

**CAMBRIDGE TECHNICALS LEVEL 2 (2016)**

**Examiners' report**

# **SPORT AND PHYSICAL ACTIVITY**

---

**05889, 05885, 05886**

**Unit 1 January 2024 series**

# Contents

Introduction .....	3
Unit 1 series overview .....	4
General comments on the paper.....	4
Learning outcome 1: Questions 1 - 16 .....	4
Learning outcome 2: Questions 17 - 28 .....	4
Learning outcome 3: Questions 29 - 34 .....	5
Learning outcome 4: Questions 35 - 40 .....	5
Copyright information .....	34

## Introduction

Our examiners' reports are produced to offer constructive feedback on candidates' performance in the examinations. They provide useful guidance for future candidates.

The reports will include a general commentary on candidates' performance, identify technical aspects examined in the questions and highlight good performance and where performance could be improved. The reports will also explain aspects which caused difficulty and why the difficulties arose, whether through a lack of knowledge, poor examination technique, or any other identifiable and explainable reason.

Where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.

Links to the question paper and a full copy of the mark scheme can be downloaded from [Teach Cambridge](#).

### Would you prefer a Word version?

Did you know that you can save this PDF as a Word file using Acrobat Professional?

Simply click on **File > Export to** and select **Microsoft Word**

(If you have opened this PDF in your browser you will need to save it first. Simply right click anywhere on the page and select **Save as . . .** to save the PDF. Then open the PDF in Acrobat Professional.)

If you do not have access to Acrobat Professional there are a number of **free** applications available that will also convert PDF to Word (search for PDF to Word converter).

## Unit 1 series overview

This was the eleventh series of assessment for this unit. The unit contains a large breadth of knowledge and, as is to be expected, candidates performed better on some Learning outcomes (LOs) than others.

LOs 1 and 2 have more content than LOs 3 and 4, and this is reflected in the Unit 1 tests in terms of the number of questions associated with each LO.

Candidates who did well on this paper generally:	Candidates who did less well on this paper generally:
<ul style="list-style-type: none"> <li>scored well on the LO1 Questions (1-16) and LO2 Questions (17-28).</li> </ul>	<ul style="list-style-type: none"> <li>did not consistently score well in certain LOs or missed marks regularly across the test.</li> </ul>

## General comments on the paper

The mean mark for the test was in the mid-twenties with most achieving between 17 and 34 marks.

This series, performance on LO1 and LO2 was better than in recent previous series.

Performance in LO3 was the weakest of the four LOs, while LO4 was the highest scoring section for candidates.

The better performance on the larger LOs meant that overall test scores were slightly higher this series than previously.

### Learning outcome 1: Questions 1 - 16

This LO covers core anatomy and the physiology of the musculo-skeleton. This was the second best-answered LO overall this series, marginally ahead of LO2. Candidates did very well on Questions 4, 5, 6, 7, 8 and 12. Question 3 proved the most difficult in this section.

### Learning outcome 2: Questions 17 - 28

This LO covers the cardio-vascular and respiratory systems. This LO contains content of a technical nature and terminology where component names and functions can be easily confused. However, as noted in the general comments, performance within this section suggests that the candidates were better prepared than in some previous series. Questions 20, 21, 22 and 25 were answered particularly well; Questions 18 and 28 were the most difficult for candidates to score on in this section.

### Learning outcome 3: Questions 29 - 34

This LO relates to health measurements such as BMI, blood pressure and body fat and the candidates need to know normative data and standard values and classifications for some of these elements of the section in order to answer the questions.

Performance was still reasonable on this section even though LOs 1 and 2 were better this series, with more candidates getting the mark than not, on most questions. Question 31 about systolic blood pressure proved the hardest mark to access for candidates in this section, with less than a third getting this correct.

### Learning outcome 4: Questions 35 - 40

LO4 is about the trends in participation within sport and physical activity. The candidates do not need to know or to be able to recall statistics themselves (in contrast to LO3) as this data can vary significantly over time and between sources. With this in mind, the relevant information is provided within the test and the candidates have to be able to correctly respond to the stimulus data which is provided.

This section is usually done quite well and again was the LO which students did best on. All questions were pretty well answered; Questions 39 and 40 slightly less so than Questions 35-38.

## Appendix 1 Questions

### Question 1

Which **one** of the following is a main function of the muscular system?

A Movement

B Protection

C Shape

D Storage of minerals

[1]

### Question 2

Which **one** of the following is **not** a gliding joint?

A Foot

B Hand

C Knee

D Vertebrae

[1]

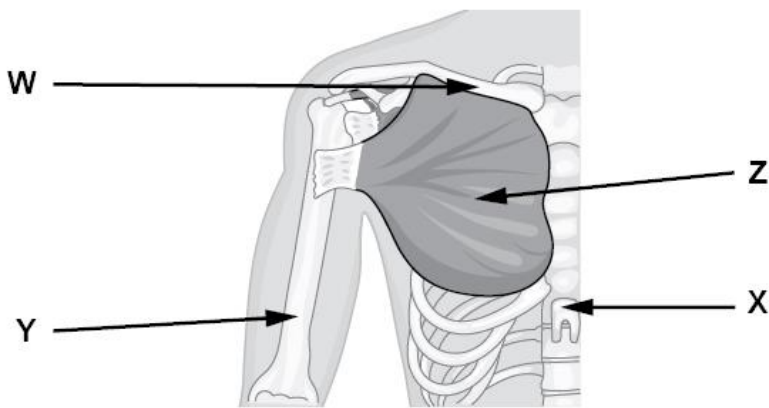
### Question 3

Where are the carpal bones found?

- A
- B
- C
- D

[1]

### Question 4



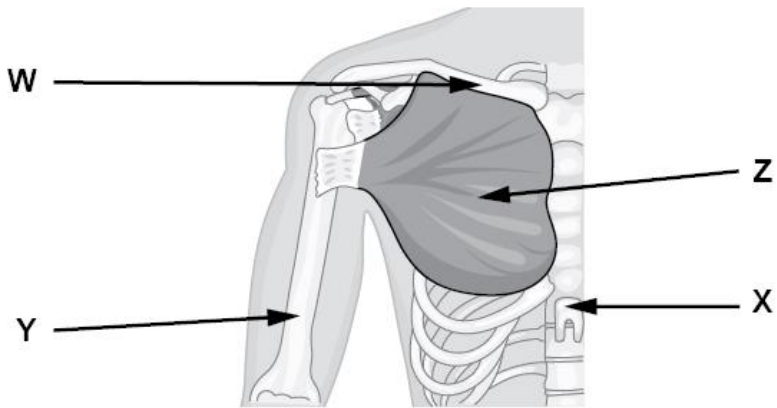
This is an image of the upper body.

What is the bone labelled **W** called?

- A
- B
- C
- D

[1]

### Question 5



This is an image of the upper body.

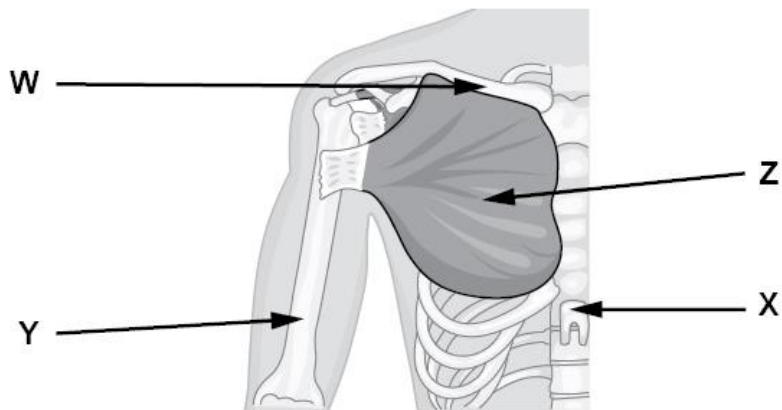
What is the bone labelled **X** called?

- A
- B
- C
- D

[1]



## Question 6



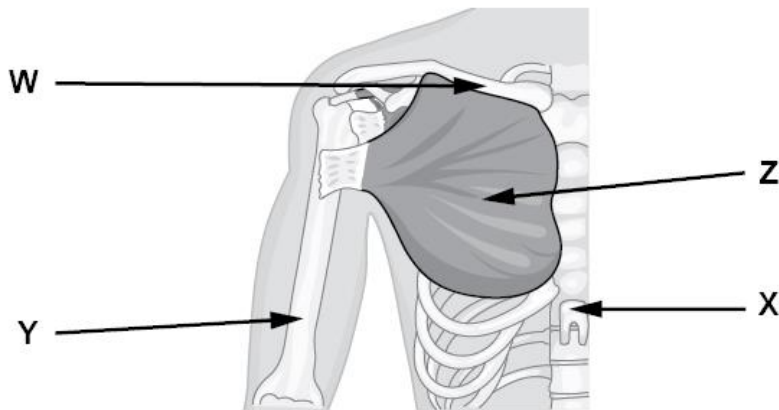
This is an image of the upper body.

What is the bone labelled Y called?

- A
- B
- C
- D

[1]

### Question 7



This is an image of the upper body.

What is the muscle labelled **Z** called?

- A
- B
- C
- D

[1]

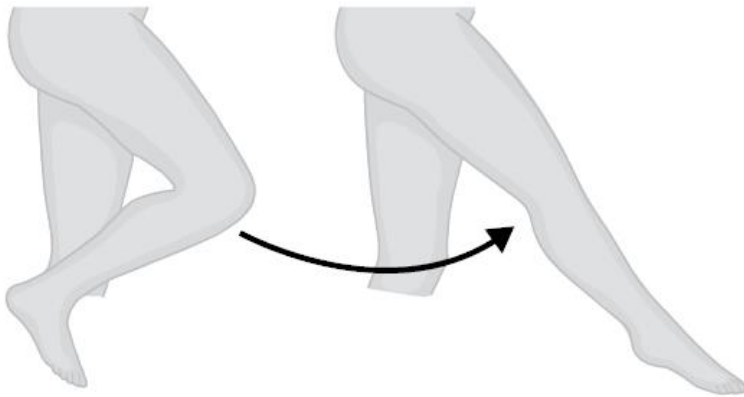
### Question 8

Which types of joint are found in the elbow **and** wrist?

- A
- B
- C
- D

[1]

## Question 9



What movement is taking place at the **knee** when it moves through the direction shown in the image above?

A Abduction to extension

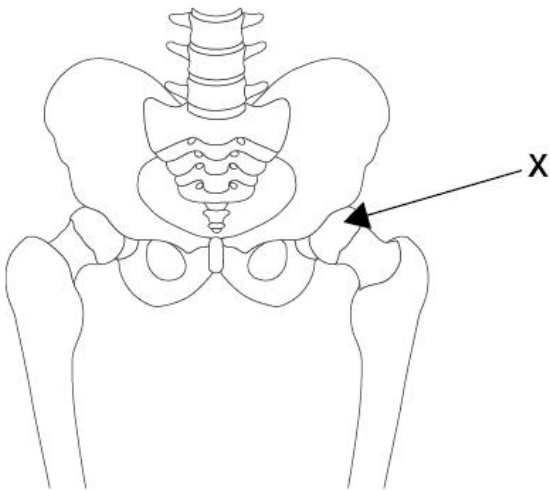
B Extension to flexion

C Flexion to adduction

D Flexion to extension

[1]

## Question 10



This image shows part of the human skeleton.

What is the joint labelled **X**?

A Ball and socket

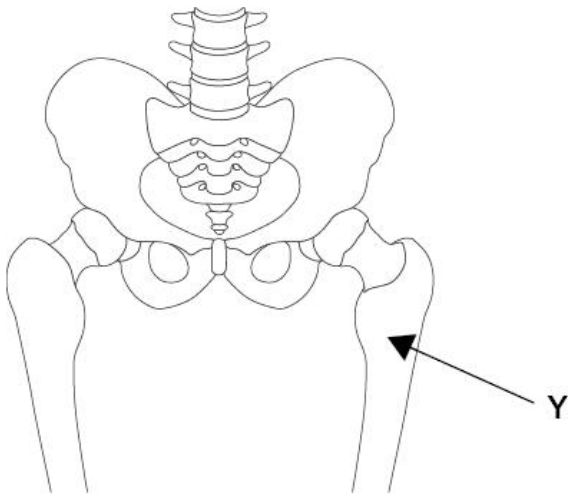
B Condylloid

C Gliding

D Hinge

[1]

## Question 11



This image shows part of the human skeleton.

What is the bone labelled Y?

A Femur

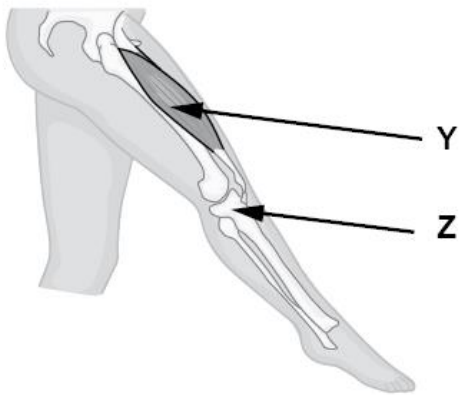
B Fibula

C Tarsal

D Tibia

**[1]**

## Question 12



This is an image of a leg.

What is the muscle labelled Y called?

A Gastrocnemius

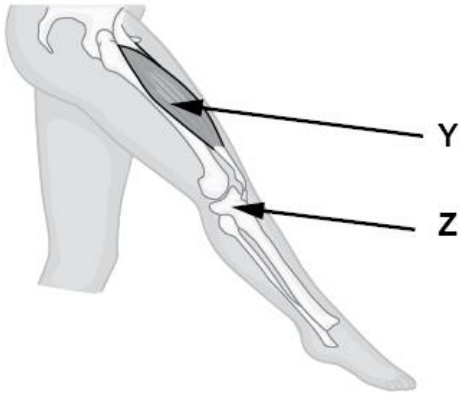
B Hamstrings

C Quadriceps

D Soleus

[1]

### Question 13



This is an image of a leg.

What is the connective tissue that attaches the muscle at **Y** to the bone at **Z**?

A Cartilage

B Ligament

C Muscle

D Tendon

[1]

### Question 14

What movement takes place when turning the neck from side to side?

A Abduction

B Adduction

C Flexion

D Rotation

[1]

## Question 15

What is glycogen used for?

A Bone density

B Energy

C Growth

D Stability

[1]

## Question 16

Which **one** of the following is a health condition that makes bones weak and more likely to break?

A Atherosclerosis

B Cardio Pulmonary Disease

C Osteoarthritis

D Osteoporosis

[1]



## Question 17

Which **one** of the following best describes the function of the **larynx**?

A Acts as a voicebox and produces sound

B Filters and warms up air breathed in

C Involved in gaseous exchange

D Prevents food from entering the airway

[1]

## Question 18

What is the direction of blood flow when it **enters** the heart from the vena cava?

A Left atrium to left ventricle to right atrium to right ventricle

B Right atrium to right ventricle to left atrium to left ventricle

C Right atrium to right ventricle to left ventricle to left atrium

D Right ventricle to right atrium to left atrium to left ventricle

[1]

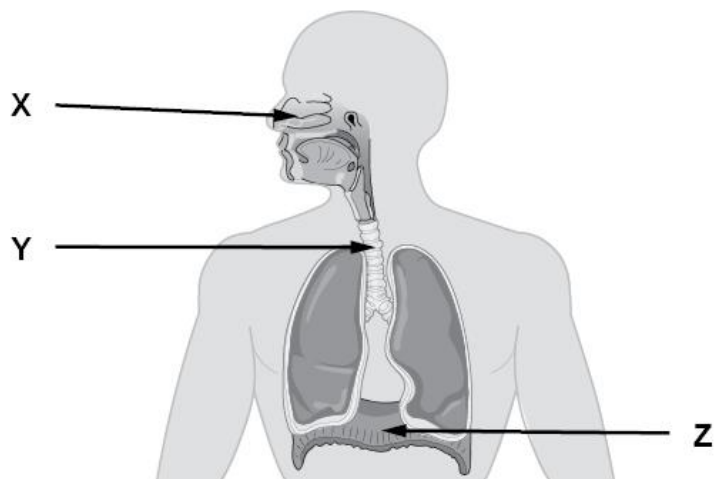
## Question 19

What body system benefits from a lower resting heart rate?

- A
- B
- C
- D

**[1]**

## Question 20



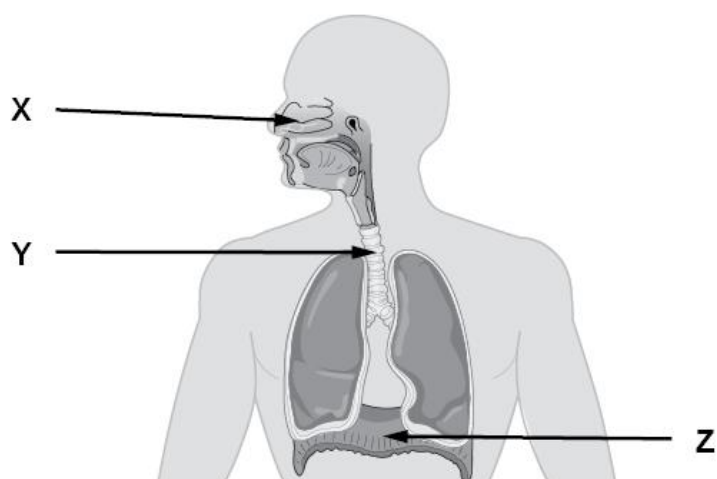
This image shows parts of the respiratory system.

What is the part labelled X called?

- A
- B
- C
- D

[1]

## Question 21



This image shows parts of the respiratory system.

What is the part labelled Y called?

A Larynx

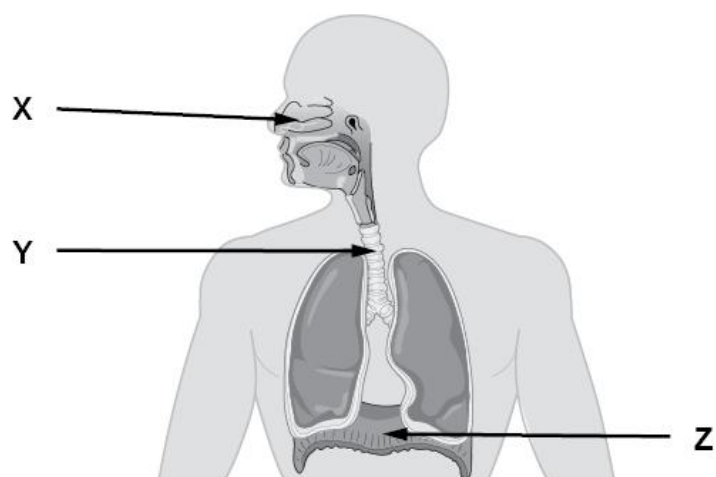
B Lung

C Pharynx

D Trachea

[1]

## Question 22



This image shows parts of the respiratory system.

What is the part labelled **Z** called?

A Bronchioles

B Diaphragm

C Intercostals

D Nasal cavity

[1]

## Question 23

Which **one** of the following is **not** a cardiorespiratory **benefit** from long-term physical activity and sport?

A Cardiac output increases

B Decreased number of capillaries in muscles

C Larger heart

D Lower resting heart rate

[1]

## Question 24

Which **one** of the following is a cardiorespiratory health **benefit** of long-term physical activity and sport?

A Alleviates symptoms of asthma

B Increases risk of heart and vascular disease

C Raises blood pressure

D Unable to sustain physical activity for longer periods of time

[1]

## Question 25

Where does gaseous exchange take place?

A Alveoli

B Bronchi

C Bronchioles

D Trachea

[1]

## Question 26

What component of blood is involved in forming a scab?

A Plasma

B Platelets

C Red blood cells

D White blood cells

[1]

## Question 27

Which **one** of the following is **true** for **arteries**?

A Carry blood under low pressure

B Help improve metabolic rate

C Prevent the backflow of blood

D Transport oxygenated blood

[1]

## Question 28

What is the main function of the vena cava?

A Transports deoxygenated blood back to the heart

B Transports deoxygenated blood to the lungs

C Transports oxygenated blood away from the heart

D Transports oxygenated blood back to the heart

[1]



## Question 29

Which **one** of the following measurements represents **high** blood pressure?

A 80/65

B 90/60

C 120/80

D 140/90

[1]

## Question 30

What does a peak flow test measure?

A Blood pressure

B Lung capacity

C Number of people participating in physical activity

D Resting heart rate

[1]

## Question 31

What is systolic blood pressure?

- A How much pressure blood exerts against artery walls when the heart beats
- B How much pressure blood exerts against artery walls when the heart rests between beats
- C How much pressure blood exerts against vein walls when the heart beats
- D How much pressure blood exerts against vein walls when the heart rests between beats

[1]

## Question 32

Name	Gender	BMI	Body fat percentage (%)
Anika	Female	31	31
Sara	Female	19	24
James	Male	20	17
Yoshi	Male	33	26

This table shows BMI and body fat percentage (%) results for males and females.

What classification would **Sara** be given using her BMI score?

- A Healthy weight
- B Morbidly obese
- C Overweight
- D Underweight

[1]

## Question 33

Name	Gender	BMI	Body fat percentage (%)
Anika	Female	31	31
Sara	Female	19	24
James	Male	20	17
Yoshi	Male	33	26

This table shows BMI and body fat percentage (%) results for males and females.

What classification would **James** be given using his body fat percentage score?

A Acceptable

B Fit

C Obese

D Unfit

[1]

## Question 34

Name	Gender	BMI	Body fat percentage (%)
Anika	Female	31	31
Sara	Female	19	24
James	Male	20	17
Yoshi	Male	33	26

This table shows BMI and body fat percentage (%) results for males and females.

How many of the people in this table would be classed as obese from both their BMI **and** body fat percentage scores?

- A
- B
- C
- D

[1]

## Question 35

**Ethnicity** may prevent people from participating in sport and physical activity.

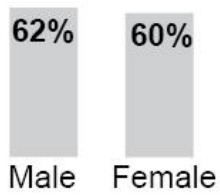
What type of barrier is this?

- A Access
- B Cultural
- C Disability
- D Work restriction

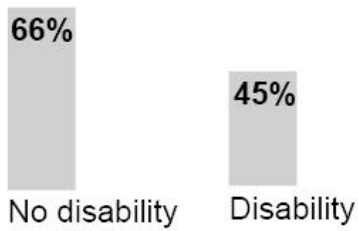
**[1]**

## Question 36

### Gender



### Disability



The information shows the percentage (%) of people participating in physical activity based on gender or disability.

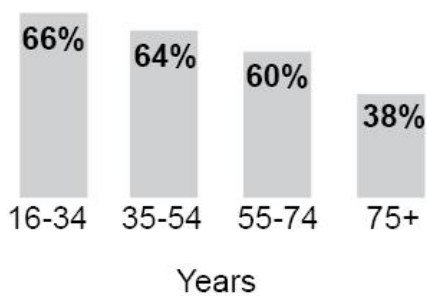
Which **one** of the following statements is **true**?

- A Disabled people and females participate the most
- B Females and people with no disability participate the most
- C Males and people with a disability participate the least
- D Males and people with no disability participate the most

**[1]**

## Question 37

### Age



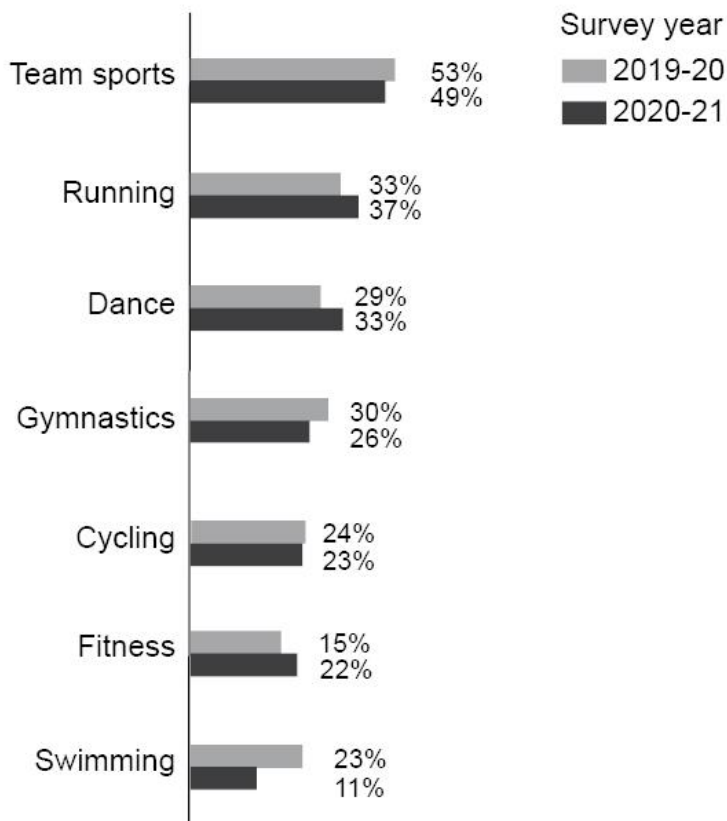
The information shows the percentage (%) of people participating in physical activity based on age.

Which **one** of the following describes what happens to participation rates in physical activity as people get older?

- A Decreases
- B Increases
- C Stays the same
- D Varies

[1]

## Question 38



The information shows participation rates in different types of sporting activity in 2019-20 and 2020-21.

Which sporting activity had the **largest** percentage (%) **increase** in participation rates from 2019-20 to 2020-21?

- A
- B
- C
- D

[1]



## Question 39

Which **one** of the following is an example of **assistive technology**?

A Hearing loops

B Multilingual signs

C Stair lift

D Wheelchair

[1]

## Question 40

Which **one** of the following is **not** an example of **specialist activity programming**?

A Advertising a local community fun run

B Ladies only aerobics

C Mothers and toddlers swimming sessions

D Wheelchair basketball and rugby sessions

[1]

## Copyright information

Question 36-37: Graph showing demographic differences in levels of activity, Graphs adapted from [Active Lives Adult Survey - May 2020/21 Report](#), Published Oct 2021, Sport England.

Question 38: Graph showing how types of activity have increased or decreased in participation rates in 2019/2020, 2020/21, Graph adapted from [Active Lives Children and Young People Survey, Academic year 2020-21](#), Published December 2021, Sport England.

---

# Supporting you

---

## Teach Cambridge

Make sure you visit our secure website [Teach Cambridge](#) to find the full range of resources and support for the subjects you teach. This includes secure materials such as set assignments and exemplars, online and on-demand training.

**Don't have access?** If your school or college teaches any OCR qualifications, please contact your exams officer. You can [forward them this link](#) to help get you started.

## Reviews of marking

If any of your students' results are not as expected, you may wish to consider one of our post-results services. For full information about the options available visit the [OCR website](#).

## Keep up-to-date

We send a monthly bulletin to tell you about important updates. You can also sign up for your subject specific updates. If you haven't already, [sign up here](#).

## OCR Professional Development

Attend one of our popular CPD courses to hear directly from a senior assessor or drop in to a Q&A session. Most of our courses are delivered live via an online platform, so you can attend from any location.

Please find details for all our courses for your subject on **Teach Cambridge**. You'll also find links to our online courses on NEA marking and support.

## Signed up for ExamBuilder?

**ExamBuilder** is the question builder platform for a range of our GCSE, A Level, Cambridge Nationals and Cambridge Technicals qualifications. [Find out more](#).

ExamBuilder is **free for all OCR centres** with an Interchange account and gives you unlimited users per centre. We need an [Interchange](#) username to validate the identity of your centre's first user account for ExamBuilder.

If you do not have an Interchange account please contact your centre administrator (usually the Exams Officer) to request a username, or nominate an existing Interchange user in your department.

## Need to get in touch?

If you ever have any questions about OCR qualifications or services (including administration, logistics and teaching) please feel free to get in touch with our customer support centre.

Call us on  
**01223 553998**

Alternatively, you can email us on  
**support@ocr.org.uk**

For more information visit

 **[ocr.org.uk/qualifications/resource-finder](https://ocr.org.uk/qualifications/resource-finder)**

 **[ocr.org.uk](https://ocr.org.uk)**

 **[facebook.com/ocrexams](https://facebook.com/ocrexams)**

 **[twitter.com/ocrexams](https://twitter.com/ocrexams)**

 **[instagram.com/ocrexaminations](https://instagram.com/ocrexaminations)**

 **[linkedin.com/company/ocr](https://linkedin.com/company/ocr)**

 **[youtube.com/ocrexams](https://youtube.com/ocrexams)**

## We really value your feedback

Click to send us an autogenerated email about this resource. Add comments if you want to. Let us know how we can improve this resource or what else you need. Your email address will not be used or shared for any marketing purposes.



**I like this**



**I dislike this**

Please note – web links are correct at date of publication but other websites may change over time. If you have any problems with a link you may want to navigate to that organisation's website for a direct search.



OCR is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2024 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

OCR provides resources to help you deliver our qualifications. These resources do not represent any particular teaching method we expect you to use. We update our resources regularly and aim to make sure content is accurate but please check the OCR website so that you have the most up to date version. OCR cannot be held responsible for any errors or omissions in these resources.

Though we make every effort to check our resources, there may be contradictions between published support and the specification, so it is important that you always use information in the latest specification. We indicate any specification changes within the document itself, change the version number and provide a summary of the changes. If you do notice a discrepancy between the specification and a resource, please [contact us](#).

You can copy and distribute this resource in your centre, in line with any specific restrictions detailed in the resource. Resources intended for teacher use should not be shared with students. Resources should not be published on social media platforms or other websites.

OCR acknowledges the use of the following content: N/A

Whether you already offer OCR qualifications, are new to OCR or are thinking about switching, you can request more information using our [Expression of Interest form](#).

Please [get in touch](#) if you want to discuss the accessibility of resources we offer to support you in delivering our qualifications.