Extreme Earth | Year 3/4 Kingfisher Class | Autumn 2020

Types of Extreme Weather

1	Volcanoes	Active, dormant and extinct – cause magma erupts through the Earth's crust to form lava flows and ash deposits
2	Earth-quakes	Moving tectonic plates cause earthquakes - significance of fault lines – examples on earth- identify on world map
3	Tornadoes	Violent rotating column of air extending from a thunderstorm to the ground
4	Tsunamis	Underwater earthquakes cause wave of water – engulfing low laying areas
5	Hurricanes	Tropical storm becomes a hurricane when the winds reach 74mph – occur in the Atlantic Basin – Have a season

Key Geographical Locations

1	Climate Zones	Polar, temperate, subtropical and tropical regions
2	Tropic of Caner and Capricorn	Two lines which show the tropical regions either side of the equator
3	Equator	Line around the centre of the Earth, dividing the Northern and Southern Hemispheres
4	Ring of Fire	Location of most of the worlds volcanoes
5	Location of tectonic plates	Areas where the plates join – where earthquakes orginate

Effects of Natural Disasters

1	Homelessness / poverty
2	Disease / famine
3	Destruction of habitats
4	Economic effects
5	Need for aid – fundraising

Measure of Severity

1	Earthquakes	Richter Scale	1-10
2	Volcanoes	VEI	Volcanic explosivity index 0-8
3	Tornadoes	Fujita Scale	F0-F5

Vocabulary

1	Dormant active	State of a volcano
2	eruption	When the magma explodes through the crust
3	lava	The hot molten rock
4	ash	Powdery substance created when volcanoes explode
5	magma	Hot fluid rocks under the Earth's crust
6	Funnel cloud	Funnel shaped cloud at the core of a tornado
7	Seismic waves	An elastic wave in the Earth produced by an earthquake
8	crater	Large hollow forming the mouth of a volcano
9	pumice	Light rock that is formed when lava solidifies
10	Tectonic plates	Slabs of the Earth's crust that move causing earthquakes
11	fault	When a rock formation is broken
12	epicentre	Point in the centre of an earthquake
13	aftershock	Smaller earthquake following a main earthquake
14	magnitude	Size of an earthquake
15	twister	Another name for a tornado
16	vortex	Whirling mass of fluid or air
17	Eye	Centre of a storm - calm

Extreme Earth Scheme of Work

Session	Key Learning	Activity
1	Learn about the Earth's climate and areas of extreme temperatures.	Locate and label Tropic of Cancer/Capricorn, Equator, Oceans, Continents - use of Atlases
2	To find out about extreme weather conditions across the world.	Match different types of weather to correct description.
3	Art – To recall types of weather facts and to use colour, line and shading to create artistic tornadoes	Complete tornado art shading
4	Learn about earthquakes, what causes them (plate techtonics) and how they are measured	Measuring earthquakes activity sheet- sorting the Mercalli scale
5	Learn about how volcanoes are formed	Draw/complete/label volcano cross section
6	Learn about where volcanoes are located (Ring of Fire) and how they affect peoples' lives	Group work to debate 'for and against' of living near volcanos
7	Understand how tsunamis are formed and the devastation caused by them	Use UN Disaster Risk Reduction computer modelling simulator to protect villages from Tsunami. Or create a poster on what to do in the event of a tsunami .
8	Art - To explore and recreate Hokusai's 'Great Wave'.	Create Hokusai great wave – using cutting and layering techniques and templates
9	Understand what causes Tornadoes and their effects	Design your own TIV – Tornado Intercept Vehicle
10	Learn about hurricanes and their effects	Plan a hurricane preparation kit to be used in event of a hurricane