**GCSE Geography AQA – Year 10**

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|  | **INTENT** | **IMPLEMENTATION** | **IMPACT** |
| **Term** | **Substantive Knowledge**  This is the specific, factual content for the topic, which should be connected into a careful sequence of learning. | **Disciplinary Knowledge (Skills)**  This is the action taken within a particular topic in order to gain substantive knowledge. | **Assessment opportunities**  What assessments will be used to measure student progress?  Evidence of how well students have learned the intended content. |
| **Autumn Term**  **Y10**  **1A** | **The Living World: Ecosystems, Rainforest**  ***Why is this taught now?***  This clearly follows from the spiral KS3 curriculum, where students have already been introduced to different environments (e.g. Coral Reefs, Polar regions) and the idea of interdependencies.  Ecosystems combine human and physical aspects and are hence an excellent topic to start the GCSE course with. | **Cartographic skills**   * Cartographic skills relating to a variety of maps at different scales, including atlas maps (coordinates – latitude and longitude) and OS maps (scale, 4- and 6 figure grid references, contour lines, symbols) * recognise and describe distributions and patterns of both human and physical features * analyse the inter-relationship between physical and human factors on maps and establish associations between observed patterns on thematic maps. * use and understand scale, distance and direction, gradient, contour and spot height and other numerical and statistical information * Recognise, describe and draw inferences about the physical and human landscape by interpretation of map evidence, e.g. relief, drainage, settlement, land-use * Maps in association with photographs and sketch maps: draw, label, understand and interpret   **Graphical skills**   * select and construct appropriate graphs and charts to present data, using appropriate scales – line charts, bar charts, pie charts, pictograms, histograms with equal class intervals, divided bar, scattergraphs, and population pyramids * interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs   **Numerical skills**   * demonstrate an understanding of number, area and scales, and the quantitative relationships between units * design fieldwork data collection and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability * understand and correctly use proportion and ratio, magnitude and frequency * draw informed conclusions from numerical data.   **Statistical skills**   * use appropriate measures of central tendency, spread and cumulative frequency (median, mean, range, quartiles and inter-quartile range, mode and modal class) * calculate percentage increase or decrease and understand the use of percentiles * describe relationships in bivariate data * be able to identify weaknesses in selective statistical presentation of data. * Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.   **Research skills**   * Formulate enquiry and argument, identify questions and sequences of enquiry   **Literacy Skills**   * write descriptively, analytically and critically * communicate ideas effectively and develop an extended written argument * draw well-evidenced and informed conclusions about geographical questions and issues. * communicate information in ways suitable for a range of target audiences. | In class teacher assessment through Q & A  Knowledge recall activity at the start of every lesson  Homework including a mix of exam question practice and independent research.  Formative teacher assessment during lesson  End of module test |
| Ecosystems:   * exist at a range of scales and involve the interaction between biotic and abiotic components. * An example of a small scale UK ecosystem (Danson Park and Lake) to illustrate the concept of interrelationships within a natural system, an understanding of producers, consumers, decomposers, food chain, food web, nutrient cycling. * The impact on the ecosystem of changing one component, balance. * An overview of the distribution and characteristics of large scale natural global ecosystems (biomes), with focus on Tropical Rainforests and Hot Deserts   Tropical rainforests   * Distribution and physical characteristics of a tropical rainforest. * The interdependence of climate, water, soils, plants, animals and people and how plants and animals adapt to the physical conditions. * Issues related to biodiversity. * Deforestation, its causes, its economic and environmental impacts, Changing rates of deforestation and possible solutions * Value of tropical rainforests to people and the environment. * Strategies used to manage the rainforest sustainably – selective logging and replanting, conservation and education, ecotourism and international agreements about the use of tropical hardwoods, debt reduction. * A case study of a tropical rainforest to illustrate the above (Amazon Rainforest, Brazil) |
| **Autumn Term**  **1B** | **The Living World: Hot Deserts, Desertification**  ***Why is this taught now?***  This follows on from Autumn Term 1, where ecosystems were introduced in general and Tropical Rainforests discussed as an example of a specific biome. | **Cartographic skills**   * Cartographic skills relating to a variety of maps at different scales, including atlas maps (coordinates – latitude and longitude) and OS maps (scale, 4- and 6 figure grid references, contour lines, symbols) * recognise and describe distributions and patterns of both human and physical features * analyse the inter-relationship between physical and human factors on maps and establish associations between observed patterns on thematic maps. * use and understand scale, distance and direction, gradient, contour and spot height and other numerical and statistical information * Recognise, describe and draw inferences about the physical and human landscape by interpretation of map evidence, e.g. relief, drainage, settlement, land-use * Maps in association with photographs and sketch maps: draw, label, understand and interpret   **Graphical skills**   * select and construct appropriate graphs and charts to present data, using appropriate scales – line charts, bar charts, pie charts, pictograms, histograms with equal class intervals, divided bar, scattergraphs, and population pyramids * interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs.   **Numerical skills**   * demonstrate an understanding of number, area and scales, and the quantitative relationships between units * design fieldwork data collection and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability * understand and correctly use proportion and ratio, magnitude and frequency * draw informed conclusions from numerical data.   **Statistical skills**   * use appropriate measures of central tendency, spread and cumulative frequency (median, mean, range, quartiles and inter-quartile range, mode and modal class) * calculate percentage increase or decrease and understand the use of percentiles * describe relationships in bivariate data * be able to identify weaknesses in selective statistical presentation of data. * Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.   **Research skills**   * Formulate enquiry and argument, identify questions and sequences of enquiry   **Literacy Skills**   * write descriptively, analytically and critically * communicate ideas effectively and develop an extended written argument * draw well-evidenced and informed conclusions about geographical questions and issues. * communicate information in ways suitable for a range of target audiences. | In class teacher assessment through Q & A  Knowledge recall activity at the start of every lesson  Homework including a mix of exam question practice and independent research.  Formative teacher assessment during lesson  End of module test |
| Hot deserts   * Distribution and physical characteristics of a hot desert. * The interdependence of climate, water, soils, plants, animals and people and how plants and animals adapt to the physical conditions. * Issues related to biodiversity * Development of hot desert environments creates opportunities and challenges, including: mineral extraction, energy, farming, tourism and the challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility. * A case study (Thar Desert) to illustrate the above * Areas on the fringe of hot deserts are at risk of desertification, e.g. The Sahel * Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion. * Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology. |
| **Spring Term**  **2A and 2B** | **The Changing Economic World**  ***Why is this taught now?***  Throughout the GCSE curriculum, topics alternate between Human and Physical Geography, thus this Human Geography topic follows the previous Physical Geography topic (The Living World). It also builds on the spiral KS3 curriculum, where students have already been introduced to the idea of uneven development (e.g. Y9 ‘Why is the world so unequal?’) and some potential solutions, such as tourism (e.g. Y8 ‘Adventure of a lifetime’). | **Cartographic skills**   * Cartographic skills relating to a variety of maps at different scales, including atlas maps * recognise and describe distributions and patterns of both human and physical features * analyse the inter-relationship between physical and human factors on maps and establish associations between observed patterns on thematic maps. * Recognise, describe and draw inferences about the physical and human landscape by interpretation of map evidence, e.g. relief, drainage, settlement, land-use * Maps in association with photographs and sketch maps: draw, label, understand and interpret   **Graphical skills**   * select and construct appropriate graphs and charts to present data, using appropriate scales – line charts, bar charts, pie charts, pictograms, histograms with equal class intervals, divided bar, scattergraphs, and population pyramids * interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs.   **Numerical skills**   * demonstrate an understanding of number, area and scales, and the quantitative relationships between units * understand and correctly use proportion and ratio, magnitude and frequency * draw informed conclusions from numerical data.   **Statistical skills**   * use appropriate measures of central tendency, spread and cumulative frequency * calculate percentage increase or decrease and understand the use of percentiles * be able to identify weaknesses in selective statistical presentation of data. * Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.   **Literacy Skills**   * write descriptively, analytically and critically * communicate ideas effectively and develop an extended written argument * draw well-evidenced and informed conclusions about geographical questions and issues. * communicate information in ways suitable for a range of target audiences | In class teacher assessment through Q & A  Knowledge recall activity at the start of every lesson  Homework including a mix of exam question practice and independent research.  Formative teacher assessment during lesson  End of module test |
| * Different ways of classifying parts of the world according to their level of economic development and quality of life. * Different economic and social measures of development: gross national income (GNI) per head, birth and death rates, infant mortality, life expectancy, people per doctor, literacy rates, access to safe water, Human Development Index (HDI). * Limitations of economic and social measures. * Link between stages of the Demographic Transition Model and the level of development. * Causes of uneven development: physical, economic and historical. * Consequences of uneven development: disparities in wealth and health, international migration. * Various strategies exist for reducing the global development gap: investment, industrial development and tourism, aid, intermediate technology, fairtrade, debt relief, microfinance loans. * An example of how the growth of tourism in Jamaica helps to reduce the development gap * A case study of one LIC or NEE (Nigeria) to illustrate: why some LICs and NEEs are experiencing rapid economic development which leads to significant social, environmental and cultural change. * Major changes in the economy of the UK have affected, and will continue to affect, employment patterns and regional growth * Economic futures in the UK: causes of economic change: deindustrialisation and decline of traditional industrial base, globalisation and government policies * moving towards a post-industrial economy: development of information technology, service industries, finance, research, science and business parks * impacts of industry on the physical environment. * An example of how modern industrial development can be more environmentally sustainable * social and economic changes in the rural landscape in one area of population growth and one area of population decline * improvements and new developments in road and rail infrastructure, port and airport capacity * the north–south divide, what it is and strategies used to resolve regional differences * the place of the UK in the wider world. * Links through trade, culture, transport, and electronic communication. (Globalisation) * Economic and political links: the European Union (EU) and Commonwealth |
| **Summer Term**  **3A** | **UK Landscapes: Coasts**    ***Why is this taught now?***  Throughout the GCSE curriculum, topics alternate between Human and Physical Geography, thus this Physical Geography topic follows the previous Human Geography topic (The Changing Economic World).  It also builds on the spiral KS3 curriculum, where students have already been introduced to different landscapes (e.g. Y7 ‘Raging Rivers’ and Y8 ‘Crazy Coasts’).  Students are required to study UK physical landscapes and two from Coastal landscapes in the UK, River landscapes in the UK and Glacial landscapes in the UK, of which we teach the first two. | **Cartographic skills**   * Cartographic skills relating to a variety of maps at different scales, including atlas maps * recognise and describe distributions and patterns of both human and physical features * analyse the inter-relationship between physical and human factors on maps and establish associations between observed patterns on thematic maps. * Recognise, describe and draw inferences about the physical and human landscape by interpretation of map evidence, e.g. relief, drainage, settlement, land-use * Maps in association with photographs and sketch maps: draw, label, understand and interpret   **Graphical skills**   * select and construct appropriate graphs and charts to present data, using appropriate scales – line charts, bar charts, pie charts, pictograms, histograms with equal class intervals, divided bar, scattergraphs, and population pyramids * interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs.   **Numerical skills**   * demonstrate an understanding of number, area and scales, and the quantitative relationships between units * understand and correctly use proportion and ratio, magnitude and frequency * draw informed conclusions from numerical data.   **Statistcal skills**   * use appropriate measures of central tendency, spread and cumulative frequency * calculate percentage increase or decrease and understand the use of percentiles * be able to identify weaknesses in selective statistical presentation of data. * Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.   **Literacy Skills**   * write descriptively, analytically and critically * communicate ideas effectively and develop an extended written argument * draw well-evidenced and informed conclusions about geographical questions and issues. * communicate information in ways suitable for a range of target audiences | In class teacher assessment through Q & A  Knowledge recall activity at the start of every lesson  Homework including a mix of exam question practice and independent research.  Formative teacher assessment during lesson  End of module test  End of Year Assessment, 90-minutes in-class test, including the following topics: The Living World, Changing Economic World, Coasts. |
| 1. UK physical landscapes   This introduction provides and overview of the range of diverse landscapes in the UK and the location of major upland/lowland areas and river systems.   1. Coastal landscapes in the UK  * The coast is shaped by a number of physical sub-aerial and marine process, including weathering, mass movement, erosion, transportation (Long-shore drift) and deposition. The coast is also shaped by different wave types and their characteristics. * Distinctive coastal landforms are the result of rock type, structure and physical processes: * How geological structure and rock type influence coastal forms * Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks. * Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars. * An example of a section of coastline in the UK to identify its major landforms of erosion and deposition (Jurassic Coast in Dorset) * Different management strategies can be used to protect coastlines from the effects of physical processes: * The costs and benefits of hard engineering (sea walls, rock armour, gabions and groynes) and soft engineering (beach nourishment and reprofiling, dune regeneration, managed retreat) – coastal realignment. * An example of a coastal management scheme in the UK (Herne Bay) to show the reasons for management, the management strategy, the resulting effects and conflicts. |
| **Summer Term**  **3B** | **UK Landscapes: Rivers and Fieldwork**  ***Why is this taught now?***  This is the second half of the ‘UK Landscapes’ unit, which focuses on Rivers. It builds on the spiral KS3 curriculum, where students have already been introduced to different landscapes (e.g. Y7 ‘Raging Rivers’ and Y8 ‘Crazy Coasts’).  Students are required to study two UK physical landscapes such as Coastal landscapes and River landscapes.  Fieldwork on Human and Physical research questions is compulsory as part of the GCSE Geography course and will be completed in the summer at Herne Bay.  **Fieldtrip 1 Physical Investigation.**  Visit to Herne Bay, Kent coast to study the coastal management strategies (Used as a case study for a coastal management scheme)  **Investigation title: To what extent are the coastal defences successful in Herne Bay?** | **Cartographic skills**   * Cartographic skills relating to a variety of maps at different scales, including atlas maps * recognise and describe distributions and patterns of both human and physical features * analyse the inter-relationship between physical and human factors on maps and establish associations between observed patterns on thematic maps. * Recognise, describe and draw inferences about the physical and human landscape by interpretation of map evidence, e.g. relief, drainage, settlement, land-use * Maps in association with photographs and sketch maps: draw, label, understand and interpret   **Graphical skills**   * select and construct appropriate graphs and charts to present data, using appropriate scales – line charts, bar charts, pie charts, pictograms, histograms with equal class intervals, divided bar, scattergraphs, and population pyramids * interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs.   **Numerical skills**   * demonstrate an understanding of number, area and scales, and the quantitative relationships between units * understand and correctly use proportion and ratio, magnitude and frequency * draw informed conclusions from numerical data.   **Statistical skills**   * use appropriate measures of central tendency, spread and cumulative frequency * calculate percentage increase or decrease and understand the use of percentiles * be able to identify weaknesses in selective statistical presentation of data. * Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.   **Literacy Skills**   * write descriptively, analytically and critically * communicate ideas effectively and develop an extended written argument * draw well-evidenced and informed conclusions about geographical questions and issues. * communicate information in ways suitable for a range of target audiences | In class teacher assessment through Q & A  Knowledge recall activity at the start of every lesson  Homework including a mix of exam question practice and independent research.  Formative teacher assessment during lesson  Fieldwork booklet to be completed  **Primary data collection-** bi-polar survey, groyne measurements, field sketches, sediment size and angularity. |
| * The shape of river valleys changes as rivers flow downstream from their source to their mouth: * The long profile and changing cross profile of a river and its valley. * Fluvial processes: a) erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion, b) transportation – traction, saltation, suspension and solution and c) deposition – why rivers deposit sediment. * Distinctive fluvial landforms result from different physical processes: * Characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges. * Characteristics and formation of landforms resulting from erosion and deposition – meanders and ox-bow lakes. * Characteristics and formation of landforms resulting from deposition – levées, flood plains and estuaries. * An example of a river valley in the UK (River Trent) to identify its major landforms of erosion and deposition. * Different management strategies can be used to protect river landscapes from the effects of flooding: * How physical and human factors affect the flood risk – precipitation, geology, relief and land use. * The use of hydrographs to show the relationship between precipitation and discharge. * The costs and benefits of the following management strategies: (a) hard engineering (dams and reservoirs, straightening, embankments, flood relief channels) and (b) soft engineering (flood warnings and preparation, flood plain zoning, planting trees and river restoration). * An example of a flood management scheme in the UK (Jubilee River on the Upper Thames) to show why the scheme was required, how the management strategy works and what social, economic and environmental issues it has created. |