

# YEAR 10 GEOGRAPHY CURRICULUM PROGRESSION OVERVIEW

## Subject Curriculum Intent

The specification enables a variety of teaching and learning approaches. This exciting and relevant course studies geography in a balanced framework of physical and human themes and investigates the link between them.

Students will travel the world from their classroom, exploring case studies in the United Kingdom (UK), higher income countries (HICs), newly emerging economies (NEEs) and lower income countries (LICs). Topics of study include climate change, poverty, deprivation, global shifts in economic power and the challenge of sustainable resource use. Students are also encouraged to understand their role in society, by considering different viewpoints, values and attitudes.

Year 10 is based on paper 1 physical geography as well as completing coursework

	Topic 1 – Paper 1	Topic 2 – paper 1	Topic 3 – paper 1	Topic 3 - paper 2	Topic 2 – paper 3 Summer Term 2
<b>Topic</b>	Natural hazards	The living world	UK Landscapes	Resource Management	Fieldwork
<b>Core Knowledge/ Threshold Concept</b>	<p>What is a natural hazard? Define Natural hazards with examples, what affects the impact of hazards? Plate tectonics Earth's structure, tectonic plates, convection currents Plate boundaries Constructive, Conservative and Destructive plates Effects and responses to tectonic hazards Nepal and New Zealand Why people continue to live in areas at risk Examples of living in tectonic regions Reducing the risks from tectonic hazards</p>	<p>An understanding of producers, consumers, decomposers, food chain, food web and nutrient cycling. An overview of the distribution and characteristics of large scale natural global ecosystems. An example of a small scale UK ecosystem (POND) to illustrate the concept of interrelationships within a natural system The impact on the ecosystem of changing one component. The physical characteristics of a tropical rainforest. The interdependence of climate,</p>	<p>The UK has a range of diverse landscapes. An overview of the location of major upland/lowland areas and river systems. The coast is shaped by a number of physical processes. Wave types and characteristics. Weathering and mass movement weathering processes – mechanical, chemical mass movement – sliding, slumping and rock falls Erosion, transportation, deposition erosion – hydraulic power, abrasion and attrition</p>	<p>Food, water and energy are fundamental to human development. The significance of food, water and energy to economic and social well-being. An overview of global inequalities in the supply and consumption of resources. An overview of resources in relation to the UK - Food the growing demand for high-value food exports from low income countries and all-year demand for seasonal food and organic produce Carbon footprint, organic and agribusiness larger carbon footprints due to the increasing number of</p>	<p>The factors that need to be considered when selecting suitable questions/hypotheses for geographical enquiry. The geographical theory/concept underpinning the enquiry. Appropriate sources of primary and secondary evidence, including locations for fieldwork. The potential risks of both human and physical fieldwork and how these risks might be reduced. Difference between primary and secondary data.</p>

	<p>Monitoring, predicting, protecting, planning General atmospheric circulation model: pressure belts and surface winds. Tropical storms (hurricanes, cyclones, typhoons) Distribution, links to global atmospheric circulation, causes Tropical storms (hurricanes, cyclones, typhoons) formation, structure, effects of climate change Effects of tropical storms Primary and secondary effects, immediate and long term resonances Tropical storm case study Use a named example of a tropical storm to show its effects and responses. Tropical storm protection How monitoring, prediction, protection and planning can reduce the effects of tropical storms. UK weather What impacts the weather in the UK UK Weather Hazards</p>	<p>water, soils, plants, animals and people. How plants and animals adapt to the physical conditions. Issues related to biodiversity. Changing rates of deforestation causes of deforestation - subsistence and commercial farming, logging, road building, mineral extraction, energy development, settlement, population growth impacts of deforestation - economic development, soil erosion, contribution to climate change. Strategies used to manage the rainforest sustainably – selective logging and replanting, conservation and education, ecotourism and international agreements about the use of tropical hardwoods, debt reduction. The physical characteristics of a hot desert. The interdependence of climate, water, soils, plants, animals and people. How plants and animals adapt to the Desert. Issues related to biodiversity.</p>	<p>transportation – longshore drift deposition – why sediment is deposited in coastal areas. Landforms of erosion headlands and bays, cliffs and wave cut platforms, caves, arches and stacks. Landforms of deposition beaches, sand dunes, spits and bars. An example of a section of coastline in the UK to identify its major landforms of erosion and deposition. Coastal management strategies  <ul style="list-style-type: none"> <li>• hard engineering – sea walls, rock armour, gabions and groynes</li> <li>• soft engineering – beach nourishment and reprofiling, dune regeneration</li> <li>• managed retreat – coastal realignment.</li> </ul> An example of a coastal management scheme (Lyme Regis)  <ul style="list-style-type: none"> <li>• the reasons for management</li> <li>• the management strategy</li> </ul> </p>	<p>‘food miles’ travelled, and moves towards local sourcing of food, the trend towards agribusiness. UK Water the changing demand for water, water quality and pollution management, matching supply and demand – areas of deficit and surplus, the need for transfer to maintain supplies. UK Energy the changing energy mix – reliance on fossil fuels, growing significance of renewables, reduced domestic supplies of coal, gas and oil, economic and environmental issues associated with exploitation of energy sources. Demand for water resources is rising globally but supply can be insecure, which may lead to conflict. global patterns of water surplus and deficit, reasons for increasing water consumption: economic development, rising population factors affecting water availability: climate, geology, pollution of supply, over-abstraction,</p>	<p>Identification and selection of appropriate physical and human data. Measuring and recording data using different sampling methods. Description and justification of data collection methods. Appreciation that a range of visual, graphical and cartographic methods is available. Selection and accurate use of appropriate presentation methods. Description, explanation and adaptation of presentation methods Description, analysis and explanation of the results of fieldwork data. Establish links between data sets. Use appropriate statistical techniques. Identification of anomalies in fieldwork data. Draw evidenced conclusions in relation to original aims of the enquiry. Identification of problems of data collection methods.</p>
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	<p>An overview of types of weather hazard experienced in the UK.</p> <p>UK Weather event case study</p> <p>An example of a recent extreme weather event</p> <p>UK Weather how management strategies can reduce risk, Evidence that weather is becoming more extreme in the UK.</p> <p>Evidence for climate change</p> <p>Records, ice melt, tree rings, ice cores, pollen analysis</p> <p>Natural causes of climate change</p> <p>Orbital change, Volcanic activity, Solar output</p> <p>Enhanced greenhouse effect</p> <p>What is it, what causes it e.g. Fossil fuels</p> <p>Effects of climate change</p> <p>Effects on people and the environment</p> <p>Managing climate change - Mitigation</p> <p>Mitigation strategies – carbon capture, planting trees etc</p>	<p>A case study of a hot desert to illustrate:</p> <p>development opportunities in hot desert environments: mineral extraction, energy, farming, tourism</p> <p>challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility.</p> <p>Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion.</p> <p>Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology.</p>	<p>the resulting effects and conflicts.</p> <p>The long and cross profile of a river and its valley</p> <p>How a river changes from source to mouth.</p> <p>Fluvial processes – erosion, transportation, deposition</p> <p>Hydraulic action, abrasion, attrition, solution</p> <p>Vertical and lateral erosion</p> <p>Traction, saltation, suspension, solution</p> <p>Landforms of erosion</p> <p>Interlocking spurs, waterfalls and gorges</p> <p>Landforms of erosion and deposition</p> <p>Meanders and oxbow lakes</p> <p>Landforms of deposition</p> <p>Levees, flood plains, estuaries</p> <p>An example of a river valley in the UK to identify its major landforms of erosion and deposition</p> <ul style="list-style-type: none"> <li>• How physical and human factors affect the flood risk</li> <li>• precipitation, geology, relief and land use</li> <li>• Hydrographs</li> </ul> <p>The use of hydrographs to show the relationship</p>	<p>limited infrastructure, poverty.</p> <p>Impacts of water insecurity</p> <p>waterborne disease and water pollution, food production, industrial output, potential for conflict where demand exceeds supply.</p> <ul style="list-style-type: none"> <li>• Overview of strategies to increase water supply: diverting supplies and increasing storage, dams and reservoirs, water transfers and desalination</li> <li>• large scale water transfer scheme</li> </ul> <p>an example of a large scale water transfer scheme to show how its development has both advantages and disadvantages.</p> <ul style="list-style-type: none"> <li>• Moving towards a sustainable resource future</li> <li>• water conservation, groundwater management, recycling, 'grey' water</li> <li>• Sand dams in Kenya</li> <li>• an example of a local scheme in an LIC or NEE to increase sustainable supplies of water.</li> </ul>	<p>Identification of limitations of data collected.</p> <p>Suggestions for other data that might be useful.</p> <p>Extent to which conclusions were reliable.</p>
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	<p>Managing climate change - Adaptation Adaptation strategies – Managing water supply, coping with rising seas etc</p>		<p>between precipitation and discharge. Cost and benefits of management strategies Hard engineering - dams and reservoirs, straightening, embankments, flood relief channels Soft engineering - flood warnings and preparation, flood plain zoning, planting trees and river restoration.</p> <ul style="list-style-type: none"> <li>An example of a flood management scheme in the UK to show: why the scheme was required the management strategy the social, economic and environmental issues.</li> </ul>		
<p><b>Why this learning now?</b></p>	<p>How coasts shape the landscape – This will build on the ideas from year 7 rivers and glaciation as the students use that knowledge to explain the changes on coastlines.</p>	<p>Population changes – This will build on the basic ideas picked up in development about population changes and firm up understanding about why population is growing and where</p>	<p>Weather – This will develop from the ideas in year 7 the UK where we gain an understanding of UK weather. Linking to ideas of global weather patterns and extreme weather events</p>	<p>Climate change – This links directly to the weather topic and develops the ideas around why weather is becoming more extreme and what we can do to minimise these issues</p>	<p>Resource Management – This will develop ideas from year 7 about development and impact of the lack of clean water and focus on the global issues of resources and how they impact around the world Should we build the reservoir – Gives students a chance to analyse information and make decisions based on the evidence given. This links to</p>

					many aspects of geography including fieldwork and Extended writing
<b>Assessment Opportunities:</b>	<p>Every lesson has:</p> <ul style="list-style-type: none"> <li>- A recall starter</li> <li>- A Plenary to assess progress</li> <li>- Embedded AfL tasks for whole class feedback</li> </ul> <p>Each end of unit assessment has:</p> <ul style="list-style-type: none"> <li>- 20 marks based on recall questions &amp; answers (given at the start of the unit)</li> <li>- 20 marks of multiple-choice questions</li> <li>- 20 marks of extended answer questions (with some synoptic content)</li> </ul>				
<b>Learning at Home</b>	<p>Homework will be set and teacher assessed once per topic (minimum). Homework will be recall based and will be a mixture of:</p> <ul style="list-style-type: none"> <li>- Exam style questions</li> <li>- Quizzes, e.g. Microsoft forms, Seneca</li> </ul>				
<b>Key Vocabulary</b>	<p>Longshore drift Coastal recession Hydraulic Action Prevailing wind Coral bleaching</p>	<p>Demographic transition model Population distribution Carrying capacity Urbanisation</p>	<p>Depression Coriolis effect Precipitation Hurricane</p>	<p>Greenhouse gasses Carbon footprint Mitigation Adaptation Deforestation</p>	<p>Economic wellbeing Malnourishment Seasonal produce Surplus and deficit Irrigation Water transfer Reservoir Water stress</p>
<b>Spiritual, Moral, Social and Cultural concepts covered</b>	<p>The Geography curriculum provides students with the opportunity to learn about and discuss current issues, whilst developing their skills of enquiry and research. Students will be supported to be critical consumers of information and will learn how to consider the relevance of where information comes from, in order to assess its reliability and usefulness.</p> <p>More specifically, concepts covered are:</p> <p>Spiritual - Moral – Differences in development Social – British values Cultural – Being British, Migration</p>				

**Links to careers and the world of work**

Each topic has a spotlight on a particular STEM role or career. This will be explored, using a guided reading approach. In Year 8, the students will learn about:  
Biotechnology, Planetary science, Data science, Accident & emergency medicine, Anthropology and Astronomy.