Scott Primary School—Geography Knowledge Organiser



Topic: Extreme Earth



Year 4—Autumn 2



Key Vocabulary

Cumulonimbus cloud	Large thunderstorm clouds.
Erupt	To suddenly burst out causing lava to explode out of the earth's surface.
Magma	Extremely hot, liquid rock.
Tectonic plates	The earth's crust is made up of large areas called tectonic plates that join together.
Tsunami	A giant wave caused by a huge earthquake under the ocean
Tornado	A swirling funnel of air that forms when warm air rises and forms into cumulonimbus clouds.
Earthquake	A sudden shaking or vibrating of the earth's surface
Hurricane	A storm with violent winds
	Cor

Important Facts

*Understand there are 4 layers to the Earth—the crust, mantle, outer core and inner core and that they layers are made of rock and metal.

*Volcanoes can be active (erupted in the last 10,000 years), dormant (have not erupted in the last 10,000 years but may erupt again) or extinct (never expected to erupt again).

*The benefits of living near a volcano are fertile land, tourism, minerals found in the soil and geothermal energy.

*Tsunamis are caused when an earthquake causes a large amount of water to be displaced very quickly causing a series of waves. These waves grow larger the closer they get to land causing devastation to buildings and sometimes lives.

*Tornadoes are large thunderstorms that twist as they rise. Most tornadoes happen in Tornado Alley in America and are formed over land—more than 500 each year and can happen in the UK but only around 30 per year.

*Earthquakes are caused when the Earth's tectonic plates move. Most occur near the tectonic plate boundaries and this is known as the Ring of Fire. They can cause damage to roads, buildings and properties.

*Hurricanes form over the ocean as a wave of low pressure air in a warm atmosphere. This draws more hot air in which rises to form huge thunderclouds which start to rotate in response to the earths natural rotation.

Previous Knowledge

How rocks are formed and made as well as fossils—Year 3

Building on knowledge of continents and locational knowledge—Year 2/3



Crust Thin outer layer. Hard rock. 10km-90km thick. Mantle Extremely hot rock that flows. 3000km thick. Outer core Iron and nickel. Mostly liquid with some rocky parts. 4000°C. Inner core Iron and nickel. Hottest layer at over 5000°C.