

# Finlay Community School

## Our Whole School Curriculum Intent

## Geography

At Finlay, we aim to teach a broad and balanced curriculum that enables children to enjoy, achieve and succeed in line with the National Curriculum. We provide opportunities to develop the children's cultural capital and ensure they are life-long learners, who are ready for the next step of the education and to thrive in Society. In addition to teaching the National Curriculum, we also aim for our children to leave school with a SMILE! Our SMILE values are: social awareness, mental health and wellbeing, independence, life skills and excellent aspirations. We provide opportunities to develop these values in all curriculum areas.

## Our Geography Intent

At Finlay, we teach the National Curriculum. As stated in the National Curriculum framework, high-quality geography teaching should inspire in pupils a curiosity and fascination about the world and the people that live within it. It is essential that these qualities remain with them for their lives. Pupils should be equipped with the knowledge of diverse places, people, natural and human environments and should be coupled with a deep understanding of Earth's human and physical processes. Pupils should gain an understanding of the interaction between these key processes and apply this understanding to the formation of landscapes and environments. Geographical knowledge, understanding and skills should provide the framework to explain how the Earth's features are shaped, linked and change over time. Pupils social awareness (a part of Finlay's SMILE values), will be at the forefront of our geography teaching as we will ensure that topical issues that affect the world we live in are taught. Teaching will allow pupils to use maps and undergo fieldwork in order to aid pupils to ask and answer geographical questions, draw conclusions from data

# Pre-school

- Who is who? Who lives at your house? How do you feel? What happens in autumn?
- 2- Who lives far away? What happens in winter? Christmas
- 3- What is beyond the clouds? What would I find on a treasure island? Could I walk with dinosaurs? What would I find in the woods?
- 4- Who helps me when I am hurt? Who helps my pet if they are hurt? Who can check my teeth? How can I be safe on the road?
- 5- What would I find on the farm? What would I find at the zoo? What would I find under the sea? What would I find on safari?
- 6- How do plants grow? How do mini beasts grow? What happens in summer? Who helps me at school

# Whole School Curriculum Overview: Thematic Overview

## Reception

- 1. It's good to be me: All about me and my family
- 2. Let's Celebrate: Religious Celebrations
- 3. I wonder
- 4. Once upon a time. Moving on up! Transition to Year 1

## Year 1

- 1. Finlay Toy Factory: The History of Toys
- 2. Where oh Where is Finlay Bear? Our Local area and the UK

- 1. The Great Fire of London and the Tudors. Focus on Samuel Pepys
- 2. Around the World in 60 Days/Paddington's Passport: The 7 continents and 5 oceans
- 3. Heroes in History: Florence Nightingale and Mary Seacole

## Year 2

## Year 3

- 1. Rock and Roll: The Stone Age to Iron Age
- 2. Deadly Disasters: Extreme Earth (Fundraising for a disaster charity)
- 3. Navigating the Nile/ Exciting Egyptians: Ancient Egypt.

## Year 4

- 1. The Rotten Romans/ Glorious Glevum: Roman Britain and their Legacy.
- 2. Journey to the River Sea/ Come Sail With Me: Oceans and Rivers
- 3. Ancient Greeks and the Olympics

- 1. Invaders and Settlers- Saxons, Vikings and Mayans
- 2. The Rainforest: North and South America, Deforestation
- 3. Chocolate! Ancient Maya

- 1. We'll Meet Again: World War 2
- 2. Ice Explorers: Arctic and Antarctica
- 3. Let Me Entertain You: Changes in leisure and entertainment throughout history

## Year 5

## Year 6

# Coverage Term by Term (EYFS – Year 6)

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Preschool 'I wonder...'</b>	Who Is who? Who lives at your house? How do you feel? What happens in autumn?	Who lives far far away? What happens in winter Christmas	What is beyond the clouds? What would I find on a treasure island? Could I walk with dinosaurs? What would I find in the woods?	Who helps me when I am hurt? Who helps my pet if they are hurt? Who can check my teeth? How can I be safe on the road?	What would I find on the farm? What would I find at the zoo? What would I find under the sea? What would I find on safari?	How do plants grow? How do mini beasts grow? What happens in summer? Who helps me at school?
			Know that there are different countries in the world and talk about the differences they have experienced or seen in photos		Begin to understand the need to respect and care for the natural environment and all living things	
<b>Reception</b>	It's Good to be Me	Let's Celebrate	I wonder: What it's like in space? What it's like in Australia? What it's like in Antarctica?	I wonder: What is It like at the forest? What is it like at the zoo?	Once upon a time Moving on up- last 2 weeks	
<b>Geographical content</b>		I can describe what I see, hear and feel whilst outside.	Introduce the solar system - planets, stars and Sun: why are	Talk about the features of their own immediate environment.	I can make observations and draw pictures of animals.	

			<p>there hot and cold planets?          Discuss the first moon landing (Neil Armstrong) and what it is like to live in Space.          I can recognize that there some environments that are different to the one in which we live.          Using pictures to compare and contrast environments in the North/South Poles, Africa and Australia and how it impacts upon the lives of the people and animals that live there.</p>	<p>Look at aerial photos of Finlay School- point out roads, landmarks etc.          Talk about local environments.          See if the children can follow a simple route on a map of the school.</p>	
<b>Year 1</b>	<b>Finlay Toy Factory</b>	<b>Where oh Where is Finlay Bear</b>		<b>The Great Space Race</b>	
<b>Geographical content</b>		<p>Geography          Local area, our school, the UK</p>	<p>Geography          Hot and cold places          Arctic V Australia</p>		

Year 2	The Great Fire of London & The Tudors		Around the World in 60 Days Passport theme		Heroes in History Florence Nightingale and Mary Seacole- Black History Month	
Geographical content		<p>Make simple maps and plans with increasing detail and a basic key</p> <p>Describe some places which are in the local area: factory, detached house, semi-detached house, terrace house.</p> <p>Describe some physical features of their own locality.</p>	<p>Geography - post card theme</p> <p>Focus on the 7 continents and the five oceans</p> <p>Split into blocks on each continent</p> <p>Europe</p>			
Year 3	Rock and Roll! Stone Age and Iron Age		Deadly Disasters Extreme Earth		Navigating the Nile/ Ancient Egyptians	
Geographical content			<p>Volcanoes</p> <p>How they happen, features, where they are found, Ring of Fire, Tropics</p>	<p>Earthquakes</p> <p>How they happen, features, where they are found, Ring of Fire, Tropics</p>		<p>Geographical features: human and physical geography of Egypt now</p>
Year 4	Rotten Romans Glorious Glorium		Journey to the River Sea! Come Sail with Me!		Ancient Greeks Olympics	
Geographical content			<p>Locating Rivers in the UK</p> <p>Famous Rivers around the world</p> <p>Tracking Rivers</p> <p>How do rivers work?</p> <p>From source to mouth</p> <p>Plastic pollution</p>	<p>Describe and understand key aspects of physical geography, including: mountains</p> <p>Explain how/ why people live in</p>		

			Coastal erosion	<p>mountainous areas.</p> <p>What are the dangers to humans? How do temperatures vary in the mountain environment?</p> <p>Explain what a mountain is and what the main features of a mountain are (eg summit, slope, valley, foot etc)</p> <p>Locate mountains on a map (Everest Fuji Kilimanjaro Mount Blanc K2 Mount Olympus_</p>		
<b>Year 5</b>	Invasaders and Settlers - Saxons, Vikings and Mayans		<b>Deforestation</b> <b>The Rainforest - North and South America</b>		<b>Chocolate!</b> <b>Ancient Maya</b>	
Geographical content			<p>Geography: Americas Focus</p> <p>Build on knowledge of the tropics of Cancer and Capricorn, Locating places in North and South America, Features of N and S America, Deforestation.</p>			
<b>Year 6</b>	We'll Meet Again! World War 2		<b>Ice Explorer</b> <b>Arctic and Antarctica</b>		<b>Let Me Entertain You!</b> <b>History of Entertainment</b>	
Geographical content			<p>Know about the Arctic and Antarctic, discussing land, sea and climate</p> <p>Longitude and Latitude,</p>			

*Greenwich Mean Time*

- Describe the impact of human activity has caused environments to change: Melting ice caps/Global warming*

# Progression of Knowledge, Skills and Understanding in the National Curriculum

## Geographical inquiry- Investigation and fieldwork

	<i>Pre-school 22-36</i>	<i>Pre-school 30-50</i>	<i>Rec 40-60</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>
<b>Ask and answer Questions</b>				Throughout unit- I can begin to ask and answer geographical questions	Throughout unit- I can confidently ask and answer geographical questions	Throughout unit- I can begin to ask and answer more focused geographical questions about the physical and human characteristics of a location	Throughout unit- I can confidently ask and answer geographical questions using geographical language about the physical and human characteristics of a location	Throughout unit -I can collect and analyse statistics and other information in order to draw clear conclusions about locations.	Throughout unit -I can confidently collect and analyse statistics and other information in order to draw clear conclusions about locations, which can be communicated using geographical vocabulary,
<b>Views</b>						Lesson 6/lesson 9- I can recognise that different people hold different views about an issue and begin to understand some of the reasons why.			Lesson 8- I can recognise that different people hold different views about an issue and understand the different reasons why.

<b>Drawing conclusions</b>							Throughout unit- I can begin to analyse evidence and draw basic conclusions (e.g. make comparisons between locations)	Throughout unit- I can confidently analyse evidence and draw more detailed conclusions that can be supported with evidence	Throughout unit- I can confidently analyse a range of evidence and draw more detailed conclusions that can be fully supported with evidence
<b>Using maps</b>			I can draw information from a map given to me (story map)	Lesson 2- I can use a simple map of the local area or to move around school.	Lesson 2. Can I identify the location of hot and cold areas of the world on a map?	Throughout unit- I can use maps, atlases, globes and digital/computer mapping to locate countries	Throughout unit- I can use maps, atlases, globes and digital/computer mapping to locate countries	Throughout unit- I can use atlases/OS maps to find out about other features of places. Use and recognise OS symbols	Throughout unit- I can use maps and charts to support decision making about the location of places
<b>Using maps</b>					Lesson 3- I can begin to identify the seven continents and five oceans on a map			Throughout unit- I can use and compare maps with arial photographs to locate places and describe their features using geographical vocabulary.	Throughout unit- I can use and compare maps with arial photographs to locate places and describe their features using geographical vocabulary.
<b>Making and drawing maps</b>			I can draw a simple map to retell a story	Lesson 4- I can make my own simple map		Lesson 5- I can name four of the most famous volcanoes and locate these on a map Draw map of ring of fire	Throughout unit- I can draw accurate maps with more complex keys.	Throughout unit - I can draw a variety of thematic maps based on my own data.	Throughout unit- I can draw a variety of maps, thematic maps and plans of increasing complexity.
<b>Fieldwork: Observations</b>	I can notice pattern		I can explore the natural world around me	Lesson 2- I can identify features of my school grounds				Throughout unit- I can begin using different types of fieldwork sampling (quadrant, along a line, around a point) to observe, measure and record the human and physical features	Throughout unit- I can choose to use different types of fieldwork sampling (quadrant, along a line, around a point) to observe, measure and record the human and physical features
			I can make observations and draw pictures of animals						



<b>Fieldwork: Using equipment</b>				Lessons 2-6- I can begin using cameras to collect and record data			Lesson 3- I can continue using simple fieldwork equipment e.g. cameras and rain gauges to collect simple data.		Throughout unit- I can use more advanced fieldwork equipment such as data loggers to record data which can be later analysed.
<b>Fieldwork: Recording Observations</b>				Lesson 2-. I can begin to make simple fieldwork sketches			Throughout unit- I can make detailed sketch maps using six figure grid references and diagrams.	Throughout unit- I can make detailed sketch maps, plans and graphs of the local areas using six figure grid references and eight point compass directions.	Throughout unit- I can sketch maps, plans and graphs (scatter graph/line graphs/pie charts) using technology where appropriate of the local areas using six figure grid references, eight point compass directions, symbols and a key.
<b>Fieldwork: surveys, questionnaires and data</b>						Throughout unit- I can begin to use simple surveys, questionnaires and simple data collection tables to find out more about topical issues and places.	Throughout unit- I can confidently use simple surveys, questionnaires and simple data collection tables to find out more about topical issues and places.		
<b>Presenting information</b>				Throughout unit- I can begin to gather and record data using pictures, basic block graphs or tally charts to help in answering questions as a class.	Throughout unit- I can begin to gather and record observations using tables, drawings, block graphs and some written data to help in answering questions, including from secondary sources of information as a group.	Throughout unit I can gather and record findings using simple geographical language, drawing, labelled diagrams, charts and tables with increasing independence.	Throughout unit- I can gather and record findings using geographical language, drawings, labelled diagrams, charts and tables independently, ensuring they are accurate.	Throughout unit- I can gather and record data and results of increasing complexity using detailed diagrams and labels, keys, tables, scatter graphs, bar and line graphs.	Throughout unit- I can select the most appropriate method of gathering and recording data and results of increasing complexity: detailed diagrams and labels, complex keys, tables, scatter graphs, bar and line graphs.
<b>Recognising, following and</b>		I can discuss locations using words		Throughout unit-- I can recognise the	Throughout unit- I can recognise, follow and use the	Throughout unit- I can begin to recognise the eight	Lesson 5- I can recognise and use the eight points of a		Throughout unit- I can confidently use the eight points of a

using compass directions.		like 'in front of' and 'behind'		4 points of a compass: North, East, South and West	4 points of a compass: North, East, South and West	points of a compass: North, North East, East, South East, South, South West, West, North West	compass: North, North East, East, South East, South, South West, West, North West		compass when explaining the position of key geographical locations/features.
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# Progression of Knowledge, Skills and Understanding in the National Curriculum

## Human, physical and locational geography

	Birth to 3	Pre-school	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Describe their own locality</b>	I can notice patterns		I can describe what I see, hear and feel whilst outside	Lesson 3- I can link my home with other places in my local community and describe the locality using words and pictures.					
<b>Describe their own locality</b>	I can explore and respond to different phenomena in my setting and on trips		I can explore the natural world around me	Lesson 6- I know about some present changes that are happening in the local environment and suggest ideas for improving environments.					
<b>Describe Localities</b>				Lesson 9/10 -I can explain the main features of a hot and cold place	Lesson 12- I can describe a place within Europe using		Throughout unit- I can describe and represent different physical features of an	Lesson 5- I can explain how a location fits into its wider geographical	Lesson 13- I can compare and contrast the physical features of

				(Antarctica and Australia)	geographical vocabulary.		area of the UK on a map (rivers, coasts)	location with reference to its geographical features	different places identifying how they are similar and how they are different.
<b>Physical features of localities</b>				Lesson 9/10- I can explain the main physical features of a hot and cold place.	Lesson 3-7- I can begin to describe the key features of a place using geographical vocabulary		Lesson 6- I can understand the effect of landscape features on the development of a locality	Throughout unit-I can compare and contrast similarities and differences between UK and America	Lesson 6/10- I can describe and understand key aspects of physical geography
<b>Physical features of localities</b>							Lesson 2/7- I know about the physical features of coasts and begin to understand erosion and deposition.		
<b>United Kingdom</b>				Lesson 7- I can begin to name and locate characteristics of the four countries of the United Kingdom	Lesson 2- I can name, locate and recognize characteristics of the four countries of the United Kingdom and their capitals.		Lesson 5-I can identify the different islands surrounding the UK		
<b>Volcanoes</b>						Lesson 2- I can identify what a volcano is and how it is made			
<b>Volcanoes</b>						Lesson 3- I can identify features of volcanoes			
<b>Volcanoes</b>						Lesson 4- I can identify different types of volcanoes			

<b>Volcanoes</b>						Lesson 5- I can name four of the most famous volcanoes and locate these on a map			
<b>Volcanoes</b>						Lesson 6- I can identify the key impact that Volcanoes can have on people's lives			
<b>Mountains</b>							Lesson 8- I can identify famous mountains in the world and locate them on a map		
<b>Mountains</b>							Lesson 9- I can identify key parts of a mountain?		
<b>Mountains</b>							Lesson 10- I can identify how mountains are made and different types of mountains		
<b>Mountains</b>							Lesson 11- I can identify key features of a mountainous climate zone		
<b>Mountains</b>							Lesson 12- I can understand how and why people choose to live in mountainous areas		
<b>Mountains</b>							Lesson 13- I can identify dangers to humans of living in/near mountains		
<b>Earthquakes</b>						Lesson 7- I can explain how earthquakes happen			

<b>Earthquakes</b>						Lesson 8 I can identify and locate places where earthquakes have happened			
<b>Earthquakes</b>						Lesson 9-I can explain the impact of earthquakes on the lives of individuals			
<b>Earthquakes</b>						Lesson 10 - I can explain how tsunamis happen and identify whether there is a link to earthquakes			
<b>Rivers/ Oceans</b>					Lesson 1-I can locate and name the five oceans (Pacific, Atlantic, Indian, Southern, Arctic)	Lesson 13-I can explain the causes of flooding and identify preventative measures that are put into place	Lesson 1- I can explain how rivers are formed		
<b>Rivers/ Oceans</b>						Lesson 14- I can explain the impact of a natural disaster in my local area	Lesson 2- I can explain different parts of a river		
<b>Rivers/ Oceans</b>							Lesson 4- I can track major rivers of the UK		
<b>Rivers/ Oceans</b>							Lesson 3. I can explain how the water cycle works		
<b>Rivers/ Oceans</b>							Lesson 7-I can explain types of erosion		
<b>Rainforests</b>								Lesson 6- I can identify the layers of a rainforest	

<b>Rainforests</b>								Lesson 7- I can identify the main features of a tropical rainforest	
<b>Rainforests</b>								Lesson 8/9 - I can describe the Amazon rainforest and identify its importance	
<b>America</b>					Lesson 7- I can identify the physical and human features of North America			Lesson 1- I can identify, locate and describe America (South)	
					Lesson 8- I can identify the physical and human features of North America				
<b>Europe</b>					Lesson 9- I can identify physical and human features of Europe				
<b>Europe</b>					Lesson 12- I can locate Spain on a map				
<b>Antarctica/ Arctic</b>									Lesson 1- I can identify and locate Antarctica
<b>Antarctica/ Arctic</b>									Lesson 2 - I recognise why Antarctica is so cold
<b>Antarctica/ Arctic</b>									Lesson 9- I can locate where the Arctic is and what countries make it up

<b>Antarctica/ Arctic</b>									Lesson 6/10-I can identify physical and human features of Antarctica
									Lesson 11 -I can identify what it is like to live in the Arctic
<b>The world</b>		I know that there are different countries in the world and talk about the difference they have experienced or seen in photos	I can recognize that there some environments that are different to the one in which we live		Lesson 1- I can identify and locate the seven continents and the 5 oceans?				Lesson 4. I can identify latitude and longitude
<b>The world</b>		I can begin to understand the need to respect and care for the natural environment and all the living things							Lesson 5- I can identify different time zones
<b>Connections</b>					Lesson 13. I can compare similarities and differences between Spain and England?			Lesson 4-I can compare Brazil to UK	Lesson 13- I can identify the similarities and differences between The Arctic and Antarctica.
<b>Weather patterns</b>			I can understand the effect of changing seasons on the world around me		Lesson 2 -I can identify the location of hot and cold areas of the world on a map	Lesson 1- I can locate the equator and the Northern and Southern Hemisphere on a map	Lesson 3- I can explain how the water cycle works	Lesson 2. I can identify the Tropic of Cancer and the Tropic of Capricorn	Lesson 2- I can identify why Antarctica is so cold
<b>Weather patterns</b>								Lesson 3- I can identify the different climate zones	Lesson 3-I can identify the seasons in Antarctica

# Progression of Knowledge, Skills and Understanding in the National Curriculum

## Communicating Geographically

	Birth to 3	Pre-school	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				Throughout unit- I can begin to use basic geographical vocabulary to refer to key physical features.	Throughout unit- I can use basic geographical vocabulary to refer to key physical features	Throughout unit- I can describe key aspects of physical geography	Throughout unit- I can describe key aspects of physical geography	Throughout unit- I can begin to describe and understand key aspects of physical geography	Throughout unit- I can describe and understand key aspects of physical geography
				Throughout unit- I can begin to use basic geographical vocabulary to refer to key human features, including	Throughout unit- I can use basic geographical vocabulary to refer to key human features	Throughout unit- I can describe key aspects of human geography	Throughout unit- I can describe key aspects of human geography	Throughout unit- I can begin to describe and understand key aspects of human geography	Throughout unit- I can describe and understand key aspects of human geography

## Key individuals and real life applications/ topical issues

	Birth to 3	Pre-school	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						Lesson 11- I can describe the work of Dr Iain Stuart		Lesson 11- I can understand what deforestation is and why it happens	Lesson 7-I can identify the work of Ernest Shackleton



						Lesson 12- I can discuss the work of key charities in supporting with natural disasters		Lesson 12 - I know what Fairtrade is and how it helps	Lesson 8- I understand what climate change is and what impact it has on the environment
						Lesson 14- I can explain the impact of a natural disaster in my local area? (A local geographical study: Floods of 2007)			Lesson 12 - I know what the Nautilus Submarine was and its impact on the world

# Knowledge Organisers

*Knowledge organisers should be shared with the children at the beginning of each block of work.*

*In history, as this is the basis of each theme, the children will have one knowledge organiser per big term.*

*The children should take a copy of this home.*

*The children should have quizzes based on the information on their knowledge organisers on a regular basis and use this as a tool for learning.*

*Knowledge Organisers should show:*

- Key dates*
- Vocabulary*
- Sticky knowledge and Rapid Recall facts*
- How learning may link to previous learning*

## Where oh Where is Finlay Bear?

Focus: The local area (Gloucester), The Four Continents and Hot and Cold Places (Australia and Antarctica)

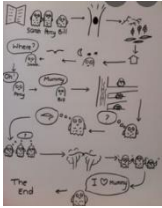
Year: 1

Term: Spring

Subject: Geography

### Rapid Retrieval

(Can I still remember?)



That a map is a picture, drawing or image of an area.  
A map can also be drawn to shown to retell a story.

Amelia Earhart was an American aviator, and set many records. She was the first woman to fly solo across the Atlantic Ocean.

People can travel to different places: on foot, in the car, on the bus, on the train, by airplane.

Some countries are hot and some countries are cold.

### Clever Connections:

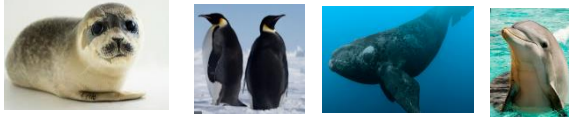

(How does this link?)








- In Reception, you learned about Amelia Earhart and how she was the first female pilot to fly solo across the Atlantic Ocean.
- In Reception, you used simple maps to tell stories.
- In Science in Year 1 this term, you are learning about different plants and different animals. Animals and plants

can be found in all countries, and have different features to help them adapt to living there.

- Polar bears have lots of fur to keep them warm in the cold countries.

Key questions	Sticky knowledge
<p>1. Can I sort areas into rural and urban?</p>	<p>Rural areas are areas where there are not big towns or cities. These are often called 'the country' or 'the country side.'</p> <p>Urban areas are areas where many people live and work. These are usually cities or larger towns.</p>
<p>2. Can I identify features of my school grounds?</p>	<p>A fieldwork sketch is a way of drawing in geography that allows us to see our surroundings. They are often accompanied by annotations (labels) of key features.</p>
<p>3. Can I link my home to other places in my local area?</p>	<p>A home is somewhere where people live. There is a range of different homes that people can live in including a flat, a cottage, a caravan or even a bungalow.</p>
<p>4. Can I make my own simple map?</p>	<p>A map is a picture, drawing or image of an area. It can give you information about your surrounding area.</p>
<p>5. What geographical features are there in my local area?</p>	<p>Physical features are natural things like seas, rivers, hills, forests and countryside.</p> <p>Human features are things that are man-made/ built by humans such as a shop, school, house, town and city.</p>
<p>6. Can I make suggestions of improvements to my local area?</p>	<p>What do I like?          What do I dislike?          What do I want to change?          Why do I want this to change?          How will this impact our lives?</p>
<p>7. What four countries make up the UK and can I locate them?</p>	<p>The UK is made of four countries:          England, Northern Ireland, Scotland and Wales.</p>
<p>8. Can I identify capital cities?</p>	<p>A capital city is where that countries government is located. The capital cities of the UK are:          England-London          Northern Ireland- Belfast</p>

	Scotland- Edinburgh Wales- Cardiff
9. Can I identify physical features of a hot country?	Australia is a hot country. The capital city is Canberra. Lots of people live here. It has high temperatures all year around, has lots of deserts and is dry.
10. Can I identify physical features of a cold country?	Antarctica is a cold country. There are no native people who live here permanently. It is the coldest, driest and highest continent.
11. Do I know what animals live in Antarctica and why?	Lots of animals live in Antarctica including seals, penguins, whales and dolphins. 
12. Do I know what animals live in Australia and why?	Animals that live in Australia include kangaroos, wallabies, koalas and dingos. 

<p>Australia</p>  <p>Australia is a large island country, surrounded by water. The temperature is hot.</p>	<p>Antarctica</p>  <p>Antarctica is a continent located in the South Pole. It is very cold and is surrounded by the Southern Ocean.</p>	<p>Compass</p>  <p>A compass is used to give directions. The four compass points are North, East, South, West. We can remember these with the rhyme Never Eat Shredded Wheat.</p>	<p>Local area</p> <p>Your local area is the place immediately surrounding where you live, work or go to school.</p>	<p>Rural</p>  <p>Rural areas are areas where there are not big towns or cities. These are often called 'the country' or 'the country side.'</p>	<p>School</p>  <p>School is a place that we go to learn.</p>	<p>United Kingdom</p>  <p>The United Kingdom is made up of England, Northern Ireland, Scotland and Wales.</p>	<p>Urban</p>  <p>Urban areas are areas where many people live and work. These are usually cities or larger towns.</p>
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**Rapid Retrieval**

(Can I still remember?)

Some countries are hot and some countries are cold.



My school is part of my local area and that I can make a fieldwork sketch of different places I go to.

The United Kingdom is where we live. We live in England.

There are 4 compass points on a compass: North, East, South, West.




**Clever Connections:**














(How does this link?)













- In Year 1, you learned about hot and cold countries. You learnt that Antarctica is a cold place and that Australia is hot.
- You learnt that there are 4 countries within the UK: England, Northern Ireland, Scotland and Wales.
- You learnt that a capital city is where that country's government live.
- In year 1 you learnt that rural areas are areas where there are not big towns or cities.






- You also learnt that urban areas are areas where many people live and work.






Key questions	Sticky knowledge
1. Can I describe the physical features of my locality?	<p>Locality is also known as an area or a neighborhood.</p> <p>Physical features of a locality are natural things like seas, rivers, hills, forests and countryside.</p> <p>The features in my locality include: a school, park, a shop, a cemetery and a church.</p>
2. Can I identify characteristics of the 4 capital cities of the UK?	<p>The capital cities of the UK are:</p> <p>England-London Northern Ireland- Belfast Scotland- Edinburgh Wales- Cardiff</p> <p>London- Rolling hills and lowlands. Lots of rivers, Lots of urban areas Belfast- Uplands and valleys. Lough Neagh-largest lake in the UK Edinburgh- High mountain ranges, rolling hills and lowlands Cardiff- Lots of mountains. One of the wettest places in Europe.</p>
3. Can I identify and locate the seven continents and the 5 oceans?	<p>The seven continents are:</p> <p>Africa Antarctica Asia Oceania Europe North America South America</p> <p>The 5 oceans are:</p> <p>Arctic Atlantic Indian Pacific Southern</p>
4. Can I identify the location of hot and cold areas of the world on a map?	<p>The Equator is an imaginary line that runs around the Earth. It divides it into the Northern and Southern hemispheres. It is halfway between the North and South poles.</p> <p>The northern Hemisphere is colder than the southern hemisphere.</p>
5. Can I identify the physical and human	<p>Africa is the second largest continent with the second largest amount of people. Countries include Kenya, Nigeria and Egypt.</p> <p><b>Physical features:</b></p>  <p>It is home to many deserts including the Sahara desert and the Kalihari desert.</p>



<p>features of Africa?</p>	 <p>The River Nile is the longest river in Africa and is often thought to be the longest river in the world.</p>  <p>Victoria Falls is a waterfall on the Zambezi River in southern Africa, which provides habitat for several unique species of plants and animals.</p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- Nairobi is the capital city of Kenya. It has a National Park and is known for its Safaris.</li> <li>- Cape Town is one of South Africa's three capital cities. It is below the famous Table mountain.</li> <li>- Masai Village is where the Masai people live in Kenya. Masai people are an ethnic group of people known for their culture and their dress.</li> </ul>
<p>6. Can I identify the physical and human features of Asia?</p>	<p>Asia is the largest continent and has the most amount of people living on it. Countries include Japan, China and India.</p> <p><b>Physical features:</b></p> <p>It is the home to many mountains including Mount Fuji(Japan) and Mount Everest (border of China and Japan).</p>   <p>The dead sea is bordering Israel and Jordan. It is a salt lake.</p>  <p>The Chocolate Hills are in the Phillipines.. They are covered in green grass that turns brown during the dry season.</p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- It is home to the tallest tower in the world- The Burj Khalifa which is in Dubai.</li> <li>- The Taj Mahal is a famous building in India</li> <li>- Angkor Wat is a religious building in Cambodia.</li> </ul>   
<p>7. Can I identify the physical and human features of North America?</p>	<p>North America includes countries such as The United States of America, Canada, Mexico, Greenland and many islands including Jamaica.</p> <p><b>Physical features:</b></p> <p>The Grand Canyon is in Arizona in the USA. It is made of millions of layers of red rock.</p>  <p>The Niagra falls is a group of three waterfalls between Canada and USA.</p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- Disney World is in Florida, USA.</li> <li>- The Hollywood sign is a famous landmark in Los Angeles, USA</li> </ul>   
<p>8. Can I identify the physical</p>	<p>South America is the 4<sup>th</sup> largest continent and includes the countries Brazil, Chile and Peru.</p> <p><b>Physical features:</b></p>  <p>Lake Titicaca is a lake that borders Bolivia and Peru and is one of the largest lakes in South America.</p>

<p>and human features of South America?</p>	<p>The Amazon rainforest is a famous rainforest mainly in Brazil It is the world's largest tropical rainforest.</p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- Statue of Christ the Redeemer is a huge statue overlooking Rio De Janeiro, Brazil.</li> <li>- Machu Picchu is an Incan city set high in the Andes Mountains in Peru.</li> </ul>   
<p>9. Can I identify the physical and human features of Antarctica?</p>	<p>Antarctica is the site of the South Pole and is the driest continent in the world.</p> <p><b>Physical features:</b> Antarctica is almost completely covered by an ice sheet. At its thickest, the ice is over 4 km deep. Beneath the ice sheet is a hidden landscape of mountains, valleys and plains. Antarctica's dome-shaped ice sheet has been formed by snow.</p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- There are no permanent human populations in Antarctica but there are people there all year around. These are scientists that work in research stations.</li> </ul>  
<p>10. Can I identify the physical and human features of Australasia/Oceania?</p>	<p>Australasia/ Oceania contains 14 countries including Australia and New Zealand. It also includes many islands.</p> <p><b>Physical features:</b> Mount Cook is a mountain in New Zealand.  Zealand.</p> <p>Wave rock is near Hyden, Australia and it is a natural rock formation  shaped like a wave.</p> <p>The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands. </p> <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- The Sydney Opera house is in Australia. It is a venue where many performances take place.</li> <li>- The Moai Monoliths are monolithic statues which are carved from volcanic ash. The human figures would be outlined in the rock wall first, then chipped away until only the image was left. They can be found on Easter Island, Eastern Polynesia.</li> <li>- The Sydney Harbour bridge is a steel bridge spanning Sydney, Australia.</li> </ul>   
<p>11. Can I identify the physical and human</p>	<p>Europe is a continent which included many countries such as Spain, Germany, Italy and Turkey.</p> <p><b>Physical features:</b></p> 

<p>features of Europe?</p>	<p>Giant's causeway is an area of about 40,000 interlocking basalt columns, the result of an ancient volcanic fissure eruption. It is located in Northern Ireland.</p> <p>The Vatnajökull Ice caves are situated in Iceland.</p> <p>Ben Nevis is the highest mountain in Scotland, the United Kingdom and the British Isles.</p>   <p><b>Human Features:</b></p> <ul style="list-style-type: none"> <li>- The Sistine chapel is in Vatican City.</li> <li>- The Eiffel tower is in Paris, France. It is named after the engineer Gustave Eiffel, whose company designed and built the tower.</li> <li>- The Colosseum is an oval amphitheatre in the centre of the city of Rome, Italy. It is the largest ancient amphitheatre ever.</li> </ul>   
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<p>12. Can I describe the physical and human features of Spain?</p>	<p><b>Physical features</b></p>  <p>Somiedo Natural Park is a protected area northern Spain.</p> <p>Las Médulas is a historic gold-mining site near the town of Ponferrada. It was the most important gold mine, as well as the largest open-pit gold mine in the entire Roman Empire.</p>  <p><b>Human Features</b></p> <ul style="list-style-type: none"> <li>- La Sagrada Familia is a basilica in Barcelona.</li> <li>- The Royal Palace of Madrid is the official residence of the Spanish royal family at the city of Madrid.</li> <li>- Parc Güell is a privatized park system composed of gardens and architectural elements located in Barcelona.</li> </ul>   
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<p>13. Can I compare similarities and differences between Spain and England?</p>	<table border="0"> <tr> <td data-bbox="808 1005 1299 1417"> <p><b>England</b></p> <ul style="list-style-type: none"> <li>- Official language- English</li> <li>- Currency- Pound</li> <li>- Flag- </li> <li>- National Anthem- God save the</li> <li>- Capital City- England</li> </ul> </td> <td data-bbox="1299 1005 2190 1417"> <p><b>Spain</b></p> <ul style="list-style-type: none"> <li>- Official language- Spanish</li> <li>- Currency- Euro</li> <li>- Flag- </li> <li>- National Anthem- Marcha Real</li> <li>- Capital City- Madrid</li> </ul> <p>Queen</p> </td> </tr> </table>	<p><b>England</b></p> <ul style="list-style-type: none"> <li>- Official language- English</li> <li>- Currency- Pound</li> <li>- Flag- </li> <li>- National Anthem- God save the</li> <li>- Capital City- England</li> </ul>	<p><b>Spain</b></p> <ul style="list-style-type: none"> <li>- Official language- Spanish</li> <li>- Currency- Euro</li> <li>- Flag- </li> <li>- National Anthem- Marcha Real</li> <li>- Capital City- Madrid</li> </ul> <p>Queen</p>
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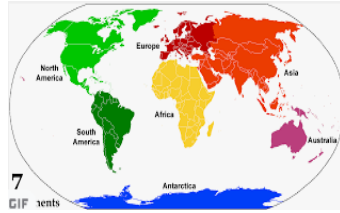
## Vital Vocabulary

### Capital City

A capital city is where that country's government is located. The capital cities of the UK are:

England-London  
Northern Ireland-Belfast  
Scotland-Edinburgh  
Wales-Cardiff

### Continents



A continent is a large continuous piece of land. There are 7 of these pieces of land in the world.

### Europe



Europe is a continent which included many countries such as Spain, Germany, Italy and Turkey.

### Equator



The Equator is an imaginary line that runs around the Earth. It divides it into the Northern and Southern hemispheres. It is halfway between the North and South poles.

### Oceans



An ocean is a continuous body of salt water that is contained in an enormous basin on Earth's surface.

### Spain



Spain is a country in Europe. It has parts in the Atlantic Ocean. It is the largest country in Southern Europe. The official language is Spanish and the capital city is Madrid.

### United Kingdom



The United Kingdom is made up of England, Northern Ireland, Scotland and Wales.

# Deadly Disasters

## Focus: Volcanoes and Earthquakes

Year: 3

Term: Spring

Subject: Geography

### Rapid Retrieval

(Can I still remember?)

Some countries are hot and some countries are cold.



A compass is used to give directions. The four compass points are North, East, South, West.

There are 7 continents. These are: Africa, Antarctica, Asia, Europe, North America, Oceania and South America.

There are 5 oceans. These are Arctic, Atlantic, Indian, Pacific and Southern.

### Clever Connections:

(How does this link?)

- In Year 2, you learnt that there are 7 continents. You learnt that at the bottom of the Earth is Africa, Australia, South America. You learnt that the top has Asia, North America and Europe.



### Key questions

### Sticky knowledge

- Can I locate the equator and the Northern and Southern Hemisphere on a map?

The equator is an imaginary line that splits up the world into two parts.

A Hemisphere is simply either the top half of the world or the bottom half.

The Southern hemispheres tends to be hotter, The Northern hemisphere tends to be colder.

- Can I identify what a volcano is and how it is made?

A volcano is made when magma builds up through the Earth's crust and pressure builds up inside the Earth. When this pressure builds up magma shoots through the top creating a volcanic eruption. The lava cools to create a crust and over time, after several eruptions, the rock builds up and a volcano forms.

- Can I ident

**Ash-** Ash is tiny pieces of rock or lava blasted into the air during a volcanic eruption.

**Conduit-** An underground passage which magma travels through.

**Crater-** The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.

**Magma reservoir-** The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.

**Throat-** The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.

**Vent-** The location in the Earth's crust where gases from the inside of the volcano escapes. Molten rock and lava erupt from this opening.

- Can I identify different types of volcanoes?




**Cinder cones-** Cinder cones are circular or oval cones. They are made up of small fragments of lava, which are blown into the air through a single vent. When they cool down, they form rock around the vent.



**Composite volcanoes-** These volcanoes are steep-sided volcanoes and are made up of lots of layers of volcanic rocks. They usually erupt in an explosive way because the magma in these volcanoes is quite sticky.



**Shield volcanoes** They are bowl or shield-shaped in the middle. When they erupt, the lava is quite runny and it travels long distances down the side of the volcano before it cools down.



<p>5. Can I name four of the most famous volcanoes and locate these on a map?</p>	<p>There are many volcanoes in the world. Four of the most famous are:  <u>Mount St Helen</u> - Skamania County, Washington, United States of America  <u>Nevado del Ruiz</u> - Border of Caldas and Tolima in Colombia  <u>Mount Vesuvius</u> - Gulf of Naples, Campania, Italy  <u>Krakatau</u> - Between the islands of Java and Sumatra in the Indonesian province of Lampung</p> <p>The Ring of fire is a region around much of the rim of the Pacific Ocean where many volcanic eruptions and earthquakes occur.</p>												
<p>6. Can I identify the key impact that Volcanoes can have on people's lives?</p>	<p>Pompeii is a vast archaeological site in southern Italy. Pompeii was buried under meters of ash and pumice after the catastrophic eruption of Mount Vesuvius in 79 A.D. The preserved site features excavated ruins of streets and houses that visitors can freely explore.</p>  <p>A shock wave is a type of propagating disturbance that moves really fast. Like an ordinary wave, a shock wave carries energy that is characterized by an abrupt, nearly discontinuous, change in pressure, temperature, and density of the medium.</p>												
<p>7. Can I explain how earthquakes happen?</p>	<p>As Tectonic plates carry on moving in different directions over long periods of time, friction causes energy to build up. Eventually it becomes so great that the energy is released, which creates a shock wave - an earthquake.</p>												
<p>8. Can I identify and locate places where earthquakes have happened?</p>	<ol style="list-style-type: none"> <li>1- Chile, 26th May, 1960 - one of the world's most powerful earthquakes.</li> <li>2- 2010 Haiti earthquake, large-scale earthquake that occurred January 12, 2010.</li> <li>3- Los Angeles - the earthquake struck at 5.12am on Wednesday 18th April, with a magnitude of 7.9 on the Richter scale.</li> <li>4- Sumatra, Indonesia, 26th December, 2004 - this earthquake happened underground, on the seabed of the Indian Ocean.</li> </ol>												
<p>9. Can I explain the impact of earthquakes on the lives of individuals?</p>	<p>Earthquakes can destroy settlements and kill many people.</p> <table border="1" data-bbox="1081 1062 1700 1409"> <thead> <tr> <th></th> <th>Social impacts</th> <th>Economic impacts</th> <th>Environmental impacts</th> </tr> </thead> <tbody> <tr> <th>Short-term (immediate) impacts</th> <td>People may be killed or injured. Homes may be destroyed. Transport and communication links may be disrupted. Water pipes may burst and water supplies may be contaminated.</td> <td>Shops and business may be destroyed. Looting may take place. The damage to transport and communication links can make trade difficult.</td> <td>The built landscape may be destroyed. Fires can spread due to gas pipe explosions. Fires can damage areas of woodland. Landslides may occur. Tsunamis may cause flooding in coastal areas.</td> </tr> <tr> <th>Long-term impacts</th> <td>Disease may spread. People may have to be re-housed, sometimes in refugee camps.</td> <td>The cost of rebuilding a settlement is high. Investment in the area may be focused only on repairing the damage caused by the earthquake. Income could be lost.</td> <td>Important natural and human landmarks may be lost.</td> </tr> </tbody> </table>		Social impacts	Economic impacts	Environmental impacts	Short-term (immediate) impacts	People may be killed or injured. Homes may be destroyed. Transport and communication links may be disrupted. Water pipes may burst and water supplies may be contaminated.	Shops and business may be destroyed. Looting may take place. The damage to transport and communication links can make trade difficult.	The built landscape may be destroyed. Fires can spread due to gas pipe explosions. Fires can damage areas of woodland. Landslides may occur. Tsunamis may cause flooding in coastal areas.	Long-term impacts	Disease may spread. People may have to be re-housed, sometimes in refugee camps.	The cost of rebuilding a settlement is high. Investment in the area may be focused only on repairing the damage caused by the earthquake. Income could be lost.	Important natural and human landmarks may be lost.
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Long-term impacts	Disease may spread. People may have to be re-housed, sometimes in refugee camps.	The cost of rebuilding a settlement is high. Investment in the area may be focused only on repairing the damage caused by the earthquake. Income could be lost.	Important natural and human landmarks may be lost.										
	<p>If the earthquake is beneath the ocean it can create a series of huge waves, called a tsunami.</p>												

<p>10. Can I explain how tsunamis happen and is there a link to earthquakes?</p>	 <p>The 2004 Indian Ocean earthquake and tsunami occurred at 07:58:53 local time on 26 December. This tsunami has been the focus of many films.</p>
<p>11. Can I describe the work of Dr Iain Stuart?</p>	<p>Dr Iain Stuart is a Scottish geologist who is currently a Research Chair in Sustainability at the Royal Scientific Society in Jordan. He is also a Professor of Geoscience Communication at the University of Plymouth, UK. His academic interests in applying Earth science to pressing societal concerns - climate change, geo-resources, geo-energy, disaster risk reduction - form the basis of his 2018 recognition as UNESCO Chair in 'Geoscience and Society'. He is a Global advocate for Earth Sciences.</p> 
<p>12. Can I discuss the work of key charities in supporting with natural disasters?</p>	<p>There are many key charities and organisations that help with natural disasters including Habitat for humanity, Action Aid and Oxfam.</p> <p>These charities provide aid and support to areas and communities that have been affected by different disasters. They often provide the communities the resources for them to be able to rebuild themselves including temporary shelter.</p>
<p>13. Can I explain the causes of flooding and identify preventative measures that are put into place?</p>	<p>A flood is an overflow of water onto land that is normally dry. Floods can happen almost anywhere. Many different situations can cause a flood. Here are just a few:</p> <ul style="list-style-type: none"> <li>- Heavy rainfall</li> <li>- Ocean waves coming on shore, such as a storm surge</li> <li>- Melting snow and ice, as well as ice jams</li> <li>- Dams or levees breaking</li> </ul> <p>Preventative methods</p> <p>There are two categories that flood protection falls into and ideally buildings should be fitted with both. Flood Resistance helps prevent water getting into buildings. Examples include:</p> <ul style="list-style-type: none"> <li>- Removable barriers on doors and windows</li> <li>- Temporary seals for doors and air bricks</li> </ul> <p>Flood Resilience ensures minimal damage is done if water does get in. Examples include:</p> <ul style="list-style-type: none"> <li>- Using ceramic or stone tiles instead of laminate or wood flooring</li> <li>- Raising electrical sockets to above 1.5m</li> <li>-</li> </ul>
<p>14. Can I explain the impact of a natural disaster in my local</p>	<p>Gloucestershire experienced one of the worst natural disasters in living memory due to extensive flooding. It was one of the wettest summers on record, two months worth of rain fell in just 14 hours.</p> <ul style="list-style-type: none"> <li>- 5,000 homes and businesses were flooded.</li> <li>- 80% of properties were affected and were overwhelmed by flash flooding.</li> <li>- 48,000 homes were without electricity for two days.</li> </ul>

area? (A local geographical study: Floods of 2007)	<ul style="list-style-type: none"><li>- 135,000 homes (over half the homes in Gloucestershire) were without drinking water for up to 17 days.</li><li>- 500 businesses were affected.</li><li>- 10,000 motorists were stranded on county roads, including the M5 where many people remained overnight.</li><li>- 500 commuters were stranded at Gloucester train station.</li><li>- Flood water reached 7 feet in some vulnerable areas.</li><li>- Overall estimated cost to the county was £50 million</li></ul> <p>Since 2007 the government has invested in flood alleviation schemes, working in partnership with the Environment Agency and district councils, in order to provide protection to an estimated 3,500 homes.</p>
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Vital Vocabulary

Active Volcano



An active volcano is a volcano which is either erupting or is likely to erupt in the future.

Ash



Ash is tiny pieces of rock or lava blasted into the air during a volcanic eruption.

Cinder Cones



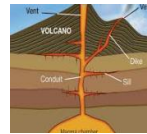
Cinder cones are circular or oval cones. They are made up of small fragments of lava, which are blown into the air through a single vent. When they cool down, they form rock around the vent. They grow quickly, but are not usually very big. They are not usually dangerous either.

Composite volcano



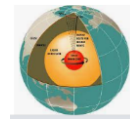
These volcanoes are steep-sided volcanoes and are made up of lots of layers of volcanic rocks. They usually erupt in an explosive way because the magma in these volcanoes is quite sticky. It clogs up the passage that it has to pass through. Pressure is built inside the volcanic chamber and this results in the volcano erupting violently.

Conduit



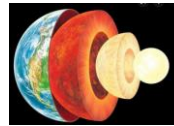
An underground passage which magma travels through

Core



The centre of the earth which is made of nickel and iron.

Crust



Earth's crust is a thin shell on the outside of Earth. It is the top component of the Earth's layers that includes the crust and the upper part of the mantle.

Crater



The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.

Dormant Volcano



Dormant volcanoes are volcanoes that have not erupted in a long time but are expected to erupt again in the future

Extinct



Extinct volcanoes are those which have not erupted in human history.

Equator



The Equator is an imaginary line that runs around the Earth. It divides it into the Northern and Southern hemispheres. It is halfway between the North and South poles

## Vital Vocabulary



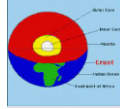
A flood is an overflow of a large amount of water beyond its normal limits, especially over what is normally dry land.



Lava is hot molten or semi-fluid rock erupted from a volcano or fissure, or solid rock resulting from cooling of this.



Magma is a fluid or semi-fluid material below or within the earth's crust from which lava and other igneous rock is formed on cooling.



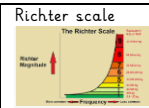
A mantle is a layer inside a planetary body bounded below by a core and above by a crust. Mantles are made of rock or ices, and are generally the largest and most massive layer of the planetary body.



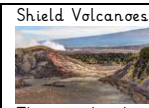
A natural disaster is a major adverse event resulting from natural processes of the Earth; examples include firestorms, duststorms, floods, hurricanes, tornadoes, volcanic eruptions, earthquakes, tsunamis, storms, and other geologic processes.



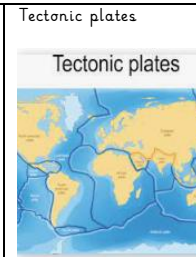
The Ring of fire is a region around much of the rim of the Pacific Ocean where many volcanic eruptions and earthquakes occur.



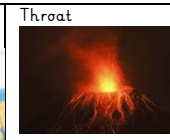
The Richter scale is a measure of the strength of earthquakes, developed by Charles Francis Richter and presented in his landmark 1935 paper, where he called it the "magnitude scale".



They are bowl or shield-shaped in the middle. When they erupt, the lava is quite runny and it travels long distances down the side of the volcano before it cools down. This lava forms long, gentle slopes that look like a warrior's shield, which is how they got their name.



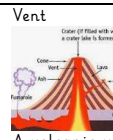
A tectonic plate (also called lithospheric plate) is a massive, irregularly shaped slab of solid rock.



The uppermost section of the main vent is known as the volcano's throat. As the entrance to the volcano, it is from here that lava and volcanic ash are ejected.



When an earthquake happens underneath the ocean.



A volcanic vent is an opening exposed on the earth's surface where volcanic material is emitted. All volcanoes contain a central vent underlying the summit crater of the volcano.

**Journey to the river sea, Come sail with me**

Focus: Rivers and Mountains

Year: 4

Term: Spring

Subject: Geography

**Rapid Retrieval**

(Can I still remember?)

There are four countries of the United Kingdom: England, Northern Ireland, Scotland, Wales.

You learnt that the capital cities are:

England- London

Northern Ireland- Belfast

Scotland- Edinburgh

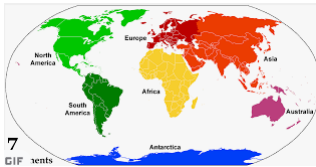
Wales- Cardiff

The equator splits the earth into two hemispheres and that the northern hemisphere is colder than the southern hemisphere.

**Clever Connections:**

(How does this link?)

- In year 1 you learnt that there are some countries that are cold and some that are hot.
- In Year 2, you learnt that there are 7 continents. You learnt that at the bottom of the Earth is Africa, Australia, South America. You learnt that the top has Asia, North America and Europe.
- In year 3 you learnt that a Tsunami happens when an earthquake occurs under the water.
- In year 3 you learnt that the equator splits the earth into two hemispheres and that the northern hemisphere is colder than the southern hemisphere.
- In year 3 you touched upon a flood as a natural disaster.
- You learnt that a compass has 4 main compass points.



**Key questions**

**Sticky knowledge**

1. Can I explain how rivers are formed?

Rivers usually begin in upland areas, when rain falls on high ground and begins to flow downhill. They then flow across the land until they reach another body of water.

As rivers flow, they erode the land. Over a long period of time rivers create valleys, or gorges and canyons if the river is strong enough to erode rock. They take the sediment - bits of soil and rock - and carry it along with them.

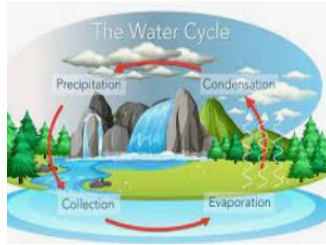
2. Can I explain different parts of a river?

- **Bank-** The riverbank is the land at the side of the river.
- **Channel-** A type of landform consisting of the outline of a path of relatively shallow and narrow body of water.
- **Confluence-** A point where two rivers join.
- **Current-** The strength and speed of the river.
- **Delta-** A wide muddy or sandy area where some rivers meet the sea.
- **Downstream-** The direction that the water flows, downhill towards the sea
- **Estuary-** The tidal mouth of a large river, where the tide meets the stream
- **Fertile-** Soil fertility refers to the ability of a soil to sustain plant growth by providing essential plant nutrients.
- **Flood Plain-** The flat area around a river that often gets flooded when the level of water in the river is high.
- **Lower course-** The lower course of the river is where it comes to meet the sea at the mouth.
- **Meander-** A meander is a bend in a river channel.
- **Middle course-** It is found on gently sloping land, and is typically identified by its meandering path.
- **Ox bow lake** - A lake forms as the river finds a different, shorter, course.
- **Silt-** Small bits of dirt or sand that are carried along by a river.
- **Source-** The start of a river is its source.
- **Stream-** A small river
- **Tributary-** It is a river or stream flowing into a larger river or lake
- **Upper course-** Rain falling in highland areas flows downwards and collects in channels, forming a stream.

3. Can I explain how the water cycle works?

There are 4 stages to the water cycle

- 1) **Evaporation-** The water cycle is powered by the sun. The heat from the sun increases the temperature of our rivers, lakes, and oceans. This causes surface water molecules to transform into vapour.




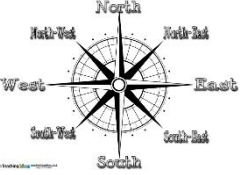
- 2) **Condensation**- As vapour travels higher into the atmosphere, the temperature drops and the water molecules begin to cool and change state. When cooled, the atmospheric vapour molecules become tiny water droplets.
- 3) **Precipitation**- Rainfall occurs when these minuscule water droplets start to merge and grow in size. When water droplets are sufficiently heavy, gravity takes over, and they return to Earth.
- 4) **Run-off**- With heavy downpours water flows over the Earth's surface, eventually making its way back into our rivers ready to start the cycle all over again.

Throughout the water cycle accumulation and infiltration occurs.

4. Can I track major rivers of the UK?

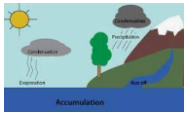
Major Rivers of UK	Start point	End point
River Ouse	North Yorkshire	Trent Falls, North Lincolnshire
River Rother	Pilsey, Derbyshire	Rye Bay, East Sussex
River Severn	Cambrian mountains, Wales	Gloucestershire
River Thames	Gloucestershire	Kent
River Trent	Staffordshire	Trent Falls, North Lincolnshire

The River Severn is the longest river in the UK.

<p>5. Can I name and locate the islands surrounding the UK?</p>	 <p>There are four countries of the United Kingdom: England, Northern Ireland, Scotland, Wales.</p> <p>An island is an area of land surrounded completely by water. It may be in a river, a lake or the sea. Islands can be different shapes and sizes.</p> <p>There are many Islands surrounding the UK including:</p> <p>Anglesey Arran Guernsey</p> <p>Isle of Man Isle of Wight Jersey Mull Orkney Shetland Skye</p>  <p>There are 8 compass points you can use when describing the position of places. These are shown below:</p>
<p>6. Can I understand how rivers are useful (or historically have been useful) and why places may be built near one ?</p>	<ul style="list-style-type: none"> <li>- Rivers carry water and nutrients to areas all around the earth.</li> <li>- Rivers provide excellent habitat and food for many of the earth's organisms.</li> <li>- Animals use the river for food and drink</li> <li>- Rivers provide travel routes for exploration, commerce and recreation.</li> <li>- River valleys and plains provide fertile soils.</li> <li>- Rivers are an important energy source.</li> </ul>
<p>7. Can I explain types of erosion?</p>	<p>Coastal erosion is the process by which local sea level rise, strong wave action, and coastal flooding wear down or carry away rocks, soils, and/or sands along the coast.</p> <p>Erosion is the geological process in which earthen materials are worn away and transported by natural forces such as wind or water.</p> <p>Water pollution is when waste, chemicals, or other particles cause a body of water to become harmful to the fish and animals that need the water to survive.</p>

## Vital Vocabulary- Water cycle

### Accumulation



Accumulation is the process of water collecting in rivers, lakes, streams, oceans and other bodies of water.

### Collection



Wherever the water lands, this is called 'collection'.

### Condensation



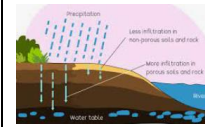
The water vapour is lifted into the sky. As you go higher, the air gets colder and cools down the gas. This causes the particles to condense (come together) and form microscopic droplets of water.

### Evaporation



When the heat from the sun warms the water, the liquid turns into vapour (gas) and rises because it is lighter.

### Infiltration



Infiltration is a part of the water cycle and occurs when water moves into the ground from the surface and begins to soak into the soil and rock layers underneath..

### Precipitation



As soon as the water droplets reach a certain size their weight is too great to stay in the air and they fall to the ground which is called precipitation. If the air is very cold, the water fall as ice or sleet.

### Run-off



Surface run-off refers to how water behaves when it arrives back on land. With heavy downpours, in particular, at this stage of the water cycle, water flows over the Earth's surface, eventually making its way back into our rivers, streams, and reservoirs.

### Transportation











Transportation in the water cycle is the movement of water through the atmosphere, usually between oceans and landmasses.

### Water vapor










Water vapor is when water turns into a gas. It is one state of water. Water vapor can be produced from the evaporation or boiling of liquid water. Water vapor is transparent.

Vital Vocabulary- Rivers

<p><b>Bank</b></p>  <p>A river bank is the terrain alongside the bed of a river, creek, or stream.</p>	<p><b>Channel</b></p>  <p>A type of landform consisting of the outline of a path of relatively shallow and narrow body of water.</p>	<p><b>Coastal erosion</b></p>  <p>Coastal erosion is the process by which local sea level rise, strong wave action, and coastal flooding wear down or carry away rocks, soils, and/or sands along the coast.</p>	<p><b>Confluence</b></p>  <p>A point where two rivers join.</p>	<p><b>Current</b></p>  <p>The strength and speed of the river. Water always flows downhill; the steeper the ground is, the stronger the current will be.</p>	<p><b>Delta</b></p>  <p>A wide muddy or sandy area where some rivers meet the sea. The river slows down and drops all the sediments it was carrying.</p>	<p><b>Deposition</b></p> <p>When a river loses energy, it will drop or deposit some of the material it is carrying. Deposition may take place when a river enters an area of shallow water or when the volume of water decreases.</p>	<p><b>Downstream</b></p>  <p>Downstream is the direction of the water flowing downwards.</p>	<p><b>Erosion</b></p>  <p>Erosion is the geological process in which earthen materials are worn away and transported by natural forces such as wind or water.</p>	<p><b>Estuary</b></p>  <p>The tidal mouth of a large river, where the tide meets the stream</p>	<p><b>Floodplain</b></p>  <p>The flat area around a river that often gets flooded when the level of water in the river is high.</p>
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Vital Vocabulary- Rivers

<p><b>Meander</b></p>  <p>A meander is a bend in a river channel. Meanders form when water in the river erodes the banks on the outside of the channel.</p>	<p><b>Mouth</b></p>  <p>A river mouth is where a river flows into a larger body of water, such as another river, a lake/reservoir, a bay/gulf, a sea, or an ocean.</p>	<p><b>Oxbow Lake</b></p>  <p>An oxbow lake starts out as a curve, or meander, in a river. A lake forms as the river finds a different, shorter, course. The meander becomes an oxbow lake along the side of the river.</p>	<p><b>Sediment</b></p>  <p>Sediment also known as dregs, is the matter that sinks to the bottom of a liquid</p>	<p><b>Silt</b></p>  <p>Small bits of dirt or sand that are carried along by a river.</p>	<p><b>Source</b></p>  <p>The start of a river is its source. This could be a spring on a hillside, a lake, or a bog or marsh. A river may have more than one source.</p>	<p><b>Tributary</b></p>  <p>It is a river or stream flowing into a larger river or lake</p>
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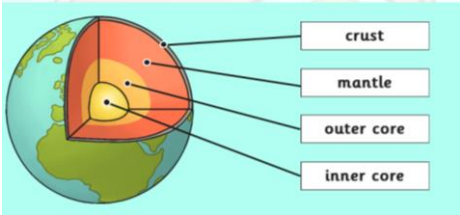
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**Rapid Retrieval**  
(Can I still remember?)

Active volcanoes mean that it is either erupting or is likely to erupt in the future.

Dormant volcanoes are volcanoes that have not erupted in a long time but are expected to erupt again in the future.

**Clever Connections:**  
(How does this link?)






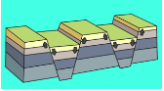







- In year 3 you learnt about volcanoes and that they are made when pressure builds up under the Earth.
- You also learnt that tectonic plates float on top of the mantle,
- In year 4 you learnt about the water cycle and that condensation is the process that induces water vapour in the air to turn into liquid
- In spring term of year 5 you learnt that there are many different climate zones including mountainous.

Key questions	Sticky knowledge
8. Can I identify famous mountains in the world and locate them on a map?	<ul style="list-style-type: none"> <li>Mount Fuji is an active volcano in Japan.</li> <li>Mount Everest is Earth's highest mountain above sea level, located in the sub-range of the Himalayas.</li> <li>Mount Kilimanjaro is a dormant volcano in Tanzania.</li> <li>K2 is the second-highest mountain on Earth, after Mount Everest.</li> <li>Mount Olympus is the highest mountain in Greece.</li> <li>Mont Blanc is the highest mountain in the Alps and Western Europe,</li> </ul>
9. Can I identify key parts of a mountain?	<p>There are several parts of a mountain</p> <ul style="list-style-type: none"> <li><b>Face</b>- The side of a mountain</li> <li><b>Foot</b>- The bottom of the mountain</li> <li><b>Outcrop</b>- A rock formation visible from the surface</li> <li><b>Plateau</b>- An area of flat high ground</li> <li><b>Ridge</b>- A long, narrow high section of land</li> <li><b>Slope</b>- An area of ground increasing in height</li> <li><b>Snow line</b>- Above here snow and ice cover the mountain all year.</li> <li><b>Summit</b>- The top of a mountain</li> <li><b>Tree line</b>- The highest point forests are found</li> <li><b>Valley</b> - The area of low land between mountains.</li> </ul>
10. Can I identify how mountains are made and different types of mountains?	<p>There are several ways that mountains are made. There are 5 types of mountains:</p> <ol style="list-style-type: none"> <li><b>Fold mountains</b>- They occur when tectonic plates collide. The Alps are fold mountains</li> <li><b>Fault block mountains</b>- When cracks in the Earth's surface open up, large chunks of rock can be pushed up while others are pushed down. The Sierra Nevada mountains in California, USA are fault-block mountains</li> <li><b>Volcanic mountains</b>- They are formed around volcanoes. An example is Mount Vesuvius in Italy.</li> <li><b>Dome Mountains</b>- Dome mountains are smooth and round-looking. Devils Tower, USA is a dome mountain.</li> </ol>














	<p>5) <b>Plateau mountains</b>- They form because of materials being taken away through erosion, which has left deep valleys or gorges next to high cliffs. The Allegheny Mountains, USA, are an example of this type of mountain.</p>
<p>11. Can I identify key features of a mountainous climate zone?</p>	<p>Mountains have their own climate.</p> <p>Lower down, the climate may be milder (temperate). Higher up, plants and animals are fewer: It's windy and cold. Frozen ground means that there is not much water available and the soil is shallow. The air is much thinner. Mountain weather conditions can change quickly. Mountains also receive lots and lots of rainfall.</p>
<p>12. Can I describe and understand how and why people choose to live in mountainous areas? What are the advantages and disadvantages?</p>	<p>Advantages</p> <ul style="list-style-type: none"> <li>- Living in the mountains is a great way to get away from the stress and busyness of city life.</li> <li>- Life in the mountains offers privacy and a way to get back to nature., snow skiing or snowboarding.</li> <li>- Cooler summers and snow in winter</li> <li>- There are many health benefits to being at a higher altitude.</li> </ul> <p>Disadvantages</p> <ul style="list-style-type: none"> <li>- It can be isolating</li> <li>- It can be harder to access telecommunication services.</li> <li>- Snow can make getting in and out difficult</li> <li>- It is tricky and sometimes pricy, to build on a sloped lot</li> </ul>
<p>13. What are the dangers to humans?</p>	<p>There are many dangers that come with living and visiting the mountains:</p> <ol style="list-style-type: none"> <li>1) Acute Mountain Sickness (AMS), High Altitude Cerebral Edema (HACE), and High Altitude Pulmonary Edema (HAPE)</li> <li>2) Avalanches</li> <li>3) Lightning</li> <li>4) Falling</li> <li>5) Landslides</li> <li>6) Blizzards</li> <li>7) Exposure</li> <li>8) Getting lost</li> </ol>

**Vital Vocabulary - mountains**

<p>Altitude</p>  <p>Altitude or height is a distance measurement, usually in the vertical or "up" direction, between a reference datum and a point or object.</p>	<p>Dome mountains</p>  <p>Dome mountains are smooth and round-looking. They are formed when magma is forced up between the crust and the mantle, but doesn't ever flow out.</p>	<p>Face</p>  <p>The face is a side of a mountain.</p>	<p>Fault block mountains</p>  <p>When cracks in the Earth's surface open up, large chunks of rock can be pushed up while others are pushed down.</p>	<p>Fold mountains</p>  <p>Fold mountains occur when tectonic plates collide.</p>	<p>Foot</p>  <p>The foot is the bottom of a mountain.</p>	<p>K2</p>  <p>K2 is the second-highest mountain on Earth, after Mount Everest. It lies between Pakistan and China.</p>	<p>Mont Blanc</p>  <p>Mont Blanc is the highest mountain in the Alps and Western Europe, rising 4,807.81 m above sea level. It is the second-most prominent mountain in Europe.</p>	<p>Mount Everest</p>  <p>Mount Everest is the Earth's highest mountain above sea level, located in the sub-range of the Himalayas. The China-Nepal border runs across its summit point.</p>	<p>Mount Fuji</p>  <p>Mount Fuji is an active volcano about 100 kilometers southwest of Tokyo in Japan.</p>	<p>Mount Kilimanjaro</p>  <p>It is a dormant volcano in Tanzania. It has three volcanic cones and it is the highest mountain in Africa.</p>
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**Vital Vocabulary - mountains**

<p>Mount Olympus</p>  <p>Mount Olympus is the highest mountain in Greece.</p>	<p>Outcrop</p>  <p>The outcrop is a rock formation visible from the surface.</p>	<p>Plateau</p>  <p>It is an area of flat high ground.</p>	<p>Plateau mountains</p>  <p>They form because of materials being taken away through erosion.</p>	<p>Ridge</p>  <p>The ridge of a mountain is a long, narrow high section of land.</p>	<p>Slope</p>  <p>A slope is an area of ground increasing in height.</p>	<p>Snow line</p>  <p>Above here snow and ice cover the mountain all year.</p>	<p>Summit</p>  <p>The summit is the top of a mountain.</p>	<p>Tree line</p>  <p>The tree line is the highest point forests are found.</p>	<p>Valley</p>  <p>A valley is the area of low land between mountains.</p>	<p>Volcanic mountains</p>  <p>Volcanic mountains are formed around volcanoes. Volcanic mountains are made of layers of ash.</p>
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and cooled  
lava.

Vital Vocabulary- Rivers

Meander



A meander is a bend in a river channel. Meanders form when water in the river erodes the banks on the outside of the channel.

Mouth



A river mouth is where a river flows into a larger body of water, such as another river, a lake/reservoir, a bay/gulf, a sea, or an ocean.

Oxbow Lake



An oxbow lake starts out as a curve, or meander, in a river. A lake forms as the river finds a different, shorter, course. The meander becomes an oxbow lake along the side of the river.

Sediment



Sediment also known as dregs, is the matter that sinks to the bottom of a liquid

Silt



Small bits of dirt or sand that are carried along by a river.

Source



The start of a river is its source. This could be a spring on a hillside, a lake, or a bog or marsh. A river may have more than one source.

Tributary



It is a river or stream flowing into a larger river or lake

# I am a year 5 get me out of here

## Focus: Rainforests

Year: 5

Term: Spring

Subject: Geography

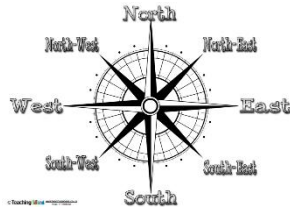
### Rapid Retrieval

(Can I still remember?)

The equator is an imaginary line that splits the Earth into two. It splits it into north and south.

The north hemisphere is colder than the southern hemisphere.

South America is one of the 7 continents and is the 4<sup>th</sup> largest continent.



There are 8 compass points that you can use to describe position and direction

### Clever Connections:

(How does this link?)

- In Year 2, you learnt that there are 7 continents. You learnt that at the bottom of the Earth is Africa, Australia, South America. You learnt that the top has Asia, North America and Europe.
- In year 2 you learnt that the Amazon Rainforest is in South America.
- In year 2 you learnt about some physical and human features of South America:
  - Lake Titicaca
  - Statue of Christ the Redeemer
  - Machu Picchu
- In year 3 you learnt that the equator splits the Earth into two.
- In year 4 you learnt that there are different weather patterns throughout the world.

### Key questions

- Where is South America and what is it like?



- What is the Tropic of Cancer and the Tropic of Capricorn?



- What are the different climate zones?



- How does Brazil compare with my country?

- What is special about Rio de Janeiro?

### Sticky knowledge

- South America is a continent in the West and mostly in the Southern Hemisphere
- It is the fourth largest continent. There are 12 countries in South America including Brazil (the largest) Peru, Argentina and Venezuela.
- The Amazon River is the second longest river in the world (4000 miles). It is defined by dense, tropical rain forest
- South America can be divided into three physical regions: mountains and highlands, river basins, and coastal plains.

The region of the Earth's surface that is closest to the Equator is called the tropics. Two imaginary lines that circle the globe mark the boundaries of the tropics. The line called the Tropic of Cancer marks the northern edge and the Tropic of Capricorn marks the southern edge.

The tropics are the only part of Earth where the Sun sometimes shines straight down. Because the sunlight is so strong, the tropics are generally warmer than other parts of Earth.




A biome is a community of animals and plants that spreads over an area with a relatively uniform climate.

Biome	Description	Example
Polar	Very cold and dry all year round	Antarctica
Temperate	Cold winters and mild summers	UK
Arid	Dry and hot all year round	Sahara Desert
Tropical	Hot and wet all year round	Brazil
Mediterranean	Dry, hot summers and mild winters	Spain
Mountainous	Very cold, sometimes wet, all year	Himalayas

- The UK is in Europe whilst Brazil is in South America.
- Most parts of Brazil are much warmer than the UK.
- UK has a temperate climate, whilst many parts of Brazil do not have clear seasons.
- Brazil is much larger than the UK.
- More people live in Brazil.
- The capital of Brazil has less people however than London.
- Brazil is situated on its continent, whereas the United Kingdom is an island country











Rio de Janeiro is a city in Brazil.

- Rio proudly holds the title as the largest carnival celebration in Brazil.







	<ul style="list-style-type: none"> <li>- The city's most iconic monument is the Christ the Redeemer. It overlooks the city from the summit of the Corcovado mountain.</li> <li>- Tijuca Forest is considered the largest urban forest in the world             <ul style="list-style-type: none"> <li>- Copacabana is a beach and a tourist hotspot</li> <li>- The Pão de Açúcar mountain) is one of Rio's natural landmarks.</li> </ul> </li> </ul>   <p style="text-align: right;">(Sugarloaf most famous)</p>
<p>6. What are the layers of the rainforest?</p>	<p>There are 4 layers of a rainforest</p> <ol style="list-style-type: none"> <li>1) Emergent Layer- It consists of towering trees that tend to experience the extremes of environmental conditions. Many animals can be found including birds, bats, insects and a range of monkeys.</li> <li>2) Canopy Layer- The canopy layer is known to contain the majority of living species in the whole rainforest. During the daytime, the canopy layer becomes the hottest part.</li> <li>3) Understory (strata)- The understory is humid and damp. The understory is composed of shrubs, ferns, climbing plants, and young trees.</li> <li>4) Forest floor- This layer is the darkest and most humid layer. It is nutrient- rich due to quick decomposition.</li> </ol>
<p>7. What are the main features of a tropical rainforest?</p>	<p>Climate</p> <ul style="list-style-type: none"> <li>- Very wet and very warm</li> <li>- The atmosphere is hot and humid</li> <li>- The climate is consistent all year around- There are no seasons</li> </ul> <p>Soil</p> <ul style="list-style-type: none"> <li>- Most of the soil is not very fertile</li> <li>- A thin layer of fertile soil is found at the surface</li> <li>- Nutrient cycling is very rapid due to the humid conditions</li> <li>- It is red as it is rich in iron</li> <li>- Due to heavy rainfall the nutrients are quickly washed away</li> </ul> <p>Plants and animals</p> <ul style="list-style-type: none"> <li>- The warm and wet climate provides perfect conditions for plant growth</li> <li>- The wide range of plant species supports many different animals, birds and insects</li> <li>- Species have adapted to the conditions of the rainforest eg trees and plants have shallow reaching roots to absorb nutrients from the thin fertile layer of trees.</li> </ul>
<p>8. What is the Amazon rainforest like?</p> 	<p>The Amazon Rainforest is the world's largest tropical rainforest. The Amazon Rainforest lies in parts of nine countries including Brazil, Ecuador, Venezuela and Per. The Amazon Rainforest has the richest and most varied plant and animal life in the world. The trees in the Amazon Rainforest teem with insects, snakes such as boas and anacondas, tree frogs, and several types of monkeys.</p>
<p>9. Why does the Amazon Rainforest matter so much?</p>	<p>The Amazon rainforest is important to the world for several reasons:</p> <ol style="list-style-type: none"> <li>1) Without the rainforest, the greenhouse effect would likely be even more pronounced</li> <li>2) Tropical forests exchange vast amounts of water and energy with the atmosphere and are important in controlling local and regional climates.</li> </ol>

	3) There are lots of flowers and plants that have medicinal potential
10. What is it like in a rainforest city?	<ul style="list-style-type: none"> <li>- Hot and wet climate</li> <li>- Lots of birds and tropical trees</li> <li>- Regular city features such as buildings, internet, plumbing, electricity, McDonald's, movie theatres, shopping centres and different types of housing.</li> <li>- In the countryside electricity isn't easily available</li> <li>- Kids usually have to travel considerable lengths to go to school</li> <li>- Medical treatment hard to reach</li> </ul>
11. What is deforestation and why does it happen?	<p>Deforestation is the action of clearing a wide area of trees</p> <p>Rainforests are being cut down in order to make way for vast plantations for products such as bananas, palm oil and coffee.</p> <p>Rainforests are also being cut down for wood, pulp for making paper, road construction and extractions of minerals and energy.</p>
12. What is Fairtrade and how does it help?	<p>Fair trade is an arrangement designed to help producers in growing countries achieve sustainable trade relationships.</p> <p>Fairtrade enables consumers to demand a better deal for those that produce our food.</p>

Vital Vocabulary

<p><b>Arid</b></p>  <p>Arid climates are very hot and dry. Australia is the driest inhabited continent on the planet (with Antarctica being the driest continent). In the arid climate zone, the dry air and clear skies can cause large ranges in temperature between day and night.</p>	<p><b>Biodiversity</b></p>  <p>The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important or desirable.</p>	<p><b>Biome</b></p>  <p>A biome is a community of animals and plants that spreads over an area with a relatively uniform climate.</p>	<p><b>Canopy</b></p>  <p>The canopy layer is known to contain the majority (about 60 to 90%) of living species in the whole rainforest. The canopy layer, which is about 100 feet above the ground, contains overlapping tall trees that act as a roof over the rest of the organisms below them. During the daytime, the canopy layer becomes the hottest part.</p>	<p><b>Decomposition</b></p>  <p>Decomposition is the state of or process of rotting or decay.</p>	<p><b>Deforestation</b></p>  <p>Deforestation is the action of clearing a wide area of trees</p>	<p><b>Emergent layer</b></p>  <p>The first layer of a tropical rainforest from the top is called the emergent layer. The emergent layer consists of towering trees (basically taller than most trees in the forest) that protrude out of the rest of the plants in the area. The average height is about 70-100m from the ground level</p>	<p><b>Fairtrade</b></p>  <p>Fair trade is an arrangement designed to help producers in growing countries achieve sustainable and equitable trade relationships. The fair trade movement combines the payment of higher prices to exporters with improved social and environmental standards.</p>	<p><b>Fertile</b></p>  <p>Soil fertility refers to the ability of a soil to sustain plant growth by providing essential plant nutrients and favorable chemical, physical and biological characteristics as a habitat for plant growth</p>	<p><b>Forest floor</b></p>  <p>Forest floor- This layer is often described as the darkest and most humid layer of a tropical rainforest as it receives less than 2% of the total sunlight. The forest floor is the most nutrient-rich layer of all due to the process of decomposition which is facilitated by different bacteria and fungi that break down materials and recycle the nutrients.</p>
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Vital Vocabulary

<p>Mediterranean</p>  <p>A Mediterranean climate, also called dry summer climate is characterized by dry summers and mild, wet winters. The climate receives its name from the Mediterranean Basin, where this climate type is most common</p>	<p>Mountainous</p>  <p>The temperature on mountains becomes colder the higher the altitude gets. Mountains tend to have much wetter climates than the surrounding flat land.</p>	<p>Polar</p>  <p>The polar climate regions are characterized by a lack of warm summers but with varying winters. Every month in a polar climate has an average temperature of less than 10 °C</p>	<p>Temperate</p>  <p>Temperate climates are generally defined as environments with moderate rainfall spread across the year or portion of the year with sporadic drought, mild to warm summers and cool to cold winters</p>	<p>Tropic of Cancer</p> <p>The region of the Earth's surface that is closest to the Equator is called the tropics. Two imaginary lines that circle the globe mark the boundaries of the tropics. The line called the Tropic of Cancer marks the northern edge. Its latitude (distance from the Equator) is 23°27' N.</p>	<p>Tropic of Capricorn</p> <p>The region of the Earth's surface that is closest to the Equator is called the tropics. Two imaginary lines that circle the globe mark the boundaries of the tropics. The line called the Tropic of Capricorn marks the southern edge. Its latitude is 23°27' S.</p>	<p>Tropical</p>  <p>A tropical climate is also known as 'equatorial', because places found on or close to the Equator are typically tropical: they're warm and wet.</p>	<p>Understory/ Strata</p>  <p>The understory is humid and damp. Such humidity level is what keeps the animals in this layer alive. The understory is composed of shrubs, herbaceous plants, ferns, climbing plants, and young trees that are well adapted to areas receiving low sunlight.</p>
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# Ice Explorers

## Focus: Antarctica and The Arctic

Year: 6 Term: Spring Subject: Geography

**Rapid Retrieval**  
(Can I still remember?)

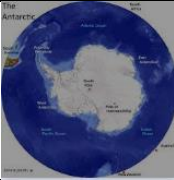
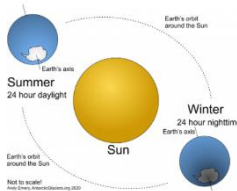
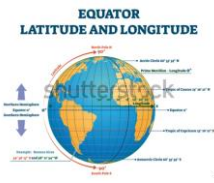
The equator is an imaginary line that splits the Earth into two. It splits it into north and south.




The north hemisphere is colder than the southern hemisphere.







There are a range of different climate zones in the world including Mediterranean and polar.


**Clever Connections:**  
(How does this link?)

- In year 1 you learnt that Antarctica is cold.
- In Year 2, you learnt that there are 7 continents. You learnt that at the bottom of the Earth is Africa, Australia, South America. You learnt that the top has Asia, North America and Europe.
- In year 3 you learnt that the equator splits the Earth into two.
- In year 4 you learnt that there are different weather patterns throughout the world.
- In year 5 you learnt that there are different climate zones throughout the world.
- In year 5 science lessons you learnt that the earth spins on its axis either facing the sun or facing away from the sun.










Key questions	Sticky knowledge
1. Where is Antarctica?	<p>Antarctica is located in the southernmost part of the planet. It is situated over the South Pole almost entirely south of latitude 66°30' south (the Antarctic Circle). It is a very rough circular shape with the long arm of the Antarctic Peninsula stretching towards South America. It is surrounded by the Southern Ocean.</p> 
2. Why is Antarctica so cold?	<p>A biome is a community of animals and plants that spreads over an area with a relatively uniform climate. There are many types of biome. Polar biomes, such as Antarctica, are cold and dry all year round. 99 per cent of it is covered by ice.</p> <p>It is cold for many reasons:</p> <ul style="list-style-type: none"> <li>- air temperatures are usually well below freezing.</li> <li>- The South Pole (Antarctica) is around 2,800m above sea level.</li> <li>- The atmosphere above Antarctica is much thinner.</li> <li>- There is an ocean that circulates around it which makes it colder and colder.</li> <li>- The Southern hemisphere has relatively little land to trap the heat</li> </ul>
3. What are the seasons in Antarctica?	<p>Antarctica has just two seasons: summer and winter.</p> <p>Antarctica has six months of daylight in its summer and six months of darkness in its winter. The seasons are caused by the tilt of Earth's axis in relation to the sun. The direction of the tilt never changes.</p>  <p>Summer in Antarctica starts in October and ends in March, and winter starts in March and lasts until October.</p> <p>When Antarctica is pointing towards the sun, in summer, there is sunlight all day long, and the sun does not set until the winter. This is often called Antarctic Day, with the Midnight Sun.</p> <p>In winter, it is dark all day long, and this is called Antarctic night.</p>
4. What is latitude and longitude?	<p>Cartographers and geographers trace horizontal and vertical lines called latitudes and longitudes across Earth's surface to locate points on the globe.</p> <p>Often called parallels or circles of latitude, latitudes are imaginary circles parallel to the Equator. They run left to right</p> <p>Longitudes are geographical positioning markers that run from the geographical North Pole to the geographical South Pole. They run North to south (up to down).</p> <p>Today, the meridian line through Greenwich, England, is considered as the reference point for longitudes. This line is also known as the Prime Meridian.</p> 

<p>5. What time is it in Antarctica?</p>	<p>Greenwich Mean Time is the yearly average (or 'mean') of the time each day when the Sun crosses the Prime Meridian at the Royal Observatory Greenwich. When we are looking at time zones we often refer back to Greenwich Mean Time. For example Paris is 2 hours ahead of GMT time so when it is 12:00 GMT time in Paris it is 2:00.</p> <p>Antarctica is 12 hours ahead of Greenwich Mean Time.</p>	
<p>6. What is Antarctica like?</p>	<p><b>Physical features</b></p> <p>Antarctica is unique among the continents for being almost totally covered by glacier ice. Antarctica has several large and small islands; for example, the South Shetland Islands just north of the Antarctic Peninsula.</p> <p>Much of the continent's coastline is fringed by ice shelves. The largest of these are the Ross Ice Shelf in the Ross Sea and the Ronne Ice Shelf in the Weddell Sea. Transantarctic Mountains extend across the continent. And contain many peaks above 4000m.</p> <p>Dry Valleys are another intriguing type of landscape found in Antarctica. These are found in high altitude areas of extreme aridity. Good examples can be found in the Victoria Land region near the McMurdo research station.</p> <p><b>Human features</b></p> <p>Regarded as the "international continent", Antarctica is a place of worldwide cooperation, peace, and scientific discovery. There are currently 70 permanent research stations scattered across the continent of Antarctica, which represent 29 countries from every continent on Earth.</p>	
<p>7. Who was Ernest Shackleton?</p>	 <p>Sir Ernest Henry Shackleton was an Anglo-Irish Antarctic explorer who led three British expeditions to the Antarctic. He was born February 15, 1874, Kilkea, County Kildare, Ireland—died January 5, 1922, Grytviken, South Georgia).</p> <p>He joined Capt. Robert Falcon Scott's British National Antarctic (Discovery) Expedition (1901-04) as third lieutenant and took part, with Scott and Edward Wilson, in the sledge journey over the Ross Ice Shelf when latitude 82°16'33" S was reached.</p> <p>In January 1908 he returned to Antarctica as leader of the British Antarctic (Nimrod) Expedition (1907-09). A sledging party, led by Shackleton, reached within 97 nautical miles of the South Pole.</p>	
<p>8. What is climate change and what impact does it have on the environment?</p>	<p>Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels (like coal, oil and gas), which produces heat-trapping gases.</p> <p>It has many impacts on the world:</p> <ul style="list-style-type: none"> <li>-Burning fossil fuels humans are increasing the amount of carbon dioxide in the atmosphere</li> <li>-Tourists can cause erosion and can disturb breeding birds</li> <li>-Oil spills pollute the oceans and are potentially disastrous for animal life</li> <li>-Krill populations are in danger from growing demand for health supplements and food for fish farms</li> </ul>	

<p>9. Where is the Arctic and what countries make it up?</p>		<p>The Arctic is a polar region located at the northernmost part of Earth. The Arctic consists of the Arctic Ocean, adjacent seas, and parts of Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States.</p> <p>In regards to biomes it can be described as a Tundra. Tundra is the coldest of all the biomes. It is noted for its frost-molded landscapes, extremely low temperatures, little precipitation, poor nutrients, and short growing seasons. Dead organic material functions as a nutrient pool.</p>
<p>10. What are the physical and human features of the Arctic?</p>	<p><b>Physical features</b></p> <p>The Elephant foot glacier is located in Northeast Greenland National Park and stands out for its unusual, near-perfect circle shape. It is five kilometers in radius.</p>   <p>An aurora is a natural light display in Earth's sky. Auroras display dynamic patterns of brilliant lights that appear as curtains, rays, spirals, or dynamic flickers covering the entire sky. The Northern Lights can be seen in many countries in the polar north: Norway, Greenland, Iceland, Swedish and Finnish Lapland, Scotland, Siberia, Canada and Alaska.</p> <p>The Prince Leopold Island Migratory Bird Sanctuary is a migratory bird sanctuary in Canada. It is located on Prince Leopold.</p> <p><b>Human features</b></p> <ul style="list-style-type: none"> <li>- Qaortoq is a rock-bound fishing village of brightly painted houses in Greenland.</li> <li>- Officially named the E.L. Patton Bridge, the Yukon River Bridge is notable as the only bridge spanning the Yukon River which is in Alaska.</li> <li>- Located on the northern end of the Dalton Highway outside of Deadhorse, the Arctic Circle Monument Sign notifies travelers that they have officially crossed into the Arctic Circle.</li> </ul>   	
<p>11. What is it like to live in the Arctic?</p>	<p>Almost 4 million people live in the Arctic including many indigenous groups, people who live in cities, and hunters and herders.</p> <p>People have lived in some parts of the region for more than 20,000 years, shaping and being shaped by the environment that they live in.</p> <p>While many aspects of life in the Arctic have changed for the better - for example life expectancy, access to food and other resources - the increase in population has led to conflict in some places as modern and traditional ways of life clash and there is increased pressure on limited resources.</p>	

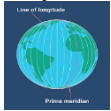
<p>12. What was the Nautilus Submarine?</p>	<p>On August 3, 1958, the U.S. nuclear submarine Nautilus accomplished the first undersea voyage to the geographic North Pole. The world's first nuclear submarine, the Nautilus, dived at Point Barrow, Alaska, and traveled nearly 1,000 miles under the Arctic ice cap to reach the top of the world. It then steamed on to Iceland, pioneering a new and shorter route from the Pacific to the Atlantic and Europe.</p> 
<p>13. What are the similarities and differences between The Arctic and Antarctica?</p>	<p><u>Similarities</u></p> <ol style="list-style-type: none"> <li>1- Both Antarctica and parts of the Arctic are deserts.</li> <li>2- The two polar regions both receive polar nights.</li> <li>3- Whilst polar nights occur at the winter solstice, the opposite happens during the summer solstice of the Arctic and Antarctica. This is called midnight sun (also known as a polar day).</li> </ol> <p><u>Differences</u></p> <ol style="list-style-type: none"> <li>1- Temperatures in the Arctic vary significantly across the region and between seasons whereas Antarctica is colder than the Arctic and is the coldest continent on Earth.</li> <li>2- Although both the Arctic and Antarctica can both be called deserts due to the rainfall, the Antarctic is often considered an ice cap and the Arctic is considered a Tundra</li> <li>3- The Arctic has a thriving animal population including the Arctic fox, polar bear, snowy owl, Arctic hare, Arctic wolf, caribou (reindeer), moose, and more. In Antarctica you will see whales and seals, and birds including penguins and albatross.</li> <li>4- There are two types of flowering plants in Antarctica whereas the Arctic is home to more than 2,200 different species of flowering plants.</li> <li>5- People live in the Arctic whereas the sub-zero climate means that Antarctica has no native human population.</li> <li>6- Antarctica is the 5th largest continent on Earth whereas the Arctic is not considered a continent.</li> <li>7- There are no official countries in Antarctica whereas the Arctic region covers the northernmost parts of 8 countries, these are Canada, Denmark (Greenland), Iceland, Norway, Sweden, Finland, Russia, and the United States.</li> </ol>

Vital Vocabulary

<p><b>Albedo</b></p>  <p>Albedo is the proportion of the incident light or radiation that is reflected by a surface, typically that of a planet or moon.</p>	<p><b>Arid</b></p>  <p>A region is arid when it is characterized by a severe lack of available water, to the extent of hindering or preventing the growth and development of plant and animal life.</p>	<p><b>Atmosphere</b></p>  <p>Atmosphere refers to the envelope of gases surrounding the earth</p>	<p><b>Axis</b></p>  <p>An axis is an invisible line around which an object rotates, or spins. The points where an axis intersects with an object's surface are the object's North and South Poles</p>	<p><b>Biome</b></p>  <p>A biome is a community of animals and plants that spreads over an area with a relatively uniform climate</p>	<p><b>Cartographer</b></p>  <p>A cartographer's job involves developing and producing maps</p>	<p><b>Glacier</b></p>  <p>Glaciers are massive bodies of slowly moving ice. Glaciers form on land, and they are made up of fallen snow that gets compressed into ice over many centuries. They move slowly downward from the pull of gravity.</p>	<p><b>Greenwich mean time</b></p>  <p>Greenwich Mean Time is the yearly average (or 'mean') of the time each day when the Sun crosses the Prime Meridian at the Royal Observatory Greenwich</p>	<p><b>Latitude</b></p>  <p>Often called parallels or circles of latitude, latitudes are imaginary circles parallel to the Equator. On a map where north is up, latitudes run laterally (left to right).</p>
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## Vital Vocabulary

### Longitude



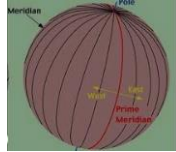
Longitudes are geographical positioning markers that run from the geographical North Pole to the geographical South Pole, intersecting the Equator. They meet at both Poles and specify the east-west position of a location. On a map where north is up, longitudes run vertically.

### McMurdo Dry Valleys



The McMurdo Dry Valleys are a row of largely snow-free valleys in Antarctica, located within Victoria Land west of McMurdo Sound. The Dry Valleys experience extremely low humidity and surrounding mountains prevent the flow of ice from nearby glaciers.

### Meridian



In geography a Meridian is a line of longitude.

### Parallels



A parallel is formed by circles surrounding the Earth and parallel to the Equator. Parallels of latitude are drawn equally spaced within the 90° separation between the poles and the Equator.

### Polar



The polar climate regions are characterized by a lack of warm summers but with varying winters. Every month in a polar climate has an average temperature of less than 10 °C.

### Polar day/ midnight sun



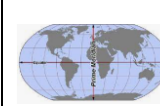
The midnight sun is a natural phenomenon that occurs in the summer months in places north of the Arctic Circle or south of the Antarctic Circle, when the Sun remains visible at the local midnight.

### Polar night



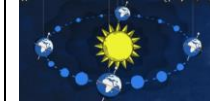
The polar night is a phenomenon where the nighttime lasts for more than 24 hours that occurs in the northernmost and southernmost regions of Earth. This occurs only inside the polar circles. The opposite phenomenon, the polar day, or midnight sun, occurs when the Sun remains above the horizon for more than 24 hours.

### Prime meridian



A prime meridian is the meridian in a geographic coordinate system at which longitude is defined to be 0°.

### Solstice



A solstice is an event that occurs when the Sun appears to reach its most northerly or southerly excursion relative to the celestial equator on the celestial sphere. Two solstices occur annually, around June 21 and December 21.

### Tundra



In physical geography, tundra is a type of biome where the tree growth is hindered by low temperatures and short growing seasons.

# Characteristics of Effective Geography Teaching

## What would I see in a unit of Geography? What would I see in a Lesson?

<i>Recap at the beginning of the theme to teach children how this unit links to their previous learning.</i>	<i>Developing an understanding of how everything is interconnected and that ideas and processes are linked .</i>	<i>Asking and answering geographical questions</i>
<i>Language rich: using and developing geographical vocabulary</i>	<i>5 minute recap at the beginning of each lesson to encourage retention of key knowledge and vocabulary.</i>	<i>Children drawing conclusions to answer geographical enquiry based questions</i>
<i>Use of fieldwork to ask and answer geographical questions</i>	<i>Use of maps and atlases where appropriate</i>	<i>Development of knowledge, skills and understanding in line with the National Curriculum.</i>

*Know the location of the place in which*

*they are studying and know its*

*significance*

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