Unit Title: Humans vs Nature: Which is most disastrous?	
Y5 Autumn 2	**End Point - The aim of this unit is for pupils to**: • Know the structure of the Earth and how this contributes to natural disasters such as: volcanoes, earthquakes and tsunamis • Understand how volcanos, earthquakes and tsunamis occur and the impact they have • Know an overview of other natural disasters **End of unit assessment task:** Make a documentary (as natural disaster specialists)

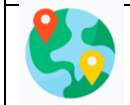
Links

Text – Escaping the Giant Wave by Peg Kehret
Science – Living things and their habitats and knowing how natural disasters can affect this

Prior Knowledge

- Know the four countries of the UK and their capital cities and the surrounding seas
- Know, name and locate the continents and oceans of the world
- Know the 8 compass points
- Name and locate Middlesbrough on a map
- Recognise similarities and difference between where they live and other countries
- Know the main lines of latitude and longitude and be able to plot these on a map
- Know and use 4-figure grid references

Key Aspects of the Unit:

	**Map and atlas work/Fieldwork and investigation**
	**Location**
	**Physical Features**: Understand that physical features are natural features in an environment. Understand that physical features can include: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather and volcanoes.

	**Human Features**: Understand that human features are features in an environment that have been made by people. Understand that human features can include: city, town, village, factory, farm, house, office, port, harbour and shop.
	**Physical Processes:** Impact of nature on the earth e.g. erosion, plate tectonics, water cycle.

Key Knowledge:

- Know will know the structure of the Earth: crust, mantle, outer core and inner core
- Know that there is magma (liquid rock) beneath the crust
- Know that the core is mostly made of iron and that the temperature can reach 5500°C
- Know that the Earth's crust is made up of pieces called tectonic plates and that these are always moving
- Know that, where these plates meet, are called fault lines.
- Know that fault lines rub against each other can this can cause tremors or earthquakes
- Understand that these faults can rub against each other, push towards each other or pull away from each other
- Know that volcanoes are openings in the Earth's crust
- Understand how volcanic eruptions occur
- Know that lava is what we call magma when it is above ground
- Know the structure of a volcano (including; **magma chamber**, **main vent**, **secondary vent**, **secondary cone** and **crater**) and be able to label a diagram
- Know that sometimes, when a volcano erupts under the sea, an island can form (eg. Galapagos Islands)
- Know that volcanoes can be described in terms of activity (**active**, **dormant** and **extinct**) and say what each of these are
- Know what the Ring of Fire is and where it is located and that it is home to 75% of the world's volcanoes and 90% of the world's earthquakes

Geographical Skills:

Mapping:

- Select a map for a specific purpose (E.g choose atlas to find the USA but an OS map to find local village)
- Use thematic maps for specific purposes
- Describe and interpret relief features
- Begin to use 8 compass points;
- Use 6 figure grid references to locate features on a map

Fieldwork:

- Begin to complete enquiries based on own suggested questions – **environmental traffic study – congestion outside of the school and the impact on the environment**
- Evaluate own observations, compare them with others and begin to draw conclusions
- Use the eight points of a compass and use to follow/describe routes
- Apply age-appropriate Maths knowledge to understanding of geography (e.g. length, distance, mass, capacity/volume, angles, area scales, negative numbers for temperature, equivalences between metric and imperial measures)

Vocabulary

weather	The atmospheric conditions which relate to a specific time and place.
global	Relating to the whole earth.
natural disaster	An event caused by nature such as floods, volcanic eruptions, tropical storm, tornado, landslides, wildfires and many more. These events cause great financial hardship for the people and communities in the locations where they occur, and they can sometimes even result in loss of life.
earthquake	A sudden violent shaking of the ground, typically causing great destruction, because of movements within the earth's crust or volcanic action.
volcanic eruption	A mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.
physical features	Natural features of land.
tectonic plates	Huge slabs of rocks that make up the outer crust of the earth.
Richter Scale	A scale of 1-10 used to measure the magnitude of earthquakes.
seismic wave	caused by an earthquake.
city	A large town.
climate	The general weather conditions that are typical.
coastal	An area of land close to the sea.
map	A drawing of a particular area such as a city, country or continent.
continent	A very large area of land that consists of many countries such as Europe.
country	An area of land that is controlled by its own government.
river	A large, natural stream of fresh water that flows into the sea or a lake.
human features	Features of land that have been impacted by human activity.
population	All the people who live in a country or area.
landscape	Everything you can see when you look across an area of land including hills, trees, buildings, rivers and plants.
atmosphere	The layer of air surrounding the earth that protects us from the sun’s harmful rays.
emissions	Gases or chemicals released into the air, (such as plumes of smoke from coal-fired power stations or car exhaust fumes).