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| Place and locational Knowledge | Year 3 | Year 4 | Year 5 | Year 6 |
| Human/physical and environmental knowledge | Locate on a map; find out about environmental regions, key physical and human characteristics, countries, and major cities in:* Italy (Rome)
* Norway (Oslo)
* Australia(Canberra)
* Mexico (Mexico City)

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over timeCounties and cities:* Yorkshire (Sheffield, Leeds, Hull, Barnsley)
* Kent (Canterbury)
* Dorset (Lyme Regis)

River:* Severn
* World ( Rio Grande)

Coast: * South Coast
* North West

Hills:* Pennines

Position of:* Equator

Northern and southern Hemisphere | Locate on a map; find out about environmental regions, key physical and human characteristics, countries, and major cities in:* Spain (Madrid)
* USA (Washington D.C)
* Russia (Moscow)
* Brazil (Brasília)

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over timeCounties and cities:* Norfolk (Norwich)
* Cornwall (Truro)
* Derbyshire (Derby)

River:* Trent
* World (Amazon)

Coast: * Yorkshire and Humberside
* South West

Hills:* Southern Uplands

Position of:* Arctic and Antarctic circle

Tropics of cancer and Capricorn | Locate on a map; find out about environmental regions, key physical and human characteristics, countries, and major cities in:* Greece (Athens)
* China (Beijing)
* Egypt (Cairo)
* Canada (Ottowa)

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over timeCounties and cities:* Lincolnshire (Lincoln)
* Buckinghamshire (Milton Keynes)
* Cumbria (Carlisle)

River:* Thames
* World (Nile)

Coast: * North West coast
* Thames estuary

Hills:* Grampian mountains (Ben Nevis)

Position of:* Longitude

latitude | Locate on a map; find out about environmental regions, key physical and human characteristics, countries, and major cities in:* Poland (Warsaw)
* Japan (Tokyo)
* India (New Delhi)
* Argentina (Buenos Aires)

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over timeCounties and cities:* Essex (Chelmsford)
* Northumberland (Alnwick)
* Gloucestershire (Gloucester)

River:* Tyne
* World (Ganges)

Coast: * North East
* South East

Hills:* Cambrian Mountains (Snowden)

Position of:Prime/Greenwich meridian and time zones. |
| Field work |
| Highlighting show areas covered during the unit |
| **Big Question** | **Unstable Earth** | **Violent Earth** | **Deadly Earth** | **Impact of nature** |
| Fieldwork |  |
|  | Layers of the earth* Crust – thin layer of cool, solid rock
* Mantle – thick layer of very hot rock under the crust
* Inner core – white hot core of solid iron and nickel – centre of the earth

1* Outer core- made of iron and nickel with some oxygen and sulphur. Temp is so hot that metals melt into liquid.
 | Layers of the earth * Crust – thin layer of cool, solid rock
* Mantle – thick layer of very hot rock under the crust
* Inner core – white hot core of solid iron and nickel – centre of the earth – hot enough to be liquid but it stays solid because it is squeezed together

1* Outer core- made of iron and nickel with some oxygen and sulphur. Temp is so hot that metals melt into liquid. Liquid moves and flows like water due to spinning of the earth.
 | Describe the properties of the earths layersThe inner core is solidthe outer core is liquid1the mantle is solid/plasticincrease in temperature and pressure as depth increases. | Compare the structure of the earth to a common object* egg
 |
| Categorise volcanoes* Extinct
* Dormant

1* Active
 |
|  | Key parts of a volcano* Ash cloud – a cloud of ash formed by the explosion

2* Crater- the mouth of a volcano which surrounds the vent
* Vent – an opening in the surface of the earth through which volcanic materials can escape
* Magma chamber – a large underground pool of liquid rock found under the surface of the earth
* Lava – liquid rock that flows out from the volcano
 | Structure of a volcano* Ash cloud – a cloud of ash formed by the explosion

2* Crater- the mouth of a volcano which surrounds the vent
* Conduit – an underground passage which magma travels through
* Vent – an opening in the surface of the earth through which volcanic materials can escape
* Magma chamber – a large underground pool of liquid rock found under the surface of the earth
* Lava – liquid rock that flows out from the volcano
* Magma – liquid rock inside a volcano. It can be runny or viscous
 | How are volcanoes formed?* Map where volcanoes are found
* Volcanoes are formed when magma, which is located at the centre of the Earth, pushes its way upwards through the Earth through a long shaft.

2* When the magma travels through the Earth's crust, it emerges as lava.
* Once this lava has erupted onto the Earth's surface, it cools and hardens into a pile of rock.
 | Locate volcanoes* Plate tectonics

2* Mount Ostrizyca ( Poland) not been active for a few million years. Land of Dormant volcanoes.
* Mount Fuji (Japan)
* Llullaillaco Volcano (Argentina) highest historically active volcano in the world.
 |
|  | Locate the worlds famous volcanoes* Vesuvius (Italy)

3* Only volcano in Europe to erupt in last 100 years
* Destroyed Pompeii AD 79
* One of the most dangerous volcanoes in the world
* Mount Etna (Italy- Sicily)
* One of the tallest active volcanoes in Europe

4* Over 6 months in 2021, Etna grew by 100ft by erupting volcanic material.
 | What happens when a volcano erupts?* Pressure builds up underground due to formation of magma.

3* Pressure causes gases and rock to shoot up through the opening and spill over
* Can cause tsunamis (Krakatoa (1883) Indonesia), floods and earthquakes
 | 5 deadly features of a volcano* Ash
* Lava flow

3* Volcanic bombs
* Pyrocastic flow
* Mud flow (lahar)
 | Impact of volcanoes* lava can kill people

3* falling ash can make it hard for them to breathe.
* They can also die from famine, fires and earthquakes which can be related to volcanoes.
* People can lose their possessions as volcanoes can destroy houses, roads and fields.
* Lava can kill plants and animals too
 |
|  | Why earthquakes happen* Tectonic plates slide past each other causing friction to build up
* When friction or pressure is released, they produce a violent jolt that shakes the land

5 | Risks and benefits of living near a volcano* Rock and ash provide fertile land for farming

4* Tourists increase money to the area.
* Geothermal energy can be used
* Volcanic rock absorbs water so prevents flooding
* Landslides etc destroy building and farmland
* Power cuts
* Drinking water can become contaminated
 | Locate the worlds famous volcanoes* Thera (Greece) possibly the largest ever eruption, happened before the Trojan War
* Tianchi (China) most dangerous and active volcano in China
 | Why earth quakes occur* Tectonic plates slide past each other, causing friction to build up.

4* While some move towards each other, causing a build up of pressure.
* When these forces - friction or pressure - are released, they produce a violent jolt that shakes the land: an earthquake.
 |
|  | Worlds biggest earthquakes* Valdivia (Chile 22nd May 1960 – 9.5)
* Prince William Sound (Alaska 28th March 1964 – 9.2)
 | Locate the worlds famous volcanoes* Klyuchevskaya (Russia) one of the highest volcanoes in the world 15,584 ft
* Mount Teide (Spain)
* Krakatoa (Indonesia)
* Mount St Helens (USA)
* Called ‘smoking mountain’ by native Americans living around it

5* 1980, erupted – one of greatest volcanic explosions ever in North America
 | Why earthquakes occur* Tectonic plates slide past each other, causing friction to build up.

4* While some move towards each other, causing a build up of pressure.
* When these forces - friction or pressure - are released, they produce a violent jolt that shakes the land: an earthquake.
 | Tornadoes* Violently rotating columns of air
* Move so fast they can rip roofs off building, pick up cars etc
* the deadliest tornado ever recorded was in Bangladesh in 1989. As it travelled through the Dhaka region of the country, more than 20 villages were destroyed and around 1,300 people were killed.

5* Scientist don’t fully understand how they form but instability in conditions is important - warm moist air near the ground, with cooler dry air high up- a change in wind speed and/or direction with height.
* Most happen in the Tornado Alley in the USA
 |
| Why do earthquakes occur?* Tectonic plates slide past each other causing friction to build up

6* When friction or pressure is released, they produce a violent jolt that shakes the land
 | 5 deadly features of earth quakes* Ground shaking

5* Tsunamis
* Landslides
* Raising or lowering land
* liquefaction
 |
|  | How to keep safe during an earthquake | Worlds biggest earthquakes* Sumatra (Indonesia 26th Dec 2002 – 9.1)
* Sendai (Japan 11th March 2011 – 9.0)
 | Tsunami* Giant wave or series of waves caused by a volcano or earthquake

6* A large amount of water is displaced very quickly
* A tsunami can take down buildings and bridges and carry heavy objects along with it when it hits land. They can travel as far as 16 km (10 miles) over land, flooding and damaging the whole of the coastline, causing building damage and loss of life.
* Keep safe:
* if caused by an earthquake: Drop, Cover, then Hold On to protect yourself from the earthquake first.
* Get to high ground as far inland as possible.
* Be alert to signs of a tsunami, such as a sudden rise or draining of ocean waters.
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