



Oxford Cambridge and RSA

**Friday 20 November 2020 – Afternoon**

**GCSE (9–1) Geography A (Geographical Themes)**

**J383/03 Geographical Skills**

**Time allowed: 1 hour 30 minutes**

**You must have:**

- the OS Map (inside this document)
- the Resource Booklet (inside this document)

**You can use:**

- a ruler (cm/mm)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

Candidate number

First name(s) \_\_\_\_\_

Last name \_\_\_\_\_

**INSTRUCTIONS**

- Use black ink. You may use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

**INFORMATION**

- The total mark for this paper is **80**.
- The marks for each question are shown in brackets [ ].
- Quality of extended response will be assessed in questions marked with an asterisk (\*).
- Spelling, punctuation and grammar (SPaG) and the use of specialist terminology will be assessed in questions marked with a pencil (✎).
- This document has **16** pages.

**ADVICE**

- Read each question carefully before you start your answer.

**Section A – Geographical Skills**

Answer **all** the questions.

**1** Study the separate **Ordnance Survey (OS) map** extract of the city of Middlesbrough.

**(a) (i)** In which grid square is the Riverside stadium (shown by an 'X') found?

..... [1]

**(ii)** Which is the correct six-figure grid reference for Middlesbrough train station?

- A** 204 492
- B** 207 496
- C** 492 204
- D** 496 207

Write the correct letter in the box.

[1]

**(iii)** Using the **OS map**, identify **one** piece of map evidence that suggests this area has industrial land use.

..... [1]

**(b)** Study **Fig. 1** in the separate Resource Booklet, which shows an aerial photograph of the Tees Barrage (462 190) which is designed to reduce flooding.

**(i)** Using **Fig. 1** and **the OS map**, identify how the building labelled 'Y' is being used.

- A** Housing
- B** Motel
- C** Sewage Works
- D** Superstore

Write the correct letter in the box.

[1]

**(ii)** Using map evidence, suggest **two** reasons why the town of Middlesbrough might be vulnerable to flooding.

1 .....

.....

2 .....

.....

[2]

(c) Study **Fig. 2** in the separate Resource Booklet, which shows flood risk in Middlesbrough.

Suggest **two** ways in which the presentation of information on this map could be improved.

1 .....

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2 .....

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[2]

(d) Assess whether human activity along river basins increases flood risk in the UK.

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..... [6]

2 The village of Skinningrove lies to the east of Middlesbrough.

(a) Study **Fig. 3** in the separate Resource Booklet, which provides information about bus movements in the area.

(i) In which direction are most buses travelling?

- A From Middlesbrough to Skinningrove
- B From Redcar to Skinningrove
- C From Skinningrove to Loftus
- D From Skinningrove to Middlesbrough

Write the correct letter in the box.  [1]

(ii) Name the graphical technique being used to demonstrate the number of buses travelling to Skinningrove.

..... [1]

(iii) Calculate the approximate difference between the total number of buses moving between Whitby and Loftus, and Saltburn and Skinningrove.

..... [1]

(iv) Suggest **one** way **Fig. 3** might be adapted to provide more information.

.....  
..... [1]

(b) Study **Fig. 4** in the separate Resource Booklet, which shows the change of average ages in the rural and urban UK populations, 2002–2016.

(i) Describe the pattern of change shown between 2002 and 2016. Use data in your answer.

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..... [4]

(ii) Using **Fig. 4**, explain **two** possible causes of these changes in population.

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..... [4]

(c) Study **Fig. 5** in the separate Resource Booklet, which shows the age structure of UK rural and urban populations.

Using **Fig. 5**, identify **two** differences between the age structure of UK urban and rural populations.

1 .....  
.....  
2 .....  
..... [2]

3 Study **Fig. 6** in the separate Resource Booklet, which shows two photographs of Ghana, an LIDC in West Africa.

(a) (i) Which industrial sector is shown in the image of the south of Ghana?

- A Primary
- B Secondary
- C Tertiary
- D Quaternary

Write the correct letter in the box.  [1]

(ii) Using information from **Fig. 6**, describe **one** feature of the classroom in the north of Ghana.

..... [1]

(b) Study **Fig. 7** in the separate Resource Booklet, which shows regional poverty levels within Ghana.

(i) Describe the changes in poverty in Ghana from 1990 to 2010.

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.....  
..... [3]

(ii) Explain **two** potential reasons for the changes you have described.

1 .....  
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2 .....  
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..... [4]

(c) The population of the south of Ghana in 2000 was 13,800,000.

Using **Fig. 7**, calculate the number of people in the rural south of Ghana who were living in poverty in 2000. You must show your working out.

..... [2]





## Section B – Geographical Fieldwork

Answer **all** the questions.

- 4 Some Geography students have been conducting **human geography fieldwork** in Middlesbrough. They were investigating the movement of people in the city centre.

Study **Fig. 8** in the separate Resource Booklet, which shows a photograph of Middlesbrough city centre.

- (a) Identify **one** data collection technique that could be used to carry out a fieldwork investigation in the area shown on the photograph.

.....  
 ..... [1]

- (b) The Geography students completed a 5-minute pedestrian count in part of Middlesbrough city centre. Below is the table of data and an isoline map of the results of the pedestrian count.

- (i) Complete the table to show the cumulative frequency and cumulative percentage for the pedestrian count.

Site number	Pedestrian count	Cumulative total	Cumulative percentage (to 1 d.p.)
1	225	225	8.1
2	175	400	14.5
3	125	525	19.0
4	185	1235	44.7
5	120	1355	49.1
6	151	1506	54.5
7	220	1726	62.5
8	205	1931	69.9
9	123	2054	74.4
10	115	2169	78.6
11	210	2379	86.2
12	105	2484	90.0
13	150	2634	
14	52		
15	75		100.0

Increasing distance from art gallery

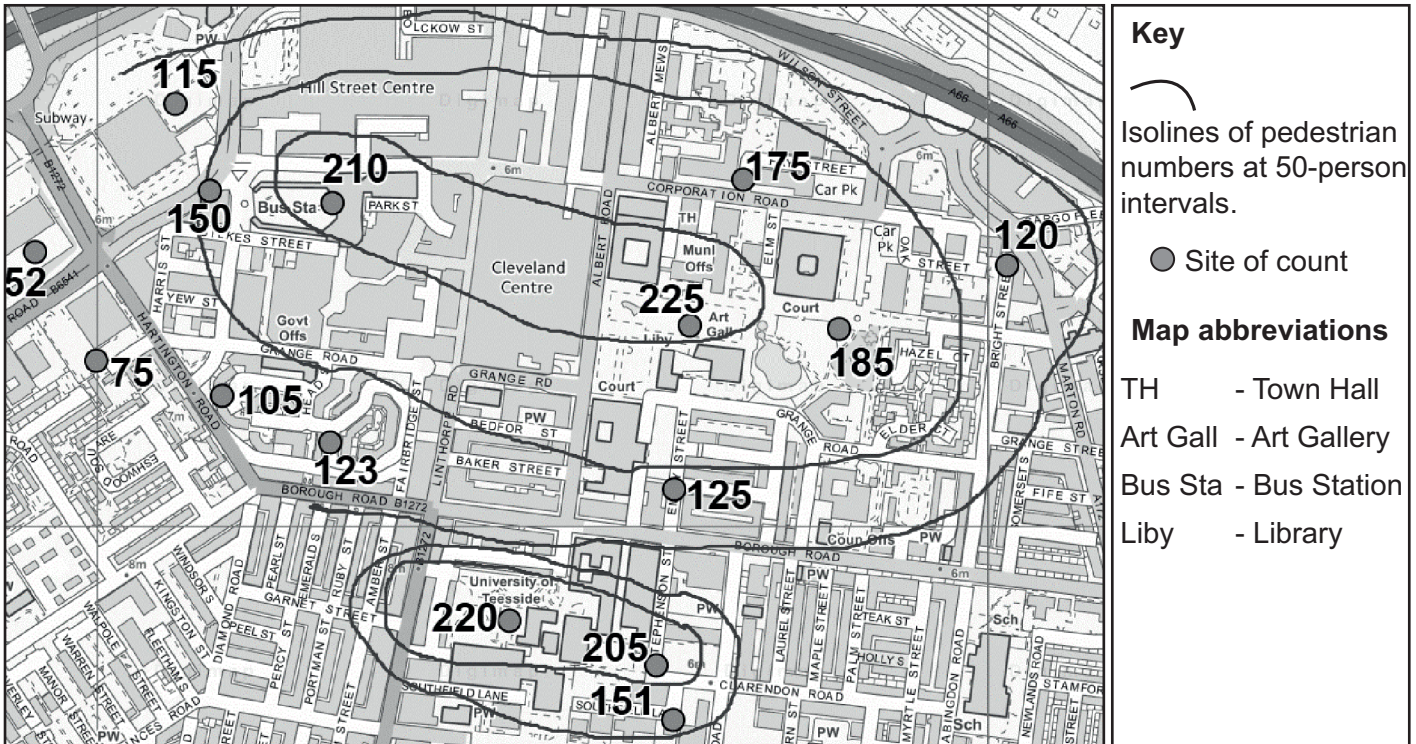
[2]

(ii) Suggest **one** reason why the data for the pedestrian count might be inaccurate.

[1]

(iii) Complete the isoline for 100 pedestrians shown on the isoline map of the pedestrian count.

Isoline map of pedestrian count



[1]

(iv) Describe a different way (not an isoline map) that the pedestrian count data could be presented. Give reasons why this would be an appropriate choice.

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..... [6]

(c) Using both the table of data above and the completed map, analyse the evidence for the following hypothesis:

*'The number of pedestrians decreases evenly as you move away from Middlesbrough Art Gallery.'*

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..... [6]

- 5 You will have taken part in fieldwork in a **physical geography** environment as part of your studies. Examples might include a river or coastal study.

Fieldwork title: .....  
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.....

Location of study area: .....

- (a) Explain **one** advantage of the location chosen to study.

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..... [1]

Explain how a theory or case study could be used to support your investigation.

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.....  
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.....  
..... [4]



**ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

A large area of lined paper for writing, consisting of 25 horizontal dotted lines. A solid vertical line runs down the left side of the page, creating a margin. The rest of the page is open for writing.



A large rectangular area for writing, bounded by a solid vertical line on the left and horizontal dotted lines on the top, bottom, and right.



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