Brook Green
CENTRE FOR LEARNING

Year	Autumn Term	Spring Term	Summer Term
	Key Stage 3		
7	**'My Plymouth'** • **Location** • **Place** • **Region** • **Movement** • **Human/Environment interaction** **Homework Project – where is your favourite place in Plymouth? Create a poster/PowerPoint/photo story/fact file** *Substantive knowledge:* • *Plymouth is a city (what is a city?)* • *Plymouth is a unitary authority in Devon (what is a unitary authority?)* • *Devon is in the South West of England (maps and compass points)* • *England is one of the 4 countries that make up the British Isles, the other 3 are Wales, Scotland and Northern Ireland.* • *The importance of scale on a map* • *Plymouth has a deep natural harbour the second deepest in the UK.* *Key vocabulary:* *Town, city, county, country, map, scale, grid reference, location, South West, Devon, United Kingdon, England, compass, north south, east, west, urban, unitary authority, British Isles, population* *Disciplinary knowledge*	**What is weather?** • **Place** • **Region** • **Human/Environment Interaction** **Homework Project – home weather station, build a rain gauge from a plastic bottle and keep a record of how much rain falls this term or build model of a weather station** *Substantive knowledge:* • *Weather The state of the atmosphere at a particular place and time* • *Temperature How hot or cold it is.* • *Air pressure It measures how heavy the air is – how closely packed the air molecules are.* • *Wind speed How fast the wind is blowing.* • *Wind direction* • *Precipitation the amount of rain that falls.* • *Cloud cover how much of the sky is hidden by cloud.* *Key vocabulary:* *air pressure, anemometer, atmosphere, barograph, barometer, climate, clouds, condensation, fog, gale, gust, hail, humidity, hurricane, isobar, meteorology, precipitation, prevailing wind, rain gauge, wind chill* *Disciplinary knowledge* *Describe the weather patterns recorded locally. Measure rainfall and temperature.*	**How do Devon rivers shape our landscape?** • **Location** • **Place** • **Human/Environment interaction** **Homework Project – visit a local river draw, paint or photograph it and label the features you can see or build a 3D model of a river labelling the features.** *Substantive knowledge:* • *Describe and understand key aspects of the physical geography of rivers and the water cycle* • *How rivers change, why they are important and how they can be managed. Impacts of flooding and link to climate change.* *Key vocabulary:* *banks, brackish, channel, current, delta, deposition, erosion, estuary, floodplain, meander, mouth, ox-bow lake, plunge pool, rapid, reservoir, river, river bed, sediment, source, transportation, tributary, waterfall, weathering, upper course, middle course, lower course* *Disciplinary knowledge:* *Local river study – map work, features of the river* *Changing rivers, how rivers change through the processes of weathering, erosion, deposition*

	Map work, finding Plymouth on a map of Devon, The UK, Europe *Map scales – how scale impacts the level of detail that can be included and how different scales are useful for different purposes.*	*Visit a weather station to experience how the information is gathered.*	

8	**Why do people come to Devon on holiday?**
	• **Location**
	• **Place**
	• **Region**
	• **Movement**
	• **Human/Environment interaction**
	
	Homework Project – produce a holiday brochure to encourage people to visit Devon
	Substantive knowledge:
	• *South East Devon has the mildest climate in the UK*
	• *The English Riviera – Where is the English Riviera? What is a riviera? Where are other rivieras?*
	• *The growth of the tourist industry*
	• *Tourism cycles*
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	Key vocabulary:
	Climate, Resort, Riviera, tourism, domestic tourism, international tourism, hotels, holiday parks, attractions, campsites, family, seaside, country, beaches, hills, mountains, lakes, sea, waves, river, sun, rain, snow, pebble, cliffs, trees, scenery, view, restaurant, train, bus, tourist, arcades
	
	Disciplinary knowledge
	Research and enquiry:
	What do people look for in a holiday destination?
	What makes Devon a popular holiday destination?
		Climate change and sustainability
		• **Location**
		• **Place**
		• **Region**
		• **Human/Environment interaction**
		
		Link to English Key theme Morality and righteousness.
		Homework Project – Lego challenge, invent gadget to make life easier that uses green energy, what does it do? What is it made from? How is it powered?
		Substantive knowledge:
		• *Weather The state of the atmosphere at a particular place and time*
		• *Climate The state of the atmosphere over a long period of time (typically the average conditions over a 30 yr period)*
		• *Temperature How hot or cold it is.*
		• *Climate change a change in the expected state of the atmosphere*
		• *Global warming and Ice ages*
		• *Natural climate change processes*
		• *Human climate change processes*
		
		Key vocabulary:
		Climate change, carbon footprint, carbon neutral, net zero, fossil fuels, sustainability, renewable energy, global warming, greenhouse gases, green energy
		
		Disciplinary knowledge
			The Coast
			• **Location**
			• **Place**
			• **Region**
			• **Movement**
			• **Human/Environment interaction**
			
			Homework Project – coastal defenders, visit a local coastal area and
			the series | Coasts for Kids
			Substantive knowledge:
			• *Coast – where the land meets the sea.*
			• *Coastal features and their formation:*
			• *Erosion*
			  ○ *Headland, Bay, Cave, Stack, Arch,Cliff*
			• *Deposition*
			  ○ *Beach,Dune*
			• *Weathering*
			• *Coastal Protection Projects*
			  ○ *Artificial beaches, breakwaters, local projects.*
			
			Key vocabulary:
			abrasion, arch, attrition, backwash, bay, beach, breakwater, cave, cliff, coastline, corrosion, current, deposition landforms, erosion landforms, groyne, headland, sea defences, sea wall, spit, stack, stump, waves.
			
			Disciplinary knowledge
			Comparing satellite photographs of coastlines over time to investigate changing coastlines
			Understanding how coastlines are monitored

	Investigating the climate in Devon, what physical features make the SE coast milder than other parts of the UK? *Similarities and differences:* *How does Devon compare with other UK, European and Worldwide holiday resorts?* *Dartmoor vs Dawlish, two very different locations.*	*One small change, the effect of making change* *Measuring climate change* *Impact of climate change* *Managing climate change*	*Research and enquiry how coastal defence systems work.* *Making the link between our changing climate, more powerful storms and the effect on coastlines and the people who live and work there.*
Year	Autumn Term	Spring Term	Summer Term
9	**More Moors** • **Location** • **Place** • **Region** • **Human/Environment interaction** **Homework Project – volcano project, this can be a written project or a labelled model of a volcano.** *Substantive knowledge:* • *Geology of Dartmoor, Exmoor and Bodmin Moor,* • *Plate tectonics* • *Earthquakes* • *Volcanoes – how does a volcano form? States of a volcano, where are other volcanoes? Ring of Fire* • *Rocks and weathering* *Key vocabulary:* *moor, geology, volcano, granite, crater, caldera, active, dormant, extinct, magma, magma chamber, vent, Ring of Fire, eruption, plate tectonics, plate boundary, Richter Scale, seismograph, seismology, lava.* *Disciplinary knowledge: Physical Geography linked with geological timescales and plate*	**Great Barrier Reef** • **Location** • **Place** • **Region** • **Movement** • **Human/Environment interaction** **Homework Project – protecting the reef, one small change can make a difference. What can you change and how will it help? or The Great Barrier Reef ecosystem research some of the plants and creatures dependant on the reef for their survival** *Substantive knowledge:* • *Where the Great Barrier Reef is* • *What the Great Barrier Reef is* • *What is happening to it and why?* • *To understand the process of coral bleaching and the implications this has for the reef, the creatures who live there and those who make a living from it.* • *What can we do? How we can rescue the Reef* • *Understanding the impact human interaction has on the reef.* *Key vocabulary:* *adaptation, climate change, coral bleaching, coral disease, crown of thorns, ocean*	**Blue Planet** • **Location** • **Place** • **Movement** • **Human/Environment interaction** **Homework Project – #thinkocean take the Ocean Conservation Trust online questionnaire and choose one of the projects based on your result.** *Substantive knowledge:* • *Name and identify the 5 oceans* • *What is an ocean?* • *70% of the world's surface is covered by Ocean which makes up 97% of the Earth's water* • *How the Oceans influence climate and weather* • *How the changing climate affects the ocean – migration, extinction etc.* • *Layers of the ocean and who lives where?* • *Taking care of our Oceans – Linked project with Seiche* Seiche Marine Technology Southwest | PAM Marine Mitigation Specialists *Key vocabulary:* *Ocean, climate, Atlantic, Pacific, Arctic, Indian, Southern, ecosystem, pollution, salination, water*

	tectonics, how does the world move, how does this affect our planet? *Building on their knowledge of map work comparing maps from when Dartmoor was subtropical to present day to explain some of the rock formation* *exploring the world from a different point of view, maps centred around the Pacific highlighting the Ring of Fire* *Collect and interpret geographical data*	*acidification, carbonic acid, habitat, ecosystem, habitat, reef* *Disciplinary knowledge:* *Building on their knowledge of maps, globes and atlases – exploring the information to be gained from atlases, using maps showing different features, political, temperature, rainfall, topographical etc.* *Interpreting maps and ariel and satellite photography – comparing old and current images of the reef and analysing what has changed.*	*cycle, zones, current, polar, Epipelagic Zone (Sunlight Zone), Mesopelagic Zone (Twilight Zone), Bathypelagic Zone (Midnight Zone), Abyssopelagic Zone (Lower Midnight Zone), Hadopelagic Zone (The Trenches),* *Disciplinary knowledge* *Fieldwork techniques – monitoring the seas around Plymouth.* *Analysing and drawing conclusions from the data.* *Reading nautical maps and using SONAR*