











2021-22 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

<p>HALF TERM 1: PEOPLE OF THE UK</p> <p>Key idea 1: Cities have distinct challenges and ways of life, influenced by its people and their culture.</p> <ul style="list-style-type: none"> Urbanisation is the increasing percentage of people living in towns and cities Urban means towns and cities. Rural means countryside Migration is the movement of a person to another place to live, usually for work Push factors cause a person to leave, pull factors attract a person to a place In the UK, urbanisation took place during the industrial revolution Cities grew in stages, linked closely to the industrial revolution, WWI and WWII, current population issues Cities developed land-use zones – Central Business District, inner city, inner suburbs and outer suburbs Each of these zones had their own characteristics <p>Case study: Birmingham</p> <ul style="list-style-type: none"> Birmingham is in the West Midlands and is the UK's second city Birmingham grew as settlement during this time due to its coal deposits and was part of 'The Black Country' The city has excellent transport links Birmingham has experienced three waves of international migration – 1950' Caribbean, 1960-70's India and Pakistan and 2000s Eastern European Birmingham has many attractions – sporting, education, retail, entertainment <p>Contemporary Challenge 1: Housing</p> <ul style="list-style-type: none"> There is a shortage of affordable housing. 30% of households are single occupancy, with 70% of these occupied by the elderly. Sustainable strategy to overcome: new housing is being built in and around the city including Selly Oak (brownfield) – a site that has been built on before (an old hospital) that has been cleared and reused. This site is located in the inner city and has a variety of affordable houses (average price of £225,000) Aldridge (greenfield) – a site that has not been built on before, to the north east of the city in the countryside and has a small number of executive houses (average price of £650,000). <p>Contemporary Challenge 2: Traffic</p> <ul style="list-style-type: none"> Congestion is a major issue, with the M6 and A38 regularly at a standstill. In 2017, motorists in Birmingham spent over 9% of their total drive time in congestion last year, costing the city £632 million. Pollution caused by exhausts is leading to health concerns. Sustainable strategies to overcome: to reduce the amount of traffic the city has (1) more than 50kms of new cycle paths along the canal towpaths; (2) the construction of the M6 Toll and (3) the growth of Midland Metro tram line, operating between Birmingham and Wolverhampton. <p>Contemporary Challenge 3: Waste</p> <ul style="list-style-type: none"> The United Kingdom produces in the region of 30 million tonnes of household rubbish each year. As recently as the 1990s, more than 80% of this waste used to go direct to landfill. Sustainable strategies to overcome: recent publication by the council, titled 'A Waste Strategy for Birmingham' sets out the city council's vision for waste management. It includes increasing the range of recyclable materials collected at the curbside, including the potential for food waste and a 70% recycling rate by 2030 and zero waste to landfill by 2035. <p>Key idea 2: There are causes and consequences of urban trends in the UK</p> <ul style="list-style-type: none"> There are three urban trends in the UK 		<p>Core textbook pages 68 to 70 - 'Urban trends in the UK'</p> <ul style="list-style-type: none"> Newspaper article on housing shortage Case study: Aldridge and Selly Oak Case study: Solving Birmingham's traffic problem GeoActive: Waste management in the UK: recent developments Newspaper article on Birmingham's twenty-year waste strategy GeoActive: Sustainable urban living: Birmingham and the West Midlands
		<p>Students will complete at least three extended pieces of writing:</p> <ul style="list-style-type: none"> To what extent is housing the greatest contemporary challenge affecting your chosen city? Examine the sustainable strategies used in your chosen city to overcome one contemporary challenge Examine the impacts of counter-urbanisation on villages such as Tideswell
		<p>Students will have four opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> Pair work to identify key characteristics of a city's urban land use zones – CBD, inner city, inner suburbs and outer suburbs Class discussion to evaluate success of Birmingham solutions to its housing shortage Think, pair, share to evaluate success of Birmingham solutions to its traffic problems Think, pair, share to evaluate success of Birmingham solutions to its waste management
		<ul style="list-style-type: none"> History: growth of Birmingham linked to the industrial revolution RS: growth and diversity of religion in Birmingham English: comprehension of written articles and use of PEEL to structure paragraphs








2022-23 CURRICULUM MAP FOR GEOGRAPHY

YEAR 10

<ul style="list-style-type: none"> • Suburbanisation is the outward spread of cities • It leads to building on the green belt • Counter-urbanisation is the decreasing percentage of people living in towns and cities as people move to the countryside • Caused by cheaper housing in the countryside and improved infrastructure • It leads to rising house prices in the countryside and traffic congestion • Re-urbanisation is the redevelopment of inner-city areas • Often executive housing and unaffordable for most. 		
<p>HALF TERM 2: PEOPLE OF THE UK</p> <p>Key idea 3: The UK is a diverse and unequal society which has geographical patterns</p> <ul style="list-style-type: none"> • The UK is a diverse and unequal society. • This diversity is evident in employment, average income, life expectancy, educational attainment, ethnicity and access to broadband • There is pattern to this diverse and unequal society, with the South of the UK being more prosperous than the North. • Uneven spread is due to the North traditionally being the base for manufacturing industries and the South the location of London and service industries <p>Key idea 4: There are different causes and consequences of development within the UK</p> <ul style="list-style-type: none"> • The UK has a North / South divide • Causes of this divide are geographical location, economic change, infrastructure and government policy • UK government has plans to reduce the N/S divide • HS2 is a high-speed train planned to link Birmingham to London and then Leeds and Manchester to Birmingham. To identify benefits and problems. • Enterprise Zones are areas of industrial decline selected for investment. The 'i54' is a local example. To identify benefits and problems. <p>Case study: the consequences of economic growth and/or decline for one place in the UK</p> <ul style="list-style-type: none"> • Birmingham's CBD has declined since 1980's due to out-of-town retail parks, internet shopping and safety fears • Birmingham has invested to rebrand the CBD • The Bullring is a major shopping centre – evaluate success • Brindleyplace is a centre of entertainment – evaluate success • The German Market is an annual attraction – evaluate success <p>Key idea 5: The UK's population is changing</p> <ul style="list-style-type: none"> • The UK's population has changed over time • Factors influencing this change include access to diet, clean water, medical developments, status of women, education and agricultural developments • The Demographic Transition Model (DTM) is a graph that displays how a country's changes over time population • Birth rate and death rate have changed in the UK • Population pyramids show the structure of a country's population. • Population pyramids change and mirror the five stages of the DTM • The UK's population pyramids have changed significantly since 1921 • The UK has an ageing population. This means there is an increasing percentage of people aged 65 and over • The UK's ageing population is caused by improved lifestyle and medical developments • An ageing population brings problems and benefits • There are strategies to cope with an ageing population in the UK – raise age of retirement, private pensions, immigration • Immigrants people move into the UK from another country 		<p>Core textbook pages 41 to 47 - 'Diversity in the UK'</p> <p>Core textbook pages 48 to 51 - 'Development of the UK'</p> <p>Core textbook pages 56 to 67 - 'The UK's changing population'</p> <p>Core textbook pages 38 to 40 - 'The UK's major trading partners'</p> <ul style="list-style-type: none"> • Newspaper article on HS2 • Case study: Enterprise zones and the i54 development • Case study: The Bullring and Brindley Place • GeoActive: Population pyramids explained • Geofile: Ageing populations • GeoActive: Immigration to the UK: A good or a bad thing? • Polish Migration to the UK card sort activity
		<p>Students will complete at least five extended pieces of writing:</p> <ul style="list-style-type: none"> • Explain how investment in infrastructure can lead to uneven development within the UK • Explain two effects of an ageing population • Discuss the social and economic impacts of immigration on the UK in the 21st century • Discuss how geographical location causes uneven development in the UK • Examine the consequences of economic growth and/or decline for your chosen place or region in the UK
		<p>Students will have four opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> • Think, pair, share to evaluate the success of the UK's government to address the north / south divide • Think, pair, share to evaluate the success of the Birmingham's attempts to rebrand its CBD • Pair work to evaluate possible solutions to the ageing population issue • Class discussion – 'Immigration is good for the UK'
		<ul style="list-style-type: none"> • History: growth of 'The North' linked to the industrial revolution • RS: growth and diversity of religion in the UK • English: comprehension of written articles and use of PEEL to structure paragraphs • Mathematics: drawing graphs and analysing data







2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

<ul style="list-style-type: none"> • Emigrants are people who move out of a country • Immigration has been steady over the last fifteen years • Eastern Europe is a major source of immigrants – to include reasons why • Immigration creates economic and social advantages and disadvantages – to include examples <p>Key idea 6: The UK is connected to many other countries and places</p> <ul style="list-style-type: none"> • The UKs trades with other countries – to identify trading partners • Exports are goods that are sold - to identify goods • Imports are goods that are bought – to identify goods 		
<p>HALF TERM 3: LANDSCAPES OF THE UK</p> <p>Key idea 1: The physical landscapes of the UK have distinctive characteristics</p> <ul style="list-style-type: none"> • There are three distinct landscapes in the UK – upland, lowland and glaciated • The uplands are predominantly in the NW and the lowlands are in the SE • Some upland areas are glaciated – Snowdonia, Lake District and Grampians • There are three types of rock that influence how human use the land - igneous, metamorphic and sedimentary • Each of the three UK’s landscapes have distinct characteristics – climate, soil, human use <p>Key idea 2: There are a number of geomorphic processes which create distinctive landscapes</p> <ul style="list-style-type: none"> • A river channel and valley change downstream • The long profile of a river shows the changing height of a river over distance • The changes in a river and river valley can be categorised in three stages – upper course, middle course and lower course • Geomorphic processes shape the landscape • Geomorphic processes include erosion, transportation, deposition, mass movement and weathering • Erosion is the wearing away of the land • There are four processes of erosion - hydraulic action, abrasion, attrition and solution • Transportation is the movement of material • There are four processes of transportation - traction, saltation, suspension, solution • Mass movement is the movement of land due to gravity • Types of mass movement include rockfall and mudslide • Weathering is the breakdown of rock • Types of weathering include mechanical, chemical and biological <p>Key idea 3: Rivers create a range of landforms which change with distance from their source within a river basin</p> <ul style="list-style-type: none"> • Upper course landforms to be described, with annotated diagrams: V-shaped valley, waterfalls and gorges. To include and highlight the importance of each relevant geomorphic process. 	   	<p>Core textbook pages 4 to 9 – ‘The physical landscapes of the UK’</p> <p>Core textbook pages 10 to 15 – ‘Geomorphic processes’</p> <p>Core textbook page 16 – ‘The formation of river landforms’</p> <ul style="list-style-type: none"> • Information sheet on types of rock – igneous, metamorphic and sedimentary <p>Students will complete at least one extended piece of writing:</p> <ul style="list-style-type: none"> • Explain the stages in the formation of a gorge. You may use a diagram <p>Students will have five opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> • Pair work to identify key characteristics of the UK’s major physical landscapes • Group work to identify the main characteristics of the three types of rock – igneous, sedimentary and metamorphic • Class discussion to identify how a river changes downstream, leading to the introduction of the Bradshaw Model • Think, pair, share to identify the correct sequencing of stages of a v-shaped valleys formation • Think, pair, share to identify the correct sequencing of stages of a waterfall’s formation <p>English: comprehension of written articles and use of PEEL to structure paragraphs</p> <p>Science: geomorphic processes and rock types</p>
<p>HALF TERM 4: LANDSCAPES OF THE UK</p> <p>Key idea 3: Rivers create a range of landforms which change with distance from their source within a river basin</p> <ul style="list-style-type: none"> • Middle course landforms to be described, with annotated diagrams: meanders and ox-bow lakes. To include and highlight the importance of each relevant geomorphic process. • Lower course landforms to be described, with annotated diagrams: flood plains and levees. To include and highlight the importance of each relevant geomorphic process. 		<p>Core textbook page 17 – ‘The formation of river landforms’</p> <p>Core textbook pages 24 to 27 – ‘How geomorphic processes shape coastal landscapes’</p> <p>Core textbook pages 28 to 31 – ‘The formation of coastal landforms’</p> <ul style="list-style-type: none"> • Case study: River Tees • GeoActive: River landforms – The River Tees • Case study: The Holderness Coastline






2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

<p>Case study: a UK river basin – The River Tees</p> <ul style="list-style-type: none"> The River Tees is located in NE England. Its source is in the Pennines and its mouth is in the North Sea Upper course: V-shaped valleys are in the Pennines, waterfall and gorge is known as High Force. Upper course used by humans for tourism, sheep farming and water supply (Cow Green Reservoir) Cow Green Reservoir affects the flow of the water Middle course: there is a meander at the town of Yarm. Used by humans for settlement and arable farming Arable farming reduces flow due to irrigation and can cause eutrophication Lower course: flood plain around Stockton and Hartlepool. Used by humans for settlement, industry and the port at Teeside. Industry can cause pollution of the river and the barrage at Teeside can affect the flow of the river 		<ul style="list-style-type: none"> GeoActive: Holderness coastal management: an update
<p>Key idea 4: There are a range of landforms within the coastal landscape</p> <ul style="list-style-type: none"> Waves are formed by the friction of the wind There are two types of wave that influence coastal landforms - constructive and destructive waves There are two types of landform on the coastline – erosional and depositional. 		<p>Students will complete at least six extended pieces of writing:</p> <ul style="list-style-type: none"> Examine how far human activity has positively impacted the coastal landscape in your chosen area Explain how geomorphic processes influence the formation of a meander. You may use a diagram Examine the impact of geomorphic processes on the formation of landforms in your chosen coastal landscape Explain the formation of a spit. You may use a diagram 'Human activities have a greater impact on the landscape in your chosen river basin than geomorphic processes.' To what extent do you agree? Examine the impact of coastal management on your chosen coastal landscape.
<ul style="list-style-type: none"> Erosional landforms to be described, with annotated diagrams - headlands and bays, cliffs with wave-cut notch and platforms, and caves, arches and stacks. To include and highlight the importance of each relevant geomorphic process Longshore drift is the zig-zag movement of material along the coastline Wave refraction is the wrapping of the waves around the coastline, due to friction. Particularly important at headlands and bays Depositional landforms to be described, with annotated diagrams - beaches and spits. To include and highlight the importance of each relevant geomorphic process 		<p>Students will have four opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> Pair work to identify the key human and physical factors shaping the River Tees Think, pair, share to identify the correct sequencing of stages forming a headland and bay, to include the idea of wave refraction Think, pair, share to identify the correct sequencing of stages forming a spit Pair work to identify the key human and physical factors shaping the Holderness coastline
<p>Case study: a UK coastal landscape – The Holderness Coastline</p> <ul style="list-style-type: none"> The Holderness Coastline is in the NE England, from Flamborough Head to Spurn Point. Erosional landforms are at Flamborough Head, depositional landforms are at Spurn Point Geology is important: chalk at FH and boulder clay (til) below to SP It is the fastest eroding coastline in Europe C.B.A. - Mablethorpe was protected because of the coastal road C.B.A. - Withernsea was protected because of its economic importance as a tourist town Mablethorpe was protected by two stone groyne and rock armour, costing £2 million Withernsea was protected by a sea wall, groyne and rock armour Coastal management can have positive and negative impacts and lead to issues elsewhere Cowden Farm - erosion increased significantly due to work at Mablethorpe Spurn Point destruction due to restricting longshore drift 		<p>English: comprehension of written articles and use of PEEL to structure paragraphs Science: geomorphic processes and rock types</p>
<p>HALF TERM 5: UK ENVIRONMENTAL CHALLENGES</p> <p>Key idea 1: The UK has a unique climate for its latitude which can create extreme weather conditions</p> <ul style="list-style-type: none"> Weather is the short-term changes in the atmosphere Climate is the long-term changes in the atmosphere – temperature and rainfall The UK has a unique climate for its latitude 		<p>Core textbook page 84 – ‘What affects the weather in the UK?’ Core textbook pages 85 to 87 – ‘Extreme weather in the UK’ Core textbook pages 88 to 89 – ‘A UK flood event caused by extreme weather conditions’ Core textbook pages 94 to 97 – ‘What are the energy sources in the UK?’</p>







2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

<ul style="list-style-type: none"> • Factors that create this unique climate are prevailing wind, air masses, the North Atlantic Drift and continentality • The UK receives five types of air masses. They are based on tropical, polar or arctic and maritime and continental • Extreme weather is any weather that is unusual. • In 2018, the UK experienced two significant extreme weather events: the 'Beast from the East' and a heatwave. To identify air mass associated with each event and the effects 		<ul style="list-style-type: none"> • Geofile: A comparison of air masses affecting the UK • Case study: The beast from the east and the heatwave of 2018. • Case study: The Somerset floods, 2014 • Case study: Chernobyl • GeoActive: Recent developments in renewable and clean energy: UK
<p>Key idea 2: Extreme flood hazard events are becoming more commonplace in the UK</p> <p>Case study: a UK flood event caused by an extreme weather conditions - The Somerset Levels</p> <ul style="list-style-type: none"> • The Somerset Levels are located in South West England • The landscape is very flat and much of the land is below sea level. • In 2014, the UK was hit by the worst storms for twenty years and the area experienced severe flooding. • There were specific human and physical causes that produced the flood. • Economic effects included a cost to the Somerset economy of between £82 and £147 million; livestock having to be moved and sold and local businesses lost trade. • Social effects included 600 homes with many people forced to live in temporary accommodation for several months after the flood; journey times were much longer as roads were flooded. • Environmental effects include 6,900 hectares of agricultural land being under water for a month. Wildlife not severely affected. • The response of the stakeholders was specific to the flood. To include the Environment Agency installing 62 pumps, working 24 hours a day to remove 1.5 million tonnes of water; the Royal Marines helping the residents of villages and the recommencement of dredging 		<p>Students will complete at least three extended pieces of writing:</p> <ul style="list-style-type: none"> • For a named flood, explain the effects of the UK flood on people • For a named flood, explain the effects of the flood on people • For a named flood, explain two causes of the UK flood event
<p>Key idea 3: There are a range of energy sources available to the UK</p> <ul style="list-style-type: none"> • A resource is something that is useful to humans • Non-renewable resources can only be used once and will run-out • Fossil fuels include coal, oil and natural gas and were made 65 million years ago • Renewable energy is energy that is naturally replaced once used and will never run out • Alternative energy means energy that is an alternative to fossil fuels i.e. renewable and nuclear • There are eleven main types of energy that are available to the UK – biomass, wind, hydro (HEP), geothermal, tidal, wave, solar, coal, oil, natural gas and nuclear • Energy mix is the combination of energy that the UK has used to meet its energy demands • The UK's energy mix has changed over the last 60 years, seeing an increase in the contribution of renewable and a decrease in fossil fuels • Fossil fuels have an environmental impact in the UK – open-cast mining, oil spills and climate change • Nuclear energy could have a significant impact on the UK – nuclear disasters like Chernobyl and nuclear waste • Renewable energy has an environmental impact on the UK – killing of birds, animal habitats and climate change whilst constructing 		<p>Students will have three opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> • Think, pair, share to evaluate the response to the Somerset Levels flooding • Pair work to discuss current and future importance of the types of energy available to the UK • Group work to discuss and present 'Should the UK invest in nuclear energy?'
		<ul style="list-style-type: none"> • English: comprehension of written articles and use of PEEL to structure paragraphs • Science: types of energy • Mathematics: drawing graphs and analysing data • History: Use of coal to fuel the UK's economic development



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

<p>HALF TERM 6: UK ENVIRONMENTAL CHALLENGES</p> <p>Key idea 4: Energy in the UK is affected by a number of factors and requires careful management and consideration of future supplies</p> <ul style="list-style-type: none"> The UK's energy is affected by a number of factors and requires careful management and consideration of future supplies. Factors that have influenced the energy mix include the establishment of OPEC, the closing of the UK's coal mines, the EU's 'Gas Burn' and EU and UN policy on climate change The changing patterns of energy supply and demand in the UK from 1950 to the present day is linked to the energy conservation. Use of energy increase between 1970 and 2004 – to include reasons why Household demand for energy has decreased since 2004 due to rising fuel prices and initiative to conserve energy – governments insulation policy, new standards for boilers, EU 'energy labels' and smart meters The sustainable use of energy resources is about ensuring their long-term availability for future generations National strategies to achieve this include increasing the contribution of renewable energy sources; encouraging energy saving and conservation; developing nuclear energy and developing carbon capture and storage. To include advantages and disadvantages Local strategies to achieve this include anaerobic digestion such as at Silloth, Cumbria. To include advantages and disadvantages Fracking is a recent possibility for the UK to increase its use of natural gas. To include advantages and disadvantages Nuclear energy remains a possibility for the UK and currently accounts for 16% of the UK's energy supply. There are plans to expand - to include advantages and disadvantages To know the economic, political and environmental factors affecting UK energy supply in the future. 		<p>Core textbook page 98 – 'The energy mix in the UK'</p> <p>Core textbook pages 99 to 100 – 'Energy supply changes since 1950'</p> <p>Core textbook pages 101 to 103 – 'Energy demand changes since 1950'</p> <p>Core textbook pages 104 to 107 – 'Sustainable energy solutions'</p> <p>Core textbook pages 108 to 115 – 'UK energy futures'</p> <ul style="list-style-type: none"> Case study: Nuclear energy Geofile: The energy balance in the UK Information sheet on the mechanisation of farming and commercial fishing Case study: Water transfer – Ely-Ouse to Essex Geofile: Fracking hell! – a new dash for gas <p>Core textbook pages 241 to 247 – 'Fieldwork'</p>
<p>Key idea 5: Humans use, modify and change ecosystems and environments to obtain food, energy and water</p> <p>Providing food</p> <ul style="list-style-type: none"> Mechanisation of farming is the change from manual labour to machines and large-scale farming It has led to the removal of hedgerows and the threat of eutrophication Commercial fishing utilises large fishing trawlers and nets Fish stocks are under threat due to over fishing and apex predators are being caught by mistake <p>Providing energy</p> <ul style="list-style-type: none"> Wind farms are found on high ground or at sea to capture strongest winds During construction greenhouse gases are produced and animal habitats are destroyed. Turbines kill birds Fracking blasts water, sand and chemical into shale beneath the ground. This can pollute water supplies and cause mini-earthquakes <p>Providing water</p> <ul style="list-style-type: none"> The supply of water in the UK is an issue. This is due to the most rain falls in the West and North, but the greatest demand is in the South and East (for industry, agriculture and homes). Reservoirs can store water behind dams They are expensive, flood farming land and can fill up with sediment affecting wildlife. Building the dam means using heavy machinery which killed local flora and fauna. Water transfer schemes can move water to where it is needed. Transferring water can affect nutrient balances in the water harming wildlife and it relies on hard engineering can alter natural river flows. 		<p>Students will complete at least five extended pieces of writing:</p> <ul style="list-style-type: none"> Using Fig.5 and Fig.6 and your own knowledge, assess whether the sustainable management of energy has been successful at a local scale Using Fig.4 and your own knowledge, assess how far fracking has modified the UK environment to provide energy Examine the impacts of the development of one or more renewable sources on people and the environment in the UK Explain the impacts of mechanisation of farming on ecosystems and environments Assess whether non-renewable energy should contribute to the UK's future energy supply
<p>Providing food</p> <ul style="list-style-type: none"> Mechanisation of farming is the change from manual labour to machines and large-scale farming It has led to the removal of hedgerows and the threat of eutrophication Commercial fishing utilises large fishing trawlers and nets Fish stocks are under threat due to over fishing and apex predators are being caught by mistake <p>Providing energy</p> <ul style="list-style-type: none"> Wind farms are found on high ground or at sea to capture strongest winds During construction greenhouse gases are produced and animal habitats are destroyed. Turbines kill birds Fracking blasts water, sand and chemical into shale beneath the ground. This can pollute water supplies and cause mini-earthquakes <p>Providing water</p> <ul style="list-style-type: none"> The supply of water in the UK is an issue. This is due to the most rain falls in the West and North, but the greatest demand is in the South and East (for industry, agriculture and homes). Reservoirs can store water behind dams They are expensive, flood farming land and can fill up with sediment affecting wildlife. Building the dam means using heavy machinery which killed local flora and fauna. Water transfer schemes can move water to where it is needed. Transferring water can affect nutrient balances in the water harming wildlife and it relies on hard engineering can alter natural river flows. 		<p>Students will have six opportunities to collaborate with peers:</p> <ul style="list-style-type: none"> Pair work to identify and discuss the importance of the factors that have affected the UK's energy supply since 1950 Think, pair, share to identify and discuss the importance of factors that affected the UK's energy demand since 1950 Pair work to discuss the advantages and disadvantages of wind farms Group work to discuss and present 'Should the UK invest in fracking?' Fieldwork: Physical – 'As velocity increases, so does width and depth' Fieldwork: Human – 'Church Stretton caters for an ageing population'
<p>Providing water</p> <ul style="list-style-type: none"> The supply of water in the UK is an issue. This is due to the most rain falls in the West and North, but the greatest demand is in the South and East (for industry, agriculture and homes). Reservoirs can store water behind dams They are expensive, flood farming land and can fill up with sediment affecting wildlife. Building the dam means using heavy machinery which killed local flora and fauna. Water transfer schemes can move water to where it is needed. Transferring water can affect nutrient balances in the water harming wildlife and it relies on hard engineering can alter natural river flows. 		<ul style="list-style-type: none"> English: comprehension of written articles and use of PEEL to structure paragraphs Science: types of energy Mathematics: drawing graphs and analysing data History: Impact of Middle East on the UK, impact of the mechanisation of farming on the landscape



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

FIELDWORK

Geographical fieldwork may be defined as the experience of understanding and applying specific geographical knowledge, understanding and skills to a particular and real out-of-classroom context. In undertaking fieldwork, learners practise a range of skills, gain new geographical insights and begin to appreciate different perspectives on the world around them. Fieldwork adds 'geographical value' to study, allowing learners to 'anchor' their studies within a real world context.

The following areas of fieldwork will be assessed, through both learners' own experiences of fieldwork and unfamiliar contexts:

- understanding of the kinds of question capable of being investigated through fieldwork and an understanding of the geographical enquiry processes appropriate to investigate these
- understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement
- processing and presenting fieldwork data in various ways including maps, graphs and diagrams
- analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories
- drawing evidenced conclusions and summaries from fieldwork transcripts and data
- reflecting critically on fieldwork data, methods used, conclusions drawn, and knowledge gained.



Keywords

10.1: People of the UK

Ageing population	a population with a rising average age / increasing proportion of people aged over 65
Amenities	things like restaurants, health clubs, shops and cinemas that people want access to
Birth Rate	the number of births per 1,000 people in a year
Brownfield site	a piece of land that has been used and abandoned, and is now awaiting some new use
Bus lane	a marked lane in a road in which only public transport vehicles such as buses and taxis are permitted.
Commuters	people who travel from their home to their place of work, the distance being such that the journey most often involves some sort of transport
Congestion charging	a system of traffic control that charges drivers who enter the congested central areas of a city
Conservation	managing the environment in order to preserve, protect or restore it



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

Counter-urbanisation	the movement of people and employment from major cities to smaller settlements and rural areas located just beyond the city, or to more distant smaller cities and towns.
Cultural background	the origins of an individual's or group's belief system
Death rate	the number of deaths per 1,000 people in a year
Deprived area	an area in which there is a damaging lack of the material benefits that are considered to be basic necessities - employment, housing etc.
Derelict land	land on which factories or houses have been demolished
Disparity	a great difference - e.g. between parts of a country in terms of wealth.
Disposable income	the amount of money which a person has available to spend on non-essential items, after they have paid for their food, clothing and household running costs.
Economic migrant	a person who moves in order to find employment
Emigrant	A person leaving a country or region to live somewhere else (for at least a year)
Employment Structure	The proportion of people who work in primary, secondary, tertiary or quaternary jobs.
Enterprise Zones	areas designated by the government to promote economic growth, by being able to offer financial benefits such as grants for buildings and machinery and a relaxation of planning regulations.
Goods	produced items and materials
Greenfield site	a piece of land that has not been built on before, but is now being considered for development
Immigrant	a person arriving in a country or region to live (for at least a year)
Landfill	disposal of rubbish by burying it and covering it over with soil
Migration	the process of people changing their place of residence, either within or between countries
Natural increase	the difference between birth rate and death rate
Net in-migration	the increase in a country's population as a result of more people arriving than leaving
Population pyramid	a diagrammatic way of showing the age and sex structure of a population
Population structure	the composition of a population, usually in terms of its age and gender
Redevelopment	development that aims to stimulate growth in areas that have experienced decline
Rural-urban migration	the movement of people from the countryside into towns and cities.
Services	those things that are provided, bought and sold that are not tangible
Suburbanisation	the outward spread of the built-up area, often at lower densities compared with the older parts of a town or city.
Sustainability	the ability to keep something (such as the quality of life) going at the same rate or level. From this stems the idea that current generation of people should not damage the environment in ways that will threaten future generations' environment (or quality of life)
Sustainable development	development that meets the needs of the present without compromising the (limiting) the ability of future generations to meet their own needs.
Sustainable resources	resources - such as wood - that can be renewed if we act to replace them as we use them.
Trade	the buying and selling of goods and services between countries
Urban sprawl	urban growth, usually weakly controlled, into surrounding rural and semi-rural area.
Urbanisation	the increasing proportion / percentage of people living in towns and cities
Zero population growth	when natural change and migration change cancel each other out, and there is no change in the total population.

10.2: Landscapes of the UK

Abrasion	erosion caused by the river/sea picking up stones and rubbing them against the bed and banks of the channel in the flow
Attrition	gradual wearing down of the particles by erosion as they collide with each other, making them smaller and rounder.
Backwash	water from a breaking wave which flows under gravity down a beach and returns to the sea
Bay	a feature produced when erosion creates an indent in the coastline
Coastal management	the processes and plans applied to coastal areas by local authorities and agencies



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

Constructive waves	small, weak waves with a low frequency that tend to add sand and other sediment to the coastline because they do not break with much force
Corrosion	chemical erosion caused by the dissolving of rocks and minerals by water
Destructive waves	large, powerful waves with a high frequency that tend to take sediment away from the beach, because their backwash is greater than their swash.
'Do nothing'	(in coastal management) an approach that allows natural processes to take their course without any intervention
Drainage basin	the area of land drained by a river and its tributaries
Erosion	the wearing away and removal of material by a moving force, such as a breaking wave
Fetch	the distance of sea over which winds blow and waves move towards the coastline
Geology	the science and study of the Earth's crust and its components / rock type
Geomorphic processes	processes that result in a change in the shape of the Earth; from 'geo' meaning the earth and 'morph' meaning to change. Examples include erosion, mass movement and weathering
Hard engineering	using solid structures to resist forces of erosion
Headland	a part of the coastland that protrudes into the sea
Hydraulic action	An erosive process which involves the pressure of water hitting a surface, compressing air in the cavities which exist, and resulting in the removal of rock fragments over time
Hydrolysis	chemical breakdown of a material due to interaction with water
Igneous	when referring to rocks, this means rocks formed within the interior of the Earth, and shaped by heat
Impermeable	not allowing water to pass through
Infiltration	the process whereby water soaks into the soil and rock
Interception	when water is caught and stored on vegetation
Levees	natural embankments of sediment along the banks of a river
Long profile	the gradient of a river, from its source to its mouth
Longshore drift	the movement of material along a coast by breaking waves
Lower course	that part of a river system that is close to the mouth of the river
Mass movement	the downslope movement, by gravity, of soil and/or rock by the processes of slumping, falling, sliding and flowing.
Metamorphic	rocks that have been changed by heat of pressure
Meanders	the bends formed in a river as it winds across the landscape
Middle course	the central section of a river's course
Ox-bow lake	an arc-shaped lake which has been cut off from a meandering river
Oxidation	a chemical reaction between a substance and the air; it can change the appearance or weaken it
Permeable	allowing water to pass through
Precipitation	when moisture falls from the atmosphere - as rain, hail sleet or snow
River cliff	steep outer edge of a meander where erosion is at its maximum
Rotational slip / slumping	a process that involves the base of the slope failing, resulting in the rest of the landform falling down and moving in a curve along a plane as it does, so that the base of the feature extends outwards
Sediment	usually sand, mud or pebbles deposited by a river
Sedimentary	rocks that have been produced from layers of sediment usually at the bottom of the sea
Slip-off slope	inner gentle slope of a meander where deposition takes place
Spit	material deposited by the sea which grows across a bay or the mouth of a river
Stack	a detached column of rock located just-off shore
Stump	a stack that has collapsed, leaving a small area of rock above sea-level.
Sub-aerial processes	processes that aid weathering and mass movement
Swash	the forward movement of water up a beach after a wave has broken
Upper course	the source area of a river, often in an upland or mountainous region
Waterfall	sudden descent of a river or stream over a vertical or very steep slope in its bed
Weathering	the breakdown and decay of rock by its natural processes, without the involvement of any moving forces



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

10.3: UK Environmental Challenges

Agribusiness	commercial agriculture that is owned and managed by large corporations
Air masses	large bodies of air (many thousands of km ² in area) that form over polar or tropical source regions such as North Africa
Alternative energy	energy sources that provide an alternative to fossil fuels
Atlantic depressions	North Atlantic Drift – a weather system that bring stormy conditions and frontal rainfall to the western coastlines of Europe. (Depressions form when polar and continental air masses meet over the Atlantic Ocean.)
Biofuels	fuel sources derived from agricultural crops
Commercial farming	a type of agriculture producing crops and livestock for sale and processing
Continentality	the sea affects the climate of a place. Coastal areas are cooler and wetter than inland areas. Clouds form when warm air from inland areas meets cool air from the sea. The centre of continents are subject to a large range of temperatures. In the summer, temperatures can be very hot and dry as moisture from the sea evaporates before it reaches the centre of the land mass.
Energy Mix	a measure of the different sources of energy in a given region
Environmental pollution	the degradation of the environment through the emission of toxic waste material
Eutrophication	the loss of oxygen in water after too much nutrient enrichment has taken place
Extreme Climate	a climate that is unusually challenging, usually in terms of its temperature conditions or type and extent of precipitation.
Flood risk	the predicted frequency of inundation (floods) in an area
Fracking	the process of injecting liquid at high pressure into subterranean rocks, boreholes, etc. so as to force open existing fissures and extract oil or gas. Also called hydraulic fracturing.
Frontal rainfall	precipitation formed when a warm (tropical) air mass rises above a denser, colder (polar) air mass. As the tropical air cools, condensation and precipitation occur.
Gulf stream	a warm ocean current in the North Atlantic that flows from the coast of Florida (USA) towards northern Europe
Hydroelectric Power (HEP)	the use of fast flowing water to turn turbines which produce electricity.
Maritime	a coastal environment or climate that lacks extremes of temperature, and experiences higher rainfall, when compared with land-locked areas at a similar latitude (distance from the equator)
Natural resources	those materials found in the natural world that are useful to man, and that we have the technology and willingness to use
Non-renewable resource	those resources - like coal or oil - that cannot be 'remade', because it would take millions of years for them to form again
Nuclear energy	the energy released during nuclear fission or fusion, especially when used to generate electricity.
OPEC	Organisation of the Petroleum Exporting Countries
Overfishing	taking too many fish (or other organisms) from the water before they have had the time to reproduce and replenish stocks for the next generation.
Polar continental	an air mass whose source region is an area of land in cold, northern latitudes (Siberia) and which may move westwards, bringing cold, dry conditions to Europe in winter.
Pollution	the presence of chemicals, noise, dirt or other substances which have harmful or poisonous effects on an environment
Prevailing wind	the most frequent, or common, wind direction
Renewable resource	resources, such as forests, that can be maintained by management
Solar output	the energy emitted by the Sun
Sustainability	the ability to keep something (such as the quality of life) going at the same rate or level. From this stems the idea that current generation of people should not damage the environment in ways that will threaten future generations' environment (or quality of life)



2022-23 CURRICULUM MAP FOR GEOGRAPHY YEAR 10

Sustainable resources	resources - such as wood - that can be renewed if we act to replace them as we use them.
Tropical continent	an air mass whose source region is an area of land in the tropics (north Africa) and which may move northwards, bringing hot, dry conditions to Europe in summer.
Water insufficiency	a lack of adequate water supplies needed to meet a society's economic and social needs
Water management schemes	programmes to control rivers, generally organised by local or central government
Water transfers	movements of water and water vapour through the biosphere, lithosphere and atmosphere