

<b>Long Term Departmental Planning Overview</b>	Subject:	<b>Geography</b>
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**Intention:**  
 At Altrincham College we believe that Geography helps to provoke and provide answers to questions about the natural and human aspects of the world. Learners are encouraged to develop a greater understanding and knowledge of the world, as well as their place in it and an awareness of key global issues. Learners will gain understanding of the interactions between people and environments, changes in places and processes over space and time, and the inter-relationship between geographical phenomena at different scales.

Students develop and extend their competence in a range of skills including those used in fieldwork. They will develop problem solving, decision making, analytical and evaluative skills in order to progress into higher education and a range of employment opportunities. Students develop as critical and reflective learners, able to articulate opinions, suggest relevant new ideas and provide evidenced argument in a range of situations.

We aim to develop an enthusiasm for and competence in geography by using contemporary real-world contexts. They are encouraged to think like a geographer.

Year	Curriculum Title	HT1 topics	HT2 topics	HT3 topics	HT4 topics	HT5 topics	HT6 topics		
7	Introduction to Geography	What is Geography? <ul style="list-style-type: none"> <li>• Types of Geography</li> <li>• Thinking like a geographer</li> <li>• Knowledge of place at different scales</li> </ul>	Map work Skills <ul style="list-style-type: none"> <li>• Compass/Direction</li> <li>• Map Symbols</li> <li>• Grid Reference</li> <li>• Scale/Distance</li> <li>• Relief</li> </ul>	Settlement <ul style="list-style-type: none"> <li>• Site factors</li> <li>• Settlement Patterns</li> <li>• Settlement function</li> <li>• Settlement change</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="vertical-align: top;">           Settlement           <ul style="list-style-type: none"> <li>• Urban/ Rural Characteristics</li> <li>• Sustainable Cities</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">           India           <ul style="list-style-type: none"> <li>• Location</li> <li>• Climate</li> <li>• Population</li> </ul> </td> </tr> </table>	Settlement <ul style="list-style-type: none"> <li>• Urban/ Rural Characteristics</li> <li>• Sustainable Cities</li> </ul>	India <ul style="list-style-type: none"> <li>• Location</li> <li>• Climate</li> <li>• Population</li> </ul>	India <ul style="list-style-type: none"> <li>• Modern India- Mumbai</li> <li>• Poverty in India – living in the slums</li> <li>• Modern Industry</li> <li>• Designation India – A travel guide to India.</li> </ul>	Green Lane Fieldwork Skills <ul style="list-style-type: none"> <li>• Practical Technique</li> <li>• Preparation for Fieldwork</li> <li>• Fieldwork visit</li> <li>• Results presentation</li> <li>• Conclusions</li> <li>• Evaluation</li> </ul>
Settlement <ul style="list-style-type: none"> <li>• Urban/ Rural Characteristics</li> <li>• Sustainable Cities</li> </ul>									
India <ul style="list-style-type: none"> <li>• Location</li> <li>• Climate</li> <li>• Population</li> </ul>									

8	People and their environment	Industry <ul style="list-style-type: none"> <li>• Employment Sectors</li> <li>• Primary Quarrying/Farming</li> <li>• Secondary Textiles/Manufacturing</li> <li>• Industry Change</li> </ul>	Industry <ul style="list-style-type: none"> <li>• Tertiary Business Parks</li> <li>• Environmental Impacts</li> </ul>	Weather & Climate <ul style="list-style-type: none"> <li>• Weather/Climate</li> <li>• UK Climate</li> <li>• Climate Graphs</li> <li>• Types of Rainfall</li> <li>• Measuring Weather</li> <li>• Micro Climate Investigation</li> </ul>	<ul style="list-style-type: none"> <li>• Air Pressure anticyclones and Depressions</li> <li>• Extreme Weather</li> </ul>	<ul style="list-style-type: none"> <li>• Migration</li> <li>• Push/Pull Factors</li> <li>• Social/Economic impacts</li> <li>• Mexico/USA</li> </ul>	Development Africa <ul style="list-style-type: none"> <li>• Contrasting Continent</li> <li>• Climate/Biomes</li> <li>• Traditional &amp; Modern Kenya</li> <li>• Poverty</li> <li>• Water Transfer Scheme</li> </ul>
9	The Physical World	Rivers <ul style="list-style-type: none"> <li>• Rivers Around the World</li> <li>• Water Cycle</li> <li>• Drainage Basin Features</li> <li>• Upper Course Landforms</li> <li>• Features of the middle course</li> <li>• The Rivers Mouth</li> </ul>	Floods in Bangladesh <ul style="list-style-type: none"> <li>• Human/Physical Causes</li> <li>• Flood Impacts</li> <li>• Solutions</li> <li>• Flood Management</li> </ul>	Tropical Rainforests <ul style="list-style-type: none"> <li>• Distribution</li> <li>• Characteristics</li> <li>• Climate</li> <li>• Adaptations</li> <li>• Traditional Life</li> <li>• Threats</li> <li>• Management</li> <li>• The Way Forward</li> <li>• Conservation</li> </ul>	Hot Deserts <ul style="list-style-type: none"> <li>• Distribution</li> <li>• Characteristics</li> <li>• Climate</li> <li>• Adaptations</li> <li>• Traditional Life</li> <li>• Threats</li> <li>• Management</li> <li>• Economic Opportunities</li> </ul>	Natural Hazards <ul style="list-style-type: none"> <li>• Types of Hazard</li> <li>• Structure of the Earth</li> <li>• Tectonics</li> <li>• Earthquakes</li> <li>• Planning, preparation, prediction</li> </ul>	<ul style="list-style-type: none"> <li>• Primary/Secondary Effects</li> <li>• Responses</li> <li>• LIC Case Study Nepal</li> <li>• HIC Case Study Chile</li> </ul>

10	AQA Geography	<p>Weather Hazards</p> <ul style="list-style-type: none"> <li>• Global Atmospheric Circulation</li> <li>• Tropical Storms</li> <li>• Extreme Weather UK</li> <li>• Somerset Levels</li> </ul>	<ul style="list-style-type: none"> <li>• Climate Change</li> </ul>	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Rainforest Management</li> </ul>	<p>Physical Landscape of the UK</p> <p>Coastal Landscapes</p> <ul style="list-style-type: none"> <li>• Erosional Processes</li> <li>• Erosional Landforms</li> <li>• Transportation</li> <li>• Depositional Landforms</li> <li>• Coastline Example (Dorset)</li> <li>• Coastline Management</li> </ul>	<p>Rivers</p> <ul style="list-style-type: none"> <li>• River Profile</li> <li>• Erosional Processes</li> <li>• Erosional Landforms</li> <li>• Transportation</li> <li>• Depositional Landforms</li> <li>• River Example</li> </ul> <p>Management of floods</p>	<p>Fieldwork Physical</p> <ul style="list-style-type: none"> <li>• Preparation</li> <li>• Techniques</li> <li>• Visit</li> <li>• Write Up</li> <li>• Conclusion</li> <li>• Evaluation</li> </ul>
11			<p>Urban Issues and Challenges</p> <ul style="list-style-type: none"> <li>• Urban Patterns/Global Change</li> <li>• Megacities</li> <li>• Rio de Janeiro Challenges &amp; Opportunities</li> <li>• Site &amp; Service Schemes</li> </ul>	<ul style="list-style-type: none"> <li>• UK City-Manchester Challenges &amp; Opportunities</li> <li>• Sustainable Cities</li> </ul>	<p>Resource Management</p> <ul style="list-style-type: none"> <li>• Global Resource Management</li> <li>• Resources in the UK</li> <li>• Energy Renewable/Fossil Fuels</li> </ul>	<p>Issues Evaluation</p> <ul style="list-style-type: none"> <li>• Pre-released Material.</li> </ul> <p>Revision</p>	<p>Examinations Revision</p>

		<ul style="list-style-type: none"> <li>UK Population Distribution</li> </ul>	<p>Changing Economic World</p> <ul style="list-style-type: none"> <li>Development Indicators/ Gap</li> <li>Quality Of Life</li> <li>Economic Development (Nigeria)</li> <li>Economic Change in the UK</li> </ul>				
12	<p>Component 1</p> <p><b>SECTION A – Changing Landscapes</b></p>	<p><b>1.1.1 The operation of the coast as a system</b> The coastal system including inputs, outputs, stores and transfers of energy and materials</p> <ul style="list-style-type: none"> <li>Terrestrial and offshore supplies of sediment</li> <li>Coastal sediment cells</li> <li>Dynamic equilibrium in the coastal system and zone of rapid</li> </ul> <p><b>1.1.2 Landforms and landscape systems, their distinctive features a distribution</b></p> <ul style="list-style-type: none"> <li>Diurnal tides, offshore and onshore currents</li> </ul>	<p><b>1.1.6 Processes of coastal transport and deposition and the characteristics and the formation of associated landforms and landscapes</b></p> <ul style="list-style-type: none"> <li>Processes of coastal transport of solution, suspension, saltation and traction including longshore drift</li> <li>Processes of coastal deposition result from reduced energy levels including flocculation and sediment sorting</li> <li>Characteristics of coastal landforms</li> </ul>	<p><b>1.1.9 Coastal processes are a vital context for human activity</b></p> <ul style="list-style-type: none"> <li>Positive impacts of coastal processes on human activity including the growth of tourism</li> <li>Negative impacts of coastal processes on human activity including economic and social losses associated with coastal erosion</li> <li>Case study of one management strategy to manage the impacts of coastal processes on human activity</li> </ul> <p><b>1.1.10 The impact of human activity</b></p>	<p><b>3.1.2 Volcanoes, processes, hazards and their impacts</b></p> <ul style="list-style-type: none"> <li>Types of volcano including shield, composite and cinder and types of volcanic eruption including explosive and effusive</li> <li>Volcanic processes and the production of associated hazards including pyroclastic flows, lava flows, ash falls, lahars, jökulhlaups, volcanic landslides and toxic gases</li> <li>Environmental, demographic,</li> </ul>	<p><b>3.1.3 Earthquakes, processes, hazards and their impacts</b></p> <ul style="list-style-type: none"> <li>Earthquake characteristics to include P and S waves, focus, depth and epicentre</li> <li>Earthquake processes and the production of associated hazards including ground shaking, liquefaction, landslides and tsunami</li> <li>Environmental, demographic, economic and social impacts of</li> </ul>	<p>Physical Fieldwork</p> <p><b>Independent Investigation</b></p> <p>Non-exam assessment Background/ introduction</p>

		<p>☐ Constructive and destructive wave types and their characteristics and seasonal variations</p> <p><b>1.1.3 Landforms and landscape systems, their distinctive features and distribution</b></p> <p>☐ High energy coastal environments and associated erosional landforms and landscape systems including rocky coastlines</p> <p>☐ Low energy coastal environments and associated depositional landforms and landscape systems including sandy coastlines and estuarine coastlines</p> <p><b>1.1.4 Factors affecting coastal processes and landforms</b></p> <p>☐ Fetch, wave type, wave orientation, wave refraction and reflection</p>	<p>and landscapes both for and beyond the UK including beaches, spits, bars, tombolos and cusped forelands</p> <p><b>1.1.7 Aeolian, fluvial and biotic processes, the characteristics and the formation of landforms in coastal environments</b></p> <p>☐ Action of wind and associated landforms of sand dunes</p> <p>☐ Action of fluvial processes in estuarine environments and associated landforms of tidal flats, salt marshes and micro features of channels and rills</p> <p>☐ Action of biotic processes and associated development of coral reefs and mangrove coastlines outside the UK</p> <p><b>1.1.8 Variations in coastal processes, coastal landforms and landscapes</b></p>	<p><b>on coastal landscape systems</b></p> <p>☐ Positive impacts of human activity on coastal processes and landforms including management and conservation</p> <p>☐ Negative impacts of human activity on coastal processes and landforms including offshore dredging and erosion of sand dunes</p> <p>☐ Case study of one management strategy to manage the impacts of human activity on coastal processes and landforms and landscapes</p> <p><b>3.1: Tectonic Hazards</b></p> <p><b>3.1.1 Tectonic processes and Hazards</b></p> <p>☐ Characteristics of the Earth's structure including core, mantle and crust and the boundaries between them</p> <p>☐ Mechanisms of plate movement</p>	<p>economic and social impacts of volcanic hazards on people and the built environment including primary and secondary effects</p> <p>☐ Local scale, regional scale and global scale impacts of volcanic activity</p> <p>☐ Use examples of at least <b>two</b> contrasting contexts to demonstrate the varied degree of risk and impacts of volcanic activity</p>	<p>earthquake activity on people and the built environment including primary and secondary effects</p> <p>☐ Local scale, regional scale and global scale impacts of earthquake activity</p> <p>☐ Use examples of at least <b>two</b> contrasting contexts to demonstrate the varied degree of risk and impacts of earthquake activity</p>	
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		stump sequence and wave-cut platforms, geos and blowholes					
12	Component 2 <b>SECTION B –Changing Places</b>	<p><b>1.3.1 Changing place; changing places – relationships and connections</b></p> <ul style="list-style-type: none"> <li>□The demographic, socio-economic and cultural characteristics of places as exemplified by the 'home' place (this may be a locality, neighbourhood or a small community) and at least one further contrasting place</li> <li>□Factors (shifting flows of and connections between people, resources, money and investment and ideas) that have shaped and continue to shape the characteristics of place at all scales from local to global, including MNC fast food chains</li> <li>□□The way in which continuity and</li> </ul>	<p><b>1.3.5 The service economy (tertiary) and its social and economic impacts</b></p> <ul style="list-style-type: none"> <li>□Retailing, commercial and entertainment expansion in some central areas and their demographic and economic drivers including rising affluence and technological change</li> <li>□Gentrification and associated social changes in central urban places experiencing re-urbanisation</li> <li>□The complexity of the changing service economy including the continuing decline for some central urban places, out-of-town retailing and office-parks, internet shopping and central entertainment and the impacts of these changes on learners'</li> </ul>	<p><b>1.3.9 The rebranding process and players in urban places</b></p> <ul style="list-style-type: none"> <li>□Re-imagining and regenerating urban places through sport / music stadia, cultural quarters, festivals, industrial heritage and flagship developments</li> <li>□Re-imagining and regenerating urban places through external agencies including governments, corporate bodies and community groups</li> <li>□□The way in which the urban place has been re-imagined and regenerated impacts on the actions and behaviours of individuals, groups, businesses and institutions</li> </ul> <p><b>1.3.10 Urban management</b></p>	<p><b>3.1.4 Human factors affecting risk and vulnerability</b></p> <ul style="list-style-type: none"> <li>□Economic factors including level of development and level of technology</li> <li>□Social factors including the population density, population profile (age, gender) and levels of education</li> <li>□Political factors including the quality of governance</li> <li>□Geographical factors including rural / urban location, time of day and degree of isolation</li> </ul> <p><b>3.1.5 Responses to tectonic Hazards</b></p> <ul style="list-style-type: none"> <li>□Monitoring, predicting and warnings of volcanic eruptions and earthquakes and tsunami</li> </ul>	<p>2.2 Component 2</p> <p><b>Global Systems and Global Governance</b></p> <p><b>SECTION A – Global Systems</b></p> <p><b>2.1.1 The concepts of system and mass balance</b> □Inputs, outputs, stores and flows in the water cycle, including the concept of mass balance</p> <ul style="list-style-type: none"> <li>□Distribution, size and characteristics of major stores of water including lakes, oceans, atmosphere and cryosphere, vegetation, soil and groundwater stores</li> <li>□Change in size of stores over space and time including, sea-level change and cryospheric processes (ice accumulation and ablation)</li> <li>□Processes which control transfers within and between land,</li> </ul>	<p><b>Urban Fieldwork</b></p> <p><b>2.1.3 Temporal variations in river discharge</b></p> <ul style="list-style-type: none"> <li>□Characteristics of river regimes including simple and complex regimes</li> <li>□Factors influencing river regime characteristics including climate, season, geology, vegetation and land use</li> <li>□The components and shape of storm hydrographs</li> <li>□Climatic factors influencing storm hydrographs including precipitation type, amount, duration and intensity, temperature, evaporation, transpiration and antecedent conditions</li> <li>□River catchment characteristics</li> </ul>

	<p>change of these local to global factors affect learner's own lives and the lives of others</p> <p><b>1.3.2 Changing place; changing places – meaning and representation</b></p> <ul style="list-style-type: none"> <li>□ Places are given meaning as a result of people's perceptions, engagement with and attachments to the place in question and are related to different identities, perspectives and experiences, for example the Lake District</li> <li>□ Places are represented in a variety of different forms including advertising and promotional material through different media and publications, for example Birmingham Grand Central</li> <li>□ Contrasting images portrayed by</li> </ul>	<p>own lives and the lives of others</p> <p><b>1.3.6 The 21st century knowledge economy (quaternary) and its social and economic impacts</b></p> <ul style="list-style-type: none"> <li>□ Knowledge economy clusters including education, research, culture / creative industries, digital / IT companies, science and biotechnology</li> <li>□ Locational factors encouraging cluster growth including proximity to universities and research institutes, government support, planning regulations and infrastructure</li> <li>□ Impacts of quaternary industry clusters on people and places including place making and marketing, demographic change and global connectivity</li> </ul> <p><b>1.3.7 The rebranding</b></p>	<p><b>and the challenges of continuity and change</b></p> <ul style="list-style-type: none"> <li>□ Re-imaging and regenerating affects the social and economic characteristics of urban places and may create conflicting perceptions</li> <li>□ On-going challenges in urban places where regeneration / rebranding are absent or have failed or are causing overheating</li> </ul>	<ul style="list-style-type: none"> <li>□ Mitigating volcanic and earthquake hazards and modifying the event, vulnerability and loss</li> <li>□ Short-term and long-term responses to the effects of earthquake and volcanic hazards (the hazard management cycle)</li> </ul>	<p>ocean, atmosphere and cryosphere at a range of time (minutes to millennia) and space (hillslope to global) scales</p> <p><b>2.1.2 Catchment hydrology – the drainage basin as a system</b></p> <ul style="list-style-type: none"> <li>□ Input: precipitation type, amount, duration and intensity</li> <li>□ Flows: through fall and stem flow, infiltration, overland (saturation and infiltration excess) flow, through flow, percolation, groundwater flow and channel flow</li> <li>□ Stores: interception store, vegetation store, surface store, soil moisture store, channel store, groundwater store</li> <li>□ Outputs: evaporation, transpiration and channel discharge to oceans</li> </ul>	<p>influencing storm hydrographs including size and shape, drainage density, porosity and permeability of soils and rock types, slopes, vegetation and land use</p> <p><b>2.1.4 Precipitation and excess runoff within the water cycle</b></p> <ul style="list-style-type: none"> <li>□ Causes of air uplift, condensation and cloud formation including orographic, frontal and convection</li> <li>□ Theories of precipitation formation including Collision and the Bergeron-Findeisen process</li> <li>□ Causes of excess runoff generation including prolonged precipitation, intense storms, monsoon rainfall and snowmelt</li> <li>□ Human causes of excess runoff generation including changing land use and river mismanagement</li> </ul>	
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		<p>and between the formal statistical, media and popular images of places</p> <ul style="list-style-type: none"> <li>□ The way in which place meanings have an effect on continuity and change in the nature of places</li> <li>□ The way in which these meanings and attachments affect learners own lives and the lives of others</li> </ul> <p><b>1.3.3 Changes over time in the economic characteristics of places</b></p> <ul style="list-style-type: none"> <li>□ Economic change in places over time can lead to structural changes in employment shown by the Clark Fisher Model</li> <li>□ External forces and factors influencing economic restructuring including changing technology and lifestyles, government strategy and globalisation</li> </ul>	<p><b>process and players in rural places</b></p> <ul style="list-style-type: none"> <li>□ Diversification in the post-productive countryside is achieved through re-imaging and regenerating rural places through recreation, heritage, media and event management that have been driven by local groups and external agencies</li> <li>□ The consequences of rebranding on the perceptions, actions and behaviours of people, including those in other places who choose to relocate there, changes to businesses and the local community</li> </ul> <p><b>1.3.8 Rural management and the challenges of continuity and change</b></p> <ul style="list-style-type: none"> <li>□ Managing rural change and inequality in diverse communities</li> </ul>				<p><b>2.1.5 Deficit within the water cycle</b></p> <ul style="list-style-type: none"> <li>□ Meteorological causes, including seasonal variation or longer term climate change</li> <li>□ Human causes, including depleting aquifers and surface water resources by extraction</li> <li>□ Natural and artificial recharge of aquifers to address the deficit</li> </ul>
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		<p>□□ Examples of the decline in primary employment in rural areas and in secondary employment in urban places, using the home area where possible and the way in which these changes affect the learners' own lives and the lives of others</p> <p><b>1.3.4 Economic change and social inequalities in deindustrialised urban places</b></p> <p>□ Consequences of the loss of traditional industries in urban areas including the cycle of deprivation, social exclusion, and lower pollution levels</p> <p>□ Consequences of loss of secondary industries in urban areas including unemployment</p> <p>□ Government policies in deindustrialised places including retraining, economic (local to global),</p>	<p>including issues of housing, transport and service provision, including Broadband provision</p> <p>□ On-going challenges in rural places where regeneration / rebranding are absent or have failed or have created conflict</p> <p>□ New challenges of managing change in some rural communities associated with counter-urbanisation and second home ownership, and possible actions</p>				
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		environmental policies and stimulating tertiary growth and investment by foreign MNCs					
13	Optional Unit Ecosystems	<p><b>3.2.1 The value and distribution of ecosystems</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The value of ecosystems as providers of goods and services for the survival and well-being of humans including medicines, gene pools and resilience to hazards</li> <li><input type="checkbox"/> Distribution of the major global biomes</li> <li><input type="checkbox"/> Relationship between temperature / precipitation and the distribution of biomes including forests, grasslands and deserts</li> </ul> <p><b>3.2.2 The structure and functioning of ecosystems</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The ecosystem concept including energy flows</li> </ul>	<p><b>3.2.4 Conserving biodiversity</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Strategies to conserve biodiversity including a range from total protection through no access to sustainable use</li> <li><input type="checkbox"/> Conservation issues including decisions on which habitats / species to conserve, and sources and types of funding</li> </ul> <p><b>3.2.5 Ecosystems at a local scale</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Succession of one ecosystem</li> <li><input type="checkbox"/> The arresting role of physical factors in creating subclimax communities</li> <li><input type="checkbox"/> Role of human factors in</li> </ul>	<p><b>3.2.7 Sustainable use of the Arctic tundra biome</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Threats to the Arctic tundra, including climate change, mineral exploitation and tourism</li> <li><input type="checkbox"/> Conflicts with indigenous populations</li> <li><input type="checkbox"/> Strategies used to manage the Arctic tundra biome</li> </ul> <p><b>Optional Unit 2 Weather and Climate</b></p> <p><b>3.5.1 Global controls on climate</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Structure of the atmosphere including the characteristics of different layers and their role in climate regulation and the</li> </ul>	<p><b>3.5.4 Extreme weather events</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Causes and consequences of recent and cyclic climate change including extreme weather events</li> <li><input type="checkbox"/> Changing vulnerability of populations to weather and climatic hazards including exposure to climatic variability, sensitivity to stress and adaptive capacity</li> </ul> <p><b>3.5.5 Impacts and management of climatic hazards</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Impacts of hazards associated with low-pressure systems on the environment and human activity</li> <li><input type="checkbox"/> Impacts of hazards associated with high-pressure systems on</li> </ul>	<b>Examinations</b>	

		<p>☐ Variations in nutrient cycling between two biomes to show the size of stores and rates of flow</p> <p>☐ Levels of primary productivity linked to the presence of limiting factors including temperature, moisture, light and nutrient availability</p> <p><b>3.2.3 Biodiversity under threat</b></p> <p>☐ Measures of biodiversity</p> <p>☐ Threats to biodiversity from direct action and indirect action operating at a range of scales from local to global</p> <p>☐ Ecosystems at greatest risk including tropical rainforests, coral reefs and wetlands</p>	<p>maintaining plagioclimax Communities</p> <p><b>3.2.6 The Arctic tundra biome</b></p> <p>☐ Characteristics of the climate, plants, animals and soils of the Arctic tundra biome</p> <p>☐ Interrelationships between the climate, plants, animals and soils of the Arctic tundra biome</p> <p>☐ Impacts of climate change on the Arctic tundra biome</p>	<p>atmospheric heat budget</p> <p>☐ Processes of global atmospheric circulation including the tri-cellular model</p> <p>☐ Distribution of the world's high and low pressure belts and their impact on planetary surface winds; oceanic circulation and its impact on climate; the regional impacts of continentality and altitude on climate</p> <p><b>3.5.2 World's major climate types</b></p> <p>☐ Major climatic types and their distinctive characteristics including temperature, precipitation, winds and pressure</p> <p>☐ Seasonal variations in the position of the ITCZ including migrations of the heat equator, wind and pressure belts</p> <p>☐ Monsoon climate including seasonal changes of precipitation,</p>	<p>the environment and human activity</p> <p>☐ Strategies to manage climatic hazards</p> <p><b>3.5.6 Impacts of human activities on the atmosphere at local and regional scales</b></p> <p>☐ Impacts of urban areas on temperature, wind, precipitation and humidity</p> <p>☐ Impacts of urban areas on air quality including particulate pollution, photochemical smog and acid rain</p> <p>☐ Strategies to reduce the impact of human activity on urban climates and air quality</p> <p><b>3.5.7 People, climate and the future</b></p> <p>Global impact of anthropogenic climate change on shifting climate belts</p> <p>☐ Consequences of reaching</p>		
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				<p>temperature, winds and atmospheric pressure</p> <p><b>3.5.3 Climate and weather of the UK</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Characteristics of the UK's climate</li> <li><input type="checkbox"/> Sources and characteristics of air masses and their influence on the UK's weather</li> <li><input type="checkbox"/> Impacts of variations in the position, pattern and amplitude of the jet stream on the UK's weather</li> </ul>	<p>atmospheric tipping point including environmental and economic impacts</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Strategies to mitigate and adapt to climate change at a variety of scales</li> </ul>		
13	<p><b>Global Systems and Global Governance</b></p>	<p><b>Global Systems cont'd</b></p> <p><b>2.1.5 Deficit within the water Cycle</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Meteorological causes, including seasonal variation or longer term climate change</li> <li><input type="checkbox"/> Human causes, including depleting aquifers and surface water resources by extraction</li> <li><input type="checkbox"/> Natural and artificial recharge of</li> </ul>	<p><b>SECTION B – Global Governance: Change and Challenges</b></p> <p><b>2.2: Global Governance: Change and Challenges</b></p> <p><b>2.2.1 Globalisation, migration and a shrinking world</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Growth of global systems; connections and global flows of</li> </ul>	<p><b>2.2.6 to 2.2.10: Global Governance of the Earth's Oceans</b></p> <p><b>2.2.6 Global governance of the Earth's oceans</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Post-1945 supranational institutions for global governance including UN and UNESCO, EU, G7/G8, G20, G77 and NATO</li> <li><input type="checkbox"/> Laws and agreements regulating the use of the Earth's</li> </ul>	<p><b>2.2.10 Managing ocean pollution</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Main sources, causes and consequences of ocean pollution including terrestrial run-off, waste disposal and oil spillage, eutrophic dead-zones, plastic garbage patches and the role of ocean currents</li> <li><input type="checkbox"/> Strategies to manage marine waste at different scales including global conventions, EU</li> </ul>	<p><b>Examinations</b></p>	

		<p>aquifers to address the deficit</p> <p><b>2.1.6 The global carbon cycle</b></p> <ul style="list-style-type: none"> <li>□ Inputs, outputs, stores and flows in the carbon cycle, including the concept of mass balance</li> <li>□ Carbon pathways and processes between: <ul style="list-style-type: none"> <li>• land and atmosphere at the local (plant), short-term scale, including fossil fuel combustion, carbon sequestration and the processes of photosynthesis, respiration, decomposition (measured over seconds)</li> <li>• ocean and atmosphere through the processes of absorption by biota, diffusion into and out of oceans</li> <li>• land and oceans at the continental scale through the</li> </ul> </li> </ul>	<p>goods, money, people, technology and ideas</p> <ul style="list-style-type: none"> <li>□ □ Classification of migrants and quantification and mapping of global patterns of migration</li> <li>□ □ Factors creating a shrinking world for potential migrants including transport, communication and media representation</li> </ul> <p><b>2.2.2 Causes of international economic migration</b></p> <ul style="list-style-type: none"> <li>□ Factors driving international out-migration, including poverty, primary commodity prices and poor access to markets within global systems</li> <li>□ Recent drivers of migration including the development of diaspora communities, colonial and Commonwealth links and legislation permitting freedom of</li> </ul>	<p>oceans in ways that promote sustainable economic growth and geopolitical stability</p> <ul style="list-style-type: none"> <li>□ Strategic value of the oceans for global superpowers and security issues affecting maritime trade, including the governance of oil transit chokepoints, the Suez and Panama canals and piracy hotspots</li> <li>□ Connections between places and the lives of people across the globe created by the UK's past role as a maritime power, including the Commonwealth</li> </ul> <p><b>2.2.7 Global flows of shipping and sea cables</b></p> <ul style="list-style-type: none"> <li>□ Changing trends, patterns, networks and regulation of shipping including containers and oil tankers</li> <li>□ Growth of smuggling and</li> </ul>	<p>rules, awareness-raising and local actions</p> <ul style="list-style-type: none"> <li>□ An ocean issues case study exploring the different geographical scales of governance and the way they interact, for example the local / regional / national / international / global strategies for Arctic Ocean conservation, or a UNESCO marine heritage site</li> </ul> <p><b>SECTION C – 21st Century Challenges</b></p> <p>This section is compulsory. Resource materials draw on both Components 1 and 2, and where appropriate links to themes studied in Component 3.</p>		
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		<p>processes of weathering, river transport, indirect movement via the water cycle and carbon sequestration in sediments over millions of years</p> <p><b>2.1.7 Carbon stores in different biomes</b></p> <p>Size of carbon stores in the tropical rainforest and temperate grassland and factors influencing the size of these stores including temperature, precipitation and light</p> <ul style="list-style-type: none"> <li>□ Changes in the size of carbon stores due to human activity including land-use change (deforestation, afforestation and agricultural activity)</li> </ul> <p><b>2.1.8 Changing carbon stores in peatlands over time</b></p>	<p>movement, including the EU</p> <ul style="list-style-type: none"> <li>□ How powerful superpowers exert influence and disproportionately attract international migrants to their own advantage, including political strategies to develop cities as global hubs for investment and migration</li> </ul> <p><b>2.2.3 Consequences and management of international economic migration</b></p> <ul style="list-style-type: none"> <li>□ Flows of money, ideas and technology linked with economic migration that reduce or exacerbate global economic inequalities, including remittances and the 'brain drain' of skilled workers. These factors can cause conflict but promote growth and stability</li> <li>□ Increased economic, social,</li> </ul>	<p>people trafficking and international efforts to manage these flows</p> <ul style="list-style-type: none"> <li>□ Growth of seafloor cable data networks including causes, trends, patterns and uses</li> <li>□ Risks to seafloor cable data networks including those from tsunamis and undersea landslides, and international conventions to protect seafloor data cables</li> </ul> <p><b>2.2.8 Sovereignty of ocean resources</b></p> <ul style="list-style-type: none"> <li>□ Distribution and ownership of major ocean resources including minerals and fossil fuels, including the establishment and reproduction of territorial limits and sovereign rights that benefit some states but not others</li> <li>□ Geopolitical tensions including the contested ownership of islands and surrounding sea</li> </ul>			
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		<ul style="list-style-type: none"> <li><input type="checkbox"/> The accumulation of the carbon store through the process of peat formation</li> <li><input type="checkbox"/> The reduction of the carbon store through peat extraction and drainage</li> <li><input type="checkbox"/> The restoration of the carbon store through management of Peatlands</li> </ul> <p><b>2.1.9 Links between the water and carbon cycles</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Causes of recent increases in the atmospheric carbon store</li> <li><input type="checkbox"/> Relationship between recent increases in the atmospheric carbon store and the energy budget</li> <li><input type="checkbox"/> Impacts of recent increases in the atmospheric carbon store on the water cycle and oceans, including: amount, type and patterns of precipitation,</li> </ul>	<p>political and environmental interdependency of host and source countries and the people who live there</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Migration policies of host and source countries, including the management of conflicting views about cultural change and migration held by individual UK citizens (and learner's own lives)</li> </ul> <p><b>2.2.4 Causes, consequences, and management of refugee movements</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Causes of international refugee movements and internal displacement of people (Internally Displaced People), including geopolitical events driven by powerful states and economic injustice, such as land grabs</li> </ul>	<p>beds and attempts to establish ownership of Arctic Ocean resources</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Injustices arising from unequal access to ocean resources, including the geographical consequences for poor landlocked countries and indigenous people in some coastal areas</li> </ul> <p><b>2.2.9 Managing marine environments</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The concept of the Global Commons and its applicability to the management of the Earth's oceans</li> <li><input type="checkbox"/> Causes and consequences for different people and learner's own lives and places of over-exploitation of marine ecosystems</li> <li><input type="checkbox"/> The need for sustainable management of marine environments to promote long-term global growth and stability,</li> </ul>			
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		<p>extreme weather, river discharge, sea level rise, acidification of the oceans</p> <ul style="list-style-type: none"> <li>□□ Links between the water and carbon cycles at the local scale</li> </ul> <p><b>2.1.10 Feedback within and between the carbon and water cycles</b></p> <ul style="list-style-type: none"> <li>□□ Positive and negative feedback loops, thresholds and equilibrium in natural systems</li> <li>□□ Consequences of change within and between the water and carbon cycles including cryosphere feedbacks, marine carbon feedbacks, terrestrial carbon feedbacks and methane feedbacks</li> <li>□ The implications of feedback within and between the two systems for life on Earth, including Arctic permafrost thawing</li> </ul>	<ul style="list-style-type: none"> <li>□□ Consequences of these movements on the lives of refugees and their destinations including lives of people in neighbouring states and developed economies</li> <li>□□ Actions to tackle refugee crises including the work of UNHDR, national governments and NGOs</li> <li>□□ The powerlessness of some states in conflict or disaster zones in relation to cross-border flows of people (refugees, soldiers, militia groups) and resources</li> </ul> <p><b>2.2.5 Causes, consequences, and management of rural-urban migration in developing countries</b></p>	<p>including local no-catch zones, regional quotas limits and marine conservation zones</p>			
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