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Year 10 Geography

Year 10 marks the transition from KS3 to OCR GCSE Geography B. Students deepen prior knowledge while increasing the precision of geographical terminology, place-specific evidence, data interpretation and independent reasoning. Across the year, physical and human topics are deliberately connected through recurring concepts including interdependence, inequality, sustainability, change, place, scale and human-environment interaction, preparing students for fieldwork and the synoptic demands of Geographical Exploration (Paper 3).

Terms 1–2: Distinctive Landscapes – Our Natural World / Paper 1 / Topic 3

Learning Objectives

Students investigate how geomorphic processes create and modify distinctive UK landscapes, applying this to the River Tees and Swanage/Jurassic Coast.

Key learning:

- Explain weathering, mass movement, erosion, transportation and deposition using precise terminology.
- Explain the formation and development of major river and coastal landforms through sequenced processes.
- Apply detailed place-specific evidence from the River Tees and Swanage, Dorset.
- Analyse how geology, climate and human activity influence landscapes at different scales.
- Interpret maps, photographs, numerical data and geographical resources.
- Evaluate the effectiveness and consequences of river and coastal management.

What previous knowledge is required?

Year 8 Rivers & Cities introduced drainage basins, river processes, flooding and the relationship between physical systems and settlements. KS3 map skills, grid references, scale, graph interpretation and numeracy provide the disciplinary tools needed to analyse landscape evidence. Earlier work on weather, climate and human-environment interaction helps students recognise that landscapes result from interacting physical and human processes. GCSE study moves from identifying features to explaining process sequences and applying precise named-place evidence.

How will this term's content help with future learning?

This provides core physical-process knowledge for Global Hazards and Changing Climate, including risk, flooding, storminess and the influence of climate on geomorphic change. Systems thinking links to Sustaining Ecosystems, while settlement and management decisions connect to Urban Futures. It directly underpins physical fieldwork at Herne Bay, where students apply coastal-process and management knowledge to primary data. For Paper 3, students transfer process understanding to unfamiliar landscapes, interpret evidence and connect physical change with human decisions.

Common Misconceptions

- Erosion, weathering and mass movement are the same process.
- All erosion processes operate in the same way in rivers and at coasts.
- Deposition only occurs when a river or wave completely stops moving.
- Waterfalls and meanders are static landforms rather than features that change over time.
- Groynes create new sediment rather than interrupting sediment transfer.
- Hard engineering always prevents erosion and has no negative impacts elsewhere.

National Curriculum / Specification

OCR GCSE Geography B J384 – Our Natural World (01), Topic 3: Distinctive Landscapes. Students study how geomorphic processes shape river and coastal landscapes, the influence of geology and climate, named UK landscape examples, management and associated geographical skills. This contributes to Paper 1 and supports the synoptic assessment in Paper 3.

Terms 2–3: Urban Futures – People and Society / Paper 2 / Topic 1

Learning Objectives

Students investigate global urbanisation and how urban change creates contrasting opportunities and challenges, using London and Lagos as detailed studies.

Key learning:
• Explain global patterns of urbanisation, world cities and megacities.
• Analyse rural–urban migration, natural increase and contrasting urban trends.
• Distinguish suburbanisation, counter-urbanisation and re-urbanisation.
• Apply detailed evidence from London and Lagos to migration, inequality, housing, services, employment and way of life.
• Analyse how urban change affects different groups and places.
• Evaluate strategies designed to improve urban sustainability, including transport.

What previous knowledge is required?

Year 7 Population & India provides knowledge of population distribution, density, structure, challenges and change. Year 8 Rivers & Cities introduced settlement growth, urban functions and links between people, infrastructure and the physical environment. Year 8 Development established that places have contrasting wealth, services and opportunities, while Year 9 Globalisation and Africa developed understanding of migration, investment, inequality and global connections. Students therefore enter GCSE able to explain basic urban patterns and now compare processes between an AC and an EDC/LIDC context.

How will this term's content help with future learning?

Urban Futures links directly to Dynamic Development because development influences migration, employment, housing, infrastructure and governments' capacity to manage growth. It connects to Resource Reliance through growing urban demand for food, water and energy, and to UK in the 21st Century through population change, migration, inequality and changing places. Links to Global Hazards and Distinctive Landscapes show how urban growth can increase exposure to flooding and other physical risks. It underpins human fieldwork at Coxheath and Paper 3 work on stakeholders, unfamiliar places and evidence-based decision making.

Common Misconceptions

• Urbanisation simply means that a city's population is increasing.
• Rural–urban migration is the only cause of rapid urban growth.
• All megacities are in poorer countries (LIDCs).
• Informal settlements are planned by governments and have identical conditions.
• Everyone benefits equally from urban growth and regeneration.
• Sustainable urban development only means reducing pollution.

National Curriculum / Specification

OCR GCSE Geography B J384 – People and Society (02), Topic 1: Urban Futures. Students study global urbanisation, contrasting urban trends, causes and consequences of urban growth, an AC city and an LIDC/EDC city, and strategies for sustainable urban living. Geographical skills and human fieldwork are integrated, and knowledge contributes to synoptic Paper 3.

Terms 3–4: Sustaining Ecosystems – Our Natural World / Paper 1 / Topic 4

Learning Objectives

Students investigate ecosystems as interdependent systems before studying tropical rainforest and polar environments in depth.

Key learning:
• Explain ecosystem interdependence and consequences of change within a system.
• Interpret global patterns in ecosystem distribution and climate characteristics.
• Explain rainforest nutrient and water cycles, soils and species adaptations.
• Explain the distinctive characteristics and adaptations of polar environments.
• Analyse pressures created by human activity on fragile ecosystems.
• Apply named evidence to management strategies and evaluate environmental, social and economic sustainability.

What previous knowledge is required?

Year 7 Weather, Climate & Extreme Environments introduced tropical rainforests, climate, biomes, plant and animal adaptations and human impacts. Students have also interpreted climate graphs and used latitude and global location to explain environmental patterns. Year 9 Africa reinforced biome and climate variation, while Water Resources and Weather & Climate developed understanding of physical systems and

environmental change. Distinctive Landscapes earlier in Year 10 strengthens the idea that natural environments are dynamic systems shaped by interacting physical and human influences.

How will this term's content help with future learning?

The topic strengthens systems thinking used throughout OCR B. It links closely to Changing Climate because temperature and precipitation influence ecosystem distribution and climate change alters habitats and feedbacks. Global Hazards links through vulnerability and resilience. Dynamic Development and Resource Reliance connect economic growth, poverty, trade and demand for food, water, energy and raw materials to ecosystem pressure. Urban Futures links through consumption and waste. Sustainability, stakeholder priorities and trade-offs are recurring Paper 3 concepts requiring students to justify decisions using unfamiliar evidence.

Common Misconceptions

- An ecosystem is simply a collection of plants and animals.
- Tropical rainforests have very fertile soils because vegetation is dense.
- Nutrients are stored mainly in rainforest soils.
- All polar environments are permanently covered by ice and contain no ecosystems.
- The Arctic and Antarctica are environmentally and politically identical.
- Conservation means preventing all human activity rather than managing use sustainably.

National Curriculum / Specification

OCR GCSE Geography B J384 – Our Natural World (01), Topic 4: Sustaining Ecosystems. Students study global ecosystem distribution, ecosystem interdependence, tropical rainforest and polar environments, human pressures and sustainable management. Skills are integrated and content supports synoptic connections in Geographical Exploration (03).

Terms 4–5: Dynamic Development – People and Society / Paper 2 / Topic 2

Learning Objectives

Students investigate why development is uneven, how it can be measured and how development strategies can improve quality of life, with an in-depth study of Ethiopia.

Key learning:

- Use and critically interpret measures including GNI per capita and HDI.
- Explain interacting physical, historical, economic, social and political causes of uneven development.
- Analyse factors that reinforce poverty and inequality.
- Apply detailed contextual knowledge of Ethiopia as a named LIDC.
- Assess progress towards relevant Sustainable Development Goals.
- Analyse trade, TNC investment and international aid, including debt relief.
- Compare top-down and bottom-up strategies and reach justified conclusions about effectiveness.

What previous knowledge is required?

Year 8 Development is the direct foundation: students studied development indicators, HDI, uneven development and Ethiopia. Year 7 Population & India supports understanding of demographic pressures and access to services. Year 9 Superpowers and Globalisation developed trade, investment, TNCs and global economic connections, while Africa examined the interacting causes of underdevelopment in Niger. Urban Futures earlier in Year 10 reinforces links between economic opportunity, migration, infrastructure and inequality. GCSE study therefore moves from identifying development differences to analysing interacting causes and evaluating strategies.

How will this term's content help with future learning?

Dynamic Development is a major synoptic bridge. It links back to Urban Futures through migration, informal employment, services and inequality, and forward to Resource Reliance because food, water and energy security interact with development, trade and investment. Sustaining Ecosystems and Changing Climate highlight tensions between economic growth, environmental sustainability and vulnerability. Global Hazards adds capacity to cope, governance and resilience; UK in the 21st Century provides a contrasting AC context. Paper 3 requires students to combine these themes, weigh stakeholder priorities and evaluate responses using evidence.

Common Misconceptions

- Development and economic growth mean exactly the same thing.
- A single indicator such as income gives a complete picture of development.
- All people within a country experience the same level of development.
- LIDCs are poor because of one simple cause.
- Aid always improves development and has no disadvantages.
- Top-down strategies are always better than bottom-up approaches.
- The Sustainable Development Goals apply only to poorer countries.

National Curriculum / Specification

OCR GCSE Geography B J384 – People and Society (02), Topic 2: Dynamic Development. Students study development indicators and limitations, causes and consequences of uneven development, a named LIDC (Ethiopia), progress towards relevant SDGs, trade, TNC investment, international aid such as debt relief, and contrasting development strategies. Content contributes to Paper 2 and synoptic Paper 3.

Term 6: Human and Physical Fieldwork – Papers 1, 2 and 3

Learning Objectives

Students apply geographical knowledge and enquiry skills through physical fieldwork at Herne Bay and human fieldwork at Coxheath. Fieldwork is taught as geographical enquiry rather than simply data collection.

Key learning:

- Understand the enquiry sequence from question/hypothesis to conclusion and evaluation.
- Select and justify primary and secondary data-collection methods and sampling.
- Consider accuracy, reliability, validity, risk and ethical issues.
- Present data using appropriate graphical, cartographic and statistical techniques.
- Identify patterns, relationships and anomalies and support conclusions with evidence.
- Evaluate limitations and suggest realistic improvements.
- Apply fieldwork understanding to unfamiliar investigations and examination resources.

What previous knowledge is required?

KS3 fieldwork and geographical skills provide experience of maps, photographs, field sketches, questionnaires, environmental observations, graphs and numerical data. Year 10 now requires students to select and justify methods rather than simply follow them. Distinctive Landscapes provides the substantive knowledge for Herne Bay: erosion, transportation, deposition, sediment, beach morphology and coastal management. Urban Futures provides the foundation for Coxheath through settlement growth, land use, traffic, environmental quality, services and stakeholder perceptions. KS3 averages, range, percentage change and proportional reasoning support independent analysis.

How will this term's content help with future learning?

Fieldwork is integrated across OCR Geography B. Physical fieldwork understanding is assessed through Our Natural World and human fieldwork through People and Society; Paper 3 requires geographical skills and enquiry thinking to be applied synoptically. Herne Bay revisits Distinctive Landscapes and links forward to Changing Climate through sea-level rise and coastal risk. Coxheath revisits Urban Futures and links to UK in the 21st Century through housing, population, infrastructure and changing places. Transferable evaluation, data presentation, evidence interpretation and judgement strengthen performance across all three GCSE components.

Common Misconceptions

- Primary data is automatically more reliable than secondary data.
- A larger sample always guarantees valid results.
- An anomaly should simply be removed from a dataset.
- A conclusion can be based on opinion rather than evidence.
- Reliability and validity mean the same thing.
- Evaluation only requires listing problems rather than explaining their impact and realistic improvements.
- Fieldwork is assessed only through questions about the students' own investigations.

National Curriculum / Specification

OCR GCSE Geography B J384 – fieldwork and geographical skills are integrated across Our Natural World (01), People and Society (02) and Geographical Exploration (03). Students must understand the enquiry process, data collection and sampling, presentation and analysis, conclusions and evaluation, and apply these skills to familiar and unfamiliar contexts. Paper 3 is explicitly synoptic and includes cartographic, graphical, numerical and statistical skills.