

P and S Human Geography Enquiry

Joanne Edgar

Please note that you may see slight differences between this paper and the original.

Candidates answer on the Question paper.

OCR supplied materials:

Additional resources may be supplied with this paper.

Other materials required:

- Pencil
- Ruler (cm/mm)

Duration: 55 mins

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions, unless your teacher tells you otherwise.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Where space is provided below the question, please write your answer there.
- You may use additional paper, or a specific Answer sheet if one is provided, but you must clearly show your candidate number, centre number and question number(s).

INFORMATION FOR CANDIDATES

- The quality of written communication is assessed in questions marked with either a pencil or an asterisk. In History and Geography a *Quality of extended response* question is marked with an asterisk, while a pencil is used for questions in which *Spelling, punctuation and grammar and the use of specialist terminology* is assessed.
- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **54**.
- The total number of marks may take into account some 'either/or' question choices.

1. * You will have carried out a human geography fieldwork investigation as part of your GCSE (9–1) Geography course.

State your fieldwork question or hypothesis -----

Critically evaluate the methods you used to collect your data.



Spelling, punctuation and grammar and the use of specialist terminology [3]

2.

Name a primary data collection technique suitable for carrying out a human geography fieldwork investigation looking at the issue of shop closures within an economic hub.

3. Study Figs 4a and 4b. (See also Insert for 384/02, Practice 1.)

Fig. 4a – Fieldwork visit record sheet for Osmaston, Derby.

Urban Quality of Life Observation Sheet 3:

Residential Area: Osmaston ~ Sinfin ward

Street a = Glossop Street

Street b = Abingdon Street

Street c = Crowshaw Street

Housing type(s)
2-3 bedroom semi-detached, 1950s, Council houses

Other Observed Evidence:

Positive factors	Negative factors
<ul style="list-style-type: none"> • Large park nearby with play area • 20 mph limits and speed bumps • Showcase Cinema + food places nearby 	<ul style="list-style-type: none"> • busy main road (A5111 - ring road) • derelict land • some empty shop units

• 1 = worst score
5 = best score

QOLF Scores:

Housing condition	1	2	3	4	5
a					
b					
c					

Garden size	1	2	3	4	5
a					
b					
c					

Pedestrian safety	1	2	3	4	5
a					
b					
c					

Litter	1	2	3	4	5
a					
b					
c					

Graffiti	1	2	3	4	5
a					
b					
c					

	1	2	3	4	5
a					
b					
c					

QOLF Total =

QOLF = quality of life

Fig. 4b – Neighbourhood profile data for wards in Derby.

City of Derby Ward	Average House Price	Unemployment Rate	Primary Pupils Achieving Level 4 or above in English & Maths	Number of calls to police for anti-social behaviour
Alvaston	£112,035	10.4%	54%	1,439
Arboretum	£89,134	18.4%	56%	5,372
Boulton	£102,472	9.6%	63%	1,211
Chellaston	£173,056	5.7%	na	1,127
Normanton	£85,194	16.8%	67%	1,656
Sinfin	£99,224	13.3%	54%	1,599
City of Derby Average	£141,906	9.3%	69%	1,175

The information was used for a human geography fieldwork investigation into the quality of life for different places in the city of Derby.

Study Fig. 4a, a fieldwork visit record sheet used for the area of Osmaston in Derby.

Suggest an additional quality of life factor that could have been observed and recorded. Explain your choice.

[2]

4. State **two** types of data which could be used to identify an economic hub and give reasons for your choices.

1 -----

2 -----

[4]

5.

As part of a students' fieldwork investigation, they counted the number of cyclists approaching a main road into Norwich. The results are shown in the table below.

Site Number	1	2	3	4	5	6	7	8	9	10	11
Cyclists counted	19	22	15	18	26	27	25	23	5	8	12

Calculate the lower quartile value of the dataset.

You must show your working out.

----- [3]

6. For a human geography fieldwork investigation which you have completed, explain how you have processed data from your own fieldwork.

----- [2]

7.

Study Fig. 6, a photograph showing traffic congestion in the city of Norwich. (See also Insert for 384/02, June 2018.)

Fig. 6 – Traffic congestion in the city of Norwich.



State **two** ways this photograph could be used in a human geography investigation.

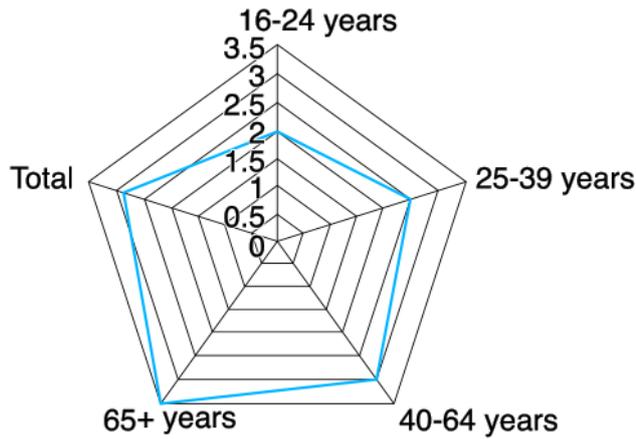
[2]

8. Study Fig. 3, a graph from a data presentation part of a human geography fieldwork investigation. (See also Insert for 384/02, Specimen).

Suggest what Fig. 3 indicates about the impact of shop closures in Worthing.

Fig. 3 – A graph from a data presentation part of a human geography fieldwork investigation

Average score out of 5 given to the question
'To what extent have you been affected by shop
closures in Worthing?'



[2]

10.

For a human geography fieldwork investigation which you have completed, justify **one** technique you used to present your data.

[2]

11.

* You will have carried out some human geography fieldwork as part of your GCSE (9–1) Geography course.

Name the fieldwork: -----

Explain how your fieldwork conclusions improved your understanding of a geographical question or issue.



Spelling, punctuation and grammar and the use of specialist terminology [3]

12.

* Figs 7a, 7b and 7c show information on population and transport issues in the city of Norwich. (See also Insert for 384/02, June 2018.)

Fig. 6 – Traffic congestion in the city of Norwich.



Fig. 7a – Resident journeys into Norwich.

Mode of transport	Percentage of journeys
Walking	17%
Bike	5%
Bus/Coach	7%
Rail	3%
Taxi	2%
Car	65%
Motorbike	1%

Fig. 7b – Population change in the city of Norwich.

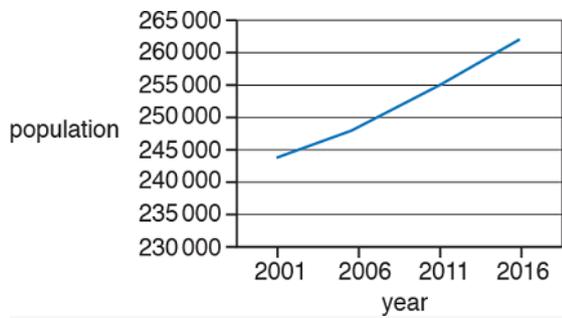
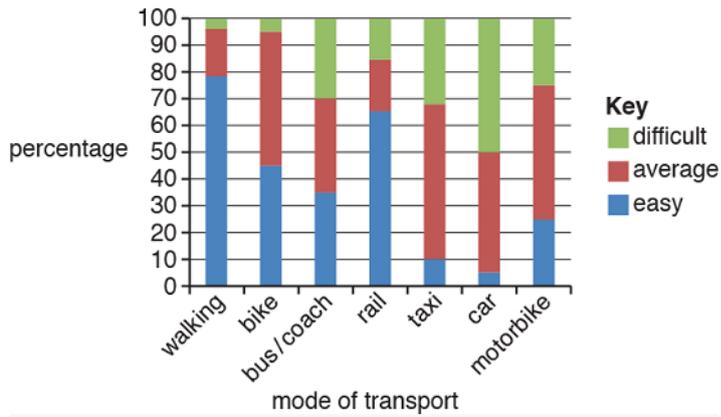


Fig. 7c – Residents’ opinions on ease of use of different transport types.



Using evidence from Figs 6, 7a, 7b and 7c, write a conclusion to the hypothesis: ‘Transport provision in Norwich is causing problems now and will do so in the future’. Develop your answer.

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
1	<p>Level 3 (6–8 marks) An answer at this level will show a thorough analysis of fieldwork data collection methods (AO3) with a thorough evaluation of the fieldwork data collection methods critically (AO3).</p> <p>This will be shown by including well developed ideas.</p> <p>There is a well–developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</p> <p>Level 2 (3–5 marks) An answer at this level will show a reasonable analysis of fieldwork data collection methods (AO3) with a reasonable evaluation of the fieldwork data collection methods critically (AO3).</p> <p>This will be shown by including some developed ideas.</p> <p>There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported with some evidence.</p> <p>Level 1 (1–2 marks) An answer at this level will show a basic analysis of fieldwork data collection methods (AO3) with a reasonable evaluation of the fieldwork data collection methods critically (AO3).</p> <p>This will be shown by some simple ideas.</p> <p>The answer may not link own fieldwork.</p> <p>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the question may not be clear</p>	8	<p>Answer will be marked using 3 levels</p> <p>Indicative content Accept any valid example of a human geography fieldwork investigation linked to a specification theme. Focus of the investigation can be communicated with a fieldwork question and/or hypothesis. Analysis should make references to data collection methods and could also include types of data collected. Critical evaluation will focus on pros and cons of methods/data re: ease of collection, usefulness for investigation, problems, bias and other issues. Credit references to secondary data.</p> <p>Example of well–developed ideas. My investigation was into the quality of life in different wards in south Derby. My hypothesis was that quality of life will improve with distance away from the city centre. On the field visit I observed and recorded a range of evidence about quality of life, such as housing quality, litter, graffiti and vandalism. This evidence was scored on a 1–5 scale with 1 being the worst score. This gave me useful data to compare the quality of life in the different wards. However, the scoring was very subjective and may have been biased by my opinion of the area and comparison with where I live. Furthermore, we only sampled three streets in each ward, these may not have been typical of the area as a whole. This means that the results obtained about the quality of life for each area may not be comprehensive and accurate. The secondary data was taken from Derby City Council's Neighbourhood profiles. This gave an insight into aspects of quality of life that cannot be observed. However for Chellaston there is no data for primary pupils achieving level 4, which hindered a comparison with the other wards for education</p>

Mark Scheme

Question		Answer/Indicative content	Marks	Guidance
		<p>0 marks No response or no response worthy of credit</p> <p>Spelling, punctuation and grammar and the use of specialist terminology (SPaG) are assessed using the separate marking grid in Appendix 1.</p>	3	<p>Example of developed ideas. My investigation was about the quality of life in south Derby. My hypothesis was that quality of life will improve with distance away from the city centre. On the field visit I observed and recorded evidence about quality of life, such as housing quality, litter, and graffiti. This gave me useful data to compare the wards. However the scoring was based on my opinion. We only sampled three streets in each area, these may not have been typical of the area. This could mean that the results about quality of life are not accurate.</p> <p>Example of simple ideas. I collected information about the quality of life in different parts of Derby. The scores I gave were based on my opinions of each area. This means that my results are biased.</p>
		Total	11	
2		Could include: a land use map (✓), a transect (✓), photographs (✓)	1	(✓) Accept any suitable answer as long as it is a primary data collection method
		Total	1	

Mark Scheme

Question		Answer/Indicative content	Marks	Guidance																																																
3		<p>Amount of vandalism (✓) as this could show if the area has a high rate of anti-social behaviour (DEV)</p> <p>Houses with burglar alarms (✓) as this could show evidence of crime prevention (DEV)</p> <p>Green space (✓) for showing whether people have access to this for leisure activities (DEV)</p> <p>Play areas for children (✓) to show who is using this facility in the urban community and when (DEV)</p>	2	<p>1 × 1 (✓) for a valid urban quality of life factor that could be observed on a fieldwork visit</p> <p>1 × 1 (DEV) for explaining why this quality of life factor was chosen</p>																																																
		Total	2																																																	
4		<p>Air traffic business passenger numbers (✓) is an indication that an area has many key important businesses (DEV)</p> <p>Number of financial institutions, headquarters of international companies (✓) as this is an indication that an area is a financial hub (DEV)</p>	4	<p>2 × 1 (✓) for naming the data type selected</p> <p>2 × 1 (DEV) for reason for the data type selected, for example about how it could be used</p> <p>Allow other reasonable types of data linked to economic hubs</p>																																																
		Total	4																																																	
5		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 10%;">Site Number</td> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> </tr> <tr> <td>Cyclists counted</td> <td>19</td><td>22</td><td>15</td><td>18</td><td>26</td><td>27</td><td>25</td><td>23</td><td>5</td><td>8</td><td>12</td> </tr> </table> <p>Ordered dataset</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 10%;">n</td> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> </tr> <tr> <td>value</td> <td>5</td><td>8</td><td>12</td><td>15</td><td>18</td><td>19</td><td>22</td><td>23</td><td>25</td><td>26</td><td>27</td> </tr> </table> <p>(DEV)</p> <p>Lower quartile = $\frac{1}{4}(n + 1)$th value = $\frac{1}{4}(11 + 1)$th value (DEV) = 3rd value = 12 (✓)</p>	Site Number	1	2	3	4	5	6	7	8	9	10	11	Cyclists counted	19	22	15	18	26	27	25	23	5	8	12	n	1	2	3	4	5	6	7	8	9	10	11	value	5	8	12	15	18	19	22	23	25	26	27	3	<p>1 × 1 (✓) for correct answer</p> <p>1 × 1 (DEV) for ordering the dataset</p> <p>1 × 1 (DEV) for showing the working of the lower quartile value</p> <p><u>Examiner's Comments</u></p> <p>Most candidates did not know how to work out the lower quartile value. Many did not order their data first, choosing instead to calculate the mean. Very few candidates made reference to the formula for calculating the lower quartile value. A significant number of candidates did not respond to this question.</p>
Site Number	1	2	3	4	5	6	7	8	9	10	11																																									
Cyclists counted	19	22	15	18	26	27	25	23	5	8	12																																									
n	1	2	3	4	5	6	7	8	9	10	11																																									
value	5	8	12	15	18	19	22	23	25	26	27																																									
		Total	3																																																	

Mark Scheme

Question		Answer/Indicative content	Marks	Guidance
6		My quality of life data was put into a large table for the three streets surveyed (✓). I downloaded and organised my photographs which showed evidence of a varied quality of life (✓).	2	2 × 1 (✓) for explaining how data has been processed
		Total	2	
7		To demonstrate the issue to be investigated (✓) To demonstrate, with annotation, traffic problems (✓) To locate the site of a traffic survey/ show the environment (✓) To complete a traffic count (✓)	2	2 × 1 (✓) for two valid ideas for how the photograph could be used in a human geography investigation No credit for air pollution. <u>Examiner's Comments</u> Few candidates accessed the second mark on this question. Some form of traffic count was common for one mark or photographic evidence of traffic congestion. Too many candidates suggested the photograph would support an investigation of pollution (generic).
		Total	2	
8		Older people are more affected by shop closures than younger people (✓) as the score for the 65+ age group is 3 out of 5 (DEV)	2	1 × 1 (✓) for any reasonable idea from the rose diagram analysis 1 × 1 (DEV) for evidence interpreted from the diagram to support the idea
		Total	2	
9		A bar graph or histogram (✓) as the height of bars would clearly show differences (DEV) and would also show scale of differences (DEV) A choropleth map (✓) as the shading would show values (DEV) and you could easily show high, medium and low house prices (DEV)	3	1 × 1 (✓) for a valid method of presentation 2 × 1 (DEV) for explanation of how method chosen enables the data to be compared
		Total	3	

Mark Scheme

Question		Answer/Indicative content	Marks	Guidance
10		<p>Justification could include:</p> <ul style="list-style-type: none"> how the technique is an appropriate choice to present the data collected (✓) reference to how difficult/easy the technique was to apply to the data set (✓) shows the data in a clear/visual way (✓) allows data to be compared easily (✓) how the technique compares with other possible techniques for clarity of presentation and/or level of difficulty(✓) 	2	<p>2 × 1 (✓) for each valid idea given to justify an appropriate data presentation technique</p> <p>Presentation technique must be relevant to a human geography investigation. Candidate does not need to state the technique used to get credit.</p> <p>No credit for stating the technique, describing the technique or describing the data presented. Expect a wide range of data presentation techniques.</p> <p><u>Examiner's Comments</u></p> <p>Many candidates described what they did to gather data and did not refer to data presentation. Other candidates made reference to a graphical technique but did not attempt to justify the method chosen. Credit given for simple reference to easy to draw or read/clear/allows for comparison. Very few candidates gained more than 1 mark.</p>
		Total	2	

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
11	<p>Own fieldwork</p> <p>Level 3 (6–8 marks) An answer at this level demonstrates thorough analysis (AO3) and evaluation (AO3) of the how the fieldwork conclusions improved understanding of a geographical question or issue. There will be a reasonable judgement as to whether the fieldwork conclusions improved understanding of a question or issue (AO3).</p> <p>This will be shown by including well-developed ideas.</p> <p>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</p> <p>Level 2 (3–5) An answer at this level demonstrates reasonable analysis (AO3) and evaluation (AO3) of the how the fieldwork conclusions improved understanding of a geographical question or issue. There will be a basic judgement as to whether the fieldwork conclusions improved understanding of a question or issue (AO3).</p> <p>This will be shown by including developed ideas.</p> <p>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</p> <p>Level 1 (1–2) An answer at this level demonstrates basic analysis (AO3) and evaluation (AO3) of the how the fieldwork conclusions improved understanding of a geographical question or issue. There will be no judgement as to whether the fieldwork conclusions improved understanding of a question or issue (AO3).</p> <p>This will be shown by including simple ideas.</p>	8	<p>Answer will be marked using 3 levels:</p> <p>Indicative content There are many areas in the specification where fieldwork could be used.</p> <p>Example of well-developed ideas: Name the fieldwork: Does housing quality improve with distance from the city centre of Newcastle upon Tyne? I found that in two directions (west and east) the types of housing remained more similar than to the north, so I was able to conclude that housing quality does not change in the same way with distance from the city centre. This helped me understand the reasons behind changing land use in a city, for example redevelopment and gentrification.</p> <p>Example of developed ideas: Name the fieldwork: Housing quality and distance from the city centre of Newcastle upon Tyne. I found that in some areas the housing quality improved with distance from the centre but in others it seemed to get worse. This is because in some areas old housing had been knocked down and new estates built.</p> <p>Example of simple ideas: Name the fieldwork: Housing quality in Newcastle upon Tyne. I found out about the different types of housing in Newcastle. This helps me understand urban land use.</p>

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
			<p>The answer may not link own fieldwork to a geographical question or issues.</p> <p>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</p> <p>0 marks No response or no response worthy of credit.</p> <p>Spelling, punctuation and grammar and the use of specialist terminology (SPaG) are assessed using the separate marking grid in Appendix 1.</p>	3	
			Total	11	

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
12	<p>Level 3 (6–8 marks) An answer at this level demonstrates a thorough analysis (AO3) of the data provided with a thorough judgement to reach a conclusion to the hypothesis (AO3).</p> <p>This will be shown by including well-developed ideas.</p> <p>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</p> <p>Level 2 (3–5 marks) An answer at this level demonstrates a reasonable analysis (AO3) of the data provided with a reasonable judgement to reach a conclusion to the hypothesis (AO3).</p> <p>This will be shown by including developed ideas.</p> <p>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</p> <p>Level 1 (1–2 marks) An answer at this level demonstrates a basic analysis (AO3) of the data provided with a basic judgement to reach a conclusion to the hypothesis (AO3).</p> <p>This will be shown by including simple ideas.</p> <p>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</p> <p>0 marks No response worthy of credit.</p>	8	<p>This question will be marked using 3 levels</p> <p>Examples of well-developed ideas: The data might suggest that traffic provision is causing problems with 65% of residents travelling to work by car but only 4% rating this journey as 'easy'. This is clearly shown in the traffic congestion seen in Fig.6 This is unlikely to improve in the future as the population has been rising from just under 245,000 in 2001 to over 260,000 in 2016, which will add pressure to the road network. However, over 20% of residents either cycle or walk to work, and a much higher proportion find this easy, suggesting that if this trend continues there may be fewer traffic problems in the future.</p> <p>Examples of developed ideas: The data suggests that people think travelling by car is not easy, with over 90% of residents classing it as 'average' or 'difficult'. The traffic in the photograph shows this. This is a problem as most people travel to work by car. This is unlikely to improve in the future as the population has been rising in recent years and therefore more people in the future will travel by car.</p> <p>Examples of simple ideas: I think that transport provision is a big problem as too many people travel by car and don't find it easy. The population is getting bigger too.</p>

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
	 <p>Spelling, punctuation and grammar and the use of specialist terminology (SPaG) are assessed using the separate marking grid in Appendix 1.</p>	3	<p><u>Examiner's Comments</u></p> <p>This question was well done and attempted by the majority of candidates. Most candidates identified enough relevant material from the sources to be credited at Level 2. Candidates wrote a lot of detail for this question and were good at quoting data from the resources, which suggested they were confident in interpreting data and that they had adequate time at the end of their examination to write a considered response. Good use of data and evidence from the sources allowed candidates to explain how factors would impact transport provision in the future. There were some very good, concise 'conclusions' integrating all the evidence. However, many candidates did not include a counter argument and did not state how the public may use more public transport/walk/cycle in the future and therefore not create a traffic issue. Some candidates allowed their responses to drift into lots of detail about pollution (generic) and global warming rather than using the data/evidence provided.</p>
	Total	11	