







# The Geography Curriculum

## Year 4

Intent	<p>At Benjamin Adlard Primary School, we aim for a high-quality geography curriculum which should inspire in pupils a curiosity and fascination about the world and its people. Our teaching equips pupils with knowledge about places and people; resources in the environment; physical and human processes; formation and use of landscapes. We also want children to develop geographical skills: collecting and analysing data; using maps, globes, aerial photographs and digital mapping to name and identify countries, continents and oceans; and communicating information in a variety of ways. We want children to enjoy and love learning about geography by gaining this knowledge and skills, not just through experiences in the classroom, but also with the use of fieldwork and educational visits. We follow the Rising Stars Geography framework, which provides a geography curriculum that is ambitious and designed for all pupils. It is coherently planned and sequenced towards cumulatively providing the necessary knowledge and skills for the pupils' future to empower them to take their role as informed and active citizens in the 21st century.</p>
Implementation	<p>In ensuring high standards of teaching and learning in geography, we implement a curriculum that is progressive throughout the whole school. Geography is taught as discrete subject, focusing on knowledge stated in the Early Years and National Curriculum. Rising Stars Geography is designed to be delivered by non-specialists, with core geographical knowledge identified and explained throughout. A breadth of teaching approaches appropriate to the content and desired learning outcomes are used to engage all pupils and enable them to not just acquire knowledge but to apply it in meaningful contexts. Questions and tasks to stretch and challenge the most able pupils are incorporated where appropriate. Quality resources and materials are provided online to support the geography curriculum and are sequenced towards the accumulation of skills, knowledge and understanding for pupils' futures. There is emphasis on visual literacy in the use and questioning of these resources, as geography is essentially a visual subject</p>
Impact	<p>Our pupils will:</p> <ul style="list-style-type: none"> <li>• Be analytical thinkers who can use maps, globes, atlases and digital mapping applications to locate continents, oceans, countries and other physical features of our planet.</li> <li>• Have excellent knowledge of the human and physical features of a range of places around the world as well as some of the key natural processes that occur on Earth. This will ensure they are prepared for the next stage in their geography education.             <ul style="list-style-type: none"> <li>• Make their own decisions about how they will communicate their ideas and explanations.</li> <li>• Embrace challenging activities, including opportunities to undertake geographical fieldwork in a range of different environments.</li> </ul> </li> </ul> <p>Talk knowledgeably about the impact that humans continue to have on our planet and its natural processes and have the ability to debate and discuss these issues.</p>

		EYFS	End of Key Stage One	Key Stage Two
Locational Knowledge		<ul style="list-style-type: none"> <li>- Locate their house from a photograph of their street/Google maps.</li> </ul>	<ul style="list-style-type: none"> <li>- name and locate the world's seven continents and five oceans</li> <li>- name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas</li> </ul>	<ul style="list-style-type: none"> <li>- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities</li> <li>- 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 time</li> <li>- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)</li> </ul>
Place Knowledge		<ul style="list-style-type: none"> <li>- Describe some geographical features of the immediate environment.</li> <li>- eg. house, street, road, garden, garage, trees</li> </ul>	<ul style="list-style-type: none"> <li>- understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country</li> </ul>	<ul style="list-style-type: none"> <li>- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America</li> </ul>
Human and Physical Geography		<ul style="list-style-type: none"> <li>- Describe types of weather seen in the local area.</li> </ul>	<ul style="list-style-type: none"> <li>- identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles</li> <li>- use basic geographical vocabulary to refer to:</li> <li>- key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather</li> <li>- key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop</li> </ul>	<ul style="list-style-type: none"> <li>- describe and understand key aspects of:</li> <li>- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle</li> <li>- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water</li> </ul>

Geographical Skills & Field work		<ul style="list-style-type: none"> <li>- Use a simple tick sheet to record what has been seen on a walk to the local shopping precinct.</li> <li>- Use computer mapping and Google Street View to locate their street and house.</li> <li>- Survey the traffic that goes past school.</li> </ul>	<ul style="list-style-type: none"> <li>- use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage</li> <li>- use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map</li> <li>- use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key</li> <li>- use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</li> </ul>	<ul style="list-style-type: none"> <li>- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</li> <li>- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies</li> </ul>
----------------------------------	---	--	---	---

Year 4 – Autumn 1		Unit 1 – The Americas	
National Curriculum Objectives Covered			
<ul style="list-style-type: none"><li>• Locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li><li>• Identify the position and significance of latitude, longitude, equator, northern hemisphere, southern hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</li><li>• Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</li><li>• Describe and understand key aspects of human geography including types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</li><li>• Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</li><li>• Use the eight points of a compass, four/six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.</li></ul>			
Cross Curricular links			
<ul style="list-style-type: none"><li>• English: making notes, annotating and communicating findings.</li><li>• Art &amp; design: learning about photos and paintings of dramatic landscapes, searching for ‘paintings, the Prairies/the Rockies’ and more. You might like to look at the work of Hundertwasser, especially ‘175 An Almost Circle’, comparing it with American city and local street patterns. The children can create their own work of art in the style of Hundertwasser by over-painting a black and white print-out (from Google™ Earth) of a street pattern, perhaps of the streets around their school, or of an American city (see The Everyday Guide to Primary Geography: Art, Mackintosh &amp; Kent, GA, ISBN 978-1-84377-366-5).</li><li>• Computing: using Google Earth maps and satellite images; using search engine(s) to research American cities.</li><li>• Music: singing ‘I’ve been everywhere’ (Johnny Cash) and ‘Route 66’; opportunity to create a geographical song or rap about North and/or South American cities, with sound effects to accompany it, basing their song on ‘I’ve been everywhere’ or ‘Route 66’.</li><li>• History: exploring the history and changes along Historic Route 66, from Chicago, Illinois to Santa Monica, California</li></ul>			
Prior Learning			
Geography Programme of Study	Year 1	Year 2	Year 3
Locational Knowledge	<ul style="list-style-type: none"><li>- Know and locate some major cities, oceans and continents on a UK and world map</li><li>- Know, name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding sea</li><li>- Know and use a world map atlas or globe to name and locate the seven continents and five oceans.</li></ul>	<ul style="list-style-type: none"><li>- Know the purpose of an atlas</li><li>- Know, identify and name the relevant countries and oceans</li><li>- know and locate world’s highest mountain is called and where it is located.</li><li>- Know and locate local coastal line</li><li>- Know and locate a of the world’s major rivers</li><li>- Know, name and locate an ‘ancient’ old-world wonder</li><li>- Know, name and can locate a ‘modern’ world wonders.</li></ul>	<ul style="list-style-type: none"><li>- Know and indicate tropical, temperate and polar climate zones</li><li>- Know and locate poles, equator and lines of latitude and longitude</li><li>- Know the position of the Prime/Greenwich Meridian on a map/globe</li><li>- Know and locate the position and significance of the Northern and Southern Hemisphere, Tropics of Cancer and Capricorn, Artic and Antarctic Circle</li><li>- Know the names of continents and oceans.</li><li>- Know why the IDL is located in the Pacific Ocean.</li><li>- Know why the IDL zigzags and does not exactly follow the 180° E–W line of longitude.</li><li>- Know and locate some coastal places on a map of the UK.</li></ul>

			<ul style="list-style-type: none"> <li>- Know and can locate and name the main British seaside locations and know how they have changed over time.</li> </ul>
<b>Place Knowledge</b>	<ul style="list-style-type: none"> <li>- Know and describe in some detail the local area and distant locations' feature.</li> <li>- Know and compare the local area to distant locations in a non-European country and compare human and physical geography.</li> <li>- Know that people do jobs and that where they live (e.g. coastline) might affect this.</li> </ul>	<ul style="list-style-type: none"> <li>- Know and name local area and that they live in the UK</li> <li>- Know geographical similarities and differences of a small area of the United Kingdom compared to a non-European country.</li> </ul>	<ul style="list-style-type: none"> <li>- Know and indicate tropical, temperate and polar climate zones</li> <li>- Know the characteristics of these zones</li> <li>- Know that these climate patterns are different in different regions of the world.</li> <li>- Know and locate where the coldest places on Earth are in relation to the equator and Poles.</li> <li>- Know and locate where (some of) the hottest, driest places on Earth are, in relation to the Equator and the North and South Poles.</li> <li>- Know and locate (some of) the hottest, wettest places on Earth are, in relation to the equator, and North and South Poles.</li> <li>- Know and can name some localities around the coast of the UK, and the activities that occur in them.</li> </ul>
<b>Geographical skills and Fieldwork</b>	<ul style="list-style-type: none"> <li>- Know how to use a world map, atlas or globe to recognise to name some continents and oceans.</li> <li>- Know and use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features</li> <li>- Know how to use a wall map or atlas to locate and identify countries taught in the unit.</li> <li>- Know about the local area and can name and locate key landmarks.</li> <li>- Know simple compass directions and locational and directional language and use these to describe the location of features and routes on a map.</li> <li>- Know how to devise a simple map with a key.</li> <li>- Know and use simple fieldwork and observational skills to study the geography of their school</li> </ul>	<ul style="list-style-type: none"> <li>- Know directional language to describe a natural environment</li> <li>- Know and use basic weather symbols.</li> <li>- Know and use an atlas, globes and maps to name and locate on a map different continents, countries and cities outside the UK.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Know how to use the zoom function of a digital map to locate places and gather information</li> <li>- Know how to use an atlas to locate the UK and locate some major urban areas, can locate where they live/have visited in the UK (e.g. seaside/coastal places they have visited).</li> <li>- Know about the 'globe' and how they made it into a map</li> <li>- Can use fieldwork and mapwork to measure, record and describe the characteristics of the temperate zone using appropriate vocabulary.</li> </ul>
<b>By the end of this unit pupils will have the opportunity to:</b>			

<b>Year 4 - Locational Knowledge</b>	<ul style="list-style-type: none"><li>- Know and locate some countries in Europe, North and South America</li><li>- Know and locate some states in the North America</li></ul>	
<b>Year 4 - Place Knowledge</b>	<ul style="list-style-type: none"><li>- Know and identify a range of North and South America settlement</li><li>- Know the characteristics of the settlements</li><li>- Know the differences and similarities between some regions in North and South America</li><li>- Know how the human and physical characteristics are connections for one or two regions in North or South America</li><li>- Know what and where Route 66 is and some of the cities that pass through it</li></ul>	
<b>Year 4 - Geographical skills and fieldwork</b>	<ul style="list-style-type: none"><li>- Know how to use give directional instructions up to eight compass points</li><li>- Know how to make a map of a route with features in the correct order</li><li>- Know appropriate techniques to carry out fieldwork in a local area</li></ul>	
<b>Next Steps – Progression through the geography curriculum</b>		
<b>Geography Programme of Study</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Locational Knowledge</b>	<ul style="list-style-type: none"><li>- Know physical and human characteristics and environmental regions of Europe.</li><li>- Know and locate several physical environments in the UK.</li><li>- Know and can locate some key topographical features of the UK.</li><li>- Know and can locate world’s countries using maps to focus on Europe and across the world, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate cities, countries and regions of South America</li><li>- Know and describe key physical and human and environmental regions of South America</li><li>- Know and name types of industry in the area and give reasons why it might change in the future</li><li>- Know and describe the location of South America, Amazon Basin, the UK, latitude and hemisphere</li></ul>
<b>Place Knowledge</b>	<ul style="list-style-type: none"><li>- Know and locate UKs major urban and rural areas</li><li>- Know and describe how a local region has changed and how it’s different from another region in the UK</li><li>- Know that human activity is influenced by climate and weather and can give examples.</li><li>- Know and describe hazards from physical environments and their management, such as avalanches in mountain regions.</li></ul>	<ul style="list-style-type: none"><li>- Know and describe similarities and differences in life in cities and in villages and in a range of settlement sizes, and give some reasons.</li><li>- Know and illustrate how human activity is influenced by climate and weather.</li><li>- Know and describe and begin to explain several threats to wildlife/habitats (e.g. in the Amazon Basin).</li></ul>
<b>Geographical skills and fieldwork</b>	<ul style="list-style-type: none"><li>- Know, locate and describe several physical environments in the UK.</li><li>- Know and locate the UK's major rural and urban areas.</li><li>- Know how to use maps to locate the Alps and identify the physical features of the region.</li><li>- Know how to use base maps to create their own maps of the Alpine region.</li><li>- Know how to use maps to locate places and countries that locally available products come from.</li></ul>	<ul style="list-style-type: none"><li>- Know and explain how climate and vegetation are connected in biomes, e.g. the tropical rainforest.</li><li>- Know and describe what the climate of a region is like and how plants and animals are adapted to it</li><li>- Know and compare the Amazon and Alpine regions, identifying similarities and differences.</li><li>- Know why the Amazon is important.</li><li>- Know key hum and physical features of Manaus.</li><li>- Know and can explain some of the reasons why deforestation is occurring in the Amazon.</li><li>- Know how the Amazon is being protected and can suggest what else might be done to protect it.</li><li>- Know and identify some ways biomes (including the oceans) are valuable, why they are under threat and how they can be protected.</li><li>- Know how to use digital maps to investigate and describe features of an area.</li><li>- Know several threats to habitats.</li></ul>

		<ul style="list-style-type: none"> <li>- Know ways to improve the health of our planet.</li> <li>- Know where minerals can be found around the world.</li> <li>- Know the advantages and disadvantages of MPAs.</li> <li>- Understand how and why</li> <li>- Know a range of housing available in the local area.</li> <li>- know what amenities and public services are available locally.</li> <li>- that community needs may change in future, and that this will affect local industry and employment opportunities.</li> <li>- know some activities or facilities that support the development of community spirit.</li> <li>- know how developments can be sustainable.</li> </ul>
--	--	--

## Unit Overview

In this unit the children, travel the North and South American continents, and distinguish between the term's 'continent', 'region', 'country', 'state' and 'city' along the journey. Finding and using images and maps on the internet and in atlases, children will make notes on cities and record their countries and/or states. They will compare the built environments and settings of the cities and, through them, identify some key regions of the American continents. For the Big Finish, children use the song 'Route 66' as the stimulus for creating an illustrated, labelled and annotated map of the historic route.

## Map Work

There will be many opportunities to use atlas maps and Google Earth images, and to extract information from photographs. Children will also create their own class map of Route 66.

## Fieldwork

If fieldwork in a city or town is a possibility for your school, children would benefit from carrying out a transect, from the outskirts to the centre and then out again, perhaps by a different route. This would help them to appreciate the relationship between a commercial city centre and the surrounding distribution of smaller shops, housing and local amenities.

Key knowledge acquired throughout this unit	Key skills acquired throughout this unit
<ul style="list-style-type: none"> <li>- I know and can locate the city of Denver in the state of Colorado, in the country of the USA, on the continent of North America, using a map, an atlas index or Google Earth.</li> <li>- I know the names of some cities that are located approximately N, NE, E, SE, S, SW, W and NW of Denver using a compass.</li> <li>- I know and can locate, name some cities that are N, NE, E, SE, S, SW, W and NW of Cuiabá, Brazil using a compass.</li> <li>- I know some similarities and differences between North and South American cities.</li> <li>- I know and name some of the major environmental regions of North and South America.</li> <li>- I know what and where Route 66 is, and some of the cities it passes/passed through.</li> </ul>	<ul style="list-style-type: none"> <li>- I can find, and record countries, states and cities in North and South America.</li> <li>- I can describe the physical characteristics of some of the major environmental regions of North and South America.</li> <li>- I can interpret a physical geography map/satellite image.</li> <li>- I can use maps, atlases, globes and digital/ computer mapping.</li> </ul>

## Key Assessments

All children can:

- use a map to identify countries in North and South America
- use eight compass points to locate cities in North and South America
- name some North and South American cities
- use geographical language to describe some North and South American cities from photographs
- name some regions in North and South America
- follow a route (Route 66) on a map.



Most children can:

- use a map to identify states in North America
- relate 'continent', 'country', 'state' and 'city' in the context of the Americas
- describe settlement and road patterns of some North and South American cities from satellite images and photographs
- describe some regions in North and South America.

Some children can:

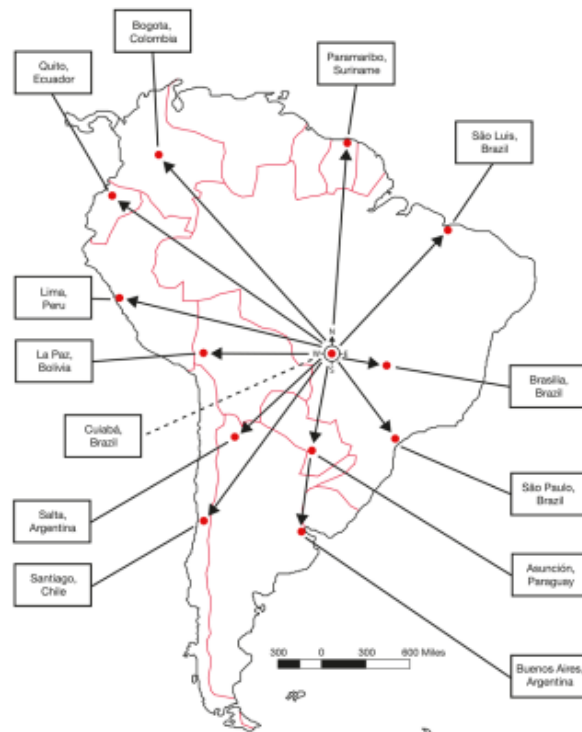
- describe and compare similarities and differences between some North and South American cities
- describe and explain the characteristics of some regions in North and South America

## Subject knowledge and teaching guidance



**The USA (United States of America) is a rich and powerful country in the continent of North America.** It is made up of 50 smaller states and the capital city is Washington DC. **The USA is made up of 50 states.** America's huge land is made up of many cities, suburbs, and smaller towns. Big cities can be found in every state and each state will often have its own unique landmarks, foods, celebrations and dialects.

Brazil is located on the South American continent. Brazil also belongs to the Latin American countries. The country borders the Atlantic Ocean. The largest Latin American country shares borders with all other South American countries except for Chile and Ecuador. The biggest cities in Brazil are Sao Paulo, Rio de Janeiro and Brasilia.



- Name and locate countries
- identify the Tropics of Cancer and Capricorn and the Equator
- locate some environmental regions of North America – Western/Pacific coastal strip (region affected by earthquakes associated with movement on the San Andreas Fault), Rockies (Rocky Mountains), Great Plains/Prairies, Canadian Shield, Caribbean, Eastern Coastal strip (region with major cities including New York)
- locate some regions of South America – Brazil/Amazon Basin, the Andes
- locate the islands of the Caribbean.



US Route 66 is also known as:

- the Will Rogers Highway
- the Main Street of America
- the Mother Road

It was established on November 11, 1926 as one of the original highways in the US Highway System, and became one of the most famous roads in the United States. Road signs were erected in 1927. It originally ran from Chicago, Illinois, through the states of Missouri, Kansas, New Mexico and Arizona before ending in Santa Monica, California, near Los Angeles, covering 2,448 miles or 3,940 kilometres. It was recognised in popular culture by the hit song '(Get Your Kicks on) Route 66' in the 1960s. It features in John Steinbeck's classic American novel, *The Grapes of Wrath* (1939). Route 66 was a primary route for those who migrated west, especially during the Dust Bowl of the 1930s. The road supported the economies of the communities through which it passed. People doing business along the route became prosperous as the highway became more popular. The same people later fought to keep the highway alive in the face of the growing threat of being bypassed by the new Interstate Highway System. Route 66 underwent many improvements and realignments over its lifetime, but was officially removed from the United States Highway System on 26 June 1985. It had been entirely replaced by segments of the Interstate Highway System. Portions of the road that passed through Illinois, Missouri, New Mexico, and Arizona have been named 'Historic Route 66'. Several states have adopted some by-passed sections of the former Route 66 into their state road networks as State Route 66. The corridor is being redeveloped into US Bicycle Route 66, a part of the United States Bicycle Route System that was developed in the 2010s. Driving as close to the original Route 66 as possible is a popular tourist activity, taking about 20 days to get from Chicago to Los Angeles, with several overnight stops to explore the towns and cities and to admire the scenery.

### Key vocabulary and definitions

City	A large town
State	A nation or territory considered as an organized political community under one government.
Country	A nation with its own government, occupying a particular territory.
Continent	Any of the world's main continuous expanses of land
Northern hemisphere	The half of the earth that is north of the equator.
Compass	An instrument containing a magnetized pointer which shows the direction of magnetic north and bearings from it.
Region	An area, especially part of a country or the world having definable characteristics but not always fixed boundaries.
Skyscrapers	A very tall building of many stories.
Routeways	A way along which a route can be followed; a road or path.

### Medium Term Planning

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
To use the eight points of the compass, with an atlas, map and/or Google™ Earth, to locate cities in the continent of North America.	To discover something about South American regions, countries and cities.	To research some countries and cities in North and South America and identify similarities and differences.	To be able to name, locate and describe some of the main environmental regions of North and South America	To research the historic Route 66 and some of the cities it went/goes through.	

Year 4 – Spring 1		Unit 2 – River and the water cycles	
National Curriculum Objectives Covered			
<ul style="list-style-type: none"><li>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 time.</li><li>Describe and understand key aspects of physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</li><li>Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</li><li>Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</li></ul>			
Cross Curricular links			
<ul style="list-style-type: none"><li>English: river and mountain stories and poem, e.g. ‘The ascent of Everest’ by John Hunt, ‘The river’ by Valerie Bloom, ‘A stream becomes a river’ by Margo Fallis, ‘The sparkling river’ by Susan Perrow; Writing a letter evaluating the unit.</li><li>Maths: learning about timing and measurement of water flow</li><li>Science: identifying the part played by precipitation, evaporation and condensation, infiltration and percolation, in the water cycle; learning about solids and liquids; learning about forces/gravity</li><li>History: researching historic river towns and river crossings/bridges</li><li>Art &amp; Design: learning about river paintings e.g. Canaletto’s and Monet’s paintings of the River Thames and Venice, John Constable’s Flatford Mill and paintings of the River Stour</li><li>Music: listening to Strauss’s The Blue Danube Waltz, Handel’s Water Music and other classical music related to rivers</li><li>Physical Education: performing a waltz and other (river-inspired) dances to Strauss</li><li>Religious Education: sacred rivers e.g. the Ganges</li></ul>			
Prior Learning			
Geography Programme of Study	Year 1	Year 2	Year 3
Locational Knowledge	<ul style="list-style-type: none"><li>Know and locate some major cities, oceans and continents on a UK and world map</li><li>Know, name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding sea</li><li>Know and use a world map atlas or globe to name and locate the seven continents and five oceans.</li></ul>	<ul style="list-style-type: none"><li>Know the purpose of an atlas</li><li>Know, identify and name the relevant countries and oceans</li><li>know and locate world’s highest mountain is called and where it is located.</li><li>Know and locate local coastal line</li><li>Know and locate a of the world’s major rivers</li><li>Know, name and locate an ‘ancient’ old-world wonder</li><li>Know, name and can locate a ‘modern’ world wonders.</li></ul>	<ul style="list-style-type: none"><li>Know and indicate tropical, temperate and polar climate zones</li><li>Know and locate poles, equator and lines of latitude and longitude</li><li>Know the position of the Prime/Greenwich Meridian on a map/globe</li><li>Know and locate the position and significance of the Northern and Southern Hemisphere, Tropics of Cancer and Capricorn, Artic and Antarctic Circle</li><li>Know the names of continents and oceans.</li><li>Know why the IDL is located in the Pacific Ocean.</li><li>Know why the IDL zigzags and does not exactly follow the 180° E–W line of longitude.</li><li>Know and locate some coastal places on a map of the UK.</li><li>Know and can locate and name the main British seaside locations and know how they have changed over time.</li></ul>

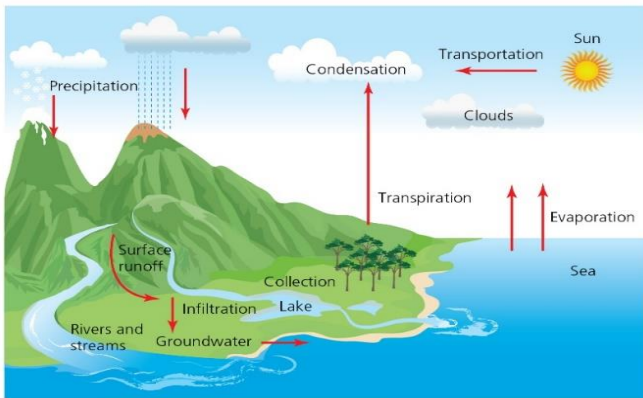
<b>Human and Physical Geography</b>	<ul style="list-style-type: none"> <li>- Know and describe which continents have significant hot or cold areas and relate these to the poles and equator.</li> <li>- Know the location of location of hot and cold areas of the world in relation to the Equator and the North and South Poles</li> <li>- Know and use basic geographical vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>- Know the four seasons and the correct order and identify seasonal and daily weather patterns in the UK.</li> <li>- Know that weather can be different in different parts of the UK.</li> <li>- Know and give reasons why the UK has the weather it does (e.g. wind).</li> <li>- Know and use basic geographical vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>- Know and indicate tropical, temperate and polar climate zones on a globe or map and describe the characteristics of these zones</li> <li>- Know what the 'tropical desert climate' and 'tropical desert biome' are.</li> <li>- Know and describe how physical processes can cause hazards to people.</li> <li>- Know some advantages and disadvantages of living in hazard-prone areas</li> <li>- Know and identify and sequence a range of (UK) seaside/coastal settlement sizes from a village to a city.</li> <li>- Know describe the characteristics of (UK) settlements with different functions</li> <li>- know and can name and describe activities that families and others enjoy at the coast.</li> </ul>
<b>Geographical skills and Fieldwork</b>	<ul style="list-style-type: none"> <li>- Know how to use a world map, atlas or globe to recognise to name some continents and oceans.</li> <li>- Know and use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features</li> <li>- Know how to use a wall map or atlas to locate and identify countries taught in the unit.</li> <li>- Know about the local area and can name and locate key landmarks.</li> <li>- Know simple compass directions and locational and directional language and use these to describe the location of features and routes on a map.</li> <li>- Know how to devise a simple map with a key.</li> <li>- Know and use simple fieldwork and observational skills to study the geography of their school</li> </ul>	<ul style="list-style-type: none"> <li>- Know directional language to describe a natural environment</li> <li>- Know and use basic weather symbols.</li> <li>- Know and use an atlas, globes and maps to name and locate on a map different continents, countries and cities outside the UK.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Know how to use the zoom function of a digital map to locate places and gather information</li> <li>- Know how to use an atlas to locate the UK and locate some major urban areas, can locate where they live/have visited in the UK (e.g. seaside/coastal places they have visited).</li> <li>- Know about the 'globe' and how they made it into a map</li> <li>- Can use fieldwork and mapwork to measure, record and describe the characteristics of the temperate zone using appropriate vocabulary.</li> </ul>
<b>By the end of this unit pupils will have the opportunity to:</b>			
<b>Year 4 - Locational Knowledge</b>	<ul style="list-style-type: none"> <li>- Know and locate the River Thames</li> <li>- Know and locate some of the worlds major rivers</li> <li>- Know and describe river and mountain environment</li> </ul>		

	<ul style="list-style-type: none"><li>- Know and locate some of the world’s main mountain ranges on a map</li><li>- Identify river features on an OS map</li></ul>	
<b>Year 4 - Human and Physical Geography</b>	<ul style="list-style-type: none"><li>- Know significant physical features of rivers and talk about how they change</li><li>- Know river and mountain environment in the UK</li></ul>	
<b>Year 4 - Geographical skills and fieldwork</b>	<ul style="list-style-type: none"><li>- Know how to make a map of a route with features in the correct order</li><li>- Know appropriate techniques to carry out fieldwork in a local area</li></ul>	
<b>Next Steps – Progression through the geography curriculum</b>		
<b>Geography Programme of Study</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Locational Knowledge</b>	<ul style="list-style-type: none"><li>- Know physical and human characteristics and environmental regions of Europe.</li><li>- Know and locate several physical environments in the UK.</li><li>- Know and can locate some key topographical features of the UK.</li><li>- Know and can locate world’s countries using maps to focus on Europe and across the world, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate cities, countries and regions of South America</li><li>- Know and describe key physical and human and environmental regions of South America</li><li>- Know and name types of industry in the area and give reasons why it might change in the future</li><li>- Know and describe the location of South America, Amazon Basin, the UK, latitude and hemisphere</li></ul>
<b>Geographical skills and fieldwork</b>	<ul style="list-style-type: none"><li>- Know a range of key physical processes and the resulting landscape features.</li><li>- Know how a mountain region was formed.</li><li>- Know and begin to explain hazards from physical environments and their management, such as avalanches in mountain regions.</li><li>- Know and describe key physical and human characteristics and environmental regions of Europe (e.g. the Alps).</li><li>- Know the advantages and disadvantages of tourism in Europe (e.g. the Alps)</li><li>- Know and describe how food production is influenced by climate.</li><li>- Know that products we use are imported as well as locally produced.</li><li>- Know where in the world several different fruits originate.</li><li>- Know and name our energy sources and natural resources.</li><li>- Know some ways in which development can be sustainable.</li><li>- Know that there are advantage and disadvantages to both imported and locally produced products.</li><li>- Know that there are many routes that products can take before arriving in my home.</li><li>- Know how regions in the UK (e.g. West Midlands) changed following the Second World War.</li><li>- Know the key changes that occurred in regions of the UK (e.g. London) for the 2012 Olympic and Paralympic Games.</li></ul>	<ul style="list-style-type: none"><li>- Know and explain how climate and vegetation are connected in biomes, e.g. the tropical rainforest.</li><li>- Know and describe what the climate of a region is like and how plants and animals are adapted to it</li><li>- Know and compare the Amazon and Alpine regions, identifying similarities and differences.</li><li>- Know why the Amazon is important.</li><li>- Know key hum and physical features of Manaus.</li><li>- Know and can explain some of the reasons why deforestation is occurring in the Amazon.</li><li>- Know how the Amazon is being protected and can suggest what else might be done to protect it.</li><li>- Know and identify some ways biomes (including the oceans) are valuable, why they are under threat and how they can be protected.</li><li>- Know how to use digital maps to investigate and describe features of an area.</li><li>- Know several threats to habitats.</li><li>- Know ways to improve the health of our planet.</li><li>- Know where minerals can be found around the world.</li><li>- Know the advantages and disadvantages of MPAs.</li><li>- Understand how and why</li><li>- Know a range of housing available in the local area.</li><li>- know what amenities and public services are available locally.</li><li>- that community needs may change in future, and that this will affect local industry and employment opportunities.</li><li>- know some activities or facilities that support the development of community spirit.</li><li>- know how developments can be sustainable.</li></ul>



<b>Human and Physical Geography</b>	<ul style="list-style-type: none"> <li>- Know, locate and describe several physical environments in the UK.</li> <li>- Know and locate the UK's major rural and urban areas.</li> <li>- Know how to use maps to locate the Alps and identify the physical features of the region.</li> <li>- Know how to use base maps to create their own maps of the Alpine region.</li> <li>- Know how to use maps to locate places and countries that locally available products come from.</li> </ul>	<ul style="list-style-type: none"> <li>- Know and locate Brazil and the Amazon Basin and River and describe features studied.</li> <li>- Know and locate national and global environmental issues.</li> <li>- Know and recognise things that can be preserved in the local environment for the future.</li> </ul>
<b>Unit Overview</b>		
<p>This unit focuses on rivers, providing excellent opportunities for fieldwork and school-based practical work. It introduces the water cycle and, as the key concept is that water flows downhill, looks at mountains, the source of many rivers. It looks at how people interact with rivers as well as their geographical features. A case study features one of the UK's major rivers, the River Thames. Cameos of some of the world's great rivers and mountain environments are included to extend children's geographical general or locational knowledge. There is opportunity to consider a local river or stream, and ideas for using local fieldwork to see the processes introduced in school in action. The Blue Danube Waltz and Handel's Water Music are suggested to accompany geographical river studies, for listening to classical music, to provide a context for classical music, and also to provide a context for dramatizing river features through dance and movement</p>		
<b>Map Work</b>		
<p>Children will be able to use OS and other (e.g. road) maps to locate and follow rivers. On a fieldtrip to a river environment, children will be able to plan the journey, provide and follow direction instructions, locate themselves on the map and annotate it with their observations. This could provide opportunities for you to model the use of OS maps and to develop 'real world' work on map symbols and grid reference, if this is appropriate for your setting.</p>		
<b>Fieldwork</b>		
<p>A stream often provides a safer environment for making observations and measurements than a river. You might also provide an opportunity for the children to visit a river flowing through an urban environment to see human use and intervention.</p>		
<b>Key knowledge acquired throughout this unit</b>		<b>Key skills acquired throughout this unit</b>
<ul style="list-style-type: none"> <li>- I know where rainfall goes when it falls to Earth.</li> <li>- I know that rainwater forms streams and rivers.</li> <li>- I know that water evaporates from oceans, seas, lakes and the ground.</li> <li>- I know that water condenses as clouds.</li> <li>- I know how and why rain falls from clouds.</li> <li>- I know a range of urban and rural features, including settlements.</li> <li>- I know some facts about several of the world's major rivers.</li> <li>- I know and can explain some ways people use rivers.</li> <li>- I know and can explain some ways people change rivers.</li> <li>- I know and can name some of the world's main mountain ranges.</li> <li>- I know and can locate some of the world's main mountain ranges on a map.</li> <li>- I know and can describe how water has helped to make these mountain ranges the shapes they are today.</li> <li>- I know and can describe erosion, transportation and deposition by water.</li> </ul>		<ul style="list-style-type: none"> <li>- I can follow the River Thames on a map from source to mouth.</li> <li>- I can identify river features on an OS map.</li> <li>- I can identify (some of) the changes that different rates of water flow produce.</li> </ul>
<b>Subject knowledge and teaching guidance</b>		
<ul style="list-style-type: none"> <li>- Wherever rainfall lands the water moves downhill.</li> <li>- Water infiltrates and percolates. (Movement of water into soil is called infiltration, and the downward movement of water through the soil is called percolation, both dependent on the pore space within the soil.)</li> </ul>		

- From a source a stream develops, it flows downhill, joins together with other streams; these eventually join to form a river. The streams are tributaries (think 'contribute') and where they join is called a confluence. As the water flows downhill it erodes a channel/valley and carries eroded material downstream. As the flow slows down on flatter land the river cannot transport the eroded material (insufficient energy) so it is deposited. The river might also wind around, forming meanders. Where a river joins the sea, possibly in an estuary, the water is brackish with the saltiness affected by the incoming and outgoing sea tides.



- The River Thames is so important because:
- it is the iconic national river (Old Father Thames) that flows through the UK's capital city, London
- historically the Tower of London guarded the lowest crossing point
- it has an estuary with the Thames (flood) Barrier which, when lowered, protects London from flooding
- it has extensive docks with historic global associations through shipping/trade
- it is crossed by famous bridges
- it has famous buildings along its banks.



**Cameo 1: Yangtze River** – In 2012, the huge Three Gorges Dam was built on the River Yangtze for hydro-electric power, for flood control downstream and to increase the river's shipping capacity. It has created many problems, however, especially because of the weight of water and pollution in the reservoir that has developed upstream as well as behind the dam. There have also been major issues about the number of people displaced to build the dam and raise the river level to establish the reservoir.

**Cameo 2: River Nile** – in Egypt use of the Nile for irrigation dates back to at least 4000 BC; since the mid-1800s a system of perennial irrigation has allowed the production of two or three cotton, sugarcane, and peanut crops a year; barrages and dams (e.g. Aswan, completed 1902) now control the water. Also the history of the search for the source of the Nile.

**Cameo 3: River Niger** – this particular river's unusual course baffled explorers for 2000 years: from its source in the Guinea highlands which is only 150 miles from the Atlantic, the river actually flows away from the sea and into the Sahara, where it then turns south-east at Timbuktu and enters the sea in the Niger Delta in eastern Nigeria.







## Looking down the sloping footpath

Water has also started to create another stream down the centre of the footpath. It meanders, sometimes round obstacles, and is cutting a channel.

Water has eroded a V-shaped valley down the side of the footpath (perhaps aided by forestry managers). Some rainfall flows down this.

Flow

## Looking up the slope

The right-hand stream is braided, and has exposed boulders by removing finer material. It meanders, finding its own way without the guidance of a cut channel.

The left-hand stream with its straighter, assisted channel controlling the direction of flow, has also eroded away fine material, leaving boulders, some eroded by water under-cutting the left-hand bank.

Flow

## The two streams join

Stream cutting a deeper channel

Confluence, where the stream joins the 'river'

V-shaped valley. Is it assisted or natural?

Tributary

Main stream (river)

## 'River' and stream meet

V-shaped valley, straight channel

Meandering stream eroding a deeper channel

Material brought down by the 'river' and its tributary when they are at their most powerful, in full flow after heavy rain.

Confluence, with a 'hanging valley' because the stream is at a higher level than the 'river'. A waterfall flows over the drop.

Flow

## A bit further downstream

The full force of the larger 'river' has undermined the left-hand bank and caused earth movement, a landslide . . .

. . . and undercut this bank.



Key Assessments					
<p>All children can:</p> <ul style="list-style-type: none"><li>- name and locate some of the UK’s most significant rivers and mountains</li><li>- describe a river and a mountain environment in the UK, using appropriate geographical vocabulary</li><li>- describe the water cycle in sequence, using appropriate geographical vocabulary</li><li>- name (some of) the processes associated with rivers and mountains</li><li>- name some of the world’s great rivers and mountains.</li></ul> <p>Most children can:</p> <ul style="list-style-type: none"><li>- name and locate the UK’s most significant river and mountain environments</li><li>- describe and name the key landscape features of river and mountain environments</li><li>- explain the water cycle in appropriate geographical language</li><li>- describe (some of) the processes associated with rivers and mountains.</li><li>- answer the unit’s question: How does water go round and round?</li></ul> <p>Some children can:</p> <ul style="list-style-type: none"><li>- name and locate the UK’s and the world’s most significant river and mountain environments</li><li>- describe river and mountain environments in the UK and the world and explain how (some of) the landscape features associated with them are formed</li><li>- explain (some of) the processes associated with rivers and mountains.</li><li>- explain the water cycle in some detail, using appropriate geographical vocabulary.</li></ul>					
Key vocabulary and definitions					
River	A large natural stream of water flowing into a channel into the sea, lake or another river.				
Stream	Small, narrow river.				
Valley	A low area of land between hills and mountain.				
Mountain	A large natural elevation of the Earth’s surface.				
Hill	A naturally raised area of land.				
Infiltration	Rain and water soaks through the ground.				
Percolation	Water filtering gradually through a surface.				
Estuary	Tidal mouth of a large river where the tide meets the stream.				
Terrain	Stretch of land with regards to its physical features.				
Tributary	A river or stream flowing into a larger river or lake.				
Confluence	The junction of two rivers.				
Meander	A winding curve or bend of a river.				
Evaporation	The process of turning from liquid into gas.				
Condensation	The process of turning gas into liquid.				
Transpiration	The release of water from plant leaves.				
Precipitation	Water released from the clouds as a form of rain, sleet, or hail.				
Glacier	A large accumulation of ice or snow.				
Scree	A mass of small loose stones that cover a slope on a mountain.				
Medium Term Planning					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6

To understand the water cycle.	To learn about a major UK river.	To explore the ways in which people use and change some of the world's major rivers.	To learn about major mountains across the world.	To know how changes in water flow affect the river or stream.
--------------------------------	----------------------------------	--	--	---

Year 4 – Summer 1		Unit 3 – Earthquakes and volcanoes	
National Curriculum Objectives Covered			
<ul style="list-style-type: none"><li>• Locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li><li>• Identify the position and significance of latitude, longitude, equator, northern hemisphere, southern hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</li><li>• Describe and understand key aspects of physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</li><li>• Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</li></ul>			
Cross Curricular links			
<ul style="list-style-type: none"><li>• English: reading an Earthquake short story by an Australian primary pupil, reading Willard Price’s story Volcano Adventure); learning about Greek and Roman mythology; legend of the Two Mexican Volcanoes, Popocatepetl and Iztaccíhuatl</li><li>• Maths: learning about measurement of temperature and earthquake scales.</li><li>• Science: learning about change of state – melting and solidification of rock (lava, magma).</li><li>• Art: looking at paintings e.g. Turner and the Quechuan artists of Tigua, Ecuador; creating own paintings and a (working) model of volcano.</li><li>• Drama: dramatizing a volcanic eruption with explosive movement and lave flows; performing a volcano safety drill as in Japan.</li><li>• History: researching famous volcanic eruptions of the past, including Vesuvius (Herculaneum and Pompeii).</li><li>• Music: for volcanoes, Handel’s Music for the Royal Fireworks; for earthquakes, children creating drumming music</li></ul>			
Prior Learning			
Geography Programme of Study	Year 1	Year 2	Year 3
Locational Knowledge	<ul style="list-style-type: none"><li>- Know and locate some major cities, oceans and continents on a UK and world map</li><li>- Know, name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding sea</li><li>- Know and use a world map atlas or globe to name and locate the seven continents and five oceans.</li></ul>	<ul style="list-style-type: none"><li>- Know the purpose of an atlas</li><li>- Know, identify and name the relevant countries and oceans</li><li>- know and locate world’s highest mountain is called and where it is located.</li><li>- Know and locate local coastal line</li><li>- Know and locate a of the world’s major rivers</li><li>- Know, name and locate an ‘ancient’ old-world wonder</li><li>- Know, name and can locate a ‘modern’ world wonders.</li></ul>	<ul style="list-style-type: none"><li>- Know and indicate tropical, temperate and polar climate zones</li><li>- Know and locate poles, equator and lines of latitude and longitude</li><li>- Know the position of the Prime/Greenwich Meridian on a map/globe</li><li>- Know and locate the position and significance of the Northern and Southern Hemisphere, Tropics of Cancer and Capricorn, Artic and Antarctic Circle</li><li>- Know the names of continents and oceans.</li><li>- Know why the IDL is located in the Pacific Ocean.</li><li>- Know why the IDL zigzags and does not exactly follow the 180° E–W line of longitude.</li><li>- Know and locate some coastal places on a map of the UK.</li><li>- Know and can locate and name the main British seaside locations and know how they have changed over time.</li></ul>
Human and Physical Geography	<ul style="list-style-type: none"><li>- Know and describe which continents have significant hot or cold areas and relate these to the poles and equator.</li></ul>	<ul style="list-style-type: none"><li>- Know the four seasons and the correct order and identify seasonal and daily weather patterns in the UK.</li></ul>	<ul style="list-style-type: none"><li>- Know and indicate tropical, temperate and polar climate zones on a globe or map and describe the characteristics of these zones</li></ul>

	<ul style="list-style-type: none"> <li>- Know the location of location of hot and cold areas of the world in relation to the Equator and the North and South Poles</li> <li>- Know and use basic geographical vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>- Know that weather can be different in different parts of the UK.</li> <li>- Know and give reasons why the UK has the weather it does (e.g. wind).</li> <li>- Know and use basic geographical vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>- Know what the 'tropical desert climate' and 'tropical desert biome' are.</li> <li>- Know and describe how physical processes can cause hazards to people.</li> <li>- Know some advantages and disadvantages of living in hazard-prone areas</li> <li>- Know and identify and sequence a range of (UK) seaside/coastal settlement sizes from a village to a city.</li> <li>- Know describe the characteristics of (UK) settlements with different functions</li> <li>- know and can name and describe activities that families and others enjoy at the coast.</li> </ul>
<b>Geographical skills and Fieldwork</b>	<ul style="list-style-type: none"> <li>- Know how to use a world map, atlas or globe to recognise to name some continents and oceans.</li> <li>- Know and use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features</li> <li>- Know how to use a wall map or atlas to locate and identify countries taught in the unit.</li> <li>- Know about the local area and can name and locate key landmarks.</li> <li>- Know simple compass directions and locational and directional language and use these to describe the location of features and routes on a map.</li> <li>- Know how to devise a simple map with a key.</li> <li>- Know and use simple fieldwork and observational skills to study the geography of their school</li> </ul>	<ul style="list-style-type: none"> <li>- Know directional language to describe a natural environment</li> <li>- Know and use basic weather symbols.</li> <li>- Know and use an atlas, globes and maps to name and locate on a map different continents, countries and cities outside the UK.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Know how to use the zoom function of a digital map to locate places and gather information</li> <li>- Know how to use an atlas to locate the UK and locate some major urban areas, can locate where they live/have visited in the UK (e.g. seaside/coastal places they have visited).</li> <li>- Know about the 'globe' and how they made it into a map</li> <li>- Can use fieldwork and mapwork to measure, record and describe the characteristics of the temperate zone using appropriate vocabulary.</li> </ul>
<b>By the end of this unit pupils will have the opportunity to:</b>			
<b>Year 4 - Locational Knowledge</b>	<ul style="list-style-type: none"> <li>- Know and locate some well-know earthquakes and volcanoes</li> </ul>		
<b>Year 4 - Human and Physical Geography</b>	<ul style="list-style-type: none"> <li>- Know and give reasons why physical processes can cause hazards to people</li> <li>- Know and give reasons why people use and change rivers</li> <li>- Know some examples where, and know the main reasons why, people live in the vicinity of volcanoes</li> <li>- Know some of the hazards for people who live in earthquake and volcanic zones</li> </ul>		

	<ul style="list-style-type: none"><li>- Know how some of these can be/have been overcome, and life made safer for people</li><li>-</li></ul>											
<b>Year 4 - Geographical skills and fieldwork</b>	<ul style="list-style-type: none"><li>- Know how to use give directional instructions up to eight compass points</li><li>- Know how to make a map of a route with features in the correct order</li><li>- Know appropriate techniques to carry out fieldwork in a local area</li></ul>											
<b>Next Steps – Progression through the geography curriculum</b>												
<b>Geography Programme of Study</b>	<table><tr><th><b>Year 5</b></th><th><b>Year 6</b></th></tr><tr><td><b>Locational Knowledge</b></td><td><ul style="list-style-type: none"><li>- Know physical and human characteristics and environmental regions of Europe.</li><li>- Know and locate several physical environments in the UK.</li><li>- Know and can locate some key topographical features of the UK.</li><li>- Know and can locate world’s countries using maps to focus on Europe and across the world, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li></ul></td><td><ul style="list-style-type: none"><li>- Know and locate cities, countries and regions of South America</li><li>- Know and describe key physical and human and environmental regions of South America</li><li>- Know and name types of industry in the area and give reasons why it might change in the future</li><li>- Know and describe the location of South America, Amazon Basin, the UK, latitude and hemisphere</li></ul></td></tr><tr><td><b>Human and Physical Geography</b></td><td><ul style="list-style-type: none"><li>- Know a range of key physical processes and the resulting landscape features.</li><li>- Know how a mountain region was formed.</li><li>- Know and begin to explain hazards from physical environments and their management, such as avalanches in mountain regions.</li><li>- Know and describe key physical and human characteristics and environmental regions of Europe (e.g. the Alps).</li><li>- Know the advantages and disadvantages of tourism in Europe (e.g. the Alps)</li><li>- Know and describe how food production is influenced by climate.</li><li>- Know that products we use are imported as well as locally produced.</li><li>- Know where in the world several different fruits originate.</li><li>- Know and name our energy sources and natural resources.</li><li>- Know some ways in which development can be sustainable.</li><li>- Know that there are advantage and disadvantages to both imported and locally produced products.</li><li>- Know that there are many routes that products can take before arriving in my home.</li><li>- Know how regions in the UK (e.g. West Midlands) changed following the Second World War.</li><li>- Know the key changes that occurred in regions of the UK (e.g. London) for the 2012 Olympic and Paralympic Games.</li></ul></td><td><ul style="list-style-type: none"><li>- Know and explain how climate and vegetation are connected in biomes, e.g. the tropical rainforest.</li><li>- Know and describe what the climate of a region is like and how plants and animals are adapted to it</li><li>- Know and compare the Amazon and Alpine regions, identifying similarities and differences.</li><li>- Know why the Amazon is important.</li><li>- Know key hum and physical features of Manaus.</li><li>- Know and can explain some of the reasons why deforestation is occurring in the Amazon.</li><li>- Know how the Amazon is being protected and can suggest what else might be done to protect it.</li><li>- Know and identify some ways biomes (including the oceans) are valuable, why they are under threat and how they can be protected.</li><li>- Know how to use digital maps to investigate and describe features of an area.</li><li>- Know several threats to habitats.</li><li>- Know ways to improve the health of our planet.</li><li>- Know where minerals can be found around the world.</li><li>- Know the advantages and disadvantages of MPAs.</li><li>- Understand how and why</li><li>- Know a range of housing available in the local area.</li><li>- know what amenities and public services are available locally.</li><li>- that community needs may change in future, and that this will affect local industry and employment opportunities.</li><li>- know some activities or facilities that support the development of community spirit.</li><li>- know how developments can be sustainable.</li></ul></td></tr><tr><td><b>Geographical skills and</b></td><td><ul style="list-style-type: none"><li>- Know, locate and describe several physical environments in the UK.</li></ul></td><td><ul style="list-style-type: none"><li>- Know and locate Brazil and the Amazon Basin and River and describe features</li></ul></td></tr></table>	<b>Year 5</b>	<b>Year 6</b>	<b>Locational Knowledge</b>	<ul style="list-style-type: none"><li>- Know physical and human characteristics and environmental regions of Europe.</li><li>- Know and locate several physical environments in the UK.</li><li>- Know and can locate some key topographical features of the UK.</li><li>- Know and can locate world’s countries using maps to focus on Europe and across the world, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate cities, countries and regions of South America</li><li>- Know and describe key physical and human and environmental regions of South America</li><li>- Know and name types of industry in the area and give reasons why it might change in the future</li><li>- Know and describe the location of South America, Amazon Basin, the UK, latitude and hemisphere</li></ul>	<b>Human and Physical Geography</b>	<ul style="list-style-type: none"><li>- Know a range of key physical processes and the resulting landscape features.</li><li>- Know how a mountain region was formed.</li><li>- Know and begin to explain hazards from physical environments and their management, such as avalanches in mountain regions.</li><li>- Know and describe key physical and human characteristics and environmental regions of Europe (e.g. the Alps).</li><li>- Know the advantages and disadvantages of tourism in Europe (e.g. the Alps)</li><li>- Know and describe how food production is influenced by climate.</li><li>- Know that products we use are imported as well as locally produced.</li><li>- Know where in the world several different fruits originate.</li><li>- Know and name our energy sources and natural resources.</li><li>- Know some ways in which development can be sustainable.</li><li>- Know that there are advantage and disadvantages to both imported and locally produced products.</li><li>- Know that there are many routes that products can take before arriving in my home.</li><li>- Know how regions in the UK (e.g. West Midlands) changed following the Second World War.</li><li>- Know the key changes that occurred in regions of the UK (e.g. London) for the 2012 Olympic and Paralympic Games.</li></ul>	<ul style="list-style-type: none"><li>- Know and explain how climate and vegetation are connected in biomes, e.g. the tropical rainforest.</li><li>- Know and describe what the climate of a region is like and how plants and animals are adapted to it</li><li>- Know and compare the Amazon and Alpine regions, identifying similarities and differences.</li><li>- Know why the Amazon is important.</li><li>- Know key hum and physical features of Manaus.</li><li>- Know and can explain some of the reasons why deforestation is occurring in the Amazon.</li><li>- Know how the Amazon is being protected and can suggest what else might be done to protect it.</li><li>- Know and identify some ways biomes (including the oceans) are valuable, why they are under threat and how they can be protected.</li><li>- Know how to use digital maps to investigate and describe features of an area.</li><li>- Know several threats to habitats.</li><li>- Know ways to improve the health of our planet.</li><li>- Know where minerals can be found around the world.</li><li>- Know the advantages and disadvantages of MPAs.</li><li>- Understand how and why</li><li>- Know a range of housing available in the local area.</li><li>- know what amenities and public services are available locally.</li><li>- that community needs may change in future, and that this will affect local industry and employment opportunities.</li><li>- know some activities or facilities that support the development of community spirit.</li><li>- know how developments can be sustainable.</li></ul>	<b>Geographical skills and</b>	<ul style="list-style-type: none"><li>- Know, locate and describe several physical environments in the UK.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate Brazil and the Amazon Basin and River and describe features</li></ul>
<b>Year 5</b>	<b>Year 6</b>											
<b>Locational Knowledge</b>	<ul style="list-style-type: none"><li>- Know physical and human characteristics and environmental regions of Europe.</li><li>- Know and locate several physical environments in the UK.</li><li>- Know and can locate some key topographical features of the UK.</li><li>- Know and can locate world’s countries using maps to focus on Europe and across the world, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate cities, countries and regions of South America</li><li>- Know and describe key physical and human and environmental regions of South America</li><li>- Know and name types of industry in the area and give reasons why it might change in the future</li><li>- Know and describe the location of South America, Amazon Basin, the UK, latitude and hemisphere</li></ul>										
<b>Human and Physical Geography</b>	<ul style="list-style-type: none"><li>- Know a range of key physical processes and the resulting landscape features.</li><li>- Know how a mountain region was formed.</li><li>- Know and begin to explain hazards from physical environments and their management, such as avalanches in mountain regions.</li><li>- Know and describe key physical and human characteristics and environmental regions of Europe (e.g. the Alps).</li><li>- Know the advantages and disadvantages of tourism in Europe (e.g. the Alps)</li><li>- Know and describe how food production is influenced by climate.</li><li>- Know that products we use are imported as well as locally produced.</li><li>- Know where in the world several different fruits originate.</li><li>- Know and name our energy sources and natural resources.</li><li>- Know some ways in which development can be sustainable.</li><li>- Know that there are advantage and disadvantages to both imported and locally produced products.</li><li>- Know that there are many routes that products can take before arriving in my home.</li><li>- Know how regions in the UK (e.g. West Midlands) changed following the Second World War.</li><li>- Know the key changes that occurred in regions of the UK (e.g. London) for the 2012 Olympic and Paralympic Games.</li></ul>	<ul style="list-style-type: none"><li>- Know and explain how climate and vegetation are connected in biomes, e.g. the tropical rainforest.</li><li>- Know and describe what the climate of a region is like and how plants and animals are adapted to it</li><li>- Know and compare the Amazon and Alpine regions, identifying similarities and differences.</li><li>- Know why the Amazon is important.</li><li>- Know key hum and physical features of Manaus.</li><li>- Know and can explain some of the reasons why deforestation is occurring in the Amazon.</li><li>- Know how the Amazon is being protected and can suggest what else might be done to protect it.</li><li>- Know and identify some ways biomes (including the oceans) are valuable, why they are under threat and how they can be protected.</li><li>- Know how to use digital maps to investigate and describe features of an area.</li><li>- Know several threats to habitats.</li><li>- Know ways to improve the health of our planet.</li><li>- Know where minerals can be found around the world.</li><li>- Know the advantages and disadvantages of MPAs.</li><li>- Understand how and why</li><li>- Know a range of housing available in the local area.</li><li>- know what amenities and public services are available locally.</li><li>- that community needs may change in future, and that this will affect local industry and employment opportunities.</li><li>- know some activities or facilities that support the development of community spirit.</li><li>- know how developments can be sustainable.</li></ul>										
<b>Geographical skills and</b>	<ul style="list-style-type: none"><li>- Know, locate and describe several physical environments in the UK.</li></ul>	<ul style="list-style-type: none"><li>- Know and locate Brazil and the Amazon Basin and River and describe features</li></ul>										

<b>fieldwork</b>	<ul style="list-style-type: none"> <li>- Know and locate the UK's major rural and urban areas.</li> <li>- Know how to use maps to locate the Alps and identify the physical features of the region.</li> <li>- Know how to use base maps to create their own maps of the Alpine region.</li> <li>- Know how to use maps to locate places and countries that locally available products come from.</li> </ul>	<ul style="list-style-type: none"> <li>studied.</li> <li>- Know and locate national and global environmental issues.</li> <li>- Know and recognise things that can be preserved in the local environment for the future.</li> <li>-</li> </ul>
------------------	--	--

## Unit Overview

Our earth is dynamic and ever-changing. In this unit children will explore the dynamism of the earth, learning about its structure, look particularly at the causes and distribution of earthquakes and volcanoes and their effects on landscape and people. They will be introduced to the 'Pacific Ring of Fire', the most active region on earth, and consider why people choose to live on the flanks of volcanoes and in earthquake zones when both can be life-threatening. They will learn that volcanoes have existed throughout geological time, and that there are several different types. In the Big Finish, the children will make their own erupting volcano!

## Map Work

Maps to locate volcanoes and earthquakes worldwide, plate (tectonic) boundaries involving maps of the world's oceans as well as land, interactive maps and satellite imagery of Ecuador.

## Fieldwork

This unit creates a good opportunity to introduce children to the main groups of rocks – sedimentary (e.g. sandstone and limestone), igneous (e.g. granite) and metamorphic (e.g. slate and schist). Discover which of these are present in your local area and visit appropriate localities. Volcanic rocks are a subdivision of igneous. Pumice stone is one light and bubbly form of volcanic lava which you may have in your bathroom. A museum with a good geological display would be worth a visit to see a wider range. However, if you are in an area of former volcanic activity (e.g. the Lake District), with your local geology including volcanic rocks, you may have opportunities for fieldwork.

### Key knowledge acquired throughout this unit

- I know what earthquakes are.
- I know how earthquakes are caused.
- I know the location of some earthquakes.
- I know what volcanoes are.
- I know and can describe what happens when a volcano erupts.
- I know and can describe the location of some volcanoes.
- I know and can describe the distribution earthquakes and volcanoes.
- I know that volcanoes can be active, dormant and extinct.
- I know about the 'Pacific Ring of Fire'.
- I know some examples where, and know the main reasons why, people live in the vicinity of volcanoes.
- I know some of the hazards for people who live in earthquake and volcanic zones.
- I know how some of these can be/have been overcome, and life made safer for people.

### Key skills acquired throughout this unit

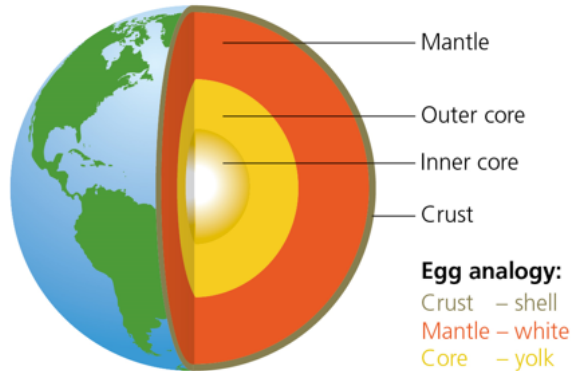
- I can identify the location of some well-known earthquakes.
- I can identify the location of some well-known volcanoes.
- I can talk about a recent example(s) of an earthquake and/or volcanic eruption.

## Subject knowledge and teaching guidance

- Earthquakes mostly occur at or near tectonic plate boundaries. They result from the release of pressure that builds up in the Earth's crust.
- The core, mantle and crust are the three major 'layers' of the Earth, with the inner core being solid, the outer core being molten, the mantle semi-molten and the crust solid. The temperature increases towards the centre of the Earth.



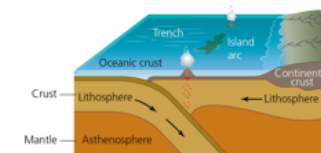
# Structure of the Earth



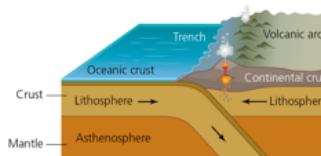
<b>Core:</b>	extremely hot Inner core: solid Outer core: molten
<b>Mantle:</b>	semi-molten very hot
<b>Crust:</b>	continental and oceanic solid rock broken into tectonic plates

- When tectonic plates move against each other, heat is generated. This can heat and mobilise material in the earth. Along with other molten material at depth, this can move upwards and come out through cracks in the earth's surface as lava. The volcanic eruptions can be fairly gentle with lava running downhill and over the surface, can throw much volcanic ash into the air, or can be explosive.
- In very explosive eruptions great boulders of rock can be thrown high into the sky. Volcanic eruptions can occur on land or under the sea, as along the Mid-Atlantic Ridge – the eastern and western sides of the Atlantic are moving apart along this ridge (at about 2.5 cm a year) and lava comes up and fills the gap.

**a)** When ocean plates move towards each other, an arc of islands with volcanoes is formed. The Philippines, Java and Sumatra are examples, but there are lots around the Pacific Ocean.



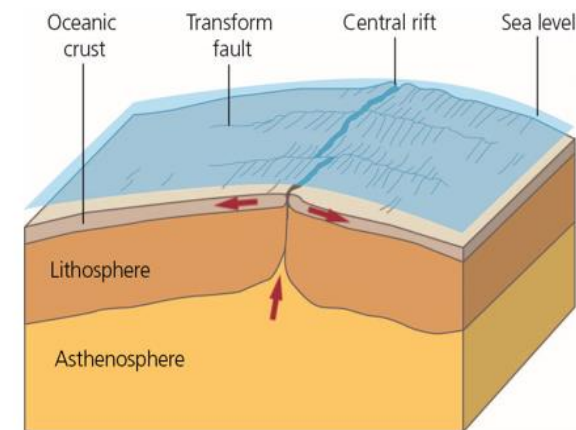
**b)** When an ocean and a land (continental) plate move towards each other, mountains with volcanoes are formed. The Andes, South America is an example.

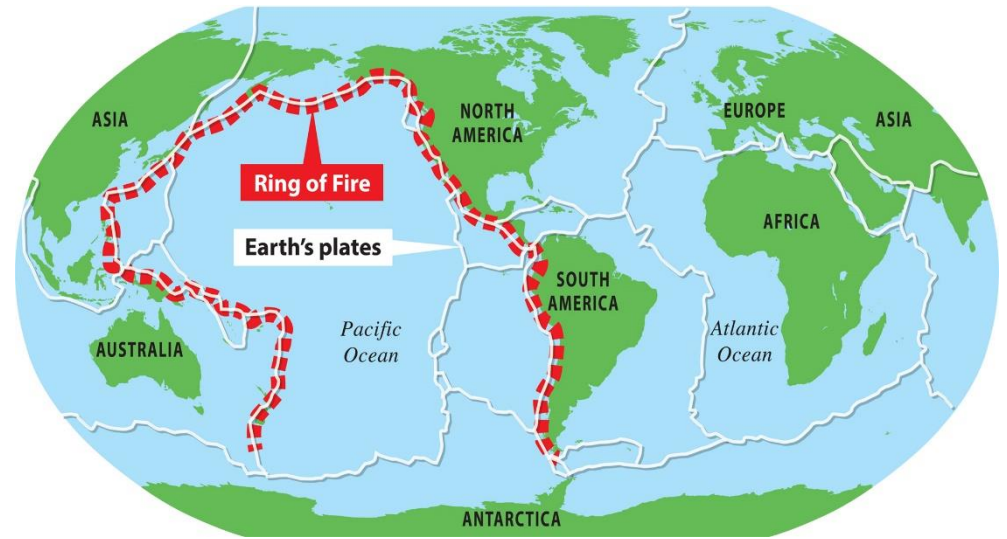
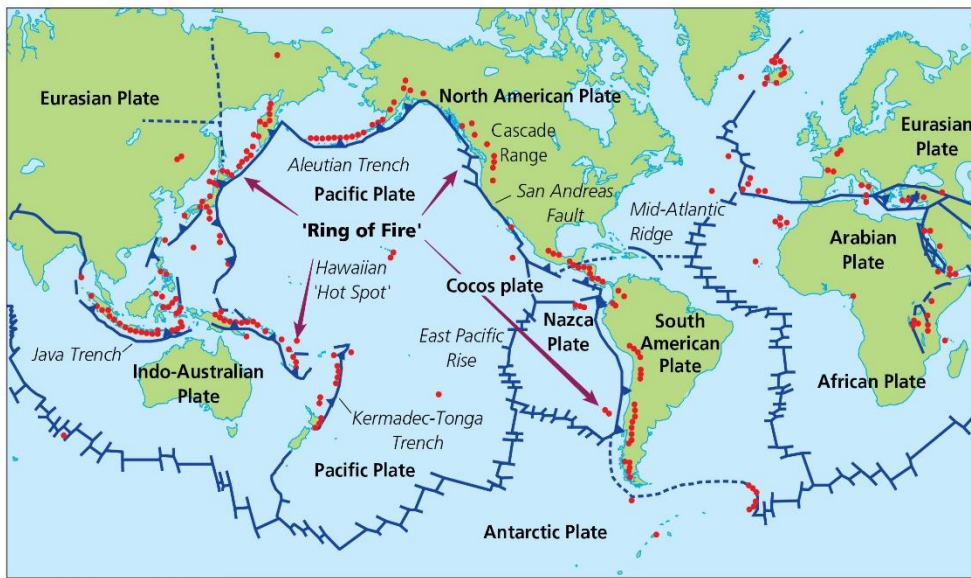


**c)** When two land (continental) plates move towards each other (converge). The Himalayan Mountains are an example.



## 'Moving apart' (divergent) plate boundary





People live near volcanoes because: -

- Minerals e.g. tin, silver, gold, copper and even diamonds
- Energy from underground steam (known as 'geothermal energy') used to make electricity
- Fertile soils
- Tourism
- The Richter scale is logarithmic which means that each one-point increase on the scale represents a tenfold increase in the magnitude of the earthquake.

## How we measure an earthquake

We measure earthquakes on the Richter scale.

Class	Magnitude	Effects
Great	8 or more	At or near total destruction. Felt across great distances.
Major	7–7.9	Causes damage to most buildings. Felt across great distances.
Strong	6–6.9	Causes damage to many buildings. Felt in wider areas.
Moderate	5–5.9	Slight damage to buildings. Felt by everyone.
Light	4–4.9	Noticeable shaking of indoor objects. Felt by most people in the area.
Minor	3–3.9	Often felt, but rarely causes damage.

## Tsunami

- Giant waves caused by earthquakes or volcanic eruptions under the sea.
- Tsunami waves can travel as fast as a jet plane.



© David / Adobe Stock

## Earthquake case study 2

- On 26th December 2004, there was a huge earthquake centred on Aceh in Indonesia.
- The earthquake triggers a huge tsunami and affected the whole of the Indian Ocean.
- About 230,000 people were killed, many of whom were in Thailand.



© Paul Olding / Alamy Stock

## Earthquake case study 1

- 11th March 2011, Japan
- The north east of Japan was extensively damaged by a magnitude 9 (on the Richter Scale) earthquake.
- It unleashed a huge tsunami which caused lots of flooding and destruction in Japan. It also severely damaged three nuclear power stations, which was incredibly dangerous for the population.

### Key Assessments

All children can:

- describe some features of earthquakes and volcanoes
- know that people live in earthquake zones and close to active volcanoes
- appreciate that earthquakes and volcanoes are often associated
- name some volcanoes and major earthquakes.

Most children can:

- describe the effects of earthquakes and volcanic eruptions
- give some reasons why people choose to live in earthquake zones and close to active volcanoes
- Know where the most active earthquake and volcanic areas are
- name examples of volcanic eruptions and major earthquake disasters.

Some children can:

- explain how earthquakes occur and volcanoes erupt
- describe some advantages and disadvantages of living in earthquake zones and close to active volcanoes
- explain about the Pacific 'Ring of Fire' and link it with plate tectonics
- describe some major volcanic eruptions and major earthquake disasters.

### Key vocabulary and definitions

Rock strata	Layers of rock or soil.
-------------	-------------------------

Earthquake	Shaking, rolling or sudden shock of the earth's surface.
Core	Part of the Earth in the middle of our planet.
Mantle	The mantle is solid and makes up most of the entire planet.
Crust	The outermost layer of our planet.
Tectonic plate	Broken pieces of the Earth's crust.
Crater	The area around the opening of a volcano that is shaped like a bowl.
Lava	A hot, liquefied rock that flows from a volcano in the surface of the Earth.
Ash	The soft gray powder tat is left after something is burnt.
Converge plate boundary	Is the boundary that occurs when two plates collide.
Dormant	Volcanoes that are quiet but might possibly erupt again.
Extinct	A volcano which has not erupted in the past 10,000 years.

### Medium Term Planning

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
To understand the causes, outcomes and location of earthquakes.	To have some understanding of the causes, outcomes, and locations of volcanoes.	To understand the distribution of earthquakes and volcanoes, and to know where the world's most active earthquake and volcanic zone is today	To discover why people live in the vicinity of volcanoes, and what measures can be taken to make life safer in earthquake zones.	To investigate recent earthquakes and volcanic eruptions and the associated issues.	