St Lawrence C of E (Aided) Junior School: Geography - Extreme Earth

Module	**Substantive Concepts** ***(Main concepts running through Geography curriculum)***	Location and Place Physical Geography Human Geography Geographical Processes	Environmental change and sustainability	**Disciplinary knowledge** ***(Knowledge of how Geographers investigate the world around them)***	Geographical Enquiry Map skills Human and Physical Interactions	GIS Spatial awareness Cultural and Historical Perspectives

Prior learning (Memory Moment)

Chn studied rocks in Spring 2 science, learning that igneous rocks form from magma (volcanoes), which can then turn into metamorphic rocks when they are exposed to extreme heat or pressure.

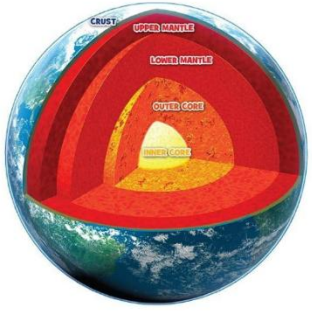
Declarative Knowledge (know)	Procedural Knowledge (able to)	Assessments and Records (inc. mind-maps and extended writing)
L.I. I can describe what is under the Earth's surface.	Make judgements on the benefits and risk of living in Geographical areas most commonly effected by natural disasters. Identify and explain geographical changes caused by natural disasters. Identify the impact natural disasters cause on human life.	Topic Mind Maps. Persuasive letter. Explaining physical and geographical changes caused by natural disasters.
L.I. I can explain how volcanoes are formed.		
L.I. I can explain how volcanoes affect people's lives.		
L.I. I can describe and understand key aspects of physical geography in the context of earthquakes.		
L.I. I can explain what creates a tsunami and its effects.	**Links (across Geography and across the general curriculum)**	
L.I. I can explain what causes tornadoes and the effects that they have.	English – persuasive letter writing using imperative verbs, expanded noun phrases, emotive language and alliteration.	

Vocabulary/Terms	Core, mantle, crust, eruption, lava, vent, conduit, magma, tectonic plates, dormant, trench, ridge, lithosphere, epicentre, hypocentre, seismic waves, Richter scale, Mercalli scale, crest, cumulonimbus clouds, vortex, physical geography, volcano, earthquake, tsunami, tornado, impact, risk, benefit.
Next Steps	Comparing further afield, different countries, benefits, risks and impacts on human and physical geography.

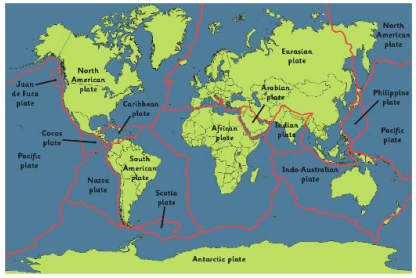
Geography – Extreme Earth – Y3 Summer 1

Core Knowledge

Locational Knowledge	Place Knowledge	Human and Physical Geography	Geographical Skills
✓ Exploring and identifying key areas around the world that are affected by natural disasters.	✓ Realising the impact on areas affected by natural disasters, including Tornado Valley and land located on the borders of tectonic plates.	✓ To be able to describe and understand key aspects of physical geography, including volcanoes and earthquakes.	✓ Using evidence to understand how both geographical areas and human life are impacted by natural disasters. ✓ Understanding the benefits of Geographical software (GIS) connecting maps data and risk.



Tectonic plates

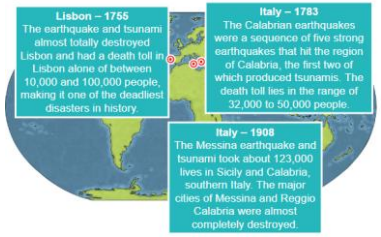


Volcanoes in the UK

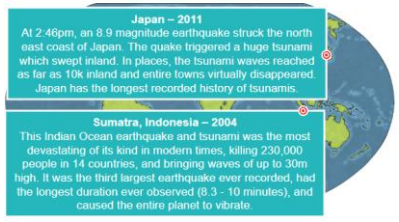
Significant places:

Kilauea in Hawaii, USA

Tsunamis Around the World



Tsunamis Around the World



Tornado Alley, USA

Key Vocabulary

Volcano	**A mountain or hill, which has a crater or vent that lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.**
Earthquake	**A sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.**
Tsunami	**Giant waves caused by earthquakes or volcanic eruptions under the sea.**
Tornado	**A vortex (whirling) of violently rotating winds.**
Impact	**An effect or influence.**
Risk	**Possibility or uncertainty of a hazard or event causing harmful consequences.**
Benefit	**An advantage or positive outcome.**
Core	**The extremely hot centre of the Earth.**
Crust	**The outer layer of the Earth.**
Mantle	**The layer of the Earth between the crust and the core.**

Prior Knowledge:

We studied rocks in Spring 2 science, learning that igneous rocks form from magma (volcanoes), which can then turn into metamorphic rocks when they are exposed to extreme heat or pressure. We also encountered physical Geography in Autumn 1 when we conducted a local Molesey study.