



Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

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Forename(s)

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Candidate signature

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I declare this is my own work.

# GCSE

# PHYSICAL EDUCATION

Paper 1 The human body and movement in physical activity and sport

Monday 19 May 2025 Afternoon Time allowed: 1 hour 15 minutes

## Materials

You will need no other materials.

## Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

## Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 78.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

For Examiner's Use	
Question	Mark
1 to 5	
6 to 9	
10 to 13	
14 to 18	
19 to 20	
21 to 22	
23	
24	
25	
26	
<b>TOTAL</b>	



J U N 2 5 8 5 8 2 1 0 1

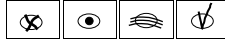
Answer **all** questions.Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

**0 1**Which **one** of these functions of the skeleton helps the body to fight off infections?**[1 mark]****A** Blood cell production
☐
**B** Protection
☐
**C** Structural shape
☐
**D** Support
☐
**0 2**Which **one** of these bones is found at the knee joint?**[1 mark]****A** Fibula
☐
**B** Humerus
☐
**C** Radius
☐
**D** Tibia
☐


**0 3**

Which **one** of these can be defined as 'the amount of blood pumped out of the heart by each ventricle during one contraction'?

**[1 mark]****A** Cardiac output☐**B** Heart rate☐**C** Stroke volume☐**D** Tidal volume☐**0 4**

Which **one** of these principles of training describes 'specificity'?

**[1 mark]****A** Training benefits are lost when training stops☐**B** Training is increased gradually as the body adjusts to the increased demands☐**C** Training that is suited to a particular sport or activity☐**D** Training to make the body work harder than normal in order to improve it☐**0 5**

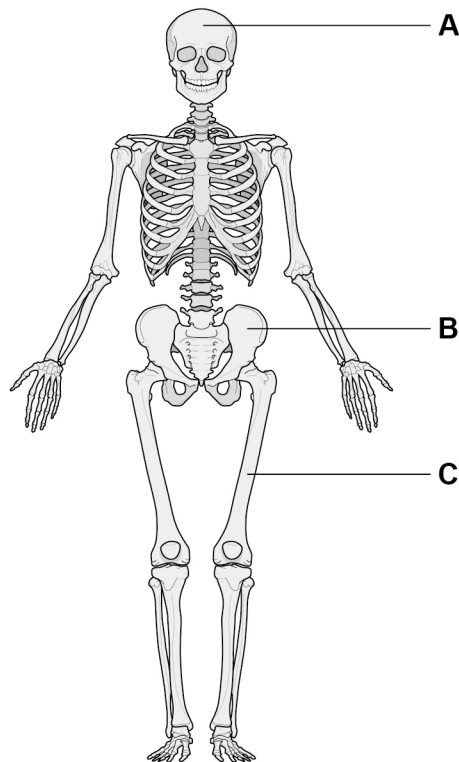
Which **one** of these occurs when the leg bends at the knee whilst running?

**[1 mark]****A** The hamstrings contract and the quadriceps relax☐**B** The hamstrings relax and the quadriceps relax☐**C** The quadriceps contract and the hamstrings contract☐**D** The quadriceps contract and the hamstrings relax☐**5****Turn over ►**

0 6

Figure 1 shows a human skeleton.

Figure 1

Identify the bones labelled **A**, **B** and **C** in **Figure 1**.**[3 marks]****A** \_\_\_\_\_**B** \_\_\_\_\_**C** \_\_\_\_\_

0 7

Name **three** muscles found at the shoulder.**[3 marks]**

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_



0 8

Muscles work in antagonistic pairs.

State the role of the agonist.

[1 mark]

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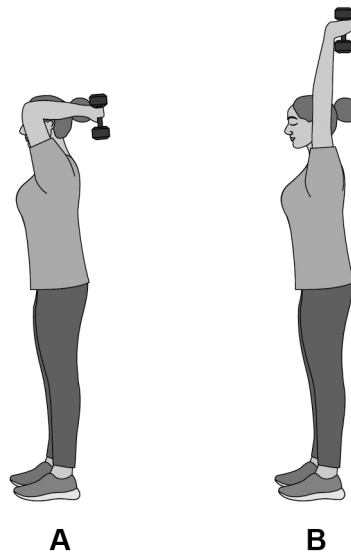


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0 9

**Figure 2** shows an individual lifting a weight.

**Figure 2**



Use **Figure 2** to help you answer **Questions 9.1 to 9.2**.

0 9 . 1

Identify the joint action taking place at the **elbow** as they move the weight from **A** to **B**.

[1 mark]

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0 9 . 2

Identify the type of isotonic muscle contraction that is taking place at the **elbow** as they move the weight from **A** to **B**.

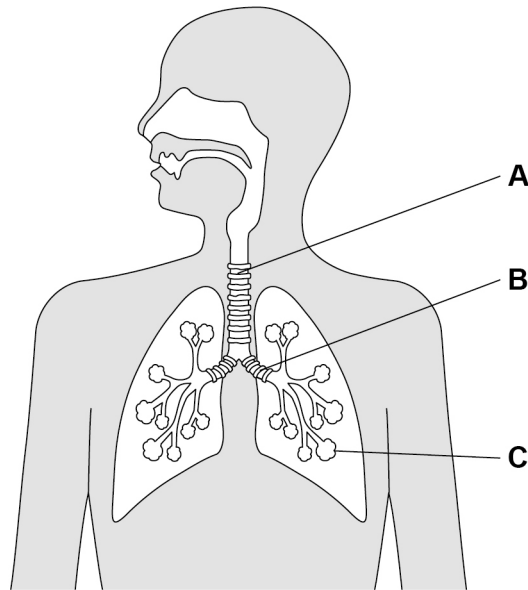
[1 mark]

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9

Turn over ►



**1 0****Figure 3** shows structures in the respiratory system.**Figure 3****1 0 . 1**Identify the structures labelled **A**, **B** and **C** in **Figure 3**.**[3 marks]****A** \_\_\_\_\_**B** \_\_\_\_\_**C** \_\_\_\_\_**1 0 . 2**State what process occurs at **C** in **Figure 3**.**[1 mark]**

\_\_\_\_\_

\_\_\_\_\_



**1 1**

Define expiratory reserve volume (ERV).

Identify what happens to ERV during exercise.

**[2 marks]**


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**1 2**Name **one** flat bone **and** the vital organ it protects.Give **one** example from sport of where this occurs.**[3 marks]**

Flat bone \_\_\_\_\_

Vital organ \_\_\_\_\_

Example \_\_\_\_\_

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**1 3 . 1**

Define reaction time.

Give a sporting example.

**[2 marks]**

Reaction time \_\_\_\_\_

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Example \_\_\_\_\_

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**1 3 . 2**

Define agility.

Give a sporting example.

**[2 marks]**

Agility \_\_\_\_\_

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Example \_\_\_\_\_

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1 4 . 1

Describe how to carry out the Illinois Agility Test.

**[3 marks]**


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1 4 . 2

Evaluate the use of the Illinois Agility Test as a suitable fitness test for a 100m sprinter.

**[4 marks]**


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1 5

Name the type of joint at the knee.

**[1 mark]**


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**1 6**

Identify the type of joint where rotation can take place.

**[1 mark]**

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**1 7**Outline **three** reasons why a cool down is important after exercise.**[3 marks]**

1 

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2 

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3 

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**1 8**

Explain how wearing appropriate footwear in a sporting activity can reduce the risk of an injury.

**[2 marks]**

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**14****Turn over for the next question****Turn over ►**

1	9
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**Figure 4** shows a weightlifter holding a weight above their head.

**Figure 4**



Identify the type of strength that the weightlifter is using in **Figure 4**.

Justify your answer.

**[3 marks]**

Type of strength \_\_\_\_\_

Justification \_\_\_\_\_

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**2 0**

Define delayed onset of muscular soreness (DOMS).

Explain how massage can reduce the effect of DOMS.

**[4 marks]**

Definition \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Explanation \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**7****Turn over for the next question****Turn over ►**

2	1
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**Figure 5** shows an individual performing a star jump.

**Figure 5**



Identify the plane and axis of movement at the hip when the individual in **Figure 5** is performing a star jump.

**[2 marks]**

Plane \_\_\_\_\_

Axis \_\_\_\_\_



**2 2**

State whether the 100m race in athletics is an aerobic or anaerobic event.

Justify your answer.

**[4 marks]**

State \_\_\_\_\_

Justification \_\_\_\_\_

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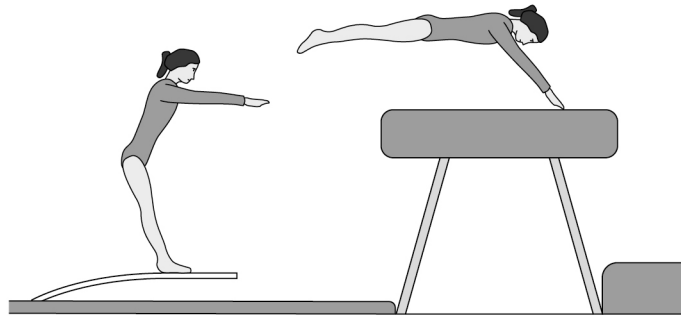


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**6****Turn over for the next question****Turn over ►**

**2 3****Figure 6** shows the take off phase as a gymnast completes a vault.**Figure 6**Use **Figure 6** to help answer the following questions.**2 3****1**Identify the class of lever system used at the ankle whilst taking off in a gymnastic vault in **Figure 6**.**[1 mark]**


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**2 3****2**Draw a fully labelled diagram to show the class of lever identified in **Question 23.1**.**[2 marks]**

**2 3 . 3** Define balance.

Justify the importance of balance for a gymnast.

**[3 marks]**

Definition \_\_\_\_\_

\_\_\_\_\_

Justification \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**6**

**Turn over for the next question**

**Turn over ►**



2 4

**Figure 7** shows the national averages for the Sit-Up Bleep Test for males and females.

**Figure 7**

**Male**

<b>Muscular endurance</b>	<b>Age</b>		
	<b>20–29</b>	<b>30–39</b>	<b>40–49</b>
<b>Excellent</b>	48+	40+	35+
<b>Good</b>	38–47	31–39	26–34
<b>Average</b>	34–37	27–30	22–25
<b>Below Average</b>	26–33	21–26	15–21
<b>Poor</b>	below 26	below 21	below 15

**Female**

<b>Muscular endurance</b>	<b>Age</b>		
	<b>20–29</b>	<b>30–39</b>	<b>40–49</b>
<b>Excellent</b>	38+	30+	26+
<b>Good</b>	29–37	24–29	20–25
<b>Average</b>	23–28	19–23	14–19
<b>Below Average</b>	16–22	12–18	10–13
<b>Poor</b>	below 16	below 12	below 10

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box





2 4 . 1

George and Lisa have completed the Sit-Up Bleep Test. The following results were recorded.

- George is a 26 year-old male and scored 43.
- Lisa is a 34 year-old female and scored 22.

Identify the level of George and Lisa's muscular endurance using the data in **Figure 7**.

**[2 marks]**

George \_\_\_\_\_

Lisa \_\_\_\_\_

2 4 . 2

Identify why the score for the Sit-Up Bleep Test is quantitative data.

**[1 mark]**


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3

**Turn over for the next question**

**Turn over ►**



**[6 marks]**

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6



Analyse how the long-term effects of regular continuous training would improve a runner's performance in a marathon.

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**END OF QUESTIONS**



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