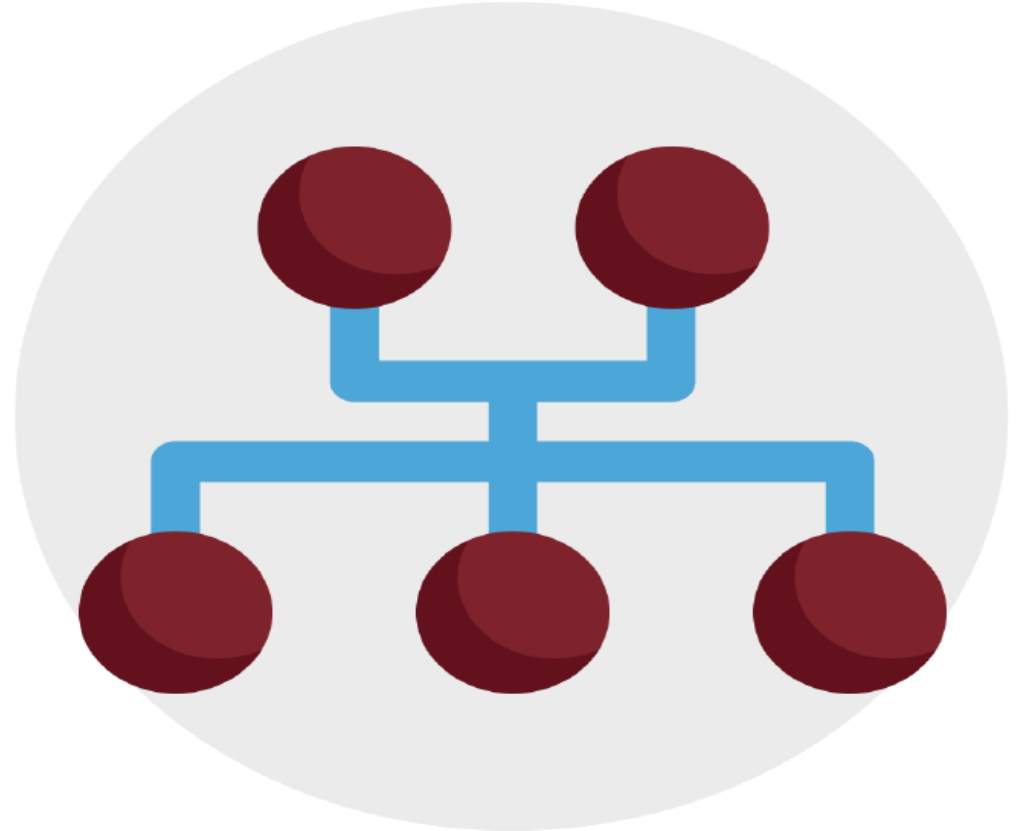


# Geography

## Curriculum Mapping

2021



<p><b>Systems &amp; Processes</b></p>	<p>The relationships between inputs, outputs and processes. As the students develop they need to understand the factors that can influence systems and also that often systems interact and are interdependent upon another. By A'level an understanding of feedback systems and how they impact on natural systems is key.</p>
<p><b>Cultural awareness</b></p>	<p>Caring approach to Geography and an understanding of the colonisation of Geography. An appreciation and awareness of cultural diversity at different scales. An understanding of factfulness and the danger of a single story. The growth and change of countries / regions.</p>
<p><b>Inequality</b></p>	<p>An understanding that inequality can be at different scales. Differences in standards of living and quality of life. An understanding of the complex interrelationships that lead to inequality. Idea of social justice and how that has changed over time and space.</p>
<p><b>Interdependence</b></p>	<p>Interrelationships between countries in human Geography and processes in physical. Interrelationships of different processes and an understanding that these might change over time as well as space. How these complex interactions lead to unique place profiles.</p>
<p><b>Sustainability</b></p>	<p>Meeting today's needs whilst not jeopardising future needs. Social, economic and environmental. An understanding of how this might be linked to inequality and cultural diversity.</p>
<p><b>Risk and mitigation</b></p>	<p>Potential hazards and how human management can reduce the impacts. This will include the risk of conflicts and disease epidemics. Interrelationship between mitigation and vulnerability of the population and how this has changed over time and space.</p>

<b>Causality</b>	The cause and effect of processes within physical geography and strategies in human geography. Including feedback loops. Links to cultural awareness and the influence of colonisation.
<b>Globalisation</b>	The growing interdependence and connectedness of people's lives across the world.

PLACE	Throughout all of the topics, the idea of place is threaded and integrated. An understanding of the uniqueness of different places based on their place profile and also how natural and human processes interact to create that profile. This includes the contemporary study of case studies.
SPACE	Though abstract in nature, pupils throughout all the topics will look at spatial changes that occur and understand the reasons for these changes. This will also include elements of how humans use space and the impacts this might have on the environment and physical processes.
SCALE	Throughout the KS3 course, the idea of scale is developed. This will look at spatial changes - how places are affected at local, regional, national and international scale. But also temporal scales - long and short term changes / impacts and responses.

KS4 specific	Place as location
	Place as community
	Place as landscape
	Place as an idea



Topics embedded within case-studies that are contemporary and up to date. An awareness that places have complex inter-relationships between natural and human processes. An understanding of the UK as a place.

How humans use and interact with place to create their own unique profiles. How communities are influenced by other factors, including hazards and social justice. How these places may change over time and the reasons why.

The natural processes and landforms found within the UK and also globally. An understanding of the interrelationships between the landscape and human activity. The importance of climate at a global level and how this influences biomes and hazards at a global and national scale.

Building on their own identity and developing a sense of place. Understanding their place in the world. Understanding that places are represented in both a formal and informal way and is a concept that is linked to our perceptions.



Geography Key Stage 3 Curriculum

Systems & processes

Globalisation

UNIT	Procedural knowledge	NC links	Misconceptions
What is my place in the world?	Use of sources and evaluation Reading World maps - latitude and longitude Reading of national maps - symbols and compass OS maps - symbols, compass, scale Fieldwork and use of secondary data GIS introduction	Locational knowledge Place knowledge skills including maps, fieldwork and GIS	Latitude and longitude Reading Grid references Going from 2D to 3D
How do natural processes interact to create distinctive landscapes?	dual coding History of plate tectonics organisation and sequencing organisation and sequencing OS maps and annotation of photographs Maps and data interpretation OS maps, use of GIS, data interpretation Use of OS maps and GIS GIS, interpretation of data	Place knowledge Geological timescales glaciation, hydrology coasts GIS	Difference between weathering and erosion That local factors can influence the type of eruption that happens. Some misconceptions about hardness of rocks.
The Almighty Dollar Where does money go when it is spent?	Data interpretation Classification of data into time and spatial orders Use of maps at different scales Thematic maps Interpretation of models Data interpretation Graphical presentation	Locational and place knowledge including Africa and Asia Economic activity globalisation	TNCs are not just from Acs Sectors of economy mixed Need to make sure that they do not stereotype c countries, but look at the whole picture.
What makes a place fantastic?	Using types of photographs as sources GIS and climate graphs Mapping and use of google maps Interpretation of thematic maps Creation of their own maps. Use of maps at different scales Data interpretation	Sense of place Understanidng of location at different scales.	Need to begin to understand that people may have different attitudes to each other. Bias and reliability of sources can influence our perception of place.



Geography Key Stage 3 Curriculum 2020

Systems & processes		cultural awareness		Inequality		Interdependence		Sustainability		Risk and Mitigation		Causality		
UNIT	Key Questions	Concepts										Declarative Knowledge		
How is the UK changing?	1What do we mean by the UK?													Countries that make up UK
	4Why did London become our capital city?													Site and situation of London
	5How is our population changing?													Population pyramids and ONS data
	7What are the key issues in the UK today?													inequality, sustainability, deprivation
	8Can the UK become more sustainable?													History of Liverpool and impact of slavery.
	9How has covid-19 changed how we live?													Renewable energy and sustainable strategies
	10What is my sense of place in the UK?													Case study mapping pandemic and issues
														Place perception using informal data
													Hydrological cycle -stores and processes	
													Landforms and processes of the Drainage basin	
Why is water so important to us?	1What is the hydrological cycle?													Dams, reservoirs, irrigation
	2What factors will influence the hydrological cycle?													water quality and water use with eggs
	How do rivers change downstream?													Mapping of climate and human causes
	How do humans use rivers?													Top down and grass roots eggs
	What are the consequences of human use?													Case studies of water conflicts
	What conflicts occur over river systems?													
	How can we use water systems sustainably?													
What is the difference between grass roots and top down strategies?														
Why does the world weather vary so much?	1What are the main climatic zones of the world?													Introduction to climates with map/graphs
	2How do world climates contrast to the UK?													Comparison of UK to specific locations
	3How does the global atmospheric system work?													Atmospheric cells and atmosphere
	4What factors create the global weather patterns?													Link to winds, ocean currents and solar output
	5Why are deserts so dry and TRF so wet?													Location and formation
	How do plants and animals adapt to this?													Glacial areas location and formation
	7How is the global climate changing?													Evidence of climate change
	8What impacts will changing climates have?													Impacts and responses to climate change
How can we investigate our local climate?													Geographical investigation.	
How has the cryosphere changed?	What are glaciers?													Define terms and use examples
	How are glaciers formed?													Cause over long term.
	Who is Otzi the iceman?													Mapping and storytelling.
	How do glaciers erode?													Processes and interrelationships
	What happens when glaciers lose energy?													Processes of deposition and landforms.
	How do we know there used to be glaciers in the UK?													Mapping in Lake District.
	Why do avalanches happen?													Case study of Alps
	What is happening to glaciers today?													Links to climate change and global changes
Why will changing glaciers have a global impact?													Link to climate change.	

UNIT	Procedural knowledge	NC links	Misconceptions
How is the UK changing?	Use of sources and evaluation Mapping and annotating sources OS maps and interpreting data population pyramids and ONS data interpretation GIS using old maps, use of ONS data ONS data including datashine Fieldwork and use of secondary data	Locational knowledge Place knowledge skills including maps, fieldwork and GIS	UK v. GB Sustainability is not only about environment Decolonising of the curriculum by identifying the issue of slavery on UK cities.
	Annotating diagrams calculating means, range and drawing graphs		inputs and outputs Confusion over terms
Why is water so important to us?	Map interpretation Mapping and interpretation of photographs GIS to determine patterns	Place knowledge Physical including hydrology and climate  GIS	Water scarcity is just for physical reasons
Why does the world weather vary so much?	Interpretation of thematic maps and graphs GIS and climate graphs Annotation of diagrams Data interpretation Calculating glacial budgets Use of maps at different scales Interpreting food webs	Locational knowledge including glacial areas Place knowledge Climate Fieldwork	Closer to equator is hotter because it is closer to the sun Deserts are hot
How has the cryosphere changed?	Data interpretation Investigation skills and mapping Data presentation and calculations Sequencing data Use of different scale maps  Graphical presentation	Locational and place knowledge including Europe and UK Economic activity Climate change and coastal processes.	Pupils often find the idea of glaciers abstract and so need to ensure very visual work at beginning. That glaciers are dynamic.

Geography Key Stage 3 Curriculum 2020

Systems & processes	Cultural awareness	Inequality	Interdependence	Sustainability	Risk and Mitigation	Causality
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UNIT	Key Questions	Concepts								Declarative Knowledge
Is our world a fair place?	1What is factfulness?									Factfulness rule of thumb
	2How do we measure development?									Measurements of development Use of HDI as a measurement
	3How does development contrast across countries?									Mapping countries and comparing
	4Why are there differences in development?									Physica/economic/political factors
	5How have some countries improve Qof Life?									Strategies to improve conditions
	6Are there differences within countries and why?									Physica/economic/political factors
	7How is inequality measured?									Gini coefficient and mapping
	8How can governments reduce inequality?									Egs from UK and Nigeria/India
	9Has the world become fairer?									Comparison over time
	10How do we ensure we are being factful?									Reducing bias and stereotyping
Why are some hazards more dangerous than others?	1What do we mean be a hazard?									Definition using hazard equation
	2What types of hazards are there in the world?									Mapping using GIS using current data
	3What hazards are associated with tectonics?									Retrieval of tectonic processes
	4Are some tectonic hazards more dangerous?									Case studies to show impacts
	5What factors influence how dangerous they are?									Assessment of significance of factors
	6How can we mitigate against these hazards?									The 3 P's and Park model
	7How can the weather create hazards?									Tropical storms and droughts
	8Why do some people suffer more due to weather hazards?									Case studies to show impacts
Prisoners of Geography how does geography help us understand world conflicts?	1What do we mean by conflict?									Definitions and examples
	2Where are the main conflicts globally?									Mapping of current conflicts
	3Why is piracy a problem in Somalia?									Causes and impacts
	4Do children suffer most in conflicts?									Child soldiers and Syria refugees
	5Why are conflicts so complex?									Complexity of causes and solutions
	6How has colonialism influenced conflict?									History of colonialism and how it changed borders in 2 examples
	7Why is there conflict between India and Pakistan?									Causes and impacts of the conflict
	8Why is the Crimea so important to Russia?									
Should we preserve biomes?	What makes a biome?									Defining and mapping global examples
	Where do we find tropical rainforests?									Definition and classifying reasons
	Do the rainforests need protecting?									Mapping location and physical
	What are hot deserts?									Evaluation of issues such as tourism
	How do animals and plants adapt to hot deserts?									DME on conservation v use
	How are temperate forests and grasslands different?									Structure and importance of TRF
	What is life like in the tundra?									Current issues including fires
	Why is oil drilling causing problems in the tundra?									Case study from Indonesia Case study from Alaska.
Africa or Asia? Where will the next superpower be from?	1What do we mean by superpower and who are they?									Mapping and use of data to identify
	2Where are the current superpowers located?									Identifying commonalities
	3Why are China and India in conflict?									Reasons for conflicts in the SE
	4How do China and India compare as economies?									Comparison of economic and social
	5Is all of Africa poor?									Comparison of economic and social
	6How has Nigeria/Kenya changed over the last 50 years?									Case study of changes in Nigeria
	7Why has Lagos/Narobi grown so fast?									Factors causing the growth of city
	8What +/- does this growth cause for Lagos/Narobi?									Environmental/economic/social
	9What do these countries have ACs don't?									Comparision of influencing factors

UNIT	Procedural knowledge	NC links	Misconceptions
Is our world a fair place?	Interpretation of data Use of GIS systems Use of sources and evaluation Descriptive statistics and data presentation Analysis of maps at different scales DME on strategies Using secondary data	Locational knowledge Place knowledge skills including maps, and GIS Comparison of places including Africa and Asia	Africa is poor That countries go from 1 type to another rather than transition
Why are some hazards more dangerous than others?	Dual coding Interpretation of data Annotating weather maps and storm tracks Maps and data interpretation Descriptive statistics Use of maps and photographs GIS systems to track hazards	Place knowledge Locational knowledge Climate systems Tectonics GIS	hazard v. risk
Prisoners of Geography how does geography help us understand world conflicts?	Using types of photographs as sources GIS to map conflicts Mapping and data interpretation Text and comprehension Evaluation of data sources Use of maps at different scales	Locational knowledge including Middle East Place knowledge Russia	Complexity of issues. Look at issue of bias also
Should we preserve biomes?	Data interpretation Graphical presentation Use of maps at different scales Thematic maps Interpretation of models Use of GIS	Locational and place knowledge including Africa and North America Ecosystems Tourism	Look at both sides Ensure understand the terms but different attitudes  Economic as well as environmental Sustainability is not just the environment
Africa or Asia? Where will the next superpower be from?	Mapping of data Interpretation of statistics Use of thematic maps Use of secondary data sources Use of GIS	Locational knowledge including Africa and Asia Population and settlements Economic activity	Africa is a continent and made up of numerous countries. Not all of Africa is poor There are +/- to growth

UNIT	Key Questions	Concepts	Declarative Knowledge	Procedural knowledge	Specification	Misconceptions
How do we think like Geographers?	What sources of information can we use? Why do we need to be careful interpreting data? Why are maps so useful to Geographers? How can we use statistics?		Current geographical issues Climate change Inequality in UK	Thematic and OS maps Interpretation graphs and photos Descriptive statistics	Paper 1 Paper 2 Paper 3	Scales and how to use Grid references Bias and manipulation of data
Why do cities change?	Why does urbanisation occur? How does urbanisation differ across countries? How does urbanisation vary across the UK? Why did Birmingham develop where it did? How is Birmingham distinctive? What challenges has and does Birmingham face? What strategies increase sustainability in B'ham? What makes Mexico City distinctive? How has urbanisation influenced Mexico City? What Challenges does Mexico City face? How might Mexico City overcome challenges? How might rural settlements change over time?		Processes and timeline of how they change Difference between developed, emerging and developing countries population density and distribution, including the causes of the differences Site, situation, connectivity and national and international context Structure of Birmingham and how it has changed, timeline of processes and causes. National and international migration, de-industrialisation, inequality, decline in retail Examples of strategies and evaluation of the strategies success International position, site and situation, megacity, connectivity population structure, inequality, economy, housing and pollution Inequality, impacts of pollution, waste disposal, water security, informal economy Sustainable strategies and evaluation of success. Top down and bottom up. What is rural, changes evident in Malham, impact tourism can have on honeypots	Use of GIS - ArcGIS Use of census data Datashine Interpretation of world maps Interpretation of regional maps Construction of population pyramids Use and interpretation of graphs calculation of % differences Geographical investigation	Paper 2 Paper 3 Paper 3	Factors stay static Differences between processes Sitev situation Sustainability not just about the environment Top down v bottom up
Why do places develop at different rates?	What is development and how do we measure it? What are the consequences of uneven development at different scales? How can the consequences of uneven development be reduced? How does the global context of India influence its development? How has India changed over the past 75 years? What challenges does India face due to its rapid development?		Single and composite measures including HDI, Gini coefficient and corruption Difference between standards of livign and quality of life. Global patterns of development, influencing factors - classification of them and assessment of importance, importance of quality of life including health and education. Top down and bottom up strategies and examples from the UK. Evaluation of the success of strategies in long and short term. Global and regional location of India including that it is emerging and reasons why. Political, social, environmental and economic context. Geopolitics and inequality (C/P) Causes and consequences of economic change. Trade and aid changes, growth of TNCs and FDI, population change, social changes and infrastructure and technology. The social, economic and environmental challenges, and assessment of them The strategies to reduce impacts, both top down and bottom up and evaluation.	Data interpretation Data manipulation Interpreting maps at different scales Interpreting graphs Central tendency measurement of range Use of GIS systems Population pyramids	Paper 2 Paper 3	Idea of factfulness Reducing stereotypes Look not only at countries but within countries Changes can be good and bad
What are the challenges of Managing global resources?	How are natural resources distributed both globally and in the UK? Why might the consumption of natural resources differ between countries and regions? What is meant by the energy mix of a country? How can energy resources be developed over time? How might countries become more sustainable in their energy use and production?		What do we mean by natural resources? What is the global distribution of energy, food, water and minerals? What is the distribution of resources in the UK including energy and woodlands. Global consumption of food, energy and water and links to population growth. What are the challenges of variatation consumption and causes and impacts of exploitation for food, water and energy (fossil fuels, dams, deforestation, fishing) Definition and examples for UK and comparable countries (India and Iceland) Definition of energy types classified into renewable and non renewable. Global variations and assessment of factors influencing a country's energy mix. Evaluation of the use of renewable and non renewable energy. Changes in the demand for different energy types and also amount and reasons why. How technology can influence energy mix including fracking and geothermal. Why attitudes may differ. Assessment of decision smade by an emerging and a developed country. Changes to their energy mix - causes and evaluation of those changes.	Interpreting maps at different scales Classifying data Projections and modelling Interpreting and producing graphs GIS systems Calculations of mean, median, range, mode, IQR, %	Paper 2 Paper 3	Reduce stereotyping of resource use. Look at economi importance of resources Not all renewable energy is good Different attitudes to energy types
How is the UK landscape changing?	How has rock type influenced the present day UK landscape? How have human and physical processes interacted to create distinctive landscapes? How do we define the coast? How do physical processes interact to create coastal landscapes? What distinctive landscapes can be created by erosion and deposition? How does human activity change the coastal landscape? How can physical and human processes interact to create our coastal landscapes? What physical processes interact to create river landscapes? How do erosion and deposition interact with geology to create distinctive river landforms? How can human activities lead to changes in river landscapes? How do human and physical factors interact to create distinctive river landscapes? How can we investigate changing river processes?		Characteristics and distribution of the main rock types of the UK Role of geology and tectonics in creating upland and lowland landscapes Comparison of upland and lowland landscapes of the UK. Physical factors and human activity such as agriculture, forestry and settlements. Case study of 1 landscape. Example of coastal areas, wave types and influence on the coast Weathering, erosion, mass movement, transport and deposition, including specific types such as LSD. Influence of geology and wave type on coastlines and processes. Formation of: headlands and bays, concordant and discordant coastlines, wave cut platforms, sequence on a headland, beaches, bars and spits. Human activity such as urbanisation, industry, agriculture and how it impacts the coast. Recession and flooding and the impacts this has. Strategies to reduce impacts. Case study of Dawlish Warren to show the interaction of human and physical processes at a specific location (formation, changes, influencing factors, management) Weathering, erosion, mass movement, transport and deposition, including specific types. Comparison of upper, middle and lower course with named example (Aire) Role of erosion and geology in formation of waterfalls, interlocking spurs, gorges, river cliffs, floodplains, levees, slip off slopes, meanders and ox-bow lakes. Including urbanisation, industry and agriculture. Cause and effect of flooding on river valleys. Strategies used to reduce impacts of flooding including hard & soft engineering. Case study of one named river landscape (Aire?) formation of features, changes over long profile and influencing factors both physical and human. Bradshaw model and hypotheses testing related to the model. Fieldwork investigation	Interpreting geology maps Interpreting flood risk maps Interpreting OS maps at different scales Interpreting weather data producing storm hydrographs Linking photos and maps Calculations of mean, median mode, IQR and range & area Calculations of % cover & area Use of GIS for flood analysis	Paper 1 - rocks coasts rivers Paper 3 - rivers fieldwork UK challenges Paper 3 Fieldwork	Differences between 3 rock types. Difference between weathering and erosion Do not confuse coasts and rivers
Wht does weather and climate vary across the world and over time?	How does the global atmospheric system work? How do we know that the climate has been different in the past? How has the UK climate changed over time? What conditions are needed for tropical cyclones to develop? How does the level of development of a country influence the impacts of and responses to a tropical cyclone? Why are some areas of the world more vulnerable to drought than others? How does the level of development of a country		Features of the system and formation of the 3 atmospheric cells. Importance of ocean currents to the system. Comparison of climate zones around the world. Evidence of past climates over different time scales - what changes have occurred and sources of evidence at different time scales including ice cores, pollen, tree rings and written records. Importance of glaciials and interglaciials. Natural causes (milankovitch, volcanism and solar output) human (industry, transport, energy, farming) -we impacts Changes in recent times 100 years) and comparison to present day climate. Spatial variations across the UK in temperature, precipitation and prevailing wind. How geographical location in the UK influences climate (frontal rain, ocean currents and air masses). What are the requirements, where do they originate and why. Sequence of their formation. The characteristics of tropical cyclones. Tracking of tropical cyclones. Comparion of tropical cyclones in different regions including current events. Social, economic and environmetal impacts of them and assessment of how development influences the seriousness of the hazards. Responses to named tropical cyclones on developed country and emerging. Evaluation of reponses. Characteristics of arid environments and the definition of a drought. Complexity of causes including meteorological, climatological and human (eg dams, deforestation and agriculture). Assessment of how global circulation leads to droughts in some regions. Reasons why droughts are hazardous to people.	Interpretation of climate graphs Production of climate graphs world maps for climate zones Calculations of mean, median, mode, range, IQR, % change, Use of GIS to track storms Interpretation of graphs for trends and long term patterns Calculation of Saffir-Simpson magnitude. Interpretation of social media	Paper 1 UK climate Global climate Climate change climate hazards Paper 3 Climate change Sustainability	Climate change is not global warming greenhouse effect is a natural processes look at enhanced greenhouse effect due to human activity climate change can be positive Cyclones are also hurricanes and typhoons They are not tornadoes Droughts do not happen in deserts Anywhere can suffer a drought.

Systems & processes	cultural awareness	Inequality	Interdependence	Sustainability	Risk and Mitigation	Causality	Globalisation
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UNIT	Key Questions	Concepts	Declarative Knowledge	Procedural knowledge	Specification	Misconceptions
	influence the impacts of and responses to droughts?		Case studies of developed and emerging countries to assess impacts droughts have on people and the economy. Evaluation of responses to droughts in different countries. Including responses by individuals, governments and other organisations.			
How do ecosystems vary across the world	How can we classify the major ecosystems of the world (biomes)?		Definitions of biomes, ecosystems and biosphere. Distribution of specific biomes (TRF, TDW, boreal forest, temperate grasslands, deserts, tundra). Role of climate in the distribution. Role of local factors such as soils and altitude.	Interpretation of maps at different scales from global to local.	Paper 1: Ecosystems	link between biomes and climate.
	How can we classify the major ecosystems within the UK?		Distribution of UK terrestrial ecosystems including forests, marsh, wetlands and heaths. Characteristics and comparisons of the UK terrestrial ecosystems. Distribution of UK marine ecosystems and their importance.	Interpretation and production of climate graphs	TRF TDW	It is not hotter on the equator because it is closer to the sun
	Why is the biosphere so useful for humans?		Global use of biosphere and UK use. Resources provided in terms of goods and services. Issues with exploitation of the biosphere.	GIS for ecosystems and exploitation of TRF	Paper 3: Challenges Sustainability	Economic importance of TRF and TDW not just environmental
	What makes the tropical rainforest an important global ecosystem?		Abiotic and biotic characteristics of the TRF and their interdependence. Nutrient cycles and energy flows, including use of Gersmehl diagrams. Biodiversity of TRF and adaptations of plants and animals. Goods and services provided by the TRF. Threats to the TRF from climate change and deforestation.	Use and interpretation of gersmehl diagrams and food webs		
	What makes the temperate deciduous woodlands of the UK such distinctive ecosystems?		Abiotic and biotic characteristics of the TDW and their interdependence. Nutrient cycles and energy flows, including use of Gersmehl diagrams. Biodiversity of TDW and adaptations of plants and animals. Goods and services provided by the TDW. Threats to the TDW from climate change and deforestation. Named TDW and reasons for its sustainable management and evaluation of strategies.	Graphical skills Calculation of mean, median, mode, IQR, range, % cover		
How do we investigate physical and human geography at a local scale?	What is geographical investigation?		Stages in investigation, hypotheses testing and risk assessments.	Geographical enquiry process	Paper 3: Fieldwork	Sampling types
	Why is sampling vital to a geographical investigation?		How to ask questions and use of sources of data to identify background to location.	Asking geographical questions		unseen data is scary
	What types of methodologies can we use for a human geography investigation?		Types of sampling and evaluation of different types	Interpreting sources of data	Paper 1: Rivers	evaluation is just about the methods
	How has tourism changed Malham village and the surrounding area?		Importance of reliability in investigation. Examples of when to use.	Evaluating sources of data	Paper 1: Changing Cities	
	What methodologies can we use for a physical geography investigation?		Quantitative versus qualitative and primary versus secondary.	Determining reliability through sampling		
	How does Malham Beck change downstream?		Examples of how to use different types and practical examples of all types.	Interpreting maps at different scales		
	Why is it important to present data in an appropriate way?		Location, risks, methods, fieldwork investigation through all steps in the sequence.	Use of GIS and internet		
How can we analyse and interpret the data we collect?		Quantitative versus qualitative and primary versus secondary.	Qualitative and quantitative methodologies			
What challenges does the UK face?	What challenges are there in the UK for resource consumption and environmental sustainability?		Changing UK population structure and impact this may have on resource consumption. Growing population and the pressure on UK ecosystems.	Interpretation of maps at a variety of scales	Paper 3: UK Challenges	Sustainability is not just about the environment
	What are the economic challenges faced by the UK?		Sustainable transport strategies - named examples, assessment and evaluation.	Interpretation of resources such as photos, tables, data and graphs	Paper 1: Ecosystems	climate change is not global warming
	What challenges does the UK landscape face due to increasing population pressure?		Two speed economic and north south divide - is it real? Social inequality within the UK and methods to reduce the inequality. Migration in UK and varying attitudes to it. Cost benefit analysis of brownfield and greenfield sites. Evaluation of data sources	Calculation of statistics	Paper 2: Changing Cities	climate change is due to natural and human activity
	How will climate change create challenges for the UK?		National Parks in the UK and current challenges for them. Conservation and development of National parks and conflicts that might arise, including varying attitudes	Including mean, IQR, % change		the greenhouse effect is natural.
			Causes and impacts of river and coastal flooding in UK and strategies to reduce impacts.	Evaluation of reliability of data sources		
			Patterns and trends of changing climates in UK. Evaluation of the data sources and uncertainty of what impacts there might be. Im pact on people and landscapes (+/-)	Assessment of varying attitudes		
			Responses to climate change at individual, local and national level.	Use of GIS systems and census	Energy resources	