

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. 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 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.		... That the structure of the Earth leads to the formation of natural hazards <i>How is the Earth structured? How does this lead to tectonic activity?</i>			Crust, mantle, core, convection currents, viscous, radioactive decay, tectonic plates	a) <u>Subject Specific Skills</u> 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			
		... how to describe the distribution of natural hazards. <i>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?</i>					BUG – exam question practice and interpretation Map reading and interpretation 'Describe distribution' – TEA technique	Distribution, tectonic plates, plate boundary, earthquake, volcano	b) <u>Numeracy</u> Analysis of data Scale (Mercalli and Richter)
		...that there are a range of theories to explain tectonic movement. <i>Who is Alfred Wegener? What is the theory of continental drift? What is tectonic theory?</i>					Multiple choice exam question interpretation Map interpretation		

	<p><i>What are convection currents?</i></p>				<p>Disciplinary reading activities</p> <p>e) <u>Cultural Capital</u> 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</p> <p>f) <u>Links to National Curriculum</u> 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.</p>
<p>... That the Earth is divided up into plate boundaries – these cause volcanoes and earthquakes.</p> <p><i>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?</i></p>	<p>Retrieval practice, low stakes testing, using metacognitive questioning to support students tackling exam style questions. ‘Explain’ exam question using BLT technique.</p>		<p>Constructive, destructive, conservative, oceanic, continental, subduction, lithosphere, asthenosphere, pressure, ridge</p>		
<p>... That Earthquakes have key features. They can be measured using different scales.</p> <p><i>What are the main characteristics of an earthquake (focus, epicentre, seismic waves). How can earthquakes be measured?</i></p>	<p>Use of etymology to understand the root of geographical words. Implementation of ‘comparison’ to support exam technique.</p>		<p>Aftershock, Richter scale, focus, epicentre, seismic waves, Mercalli, scale, seismometer, magnitude</p>		
<p>... that developing countries like Haiti struggle to recover from tectonic hazards.</p> <p><i>Where is Haiti? How developed is Haiti? What are the impacts of</i></p>					

	<p><i>the earthquake on Haiti?</i></p>				
	<p>...that not all volcanoes are the same; there are different features, shapes and types of eruptions. <i>What are the main characteristics of a volcano? What are the differences between composite and shield volcanoes?</i></p>	<p>Use of hinge questions, use of mini whiteboards to address misconceptions and assess understanding of all students.</p>		<p>Main vent, crater, volcanic bombs, pyroclastic flow, secondary cone, lava flow, magma chamber, shield, composite</p>	
	<p>... That Iceland is a tectonically active location <i>Icelandic volcano case study – Location of Iceland, plate boundary, primary and secondary effects, immediate and long term responses</i></p>			<p>HIC, Effect, response, immediate</p>	
	<p>... That the impacts of tectonic hazards can be very different in developing countries compared to developed countries <i>Developing volcano case study – Location, plate boundary, primary and secondary effects, immediate and long term responses</i></p>			<p>Developing country, developed country , Effect, response, immediate</p>	

	<p>...that there are many factors that increase or decrease your risk of a natural hazard. <i>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?</i></p>	<p>Metacognitive strategies for students to tackle 'assess' extended writing. Use of flow maps to plan.</p>		<p>Tectonic, natural hazard, risk, assessment,</p>	
	<p>... That there are many reasons why people live in tectonically active locations. <i>Why do people still live in areas of risk? What are the advantages? Do the advantages outweigh the disadvantages?</i></p>			<p>Evaluate, advantages, disadvantages, social, economic, environmental, comparison</p>	
<p>2 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).</p> <p>Laddering.... This topic enables students to gain background knowledge to</p>	<p>...That cold environments experience temperatures that are at or below 0°C for sustained periods of time.</p>	<p>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.</p>		<p>Polar, tundra, interdependence, permafrost, biome, adaptation</p>	<p>g) <u>Subject Specific Skills</u> Understanding of and interdependence between climate and biomes. Understanding key physical processes and how they shape the land e.g. erosion, glaciation.</p> <p>h) <u>Numeracy</u> Climate Graphs</p> <p>i) <u>Literacy</u> Applying case study</p>
	<p>...that animals and plant species are</p>	<p>Metacognitive strategies to answer</p>		<p>Polar, tundra, biome, adaptation,</p>	<p>Researching and compiling case study notes Extended writing planning</p>

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 the land which they study at Edexcel GCSE paper 2.	specifically adapted to survive in cold environments.	'explain' questions e.g. BLT.			<p>Extended writing Interpretation of command words / stems such as 'explain', 'discuss', 'describe', 'to what extent'</p> <p>j) <u>Reading</u> Key Stage 3 textbooks Atlas reading Map reading Guided reading materials</p> <p>k) <u>Cultural Capital</u> Locating areas of risk of climate change.</p> <p>l) <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.</p>
	...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	
	...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 figures. The use of TEA to describe. Disciplinary reading task to support literacy in		Upland, lowland, glaciation, process, physical	

		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 global consequences.	Defining key geographical terminology. Discussion time incorporated into the lesson. Low stakes true or false plenary assessment of understanding.		Climate change, sea level rise, mass balance, greenhouse effect	
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	...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,		Biosphere, biome, ecosystem, climate	<u>Subject Specific Skills</u> 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

<p>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.</p> <p>Laddering... This topic acts as a foundation for Paper 3 Edexcel GCSE.</p>	<p>...that the biosphere provides resources for people on different scales and this its function is important naturally.</p>	<p>Key word recall starter task, red pen tasks incorporated for self assessment, low tariff exam questions</p>		<p>Goods, services, exploitations, indigenous</p>	<p>human processes may affect the climate and the land e.g. deforestation and the impacts and responses associated with this.</p> <p>m) Numeracy Climate Graphs</p>
	<p>...that population and resource demand is increasing globally, but mainly in developed and emerging countries.</p>	<p>Graph interpretation, describing trends using TEA strategy, using geographical theory to interpret trends,</p>		<p>Optimistic, pessimistic, population</p>	<p>n) 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'</p>
	<p>...that tropical rainforests have high levels of biodiversity and plants and animals are adapted to the conditions.</p>	<p>'Describe' TEA starter task, 'Explain' exam style questions, mini whiteboards task, red pen self assessment.</p>		<p>Stratified layers, adaptations, interdependence</p>	<p>o) Reading Key Stage 3 textbooks Atlas reading Map reading Guided reading materials</p>
	<p>...that deforestation is the main direct threat and climate change is the main indirect threat to tropical rainforests.</p>	<p>'describe distribution' starter task to practice skills, disciplinary reading task, BLT strategy used to tackle 'explain' question, mini white boards used to assess understanding.</p>		<p>Direct threat, indirect threat, deforestation</p>	<p>p) 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.</p> <p>q) Links to National Curriculum 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</p>

					different climates such as tropical rainforests . Students will develop and 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.
<p>4 Population and Migration</p> <p>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.</p> <p>Builds on prior knowledge of countries/continents. Improves locational knowledge and physical/human interaction. Builds on cartography skills.</p> <p>Laddering... This topic links to Human geography topics taught on paper 1 and 2 Edexcel B GCSE.</p>	<p>...that the population is distributed unevenly around the world and there are a number of key factors that determine where people live.</p>	<p>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.</p>		<p>Density, population, distribution, even, uneven, sparsely, densely</p>	<p><u>Subject Specific Skills</u></p> <p>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.</p>
	<p>...that global population is changing, so excessively large numbers creates pressure and can lead to depleting resources.</p>	<p>Interleaved content for low stakes starter task, describing data (modelled activity used), key words explicitly taught, model answers used, Explain exam question incorporated, BLT used</p>		<p>Over population, consequences, pollution, health care, education</p>	<p>r) <u>Numeracy</u></p> <p>Graphs Population pyramids Data Tables</p>
	<p>...that the demographic transition model is a model which shows population</p>	<p>Links made to geographical models used to interpret trends, modelling used to ‘describe’.</p>		<p>Birth rate, death rate, natural change, development</p>	<p>s) <u>Literacy</u></p> <p>Applying case studies. Researching and compiling case study notes Extended writing planning Extended writing</p> <p>Interpretation of command words / stems such as ‘explain’, ‘discuss’, ‘describe’, ‘assess’, ‘evaluate’</p> <p>t) <u>Reading</u></p> <p>Key Stage 3 textbooks</p>

	<p>change over time. This takes into account birth rates, death rates and stages of development.</p>				<p>Atlas reading Map reading Guided reading materials</p> <p>u) <u>Cultural Capital</u> Looking at areas associated with over population and the challenges e.g. favelas in Rio de Janeiro.</p>
	<p>...that population pyramids show the population structure of a country. To know how to construct and interpret population pyramids.</p>	<p>Data interpretation, low stakes knowledge checks, red pen self assessment used throughout</p>		<p>Birth rate, death rate, life expectancy</p>	<p>v) <u>Links to National Curriculum</u> Developing contextual knowledge of globally significant places – Rio de Janeiro and China. Evaluation of links between development and population and the effects on people.</p>
	<p>...that migration means the movement of people from one place to another and there are multiple reasons why people migrate.</p>	<p>Key words are explicitly taught, disciplinary reading,</p>		<p>Migration, immigrant, emigrant, refugee, push / pull factors</p>	
	<p>That Rio de Janeiro is growing and it is important on a variety of scales</p>	<p>Geographical figure interpretation, low stakes knowledge checks, red pen self assessment</p>		<p>Rio de Janeiro, importance, global, national, regional</p>	
	<p>...That urbanisation in Rio has created inequality, with different challenges and opportunities across the city.</p>	<p>Describing distributions using TEA metacognitive strategy, explicitly teaching key words, BLT strategy used for 'explain' command words.</p>		<p>Inequalities, qualitative, quantitative</p>	

	...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	
<p>5 Disease Links to ...</p> <p>Builds on prior knowledge of countries/continents. Improves locational knowledge and physical/human interaction. Builds on cartography skills (Year 7).</p> <p>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.</p> <p>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</p>	<p>... That there are 2 types of disease and how to categorise them as communicable and non communicable</p> <p><i>What is 'disease'?</i> <i>What are the differences between communicable and non communicable disease?</i></p>	The use of TEA to describe variations of disease on a map. Red pen self assessment throughout. Key words explicitly defined.		Disease Manage Communicable Non Communicable	<p>a) <u>Subject Specific Skills</u></p> <p>Locational skills Knowledge of Reading and interpreting a variety of cartography Map Reading Skills</p> <p>b) <u>Numeracy</u></p> <p>Figure and data analysis Comparing graphs and data</p>
	<p>...that communicable diseases decrease as a country develops. To know how cartograms can be used to display the global spread of disease.</p>	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, cartogram	<p>c) <u>Literacy</u></p> <p>Planning extended writing Extended writing Understanding and using key exam command words e.g. 'assess', 'evaluate' 'describe', 'explain', 'discuss'</p> <p>d) <u>Reading</u></p> <p>Atlas Reading Map Reading</p>
	<p>... that deaths from Malaria are most likely to occur in Sub-Saharan Africa due to climate,</p>	Low stakes self assessment (retrieval). Student self assessment red pen tasks. Map interpretation.		Sub-Saharan Africa, cartogram, eradicate	<p>e) <u>Cultural Capital</u></p> <p>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.</p>

	poor 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.			Awareness of the role of international and national organisations in controlling the spread of disease. f) <u>Links to National Curriculum</u>
	...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	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 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 assessment of factors.		Prevention, cure, treatment, national, international, vaccine	
	...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 categorisation, diamond 9 metacognitive strategy for		Management, economic, environmental, social	

		assessing factors, metacognitive flow maps for planning extending writing			
	...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	

*Bridging gaps due to Covid19

Substantive Knowledge

Disciplinary Knowledge

