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|  **Alderley Edge Community Primary School** |
| **TOPIC: Volcanoes and Earthquakes** | **Strand: Knowledge (Human and Physical)** | **Year 4** |

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| **What should I already know?** |
| * The seven continents and five oceans of the world.
* The location of some countries, including the UK and Kenya.
* What climate means and how it effects the vegetation in an **area**
* Greece is in Europe and some of the physical and human geography of Greece linked to place topic
* When two **tectonic plates** of the earth's **crust** grind into each other the land can be pushed upwards, **forming** **mountains**.
* Many of the greatest **mountain** ranges of the world have **formed** because of enormous collisions between the **tectonic** **plates.**
* When many **mountains** are close together, this is called a **range.**
* The highest point of a **mountain** is called the **peak** or the **summit**.
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| **Features of Cheshire and Greece**  |
|   | **Human features**  | **Physical features**  |
| Cheshire  | Cheshire has many **villages (such as Alderley Edge**) and **towns** (such as Macclesfield). There are no official **cities** in Cheshire East but our nearest city is ManchesterCheshire has many farms and is famous for the farming **trade**. Cheshire has salt mines Cheshire is famous for Cheshire CheeseHistorically Macclesfield was famous for silk | **River**  - River Bollin which is a tributary to the River Mersey into the Irish Sea **Highest point** – Shining Tor on border between Cheshire and DerbyshireThe **landscape** is green as there are many fields.  The **climate** is mild. The summers are warm and the winters are cool. Cheshire's natural hazards include floods |
| Greece  | Greece has many **villages, towns** and **cities.** The capital **city** in Greece is Athens, which is a **port** **city**. Greek ferries are the primary means of transport to and from the **islands**.  Many **tourists** visit Greece, especially Athens and the **islands**.  Greece’s main **exports** include petrol and food, such as olive oil and fish.  Greece has many ancient structures, including the Acropolis and the Delphi.  | Greece is a **mountainous** country with a very long **coastline**, made up by a **mainland**, **peninsulas** and **islands**. Greece's natural hazards include severe earthquakes, floods, droughts and wildfires. Current environmental issues include air pollution and water pollution. Mount Etna, Europe’s largest volcano is in Greece |

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| **What will I know be the end of the topic?** |
| **Volcanoes** |
| * A **volcano** is a very deep hole in the Earth’s top **layer** that can let out hot **gasses**, ash and **lava**. Many **volcanoes** are also **mountains**.
* **Volcanoes** have long **vents** that go all the way down through the Earth’s first **layer**, the **crust**, to **magma** in between the **crust** and the **mantle** (the Earth’s second **layer**). It’s so hot there that rocks **melt** into liquid. This is called **magma**, which travels up through **volcanoes** and flows out as **lava**.
* There are three ways to describe a **volcano** and explain what it’s doing – **active, erupting**, and **dormant**
* When a **volcano erupts**, **magma** comes up and out through the **vents**. **Magma** is called **lava** when it’s outside the **volcano.**
* Some **volcanoes** are underwater.
* There are no **volcanoes** in the UK. The largest **volcano** in Europe is Mount Etna in Greece
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| **Vocabulary**  |
| active  | An active volcano has erupted recently or is expected to erupt quite soon  |
| climate  | the general weather conditions that are typical of a place  |
| continent  | a very large area of land that consists of many countries. Europe is a continent.  |
| core  | the central part of the earth, beneath the mantle  |
| crust  | The Earth's crust is its outer layer  |
| dormant  | not active but is capable of becoming active later on  |
| earthquake  | a shaking of the ground caused by movement of the Earth's crust  |
| erupt  | When a volcano erupts, it throws out a lot of hot, melted rock called lava, as well as ash and steam  |
| fault lines  | a long crack in the surface of the earth. Earthquakes usually occur along fault lines  |
| form  | move or arrange  |
| gas  | something that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.  |
| lava  | the very hot liquid rock that comes out of a volcano  |
| layers  | If something has many layers, it has many different levels or parts  |
| location  | the place where something happens or is situated  |
| magma  | molten rock that is formed in very hot conditions inside the earth  |
| mantle  | the part of the earth between the crust and the core  |
| melt  | to change from a solid to a liquid state through heat or pressure  |
| molten  | Molten rock, metal, or glass has been heated to a very high temperature and has become a hot, thick liquid  |
| mountain  | a very high area of land with steep sides  |
| peak  | the highest point of a mountain, Also known as a summit.  |
| pressure  | force that you produce when you press hard on something  |
| range (mountains)  | A range of mountains or hills is a line of them  |
| summit  | the highest point of a mountain, Also known as a peak.  |
| tectonic plate | Huge slabs of the Earth’s crust that fit together like a jigsaw puzzle |

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| **Earthquakes**  |
| * The **tectonic plates** have edges and sometimes the edges, which are called **fault lines**, can get stuck, but the **plates** keep moving.
* **Pressure** slowly starts to build up where the edges are stuck and, once the **pressure** gets strong enough, the **plates** will suddenly move causing an **earthquake**.
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| **The Earth** |
| * The Earth has three layers – the **crust** at the very top, then the **mantle**, then the **core** at the very middle of the planet.
* The Earth's crust is made up of huge slabs called **tectonic plates**, which fit together like a jigsaw puzzle.
* These tectonic plates slowly move over a long period of time
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