Geography Core Curriculum
Year 4

Unit	*Why do some earthquakes cause more destruction than others?*	*Why are jungles so wet and deserts so dry?*	*How can we live more sustainably?*
Previous Learning	• The causes and effects of the eruption of Vesuvius in AD 79 in History (Why do we know so much about where Sappho used to live? Y2 History)	• A wide range of different natural and human environments at different scales around the world. (Why do so many people live in megacities? Y3) • The physical and human features of these environments. (How and why is my local area changing? Y3) • The difference between weather and climate. (How does the weather effect our lives? Y1) • That environmental change can be both positive and negative. (Why do so many people live in megacities? Y3)	• A wide range of different natural and human environments at different scales around the world. (How and why is my local area changing? Y3) • The physical and human features of these environments. (How and why is my local area changing? Y3) • That environments change as a result of both physical and human processes. (How and why is my local area changing? Y3) • That environmental change can be both positive and negative. (How and why is my local area changing? Y3)
Substantive Knowledge	• What causes an earthquake. • The distribution of earthquakes occurring around the world. • Why earthquakes happen at some locations but not others. • How the magnitude of an earthquake is measured. • Why earthquakes with the greatest magnitude do not necessarily cause the most deaths and destruction. • What causes a volcano. • Why volcanoes and earthquakes often occur at the same locations around the world.	• The difference between weather and climate. • How temperature and precipitation varies across the United Kingdom. • The location and features of the main climate regions of the world. • How climate affects the landscape of different environments. • What a biome is and the name and location of the world's main biomes. • The flora and fauna of the main biomes of the world. • The physical features of the Atacama Desert. • Why Arica in Chile is the driest inhabited place in the world.	• What a natural resource is. • The difference between renewable and non-renewable resources. • How electricity is generated. • The different sources of energy used to make electricity in the United Kingdom. • Why fossil fuels are no longer used to generate electricity in the United Kingdom. • How human created greenhouse gases contribute to global warming. • What sustainability and sustainable development mean.

	• The location of the 'Pacific Ring of Fire' and why it is a hot spot for earthquakes and volcanoes. • The location, cause and effects of the Christchurch (New Zealand) earthquake of 2011.	• Why Manaus in Amazonia is one of the wettest places in the world.	• How electricity is generated in a hydroelectric power station. • The benefits of using renewable sources of energy in poorer countries of the world such as Nepal. • How I could live in a more sustainable way both at home and at school.

Disciplinary knowledge	• Describe and explain what causes an earthquake. • Locate, describe and explain the distribution of earthquakes occurring around the world. • Explain why earthquakes happen at some locations but not others. • Describe how the magnitude of an earthquake is measured. • Explain why earthquakes with the greatest magnitude do not necessarily cause the most deaths and destruction. • Describe and explain what causes a volcano. • Explain why volcanoes and earthquakes often occur at the same locations around the world. • Identify and locate the 'Pacific Ring of Fire' and explain why it is a hot spot for earthquakes and volcanoes. • The location, cause and effects of the Christchurch (New Zealand) earthquake of 2011	• **Explain** the difference between weather and climate. • **Identify, describe and explain** how temperature and precipitation varies across the United Kingdom. • **Identify and describe** the location and features of the main climate regions of the world. • **Understand** how climate affects the landscape and the types of plants and animals that can live in different environments. • **Explain** what a biome is and **identify and locate** the world's main biomes. • **Identify, describe and explain** the flora and fauna of the main biomes of the world. • **Identify and describe** the physical features of the Atacama Desert. • **Explain** why Arica in Chile is the driest inhabited place in the world. • **Explain** why Manaus in Amazonia is one of the wettest places in the world.	• **Describe and explain** what a natural resource is. • **Identify, describe and explain** the difference between renewable and non-renewable resources. • **Understand** how electricity is generated. • **Identify and describe** the different sources of energy used to make electricity in the United Kingdom. • **Explain** why fossil fuels are no longer used to generate electricity in the United Kingdom. • **Understand** how human created greenhouse gases contribute to global warming. • **Understand** what sustainability and sustainable development mean. • **Describe** how electricity is generated in a hydroelectric power station. • **Explain** some of the benefits of using renewable sources of energy in poorer countries of the world such as Nepal. • **Describe and explain** some of the ways in which they might live in a more sustainable way both at home and at school.

Key Vocab						
	Earthquake	the sudden shaking of the ground which happens when masses of rock change position along a fault in the earth's crust	Biodiversity	the variety of plants and animals living in a particular place	Raw material	things found in nature that are used to make products people use
	Strata	layers of rock	Ecosystem	the community of living things found in a particular area which depend upon each other	Renewable	energy from a source such as wind that is never used up (infinite)
	Epicentre	the point on the Earth's surface directly above where an earthquake happens underground	Habitat	the natural home of a living thing	Non-renewable	energy from a source such as oil which will eventually be used up (finite)
	Richter scale	how the magnitude or energy released by an earthquake is measured	Pattern	how objects are arranged or laid out on the Earth's surface	Fossil fuel	energy sources made of carbon such as oil that are non-renewable
	Projection	an estimate of what might happen in the future based on what is happening now	Prevailing wind	the direction from which a wind most frequently blows	Biodiversity	the variety of plants and animals living in a particular place
	Pattern	how objects are arranged or laid out on the earth's surface	Climate graph	a graph showing the average pattern of temperature and precipitation over the course of a year	Conservation	the protection of environments to prevent their loss or destruction
	Tectonic plate	one of the large moving sections of the Earth's crust	Precipitation	any kind of moisture that falls from the clouds e.g., rain, snow, dew	Global warming	the warming up of the Earth's atmosphere through the build-up of greenhouse gases such as carbon dioxide and methane
	Remote	a faraway place situated a long distance from centres of population	Flora	all of the plant life of a place	Deforestation	cutting down huge areas of woodland to use the land for other purposes
	Crust	the thin outermost layer of the Earth made of solid rock	Fauna	all of the animal life of a place	Ecosystem	the community of living things to be found in a particular area which depend upon each other
	Mantle	the very thick layer of rock that lies between the Earth's crust and its central core	Rain forest	dense evergreen woodland found in tropical regions around the Equator	Habitat	the natural home of a living thing such as a plant or animal
	Core	the very hot centre of the Earth which is solid on the inside and liquid on the outside	Desert	an environment that is very dry because it receives very little precipitation	Pollution	something added to the environment that is harmful to living things
	Volcano	a landform (usually a mountain) from which red hot liquid rock called magma erupts	Convectional rain	when warm moist air rises to a height where its water vapour condenses to rain		
	Fault	a crack in the earth's crust particularly between two tectonic plates	Relief rain	as air rises over mountains it cools causing water vapour to condense as rain droplets		
	Magma	red hot liquid rock that rises up from beneath the surface of the Earth	Drought	a very long period of time without any precipitation		
	•		Adaptation	how living things are particularly suited to the environment in which they live		