

Coastal landscapes – investigation of coastal processes through landscape evidence

1 Formulating enquiry questions	<p>An enquiry question should relate to a geographical theory and/or example. A key question or hypothesis follows on from the enquiry to be tested. For example:</p> <ul style="list-style-type: none"> Why does beach morphology Happisburgh change? <p>A key question that follows on from this could be:</p> <ul style="list-style-type: none"> Does sediment size and shape change along the North Norfolk Coast? <p>A hypothesis could be:</p> <ul style="list-style-type: none"> Sediment size increases from Happisburgh to Sheringham.
2 Fieldwork methods and techniques	<p>Fieldwork data collection must include at least:</p> <ul style="list-style-type: none"> one quantitative fieldwork method to measure beach shape and sediment characteristics – quantitative methods record data that can be measured as numbers (for example, using ranging poles and a clinometer to measure beach gradient) one qualitative fieldwork method to record the landforms that make up the coastal landscape – qualitative methods record descriptive data (for example, field sketch of the cliff line).
3 Secondary data sources	<p>Secondary data is data that somebody else has already collected. For example, a geology map from British Geological Survey and Environment Agency.</p>

Topic 7B: Investigating human environments (central/inner urban area OR rural settlements)

Changing city environments – investigating change in central/inner urban area(s)






1 Formulating enquiry questions	<p>An enquiry question should relate to a geographical theory and/or example. A key question or hypothesis follows on from the enquiry to be tested. For example:</p> <ul style="list-style-type: none"> How does the quality of the urban environment vary along a transect through the south-west of Norwich? <p>A key question that follows on from this could be:</p> <ul style="list-style-type: none"> Does environmental quality improve with increasing distance from the CBD? <p>A hypothesis could be:</p> <ul style="list-style-type: none"> Environmental quality improves with distance from the CBD.
2 Fieldwork methods and techniques	<p>Fieldwork data collection must include at least:</p> <ul style="list-style-type: none"> one quantitative fieldwork method to measure the land use function (quantitative methods record numbers that can be measured as numbers for example, land use mapping) one qualitative fieldwork method to record the quality of the environment (qualitative methods record descriptive data for example, field sketch).
3 Secondary data sources	<p>Secondary data is data that somebody else has already collected for example, census data from the Office for National Statistics and Multiple Deprivation Index.</p>

Topic 8: Geographical investigations – UK challenges

Specification key ideas	Key content				
8.1 The UK's resource consumption and environmental sustainability challenge	<p>The UK is becoming overpopulated. By 2030, the UK's population is expected to exceed 70 million owing to natural increase and migration. This will put further strain on natural resources and ecosystems.</p> <p>Pressure on ecosystems comes from:</p> <ul style="list-style-type: none"> building on greenfield sites 				
	<ul style="list-style-type: none"> the destruction of natural habitats and declining biodiversity pressure on water supply and quality increased food production intensifying agricultural practices. <p>Solutions to tackling sustainable transport include:</p> <ul style="list-style-type: none"> increased public transport options congestion charging and park-and-ride schemes promoting the use hybrid and electric cars. 				
8.2 The UK settlement, population and economic challenges	<p>A 'two-speed economy' refers to the uneven growth of the UK economy, with the South East developing fastest. A possible solution to help close the gap between the South East and the rest of the UK is to improve transportation links. For example, HS2.</p> <p>Costs and benefits of greenfield development and the regeneration of brownfield sites are listed below.</p> <table border="0"> <tr> <td> <p>Greenfield benefits</p> <ul style="list-style-type: none"> Cheaper land to develop More space </td><td> <p>Brownfield benefits</p> <ul style="list-style-type: none"> Infrastructure already exists Improvement to landscape </td></tr> <tr> <td> <p>Costs</p> <ul style="list-style-type: none"> Loss of valuable farmland Disruption to wildlife habitats </td><td> <p>Costs</p> <ul style="list-style-type: none"> Restricted development Land may be contaminated </td></tr> </table> <p>UK net migration has increased since 1970. During 2015, net migration was over 300,000 people. However, it is difficult to collect data about migration accurately and data from different sources varies, so net migration statistics may not be reliable. Stakeholders have different views towards migration into the UK.</p> <ul style="list-style-type: none"> Some businesses welcome migrant workers to increase the workforce. Local councils have concerns about providing healthcare and education. Some people believe migrants reduce the number of jobs available. Note: research has shown that migration has had little or no impact on the average employment and unemployment of UK-born workers (Source: The Migration Observatory, University of Oxford) 	<p>Greenfield benefits</p> <ul style="list-style-type: none"> Cheaper land to develop More space 	<p>Brownfield benefits</p> <ul style="list-style-type: none"> Infrastructure already exists Improvement to landscape 	<p>Costs</p> <ul style="list-style-type: none"> Loss of valuable farmland Disruption to wildlife habitats 	<p>Costs</p> <ul style="list-style-type: none"> Restricted development Land may be contaminated
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8.3 The UK's landscape challenges	<p>The management of the UK's National Parks is divided into different categories – habitats, biodiversity, climate change and historical environments. Approaches to conservation and development include:</p> <ul style="list-style-type: none"> using renewable energy sources river restoration projects using electric bikes to reduce the number of cars on roads extending National Parks – the Lake District National Park was expanded in 2016, for example, and there are plans for further expansion. Views on this have been mixed though, and some residents and community groups may be concerned about increased visitors and traffic pollution, as well as rising house prices due to the popularity of owning second homes in National Parks. However, the local economy may benefit from increased spending by tourists in local businesses, which could create more jobs for local residents. <p>The Environment Agency is responsible for the management of the UK's rivers and coasts. Approaches to managing the UK's river and coastal flood risk include:</p> <ul style="list-style-type: none"> monitoring and early warning systems soft and hard engineering stricter building regulations afforestation.
8.4 The UK's climate change challenges	<p>The UK's future climate could see temperature rising between 2°C and 4°C, an increase in precipitation and more extreme weather events, although there is uncertainty around these projections.</p> <p>Climate change could result in rising sea levels causing coastal flooding. This will increase the rate of erosion on coasts, at a cost to the economy. Temperature increases could cause more frequent heatwaves, leading to longer periods of drought in the UK. This will affect food production and human health.</p> <p>UK responses to climate change</p> <ul style="list-style-type: none"> Local scale – Individuals can reduce their carbon footprint by walking more or using public transport, recycling waste and installing energy efficient devices. National scale – The government can invest in more sustainable practices, such as renewable energy.

Remember, you will be answering the **coasts** section, as that is where we have completed our fieldwork. Your Urban Investigation will be focused on our local area.

				
Place and Space	Scale and Connection	Physical and human geography	Environment and sustainability	Culture and diversity

In your third and final paper you will be tested on:

- 1) Coastal Investigation theory 10 marks
- 2) Urban Investigation theory 10 marks
- 3) UK Challenges Synoptic 28 marks

<div> <div> Data <ul style="list-style-type: none"> Facts and figures pertinent to the problem </div> <div> Secondary data <ul style="list-style-type: none"> Facts and figures already recorded prior to the project </div> <div> Primary data <ul style="list-style-type: none"> Facts and figures newly collected for the project </div> </div>		<ol style="list-style-type: none"> 1. Random sampling - selecting a person to interview or site to measure, at random. Random sampling is unbiased as particular people or places are not specifically selected. 2. Systematic sampling - collecting data in an ordered or regular way, eg every 5 metres or every fifth person. 3. Stratified sampling - dividing sampling into groups, eg three sites from each section of coastline, or five people from each age range. It is possible to combine stratified sampling with random and systematic sampling. <ul style="list-style-type: none"> Stratified random sampling - random samples are taken from within certain categories. Stratified systematic sampling - regular samples are taken from within certain categories 		Methodology: Data we collected	Methodology: Data we collected
				Field Sketch	Land use transect
				Beach profile	
				Groyne Height	Interviews / Surveys
				Sediment Analysis	
				Bipolar analysis of groyne	Environmental Quality Survey (EQS)
				Photographs/field sketch	

Enquiry question to investigate
1. How does land use change with distance from the CBD?
2. How has the land use in the CBD changed since deindustrialisation?
3. How does the quality of the environment change as we move away from the CBD?
4. How has the River Rea impacted on the land use and the people who use the urban area?
5. How has the Bullring shopping centre affected the quality of the environment?
6. Has Sparkbrook community centre improved people's quality of life?

Methods
<ul style="list-style-type: none"> Photographs Police crime data EQS (environmental quality survey) Census data (employment, ethnicity, doctors per 1,000 people) Questionnaires Land use survey

KEY TERMS:

Primary Data - information which you go out and collect yourself

Secondary data - someone else has collected it, you use their results

Qualitative data - where the result you collect is words or images

Quantitative data - where the results you collect are numbers