the three different types of blood vessels. • Create a mechanics of breathing model. Follow steps on this video https://www.youtube.com/watch?v=fybV8zIGyu8 • Draw a diagram of the mechanics of breathing. Label the parts involved and describe the roles that they play when breathing. • Create a table identifying different lung volumes, including their definitions. • Draw a spirometer trace, labelling the different lung volumes. **Cardiovascular System**	• Explaining the process of gaseous exchange. Include: where it takes place and how the features and structures of the alveolus and capillary walls assist gaseous exchange. • Label the structures of the blood vessels and identifying the function of each vessel (what role does it play). This should cover vascular shunting • Explain the role of the parts involved and describe the roles that they play when breathing in (inspiration) and out (expiration). • Explain what happens to the lung volumes during exercise.	The first position in **Figure 5** has been completed for you. Use each number only once. **[5 marks]** **1**. Alveoli **2**. Bronchi **3**. Trachea **4**. Lungs **5**. Bronchioles **Figure 5** ] During exercise the lungs expand more to allow a greater volume of air to be breathed in. Name the **two** muscles that help the diaphragm and intercostal muscles in this process. **[2 marks]** 1 _____ 2 _____

• Draw a diagram showing the structure of the heart. Accurately label and name the different chambers. • Watch the video explaining the cardiac cycle: https://www.youtube.com/watch?v=l_16ymQJDMY • Create a poster defining cardiac output, heart rate and stoke volume. • Create a table defining aerobic and anaerobic exercise. • Create a poster, identifying the different 'immediate effects of exercise, short term effects of exercise and long-term effects of exercise'.	• Create a flow diagram to show the path a blood molecule would take for one complete cycle around the body starting at the vena cavae • Describe the relationship between them. Include the cardiac output equation. Can you explain the changes that happen to these volumes when exercising? • Below each definition, identify 5 sports that are mainly aerobic and 5 sports that are mainly anaerobic.	Explain how vasodilation helps to direct blood flow when we exercise. **[2 marks]** _____ _____ _____ _____ _____ _____

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