



Innovation

Subject: Geography

Year group: 5

Term: Autumn

Unit name: Earthquakes, mountains and volcanoes

Link to innovation:

Opportunities to explore how engineers have developed access to mountains through use of railways and cable cars. Could specifically link this to Mont Blanc and the Mer de Glace and the retreat of the Mer de Glace resulting in a new cable car station to access it.

Specific knowledge to be covered (Linked to National Curriculum)

- The earth has 3 layers – crust, mantle and core.
- The crust is made up of tectonic plates that fit together like a puzzle and slowly move.
- A mountain is a large rocky raised part of the earth's surface that is 610m high. That was formed over millions of years as tectonic plates grind together.
- The highest points on mountains are called the summit.
- **Mont Blanc is the highest mountain in Western Europe, it is located in the alps mountain range near the borders of France, Italy and Switzerland (and be able to locate this on a map).**
- The climate in low land areas can be mild, whereas it is much colder and windier on a mountain caused by elevation in height and that the weather can change very quickly to form thunderstorms and blizzards.
- Earthquakes occur when the edges of tectonic plates called fault lines become stuck and then after a build up of pressure suddenly move.
- **Know an area of the world that is affected by earthquakes and be able to name and locate these places on maps and atlases. Key physical and human characteristics of them (this can link to areas studied in other areas of the curriculum).** Children are expected to know the country and describe using latitude, longitude, Equator, Northern Hemisphere/ Southern Hemisphere, position relevant to the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Describe the physical geography and settlement and land use of the area.
- That volcanoes have long vents (holes) that let out hot gases, ash and lava.
- When a volcano erupts molten rock or magma flows out of the volcano as lava.
- **Volcanos can be described as erupting, active, dormant or extinct.**
- The largest volcano in Europe is Mount Etna, Sicily, Italy and to locate this on a map.
- There are no active volcanos in the UK.

Key vocabulary:

Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle, Greenwich Mean Time.

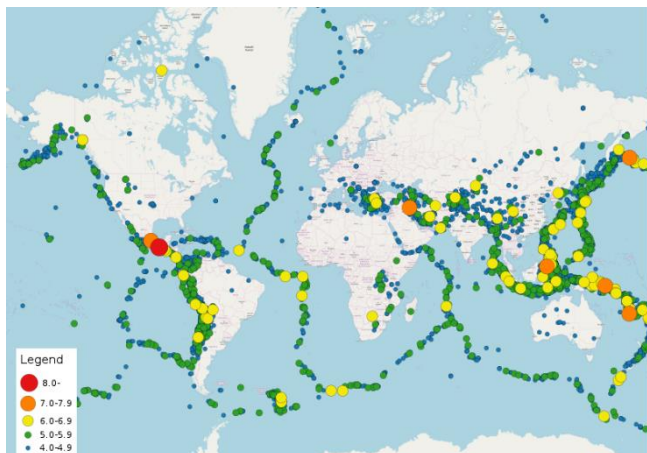
Latitude, longitude, equator, northern hemisphere, southern hemisphere.

Volcano, mountain, earthquake.

Mont Blanc, France, Italy, Switzerland.

Crust, mantle, core

Tectonic plate, eruption, magma, lava.



Prior Learning:

- Learning in about rivers and water cycle has provided prior knowledge about geological cycles and processes.
- Children have learned the location of a number of countries in Europe, within Geography and in other subjects such as French.
- Through learning about south American rainforests and polar regions children understand about climate and can describe the climate of different areas.
- Children have begun to learn the features of the earth, such as the equator and to describe using those terms.
- Children have learnt about urban and rural areas and so will be able to talk about land use related to this.
- Within science children can apply knowledge learned about solids, liquids and gases

Specifics about teaching:

Children should have the opportunity to view film and images relating to volcanoes, mountains and earthquakes; the opportunity to use maps and atlases and complete their own diagrams and explanations of the geological processes at work.