

A Level Geography Curriculum Overview 2020-2021

Core aims of the subject at Key Stage 5

“The study of geography is about more than just memorizing places on a map. It’s about understanding the complexity of our world, appreciating the diversity of cultures that exists across continents. And in the end, it’s about using all that knowledge to help bridge divides and bring people together.” –Barack Obama

At Brine Leas, we aim to create rounded human and physical Geographers. We challenge students to think, act and speak like those working in the field would. We can do this by quality first teaching which ensures students understand geographical principles and can apply them in a variety of familiar and unfamiliar contexts from around the world. We teach content in its totality and constantly vary topics between human and physical geography to provide a varied and balanced appreciation of the ideas, skills and topics in this discipline. Through sequencing the curriculum in such a specific way we ensure a breadth and depth of curriculum to enable students to continually develop understanding of the changing contemporary environments around them with an entwined approach to academic and personal development.

Our curriculum at Brine Leas goes far beyond what is taught in lessons, for whilst we want students to achieve the very best examination results possible, we believe our curriculum goes beyond what is examinable. Students have opportunities to participate in fieldwork in Birmingham and at Cardingmill Valley, Shropshire to apply the skills and knowledge beyond the classroom. Sixth Form geographers at the school undertake an extended residential North Wales fieldtrip to gain the confidence to undertake their own individual investigation on a topic of their choice. They deploy the skills learnt at Brine Leas to formulate an independent piece of work which is worth 20% of their final marks in Geography. These experiences promote personal development as students are gifted opportunities to develop a variety of transferable skills, including independent and group work and assessing risk. Fieldwork also encourages them to work ethically with members of the general public whilst collecting primary data. These challenging opportunities to work out in the field help students to prepare for learning beyond academia. Additionally to these field trip experiences, students have been provided with the opportunity to travel to Iceland, to add depth and breathe to the curriculum studied and to gain first-hand experience of these dynamic landscapes.

Our curriculum in geography forms a backbone to our ethos statement. Examples of how our curriculum supports the ethos statement are by providing stretch and challenge across a broad range of topics. The curriculum provides opportunities for collaborative working as well as independent learning to consolidate knowledge and understanding. Students are explicitly taught skill, knowledge, recall and the vocabulary needed to effectively explain and understand geographical issues in the past, present and future. This ethos is embedded into the curriculum to help provide lifelong learning opportunities beyond the confines of the classroom; all pupils will develop transferable skills to promote lifelong learning.

As a knowledge engaged curriculum we believe that knowledge underpins and enables the application of skills; both are entwined. As a department we define the powerful knowledge our students need and help them to recall it by using knowledge organisers and building in recall across the curriculum. Thus helping the students to organise, recall and learn the content within the geography curriculum.

We build the cultural capital of our students by helping them to understand the contemporary world around them, Students learn about how political decisions can cause changes in the world around them. They learn about the powerful economic forces around them that are bringing about changes to the way that will affect their future careers. Socially the students learn about how countries are at different stages of development and how the lives of people living there are different to their own lived experiences. Contrastingly, students are also given opportunities to develop community involvement through the study of the local workforce and economy and how this feeds into the national economic agenda.

Geography also helps to explain the many environmental issues that are changing the world in which these students live and how to make sense of these effects. This is delivered in a way in which students are motivated to become actively engaged in issues such that will impact on their futures and are inspired by key players in the field of environmental sustainability to ensure that the planet remains fit for purpose for all future generations. As a powerful bridging subject geography has strong cross curricular links to many of the cultural capital topics students are taught in School, such as stewardship in Religious Education.

Further rationale behind our curriculum design includes the alternating from human and physical geography topics regularly so that students get a chance make links between the natural and human worlds. The spiral design of the seven year curriculum is aimed at revisiting topics on several occasions to promote learners confidence and to develop in-depth transferable skills to prepare them for ongoing or lifelong learning. Each time students revisits a topic they are exposed to more complex content, building on what they have already learnt.

In summary, the aim of the curriculum is to ensure that all students can develop an understanding of the complexities of the relationships between the human and physical world, whilst developing transferable skills essential for sustained learning across the social, economic and environmental spheres.

Trips and visits

Geographical enquiry encourages questioning, investigation and critical thinking about issues affecting the world and people's lives, now and in the future. Fieldwork is an essential element of this. Students learn to think spatially and use maps, visual images and instruments to obtain, present and analyse information. Students undertake one fieldtrip to North Wales, encompassing human fieldwork and physical fieldwork, as part of their A level course.

Assessment

Students will be given a wide range of opportunities to apply their geographical knowledge, skills and concepts of the world through short answer and long answer questions. Over time, their performance will determine their predicted grades based on the core principles of A level Geography.

There is one summative assessment for physical geography: Paper 1 (2 hours 30 minutes, 40% of A level): Section A – Water and carbon cycle, Section B – Glacial systems and landscapes and Section C - Hazards.

There is one summative assessment for human geography: Paper 1 (2 hours 30 minutes, 40% of A level): Section A- Global systems and global governance, Section B- Changing places, Section C - Contemporary urban environments

In addition to the above, students complete an individual investigation which must include data collected in the field. The individual investigation must be based on a question or issue defined and developed by the student relating to any part of the specification content. The 3,000–4,000 word investigation is 20% of the A level grade; it is marked by teachers and moderated by AQA.

Homework

Students are set homework twice a week to embed and master the learning undertaken in lessons through a variety of activities

Clubs and/or intervention

Knowledge recall quizzes are used to improve long-term memory of geographical concepts through the use of knowledge organisers; repetition of work to ensure mastery of the PEELLLA structure.

Parental/Carer support

Review children’s learning in books in order to aid revision for knowledge recall quizzes; watch the local and national news (the BBC app is useful to download); watch Newsround and relevant environmental documentaries; test students on the content included within knowledge organisers and work booklets.

Helpful sources of information

Wider reading lists.

Organisation

Physical Geography

The planned teaching and assessment schedule for Y12 is:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit 1: Water and carbon cycles <ul style="list-style-type: none"> • Water and carbon cycles as natural systems • The water cycle <p style="text-align: center;">Mid-unit assessment</p>	<ul style="list-style-type: none"> • The carbon cycle. • Water, carbon, climate and life on Earth. <p style="text-align: center;">Mid-unit assessment</p>	<ul style="list-style-type: none"> • Case study: Tropical Rainforest. • Case study: A River catchment at a local scale. <p style="text-align: center;">End of unit assessment</p>	Unit 4: Glacial systems & landscapes <ul style="list-style-type: none"> • Glaciers as natural systems. • The nature and distribution of cold environments. • Systems and processes. Glacial processes and landforms. <p style="text-align: center;">Mid-unit assessment</p>	<ul style="list-style-type: none"> • Fluvioglacial processes and landforms. • Periglacial processes and landforms. <p style="text-align: center;">Mid-unit assessment</p>	<ul style="list-style-type: none"> • Human impacts on cold environments. <p style="text-align: center;">End of unit assessment</p>

The planned teaching and assessment schedule for Y13 is:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit 5: Hazards <ul style="list-style-type: none"> • The concept of hazard in a geographical context • Plate tectonics 	<ul style="list-style-type: none"> • Volcanic hazards • Seismic hazards <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Storm hazards <p>Mid-unit assessment</p> <ul style="list-style-type: none"> • Fires in nature <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Multi-hazardous environment • Local hazard <p>End of unit assessment</p>	Revision	

Human Geography

The planned teaching and assessment schedule for Y12 is:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit 1: Changing Places <ul style="list-style-type: none"> • Concept of Place • Types of Place • Character of Place <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Local Case Study: Nantwich • Representation of Place: Liverpool and Birmingham • Urban Regeneration <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Fieldwork Skills • Far Case Study: Dharavi <p>End of unit assessment</p>	Unit 2: Global Systems and Global Governance <ul style="list-style-type: none"> • Globalisation • Global Systems • International trade and access to markets <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Global Governance • The 'Global Commons' • Antarctica as a Global Common <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Globalisation Critique • Quantitative and Qualitative Skills <p>End of unit assessment</p>

The planned teaching and assessment schedule for Y13 is:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit 3: Contemporary Urban Environments <ul style="list-style-type: none"> • Urbanisation • Urban Forms • Social and economic issues associated with urbanisation 	<ul style="list-style-type: none"> • Urban climate • Urban drainage • Urban waste and its disposal <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Contemporary urban environmental issues • Sustainable Urban Development <p>Mid-unit assessment</p>	<ul style="list-style-type: none"> • Case Studies <p>End of unit assessment</p>	Revision	

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This course is taught simultaneously by two teachers. The curriculum taught over the two years by one teacher is outlined first before the curriculum taught by the second teacher is shown

Teacher 1

Year 12 Overview

Core 1: Water and the carbon cycle

Term	Learning Objectives	Assessment	Connections to learning	Connections to future pathways
<p>Big Idea: Water and the carbon cycle</p> <p>Rationale: The water cycle and carbon cycle are major elements in the natural environment. It is vital to understand them as they are integral to many facets of physical geography. Both cycles operate at a variety of scales and have huge significance for humans</p>				
Autumn and Spring	<p>Water and carbon cycles as natural systems</p> <ul style="list-style-type: none"> ➤ Systems in physical geography <ul style="list-style-type: none"> • Open systems – drainage basin, woodland • Closed system – hydrological cycle ➤ Systems concepts and their application to the water and carbon cycles <ul style="list-style-type: none"> • inputs – outputs • energy • stores/components • flows/transfers, 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Future learning of</p> <ul style="list-style-type: none"> ➤ Glaciers as natural systems with inputs, flows and outputs ➤ Stationary glaciers are in a state of dynamic equilibrium ➤ A glacier is an example of an open system <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	<p>Careers</p> <ul style="list-style-type: none"> ➤ Hydrologist/Water resources engineer ➤ Researcher ➤ Flood modeller ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Environment manager or consultant ➤ Writer/Researcher ➤ Teacher ➤ Education Ranger ➤ Emergency manager ➤ National Park Service Ranger ➤ Environmental consultant ➤ Conservation Officer ➤ Surveyor ➤ Hydrographer ➤ Water conservation officer

- positive/negative feedback with atmospheric carbon dioxide
- dynamic equilibrium
- Cascading system
- mass balance unit conversions

- Water quality scientist
- Zoning inspector
- Catastrophe modeller
- Emergency planner
- Urban planning

Future learning

A levels in

- Geography
- Biology

Degrees in

- Civil engineering
- Geography
- Physical geography
- Ecology
- Environmental Science
- Environmental management
- Ecology
- Geology
- Adventure Tourism

Geography can be linked with a wide range of subjects as well

- Physical geography with mathematics
- Physical geography and geology
- Mathematical sciences
- Ecology and conservation
- Environmental geography and outdoor education

➤ Ecology

- Ecology and environmental science

University short courses or higher degrees in

- Surface and groundwater hydrology
- River Basin Dynamics and Management with GIS
- Hydrogeology
- Ecology
- Ecology and biodiversity

				<ul style="list-style-type: none"> ➤ Nature conservation ➤ River Environmental Management ➤ Environmental Sciences ➤ Sustainable water management ➤ Hydrology and water resources management ➤ Hydrology with business management ➤ Hydrology with sustainable management ➤ Environmental and water resources engineering ➤ Flood risk management ➤ Hydrology and climate change ➤ Hydroinformatics and water management
	<p>The water cycle</p> <ul style="list-style-type: none"> ➤ Global distribution and size of major stores of water <ul style="list-style-type: none"> • Lithosphere • Hydrosphere • cryosphere • atmosphere ➤ Processes driving change in the magnitude of these stores over time and space at a hill slope, drainage basin and global scales, including the atmospheric circulation model <ul style="list-style-type: none"> • flows and transfers • evaporation • condensation • sublimation • deposition • fusion • melting 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior GCSE learning of physical landscapes of the UK – River landscapes</p> <ul style="list-style-type: none"> ➤ Storm hydrographs ➤ Flood management <p>Future learning of glacial systems and processes:</p> <ul style="list-style-type: none"> ➤ Glaciers are part of the cryosphere, a global system. ➤ The cryosphere is part of a cascading system within interconnections to the biosphere, atmosphere, hydrosphere and lithosphere. ➤ Flows and transfers constitute the inputs and outputs of glaciers ➤ Differences in flows and transfers within polar, 	

- freezing
- cloud and precipitation formation on a local (relief, convection, frontal) and global scale (atmospheric circulation model – Hadley cell, Ferrel cell, Polar cell)
- cryospheric processes
- The importance of latent heat
- Drainage basins as open systems - inputs and outputs, to include
 - precipitation,
 - evapotranspiration
 - runoff
 - stores
 - flows
 - interception
 - surface water
 - soil water
 - groundwater
 - channel storage
 - stemflow
 - infiltration
 - overland flow
 - channel flow
- Features including source, watershed, tributary, confluence and floodplain
- Concept of water balance.
 - Water surplus and water deficit,
 - Soil moisture utilisation, deficit and recharge and surplus

- alpine and tundra cold environments
- The concept of mass balance and glacial regime
 - Glacial processes and landforms
 - Fluvioglacial processes and landforms
 - Periglacial processes and landforms
 - Changes to the cryospheric system over time to include diurnal and seasonal variations

Future learning of hazards

- Natural hazards

Connections to the Curriculum

- SMSC: 1b, 1d

	<ul style="list-style-type: none"> • potential and actual evapotranspiration ➤ Runoff variation <ul style="list-style-type: none"> • river discharge ➤ Flood hydrograph ➤ Types - flashy, subdued <ul style="list-style-type: none"> • Human influences – deforestation, afforestation, agriculture, urbanisation, water abstraction, irrigation, flood management • Physical influences – drainage basin shape, slope angle, drainage density, rock type, antecedent rainfall, vegetation cover, drainage basin size ➤ River regime ➤ Changes in the water cycle over time to include <ul style="list-style-type: none"> • natural variation - storm events and seasonal changes • human impact - farming practices, land use change and water abstraction. 			
	<p>The carbon cycle</p> <ul style="list-style-type: none"> ➤ Global distribution ➤ Size of major stores of carbon <ul style="list-style-type: none"> • Lithosphere • Hydrosphere • cryosphere • biosphere 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior GCSE learning of the challenge of natural hazards – climate change</p> <ul style="list-style-type: none"> ➤ Causes of climate change ➤ Managing climate change <p>Prior A level learning of water and the carbon cycle</p>	

- atmosphere
- Factors driving change in the magnitude of these stores over time and space, including
 - flows and transfers - plant scale, sere scale, continental scale
 - photosynthesis
 - respiration
 - decomposition
 - combustion
 - carbon sequestration in oceans and sediments
 - weathering
- Changes in the carbon cycle over time, to include
 - natural variation (including wild fires, volcanic activity)
 - human impact (including hydrocarbon fuel extraction and burning, farming practices, deforestation, land use changes)
- The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate.
- Natural factors – volcanic activity, natural climate change, wild fires
- Human induced – fossil fuel combustion, agricultural

- Systems in physical geography

Future learning of glacial systems and processes

- Natural changes in atmospheric carbon dioxide leads to glacial and interglacial periods of the Pleistocene Epoch and Holocene Epoch
- Glacial processes, weathering
- Human causes of temperature change, including burning of fossil fuels, aviation and deforestation

Future learning of hazards

- The nature of wildfires and their underlying causes.
- Forms of wildfires
- Impacts and responses to wild fire hazards

Connections to the Curriculum

- SMSC: 1b, 1d

	<p>change, deforestation, urbanisation</p>			
	<p>Water, carbon, climate and life on Earth</p> <ul style="list-style-type: none"> ➤ The key role of the carbon and water stores and cycles in supporting life on Earth with particular reference to climate. ➤ The relationship between the water cycle and carbon cycle in the atmosphere. ➤ The role of feedbacks within and between cycles and their link to climate change and implications for life on Earth. ➤ Human interventions in the carbon cycle designed to influence carbon transfers and mitigate the impacts of climate change. <ul style="list-style-type: none"> • Carbon capture and sequestration (CCS) • Changing rural landscapes • Improve aviation practices 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior learning of water and the carbon cycles</p> <ul style="list-style-type: none"> ➤ Water and carbon cycles as natural systems ➤ Systems in physical geography ➤ Systems concepts and their application to the water and carbon cycles ➤ The water cycle ➤ The carbon cycle <p>Future learning of glacial systems and processes</p> <ul style="list-style-type: none"> ➤ Human causes of changes in atmospheric carbon dioxide <p>Future learning of hazards</p> <ul style="list-style-type: none"> ➤ Hazard mitigation <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	

	<p>Case study of a tropical rainforest – the Amazon rainforest, Brazil</p> <ul style="list-style-type: none"> ➤ Changes to the water cycle due to environmental change ➤ Changes to the carbon cycles due to environmental change ➤ Human activity 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior GCSE learning of the living world – tropical rainforests</p> <ul style="list-style-type: none"> ➤ Causes of deforestation <p>Prior GCSE learning of the changing economic world</p> <ul style="list-style-type: none"> ➤ Reducing the gap – debt for conservation swaps <p>Prior A level learning of water and the carbon cycles</p> <ul style="list-style-type: none"> ➤ Water and carbon cycle as natural systems ➤ The water cycle ➤ The carbon cycle ➤ Water, carbon, climate and life on earth ➤ The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate. ➤ Human induced – fossil fuel combustion, agricultural change, deforestation, urbanisation <p>Future learning of glacial systems and processes</p> <ul style="list-style-type: none"> ➤ Human causes of changes in atmospheric carbon dioxide <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d, 4a 	
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	<p>Case study of a river catchment at a local scale – the River Eden</p> <ul style="list-style-type: none"> ➤ Changes to the water cycle ➤ Changes to the carbon cycle ➤ Sustainable water supply and/or flooding 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior learning of water and the carbon cycles</p> <ul style="list-style-type: none"> ➤ Water and carbon cycle as natural systems ➤ The water cycle ➤ The drainage basin as a system ➤ Drainage basins as open systems - inputs and outputs, to include ➤ Features including source, watershed, tributary, confluence and floodplain ➤ Concept of water balance. ➤ Runoff variation, river discharge ➤ Flood hydrograph ➤ The carbon cycle ➤ Water, carbon, climate and life on earth ➤ Human interventions in the carbon cycle designed to influence carbon transfers and mitigate the impacts of climate change, afforestation. <p>Future learning of glacial systems and processes</p> <ul style="list-style-type: none"> ➤ Human causes of changes in atmospheric carbon dioxide <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
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Option 1: Glacial systems and landscapes

Term	Knowledge	Assessment	Connections to learning	Connections to future pathways
<p>Big Idea: Glacial systems and landscapes</p> <p>Rationale: Glaciated landscapes reflect climatic conditions of the Pleistocene Epoch that began 2.6 million years ago and lasted up until 11,700 years before present. However the distinctive landscapes associated with glacial environments are constantly changing through present-day processes and can be observed through fundamental geomorphological processes. Through learning about glaciated systems and landscapes, students will gain an appreciation of the beauty and diversity of such regions and the challenges they present for human habitation. (AQA)</p>				
<p>Spring and summer</p>	<p>Glaciers as natural systems</p> <ul style="list-style-type: none"> ➤ Glaciers are part of the cryosphere, a global system. ➤ A system is a set of interconnected parts that work together. ➤ Systems concepts can be applied to the development of glaciated landscapes <ul style="list-style-type: none"> • Inputs • Outputs • Energy • Stores/components • Flows/transfers • Positive/ negative feedback • Dynamic equilibrium. ➤ Glaciers are examples of open systems. ➤ A case study of glacial advance – the Athabasca Glacier, Western Canada ➤ A case study of glacial retreat – the Hubbard Glacier, Eastern Alaska 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems and their concepts in physical geography – open system, inputs, flows, outputs, cascading system ➤ The global distribution of the water cycle ➤ Processes driving change in the magnitude of water stores over time <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 	<p>Careers</p> <ul style="list-style-type: none"> ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Environment manager or consultant ➤ Writer/Researcher ➤ Teacher ➤ Education Ranger ➤ Emergency manager ➤ National Park Service Ranger ➤ Environmental consultant ➤ Conservation Officer ➤ Surveyor ➤ Hydrographer ➤ Water conservation officer ➤ Water quality scientist ➤ Zoning inspector ➤ Catastrophe modeller ➤ Emergency planner ➤ Urban planning <p>Careers where geography would be useful</p> <ul style="list-style-type: none"> ➤ Nature conservation officer ➤ Landscape architect ➤ Sustainability consultant <p>Future learning</p> <ul style="list-style-type: none"> ➤ A levels

				<ul style="list-style-type: none"> • Biology • Geography • Maths • Environmental Science ➤ Degrees <ul style="list-style-type: none"> • Environmental Science • Biology • Geology • Geography • Mathematics
	<p>The nature and distribution of cold environments</p> <ul style="list-style-type: none"> ➤ The global distribution of cold environments, including alpine glaciers in the Canadian Rockies, European Alps and Asian Himalayas; ice sheets of Greenland and Antarctica; continuous permafrost within northern Canada and Siberia; discontinuous permafrost of Canada and Russia; and sporadic permafrost of mid to southern Canada, Russia and Mongolia. ➤ Causes of cold environments: <ul style="list-style-type: none"> • Latitude • Altitude • Aspect • Distance from the sea • Moisture source ➤ Physical characteristics, and their interaction of cold environments 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior GCSE learning of the challenge of natural hazards – climate change</p> <ul style="list-style-type: none"> ➤ Causes of climate change <p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems and their concepts in physical geography – stores of water ➤ The water cycle and run-off variation ➤ The carbon cycle and carbon stores ➤ Changes in the carbon cycle over time ➤ The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate. ➤ Natural factors – volcanic activity, natural climate change, wildfires ➤ Human induced – fossil fuel combustion, 	

	<ul style="list-style-type: none"> • Climate – cold and dry • Soils – gleyed, anerobic, acidic • Vegetation (and their interaction) – lichen, moss, flowers. <ul style="list-style-type: none"> ➤ The global distribution of past and present cold environments (polar, alpine, glacial and periglacial) and of areas affected by the Pleistocene glaciations. ➤ Changes in atmospheric carbon dioxide show natural fluctuations in temperature over millions of years. ➤ The Quaternary period was 1.6 million years before present. ➤ The Pleistocene Epoch and Holocene Epoch made up the Quaternary Period. ➤ The last glacial maxim occurred 18,000 years ago during the Pleistocene Epoch (glacial). Ice covered vast areas of North America, Europe, and Asia. ➤ We are currently living within the Holocene Epoch (interglacial) ➤ Natural causes of temperature change: solar variation and Milankovitch Cycles – eccentricity of 		<p>agricultural change, deforestation, urbanisation</p> <p>Prior GCSE learning of the living world – cold environments</p> <ul style="list-style-type: none"> ➤ Adaptions of vegetation to cold environments <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d, 	
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	<p>earth's orbit, precession, obliquity, global warming/greenhouse effect</p> <ul style="list-style-type: none"> ➤ Human causes of temperature change – global warming/enhanced greenhouse effect – burning of fossil fuels, aviation, deforestation. 			
	<p>Systems and processes</p> <ul style="list-style-type: none"> ➤ Glacial systems including glacial budgets. ➤ Ablation and accumulation – historical patterns of ice advance and retreat. ➤ Warm and cold based glaciers: characteristics and development. ➤ Landscapes consists of a collection of related landforms. ➤ A landform is a physical feature formed by natural processes. 		<p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems and their concepts in physical geography – open system, inputs, flows, outputs, cascading system ➤ Changes in the carbon budget - weathering <p>Future learning of hazards</p> <ul style="list-style-type: none"> ➤ Multi-hazardous area, the Philippines <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	
	<p>Glaciated landscapes develop from geomorphological processes over time</p> <ul style="list-style-type: none"> ➤ Geomorphological processes lead to the formation of glacial landscapes in the UK (Snowdonia, North Wales) and further afield: <ul style="list-style-type: none"> • weathering: frost action, nivation; • ice movement: internal deformation, rotational, 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior GCSE learning of glacial landscapes</p> <ul style="list-style-type: none"> ➤ Processes - frost shattering, abrasion, plucking ➤ Erosional landforms – corries, glacial troughs, truncated spurs ➤ Depositional landforms of unsorted sediment – drumlins, moraines, erratics 	

	<p>compressional, extensional and basal sliding;</p> <ul style="list-style-type: none"> • erosion: plucking, abrasion; • transportation of moraines • deposition. <p>➤ Characteristic glaciated landscapes include landforms of erosion: corries, arêtes, glacial troughs, hanging valleys, truncated spurs, roches moutonnées.</p> <p>➤ Characteristic glaciated landscapes include depositional landforms consisting of angular unsorted deposits</p> <p>➤ Origin and development of landforms and landscapes of glacial deposition: drumlins, erratics, moraines (ground, medial, lateral, recessional, push, supraglacial, englacial) terminal), till plains.</p>		<p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems concepts and their application to the water cycle ➤ Processes driving change in the magnitude of water stores within the water cycle <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	
	<p>Fluvioglaciated landscapes (North Wales and Yorkshire) develop from geomorphological processes and landforms over time</p> <ul style="list-style-type: none"> ➤ Fluvioglacial processes: ➤ Meltwater streams – subglacial, supraglacial ➤ erosion – hydraulic action, attrition, abrasion 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior learning of physical landscapes of the UK – River landscapes in Y11</p> <ul style="list-style-type: none"> ➤ Hydrological processes of erosion (abrasion, hydraulic pressure and attrition), transportation (traction, saltation, suspension, solution) and deposition 	

	<ul style="list-style-type: none"> ➤ transportation – traction, saltation, suspension ➤ deposition leads to horizontal and vertical sorting of sediment that is smooth and more rounded ➤ Characteristic landforms of Fluvioglacial processes of erosion and deposition: <ul style="list-style-type: none"> • meltwater channels • kames and kame terraces • eskers • outwash plains/sandur and kettle holes • varves. • Braided streams 		<ul style="list-style-type: none"> ➤ Sorting of sediment down stream ➤ Meandering streams and eskers <p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems concepts and their application to the water cycle ➤ Processes driving change in the magnitude of water stores within the water cycle ➤ Concept of water balance ➤ Changes in the water cycle, run-off variation <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	
	<p>Periglacial/tundra landscapes result from geomorphological processes and landforms over time.</p> <ul style="list-style-type: none"> ➤ Periglacial features <ul style="list-style-type: none"> • Permafrost – sporadic, discontinuous, continuous • talik • active layer • mass movement • Braided streams ➤ Periglacial processes <ul style="list-style-type: none"> • aeolian • freeze-thaw/frost shattering 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior A level learning of water and the carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems concepts and their application to the water cycle ➤ Processes driving change in the magnitude of water stores within the water cycle ➤ Concept of water balance ➤ Changes in the carbon budget – weathering <p>Prior A level learning of glacial process and landforms</p> <ul style="list-style-type: none"> ➤ Weathering – frost shattering/freeze-thaw weathering 	

	<ul style="list-style-type: none"> • frost action – frost pull and frost push • frost creep • frost heave • solifluction • congelifluction • gelifluction <p>➤ Periglacial landforms:</p> <ul style="list-style-type: none"> • patterned ground – stone polygons, stone stripes • ice wedges and ice wedge polygons • pingos • blockfields felsenmeer • solifluction lobes • terracettes • thermokarst • nivation hollows • pingos – East Greenland type/open and Mackenzie type/closed 		<p>Connections to the Curriculum</p> <p>➤ SMSC: 1b, 1d</p>	
	<p>Human impacts on cold environments</p> <p>➤ Concept of environmental fragility.</p> <p>➤ Human impacts on fragile cold environments over time and at a variety of scales, including the Sami region, Alaska, Antarctica</p> <p>➤ Recent and prospective impact of climate change including implications of thawing permafrost, and glacial retreat in alpine and polar regions</p>	<p>➤ Formative assessments through vocabulary tests</p> <p>➤ Formative assessment of closed questions</p> <p>➤ Formative assessment of short answer and long answer questions</p> <p>➤ Formative end of unit assessment</p>	<p>Prior GCSE learning of physical landscapes of the UK – river landscapes</p> <p>➤ Economic activity in glaciated landscapes</p> <p>Prior GCSE learning of the living world – cold environments</p> <p>➤ Challenges and opportunities of cold environments</p> <p>➤ Management of cold environments</p>	

- Management of cold environments at present and in alternative possible futures.
- The challenges and opportunities for human occupation and development in the Sami region of Scandinavia
- The resilience, mitigation and adaptation of the Sami people to living in cold environments.

- Prior A level learning of the water and carbon cycle
- Systems and their concepts in physical geography – stores of water
 - The water cycle and run-off variation
 - The carbon cycle and carbon stores
 - Changes in the carbon cycle over time
 - The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate.
 - Natural factors – volcanic activity, natural climate change, wildfires
 - Human induced – fossil fuel combustion, agricultural change, deforestation, urbanisation

Future A level learning of hazards

- The concept of hazard in a geographical context
- Hazard perception and its economic and cultural determinants – including values, personality, expectations and resilience
- Characteristic human responses - mitigation

Connections to the Curriculum

➤ SMSC: 1a, 1b, 1d

Year 13 Overview

Option 2: Hazards

Term	Learning Objectives	Assessment	Connections to learning	Connections to future pathways
<p>Big Idea: Hazards</p> <p>Rationale: Processes within the lithosphere and atmosphere often present natural hazards to human populations. The impacts vary enormously from place to place but can have dramatic and catastrophic impacts upon societies, environments, economy and politics of areas at a variety of scales. Students will explore the origin and nature of various natural hazards and the various ways people respond to them over time. (AQA)</p>				
<p>Autumn and Spring</p>	<p>The concept of hazard in a geographical context</p> <ul style="list-style-type: none"> ➤ Natural hazards relate to the physical environment that can cause harm to humans. ➤ Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). ➤ Hazard perception and its economic and cultural determinants. <ul style="list-style-type: none"> • Socio-economic status • Level of education • Occupation/employment status 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior A level learning of glacial systems and processes</p> <ul style="list-style-type: none"> ➤ Human impacts on cold environments ➤ The resilience, mitigation and adaptation of the Sami people to living in cold environments. ➤ The challenges and opportunities for human occupation and development <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	<p>Careers</p> <ul style="list-style-type: none"> ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Environment manager or consultant ➤ Writer/Researcher ➤ Teacher ➤ Emergency manager ➤ National Park Service Ranger ➤ Environmental consultant ➤ Conservation Officer ➤ Surveyor ➤ Zoning inspector ➤ Catastrophe modeller ➤ Emergency planner ➤ Urban planning ➤ Researcher ➤ Flood modeller

<ul style="list-style-type: none"> • Religion, cultural/ethnic background • Family and marital status • Past experiences • Values, personality and expectations • Resilience of a population – robustness, resourcefulness, rapidity 	<ul style="list-style-type: none"> ➤ Characteristic human responses <ul style="list-style-type: none"> • fatalism • adjustment/ adaptation • fear • prediction • mitigation • management, • risk sharing ➤ The relationship of the above to: <ul style="list-style-type: none"> • hazard incidence • intensity • magnitude • distribution • level of development ➤ The Park model of human response to hazards. ➤ The Hazard Management Cycle. 			<ul style="list-style-type: none"> ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Environment manager or consultant ➤ Education Ranger ➤ Emergency manager <p>Careers where geography would be useful</p> <ul style="list-style-type: none"> ➤ Nature conservation officer ➤ Landscape architect ➤ Sustainability consultant <p>Future learning</p> <ul style="list-style-type: none"> ➤ A levels <ul style="list-style-type: none"> • Biology • Geography • Maths • Environmental Science ➤ Degrees <ul style="list-style-type: none"> • Environmental Science • Biology • Geology • Geography • Physical geography • Environmental science • Mathematics • Geography and natural hazard management ➤ Higher degrees in <ul style="list-style-type: none"> • Volcanology and geological hazards • Natural hazards
<p>Plate tectonics</p> <ul style="list-style-type: none"> ➤ Earth structure and internal energy sources <ul style="list-style-type: none"> • inner core • outer core • Gutenberg discontinuity • mantle 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long 	<p>Prior GCSE learning of the challenge of natural hazards – tectonic hazards</p> <ul style="list-style-type: none"> ➤ Structure of the earth and plate boundaries ➤ People live in tectonic areas 	

	<ul style="list-style-type: none"> • asthenosphere • Mohorovic discontinuity • Crust • Continental crust • Oceanic crust ➤ Plate tectonic theory of crustal evolution: <ul style="list-style-type: none"> • tectonic plates; • plate movement; • gravitational sliding; • ridge push, slab pull; • convection currents and seafloor spreading. ➤ Plate margins <ul style="list-style-type: none"> • destructive/ convergent, collision, subduction, Benioff zone • constructive/ divergent • conservative plate ➤ Characteristic processes: seismicity and vulcanicity. ➤ Associated landforms: <ul style="list-style-type: none"> • young fold mountains • rift valleys – case study – East African Rift Valley • ocean ridges – case study – Mid Atlantic Ridge • deep sea trenches and island arcs – case study – Marianas Trench • volcanoes. ➤ Magma plumes and their relationship to plate movement – case study - Hawaii 	<p>answer questions within a mid-unit assessment</p>	<p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the lithosphere <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1b, 1d 	
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<p>Volcanic hazards</p> <ul style="list-style-type: none"> ➤ The nature of vulcanicity and its relation to plate tectonics ➤ Extrusive major volcanic features: <ul style="list-style-type: none"> • Fissure volcanoes – Icelandic eruptions on constructive boundaries • Shield volcanoes – Hawaiian eruptions on magma plumes • Acid/Dome volcanoes– Pilean eruptions • Ash-cinder volcanoes • Composite cone/strato volcanoes • Caldera ➤ Extrusive minor volcanic features: <ul style="list-style-type: none"> • Geysers • Mudpots • fumaroles ➤ Forms of volcanic hazard: <ul style="list-style-type: none"> • nuées ardentes • lava flows – basaltic, andesitic, rhyolitic, andesitic • mudflows • pyroclastic fallout • ash fallout • gases/acid rain • tephra ➤ Spatial distribution, magnitude, frequency, regularity and predictability of hazard events. 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior GCSE learning of the challenge of natural hazards</p> <ul style="list-style-type: none"> ➤ Structure of the earth and plate boundaries ➤ People live in tectonic areas ➤ Features of earthquakes ➤ Case studies – Haiti and Christchurch <p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the lithosphere <p>Prior A level learning of hazards</p> <ul style="list-style-type: none"> ➤ Natural hazards relate to the physical environment that can cause harm to humans. ➤ Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). ➤ Hazard perception and its economic and cultural determinants. ➤ Characteristic human responses ➤ The Park model of human response to hazards. ➤ The Hazard Management Cycle. <p>Connections to the Curriculum</p>	
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<ul style="list-style-type: none"> ➤ Volcanic explosivity index ➤ Impacts: primary/secondary, environmental, social, economic, political. ➤ Short and long-term responses: risk management designed to reduce the impacts of the hazard through <ul style="list-style-type: none"> • prediction – magnetometers, tiltometers, seismographs, hydrological instrumentation, remote sensing equipment • preparedness – masks, evacuation • mitigation including diversionary spillways, lava bombing, land use zoning • prevention • adaptation ➤ Case study - Impacts and human responses as evidenced by a recent volcanic event – Eyjafjallajokull eruption or Nyiragongo eruption 		<ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
<p>Seismic hazards</p> <ul style="list-style-type: none"> ➤ The nature of seismicity ➤ Features – focus, epicentre, seismic waves ➤ Types of earthquakes: <ul style="list-style-type: none"> • Natural - Shallow-focus, deep-focus, injection of 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long 	<p>Prior GCSE learning of the challenge of natural hazards – tectonic hazards</p> <ul style="list-style-type: none"> ➤ Structure of the earth and plate boundaries 	

	<p>magma into the lithosphere</p> <ul style="list-style-type: none"> • Human induced – underground nuclear explosion, damming a river, disposal of toxic waste, mining <ul style="list-style-type: none"> ➤ Elastic rebound theory ➤ Types of seismic waves: <ul style="list-style-type: none"> • Body waves – Primary/p-waves, secondary/ s-waves • Surface waves – Love wave, Raleigh wave ➤ Relation of seismicity to plate tectonics ➤ Forms of seismic hazard: <ul style="list-style-type: none"> • earthquakes • shockwaves • tsunamis • liquefaction • landslides • fires ➤ Spatial distribution, randomness, magnitude (Richter Scale, Mercalli Scale, Moment Magnitude Scale), frequency, regularity, predictability of hazard events. ➤ Impacts: <ul style="list-style-type: none"> • primary/secondary; • social, environmental, economic, political. ➤ Short and long-term responses; risk 	<p>answer questions within a mid-unit assessment</p>	<ul style="list-style-type: none"> ➤ People live in tectonic areas ➤ Features of earthquakes ➤ Case studies – Haiti and Christchurch <p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the lithosphere <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
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	<p>management designed to reduce the impacts of the hazard through</p> <ul style="list-style-type: none"> • preparedness, • mitigation, • prevention • adaptation. <p>➤ Case study - impacts and human responses as evidenced by a recent seismic event – either Christchurch 2011, Haiti 2010, Japan 2011 or Boxing Day Tsunami 2004.</p>			
	<p>Storm hazards</p> <ul style="list-style-type: none"> ➤ The nature of tropical storms and their underlying causes. ➤ Forms of storm hazard: <ul style="list-style-type: none"> • high winds • storm surges • coastal flooding • river flooding • landslides ➤ Spatial distribution (cyclones, typhoons, hurricanes), magnitude (Saffir-Simpson Scale), frequency, regularity, predictability (models of atmospheric circulation, tracks of previous hurricanes) of hazard events. ➤ Impacts: <ul style="list-style-type: none"> • primary/secondary 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior GCSE learning of the challenge of natural hazards – weather hazards</p> <ul style="list-style-type: none"> ➤ Global atmospheric circulation ➤ Formation of tropical storms ➤ Impacts and responses to tropical storms <p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the atmosphere, the hydrosphere and the lithosphere <p>Prior A level learning of hazards</p> <ul style="list-style-type: none"> ➤ Natural hazards relate to the physical environment 	

	<ul style="list-style-type: none"> • social, environmental, economic, political. ➤ Short and long-term responses: risk management designed to reduce the impacts of the hazard through <ul style="list-style-type: none"> • Preparedness including protection – disaster kits, drills, sea walls, breakwaters, flood barriers, levees, building design, drills • Mitigation including warnings • prevention – cloud seeding, land use zoning • adaptation ➤ Case study - impacts and human responses as evidenced by Typhoon Haiyan 2016 in the Philippines, a LIC ➤ Case study - impacts and human responses as evidenced by Hurricane Sandy (2012) in the USA, a HIC 		<p>that can cause harm to humans.</p> <ul style="list-style-type: none"> ➤ Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). ➤ Hazard perception and its economic and cultural determinants. ➤ Characteristic human responses ➤ The Park model of human response to hazards. ➤ The Hazard Management Cycle. <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
	<p>Fires in nature</p> <ul style="list-style-type: none"> ➤ Nature of wildfires. ➤ Types of wildfires – crown, surface, ground, ladder effect ➤ Conditions favouring intense wildfires: <ul style="list-style-type: none"> • vegetation type – dry, pine needles, dead brush 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the biosphere and the atmosphere <p>Prior A level learning of hazards</p>	

- fuel characteristics
- climate and recent weather (high temperatures, dry winds) and fire behaviour
- Topography
- Causes of fires:
 - natural – El Nino, lightning, drought, volcanic eruptions
 - human agency – shifting cultivation, arson, campfire, controlled burning, fireworks, machinery or equipment, burning debris
- Impacts:
 - primary/secondary,
 - social, environmental, economic, political.
- Short and long-term responses; risk management designed to reduce the impacts of the hazard through
 - preparedness – removal of dead vegetation, GIS, building/land use planning
 - mitigation – air drops, fire engines, smoke jumpers, control lines, back firing,
 - prevention
 - adaptation
- Case study - impact and human responses as evidenced by a recent

- Natural hazards relate to the physical environment that can cause harm to humans.
- Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological).
- Hazard perception and its economic and cultural determinants.
- Characteristic human responses
- The Park model of human response to hazards.
- The Hazard Management Cycle.

Connections to the Curriculum

- SMSC: 1a, 1b, 1d

	wildfire event, Australia 2009.			
Spring	<p>Case study beyond the UK – the Philippines, a multi-hazardous environment</p> <ul style="list-style-type: none"> ➤ Nature of the hazards <ul style="list-style-type: none"> • Tectonic hazards – volcanoes, earthquakes, tsunamis • Atmospheric hazards – typhoons, storms, floods • Mass movement - landslides, avalanche, subsidence • Drought • Wildfire ➤ Social, environment, economic risks ➤ Human qualities and responses that contribute to its continuing occupation <ul style="list-style-type: none"> • resilience • adaption • mitigation • management 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the lithosphere, the biosphere, the lithosphere, the hydrosphere <p>Prior A level learning of glacial processes and systems</p> <ul style="list-style-type: none"> ➤ Mass movement <p>Prior A level learning of hazards</p> <ul style="list-style-type: none"> ➤ Natural hazards relate to the physical environment that can cause harm to humans. ➤ Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). ➤ Hazard perception and its economic and cultural determinants. ➤ Characteristic human responses ➤ The Park model of human response to hazards. ➤ The Hazard Management Cycle. ➤ The nature of tropical storms and their underlying causes. ➤ Forms of storm hazard 	

			<ul style="list-style-type: none"> ➤ Impacts and responses to storm hazards ➤ The nature of tectonic hazards and their underlying causes. ➤ Forms of tectonic hazard ➤ Impacts and responses to tectonic hazards ➤ The nature of wildfires ➤ Forms of wildfires ➤ Impacts and responses to wildfires <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
	<p>Case study at a local scale – the Somerset floods</p> <ul style="list-style-type: none"> ➤ Physical nature of the hazard ➤ Social, economic and political character of its community reflects the presence and impacts of the hazard and the community’s response to the risk 		<p>Prior A level learning of the water and carbon cycle</p> <ul style="list-style-type: none"> ➤ Systems in physical geography - the lithosphere ➤ Global systems – the biosphere, the hydrosphere ➤ Processes driving change in the magnitude of these stores over time and space at a hill slope, and drainage basin scales ➤ Drainage basins as open systems - inputs and outputs, to include ➤ Features including source, watershed, tributary, confluence and floodplain ➤ Concept of water balance. ➤ Runoff variation ➤ Flood hydrograph ➤ Changes in water cycle over time 	

			<p>Prior A level learning of glacial systems and processes</p> <ul style="list-style-type: none"> ➤ Human impacts on cold environments - Recent and prospective impact of climate change <p>Prior A level learning of hazards</p> <ul style="list-style-type: none"> ➤ Natural hazards relate to the physical environment that can cause harm to humans. ➤ Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). ➤ Hazard perception and its economic and cultural determinants. ➤ Characteristic human responses ➤ The Park model of human response to hazards. ➤ The Hazard Management Cycle. <p>Connections to the Curriculum</p> <ul style="list-style-type: none"> ➤ SMSC: 1a, 1b, 1d 	
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Teacher 2
Year 12 Overview
Topic 1: Changing Places

Term	Learning Objectives	Assessment	Connections to learning	Connections to future pathways
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Big Idea: Concepts of Place

This section of our specification focuses on people's engagement with places, their experience of them and the qualities they ascribe to them, all of which are of fundamental importance in their lives

Autumn
and
Spring

The nature and importance of places

- Categories of Place
 - Near and far place.
 - Experienced places and media places.
 - Endogenous: location, topography, physical geography, land use, built environment, infrastructure, demographic and economic characteristics
 - Exogenous: relationships with other places.
- Changing places – relationships, connections, meaning and representation
 - How relationships and connections, meaning and representation affect continuity and change in the nature of places and our understanding of place.
 - The ways in which students own loves and others are affected by continuity of change in

- Formative assessments through vocabulary tests
- Formative assessment of closed questions
- Formative assessment of short answer and long answer questions within a mid-unit assessment

- Prior Learning at GCSE:
- Urban change – location of cities and the socio-economic cultural mix.
 - The impact of urban sprawl.
- Future Learning – Contemporary Urban Environments.
- Urban forms and land use
 - Post modernism cities
 - Edge Cities

Careers

- Town Planning
- Engineer
- Researcher
- Surveyor
- Climatologist
- Climate change analyst
- Meteorologist
- Writer/ Researcher
- Teacher
- Emergency manager
- Demographer
- Zoning inspector
- Urban planning
- Commercial/ residential surveyor
- Cartographer.
- Geographical information systems officer.
- Community Outreach Coordinator NGO's
- Police
- Consultant.
- Sustainability Coordinator in Corporations
- Mapping/Data Analyst in Planning/ Construction
- GIS Analyst in Transportation Services
- Development Worker in Non-Profits
- Policy Analyst in Municipal Government
- Oil and gas analyst

the nature of places and our understanding.

- Relationships and Connections
 - How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at all scales from local to global.
 - The characteristics and impacts of external forces operating at different scales from local to global, including either government policies or the decisions of multinational corporations or the impacts of global institutions.
- Meaning and representation
 - How humans perceive, engage with and form attachments to places and how they present and represent the world to others, including the way in which everyday place meanings are bound up with different

Future learning

A levels in

- Geography
- Engineering

Degrees in

- Civil engineering
- Geography
- Human geography
- Ecology
- Environmental Science
- Environmental management
- Adventure Tourism
- Disaster Management

Geography can be linked with a wide range of subjects as well

- Human geography with government and politics
- Human geography and environmental science
- Human geography and global studies.
- Mathematical sciences
- University short courses or higher degrees in
- Global London: Contemporary Urbanism, Culture and Space, Short Course
- International development studies
- Environmental challenges – human impact in the natural environment
- Transport Systems: Global Issues and Future Innovations
- Geographical Information Science MSc

	<p>identities, perspectives and experiences.</p> <ul style="list-style-type: none"> • How external agencies, including government, corporate bodies and community or local groups make attempts to influence or create specific place-meanings and thereby shape the actions and behaviours of individuals, groups, businesses and institutions. 			<ul style="list-style-type: none"> ➤ Community Action ➤ Leadership and Governance in local communities ➤ Community based projects and management ➤ Geography
	<ul style="list-style-type: none"> • How places may be represented in a variety of different forms such as advertising copy, tourist agency material, local art exhibitions, and other diverse media which often gives contrasting images to 		<p>Future Learning</p> <ul style="list-style-type: none"> ➤ The emergence of megacities and world cities and their role in global and regional economies. ➤ Urban change: deindustrialisation decentralisation, rise of service economy. 	

that presented formally or statistically such as cartography and census data.

- Quantitative and Qualitative Skills
- Local and Contrasting Place Studies, focussing on:
 - People's lived experiences of the place in the past and at present
 - Changing demographic and cultural characteristics
 - Economic change and social inequalities
- Geographic Skills, including:
 - Statistic, e.g. census
 - Maps
 - Geo-located data
 - Geospatial data, e.g. GIS (geographic information systems)
 - Photograph analysis
 - Text, from varied media
 - Audio-visual media
 - Artistic representations
 - Oral sources, e.g. interviews, songs etc.
 - Human impact

Prior Learning at GCSE:

- Urban change – location of cities and the socio-economic cultural mix.
- The impact of urban sprawl – growth of commuter settlements.
- Global variations in economic development
- Causes of uneven development
- The role of TNC's in development
- The location and importance of country, regionally and globally.

Future Learning – Contemporary Urban Environments.

- Urban forms and land use
- Post modernism cities
- Edge Cities
- Suburbanisation

- Global features and trends in the volume and pattern of international trade and investment associated with globalisation.
- The emergence of megacities and world cities and their role in global and regional economies.
- Urban change: deindustrialisation

decentralisation, rise of service economy.

Prior Learning GCSE

- The location and importance of country, regionally and globally.
- Urban change – location of cities and the socio-economic cultural mix.
- The impact of urban sprawl
- Urban trends in different parts of the world.

Prior Learning GCSE

- Fieldwork Skills
- Issue evaluation

Future Learning
NEA

Topic 2: Global Systems and Global Governance

Term	Knowledge	Assessment	Connections to learning	Connections to future pathways
	<p data-bbox="824 515 1585 547" style="text-align: center;">Big Idea: Global Systems and Global Governance</p> <p data-bbox="259 587 2159 659">This section of our specification focuses on globalisation – the economic, political and social changes associated with technological and other driving forces which have been a key feature of global economy and society in recent decades.</p>			

<p style="text-align: center;">Spring and Summer</p>	<ul style="list-style-type: none"> ➤ Globalisation <ul style="list-style-type: none"> • Dimensions of globalisation: flows of capital, labour, products, services and information; global marketing; patterns of production, distribution and consumption. • Factors in globalisation: the development of technologies, systems and relationships, including financial, transport, security, communications, management and information systems and trade agreements. ➤ Global systems <ul style="list-style-type: none"> • Form and nature of economic, political, social and environmental interdependence in the contemporary world. • Issues associated with interdependence including: <ul style="list-style-type: none"> - Unequal flows of people, money, ideas and technology within global systems. - Unequal power relations enable some states to 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior Learning GCSE</p> <ul style="list-style-type: none"> ➤ Changes in UK economy ➤ Development of industries ➤ The role of TNC's in relation to development <p>Prior Learning A Level</p> <ul style="list-style-type: none"> ➤ How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at all scales from local to global. 	<p>Careers</p> <ul style="list-style-type: none"> ➤ Town Planning ➤ Engineer ➤ Researcher ➤ Surveyor ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Writer/ Researcher ➤ Teacher ➤ Emergency manager ➤ Demographer ➤ Zoning inspector ➤ Urban planning ➤ Commercial/ residential surveyor ➤ Cartographer. ➤ Geographical information systems officer. ➤ Community Outreach Coordinator NGO's ➤ Police ➤ Consultant. ➤ Sustainability Coordinator in Corporations ➤ Mapping/Data Analyst in Planning/ Construction ➤ GIS Analyst in Transportation Services ➤ Development Worker in Non-Profits ➤ Policy Analyst in Municipal Government ➤ Oil and gas analyst <p>Future learning A levels in</p> <ul style="list-style-type: none"> ➤ Geography
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drive global systems.

- International trade and access to markets
 - Global features and trends in the volume and pattern of international trade and investment associated with globalisation.
 - Trading relationships and patterns between large, highly developed economies such as the United States, the European Union, emerging major economies such as China and India and smaller, less developed economies such as those in sub-Saharan Africa, southern Asia and Latin America.
 - Differential access to markets associated with levels of economic development and trading agreements and its impacts on economic and societal well-being.
 - The nature and role of transnational corporations (TNCs),
 - World trade in at least one food commodity or

➤ Engineering

Degrees in

- Civil engineering
- Geography
- Human geography
- Ecology
- Environmental Science
- Environmental management
- Adventure Tourism
- Disaster Management

Geography can be linked with a wide range of subjects as well

- Human geography with government and politics
- Human geography and environmental science
- Human geography and global studies.
- Mathematical sciences

University short courses or higher degrees in

- Global London: Contemporary Urbanism, Culture and Space, Short Course
- International development studies
- Environmental challenges – human impact in the natural environment
- Transport Systems: Global Issues and Future Innovations
- Geographical Information Science MSc
- Community Action
- Leadership and Governance in local communities
- Community based projects and management

one manufacturing product.

- Analysis and assessment of the geographical consequences of global systems.

➤ Global Governance

- The emergence and developing role of norms, laws and institutions in regulating and reproducing global systems.
- Issues associated with attempts at global governance, including how:
 - agencies, including the UN in the post-1945 era, can work to promote growth and stability but may also exacerbate inequalities and injustices
 - interactions between the local, regional, national, international and global scales are fundamental to understanding global governance.

➤ The 'Global Commons'

- The concept of the 'global commons'. The

➤ Geography

rights of all to the benefits of the global commons.

- Acknowledgement that the rights of all people to sustainable development must also acknowledge the need to protect the global commons.

➤ Antarctica as a Global Common

- An outline of the contemporary geography, including climate, of Antarctica (including the Southern Ocean as far north as the Antarctic Convergence) to demonstrate its role as a global common and illustrate its vulnerability to global economic pressures and environmental change.
- Threats to Antarctica arising from:
 - climate change
 - fishing and whaling
 - the search for mineral resources
 - tourism and scientific research.
- Critical appraisal of the developing governance of Antarctica.

International government organisations to include United Nations (UN) agencies such as United Nations Environment Programme (UNEP) and the International Whaling Commission. The Antarctic Treaty (1959), the

- Protocol on Environmental Protection to the Antarctic Treaty (1991); IWC Whaling Moratorium (1982) – their purpose, scope and systems for inspection and enforcement.
- The role of NGOs in monitoring threats and enhancing protection of Antarctica.
- Analysis and assessment of the geographical consequences of global governance for citizens and places in Antarctica and elsewhere to specifically consider how global governance underlies and impacts on students' and other

people's lives across the globe.

- Globalisation Critique
 - The impacts of globalisation to consider the benefits of growth, development, integration, stability against the costs in terms of inequalities, injustice, conflict and environmental impact.

- Quantitative and Qualitative Skills
 - Students must engage with quantitative and qualitative approaches across the theme as a whole.

- Formative assessments through vocabulary tests
- Formative assessment of closed questions
- Formative assessment of short answer and long answer questions

Prior Learning GCSE –

- Limitation of economic development
- Causes of uneven development
- Consequences of uneven development – disparities of wealth

Prior Learning A Level

- How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at

all scales from local to global.

- How external agencies, including government, corporate bodies and community or local groups make attempts to influence or create specific place-meanings and thereby shape the actions and behaviours of individuals, groups, businesses and institutions.

- Formative assessments through vocabulary tests
- Formative assessment of closed questions
- Formative assessment of short answer and long answer questions

- Formative assessments through vocabulary tests
- Formative assessment of closed questions
- Formative assessment of short answer and long answer questions

Prior Learning GCSE

- Urban change – location of cities and the socio-economic cultural mix.
- The place of the UK in the wider world –EU
- The role of TNC's in relation to industrial development

		<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions ➤ Formative end of unit assessment 	<p>Prior Learning GCSE</p> <ul style="list-style-type: none"> ➤ Place of the UK in the wider world – EU ➤ Cold environments – case study ➤ Climate Change <p>Prior Learning A Level</p> <ul style="list-style-type: none"> ➤ How external agencies, including government, corporate bodies and community or local groups make attempts to influence or create specific place-meanings and thereby shape the actions and behaviours of individuals, groups, businesses and institutions. 	
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Year 13 Overview

Topic 3: Contemporary Urban Environments

Term	Learning Objectives	Assessment	Connections to learning	Connections to future pathways
Autumn and Spring	<p style="text-align: center;">Big Idea: Contemporary Urban Environments</p> <p>Rationale: Contemporary Urban Environments focuses on urban growth and change which are seemingly ubiquitous processes and present significant environmental and social challenges for human populations. The section examines these processes and challenges and the issues associated with them, in particular the potential for environmental sustainability and social cohesion. Engaging with these themes in a range of urban settings from contrasting areas of the world affords the opportunity for students to appreciate human diversity and develop awareness and insight into profound questions of opportunity, equity and sustainability.</p>			

	<p>Urbanisation</p> <ul style="list-style-type: none"> ➤ Global patterns of urbanisation since 1945. ➤ Urbanisation ➤ Suburbanisation ➤ Counter-urbanisation ➤ Urban resurgence ➤ The emergence of megacities and world cities and their role in global and regional economies. ➤ Urban change: deindustrialisation, decentralisation, rise of service economy. 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior learning GCSE</p> <ul style="list-style-type: none"> ➤ Urban change – location of cities and the socio-economic cultural mix. ➤ The impact of urban sprawl ➤ Causes of uneven development ➤ Features of sustainable urban living ➤ Growth of megacities <p>Prior learning A Level</p> <ul style="list-style-type: none"> ➤ How relationships and connections, meaning and representation affect continuity and change in the nature of places and our understanding of place. ➤ How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at all scales from local to global. ➤ Factors in globalisation: the development of technologies, systems and relationships, including financial, transport, security, communications, management and information systems and trade agreements. 	<p>Careers</p> <ul style="list-style-type: none"> ➤ Town Planning ➤ Engineer ➤ Researcher ➤ Surveyor ➤ Climatologist ➤ Climate change analyst ➤ Meteorologist ➤ Writer/ Researcher ➤ Teacher ➤ Emergency manager ➤ Demographer ➤ Zoning inspector ➤ Urban planning ➤ Commercial/ residential surveyor ➤ Cartographer. ➤ Geographical information systems officer. ➤ Community Outreach Coordinator NGO's ➤ Police ➤ Consultant. ➤ Sustainability Coordinator in Corporations ➤ Mapping/Data Analyst in Planning/ Construction ➤ GIS Analyst in Transportation Services ➤ Development Worker in Non-Profits ➤ Policy Analyst in Municipal Government ➤ Oil and gas analyst <p>Future learning</p> <p>A levels in</p> <ul style="list-style-type: none"> ➤ Geography
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➤ Engineering

Degrees in

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- Leadership and Governance in local communities
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	<p>Urban Forms</p> <ul style="list-style-type: none"> ➤ Characteristics of mega/world cities ➤ Physical and human characteristics of urban forms ➤ Spatial patterns of land use ➤ Social segregation ➤ Cultural diversity ➤ Economic Inequality ➤ New urban landscapes ➤ Town centre mixed developments ➤ Cultural and heritage quarters ➤ Fortress developments ➤ Gentrified areas ➤ Edge cities ➤ Post-Modern western city 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior Learning GCSE</p> <ul style="list-style-type: none"> ➤ Urban change – location of cities and the socio-economic cultural mix. ➤ The impact of urban sprawl ➤ Causes of economic change – de-industrialisation and decline of traditional industrial base, globalisation and government policies. <p>Prior Learning A Level</p> <ul style="list-style-type: none"> ➤ How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at all scales from local to global. ➤ Global features and trends in the volume and pattern of international trade and investment associated with globalisation. 	<p>➤ Geography</p>
	<p>Urban Climate</p> <ul style="list-style-type: none"> ➤ Impact of urban forms on climate and weather ➤ Urban heat island ➤ Precipitation – frequency and intensity 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and 	<p>Prior learning GCSE</p> <ul style="list-style-type: none"> ➤ Climate Change 	

	<ul style="list-style-type: none"> ➤ Fogs and thunderstorms in urban environments. ➤ Wind – the effect on urban structures and layouts ➤ Air quality – photo chemical pollution 	<p>long answer questions within a mid-unit assessment</p>		
	<p>Urban Drainage</p> <ul style="list-style-type: none"> ➤ Urban precipitation, surfaces and catchment characteristics ➤ Impacts on drainage basin storage areas ➤ Urban water cycle: water movement through urban catchments as measured by hydrographs. ➤ Issues associated with catchment management in urban areas. ➤ Development of sustainable urban drainage systems (SUDS). ➤ River restoration and conservation in damaged urban catchments with reference to a specific project ➤ Reasons for and aims of the project; attitudes and contributions of parties involved; project activities and evaluation of project outcomes. 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>GCSE Prior Learning</p> <ul style="list-style-type: none"> ➤ Physical landscapes in the UK – River landscapes 	
	<p>Urban Waste and it's Disposal</p> <ul style="list-style-type: none"> ➤ Urban physical waste generation: sources of 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests 	<p>Prior learning GCSE</p> <ul style="list-style-type: none"> ➤ Urban growth – managing environmental issues – 	

	<p>waste - industrial and commercial activity, personal consumption.</p> <ul style="list-style-type: none"> ➤ Relation of waste components and waste streams to economic characteristics, lifestyles and attitudes. ➤ Environmental impacts of alternative approaches to waste disposal: unregulated, recycling, recovery, incineration, burial, submergence and trade. ➤ Comparison of incineration and landfill approaches to waste disposal in relation to a specified urban area. 	<ul style="list-style-type: none"> ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>waste disposal, water and air pollution</p>	
	<p>Contemporary urban environmental issues</p> <ul style="list-style-type: none"> ➤ Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction. ➤ Strategies to manage these environmental problems. 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions within a mid-unit assessment 	<p>Prior Learning GCSE</p> <ul style="list-style-type: none"> ➤ Climate change ➤ Impact of urban sprawl ➤ Managing environmental issues 	
	<p>Sustainable urban development</p> <ul style="list-style-type: none"> ➤ Impact of urban areas on local and global environments. ➤ Ecological footprint of major urban areas. ➤ Dimensions of sustainability: natural, 	<ul style="list-style-type: none"> ➤ Formative assessments through vocabulary tests ➤ Formative assessment of closed questions ➤ Formative assessment of short answer and long answer questions 	<p>Prior leaning GCSE</p> <ul style="list-style-type: none"> ➤ Urban sustainability - management of resources and transport ➤ Social and economic deprivation 	

	<p>physical, social and economic.</p> <ul style="list-style-type: none"> ➤ Nature and features of sustainable cities. ➤ Concept of liveability. ➤ Contemporary opportunities and challenges in developing more sustainable cities. ➤ Strategies for developing more sustainable cities. 	<p>within a mid-unit assessment</p>		
	<p>Case studies</p> <ul style="list-style-type: none"> ➤ Case studies of two contrasting urban areas to illustrate and analyse key themes set out above, to include: <ul style="list-style-type: none"> • patterns of economic and social well-being • the nature and impact of physical environmental conditions ➤ Reference to the implications for environmental sustainability, the character of the study areas and the experience and attitudes of their populations 			