Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Thursday 11 June 2020

Morning (Time: 1 hour 30 minutes) | Paper Reference **1GA0/03**

Geography A

Paper 3: Geographical Investigations: Fieldwork and UK Challenges

You must have:
Resource Booklet (enclosed)
Calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A answer **either** Question 1 **or** Question 2.
- In Section B answer **either** Question 3 **or** Question 4.
- In Section C answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Where asked you must **show all your working out** with **your answer clearly identified** at the **end of your solution**.

Information

- The total mark for this paper is 64.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*
- The marks available for spelling, punctuation, grammar and use of specialist terminology are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

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Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

SECTION A

Geographical Investigations – Physical Environments

Answer EITHER Question 1 OR Question 2 in this section.
Write your answers in the spaces provided.

Question 1: Investigating Physical Environments (Rivers)

If you answer Question 1 put a cross in the box ☐ .

1 A group of students collected data to investigate changes at five sites along a river channel.

(a) Study Figure 1a below.

(Source: ©Andy Childe)

Figure 1a

Students collecting river data

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(i) Describe **one** fieldwork method that could be used by the students to measure river width.

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(ii) Explain **one** disadvantage of using this data collection method.

(2)

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(b) Study Figure 1b in the Resource Booklet.

(i) Calculate the mean width of the river.

Give your answer to two decimal places.

You must show your working in the space below.

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(ii) Explain **one** conclusion that could be drawn from the data in Figure 1b.

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(c) The students measured sediment size at each site and presented data in a bar chart.

Study Figure 1c below.

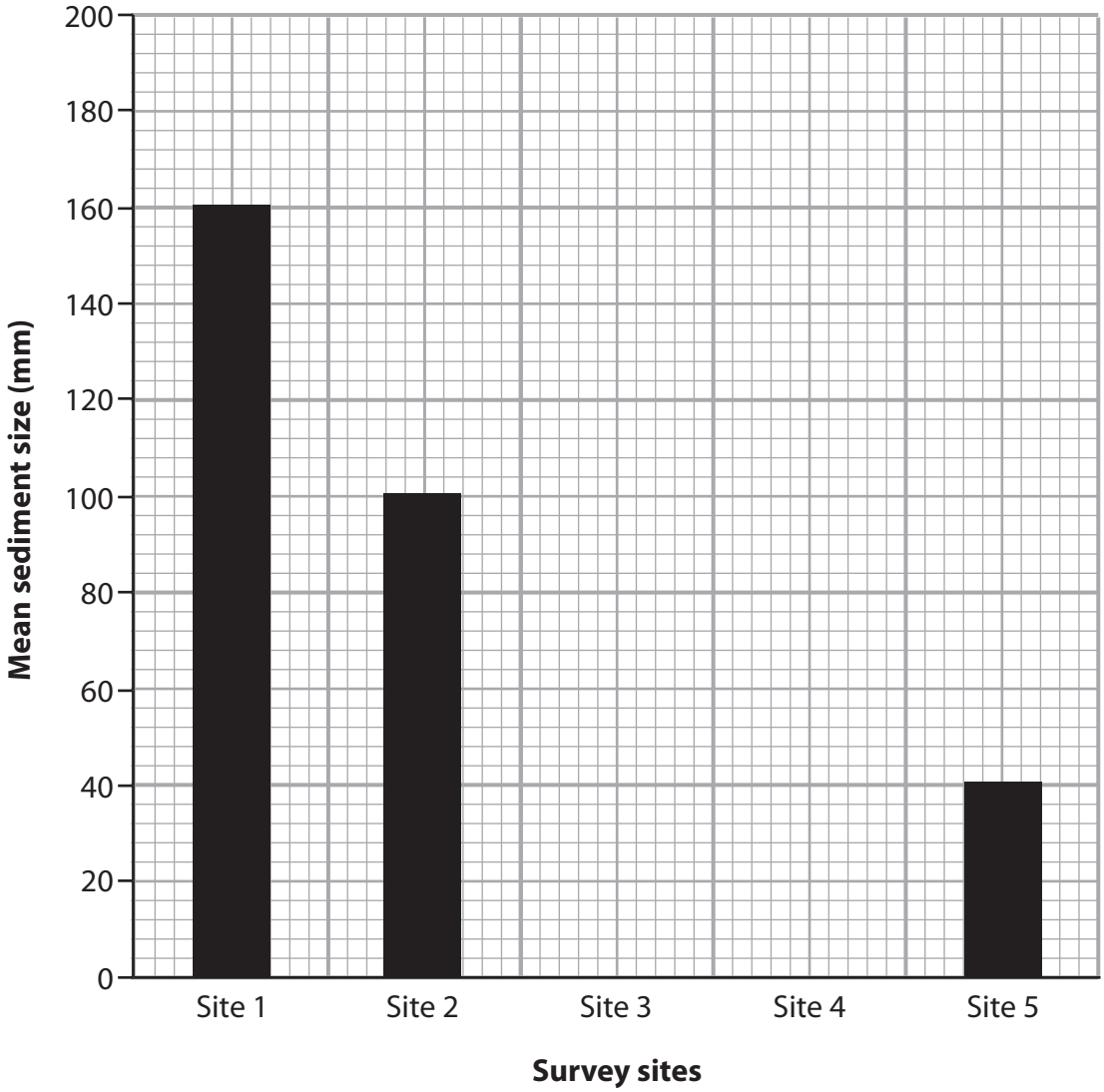

Figure 1c

Plot the data from the table below on to Figure 1c.

(2)

Survey site	Mean sediment size (mm)
Site 3	96
Site 4	80

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(d) You have studied a river as part of your geographical investigation.

Evaluate the effectiveness of the different techniques used to present your fieldwork data.

(8)

Title of your geographical investigation

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(Total for Question 1 = 18 marks)

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Do not answer Question 2 if you have answered Question 1.

Question 2: Investigating Physical Environments (Coasts)

If you answer Question 2 put a cross in the box ☒ .

2 A group of students collected data to investigate coastal processes at five sites along a coast.

(a) Study Figure 2a below.

(Source: ©Andy Childe)

Figure 2a

Students collecting coastal data

(i) Describe **one** fieldwork method that could be used by the students to measure beach gradient.

(2)

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(ii) Explain **one** disadvantage of using this data collection method.

(2)

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(b) Study Figure 2b in the Resource Booklet.

(i) Calculate the mean sediment size.

Give your answer to one decimal place.

You must show your working in the space below.

(2)

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(ii) Explain **one** conclusion that could be drawn from the data in Figure 2b.

(2)

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(c) The students measured sediment size at each site and presented data in a bar chart.

Study Figure 2c below.

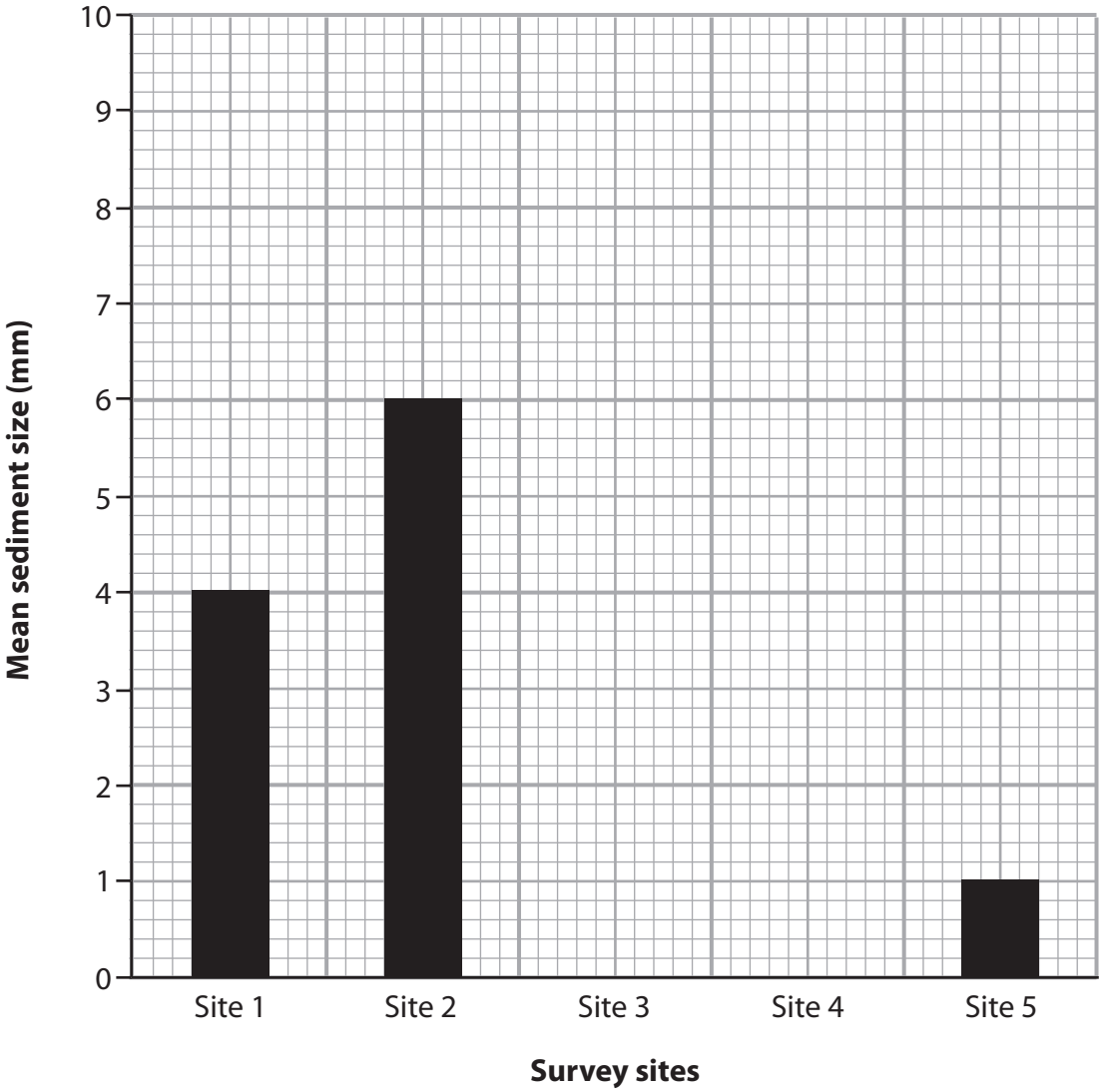

Figure 2c

Plot the data from the table below on to Figure 2c.

(2)

Survey site	Mean sediment size (mm)
Site 3	3
Site 4	2

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(d) You have studied a coast as part of your geographical investigation.

Evaluate the effectiveness of the different techniques used to present your fieldwork data.

(8)

Title of your geographical investigation

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TOTAL FOR SECTION A = 18 MARKS

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SECTION B

Geographical Investigations – Human Landscapes

Answer EITHER Question 3 OR Question 4 in this section.
Write your answers in the spaces provided.

Question 3: Investigating Human Landscapes (Central/Inner Urban Area)

If you answer Question 3 put a cross in the box ☒ .

3 (a) You have studied an urban area as part of your own fieldwork.

(i) Explain **one** reason why you used a qualitative fieldwork method.

Named qualitative fieldwork method .....

(2)

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(ii) Explain **one** disadvantage of this qualitative fieldwork method.

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(b) State **one** risk that you considered before collecting your urban fieldwork data.

(1)

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(c) Explain **one** advantage of a sampling strategy you used to collect your data.

Use evidence from your own fieldwork in your answer.

Named sampling strategy .....

(2)

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(d) Explain **one** way in which the secondary data that you collected helped your urban investigation.

Named secondary source .....

(3)

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(e) Study Figures 3a and 3b in the Resource Booklet.

Using both Figures 3a and 3b, assess the conclusions that might be drawn from this urban investigation.

(8)

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Do not answer Question 4 if you have answered Question 3.

Question 4: Investigating Human Landscapes (Rural Settlements)

If you answer Question 4 put a cross in the box ☒ .

4 (a) You have studied a rural settlement as part of your own fieldwork.

(i) Explain **one** reason why you used a qualitative fieldwork method.

Named qualitative fieldwork method .....

(2)

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(ii) Explain **one** disadvantage of this qualitative fieldwork method.

(2)

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(b) State **one** risk that you considered before collecting your rural fieldwork data.

(1)

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(c) Explain **one** advantage of a sampling strategy you used to collect your data.

Use evidence from your own fieldwork in your answer.

Named sampling strategy .....

(2)

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(d) Explain **one** way in which the secondary data that you collected helped your rural investigation.

Named secondary source .....

(3)

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(e) Study Figures 4a and 4b in the Resource Booklet.

Using both Figures 4a and 4b, assess the conclusions that might be drawn from this rural investigation.

(8)

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(Total for Question 4 = 18 marks)

TOTAL FOR SECTION B = 18 MARKS

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SECTION C

UK Challenges

Answer ALL questions in this section.
Write your answers in the spaces provided.

Spelling, punctuation, grammar and specialist terminology will be assessed in Question 5(f).

5 (a) Study Figure 5a in the Resource Booklet.

Identify the offshore wind energy capacity in 2015.

(1)

☒ **A** 2000 megawatts

☒ **B** 3000 megawatts

☒ **C** 4000 megawatts

☒ **D** 5000 megawatts

(b) State **two** impacts of climate change on landscapes in the UK.

(2)

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(c) The UK government has increased the use of renewable energy.

In 2011, UK energy use from renewables was equivalent to burning 1.9 million tonnes of oil whereas in 2017 it was 5.7 million tonnes.

Calculate the percentage (%) increase in energy use from renewables between 2011 and 2017.

Give your answer to the nearest whole number.

You must show your working in the space below.

(2)

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(d) Explain **two** impacts of climate change on people in the UK.

(4)

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(e) One response to climate change in the UK is the development of sustainable transport schemes.

Explain **one** example of a sustainable transport scheme in the UK.

(3)

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In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and your use of specialist terminology.

(f) Use the information from the Resource Booklet (Figures 5a to 5d) as well as knowledge and understanding from the rest of your geography course.

> 'The use of local scale responses is less important than national scale responses in tackling the challenges of climate change in the UK.'

Discuss this view.

(12)

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(Total for spelling, punctuation, grammar and use of specialist terminology = 4 marks)

(Total for Question 5 = 28 marks)

TOTAL FOR SECTION C = 28 MARKS

TOTAL FOR PAPER = 64 MARKS

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Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Thursday 11 June 2020

Morning (Time: 1 hour 30 minutes) | Paper Reference **1GA0/03**

Geography A

Paper 3: Geographical Investigations: Fieldwork and UK Challenges

Resource Booklet

Do not return this Resource Booklet with the question paper.

Turn over

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SECTION A

Geographical Investigations – Physical Environments

Channel characteristic	Site 1	Site 2	Site 3	Site 4	Site 5
Width (m)	0.25	1.00	5.00	4.00	8.00
Depth (m)	0.10	0.35	0.60	0.40	0.75
Velocity (m/sec)	0.40	0.45	0.55	0.58	0.60

Figure 1b

A table of data collected by this group of students moving downstream

Beach characteristic	Site 1	Site 2	Site 3	Site 4	Site 5
Beach width, from sea to cliff (m)	50	70	120	90	160
Beach gradient (°)	5	6	10	12	16
Mean sediment size (mm)	4	6	3	2	1

Figure 2b

A table of data collected by this group of students along a coast

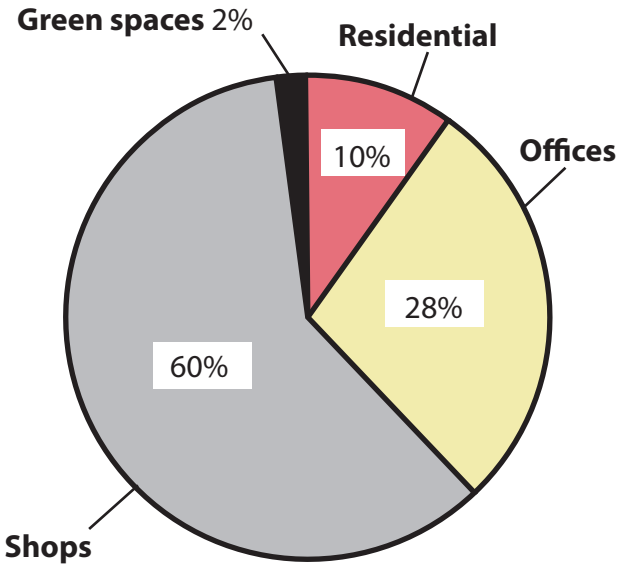
SECTION B

Geographical Investigations – Human Landscapes

A group of students collected data in two contrasting areas in their local city, the Central Business District (CBD) and the inner urban area surrounding the CBD, to answer the question:

'To what extent are there significant differences between land use and the quality of the environment in these two areas?'

Location 1 (CBD)



Location 2 (inner urban area)

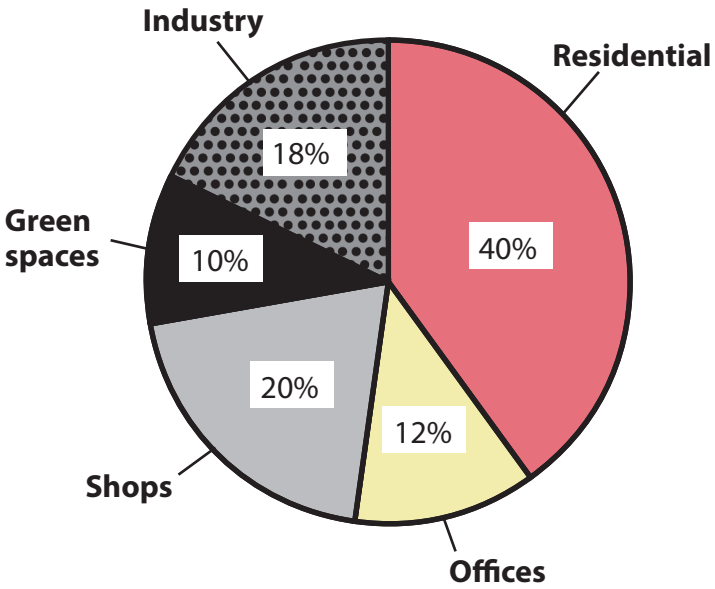


Figure 3a

Land use in locations 1 and 2

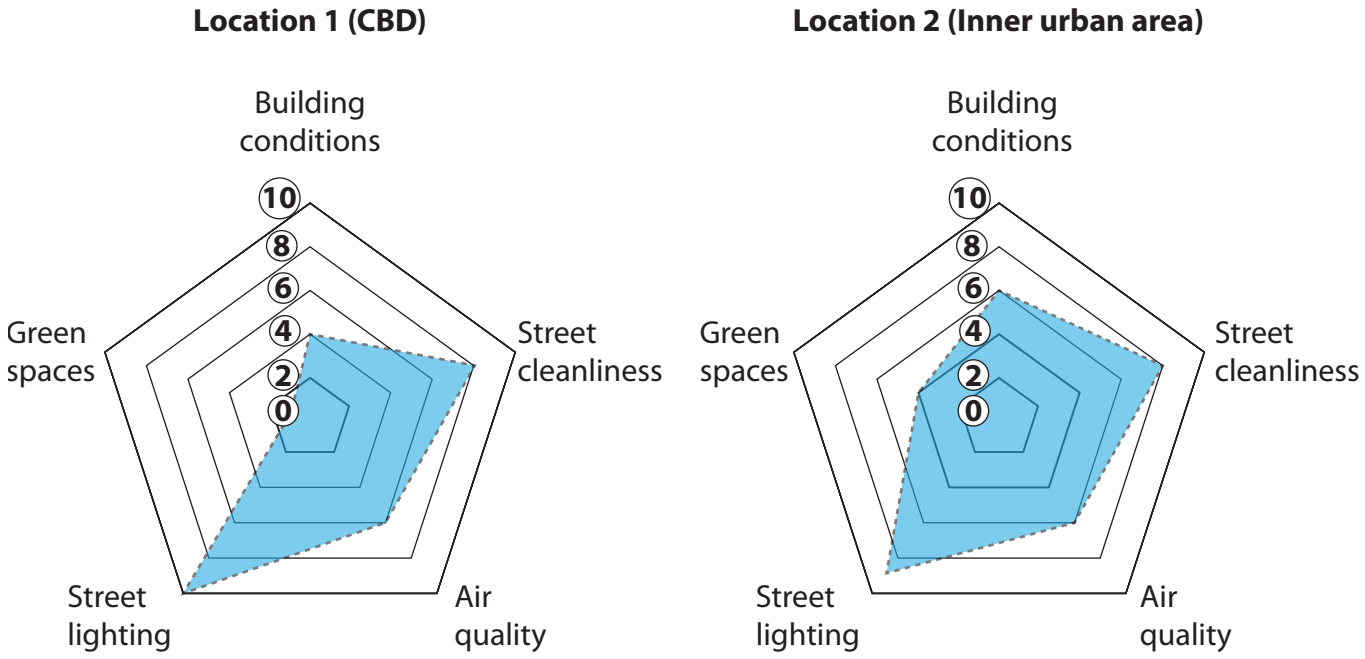


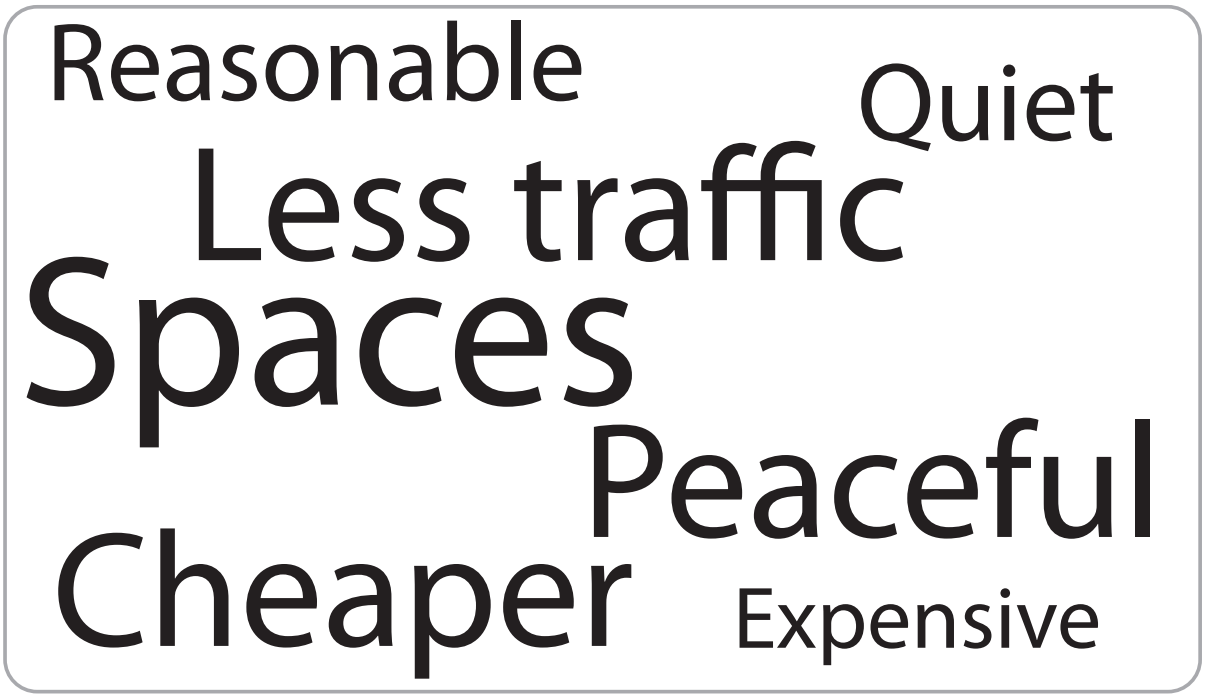
Figure 3b

Environmental quality in locations 1 and 2 (0 = low, 10 = high)

A group of students collected data for a rural settlement to answer the question:

'To what extent has the new housing development had an impact on the quality of the environment and services in the settlement?'

Before the housing development



After the housing development

Figure 4a

Resident views from questionnaire (larger words represent the most common responses)

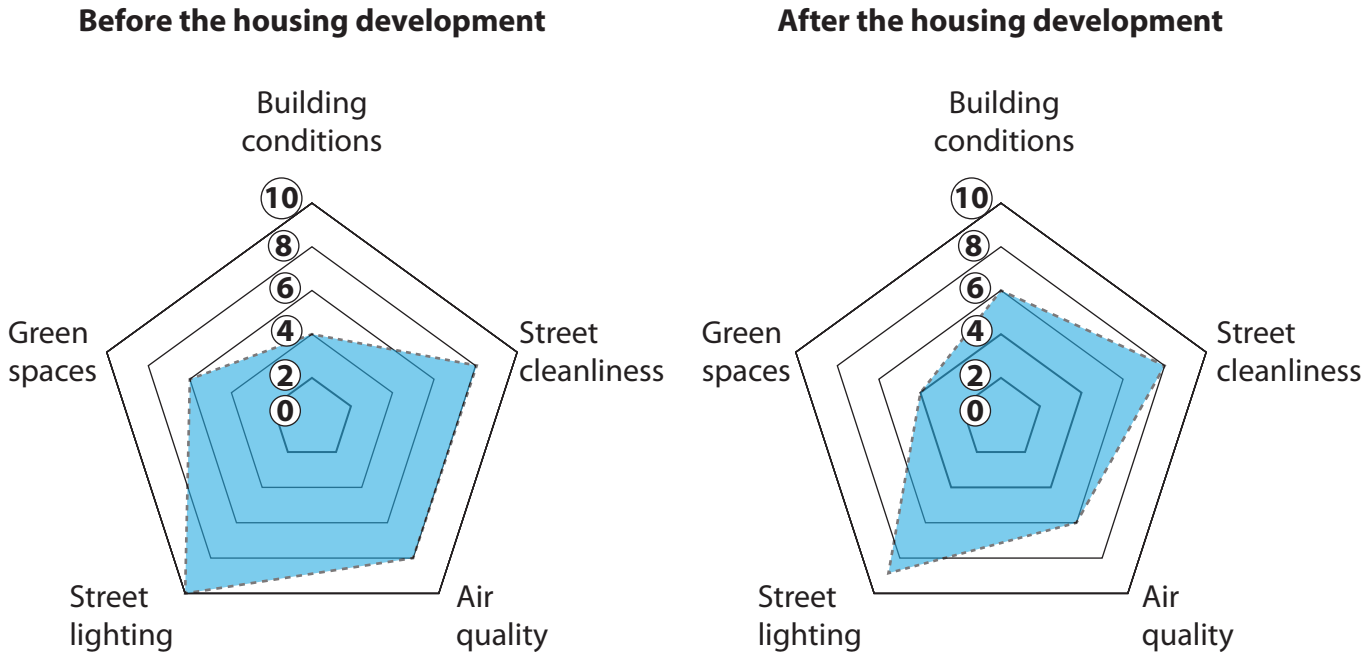
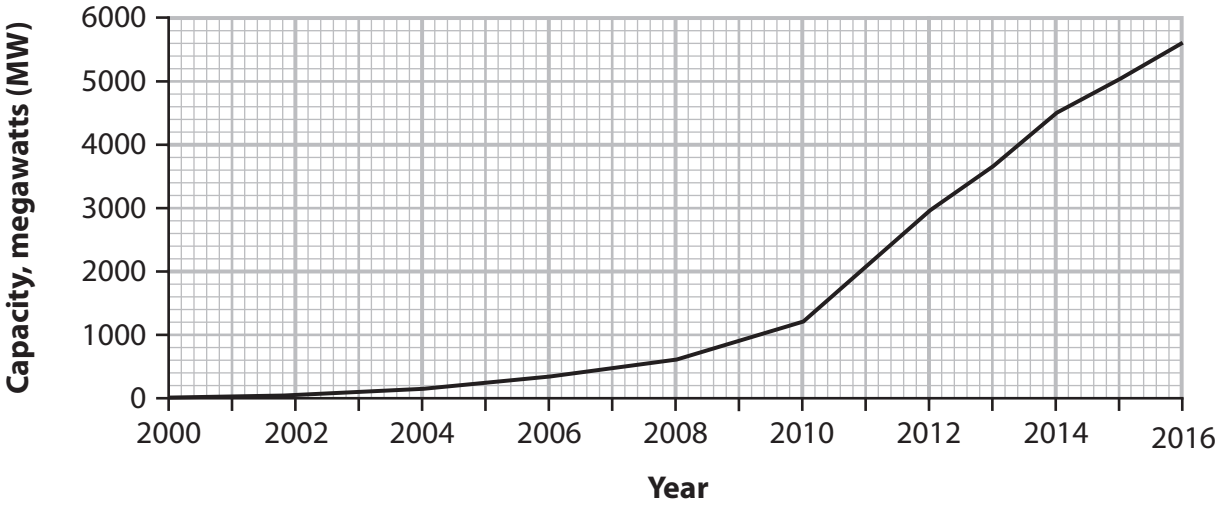


Figure 4b

Environmental quality (0 = low, 10 = high)

SECTION C

UK Challenges



(Source: http://fsr.eui.eu/offshore-energy-infrastructure/)

Figure 5a

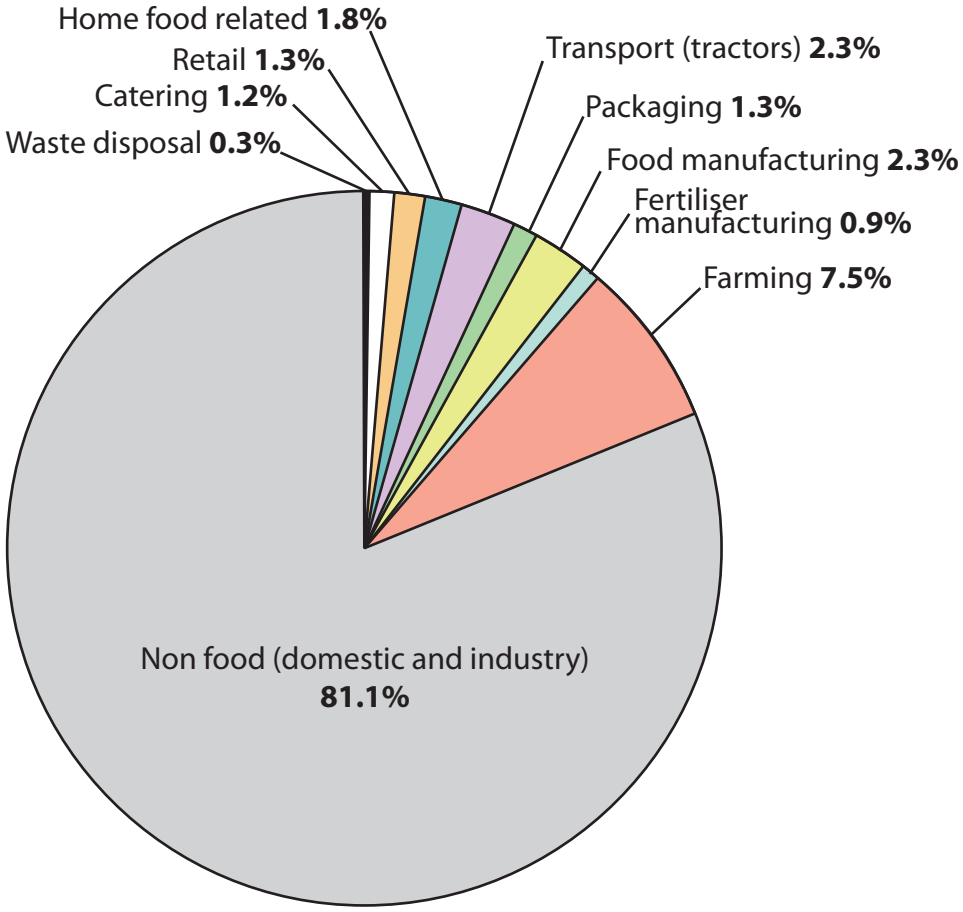
UK's offshore wind energy capacity 2000–2016

In 2011, UK energy use from renewables was equivalent to burning 1.9 million tonnes of oil whereas in 2017 it was 5.7 million tonnes.

Figure 5b

UK energy use from renewable

The production and consumption of food in the UK is estimated to account for almost a fifth (18.9%) of the country's overall greenhouse gas emissions.



Community food enterprises in the UK aim to promote the following:

1. Reduce the intensive use of nitrogen fertilisers which produce greenhouse gases.
2. Support customers in reducing emissions by providing advice on cutting food waste (for example, using leftovers), cooking efficiently (for example, putting lids on pans) and strategies for saving energy in the home.
3. Increase transport efficiency through collaboration, home delivery or using low-carbon fuels, and source electricity from a green energy supplier.
4. Create a clear vision that links community food enterprises to a low-carbon world.

Figure 5c

Fact File

BedZed is an example of a local scale response to climate change.

It is located in South London and was one of the first eco-villages with 100 sustainable homes, office space, a college and a community centre.

Other features of BedZed include:

1. Low water consumption, with residents using 50% less than the London average
2. A large percentage of the construction materials sourced locally within 35 miles of the site
3. An on-site car club estimated to save approximately £1,391 per year compared with a normal household with a car
4. Renewable energy sources that contribute to producing 37% less carbon dioxide emissions

Figure 5d

BedZed Sustainable Community Project

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Sources

Figure 5b Sourced from: © Crown Copyright

Figure 5c Sourced from: © Making Local Food Work 2008

Figure 5d Image sourced from: © Raf Makda-VIEW/Alamy and Text based on: https://www.bioregional.com/bedzed/