Year 9 Topics

In year 9 we teach the following modules over the course of the year. Each module draws on prior learning from previous years and builds on understanding from the KS2 programme of study. Each module develops and deepens the Core knowledge that will underpin all areas of the curriculum at KS3 and KS4.

Topic	Rationale	Knowledge acquisition: to know… That (declarative) how to (procedural)	Department priorities	Homework	Key Tier 3 vocabulary	Skills and enrichment opportunities
1 Hazards **Links to …** Distinction between human and physical geography studied in both year 7 & 8. Builds upon key stage 2 national curriculum – tectonic hazards. This links to development in Year 8, where students will look at the responses and impacts of tectonic hazards in relation to development. **Laddering …** Compulsory topic for Edexcel GCSE Paper 1 –The physical environment. Provides knowledge foundations for Key Stage 4. Introduces the more complex concepts to		**… That the structure of the Earth leads to the formation of natural hazards** *How is the Earth structured? How does this lead to tectonic activity?*		Key words	Crust, mantle, core, convection currents, viscous, tectonic plates	***a) Subject Specific Skills*** Understanding of and the differences between Cause, effect, response Understanding of physical processes Comparing and contrasting different hazardous locations Understanding severity and significance Identifying geographic areas of risk Interpreting figures ***b) Numeracy*** Analysis of data Scale (Mercalli and Richter) ***c) Literacy*** Applying case study Researching and compiling case study notes
		… how to describe the distribution of natural hazards. *How is the earth's crust split into tectonic plates? Where are the plate boundaries? Does the location of earthquakes and volcanoes link to the location of plate boundaries?*	BUG – exam question practice and interpretation Map reading and interpretation 'Describe distribution' – TEA technique		Distribution, tectonic plates, plate boundary, earthquake, volcano	

allow transition into GCSE where more focus can be applied to exam technique. This links to key stage 4 GCSE Edexcel Physical Landscapes where students will study tectonic impact on landscape in the UK (Paper 2)	**…that there are a range of theories to explain tectonic movement.** *Who is Alfred Wegener? What is the theory of continental drift? What is tectonic theory? What are convection currents?*	Multiple choice exam question interpretation Map interpretation		Tectonic plates, earthquake, volcano, plate boundary, continental drift, convection currents	Extended writing planning Extended writing Interpretation of command words / stems such as 'explain', 'discuss', 'describe', 'to what extent' ***d) Reading*** Key Stage 3 textbooks Atlas reading Map reading Disciplinary reading activities ***e) Cultural Capital*** Locating areas of risk Appreciating social, environmental, political and economic effects of disasters Understanding the difference in management and responses between developing and developed countries ***f) Links to National Curriculum*** Understanding key physical processes involved in tectonic and weather disasters. Extends locational knowledge and spatial awareness. Explores how physical processes have an effect on the landscape.
	… That the Earth is divided up into plate boundaries – these cause volcanoes and earthquakes. *What is a plate boundary? What are the three types of plate boundary (constructive, destructive, conservative), how do the plates move at each of the boundaries? What hazards does the plate movement create?*	Retrieval practice, low stakes testing, using metacognitive questioning to support students tackling exam style questions. 'Explain' exam question using BLT technique.	Written homework	Convergent, divergent, conservative, oceanic, continental, subduction, lithosphere,	
	… That Earthquakes have key features.	Use of etymology to understand the		Richter scale, focus, epicentre,	

	They can be measured using different scales. *What are the main characteristics of an earthquake (focus, epicentre, seismic waves). How can earthquakes be measured?*	root of geographical words. Implementation of 'comparison' to support exam technique.		seismic waves, Mercalli scale, magnitude	
	… that developing countries like Haiti struggle to recover from tectonic hazards. *Where is Haiti? How developed is Haiti? What are the impacts of the earthquake on Haiti?*				
	…that not all volcanoes are the same; there are different features, shapes and types of eruptions. *What are the main characteristics of a volcano? What are the differences between composite*	Use of hinge questions, use of mini whiteboards to address misconceptions and assess understanding of all students.		Main vent, crater, volcanic bombs, pyroclastic flow, secondary cone, lava flow, magma chamber, shield, composite	

	and shield volcanoes?				
	… That Iceland is a tectonically active location *Icelandic volcano case study – Location of Iceland, plate boundary, primary and secondary effects, immediate and long term responses*			Developed country, Impact, response, short term, long term	
	… That the impacts of tectonic hazards can be very different in developing countries compared to developed countries *Developing volcano case study – Location, plate boundary, primary and secondary effects, immediate and long term responses*			Developing country, developed country , Effect, response, immediate	

	…that there are many factors that increase or decrease your risk of a natural hazard. *What is a natural hazard? How do different factors affect your risk of a natural hazard? What are the most / lease important factors in assessing hazard risk?*	Metacognitive strategies for students to tackle 'assess' extended writing. Use of flow maps to plan.		Tectonic, natural hazard, risk, assessment,	
	… That there are many reasons why people live in tectonically active locations. *Why do people still live in areas of risk? What are the advantages? Do the advantages outweigh the disadvantages?*			Evaluate, advantages, disadvantages, social, economic, environmental,	
2 **Disease** **Links to …** Builds on prior knowledge of countries/continents.	**… That there are 2 types of disease and how to categorise them as communicable and non communicable**	The use of TEA to describe variations of disease on a map. Red pen self assessment	Key words	Disease Manage Communicable Non Communicable	***a) <u>Subject Specific Skills</u>*** Locational skills Knowledge of Reading and interpreting a variety of cartography Map Reading Skills

Improves locational knowledge and physical/human interaction. Builds on cartography skills (Year 7). Builds upon key ideas about development and prior knowledge of development topic studied in year 8. This links to knowledge of developing / developed differences in access to education and healthcare. **Laddering …** Introduces key resource and figure interpretation required for GCSE Paper 1, 2 and 3. Sets clear knowledge and skill foundations for A Level study of Disease	*What is 'disease'? What are the differences between communicable and non communicable disease?*	throughout. Key words explicitly defined.			***b) Numeracy*** Figure and data analysis Comparing graphs and data ***c) Literacy*** Planning extended writing Extended writing Understanding and using key exam command words e.g. 'assess', 'evaluate' 'describe', 'explain', 'discuss' ***d) Reading*** Atlas Reading Map Reading ***e) Cultural Capital*** Understanding the challenges facing developing and developed countries in managing disease Making links between social, economic, political and environmental factors that influence the spread of disease. Awareness of the role of international and national organisations in controlling the spread of disease. ***f) Links to National Curriculum***
	…that communicable diseases decrease as a country develops. **To know how** cartograms can be used to display the global spread of disease.	TEA strategy to describe trends on graphs. Teacher led modelling of metacognitive strategies e.g. TEA. Red pen self assessment throughout. BLT strategy used to tackle 4 mark 'explain' questions.		Disease, life expectancy	
	… **that** deaths from Malaria are most likely to occur in Sub-Saharan Africa due to climate, poor	Low stakes self assessment (retrieval). Student self assessment red pen tasks. Map interpretation.	Malaria written homework	Sub-Saharan Africa, cartogram, eradicate	

	drainage, education and poverty.	Describing locations. Teacher led modelling activities. 'I do, you do' tasks. BLT technique for 'explain' questions. Hyerlee thinking maps for comparing and contrasting.			Extends student's locational knowledge and deepens their spatial awareness of the world's countries using maps of the world. Focus given to key regions within Africa. An understanding of human geography and links made with spread of disease and development.
	…that cholera spread after the 2010 Haiti earthquake and caused social, environmental and economic impacts which required international and national efforts.	Describing distribution using TEA technique. Categorising impacts. Low stakes testing and red pen activities to assess understanding and address misconceptions.		Epidemic, cholera, environmental, economic, international, national	
	…that diseases can be managed (prevented, treated, cured) on 3 scales: individually, nationally and internationally	TEA technique to describe maps. Key words explicitly defined. Red pen self assessment. Diamond 9 metacognitive strategy for		Prevention, cure, treatment, vaccine	

		assessment of factors.			
	…that some places more vulnerable to disease than others and there are social, economic and environmental reasons for this.	Retrieval practice of key terms, low stakes self assessment, factor catergorisation ,diamond 9 metacognitive strategy for assessing factors, metacognitive flow maps for planning extending writing		Management, economic, environmental, social	
	…that globalisation helped Covid-19 spread globally and become a pandemic.	Key vocabulary explicitly defined. I do, we do, you do tasks included. 4 Mark explain question with BLT strategy.		Globalisation, disease, pandemic	
	…how to think metacognitively when completing a decision making exercise.	Key term retrieval practice. Red pen self assessment. Describing location, response justification and modelling		Development, disease, prevention	

3 People and Environmental Issues **Links to….** Europe , weather and climate studied in year 8. This builds upon Cold environments (previous topic in year 9). The topic extends knowledge of weather and climate conditions and how this impacts on life and diversity of an area as well as plant and animal adaptations. **Laddering…** This topic acts as a foundation for Paper 3 Edexcel GCSE.	**…that there are 9 global biomes which are influenced by climate (temperature, precipitation, sunshine hours).**	Key word recall starter task, red pen activities included, TEA metacognitive strategy to describe distribution,	Key words	Biosphere, biome, ecosystem, climate	***Subject Specific Skills*** Understanding of interdependence between climate and biomes. Understanding key physical processes such as desertification and deforestation and how this has an impact on the land. Understanding how human processes may affect the climate and the land e.g. deforestation and the impacts and responses associated with this. ***a) Numeracy*** Climate Graphs ***b) Literacy*** Applying case studies. Researching and compiling case study notes Extended writing planning Extended writing Interpretation of command words / stems such as ‘explain’, ‘discuss’, ‘describe’, ‘assess’, ‘evaluate’ ***c) Reading*** Map reading Guided reading materials ***d) Cultural Capital*** Locating areas of risk of climate change. Understanding the

					differences in managing climate in terms of development. Understanding the relationship between development and exploitation of land and resources. ***e) <u>Links to National Curriculum</u>*** Developing contextual knowledge of globally significant places – Arctic and Tundra. Evaluation of interdependence of life within cold environments and the impact of external factors over time. This is contrasted with areas of different climates such as tropical rainforests . Students will develop an understanding of the physical and human processes that shape cold environments and how they change over time. The topic specifically looks at cold environments such as Russia and the Arctic and how people interact with the area.
	….that the biosphere provides resources for people on different scales and this its	Key word recall starter task, red pen tasks incorporated for self assessment, low tariff exam questions	Humans and the biosphere homework 1	Goods, services, exploitations, indigenous	

	function is important naturally.				
	…that population and resource demand is increasing globally, but mainly in developed and emerging countries.	Graph interpretation, describing trends using TEA strategy, using geographical theory to interpret trends,		Optimistic, pessimistic, population	
	…that tropical rainforests have high levels of biodiversity and plants and animals are adapted to the conditions.	'Describe' TEA starter task, 'Explain' exam style questions, mini whiteboards task, red pen self assessment.		Stratified layers, adaptations, interdependence	
	To know that deforestation is the main direct threat and climate change is the main indirect threat to tropical rainforests	Mini white boards, assessment and evaluation of management strategies	Climate graphs (optional)	Direct threat, indirect threat, deforestation, sustainable	
	To know that Taiga forests have low levels of	Comparing and contrasting using flow maps		Biodiversity, taiga forest, interdependent,	

	biodiversity and animals and plants are adapted to a harsh climate			adaptation, nutrient cycle,	
	To know that taiga forests are threatened by human activity. There are differing views on how we can use the taiga without destroying it,	Assessment of factors, ordering of importance by using flow maps		Wilderness area, national park, sustainable, management, direct, indirect threats	
	To know that all energy resources have environmental impacts but renewable and recyclable resources have a lower impact that non renewable resources.	Evaluation of resources		Renewable, non renewable, recyclable,	
	To know that the demand for energy varies across the world because of physical factors, accessibility, level	Hinge questions Use of flow maps to identify relationship between cause and effect		Energy consumption, energy poverty,	

	of development and politics				
	To know that risky and dangerous areas that are difficult to access are exploited to meet growing energy demands.	Hinge question, categorisation of factors		Ecologically sensitive areas, albedo effect,	
4 Cold Environments and Glaciation **Links to ……** Physical processes of erosion in both Rivers (year 7) and Coasts (year 8). The topic builds upon knowledge and skills acquired in Europe weather and Climate (Year 8) as well as map interpretation (Year 7). **Laddering….** This topic enables students to gain background knowledge to cold environments / biomes that they will study in year 9 topic 3 (People and Environmental Issues). This topic also allows students to understand the role of glaciation in shaping	**…That cold environments experience temperatures that are at or below 0°C for sustained periods of time.**	Low stakes testing and recall activities. Metacognitive strategies to tackle 3 mark 'describe questions' including TEA technique. BLT strategy used for 'explain'. Example answers used to demonstrate good responses.		Polar, tundra, interdependence, permafrost, biome, adaptation	***f) Subject Specific Skills*** Understanding of and interdependence between climate and biomes. Understanding key physical processes and how they shape the land e.g. erosion, glaciation. ***g) Numeracy*** Climate Graphs ***h) Literacy*** Applying case study Researching and compiling case study notes Extended writing planning Extended writing Interpretation of command words / stems such as 'explain', 'discuss', 'describe', 'to what extent' ***i) Reading*** Key Stage 3 textbooks Atlas reading
	….that animals and plant species are specifically adapted to survive in cold environments.	Metacognitive strategies to answer 'explain' questions e.g. BLT.		Polar, tundra, biome, adaptation,	

the land which they study at Edexcel GCSE paper 2.	**….that a glacier is a slow-moving mass of ice and snow on land. The extent of glaciers increases in glacial periods.**	Figure and map interpretation using TEA technique. Use of mini whiteboards as low stakes testing and address misconceptions.		Glacial and interglacial periods, tundra, polar, glacier, alpine, continental	Map reading Guided reading materials ***j) <u>Cultural Capital</u>*** Locating areas of risk of climate change. ***k) <u>Links to National Curriculum</u>*** Developing contextual knowledge of globally significant places – Arctic and Tundra. Evaluation of interdependence of life within cold environments and the impact of external factors over time. Understanding of the physical and human processes that shape cold environments and how they change over time. The topic specifically looks at cold environments such as Russia and the Arctic and how people interact with the area.
	…that glacial ice forms in upland or polar regions above the snow line where snow and ice cover the ground.	Metacognitive sequencing strategy used to guide students through formation.		Erosion, weathering, freeze-thaw, plucking, abrasion,	
	…that glacial landforms can be created due to the processes of transportation and deposition and how they change the shape of the landscape	Interpretation of aerial photographs. Use of mini whiteboards to assess understanding. Exam technique.		Moraine, erratic, drumlin	
	…that glaciers shaped the UKs upland landscapes in the last ice age 10,000 years ago.	Metacognitive discussion and strategy to ‘describe’ geographical		Upland, lowland, glaciation, process, physical	

		figures. The use of TEA to describe. Disciplinary reading task to support literacy in geography. Exam style question practice to encourage familiarity of exam structure.			
	….that economic activity provides opportunities in Svalbard, but the cold environment provides challenges.	Starter task – low tariff exam style questions. Recall content. Describing location. Interpretation of data and images. Diamond 9 strategy to tackle 'assess' command word. Flow map metacognitive strategy used to support extended writing for 'assess' command word.		Archipelago, permafrost, minerals, extraction	
	…that climate change is causing glaciers to melt, which is creating	Defining key geographical terminology. Discussion time incorporated into		Climate change, sea level rise, mass balance, greenhouse effect	

	global consequences.	the lesson. Low stakes true or false plenary assessment of understanding.			
5 Population and Migration **Links to….** Development topic taught in year 8. This topic builds upon reasons for migration (push and pull factors) and the links between migration and development. Builds on prior knowledge of countries/continents. Improves locational knowledge and physical/human interaction. Builds on cartography skills. **Laddering…** This topic links to Human geography topics taught on paper 1 and 2 Edexcel B GCSE.	**…that the population is distributed unevenly around the world and there are a number of key factors that determine where people live.**	Describe distribution task use, BUG metacognitive strategy used to tackle 'explain' exam question. BLT used to 'explain'. Metacognitive sequencing strategy used to form BLT response.	Key words	Density, population, distribution, even, uneven, sparsely, densely	***Subject Specific Skills*** Understanding of cause and effect of population change. This topic introduces geographical modelling used at GCSE to widen students understanding of theory. Students will categorise push and pull factors and understand the social, economic and environmental considerations associated with population change. ***l) Numeracy*** Graphs Population pyramids Data Tables ***m) Literacy*** Applying case studies. Researching and compiling case study notes Extended writing planning Extended writing
	…that global population is changing, so excessively large numbers creates pressure and can lead to depleting resources.	Interleaved content for low stakes starter task, describing data (modelled activity used), key words explicitly taught, model answers used, Explain exam question		Over population, consequences, pollution, health care, education	

		incorporated, BLT used			Interpretation of command words / stems such as 'explain', 'discuss', 'describe', 'assess', 'evaluate' ***n) Reading*** Key Stage 3 textbooks Atlas reading Map reading Guided reading materials ***o) Cultural Capital*** Looking at areas associated with over population and the challenges e.g. favelas in Rio de Janeiro. ***p) Links to National Curriculum*** Developing contextual knowledge of globally significant places – Rio de Janeiro and China. Evaluation of links between development and population and the effects on people.
	…that the demographic transition model is a model which shows population change over time. This takes into account birth rates, death rates and stages of development.	Links made to geographical models used to interpret trends, modelling used to 'describe'.		Birth rate, death rate, natural change, development	
	…that population pyramids show the population structure of a country. To know how to construct and interpret population pyramids.	Data interpretation, low stakes knowledge checks, red pen self assessment used throughout	Homework – population pyramids	Birth rate, death rate, life expectancy	
	…that migration means the movement of people from one place to another and there are multiple reasons	Key words are explicitly taught, disciplinary reading,		Migration, immigrant, emigrant, refugee, push / pull factors	

	why people migrate.				
	That Rio de Janiero is growing and it is important on a variety of scales	Geographical figure interpretation, low stakes knowledge checks, red pen self assessment		Rio de Janeiro, importance, global, national, regional	
	…That urbanisation in Rio has created inequality, with different challenges and opportunities across the city.	Describing distributions using TEA metacognitive strategy, explicitly teaching key words, BLT strategy used for 'explain' command words.		Inequalities,	
	…that Favelas are illegal squatter settlements with high levels of social deprivation. They can be improved using charities and government initiatives.	Low stakes knowledge recall, data interpretation, TEA used for describing data, metacognitive planning sheet used to support 'evaluate' question.		Favela, self-help scheme, top down strategy, bottom up strategy	

*Bridging gaps due to Covid19

Substantive Knowledge
Disciplinary Knowledge