

Geography. Year 10 Curriculum Map



YEAR 7	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Curriculum Content	<p><u>Tectonic Hazards</u> Composite: Understand the formation and tectonic hazards and why risk differs around the world.</p> <p>Component 1 = Introduction to the course, its structure and command words.</p> <p>Component 2 = The definition of natural hazards and disasters and the types of tectonic and climatic hazards.</p> <p>Component 3 = Factors affecting hazard risk and how much impact a hazard will have.</p> <p>Component 4 = What is the plate tectonic theory and the global distribution of tectonic plates and margins.</p> <p>Component 5 = Constructive, destructive and conservative plate margins and how they create volcanic eruptions and earthquakes.</p> <p>Component 6 = Primary and secondary effects of earthquakes.</p> <p>Component 7 = Immediate and long-term responses to earthquakes.</p> <p>Component 8 = Compare case studies of 2 earthquakes in areas of different wealth -Nepal and Christchurch.</p> <p>Component 9 = Why do people live in areas of risk?</p> <p>Component 10 = How can risk be managed in areas of tectonic activity?</p> <p><u>Weather hazards.</u> Composite: Understand the distribution and formation of different weather hazards; their social, economic and environmental effects; and how risk can be reduced.</p> <p>Component 1 = How the global atmospheric circulation works and</p>	<p><u>Climate change.</u> Composite: Understand the natural and human causes of climate change and evidence of past and future change.</p> <p>Component 1 = Evidence of past climate change through the Quaternary.</p> <p>Component 2 = Natural and human causes of climate change e.g. volcanic activity.</p> <p>Component 3 = Social, economic and environmental effects of climate change on people and the environment.</p> <p>Component 4 = Mitigation (e.g. alternative energy) and adaptation (e.g. change in agricultural systems) to climate change.</p> <p><u>Ecosystems.</u> Composite: Understand large and small-scale ecosystems; their abiotic and biotic characteristics and how humans can affect these ecosystems.</p> <p>Component 1 = The features of food webs and interdependence, linking to Formby.</p> <p>Component 2 = Distribution and characteristics of global ecosystems, such as rainforests and deserts.</p> <p>Component 3 = Structure of the rainforest from forest floor to emergent layer, identifying the abiotic and biotic changes as you move up the layers</p> <p>Component 4 = Adaptations of plants and animals to each layer of the rainforest for survival and the interdependences between biotic and abiotic elements e.g. soil, climate and animals.</p> <p>Component 5 = The biodiversity and value of the rainforest, using the Amazon rainforest to understand the causes and economic and environmental impacts of deforestation.</p>	<p><u>Ecosystems.</u> Composite: Understand the abiotic and biotic characteristics of hot deserts and the challenges and opportunities to development in these regions.</p> <p>Component 1 = The physical characteristics of hot deserts, including precipitation and soil.</p> <p>Component 2 = The adaptations of plants and animals in hot deserts; the issues with biodiversity and the interdependence in the ecosystem.</p> <p>Component 3 = The opportunities and challenges to development of the Sahara Desert.</p> <p>Component 4 = The causes of desertification on the fringes of hot deserts, including strategies to reduce this.</p> <p><u>Rivers.</u> Composite: Understand the features of rivers relating to river processes from source to mouth and flooding.</p> <p>Component 1 = Overview of the location of major upland/lowland areas and river systems in the UK.</p> <p>Component 2 = The hydrological cycle and the human and physical features of it.</p> <p>Component 3 = Changes in the long and cross profiles of a river.</p> <p>Component 4 = Fluvial processes that occur in rivers including types of erosion, transport and deposition.</p> <p>Component 5 = Formation of erosional and depositional landforms at each stage of a river, linking to a drainage basin case study of the River Tees.</p>	<p><u>Rivers</u> Composite : Understand the features of rivers relating to river processes from source to mouth and flooding.</p> <p>Component 6 = Physical and human causes of flooding.</p> <p>Component 7 = How to read flood hydrographs to explain the stages of flooding.</p> <p>Component 8 = Soft and hard engineering on floodplains and their various costs/benefits on mitigating flood risk, linking to a flood management case study (Boscastle floods, 2004).</p> <p><u>Coasts.</u> Composite: Understand the coastal processes that lead to changes in the landscape, linking to landforms and management.</p> <p>Component 1 = Constructive and destructive waves and their characteristics.</p> <p>Component 2 = Coastal processes including mass movements; types of erosion (abrasion...); transportation (longshore drift) and deposition.</p> <p>Component 3 = Formation of landforms (erosional and depositional) on the coast, linking to geology.</p> <p>Component 4 = Hard and soft engineering strategies used to reduce coastal processes. This includes looking at the costs and benefits to these strategies, linking to the case study of the Holderness Coast.</p>	<p><u>Resource Management (Food)</u> Composite: Understand the global inequalities of resources; changes in demand and sustainable strategies to tackle issues related to food shortages.</p> <p>Component 1 = The significance of food, water and energy in human development and global inequalities of each resource.</p> <p>Component 2 = A UK-focused perspective on changes in demand of food, water and energy and how it presents challenges and opportunities.</p> <p>Component 3 = Factors that affect supply and demand of food, linked to calorie intake, economic development and population.</p> <p>Component 4 = Impacts of food insecurity including famine and soil erosion.</p> <p>Component 5 = Strategies to increase food supply, using the case study of Kilombero and River Nile to demonstrate the advantages and disadvantages of large-scale agricultural developments.</p> <p>Component 6 = The different ways that food supplies can be more sustainably produced (e.g. organic farming), using Thanet Earth as a case study.</p>	<p><u>Fieldwork and Geographical Investigation</u></p> <p>Medium term content Composite: Understand the rationale behind the fieldwork hypothesis and analyse data to conclude a research question proposed.</p> <p>Component 1 = Introduce fieldwork paper and research questions.</p> <p>Component 2 = Types of data collection (primary and secondary) and limitations.</p> <p>Component 3 = Secondary data analysis – reading OS maps and pinpointing geographical features e.g. beaches, defences, nature reserves, using 4 and 6 figure grid references and isolines for relief.</p> <p>Component 4 = Risk assessment of Bridlington and the methodology (data collection) of the fieldwork.</p> <p>Component 5 = Primary data collection.</p> <p>Component 6 = Types of data presentation and how to read types of graphs, maps and charts e.g. radar graphs, and their limitations.</p> <p>Component 7 = Presentation of primary data, analysis and limitations of data presentation and conclusions of the fieldwork, related to the research question.</p> <p>Component 6 = Evaluation of fieldwork – what could be done better next time? What were the fieldwork’s limitations?</p> <p>Fieldwork locations TBC.</p>

<p>influences climate zones around the world.</p> <p>Component 2 = The distribution of tropical storms globally, using maps to help.</p> <p>Component 3 = The formation of tropical storms, relating to ingredients (e.g. sea surface temperatures and the Coriolis effect), linking to their internal structure and the influence of climate change on their strength, frequency and distribution.</p> <p>Component 4 = The effects (primary and secondary) and responses (short- and long-term) to Hurricane Matthew/Hurricane Katrina.</p> <p>Component 5 = Predict, Protect, Prepare and how to mitigate the effects of tropical storms.</p> <p>Component 6 = The different weather hazards that the UK experiences, using mini-examples such as the UK Heatwave of 2018 and the larger case study of the Boscastle flooding.</p> <p>Component 7 = The natural and human causes of climate change, its global effects and the ways humans can mitigate and adapt to it.</p>	<p>Component 6 = Strategies used to manage the rainforest sustainably e.g. selective logging and replanting.</p>					
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<p>Prior knowledge and skills (from previous year / key stage)</p>	<p>Year 7 – What is the weather and climate like around the world? Year 9 – Will it ever be safe to live near tectonic plate boundaries.</p>	<p>Year 8 – How is our climate changing? Year 8 – How are ecosystems changing?</p>	<p>Year 8 – How is our climate changing? Year 7 – What features make up the UK?</p>	<p>Year 7 – What features make up the UK?</p>	<p>Year 9 – Will there be enough resources for us all?</p>	<p>Year 7- What makes Liverpool a great place?</p>
<p>Core Knowledge Organiser content</p>	<p>Keywords and definitions. Unit specific theories and diagrams eg. Structure of the earth, plate boundaries, structure of tropical storms, structure of rainforest. Information about independent study eg. Seneca, BBC Bitesize.</p>					
<p>Assessment Objectives</p>	<p>AO1. Demonstrate knowledge of locations, places, processes, environments and different scales. AO2. Demonstrate graphical understanding of: concepts and how they are used in relation to places, environments and processes; the interrelationships between places and environments and processes. AO3. Apply knowledge and understanding to interpret, analyse and evaluate geographical information and issues to make judgements. AO4. Select, adapt and use a variety of skills and techniques to investigate questions and issues and communicate findings.</p>					
<p>Vocabulary / Key Subject Terminology</p>	<p><u>Tectonics.</u> Hazard risk, natural hazard, conservative, constructive, destructive, earthquake, immediate responses, long term responses, monitoring, plate</p>	<p><u>Climate change.</u> Adaptation, climate change, mitigation, orbital change, quaternary period.</p>	<p><u>Deserts.</u> Appropriate technology, biodiversity, desertification, hot desert, mineral extraction, over cultivation, over grazing,</p>	<p><u>Coasts.</u> Abrasion, arch, attrition, bar, beach, beach nourishment, beach reprofiling, cave, chemical weathering, cliff, deposition, dune</p>	<p><u>Resource management.</u> Agribusiness, carbon footprint, energy mix, food miles, fossil fuels, local food sourcing, organic produce, resource management.</p>	

	margin, planning, prediction, primary effect, protection, secondary effect, tectonic hazard, tectonic plate, volcano. <u>Weather hazards.</u> Economic, environmental, extreme weather, global atmospheric circulation, immediate response, long term response, management strategies, monitoring, planning, prediction, primary effects, protection, secondary effects, social impact, tropical storm.	<u>Ecosystems.</u> Abiotic, biotic, consumer, decomposer, ecosystem, food chain, food web, nutrient cycling, global ecosystem, producer. <u>Rainforests.</u> Biodiversity, commercial farming, debt reduction, deforestation, ecotourism, logging, mineral extraction, selective logging, soil erosion, subsistence farming, sustainability.	<u>Rivers.</u> Abrasion, attrition, cross profile, dam and reservoir, discharge, embankments, estuary, flood, flood plain, flood plain zoning, flood relief channel, flood risk, flood warning, fluvial processes, gorge, hard engineering, hydraulic action, hydrograph, interlocking spurs, lateral erosion, levees, long profile, meander, Ox-bow lake, precipitation, saltation, soft engineering, solution, channel straightening, suspension, traction, vertical erosion, waterfall.	regeneration, erosion, gabion, groyne, hard engineering, headlands and bays, hydraulic power, longshore drift, managed retreat, mass movement, mechanical weathering, rock armour, sand dune, sea wall, sliding, slumping, soft engineering, spit, stack, transportation, wave cut platform, waves,	Aeroponics, biotechnology, famine, food insecurity, food security, hydroponics, irrigation, permaculture, sustainable development, the new green revolution, undernutrition, urban farming,	
Assessment 1	Tectonics end of unit assessment.	Climate change assessment questions. Recall of previous units.	Deserts assessment questions. Recall of previous units.	Rivers end of unit assessment questions. Recall of previous units.	Full paper 1 assessment.	Paper 3 – Fieldwork assessment questions. Recall of previous units.
Assessment 2	Weather hazards assessment questions. Recall of previous unit.	Rainforest assessment questions. Recall of previous units.	Rivers mid unit assessment questions. Recall of previous units.	Coasts assessment questions. Recall of previous units.	Resource management end of unit assessment. Recall of previous units.	Full paper 1. Resource management and Field work assessment questions.
Cross Curricular Links with other Faculties	Science – Structure of the earth, climate change.	Science – climate change.	Maths – Graphical skills.	Maths – Graphical skills.	Maths – Graphical skills.	Maths – Graphical and statistical skills.
Extra-Curricular Offer	Tuesday revision sessions and twilights.					
Time Allocation	5 lessons over 2 weeks.					