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# Our Lady's Catholic College

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## Geography Curriculum Overview

Our Lady's Catholic College, Morecambe road, Lancaster, La12rx

# Key Stage 3 Geography Curriculum: Year 7



**Sustainability-** As global citizens it is vital that we consider the needs of future generations and ensure that we live with this in mind. Within this year students are developing their understanding of the role that sustainability plays on a number of different scales from the local school community to a global level.

Unit	Links to curriculum intent	Rationale	Misconceptions
Map Skills	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- Increases locational knowledge of the students.</li> <li>- The difference between different categories of Geography.</li> <li>- Locate continents and oceans.</li> <li>- The difference between country, region and county.</li> <li>- 4 and 6 figure grid references.</li> <li>- OS map symbols.</li> <li>- Show height and relief of the land using contour diagrams.</li> <li>- Measure distance on a map.</li> <li>- Students learn transferrable skills from reading maps, GIS and also map skills.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe what Geography is and how it links to the world we live in.</li> <li>- To define the difference between human, physical and environmental Geography in the local area.</li> <li>- To locate the continents and oceans on a world map.</li> <li>- To describe the country, region and county in which they live.</li> <li>- To identify key locations on a map of the UK.</li> <li>- To identify and use 4 and 6 figure grid references on a range of different maps.</li> <li>- To identify map symbols on a range of OS map.</li> <li>- To describe height and relief on an OS map, and draw contour diagrams to represent hill profiles.</li> <li>- To be able to measure distance on a map.</li> </ul>	<p>The Y7 baseline clearly shows a lack of general geographical knowledge across the year group and it is apparent across the school. The whole purpose of this unit is to make sure all of the basics such as- What is our own country called? What is a continent? are covered and are practiced. Introduction to basic map skills such as latitude and longitude, OS maps, 4 and 6 figure grid references, scale and measuring distance. The purpose of this unit is to make sure these skills are consolidated and practiced.</p> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>• Base line assessment to gauge prior understanding from primary school.</li> <li>• Build on knowledge of local area using maps and photographs.</li> </ul>	<p><i>"Africa is a country"</i></p> <p><i>"We are not part of Europe anymore"</i></p>
Sustainability Study	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- What sustainability is.</li> <li>- Examples of sustainable communities.</li> <li>- How sustainable our school environment is and identify what can be done in future to improve this.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To explain strategies we can use to become more sustainable.</li> <li>- To explain how communities can become more sustainable.</li> <li>- To evaluate how sustainable cities can be.</li> <li>- To plan, collect and analyse primary fieldwork data about suitability in the school environment.</li> </ul>	<p>The main underlying theme for year 7 is the concept of Sustainability, this unit introduces the definition and practices at different scales. This allows students to develop their understanding of scale, as well as their role within this. The field-work cycle is implemented with students, allowing them to develop the disciplinary skills of setting an hypothesis, then collecting, presenting and interpreting data. <u>The National Curriculum expectation of the Middle East is also covered within the unit</u>, evaluating the sustainability of Masdar City.</p> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>• Promotes the catholic like of the school, linking to Laudato Si.</li> <li>• Build on knowledge of school environment.</li> </ul>	<p><i>"Sustainability is just being environmentally friendly"</i></p>

**Know**

- Key words associated with ecosystems.
- The characteristics of global biomes.
- The location of Tropical rainforests and hot Deserts.
- Climate graph of Tropical rainforests and hot Deserts.
- The structure of the Rainforest.
- How plants are adapted to the Rainforest.
- To understand how an important message is being communicated.
- Causes and effects of deforestation.
- The effects deforestation can have on people and the environment
- How are plants and animals adapted to living in the desert.
- Causes and effects of desertification.
- How to reduce the effects of desertification.

**Know how**

- To define biome and habitat and describe the location of global biomes on a map.
- To collect and present key information.
- To describe the location of Tropical Rainforests.
- To extract key information from an extended term.
- To interpret data from climate graphs and describe the equatorial climate.
- To label the structure of the rainforest using key information.
- To present how important message is having an impact upon the globe.
- To describe and explain the causes and effects of deforestation in the Amazon Rainforest.
- To describe the location and climate of hot deserts.
- To annotate and explain how plants and animals have adapted to live in the desert.
- To explain the causes and effects of desertification.
- To evaluate how we can manage desertification on a range of scales.

This unit builds upon the concepts taught at the start of the year, where students can use map skills such as latitude to describe and explain the location of world biomes. Students develop the disciplinary skill of interpreting climate graphs, which are then used to explain adaptations within both the rainforest and desert biomes. One of the main outcomes of this unit, as well as the substantive understanding of the characteristics of each biome is the development of students to understand the interactions between human and physical geography. They will learn how human activities are impacting the environment, but also how these actions can be sustainably managed. Management of the ecosystems is taught by using a decision making exercise to introduce students to the skill of evaluating options, as well as justifying their own opinions.

**Links to prior learning:**

- Using key words.
- Links with Science—Habitats.
- Link back to sustainability (topic 1) of managing the rainforest and desert ecosystems.
- Develop skills in arguing for or against using their opinion.

*"All deserts are hot"*

*"The equator is the hottest part of the world"*

**Know**

- The location of the Lake District national park and why people visit.
- How past climate has shaped the Lake District.
- To know the processes of glaciation and what landforms are formed.
- How the impacts of tourism change over time.
- The countryside code and ways we can protect it for the future.
- Methods to rejuvenate the Lake District.

**Know how**

- Describe and explain the location of the Lake District.
- Describe how glaciers, erosion and disposition has shaped the Lake District landscape.
- To identify, draw and annotate how glacial landforms are formed.
- To be able to explain how tourist impacts change in relation to the Butler model.
- The countryside code can be applied to our lives and explain ways we can protect the countryside.
- To evaluate future plans for the Lake District.

Interactions between physical and human geography also underpins this unit, where students study the geographical processes that have formed the Lake District landscape. Glaciation process are outlined in the National Curriculum, these are put into a locational concept of the Lake District. Students will also have the opportunity to develop their map reading skills from the beginning of the year, as well as using the decision making skills taught in the Ecosystems unit, when they consider the future for the Lake District National Park.

**Links to prior learning:**

- OS maps to locate features of glaciation.
- Describe locations.
- Sustainability.

*“Mountains in the Lake District have risen upwards”*



# Key Stage 3 Geography Curriculum: Year 8



**Dynamic**— Geography is ever changing and students need to be aware that the interactions that take place between human and physical elements have impacts upon the world. We must therefore be adaptive to these changes in order to conserve, manage and preserve both human and natural environments.

Unit	Links to curriculum intent	Rationale	Misconceptions
Rivers	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- The characteristics of the water cycle.</li> <li>- The characteristics of the three different types of rainfall.</li> <li>- The characteristics of a river drainage basin.</li> <li>- How does a river change downstream.</li> <li>- Formation of a waterfall.</li> <li>- Causes of river flooding.</li> <li>- Which areas of school are most likely to flood.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe and explain the processes linked to the water cycle.</li> <li>- To identify, annotate and explain convection, frontal and relief rainfall.</li> <li>- To identify features of a drainage basin on a diagram.</li> <li>- To describe and explain how a river changes downstream.</li> <li>- To describe and explain the formation of a waterfall.</li> <li>- To describe and explain the causes of flooding.</li> <li>- To collect primary data on infiltration rates around school to decide which area of school is most at risk from flooding.</li> <li>- To describe and explain the causes and effects of a flooding event in Bangladesh.</li> </ul>	<p>This unit introduces students to the concept that the world is dynamic and there are interactions between human and physical processes. Students often have an understanding of some of the processes taught regarding the water cycle from Science and KS2. However, these are then built upon when they learn about the different types of rainfall. Students have the opportunity to use some of the map skills from year 7 to look at how a river changes downstream, with a focus on the formation of landforms. Infiltration rates are studied in different context to allow students to apply their geographical knowledge of flooding to different environments, at different scales. Using both primary and secondary research allows students to draw conclusions and evaluate the use of the data.</p> <p><u>Links to prior learning:</u></p> <ul style="list-style-type: none"> <li>• Map skills from year 7 to identify features of a river on OS maps.</li> <li>• The interpretation of climate graphs.</li> <li>• Field work structure from year 7.</li> </ul>	<p><i>"All rivers begin at the sea"</i></p>

Unit	Links to curriculum intent	Rationale	Misconceptions
Population	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- How the world population has changed.</li> <li>- How population distribution varies.</li> <li>- Causes of population change.</li> <li>- Understand the DTM.</li> <li>- Understand population pyramids.</li> <li>- Why China's one child policy was introduced.</li> <li>- How push and pull factors link to migration.</li> <li>- Decision making exercise of a contemporary migration issue.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe world population change on a graph.</li> <li>- To describe and explain population distribution on a map.</li> <li>- To define and give reasons for population change.</li> <li>- To use the DTM to describe population change and make predictions for the future.</li> <li>- To draw, interpret and compare population pyramids.</li> <li>- To evaluate the use of population management schemes.</li> <li>- To be able to describe push and pull factors linked to the process of migration.</li> <li>- To evaluate the migration issue from Mexico to USA.</li> </ul>	<p>This human based geography unit again shows students that is not only the physical world that is dynamic and needs management, but this is relevant in a human context also. The first component of knowledge studied links to density and distribution, students are able to use different sources to identify and explain a variety of different factors. Misconceptions are challenged such as the size of the country and the size of the population. As well as the substantive knowledge linked to population structures, students are taught how to draw and interpret population pyramids, with a focus on the impacts of the population on the government. A particular focus is made to <u>China's management</u> of its population. The decision making skills that we introduced in year 7 are developed, when looking at topical management ideas for international migration.</p> <p><u>Links to prior learning:</u></p> <ul style="list-style-type: none"> <li>• World continents from map skills unit.</li> <li>• Quality of life and migration.</li> <li>• Dynamic concept.</li> </ul>	<p><i>"Russia has a large population"</i></p> <p><i>"Rich countries have more children because they can afford them"</i></p>

India	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- Locate the countries on Asia.</li> <li>- Define globalization.</li> <li>- The human and physical features of India.</li> <li>- The climate of India.</li> <li>- Cause and effects of monsoons.</li> <li>- Quality of life in India.</li> <li>- How different industries in India have changed over time.</li> <li>- Effect of MNC's on India.</li> <li>- Impact of Coco-Cola as an MNC.</li> <li>- Impacts of tourism on India.</li> </ul> <p><b>-Know how</b></p> <ul style="list-style-type: none"> <li>- To use an atlas to locate the countries and key features of Asia.</li> <li>- To define and explain the process of globalisation.</li> <li>- To locate the human and physical features of India on a map.</li> <li>- To complete and describe a climate graph and compare to other regions.</li> <li>- To explain the effects the monsoon has on India.</li> <li>- To define and explain the factors that affect quality of life.</li> <li>- To define the types of industry in India and give examples.</li> <li>- To explain why types of industry change over time.</li> <li>- To be able to explain the impact that MNC's have had on India.</li> <li>- To develop a case study of Coca-Cola in India.</li> <li>- To be able to explain the positive and negative impacts of tourism in India.</li> <li>- To develop a case study of the Taj Mahal.</li> </ul>	<p><u>This unit allows students to study a country at a local scale, India.</u> In order to build upon the students locational knowledge the unit begins looking at the continent of Asia before developing a sense of place for India. Interactions between human and physical geography are a main underlying theme of this unit, showing how a country can change and develop over time due to a number of internal and external factors. Disciplinary skills are taught how to produce and interpret choropleth maps, as a way to show patterns of quality of life across India. As well as this, students are encourage to evaluate the use of the data presentation technique. Evaluative skills are developed both when studying the role of a global company in India and also the number of tourists at the Taj Mahal.</p> <p><b><u>Links to prior learning:</u></b></p> <ul style="list-style-type: none"> <li>• Map skills</li> <li>• Drawing and interpretation of climate graphs.</li> <li>• Skill of chains of reasoning.</li> </ul>	<p><i>"India is a LIC"</i></p>
Climate Change	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- What is climate change and the human enhanced greenhouse effect.</li> <li>- Human and physical causes of climate change.</li> <li>- Students can describe the process of the enhanced greenhouse effect.</li> <li>- Understanding the carbon cycle, including the importance of stores and sinks.</li> <li>- Threats of climate change.</li> <li>- What is permafrost.</li> <li>- Mitigation and adaption of climate change.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To be able to define climate change and how the human enhanced greenhouse effect is contributing to this.</li> <li>- To collect information about the causes and effects of climate change.</li> <li>- To define the human and physical causes of climate change and give my opinion based on knowledge learnt during the lesson.</li> <li>- To understand the carbon cycle and key terms carbon sink/carbon store.</li> <li>- To create a case study of information about the threat of climate change to the Maldives.</li> <li>- To understand what permafrost is and how it effects Russia.</li> <li>- To understand the difference between mitigation and adaption of climate change.</li> </ul>	<p>Climate change is a unit that is underpinned by the main concepts of sustainability and dynamic processes. As well as teaching the causes of climate change, the carbon cycle is taught to enable students to make links between the carbon the water cycle that was taught in rivers. This allows students to see the synoptic links within Geography. The Maldives is taught as a current environment at threat. <u>A case study is develop of Russia, which is outlined within the National Curriculum,</u> looking at the importance of permafrost in the carbon cycle. As well as looking at the causes and effects of climate change, mitigation and adaptation is studied. This links once again the sustainability.</p> <p><b><u>Links to prior learning:</u></b></p> <ul style="list-style-type: none"> <li>• Water cycle.</li> <li>• Sustainability project.</li> <li>• Social, economic and environmental effects</li> </ul>	<p><i>"A hole in the o zone layer is causing global warming"</i></p> <p><i>"Weather in the UK will be sunnier"</i></p>

# Key Stage 3 Geography Curriculum: Year 9



**Globalisation-** The way that the world is now connected in changing, due to developments in technology and transport. This is leading to an ever increasing 'borderless world' where countries are more interdependent than ever. Students will study this through both human and physical geography concepts.

Unit	Links to curriculum intent	Rationale	Misconceptions
Tectonics	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The characteristics of the layers of the earth.</li> <li>-Evidence to support the theory of continental drift.</li> <li>-The location of volcanoes and earthquakes.</li> <li>-The features and activity of volcanoes.</li> <li>- The hazards associated at each of the 4 plate boundaries.</li> <li>- Causes and effects of the E15 volcanic eruption.</li> <li>- Causes and effects of the Haiti and Nepal earthquakes and Nepal.</li> <li>-How we measure earthquakes.</li> <li>- Causes and effects of the Japanese Tsunami</li> <li>- The different management techniques that can be used to prepare for tectonic hazards.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>-To describe each layer of the earth.</li> <li>- To explain how tectonic plates move via convection currents.</li> <li>- To interpret a Pacific Ring centered map.</li> <li>- To describe how hazards are created at each of the 4 plate boundaries.</li> <li>- To develop an understanding of how GIS can be used to map global tectonic hazards.</li> <li>- To compare how hazards can impact communities at different levels of development.</li> <li>- To evaluate the use of the Mercalli and the Richter scale to measure earthquakes.</li> <li>- To categorise the impacts of the Japanese tsunami.</li> <li>-To explain how communities can mitigate and plan for tectonic hazards.</li> </ul>	<p>Whilst this unit focuses upon the physical causes of tectonic hazards, it also covers the interactions between countries in terms of aid, tectonic management and also refugees. This highlights the role of globalisation and the positive impact it can have between countries. The unit is taught through looking students using a Freyer model for each of the 4 plate boundaries, after each plate boundary a relevant case study is taught. This enable students have a deeper understanding of the cause and effect. A number of different stimuli to present the impact of each tectonic hazard, this includes documentaries, newspaper articles and decision making activities. This unit builds upon map skills taught in year 7, as well as considering the dynamic nature of planet earth.</p> <p><u>Links to prior learning:</u></p> <ul style="list-style-type: none"> <li>- Map skills</li> <li>- Cause and effect of a natural disaster</li> <li>- Migration and refugees</li> <li>-Use of GIS</li> </ul>	<p><i>"Hurricanes are tectonic hazards"</i></p>



Unit	Links to curriculum intent	Rationale	Misconceptions
Development	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>-The misconceptions of Africa.</li> <li>- The location of Africa and some African countries.</li> <li>- The definition of main development indicators.</li> <li>- The 3 categories of water consumption.</li> <li>-Different water borne diseases that are prevalent in Africa.</li> <li>- Different water management techniques that can be used by countries.</li> <li>-The impact that Ebola had on communities.</li> <li>-The human and physical geography of Kenya.</li> <li>-What the living conditions are like for the residents of Kibera.</li> <li>-The different strategies that could be used to improved Kibera.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>-To challenge misconceptions towards Africa.</li> <li>- To be able to use an atlas to locate countries and physical features.</li> <li>-To explain how development indicators vary between HIC and LIC countries.</li> <li>—To compare water usage in HIC and LIC's.</li> <li>- To explain how water borne diseases such as Cholera are spread.</li> <li>- To evaluate how countries are trying to manage their water supplies.</li> <li>-To explain how the development of a country is linked to the spread of disease.</li> <li>-To describe the living conditions in an informal settlement.</li> <li>- To evaluate how the living conditions in Kibera can be improved.</li> </ul>	<p>One of the main misconceptions of students is their locational knowledge surrounding Africa and also their preconceptions of what the living standards are. The first lesson in the unit challenges these views using images from a variety of African countries. Definitions of a variety of development indicators are taught, with numeracy skills developed when ranking HDI. A focus is made upon water security, this build upon the knowledge of the water cycle and desertification units taught in Year 7 and 8. Students use different sources to consider how water usage changes with the development of a country. Decision making techniques that have been introduced in previous units , as a key disciplinary skill, is embedded with students justifying which water management technique is the most appropriate. The main focus from tear 7, sustainability, must be considered within their decision.</p> <p><u><b>Links to prior learning:</b></u></p> <ul style="list-style-type: none"> <li>- Desertification linked to water management</li> <li>- Map skills</li> <li>- Decision making skills</li> </ul>	<p><i>“Africa is a country”</i></p> <p><i>“Countries can get richer by printing more money”</i></p> <p><i>“People can just move home to live next to clean water”</i></p>

Coasts	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The 4 processes of erosion and transportation.</li> <li>- How geology and human activity can effect the rate of erosion.</li> <li>- The characteristics of waves.</li> <li>- How mass movement can occur along the coastline.</li> <li>- The process of longshore drift.</li> <li>- The formation of coastal landforms of erosion and deposition.</li> <li>- How the coastline can be managed using hard and soft management techniques.</li> <li>- How we can hold the line or manage retreat.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>-To describe the processes of erosion and transportation.</li> <li>-To compare the characteristics of different waves.</li> <li>- To explain how sediment is transported by longshore drift.</li> <li>- To explain the formation of coastal landforms (cliffs, wave cut platforms, headlands, , beaches, spits and estuaries)</li> <li>- To evaluate the hard and soft coastal management techniques.</li> <li>- To evaluate the use of hold the line as a management strategy.</li> <li>- To evaluate the use of managed retreat as a management strategy.</li> </ul>	<p>Coasts builds upon some of the geographical processes that students have learnt in Rivers, erosion and transportation. Although Morecambe and Heysham are nearby students do have a lack of knowledge of tides, management techniques. In order to make the abstract more concrete, references are made to local examples wherever possible eg. Half Moon Bay and rock armour along the prom. Within this unit students are able to embed their ability to explain geographical processes and how they form a specific landform. This again links back to the disciplinary knowledge required to explain the formation of river landforms. The Holderness Coast is used as a case study, for management, as well as factors for rapid erosion, allowing students to link both concepts.</p> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>-Types of erosion from Rivers unit.</li> <li>-Map skills</li> <li>-How we describe formation of a landform</li> <li>- Command words of evaluate and explain</li> </ul>	<p><i>“It’s their own fault for buying a house so close to the cliff edge”</i></p> <p><i>“People can just move if sea levels are rising”</i></p>
Global Issues	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The issues that are facing a number of different countries.</li> <li>-The issues surrounding traffic in urban areas.</li> <li>- The different techniques that are used to manage traffic in an urban area.</li> <li>- The stages of the fieldwork cycle.</li> <li>- The characteristics of brownfield and greenfield sites.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To develop empathy with the issues that different countries are experiencing.</li> <li>- To evaluate how different urban areas are managing their traffic issues.</li> <li>- To collect, present and interpret primary data.</li> </ul> <p>To evaluate how the Bay Gateway has impacted upon traffic along Morecambe Road.</p> <ul style="list-style-type: none"> <li>-To evaluate the use of greenfield and brownfield sites.</li> <li>- To evaluate the use of brownfield and greenfield sites for development in Lancaster.</li> </ul>	<p>This is very much a synoptic unit, which brings numerous geographical concepts together, hence why it is delivered in year 9. Scale is a very important concept, as students look at global issues and evaluate if these issues are present in Lancaster. This once again allows the abstract to be made concrete. Students will look at a current planning application and consider all of the contribution factors to if it should be granted, this takes into account flooding risk, impact on local ecosystems as well as further embedding the students decision making skills. Within the unit students also have the opportunity to collect data regarding traffic, enabling them to use their own data rather than just secondary data.</p> <p><b>Links to prior learning:</b></p> <ul style="list-style-type: none"> <li>- Flooding risk</li> <li>- Desertification and impact on water sources</li> <li>- Fieldwork cycle</li> <li>- Command word of evaluate</li> <li>- Habitats and local ecosystems.</li> </ul>	<p><i>“Lancaster does not face the same issues as London”</i></p>

# Key Stage 4 Geography Curriculum: Year 10



**Curriculum Rationale:** At Key Stage 4, pupils study the EDUQAS Geography B exam specification. We have ensured that the curriculum at KS3 has developed schemas that are built upon by the GCSE content to ensure that they are effectively prepared not only for their GCSE examination but for further education, training and the world of work beyond school.

Unit	Links to curriculum intent	Rationale	Links to Specification
Ecosystems	<p><b>Know :</b></p> <p>A definition of the key words associated with ecosystems</p> <p>The relationship between climate and biomes at a global scale.</p> <p>The difference between the nutrient cycle and the broken nutrient cycle</p> <p>The features of the semi arid grassland ecosystem</p> <p>The features of the rainforest ecosystem</p> <p>How the rainforest is damaged by human activity.</p> <p>The Virunga National Park Case study</p> <p>The Lawson's Bridge case study</p> <p>How other ecosystems can be used by humans—positively and negatively eg North Sea</p> <p><b>Know how :</b></p> <p>To select characteristics of biomes and link to global location</p> <p>To explain of energy moves around an ecosystem in a food web</p> <p>To describe the impact on an ecosystem of breaking the nutrient cycle</p> <p>To explain how climate affects the type of vegetation.</p> <p>To describe a climate graph of semi arid grasslands</p> <p>To explain how vegetation is adapted to the climate of the semi arid grassland</p> <p>To describe a climate graph of the rainforest</p> <p>To compare the climate graph of the rainforest and the semi arid grassland</p> <p>To explain how vegetation is adapted to the climate of the rainforest</p> <p>To explain how deforestation impacts on the natural processes within the ecosystem</p> <p>To be able to assess the success of how a rainforest ecosystem can be managed using an case study eg Virunga National Park</p> <p>To describe how a small local ecosystem can be used by local people—impacts positive and negative</p> <p>To explain how ecosystems are used and under threat from humans</p>	<p>Students will learn about key geographical processes, that they must be able to define, describe and explain the processes in any ecosystem. Students will be expected to learn how the location and climate change the plants and animals in an ecosystem. Students will then look at how and why ecosystems are under threat and techniques used to manage ecosystems.</p> <p><u>Links to prior learning:</u></p> <p>In year 7 students learnt how humans are threatening world biomes and how these can be managed.</p> <p>In year 9 students looked a local planning issue, of a development upon a greenfield site and the possible impacts that this could have.</p> <p>Throughout key stage 3, students have developed skills of describing and interpreting climate graphs.</p>	<p>Theme 3: Environmental Challenges</p> <p>Key idea 3.1</p> <p>Key idea 3.2</p> <p>Key idea 3.4</p>



Unit	Links to curriculum intent	Rationale	Links to Specification
Desertification	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- What are the physical causes of desertification.</li> <li>- What is the ITCZ.</li> <li>- How can human activity contribute to the problem of desertification.</li> <li>- How can we manage the problem of desertification.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To explain the physical causes of desertification, such as changing weather patterns.</li> <li>- To explain the atmospheric processes involved in the ITCZ.</li> <li>- To explain how human activity, such as overgrazing cattle can lead to desertification.</li> <li>- To evaluate small scale management strategies, including magic stones and tethering cattle.</li> <li>- To evaluate the large scale management strategy of the Great Green Wall.</li> </ul>	<p>Students will learn about key geographical processes that cause desertification . They must be able to define, describe and explain the processes in that cause desertification. Students will be expected to learn how the location, human involvement and climate change cause desertification . Students will then look at how and why areas are under threat from desertification and techniques used to manage desertification</p> <p><b><u>Links to prior learning:</u></b></p> <p>In year 7 students learnt how humans are threatening world biomes and how these can be managed., this included areas at threat from desertification.</p> <p>This links to the Ecosystems unit taught previously, as Desertification is the human activity that is threatening the semi-arid grassland, which is a key case study biome.</p>	<p>Theme 3: Environmental Challenges</p> <p>Key idea 3.4</p>
Water Management	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>--Where water comes from.</li> <li>-The 3 categories of water consumption</li> <li>-The concept of embedded water.</li> <li>-- What happens when demand for water exceeds supply eg over abstraction and how it can cause desertification</li> <li>-Different water management techniques that can be used by countries.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe where drinking water is sourced from.</li> <li>- To compare water usage in HIC and LIC's.</li> <li>- To describe water footprints and embedded water</li> <li>- To evaluate the impact of over-abstraction and unsustainable use of water on people, the economy and environment. Through a case study of Lake Chad</li> <li>- To evaluate how countries are trying to manage their water supplies.</li> <li>- To evaluate the impacts of water transfer schemes eg Lesotho to South Africa (international scale)</li> </ul>	<p>Students will learn about key geographical processes, that they must be able to define, describe and explain the issues about global water management . Students will be expected to learn how the level of development changes access and use of water. Students will then look at how water use can be managed in countries with different levels of development.</p> <p><b><u>Links to prior learning:</u></b></p> <p>This unit builds upon the Year 9 Africa unit which looks at access to a sustainable water supply in LICs.</p> <p>At GCSE this unit links to the link to how human activity may contribute to desertification</p>	<p>Theme 3: Environmental Challenges</p> <p>Key idea 3.3</p>



Unit	Links to curriculum intent	Rationale	Links to Specification
Weather and Climate	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>-The characteristics of the UK climate, including regional variations.</li> <li>- The 4 factors that influence the UK climate.</li> <li>-The processes linked to global air circulation and the location of global biomes.</li> <li>-The different symbols used on a weather map.</li> <li>- The weather conditions and hazards linked to high pressure.</li> <li>- The weather conditions and hazards linked to low pressure—the passage of a depression.</li> <li>- The causes, impacts and response of an extreme high pressure event outside of the UK—California drought.</li> <li>- The causes, impacts and response of an extreme low pressure event outside of the UK—Hurricane Katrina.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe the factors that influence the UK climate.</li> <li>- To explain how the UK climate varies regionally and seasonally.</li> <li>-To explain climates of global biomes.</li> <li>- To interpret synoptic weather charts.</li> <li>- To explain the weather and associated hazards for areas of high pressure.</li> <li>- To explain the weather and associated hazards for areas of low pressure.</li> <li>- To explain the weather associated with a depression.</li> <li>- To evaluate the impact and management of the California drought. (Extreme high pressure event)</li> <li>- To evaluate the impact and management of Hurricane Katrina. (Extreme low pressure event)</li> </ul>	<p>Students will learn about key geographical processes, they will learn why the climate in the UK is variable, they will also look at how global circulation patterns influence distinctive climate zones on a larger scale. Students will have to understand the process behind high and low pressure zones and the hazards associated with this, also being able to interpret weather charts. Students will also apply their knowledge to two contrasting case studies to show their understanding of causes, effects and responses to extreme weather events outside of the UK.</p> <p><b>Links to prior learning:</b></p> <p>At GCSE this unit build upon the knowledge of latitude taught with the Ecosystems unit.</p> <p>There are also links to water management, taught in theme 3.</p> <p>Key geographical skills that have been taught at key stage 3 will also be referred back to such as interpreting sources and locational knowledge of continents, main oceans.</p>	<p>Theme 2:</p> <p>Changing Environments</p> <p>Key idea 2.3</p>
Climate Change	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- How and why climate has changed during the quaternary period.</li> <li>- What are the consequences of climate change.</li> <li>- That people have differing views and attitudes towards climate change.</li> <li>- How climate change is being managed at a global, national and local scale.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To interpret graphs to describe how climate has changed during the quaternary period.</li> <li>- To explain both human and natural causes of climate change.</li> <li>- To explain the impact of where people will live, due to the impacts of climate change—Kiribati</li> <li>- To explain the impact on the tourism industry, due to changes in climate.</li> <li>- To evaluate the changing attitudes of the UK government and their approach to managing climate change.</li> <li>- To evaluate strategies used at a global, national and local level to manage climate change.</li> </ul>	<p>Students will learn about both the natural and man made causes of climate change. They should be able to annotate a diagram of the greenhouse effect and understand the role this plays in climate change. Students will then explain the impacts of climate change, making links to previous units. Management of climate change is studied at local, regional and global scales, before studying the Maldives as a case study.</p> <p><b>Links to prior learning:</b></p> <p>This links to the climate change unit studied in Year 8. The students will also be expected to use geographical skills, such as describing trend on a graph.</p>	<p>Theme 2:</p> <p>Changing Environments</p> <p>Key idea 2.4</p>

Unit	Links to curriculum intent	Rationale	Links to Specification
Urban and Rural Environments	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- The characteristics of urban areas.</li> <li>- The issues that the inner city is trying to overcome.</li> <li>- The issues that the inner city is trying to overcome.</li> <li>-The characteristics of brownfield and greenfield sites.</li> <li>-The impacts of urban leisure use.</li> <li>-The characteristics of different shopping locations.</li> <li>The different types of goods and services.</li> <li>-The different techniques used to improve CBD's.</li> <li>- The characteristics of sustainable communities.</li> <li>- The causes and effects of counterurbanisation.</li> <li>- The impacts and management strategies used to manage leisure in a rural area.</li> </ul> <p><b>Know how:</b></p> <ul style="list-style-type: none"> <li>- To describe the zones of an urban area</li> <li>- To evaluate the regeneration projects taking place in the inner city.</li> <li>-To evaluate the use of greenfield and brownfield sites.</li> <li>-To evaluate the use of greenfield and brownfield sites.</li> <li>-To evaluate the use of urban areas for leisure use.</li> <li>-To evaluate the different areas that we can shop.</li> <li>-To describe the characteristics of the different types of goods and services.</li> <li>-The CBD can be improved.</li> <li>-To evaluate the sustainability of different communities.</li> <li>-To explain the causes and effects of counterurbanisation.</li> <li>-To evaluate the impacts and management strategies used to manage leisure in a rural area.</li> </ul>	<p>Students will learn about key geographical processes, that they must be able to define, describe and explain the issues about urban and rural land use in the UK . Students will be expected to learn how the use of land changes places in both urban and rural areas. Students will then look at how cities can be sustainable and how rural areas can be managed sustainably.</p> <p><b><u>Links to prior learning:</u></b></p> <p>In the Year 9 global issues unit students learn about global issues and relate them to issues in Lancaster</p>	<p>Theme 1: Changing places - Changing economies</p> <p>Key Idea 1.2:</p>

# Key Stage 4 Geography Curriculum: Year 11

**Curriculum Rationale:** At Key Stage 4, pupils study the EDUQAS Geography B exam specification. We have ensured that the curriculum at KS3 has developed schemas that are built upon by the GCSE content to ensure that they are effectively prepared not only for their GCSE examination but for further education, training and the world of work beyond school.



Unit	Links to curriculum intent	Rationale	Links to Specification
Urbanisation/Global Cities	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>-The global distribution of global cities.</li> <li>-The features of a global city.</li> <li>- The ways of life and current challenges created by urbanisation in two global cities.</li> <li>- The strategies that can be used to manage the impacts of urbanisation in global cities</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>To describe patterns of global rates of urbanisation</li> <li>To describe the characteristics of global cities</li> <li>To explain the challenges created by urbanisation.</li> <li>To explain strategies which aim to reduce inequality and improve the lives of people living in global cities</li> </ul>	<p>Students will learn about key geographical processes, that result in the growth of global cities. As part of this unit student must have a case study of a global city from a HIC and a contrasting one from an NIC. We will use Sydney and Mumbai, for each location students must understand why they can be classed as a global city and explain reasons for their growths. Students will then explain the problems linked to growth of these cities and evaluate the management schemes that are being put into place.</p> <p><b>Links to prior learning:</b></p> <p>In year 8 students study a unit on population and the concept of push and pull factors. As well as this students look at shanty towns in Africa with a focus on Nairobi</p>	<p>Theme 1: Changing places</p> <p>- Changing economies</p> <p>Key Idea 1.1:</p>

Unit	Links to curriculum intent	Rationale	Links to Specification
Development	<p><b><u>Know</u></b></p> <ul style="list-style-type: none"> <li>-Indicators that are used to measure development.</li> <li>-Understand population pyramids.</li> <li>-Causes and effects of globalisation</li> <li>-Trading patterns and partnerships.</li> <li>-Reasons and impacts of an MNC locating in a HIC.</li> <li>-Reasons and impacts of an MNC locating in a NIC</li> <li>-The characteristics of Fair Trade.</li> <li>-The different types of aid.</li> </ul> <p><b><u>Know How</u></b></p> <ul style="list-style-type: none"> <li>-Development can be measured.</li> <li>-To draw, interpret and compare population pyramids.</li> <li>-Globalisation impacts the UK.</li> <li>-To evaluate global trading patterns and partnerships.</li> <li>-To evaluate the reasons and impacts of an MNC locating in a HIC.</li> <li>-To evaluate the reasons and impacts of an MNC locating in a NIC.</li> <li>-To explain the impact of Fair Trade on communities.</li> <li>-To evaluate the use of long term aid.</li> <li>-To evaluate the use of short term emergency aid.</li> </ul>	<p>Students will learn about the different levels of development in different countries. They will need to be able to define different indicators that can be used to measure development and be able to apply these to population structures of a country. The influence of TNC's and their location is also evaluated on the level of development and this then links into patterns of trade. Students need to have specific examples of trading patterns for two contrasting countries. The different types of aid also need to be defined and evaluated, this is then applied to two relevant case studies.</p> <p><b><u>Links to prior learning:</u></b></p> <p>In the Africa unit in Year 9 pupils start to consider different levels of development across the continent and how we can measure and compare levels of development</p>	<p>Theme 1: Changing places - Changing economies</p> <p>Key Idea 1.3:</p>



Unit	Links to curriculum intent	Rationale	Links to Specification
Rivers	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- The inputs, outputs, flows and stores of water are within a drainage basin.</li> <li>- How a river changes downstream.</li> <li>- How a river transports and erodes material.</li> <li>- The formation of river landforms (v-shaped valley, waterfall, gorge, meander, ox-bow lake, floodplain, estuary)</li> <li>- Factors that can affect flooding.</li> <li>- Key features of storm hydrographs.</li> <li>- The different hard and soft river management techniques.</li> <li>- The causes and effects of flooding, including flash floods.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To describe how water moves around the drainage basin cycle.</li> <li>- To describe how a river erodes and transports material.</li> <li>- To explain how rivers change downstream.</li> <li>- To explain the formation of river landforms. (v-shaped valley, waterfall, gorge, meander, ox-bow lake, floodplain, estuary)</li> <li>- To explain physical and human causes of flooding.</li> <li>- To interpret and describe storm hydrographs, including calculating the lag time.</li> <li>- To explain how factors can influence the lag time.</li> <li>- To evaluate hard and soft flood management techniques.</li> <li>- To explain the causes and effects of the Boscastle Floods.</li> <li>- To evaluate the flood management techniques used at Boscastle.</li> </ul>	<p>Students will learn about key geographical processes, that they must be able to define, describe and explain. The processes include the drainage basin cycle, process of river transportation and erosion. Students will be expected to learn how the river changes along its profile. River flooding is also studied with students learning about the generic causes and managements of floods, before applying to a case study.</p> <p><b><u>Links to prior learning:</u></b></p> <p>In year 8 students studied a unit on Rivers. This builds upon that prior knowledge of how a river changes downstream and also the formation of a water fall.</p> <p>Considering the impacts of flooding, links to the theme 1 units previously studied at GCSE, including Global Cities and Urban environments.</p> <p>Map skills will also be included in this unit, to identify different river landforms.</p>	<p>Theme 2:</p> <p>Changing Environments</p> <p>Key idea 2.2</p>

Unit	Links to curriculum intent	Rationale	Links to Specification
Coasts	<p><b>Know</b></p> <ul style="list-style-type: none"> <li>- The 4 processes of erosion and transportation.</li> <li>- How geology and human activity can effect the rate of erosion.</li> <li>- How mass movement can occur along the coastline.</li> <li>- The process of longshore drift.</li> <li>- The formation of coastal landforms of erosion and deposition.</li> <li>- How the coastline can be managed using hard and soft management techniques.</li> <li>- How we can hold the line or manage retreat.</li> <li>- How climate change can impact coastal communities at different levels of development.</li> </ul> <p><b>Know how</b></p> <ul style="list-style-type: none"> <li>- To explain how rates of erosion can be effected by geology and human activity.</li> <li>- To explain how mass movement occurs.</li> <li>- To draw a diagram of longshore drift.</li> <li>- To explain how sediment is transported by longshore drift.</li> <li>- To explain the formation of coastal landforms (cliffs, wave cut platforms, headlands, , beaches, spits and estuaries)</li> <li>- To evaluate the hard and soft coastal management techniques.</li> <li>- To evaluate the use of hold the line as a management strategy.</li> <li>- To evaluate the use of managed retreat as a management strategy.</li> <li>- To explain how communities of different levels of development can be effected by coastal flooding.</li> </ul>	<p>Students will learn about key geographical processes, that they must be able to define, describe and explain. The processes include the processes of weather, erosion, transportation and deposition. Students will be expected to learn how various coastal landforms are formed. Coastal erosion is also studied with students learning about the generic management strategies, before applying to a case studies.</p> <p><b><u>Links to prior learning:</u></b></p> <p>When in Year 9 students studied Coasts, including the different characteristics of waves, as well as the formation of a headland.</p> <p>This unit also retrieves knowledge from the River unit, where by students need to know the 4 processes of erosion.</p> <p>Coastal flooding is one of the consequences of climate change, so this links with the unit studied in Year 10.</p>	<p>Theme 2:</p> <p>Changing Environments</p> <p>Key idea 2.1</p>

# Key Stage 5 Geography Curriculum: Year 12



**Curriculum Rationale:** The WJEC Eduqas A level Geography specification encourages learners to apply geographical knowledge, theory and skills to the world around them. In turn this will enable learners to develop a critical understanding of the world's people, places and environments in the 21st century. Learners should be able to develop both knowledge and understanding of contemporary geographical concepts together with transferable skills that will enable learners to progress to higher education and a range of employment opportunities.

Unit	Links to curriculum intent	Rationale	Links to Specification
Changing Places	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>-The concept of “place”</li> <li>- The concept of continuity and change</li> <li>- The perception of place linked to direct and indirect experience and by formal and informal representation</li> <li>-The economic characteristics of places change over time</li> <li>-The role that deindustrialization has had in creating economic change and inequalities</li> <li>-The complexity of the tertiary industry and its ability to drive change and bring about decline</li> <li>- The role rebranding can have on urban places—success and failure</li> <li>-The location factors of the quaternary industry</li> </ul> <p>The role rebranding can have on rural places—success and failure</p> <p>The challenges facing rural areas</p> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>-To describe their home place incorporating the “concepts of place” eg continuity</li> <li>- To describe how continuity and change occur in locations eg West Ham</li> <li>- To describe how the perception of place is linked to direct and indirect experience and by formal and informal representation</li> <li>-To describe and explain the structural changes in employment shown by the Clark Fisher Model</li> <li>-To explain the consequences of deindustrialisation on urban places</li> <li>-To explain how gentrification brings about social change in urban places</li> <li>- To explain how Rebranding can change perceptions of urban areas and the main catalysts for re-branding</li> <li>-To assess the importance of the location factors of the quaternary industry .</li> <li>-To explain how Rebranding can change perceptions of rural areas and the main catalysts for re-branding eg broadband</li> </ul>	<p>Places are dynamic because the population, society, and the economy upon which they depend and the environment in which they are situated are in a constant state of flux. The changing economic environment impacts on employment structure with effects on the environment, the demography of the place and the consequent socio-economic characteristics. As places change there is often a need for government and society to respond through innovation, marketing and reinvention. This leads to the 'remaking' of rural and urban places. Economic restructuring drives change. This has major impacts on social inequalities, culture, and the environment in relation to learners' own lives and the lives of others. .</p>	<p>Learners must begin by studying their 'home' place or the location of their studies. They should investigate how and why it has changed over time, both in reality and how it is represented (for instance in tourist literature or the media). These changes should be in a wider regional and national and global context as the characteristics and impacts of external forces operate at different scales (individuals, businesses, interest groups, government policies and the decisions of multinational corporations). Through this knowledge, learners will gain an understanding of the way in which their own lives and the lives of others are affected by continuity and change in the nature of places</p>



Unit	Links to curriculum intent	Rationale	Links to Specification
Coasts	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The different parts of the coastal system, including the role of sediment cells.</li> <li>- The role of tides, currents and waves.</li> <li>- The features and distribution of high energy coastal environments.</li> <li>- The features and distribution of low energy coastal environments.</li> <li>- The different lithological features of rocks.</li> <li>- Factors affecting coastline such as fetch and wave refraction.</li> <li>- How sub-aerial processes lead to mass movement.</li> <li>- Erosional landforms were formed.</li> <li>- How sediment is transported and deposited along the coastline.</li> <li>- How the action of wind and associated landforms of sand dunes.</li> <li>- The conditions required for the formation of coral reefs and mangroves.</li> <li>- How landforms are created in differing timescales.</li> <li>- How coastal processes are a vital context for human activity.</li> <li>- How human activity can impact coastal processes.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To be able to describe how the coast works as a system.</li> <li>- To be able to describe the characteristics of constrictive and destructive waves.</li> <li>- To describe how tides and currents can influence coastlines.</li> <li>- To explain how landforms are created along a high and low energy coastlines.</li> <li>- To assess the importance of lithology in the formation of coastal landscapes.</li> <li>- To assess the importance of sub-aerial processes in the formation of landforms.</li> <li>- To assess the importance of erosional processes in the formation of landforms.</li> <li>- To assess the importance of transportation and depositional processes in the formation of landforms.</li> <li>- Explain the formation of sand dunes.</li> <li>- To explain the formation of coral reefs and mangroves.</li> <li>- To assess the importance of timescales in the formation of landforms.</li> <li>- Evaluate the impact that coastal processes can have on human activity.</li> <li>- Evaluate the impact that human activity can have on coastal processes.</li> </ul>	<p>As an outcome of studying this theme, learners will gain an understanding of specialised concepts: causality (linking processes to landforms and landscapes), equilibrium (related to dynamic equilibrium), feedback (the process by which the coastal system responds to changing inputs and outputs), interdependence (the relationship between human activity and coastal landscape systems), mitigation (related to coastal management), adaptation (related to shoreline plans), risk (in the context of the impact of extreme weather events associated with anthropogenic climate change on coastal processes and landforms), resilience (related to coastal management), systems (especially coastal sediment budgets), and thresholds (a factor that complicates the self-regulation of the coastal system: when crossed, it sets irreversible changes in motion).</p>	<p>Study takes place within a systems framework, focusing on spatial and temporal variations in the geomorphological processes that operate within coastal landscapes and how the flows of energy and movement of materials combine to create specific landforms on rocky, sandy and estuarine coastlines.</p> <p>Scale in this theme is fundamentally at the local level but includes a wider region to put the local into context. Some content moves beyond the local to the global to embrace a variety of landscapes not evident in the UK, for example the study of mangrove coastlines. The impact of human activity as a factor causing change within coastal landscape systems will also be studied.</p>



Unit	Links to curriculum intent	Rationale	Links to Specification
Water and Carbon– The Water Cycle	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The concepts of system and mass balance in relation to the water cycle</li> <li>- The parts of a drainage basin as a system eg key processes</li> <li>- The causes of Temporal variations in river discharge</li> <li>- The Climatic factors influencing storm hydrographs including precipitation type, amount, duration and intensity, temperature, evaporation, transpiration and antecedent conditions</li> <li>- Theories of precipitation formation eg Collision and the Bergeron-Findeisen process</li> <li>- The physical and human causes of excess run-off</li> <li>- The human and physical causes for deficit within the water cycle</li> <li>- The natural (meteorological) causes of deficit within the water cycle</li> <li>- The human causes of deficits within the water cycle</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To explain the spatial and temporal transfers of water (cryosphere and hydrosphere)</li> <li>- To explain the links between parts of the drainage basin system</li> <li>- To interpret river regime graphs and suggest reasons for differences</li> <li>- To interpret storm hydrographs and suggest reasons for variations between storm events</li> <li>- To explain the processes of precipitation formation</li> <li>- To explain the human and physical causes of excess run-off such as river mismanagement and changing and use</li> <li>- To explain The natural (meteorological) causes of deficit within the water cycle</li> <li>- To explain the human causes of deficits within the water cycle eg depleting aquifers</li> </ul>	<p>This compulsory theme is based on the physical processes which control the cycling of both water and carbon between land, oceans and the atmosphere. It takes place within a systems framework to emphasise the integrated nature of land, oceans and atmosphere, so that learners can gain an understanding of the key role played by the carbon and water cycles in supporting life on Earth. Systems operate at a range of temporal scales (seconds to millions of years) and space (plant to global) scales.</p>	<p>As an outcome of studying this theme, learners will gain an understanding of specialised concepts: adaptation (to maintain equilibrium), causality (changes within the cycles), equilibrium (of the cycles), feedback (within the systems), interdependence (of the two cycles), mitigation (to maintain equilibrium), resilience (of the system), sustainability (of the system), systems (the water and carbon cycles), and thresholds (the tipping point for change within and between the cycles).</p>

Unit	Links to curriculum intent	Rationale	Links to Specification
Water and Carbon – The Carbon Cycle	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- The concepts of system and mass balance in relation to the carbon cycle</li> <li>- Carbon pathways and processes between land and atmosphere at the local, short-term scale.</li> <li>- Carbon pathways and processes between ocean and atmosphere through the processes of absorption by biota, diffusion into and out of oceans .</li> <li>- Size of carbon stores in the tropical rainforest and temperate grassland and factors influencing the size of these stores.</li> <li>- Changes in the size of carbon stores due to human activity.</li> <li>- Changing carbon stores in peatlands over time .</li> <li>- Causes of recent increases in the atmospheric carbon store</li> <li>- Impacts of recent increases in the atmospheric carbon store on the water cycle and oceans</li> <li>- Links between the water and carbon cycles at the local scale</li> <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> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To explain the carbon cycle as a system.</li> <li>- To explain how carbon processes, both fast and slow, can transfer carbon between the atmosphere and land.</li> <li>- To explain how carbon can be transferred between the atmosphere and the ocean via the biological and inorganic pump.</li> <li>- To explain and compare carbon stores and flows in the rainforest and grasslands.</li> <li>- To explain how humans can impact carbon stores, both decrease and increase.</li> <li>- To explain the accumulation of the carbon store through the process of peat formation</li> <li>- To explain the reduction of the carbon store through peat extraction and drainage</li> <li>- To use relevant case studies to explain how peatlands can be restored.</li> <li>- To explain why atmospheric carbon levels are rising and the impact that this is having.</li> <li>- To explain how the water cycle and carbon cycle are interlinked.</li> <li>- To explain, using relevant examples, negative and positive feedback loops within the water and carbon cycles.</li> </ul>	<p>This compulsory theme is based on the physical processes which control the cycling of both water and carbon between land, oceans and the atmosphere. It takes place within a systems framework to emphasise the integrated nature of land, oceans and atmosphere, so that learners can gain an understanding of the key role played by the carbon and water cycles in supporting life on Earth. Systems operate at a range of temporal scales (seconds to millions of years) and space (plant to global) scales.</p>	<p>As an outcome of studying this theme, learners will gain an understanding of specialised concepts: adaptation (to maintain equilibrium), causality (changes within the cycles), equilibrium (of the cycles), feedback (within the systems), interdependence (of the two cycles), mitigation (to maintain equilibrium), resilience (of the system), sustainability (of the system), systems (the water and carbon cycles), and thresholds (the tipping point for change within and between the cycles).</p>

# Key Stage 5 Geography Curriculum: Year 13

**Curriculum Rationale:** The WJEC Eduqas A level Geography specification encourages learners to apply geographical knowledge, theory and skills to the world around them. In turn this will enable learners to develop a critical understanding of the world's people, places and environments in the 21st century. Learners should be able to develop both knowledge and understanding of contemporary geographical concepts together with transferable skills that will enable learners to progress to higher education and a range of employment opportunities.



Unit	Links to curriculum intent	Rationale	Links to Specification
	<p><b>Know:</b></p> <p><b>Know:</b></p> <p>The Laws and agreements regulating the use of the Earth's oceans in ways that promote sustainable economic growth and geopolitical stability</p> <p>The 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</p> <p>The 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</p> <p>How patterns of shipping have changed over time</p> <p>The growth of smuggling and people trafficking and international efforts to manage these flows</p> <p>The risks to seafloor cable data networks including those from tsunamis and undersea landslides, and international conventions to protect seafloor data cables</p> <p>The 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</p> <p>The Geopolitical tensions including the contested ownership of islands and surrounding sea beds and attempts to establish ownership of Arctic Ocean resources</p> <p>The Injustices arising from unequal access to ocean resources, including the geographical consequences for poor landlocked countries and indigenous people in some coastal areas</p> <p>The concept of the Global Commons</p> <p>The need for sustainable management of marine environments to promote long-term global growth and stability, including local no-catch zones, regional quotas limits and marine conservation zones</p> <p>The 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</p> <p><b>Know How :</b></p> <p>To describe how laws and agreements regulate the use of the Oceans eg EEZ</p> <p>To explain the strategic importance of choke points to global trade</p> <p>To describe and recognize changing trends, patterns, networks and regulation of shipping including containers and oil tankers.</p>	<p>The focus is the global governance of the Earth's oceans. Global flows that cross oceans include container shipping, oil tankers, broadband networks and illegal movements of people and goods. The oceans also function as a global commons for waste. Over time, nations have recognised the strategic importance of oceans. Throughout this section, learners are encouraged to reflect on how connectivity has linked people, places and environments across the globe, involving movements of goods, people, technology and ideas. While globalisation is sometimes characterised as a borderless world, in reality a growing number of national and international laws and conventions have been introduced. These laws and conventions aim to manage global systems and the consequences they bring to people, places and environments around the world, which are often tied to issues of power, justice and inequality. Systems operate at a range of temporal scales and space (local to global) scales.</p>	<p>As an outcome learners will gain an understanding of specialised concepts: causality (instability in ocean environments), globalisation (links between countries), mitigation (attempts to manage the global commons), risk (to ocean environments), and sustainability (management of ocean environments). )</p>



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Global Governance — Processes and Patterns of Global Migration	<p><b>Know:</b></p> <p>The concept of Globalisation, migration and a shrinking world</p> <p>The causes of international economic migration</p> <p>The Consequences of international economic migration</p> <p>How international migration can be managed through Government policies</p> <p>How flows of money can exacerbate global economic inequalities</p> <p>The causes, consequences, and management of refugee movements</p> <p>The causes, consequences, and management of rural-urban migration in developing countries</p> <p><b>Know how:</b></p> <p>To explain the factors creating a shrinking world for potential migrants including transport, communication and media representation</p> <p>To explain the factors driving international out-migration, including poverty, primary commodity prices and poor access to markets within global systems</p> <p>To assess the importance of recent drivers of migration including the development of diaspora communities, colonial and Commonwealth links and legislation permitting freedom of movement, including the EU</p> <p>To evaluate the success of migration policies of host and source countries, including the management of conflicting views about cultural change and migration held by individual UK citizens</p> <p>To evaluate how flows of money, ideas and technology are linked with economic migration and how it can reduce or exacerbate global economic inequalities, including remittances and the 'brain drain' of skilled workers.</p> <p>To explain the 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</p> <p>To assess the powerlessness of some states in conflict or disaster zones in relation to cross-border flows of people (refugees, soldiers, militia groups) and resources</p> <p>To explain the employment pull factors in urban areas in developing and emerging economies, including global supply chain growth in export processing zones (EPZs)</p>	<p>This theme covers global change and challenges. The focus is on processes and patterns of global migration, a global flow which has historically had a major impact on most countries. Technological developments have accelerated migration over time, giving rise to a shrinking world. This brings opportunities and challenges to different localities.</p>	<p>Learners will gain an understanding of specialised concepts: causality (drivers of global patterns of migration), globalisation (links between countries), risk (associated with refugees), and resilience (ability of neighbouring countries to cope with refugees)</p>



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Energy Challenges and Dilemmas	<p><b>Know:</b></p> <p>The classification and distribution of energy resources</p> <p>The physical factors determining the supply of energy (geological, climatic and relief plus favourable locations)</p> <p>The changing demand for energy ( economic, social , technological and political)</p> <p>The global management of oil and gas</p> <p>The problems associated with extraction, transport and use of energy</p> <p>The energy mixes and how it links to levels of development at different scales</p> <p>The need for sustainable solutions to meet the demand for energy</p> <p><b>Know How:</b></p> <p>To describe the differences between renewable and non renewable energy resources</p> <p>To describe the location of the global distribution of energy resources</p> <p>To evaluate the relative importance of the physical factors determining the supply of energy</p> <p>To evaluate the relative importance of each of the changing demands for energy</p> <p>To evaluate the supply and demand of oil and gas and the relative importance of governments, TNCs and OPEC in controlling the supply of oil and gas</p> <p>To evaluate the environmental problems associated with fossil fuels and other forms of energy</p> <p>To evaluate the relative importance of the political problems associated with fossil fuels and other forms of energy</p> <p>To evaluate the technological problems associated with fossil fuels and other forms of energy</p> <p>To evaluate the economic problems associated with fossil fuels and other forms of energy</p> <p>To explain at a local scale, the use of appropriate technology for sustainable energy micro-generation in developing countries</p> <p>To explain at a national scale, factors influencing the energy mix of countries at different stages of development</p> <p>To explain at the global scale, economic and political factors affecting world energy prices and energy mix</p> <p>To evaluate the importance and possible success of policies for demand reduction and increased energy efficiency at the global, national and local scale , Clean technologies for fossil fuels including carbon capture, carbon sequestration and gasification and transport technologies and sustainability of alternative energy sources</p>	<p>This optional theme covers the classification and distribution of energy resources and the physical factors determining their supply. Reasons for the growing demand for energy are explored, together with the issues associated with the management of energy supplies. Factors influencing a country's energy mix are examined, including the link with development. The traditional energy sources used in developing countries pose challenges which are being addressed through appropriate technology. Attempts to provide sustainable solutions require co-operation between governments, energy providers and individuals working together to implement international, national and local strategies. The objective is to provide clean, green energy supplies at affordable costs that are socially equitable</p>	<p>As an outcome of studying this theme learners will gain an understanding of specialised concepts: adaptation (the shift to appropriate technology), causality (of physical factors determining energy supplies), inequality (due to unequal access to energy supplies), interdependence and globalisation (in the form of agreements between OPEC countries), mitigation (through new technologies of carbon capture and sequestration), risk (the problems associated with energy supplies), and sustainability (clean, alternative energy sources)</p>

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Development in an African Context	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>- Changing definitions of development</li> <li>- Measuring development including simple and composite quantitative measures and qualitative measures</li> <li>- Variation within countries including regional, ethnic and gender differences .</li> <li>- The influence of physical factors on the development two or more countries .</li> <li>- The influence of economic factors on the development two or more countries .</li> <li>- The influence of political, social and cultural factors on the development two or more countries .</li> <li>- The impact of development on the environment of two or more countries .</li> <li>- Challenges of desertification in two or more countries .</li> <li>- Strategies to promote development in two or more countries .</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To describe the changing development indicators of specific countries.</li> <li>- To evaluate how we use different way to measure development.</li> <li>- To explain how variations within a country can impact on overall development measures.</li> <li>- To evaluate the impact of physical geography factors, such as climate, relief and resource base , on a countries overall development.</li> <li>- To evaluate the influence of free trade and trade blocs in promoting and hindering development.</li> <li>- To evaluate the influence of MNCs, including foreign direct investment, outsourcing and offshoring</li> <li>- To explain the impact that tourism and fair trade can have on a countries development.</li> <li>- To evaluate the impact of social factors on development, such as health care, education and the role of women.</li> <li>- To evaluate the impact that government and policies can have the development of a country.</li> <li>- To explain the impact that mining an resource management can have on the environment.</li> <li>- To explain the causes and consequences of desertification.</li> <li>- To evaluate the management techniques used in order to mitigate against desertification.</li> <li>- To explain the role of NGO's, World Bank and national governments in the development of countries.</li> <li>- To evaluate the impact that strategies such as SDG can have on the development of countries.</li> </ul>	<p>This optional theme covers development within Sub-Saharan Africa. Development can be defined and measured in a variety of ways and there are variations in development both between and within countries. Development is influenced by a complex interplay of a variety of physical, economic, political, social and cultural factors that can operate to both promote and hinder the development process. The interplay and operation of these factors in the development process should be studied in the context of two or more countries. The process of development often results in negative environmental impacts, including desertification, which constitutes a major challenge for many Sub-Saharan African countries. Strategies designed to manage and promote environmental, economic and social development are critical to avert the repeated humanitarian crises that characterise these countries.</p>	<p>As an outcome of studying this theme learners will gain an understanding of specialised concepts: sustainability (with respect to economic growth, society and the environment), globalisation and interdependence (the links between Sub-Saharan African countries and the rest of the world), risk (the threats of climate change, desertification and political instability), resilience (the ability of people and places to adapt to economic, social and environmental change), adaptation (in the context of a country and society undergoing rapid change), inequality (the consequences of economic, social and environmental change at regional and global scales).</p>

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Tectonic Hazards	<p><b>Know:</b></p> <ul style="list-style-type: none"> <li>-Characteristics of the Earth's structure including core, mantle and crust and the boundaries between them .</li> <li>-Processes and hazards created at each of the different plate boundaries, including hot spots.</li> <li>- The characteristics of the physical hazard profile that influence its impact.</li> <li>- The types of different volcanoes and eruptions.</li> <li>- The primary and secondary hazards created by volcanic eruptions.</li> <li>- The impacts that volcanic hazards can have on different scales.</li> <li>- Two detailed case studies of volcanic eruptions, in contrasting locations.</li> <li>- Earthquake characteristics to include P and S waves, focus, depth and epicenter.</li> <li>- The primary and secondary hazards created by earthquakes.</li> <li>- The impacts that earthquakes can have on different scales.</li> <li>- Two detailed case studies of earthquakes, in contrasting locations.</li> <li>- Factors that can increase risk and vulnerability to hazards.</li> <li>- The causes and impacts of Tsunamis.</li> <li>- How we can plan, mitigate, monitor and respond to tectonic hazards.</li> </ul> <p><b>Know How:</b></p> <ul style="list-style-type: none"> <li>- To describe the characteristics of each layer within the earths structure.</li> <li>- To explain the processes that occur at each plate boundary and their resulting hazard.</li> <li>- To explain how the physical hazard profile can influence the impact the hazard.</li> <li>- To explain how different volcano shapes can lead to different hazards.</li> <li>- To explain the primary and secondary hazards posed by volcanic eruptions.</li> <li>- To evaluate the impact that primary and secondary volcanic hazards can have on different locations.</li> <li>- To compare the impact of volcanic eruptions in contrasting locations.</li> <li>- To describe and define key terminology and processes linked to earthquakes.</li> <li>- To explain the primary and secondary hazards posed by earthquakes.</li> <li>- To evaluate the impact that primary and secondary earthquakes can have on different locations.</li> <li>- To compare the impact of an earthquake in contrasting locations.</li> <li>- To explain the cause and impact of tsunami, through the study of a relevant case study.</li> <li>- To evaluate the factors that affect risk and vulnerability of locations to tectonic hazards.</li> <li>- To evaluate how we can plan, mitigate, monitor and respond to different tectonic hazards .</li> </ul>	<p>This theme is based on a study of the structure of the Earth and the processes operative within the asthenosphere and lithosphere. These processes and their distribution are closely related to tectonic activity at plate boundaries. Tectonic hazards include primary hazards of volcanic and seismic events and secondary hazards resulting from both. Tectonic hazards have various effects on people and operate at a range of spatial and temporal scales. Steps can be taken to prepare for, adapt to and respond to tectonic hazards by employing a variety of strategies. The vulnerability of people to tectonic hazards can lead to some events turning into disasters</p>	<p>As an outcome of studying this theme, learners will gain an understanding of specialised concepts: inequality (linked to vulnerability and responses), interdependence (linked to aid), mitigation and adaptation (linked to responses to hazards), resilience (linked to strengthening strategies), risk (linked to vulnerability and turning hazards into disasters), and systems (with the cycle of tectonic renewal and take-up, for example, in the sea floor cycle).</p>