Supporting students with fieldwork questions in exams
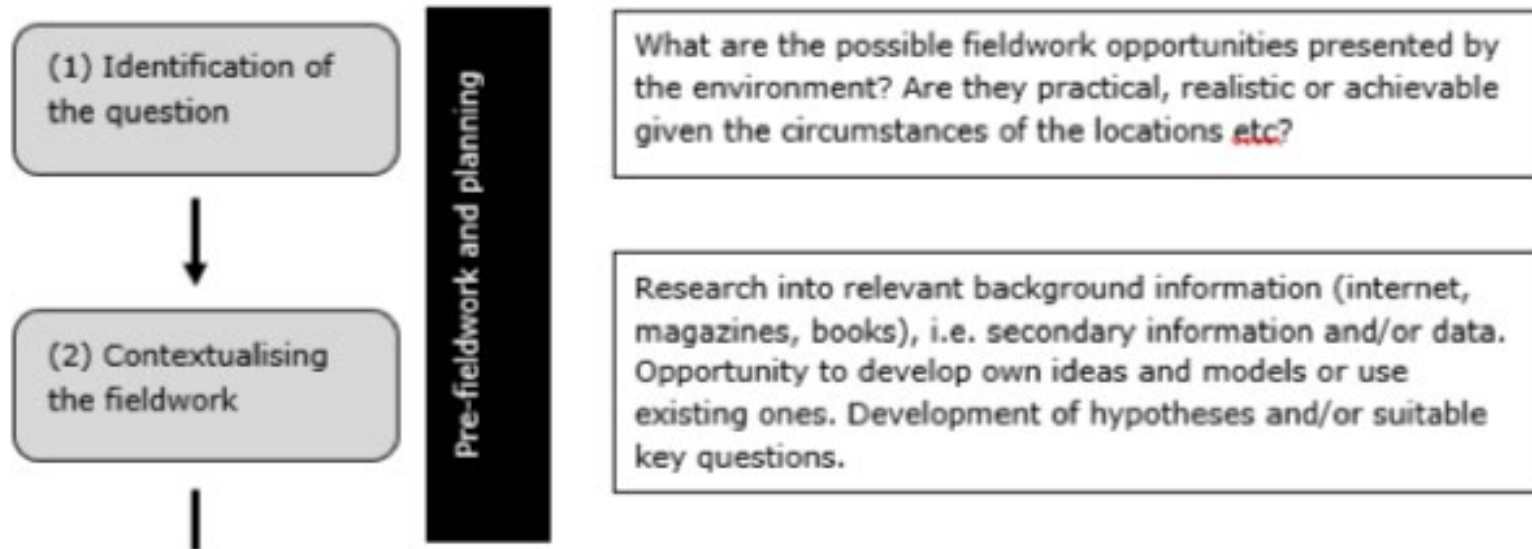
Devising Enquiry Questions

More ownership, more engagement, more enquiry = better outcomes!

1–2 Pre-fieldwork and planning

(1) Identification of the question

Pre-fieldwork and planning

What are the possible fieldwork opportunities presented by the environment? Are they practical, realistic or achievable given the circumstances of the locations etc?

(2) Contextualising the fieldwork

Research into relevant background information (internet, magazines, books), i.e. secondary information and/or data. Opportunity to develop own ideas and models or use existing ones. Development of hypotheses and/or suitable key questions.

For example, students might ask the following questions about this photo:

- How does the beach change if you move from the edge of the sea towards the land?
- What physical processes were involved in the formation of this beach?
- How might this place change in the future (and why)?

Photo 1: Cuckmere Haven, Sussex. Sourced from James Maxwell

8 (a) Study Figure 8, which are photographs of the two beaches chosen by a group of students studying the impact of coastal management on coastal processes at two different locations.

- The students chose to measure beaches at two different locations.

- The chosen locations are about 10 km apart with Location A on a south-east facing coastline and Location B on a south-west facing coastline.

- At each location they selected three sites to carry out their beach profiles.

- They intended to measure beach gradient and sediment characteristics.

Location A   Location B

Figure 8

(i) Suggest an enquiry question or hypothesis that the students might have proposed for their investigation.
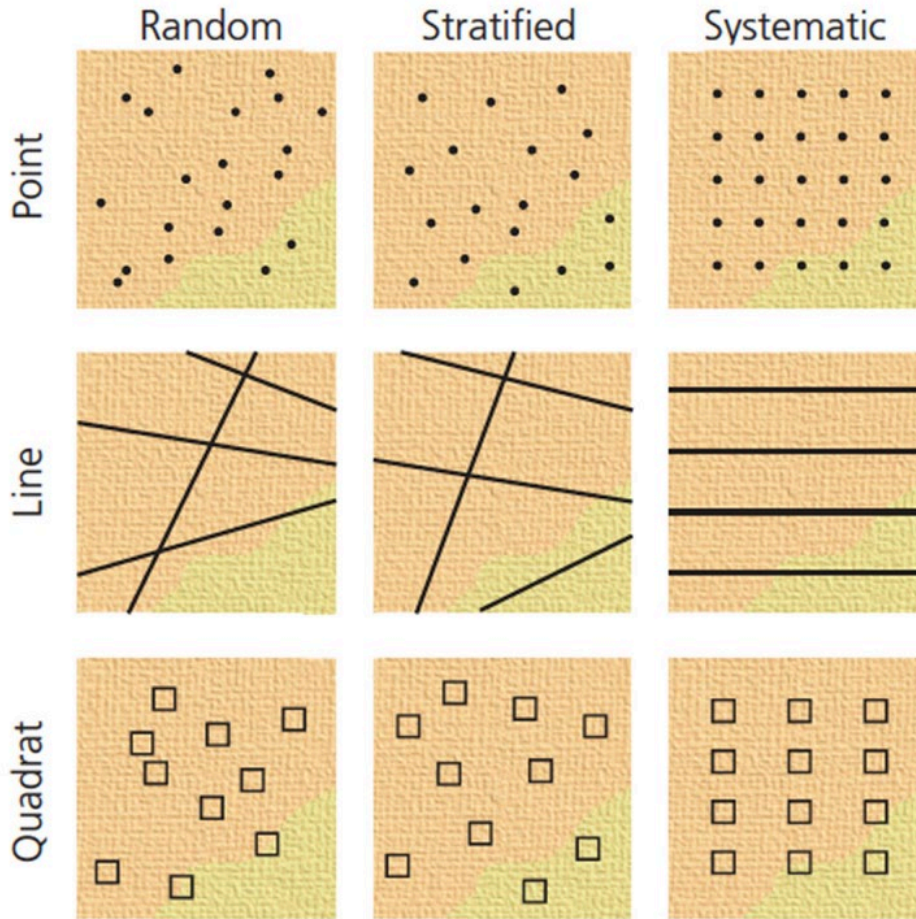
(2)

ResultsPlus
Examiner Tip

Always use the resources that you are offered. They will often contain the answer to the question asked.

Fieldwork in exams - sampling

Students need to understand the different sampling methods and the idea of accuracy and reliability of the methods, data collected and conclusions.

Spec B P2 Q11d

(d) In 2017 a group of students carried out a questionnaire in three different urban areas, one in the city centre, one in the suburbs and one in a rural settlement just inside the city boundary.

The interviews were conducted between 13:00 and 15:00 on a Thursday afternoon by asking people in the three different areas;

(a) if they were residents in that location and

(b) if they would be prepared to take part in a survey.

The students interviewed 30 residents in total, 13 in the city centre, 10 in the suburb and 7 in the rural settlement just inside the city boundary.

The residents were asked to identify the **three** most important factors for them when they chose their current residence. The results are shown below in Figure 10.
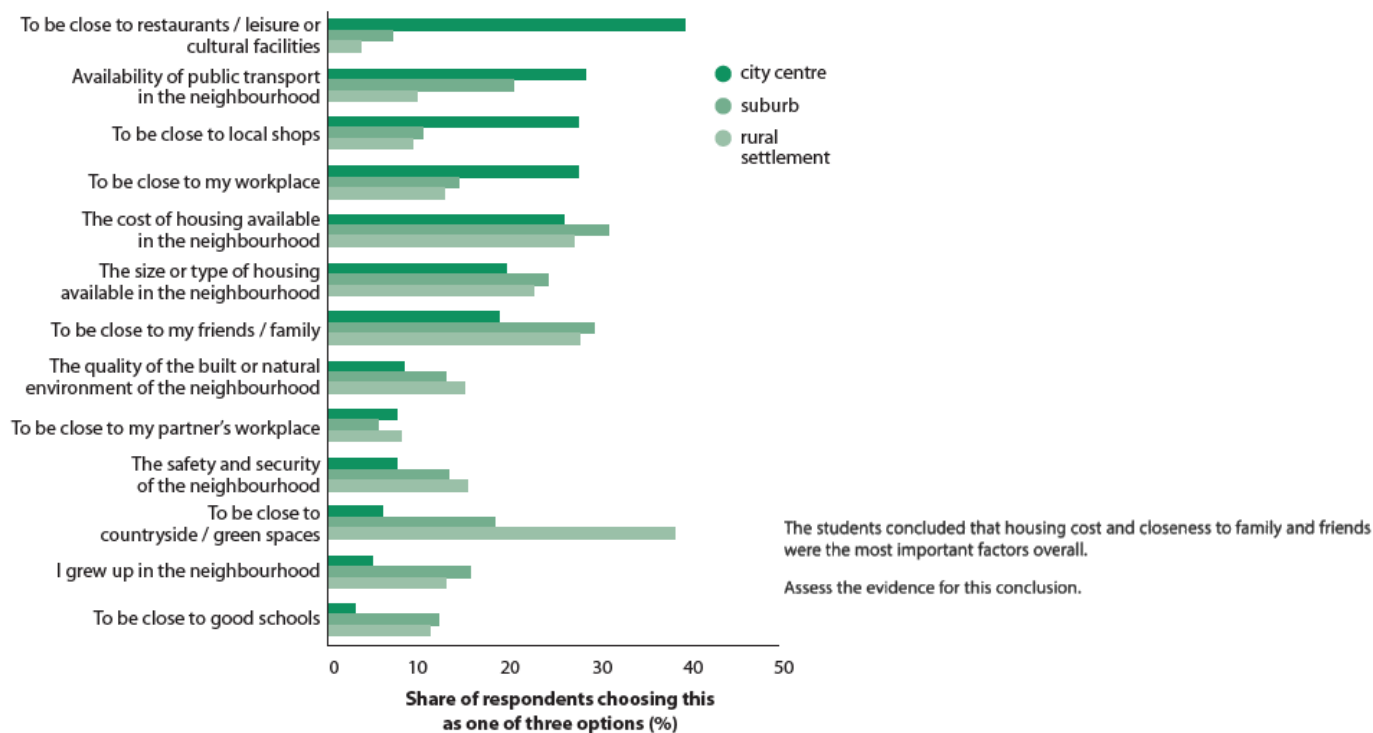
The students concluded that housing cost and closeness to family and friends were the most important factors overall.

Assess the evidence for this conclusion.

(8)

Figure 10

Pearson
Edexcel

Logical connections

A balanced argument

Judgements supported by evidence

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

The students concluded that housing cost and closeness to family and friends were the most important factors overall.

Assess the evidence for this conclusion.

(8)

In Figure 10, it does show across all three areas that housing cost and closeness to family were the most important factor. Although for the City Centre and rural settlement is isn't the highest percentage. For example closeness to family is only around 18% in rural areas, but close to leisure facilities is around 40%, overall across the three areas it's the most important factor. Their conclusion is considered accurate as they asked in each area at the same time between 13:00 and 1500 and on the same day. This means the people will roughly be the same as in different times of the day for example the evening will have more adults and children home from work and school. Therefore their conclusion can be considered accurate and correct.

On the other hand, the conclusion can be considered incorrect as the amount of people they asked varies. In the city centre they asked 13, 10 in suburbs, 7 in rural settlement. This makes result less reliable and bias as there is more opinions from one area. By asking 10 people in every area their results and conclusion would be more reliable as the number

is even. To make their results and conclusion more accurate they should ask people at three or more times a day at different times. Depending on the time and day depends on the type and amount of people

(Total for Question 10 = 18 marks)

Overall from figure 10 their conclusion is correct however eat is unreliable as they have only given a small number number of people due to it being at a specific time. If they went back multiply times a year and asked at different times of the day, their results could be more reliable and accurate

ResultsPlus
Examiner Comments

This is a very systematic response, although set up unusually by presenting a 'yes/no' argument that is not helpful. However, the arguments are sound and the AO4 is good.

The opening overview, which is then broken down into sub-sets, is excellent and the candidate notes the critical weakness of varying sample sizes.

AO3 is sufficient and steers clear of the temptation to explain the reasons behind these variations.

8 marks

ResultsPlus
Examiner Tip

Remember that all conclusions are likely to be partial – avoid extremes in your answers.