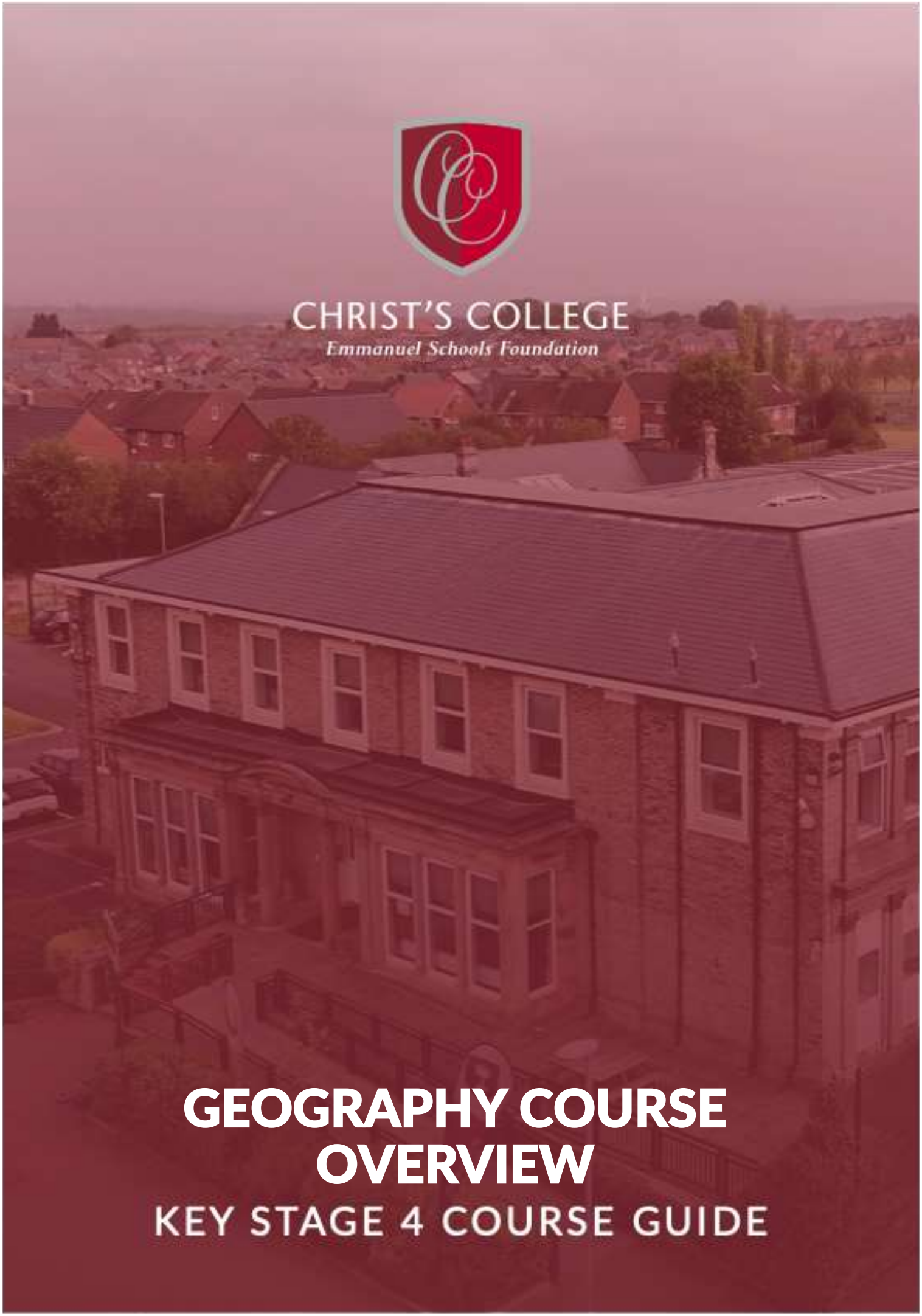

CHRIST'S COLLEGE

Emmanuel Schools Foundation

GEOGRAPHY COURSE OVERVIEW

KEY STAGE 4 COURSE GUIDE

COURSE OVERVIEW

Prior Learning Required

The Key Stage 3 History curriculum at Christ's College is designed as a firm foundation to equip you with the knowledge and skills to succeed at GCSE. You will have practiced describing and explaining geographical scenarios and events, but at GCSE you will use your wider geographic knowledge to assess and evaluate causes and impacts, and solutions in relations to case studies for each topic.

Building knowledge and skills at Key Stage 3 is essential, as you will find there is overlap between the two curriculums. For example, a key skill developed is data interpretation. Many short answer questions require you to identify information based on figures such as bar charts, scatter graphs, and choropleth maps. You will be required to discuss your thoughts and opinions on UK challenges in Paper 3, which requires you to pool together your geographical knowledge from the last 5 years of study, and utilise the literacy skills developed from across your subjects.

Complementary Subjects of Study

Geography is the study of the world, so through its very nature, has links across the school curriculum. Geography complements core subjects such as English Language and Literature, as well as other Humanities subjects like History and Religious Studies. If you enjoy Physical Geography, then all branches of science pair will with Geography. For example, the links between Biology when studying Ecosystems, and Physics and Chemistry with climate, erosion and energy. If you enjoy Human Geography, History and Business pair well, especially if you are looking to go into business and finance in the future.

Further Education Pathways

Geography is a fantastic subject to study at GCSE due to the fact that the skills and knowledge you gain span such a broad range of topics that can be applied in multiple different contexts. Even if you don't take Geography further in education, employers still looks at Geography favourably due to the range of skills it provides.

Students who perform well in GCSE Geography can go on to thrive in A-Level subjects such as Sociology, Politics, Business, Biology, and of course A-Level Geography. Universities now offer more specific degrees, so if you feel like there are some areas of Geography that interest you more than others, then there are specific degrees you can take. For example you can study Environmental Geography, Human Geography, or even Environment, Economics and Ecology.

Course and Component Overview

PAPER 1: The Physical Environment	PAPER 2: The Human Environment	PAPER 3: Geographical Investigations
Section A: The changing landscapes of the UK Section B: Weather hazards and climate change Section C: Ecosystems, biodiversity and management	Section A: Changing Cities Section B: Global Development Section C: Resource Management	Section A: Urban Fieldwork Section B: Coastal Fieldwork Section C: UK Challenges

Key Course Information

- **Course title**: Geography
- **Exam board**: Edexcel A
- **Specification Code**: 1GA0

KEY STAFF

Department Teachers

The GCSE Geography course is delivered by one teacher over three periods a week and you will most likely have the same teacher throughout Year 10 and Year 11. These are normally divided into one single lesson and one double lesson.

Miss. G. Burdon *Lead Teacher of Geography*	Miss. Burdon has taught at Christ's College since September 2023 having previously taught at multiple other schools around the North-East. She studied Environmental Geography at the University of York, then went on to do her PGCE at the University of Sunderland. She has a keen interest in the Environment and the impact humans are having in our ever- changing world. She has a passion for ecology, specifically in the oceans.
Mrs. J. Normanton	Mrs. Normanton has taught Geography in various schools throughout the North-East for over 30 years, and is delighted to maintain a small teaching load alongside her role as Principal. She completed a BSc in Geography, followed by a PGCE at Durham University. She is an avid traveller, and likes nothing better than watching volcanoes erupt and enjoying the wonders of the natural world.

KNOWLEDGE CHECKLIST

Paper 1 – Physical Landscapes		
UK Landscapes		
1	Characteristics and distribution of the UK's main rock type	
2	The role of geology and past tectonic processes in the development of upland and lowland landscapes.	
3	How distinctive upland and lowland landscapes result from the interaction of physical processes (glacial erosion and deposition, weathering and climatological, post-glacial river and slope processes).	
4	How distinctive landscapes result from human activity (agriculture, forestry, settlement) over time.	
Coasts		
5	The physical processes at work on the coast	
	Influence of geological structure, rock type and wave action on landforms.	
	How the UK's weather and climate affect rates of coastal erosion and retreat, and impact on landforms and landscape.	
	The role of erosional processes in the development of landforms: headlands and bays, caves, arches, cliffs, stacks, wave cut platforms.	
	The role of depositional processes in the development of landforms: bars, beaches and spits.	
	How human activities (urbanisation, agriculture and industry) have affected landscapes and the effects of coastal recession and flooding on people and the environment.	
	The advantages and disadvantages of different coastal defences used on the coastline of the UK	
	The significance of the location of one named distinctive coastal landscape within the UK (Dawlish Warren)	

KNOWLEDGE CHECKLIST

Paper 1 – Physical Landscapes		
Rivers		
1	The physical processes at work in the river landscape: weathering.	
2	How river landscapes contrast between the upper courses, mid courses and lower courses of rivers and why channel shape (width, depth), valley profile, gradient, discharge, velocity and sediment size and shape change along the course of a named UK river.	
3	How the UK's weather (short-term events such as storms and droughts) and climate affect river processes and impact on landforms and landscapes.	
4	The role of erosion processes and the influence of geology in the development of landforms: interlocking spurs, waterfalls, gorges and river cliffs. (	
5	The role of depositional processes in the formation of flood plains, levees and point bars.	
6	The interaction of deposition and erosion processes in the development of landforms.	
7	How human activities and changes in land use (urbanisation, agriculture and industry) have affected river processes that impact on river landscapes; the physical and human causes and effects of river flooding.	
8	Advantages and disadvantages of different defences used on UK rivers (hard engineering– dams, reservoirs and channelisation and soft engineering– flood plain zoning and washlands) and how they can lead to change in river landscapes.	
9	The significance of the location of one named distinctive UK river landscape (upland/lowland), how it has been formed and the most influential factors in its change.	

KNOWLEDGE CHECKLIST

Paper 1 – Physical Landscapes		
Weather and Climate		
1	The features of the global atmospheric circulation.	
2	How circulation cells and ocean currents transfer and redistribute heat energy across the Earth.	
3	How climate has changed in the past over different time scales: glacial and interglacial periods during the Quaternary period.	
4	Causes (Milankovitch cycles, solar variation, volcanism) and evidence (ice cores, pollen records, tree rings, historical sources) for natural climate change.	
5	How human activities (industry, transport, energy, farming) produce greenhouse gases that cause the enhanced greenhouse effect.	
6	Negative effects that climate change is having on the environment and people (changing patterns of crop yield, rising sea levels and ice melt)	
7	Climate of the UK today and changes over the last 1000 years.	
8	Spatial variations in temperature, prevailing wind and rainfall within the UK.	
9	The significance of the UK's geographic location in relation to its climate.	
Tropical Storms		
	How the global circulation of the atmosphere leads to tropical cyclones (hurricanes and typhoons) in source areas and the sequence of their formation.	
	Characteristics, frequency and geographical distribution of tropical cyclones and how these change over time.	
	Reasons why tropical cyclones are natural weather hazards (high winds, intense rainfall, storm surges, coastal flooding and landslides).	
	Reasons why tropical cyclones are natural weather hazards (high winds, intense rainfall, storm surges, coastal flooding and landslides).	
	Different social, economic and environmental impacts that tropical cyclones in a developing and developed country.	
	Different responses to tropical cyclones of individuals, organisations and governments in a developing and developed country.	

KNOWLEDGE CHECKLIST

Paper 1 – Physical Landscapes		
Drought		
1	Characteristics of arid environments compared to the extreme weather conditions associated with drought.	
2	Different causes of the weather hazard of drought: meteorological, hydrological, and human (agricultural, dam building, deforestation).	
3	Why the global circulation makes some locations more vulnerable to drought as a natural hazard than others and how this changes over time.	
4	Reasons why droughts are hazardous.	
5	How the impacts of drought on people and ecosystems can vary for a named developed and a named emerging or developing country.	
6	Different responses to drought from individuals, organisations and governments in a named developed and a named emerging or developing country .	

Ecosystems		
1	Distributions and characteristics of the world's large-scale ecosystems.	
2	The role of climate and local factors (soils and altitude) in influencing the distribution of different large-scale ecosystems.	
3	How the biosphere provides resources for people (food, medicine, building materials and fuel resources) but is also increasingly exploited commercially for energy, water and mineral resources.	
4	Distribution and characteristics of the UK's main terrestrial ecosystems (moorlands, heaths, woodlands, wetlands).	
5	Importance of marine ecosystems to the UK as a resource and how human activities are degrading them.	

KNOWLEDGE CHECKLIST

Paper 1 – Physical Landscapes		
Tropical Rainforests		
1	Biotic and abiotic characteristics of the tropical rainforest ecosystem.	
2	The interdependence of biotic and abiotic characteristics and the nutrient cycle (Gersmehl model).	
3	Why rainforests have very high biodiversity and how plants (stratified layers, buttress roots, drip tips) and animals (strong limbs, modified wings and beaks, camouflage) are adapted to that environment.	
4	Examples of goods and services provided by tropical rainforest ecosystems (food stuffs, medicines, timber and recreation).	
5	How climate change presents a threat to the structure, functioning and biodiversity of tropical rainforests.	
6	Economic and social causes of deforestation (conversion to agriculture, resource extraction, population pressure).	
7	Political and economic factors (governance, commodity value and ecotourism) that have contributed to the sustainable management of a rainforest in a named region (Amazon).	
Deciduous Woodlands		
1	Abiotic and biotic characteristics of the deciduous woodland ecosystem	
2	The interdependence of biotic and abiotic characteristics (climate, soil, water, plants, animals and humans) and the nutrient cycle (Gersmehl model).	
3	Why deciduous woodlands have moderate biodiversity and how plants (leaf size and structure, water conservation in winter) and animals are adapted to that environment.	
4	Examples of goods and services provided by deciduous woodlands ecosystems.	
5	How climate change presents a threats to both the structure, function and biodiversity	
6	Economic and social causes of deforestation	
7	Different approaches to the sustainable use and management of deciduous woodlands in a named region (New Forest).	

KNOWLEDGE CHECKLIST

Paper 2 – Human Environment		
Changing Cities		
1	Contrasting trends in urbanisation over the last 50 years in different parts of the world	
2	How and why urbanisation has occurred at different times and rates in different parts of the world	
3	Distribution of urban population in the UK and the location of its major urban centres.	
4	Factors causing the rate and degree of urbanisation to differ between the regions of the UK.	
UK City (Newcastle)		
1	Site, situation and connectivity of the chosen UK city in a national (cultural and environmental), regional and global context.	
2	Newcastle's structure	
3	The sequence of urbanisation, suburbanisation, counter urbanisation and re-urbanisation processes and their distinctive characteristics	
4	Causes of national and international migration and the impact on different parts of Newcastle.	
5	Key population characteristics of the chosen UK city's that is available from the Census and reasons for population growth or decline.	
6	Causes of deindustrialisation (globalisation, de-centralisation, technological advances and developments in transport) and impacts.	
7	How economic change is increasing inequality in the city and the differences in quality of life.	
8	Recent changes in retailing and their impact on the chosen UK city: decline in the Central Business District (CBD), growth of edge- and out-of-town shopping and increasing popularity of internet shopping)	
9	The range of possible strategies aimed at making urban living more sustainable and improving quality of life.	

KNOWLEDGE CHECKLIST

Paper 2 – Human Environment		
Mumbai		
1	Site, situation and connectivity of the chosen city in a national (cultural and environmental), regional and global context.	
2	Mumbai's structure	
3	Reasons for past and present trends in population growth.	
4	Causes of national and international migration and the impact on different parts of the chosen city.	
5	How the growth of the Mumbai is accompanied by increasing inequality (areas of extreme wealth versus poverty) and reasons for differences in quality of life.	
6	Effects resulting from Mumbai's rapid urbanisation: housing shortages, squatter settlements, under-employment employment, pollution and inadequate services	
7	Advantages and disadvantages of both bottom-up and top-down approaches to solving Mumbai's problems and improving the quality of life or its people.	
8	The role of government policies in improving the quality of life (social, economic and environmental) within Mumbai.	

KNOWLEDGE CHECKLIST

Paper 2 – Human Environment		
Global Development		
1	Contrasting ways of defining development, using economic criteria and broader social and political measures.	
2	Different factors contribute to the human development of a country: economic, social, technological, cultural, as well as food and water security.	
3	How development is measured in different ways: Gross Domestic Product (GDP) per capita, the Human Development Index, measures of inequality and indices of political corruption.	
4	Global pattern of development and its unevenness between and within countries, including the UK.	
5	Factors (physical, historic and economic) that have led to spatial variations in the level of development globally and within the UK.	
6	Impact of uneven development on the quality of life in different parts of the world: access to housing, health, education, employment, technology, and food and water security.	
7	The range of international strategies (international aid and inter-governmental agreements) that attempt to reduce uneven development.	
8	Difference between top-down (government or transnational corporation (TNC) led) and bottom-up development projects (community led). Their advantages and limitations in the promotion of development.	

KNOWLEDGE CHECKLIST

Paper 2 – Human Environment		
India Cast Study		
1	Location and position of the chosen country in its region and globally.	
2	Broad political, social, cultural and environment.	
3	Unevenness of development within the chosen country (core and periphery) and reasons why development does not take place at the same rate across all regions.	
4	Positive and negative impacts of changes that have occurred in the sectors (primary, secondary, tertiary and quaternary) of the chosen country's economy.	
5	Characteristics of international trade and aid and the chosen country's involvement in both.	
6	Changing balance between public investment (by government) and private investment (by TNCs and smaller businesses) for the chosen country.	
7	Changes in population structure and life expectancy that have occurred in the last 30 years in the chosen country.	
8	Changing social factors (increased inequality, growing middle class and improved education) in the chosen country.	
9	How geopolitical relationships with other countries affect the chosen country's development: foreign policy, defence, military pacts, territorial disputes.	
10	How technology and connectivity support development in different parts of the chosen country and for different groups of people.	
11	Positive and negative social, economic and environmental impacts of rapid development for the chosen country and its people.	
12	How the chosen country's government and people are managing the impacts of its rapid development to improve quality of life and its global status.	

KNOWLEDGE CHECKLIST

Paper 2 – Human Environment		
Resource Management		
1	Natural resources can be defined and classified in different ways (biotic, abiotic, renewable and non-renewable).	
2	Ways in which people exploit environments in order to obtain water, food and energy (extraction of fossil fuels, fishing, farming and deforestation).	
3	How environments are changed by this exploitation (reduced biodiversity, soil erosion and reduced water and air quality).	
4	Global and UK variety and distribution of natural resources (soil and agriculture, forestry, fossil fuels, water supply, rock and minerals).	
5	Global patterns of usage and consumption of food, energy and water.	
6	Energy resources can be classified as renewable and non-renewable.	
7	Advantages and disadvantages of the production and development of one non-renewable energy resource.	
8	Advantages and disadvantages of the production and development of one renewable energy resource.	
9	The composition of the UK's energy mix.	
10	How global variations in the energy mix are dependent on a number of factors: population, wealth and the availability of energy resources.	
11	How and why global demand and supply has changed over the past 100 years due to human intervention: world population, growth increased wealth and technological advances.	
12	How non-renewable energy resources (coal, oil, natural gas and uranium) are being developed and how this can have both positive and negative impacts on people and the environment.	
13	How renewable energy resources are being developed and how this can have both positive and negative impacts on people and the environment.	
14	How technology (fracking) can resolve energy resource shortages.	
15	How attitudes to the exploitation and consumption of energy resources vary with different stakeholders.	
16	Different views held by individuals, organisations and governments on the management and sustainable use of energy resources.	
17	How China and the UK have attempted to manage their energy resources in a sustainable way.	

KNOWLEDGE CHECKLIST

Paper 3 – Geographical Investigations		
Coastal Fieldwork		
1	How and why did we formulate our enquiry question?	
2	Data collection methods (quantitative and qualitative)	
3	What secondary data did we use?	
Urban Fieldwork		
5	How and why did we formulate our enquiry question?	
6	Data collection methods (quantitative and qualitative)	
7	What secondary data did we use?	
UK Challenges		
9	Changes in the UK's population in the next 50 years and implications on resource consumption.	
10	Pressures of growing populations on the UK's ecosystems	
11	Range of national sustainable transport options for the UK.	
12	The 'two-speed economy' and options for bridging the gap between south east and the rest of the UK.	
13	Costs and benefits of greenfield development and the regeneration of brownfield sites.	
14	UK net migration statistics and their reliability and values and attitudes of different stakeholders towards migration.	
15	Approaches to conservation and development of UK National Parks	
16	Approaches to managing river and coastal UK flood risk.	
17	Uncertainties about how global climate change will impact on the UK's future climate	
18	Impacts of climate change on people and landscapes in UK	
19	Range of responses to climate change in the UK at a local and national scale.	

REVISION AND HOMEWORK

Revision material
A variety of revision resources will be posted onto the Class Teams pages:
Revision booklets, Key knowledge booklets, Knowledge retrieval packs, Knowledge organisers (also given in class for your books and available on the school website).

Useful revision links

- **Oak National Academy**:

This site has lessons and resources available for free. It does not have Edexcel A as a specification, however there is overlap with Edexcel B. The following links are relevant:

  - Rivers - River landscapes KS4 | Y10 Geography Lesson Resources | Oak National Academy
  - Coasts - Coastal landscapes KS4 | Y10 Geography Lesson Resources | Oak National Academy
  - Weather and Climate - Climate change and weather hazards KS4 | Y10 Geography Lesson Resources | Oak National Academy
  - Ecosystems - Tropical rainforest and taiga biomes KS4 | Y10 Geography Lesson Resources | Oak National Academy
  - Energy - Energy KS4 | Y11 Geography Lesson Resources | Oak National Academy

- **Bitesize** – make sure you are looking at the Edexcel Resources found here - GCSE Geography - Edexcel - BBC Bitesize
- **Century** – every GCSE student has access to their own personal account. Teachers can set revision and homework on here, and AI will set you recommended tasks and topics to target your specific areas of focus.

Homework
Each week you will be set a homework task which has a deadline assigned to it.
These tasks will be in the form of:

- Homework Booklets
- Century
- Exam-style Questions
- Revision tasks followed by an in-class mini quiz

Independent Study
Each week you should also spend 2 additional hours studying for this subject.
The suggested tasks for independent study are:
Creating mind maps or flash cards using the GCSE Geography revision guides.
Creating mind maps or flash cards using online videos or Century.
Completing the GCSE Geography tasks recommended by Century (doesn't have to be an assignment set by a teacher).
Completing the revision tasks in the revision guides provided in Teams
Practising past-paper questions or practice questions found in revision guides.
Making case study fact files from memory, or case study information posters.

Documentaries and Video Clips
Jonny Rock on YouTube has playlists of videos on each topic. Jonny Rock – YouTube
Mumbai Documentary - World's Largest Slum: Dharavi, India | Stories from the Hidden Worlds: India | Free Documentary
Hurricane Sandy Documentary - Sandy: A CBS News New York Documentary
Cowspiracy – Netflix (Links to resource management and ecosystems)
Seaspiracy – Netflix (Links to resource management and ecosystems)

Don't underestimate the value of YouTube when it comes to revision. Especially for case studies such as Hurricane Sandy above, this can help you imagine the events and see it for yourself, and can often be more useful than just reading about it from a textbook. Whatever it is you are revising, I always recommend typing it in to YouTube to see what comes up, especially if you are a visual learner.

LITERACY REQUIREMENTS

GCSE literacy skills are crucial for success across all subjects, not just English.

Developing strong reading comprehension, vocabulary and writing skills will help students to understand exam questions, analyse information and articulate their knowledge effectively. Daily reading, across a wide range of texts, will assist students to build these skills.

In Year 10, students are required to read Accelerated Reader books daily and pass quizzes (books can be borrowed from the College library). In Year 11, the reading focus is on revision material.

The following literacy requirements are specific to Geography:

- Students should know the key vocabulary terms and their definitions. See pages 14 to 17 for a detailed list of key terms. You can also check the knowledge organisers.
- Students should know how to punctuate writing clearly and accurately to ensure they communicate precise meaning. There are up to 4 marks available on some 8 mark questions for Spelling, Punctuation, Grammar and Key terminology (SPAG marks)
- Students should be familiar with the meaning of tier-two vocabulary as this is essential to understanding exam questions. See the list on the next page.

ESSENTIAL VOCABULARY

Tier 2 Vocabulary

In Key Stage 4 (KS4) exams, Tier 2 words are high-frequency words that are commonly used in academic contexts, across different subjects, and are not typically used in everyday conversation. They are more sophisticated than basic, everyday vocabulary (Tier 1) and more general than subject-specific vocabulary (Tier 3). These words are crucial for understanding exam questions and texts, and for developing strong literacy skills.

Identify/State/Name	Recall or select one or more piece(s) of information.
Define	State the meaning of the term.
Calculate	Produce a numerical working, showing the relevant working if asked.
Draw/plot	Create a graphical representation of geographical information.
Label	Add a label to a resource, graphic or image.
Describe	Give an account of the main characteristics of something or the steps in a process.
Compare	Find the similarities and differences of two elements given in a question. Responses must relate to both elements and include a statement of their similarity/difference.
Explain	Provide a reasoned explanation of how or why something occurs. An explanation requires a justification/exemplification of a point.
Suggest	Apply understanding to provide a reasoned explanation of how or why something may occur. A suggestion requires a justification/exemplification of a point.
Assess	Use evidence to determine the relative significance of something. Consider factors and identify the most important.
Discuss	Explore the strengths and weaknesses of different sides of an issue/question. Investigate the issue by reasoning or argument.
Evaluate	Measure the success of something and provide a substantiated judgement. Review information and then bring it together to form a conclusion, drawing on evidence.

ESSENTIAL VOCABULARY

UK Landscapes

Keyword	Definition
Abrasion	When pebbles grind along the cliff in a sand-papering effect.
Attrition	When rocks that the waves are carrying knock against each other or the cliff. They break apart to become smaller and more rounded.
Backwash	is the water rolling down, away from the beach.
Biological weathering	the roots of plants, especially trees, can grow into cracks in a rock and split the rock apart.
Chemical weathering	Rainwater is slightly acidic. When rain falls on rocks such as limestone and chalk a weak chemical reaction takes place, causing the rock to weaken and break down.
Confluence	A point where two streams or rivers meet
Constructive waves	A powerful wave with a strong swash that surges up a beach.
Deposition	A process where sediments are dropped by the river or wave that carried them.
Destructive waves	A wave formed by a local storm that crashes down onto a beach and has a powerful backwash.
Discharge	The volume and speed at which water flows through the river channel
Erosion	The wearing away and removal of material by a moving force, such as a river or a breaking wave.
Groundwater flow	Water which runs in the ground/rock back into the sea
Hard engineering	Building artificial structures such as sea walls aimed at controlling natural processes.
Hydraulic action	this results from the sheer force of the water hitting the cliffs and wearing them away.
Igneous	Rocks created by volcanic activity when magma or lava cools, forming rocks made of crystals that are usually hard. Examples are granite and basalt.
Infiltration	Water which drains downwards into the soil
Longshore drift	The movement of material along a beach transported by wave action. D

ESSENTIAL VOCABULARY

Mass movement	is the movement of rocks and soil downslope due to gravity, helped by weaker rocks, steep slopes and heavy rainfall. Mass movements can be very slow – only a few millimetres a year – or sudden and rapid.
Mechanical weathering	For example, freeze-thaw weathering this happens when rainwater enters cracks or gaps in the rock and then freezes if temperatures drop below zero. The water expands as it turns into ice and then exerts pressure on the rock, causing it to break into smaller pieces.
Metamorphic	Rocks are formed from other rocks changed by extreme pressure or heat. They are usually formed from layers or bands of crystals and are very hard. Examples are slate and marble.
Prevailing wind	Direction from which wind usually blows.
Saltation	A process by which sediment is transported by being bounced along a river bed or sea floor.
Sedimentary	Rocks are formed of small particles that have been eroded, transported and deposited in layers. For example, sandstone or limestone.
Sliding	Where material moves rapidly downslope in one go, for example, in a landslide. In a slump, the material often rotates as it moves.
Slumping	Saturated soils and weak rock flow down the slope, often where there is permeable rock on top of impermeable rock.
Soft engineering	A sustainable approach to managing the coast which out using artificial structures.
Solution (erosion)	This is the chemical action on rocks by seawater. It is most effective on limestone rocks, in which the calcium is dissolved and carried away in solution.
Solution (transportation)	Some minerals will be dissolved in water.
Surface runoff	Water which runs over the surface of the ground, e.g. rivers
Suspension	Small particles (silt and clay-sized) are carried within the water by turbulent flow.
Swash	is the water rolling up towards the beach.
Traction	The transport of sediment along a river bed or the sea floor through a rolling action.
Velocity	How fast the water is flowing.
Weathering	is the breakdown and decay of rock by natural processes, usually acting on the river valley sides.

ESSENTIAL VOCABULARY

Weather and Climate

Key Word	Definition
Axial tilt	Over 40,000 years the angle of tilt changes, a greater angle of tilt is associated with higher summer temperatures but cooler winters.
Climate	The average weather conditions of an area over 25/30 years.
Deforestation	Permanently removing forest so the land can be used for something else.
Drought	An extended period of lower than normal rainfall/precipitation, causing water shortages
Eccentricity	Over 100,000 there are changes in the shape of the earth's orbit, more circular for warmer (interglacial periods) and more elliptical for cooler (glacial periods).
Ice cores	A section of ice drilled from a glacier showing the layers of ice created over time.
Milankovitch cycles	Long term variations in the orbit of the Earth around the Sun which results in long term changes in climate.
Ocean current	A directed movement of ocean water. The currents are made from forces acting on the water, such as, wind, different temperatures and earth's rotation.
Precession	Over 24,000 years the earth wobbles on its axis creating bigger or smaller differences between summer and winter.
Prevailing Winds	Direction from which wind usually blows.
Quaternary period	The current period of geological time.
Solar variation (sunspot theory	Activity in the sun which means more energy reaches the Earth leading to warmer temperatures.
Tree rings (dendrochronology)	Using tree rings to record changes in short- medium term changes in climate.
Tropical cyclones	This has wind speeds of over 63km per hour. Tropical storms can develop into tropical cyclones, hurricanes or typhoons with wind speeds of over 119km per hour.
Weather	The day-to-day conditions of the atmosphere e.g. temperature, precipitation, cloud cover etc.

ESSENTIAL VOCABULARY

Ecosystems

Key Word	Definition
Abiotic	The non-living parts of an ecosystem such as climate, temperature, water and soil type.
Biodiversity	The number and variety of living species found in a specific area
Biome	An ecosystem on a global scale. Put together, the world's biomes make up the biosphere – all living things on earth
Biotic	The living parts of an ecosystem
Carbon sink	An environmental reservoir that absorbs and stores more carbon than it releases
Deciduous woodland	Trees which lose their leaves in winter.
Deforestation	Permanently removing forest so the land can be used for something else.
Drought	An extended period of lower than normal rainfall/precipitation, causing water shortages
Subsistence	Where the resources available provide the basic needs for survival
Sustainable development	Development that meets the needs of the present without compromising (limiting) the ability of future generations to meet their own needs

ESSENTIAL VOCABULARY

Changing Cities

Key Word	Definition
Birth rate	The number of babies born per 1000 people
Central Business District (CBD)	The central area of a city, where land use is dominated by department stores, specialist and variety of stores, offices, cinemas, theatres and hotels.
Counter-urbanisation	The movement of people and employment from major cities to smaller settlement and rural areas located beyond the city or to more distant towns and cities.
Death rate	The number of deaths per 1000 people
Deindustrialisation	The decline of industrial activity in a region.
Function	The purpose of a particular area e.g. for residential use, recreation or shopping.
Inner city	The area around the CBD – usually built before 1918 in the UK.
Land use	The types of buildings or other features that are found in the area, e.g. terraced housing, banks, industrial estates, roads and parks.
Natural Increase	Death rate minus birth rate
Population density	The number of people per square kilometre.
Pull factor	The reasons why people move to a place – positive factors
Push factor	The reasons why people to choose to leave a place – negative factors
Re-urbanisation	The movement of people back towards city centres away from rural areas and suburbs.
Rural	The countryside
Rural to urban migration	The movement of people from the countryside to the city
Settlement	A place where people live – it could be a hamlet, village or a city.
Site	The land a settlement is built on (physical characteristics).
Situation	The location of a place relative to its surroundings and other places.
Suburbanisation	The outward spread of the built-up area, often at a lower density compared to the older parts of town.
Suburb	The area on the edge of the city. Many suburbs were build after 1945 and get newer as they reach the edge of the city.
Urban	Built up areas - towns and cities
Urbanisation	The increase in the percentage of people living in towns and cities, causing them to grow.

ESSENTIAL VOCABULARY

Global Development

Key word	Definition
Adult literacy	The % of the adult population able to read and write.
Birth rate	The average number of births per 1000 population per year.
Death rate	The average number of deaths per 1000 population per year.
Development	is a positive change to quality of life.
Economically active	The part of the population that is employed, ages 15-64.
Elderly dependents	People usually over 65 who are dependent on the younger economically active people.
Fertility rate	The average number of children born to a woman in her lifetime.
Gross Domestic Product	GDP is the total value of goods and services produced within a country in a year.
Human Development Index	measures life expectancy at birth, mean years of schooling for adults aged 25 years, expected years of schooling for children of school-entering age and gross national income (GNI) per capita (US$PPP).
Infant mortality	The number of children who die before their first birthday (per 1000).
Life expectancy	The number of years a person can expect to live.
Slums	A squalid and overcrowded area inhabited by very poor people.
Sustainable	Able to continue without causing damage to the environment.
Transnational corporation	A firm that owns or controls productive operations in more than one country through foreign direct investment.
Urbanisation	The increase in the percentage of people living in cities.
Young dependents	Children under 15 year old who are dependent on the economically active people for their needs.

ESSENTIAL VOCABULARY

Resource Management

Key Word	Definition
Abiotic	The non-living parts of an ecosystem such as climate, temperature, water and soil type.
Biodiversity	The number and variety of living species found in a specific area
Biotic	The living parts of an ecosystem
Deforestation	Permanently removing forest so the land can be used for something else.
Energy mix	The percentage of different energy sources (fossil fuels, nuclear, hydro and other renewable energies) used to generate electricity.
Fossil fuels	Energy resources such as coal, oil and natural gas that were formed from the remains of plants and animals that lived millions of years ago.
Fracking	A process that involves drilling down into the Earth and using a high-pressure water mixture to release gas trapped inside rock.
Non-renewable	Sources of energy that cannot be 'remade' because it would take millions of years for them to form again.
Renewable	A natural source of power that will never run out.
Stakeholders	A person with an interest or concern in something.
Sustainable management	Development that meets the needs of the present without compromising (limiting) the ability of future generations to meet their own needs

ESSENTIAL VOCABULARY

Fieldwork

Key Word	Definition
Quantitative	Data which contains numbers.
Qualitative	Data without numbers, description.
Primary data	Data that you collected yourself.
Secondary data	Data that has been collected by someone else.
Data collection	Recording data in the field.
Data presentation	Putting raw data into graph form to then analyse.
Random sampling	Data collected by chance.
Systematic sampling	Data that is collected at regular intervals.
Stratified sampling	Using prior knowledge to create subgroups.
Limitation	Weakness.
Subjective	Personal opinion and interpretation.
Objective	Factual evidence.
Reliability	The extent to which the measurements taken by the student were conducted in a consistent way.
Accuracy	the extent to which the measurements taken were closest to the true value, affected by the equipment used.
Operator error	differences in the results collected by different people, such as different people giving different scores.
Measurement error	mistakes made when collecting the data, such as a student mis-reading a thermometer.
Familiar fieldwork	Your fieldwork enquiry
Unfamiliar fieldwork	Someone else's fieldwork enquiry that you get presented with in an exam paper.

CHRIST'S COLLEGE

Emmanuel Schools Foundation

Principal **Julie Normanton**

Christ's College, Pennywell Road, Sunderland, SR4 8PG

T: 0191 534 4444 **E:** enquiries@christscollege.org.uk

www.christscollege.org.uk

EMMANUEL SCHOOLS FOUNDATION