Active Revision – GCSE PE
Assessment Point -Year 11 mocks

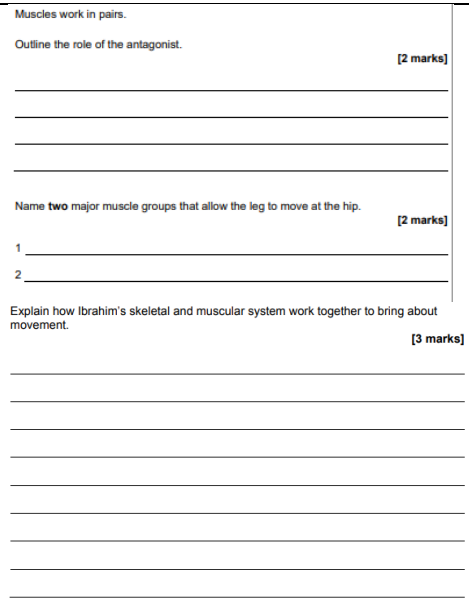
Research shows that students who do frequent chunks of revision across all 3 stages of revision below are more likely to reach their full potential.

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

TOPIC: Skeletal and muscular systems

- Draw the outline or print the outline of a person and label all relevant bones and muscles.
- Label the below synovial joints
  - Elbow joint
  - Shoulder joint
  - Hip joint
  - Knee joint
  - Ankle
- Muscle contractions – use the Leitner Box technique for your flash cards defining recalling
  - The difference between an agonist and antagonist
  - the different muscles contractions.

- Locate and name each 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
- For each type of joint provide a sports example and explain what muscle is the **agonist and the antagonist,** what **joint action** and type **of muscle contraction** is taking place for both phases of movement for example the upward and downward phase of a bicep curl



Muscles work in pairs.

Outline the role of the antagonist. **[2 marks]**

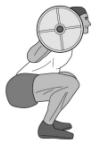
Name **two** major muscle groups that allow the leg to move at the hip. **[2 marks]**

1 _____

2 _____

Explain how Ibrahim's skeletal and muscular system work together to bring about movement. **[3 marks]**

TOPIC: Movement analysis

• Recreate 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.	• For each sporting action label, - The muscle movement (flexion, extension, adduction, abduction, rotation) happening at the following joints elbow, shoulder, hip, knee and ankle - plane and axis the movement is taking place - what lever system is in operation	**Figure 3** shows a person performing a back squat. **Figure 3**  Identify the class of lever system used at the **knee** whilst performing the back squat in **Figure 3**. **[1 mark]** 1 5 . 2 Draw a fully labelled diagram to show the class of lever identified in **Question 15.1**. **[2 marks]** 1 5 . 3 Explain why the lever in **Figure 3** has a low mechanical advantage. **[2 marks]**

TOPIC: Cardiovascular and respiratory systems

Respiratory System • Create a mechanics of breathing model. Follow steps on this video https://www.youtube.com/watch?v=fybV8zIGyu8	• Explain the flow of air in and out of the body what structures it passes through • 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.	Hhh

- Draw a diagram of the mechanics of breathing. Label the parts involved and describe the roles that they play when breathing.
- Draw a spirometer trace

Cardiovascular System

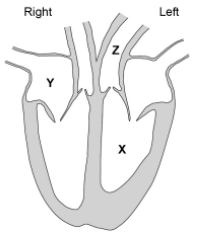
- Draw a diagram showing the structure of the heart.
- Watch the video explaining the cardiac cycle: https://www.youtube.com/watch?v=l_16ymQJDMY
- Create a poster defining cardiac output, heart rate and stoke volume.
- Create a table defining aerobic and anaerobic exercise.
- Create a poster, identifying the different 'immediate effects of exercise, short term effects of exercise and long-term effects of exercise'.

- Label the different lung volumes and explain what happens to the lung volumes during exercise

- Accurately label the heart and create path flow for the blood through one cycle of the body. Add definitions for the cardiac cycle
- Below each definition, identify 5 sports that are mainly aerobic and 5 sports that are mainly anaerobic.

Figure 3 shows the structure of the heart.

Figure 3



Identify the chambers of the heart labelled **X** and **Y** in **Figure 3**.

[2 marks]

X _____

Y _____

What is the role of **Z** in **Figure 3**?

[1 mark]

_____

_____

Complete the formula for cardiac output.

[1 mark]

Cardiac output (Q) = _____

_____

Explain how air pressure changes occur in the chest cavity allowing exhalation to take place.

Refer to the roles of the intercostal muscles, rib cage and diaphragm.

[4 marks]

_____

_____

_____

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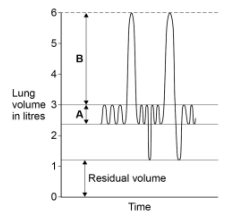
_____

_____

		0 7 **Figure 1** shows a spirometer trace for a person at rest. **Figure 1**  0 7 . 1 Identify lung volumes **A** and **B** in **Figure 1**. **[2 marks]** A _____ B _____ 0 7 . 2 In **Figure 1**, what would happen to lung volume **A** during exercise? **[1 mark]** _____ 0 7 . 3 Justify your answer to **Question 7.2**. **[2 marks]** _____ _____ _____ _____
TOPIC: **Training**		
• Create a table relevant to fitness components and testing. There should be a row for each component of fitness. • Type of training and its principles- Create a poster. Include application to a sports performer of your choice. Use specific sporting examples of how each principle can be used to improve training.	• Add to the columns in your table to Include definitions for each component and a sport where it is used and why • Name a fitness test for each component of fitness and provide the protocol for the test, this could include a diagram if you wish. This should also include how you ensure the test is valid and reliable • Provide an overview of a year-long training program for a performer of your choice to use. This should be broken down into the different training seasons, type of training taking place, how the principles of training should be applied. Provide the performer with a warmup and cool down. The performer will need to know how hard they should be working therefore training intensities need to be calculated for them	Dynamic strength is required to perform in a 1000m rowing race. Define 'dynamic strength'. Justify why dynamic strength is important in a 1000m rowing race. **[4 marks]** Definition _____ _____ Justification _____ _____ _____ _____ _____ _____ Analyse how **both** aerobic **and** anaerobic exercise can be used in interval training to help improve performance in a team game. **[9 marks]** _____ _____ _____

Delayed onset of muscle soreness (DOMS) can occur after vigorous exercise.

Evaluate the use of ice baths to prevent DOMS.

[4 marks]

Discuss whether the One Rep Max Test is a relevant test for a gymnast.

[4 marks]

		0 8 Andrew is 40-years-old. 0 8 . 1 Calculate Andrew's maximum heart rate. **[1 mark]** _____ beats per minute 0 8 . 2 State the percentage range of maximal heart rate for the **aerobic** training zone. Calculate Andrew's heart rate range in beats per minute (BPM) for his **aerobic** training zone. **[2 marks]** The aerobic training zone is between _____% and _____% of maximal heart rate. Andrew's heart rate range for his aerobic training zone is between _____BPM and _____BPM Nell is a 16-year-old who represents her county at both football and netball. She is undertaking an intensive training programme so that she can perform to her maximum potential. Analyse the different methods that Nell could use to prevent injury and recover from vigorous exercise to optimise her performance. **[9 marks]**

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