John Keble CE School

Geography Curriculum

Rooted together in love, growing without limits.

Believing in the worth of every individual, we are a nurturing, Christian sanctuary of learning, where all can flourish. We aspire for everyone to achieve heights of success, to deepen courage and to experience breadth of creativity, knowing the joy of God's love.

Geography Intent, Implementation and Impact: EYFS – KS2

Whole school curriculum intent
Our ambitious, knowledge-rich curriculum has been sequenced to equip our pupils with the knowledge and skills to ensure they are happy, healthy global citizens, ready to take their place in modern Britain. The broad and balanced curriculum is creative, coherent and inclusive and, together with our Christian values, enables the pupils to be self-motivated, independent learners.
Subject specific intent: Geography
At John Keble school, we aim to provide a curriculum that meets the aims of the National Curriculum whilst providing a structure and sequence to support teachers in inspiring our pupils to become curious learners and develop a fascination about the world. Our curriculum content allows for a broader, deeper understanding of the four areas of geography identified in the curriculum. We intend to develop pupils' contextual knowledge of the location of globally significant places and understanding of the processes that give rise to key physical and human geographical features of the world, along with how they bring about variation and change over time. Our curriculum offers a range of opportunities for investigating places around the world as well as the Earth's key physical and human processes. As our pupils progress, their growing knowledge about the world will help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Our coverage intends to improve children's geographical vocabulary, map skills and geographical facts and provide opportunities for consolidation, challenge, and variety to ensure interest and progress in the subject.
Implementation and impact
In KS1, children begin to use maps and recognise physical and human features to do with the local area, building to using maps to explore the continents and oceans of the world in year 2. Further, in year 2, children will begin to compare where they live to places outside of Europe and ask and answer geographical questions. In KS2, map skills are developed further using digital maps, more keys and symbols and children begin to use more fieldwork skills. Through revisiting and consolidating skills, our lesson plans and resources help children build on prior knowledge alongside introducing new skills and challenges. All children expand on their skills in local knowledge, place knowledge, human and physical geography, geographical skills and fieldwork. Across both key stages, children have a range of opportunities to experience geography through practical engaging tasks beyond the classroom.We believe that the impact of our curriculum is that geography learning is loved by teachers and pupils across school, teachers have higher expectations and more quality evidence can be presented in books. All children will use geographical vocabulary accurately and understand the different strands of geography, with a deep understanding of the Earth's key physical and human processes. Children will begin to make relevant links from geography to other curriculum subjects, such as history and science. They will improve their enquiry skills and inquisitiveness about the world around them, and their impact on the world. All children will realise that they have choices to make in the world, developing a positive commitment to the environment and the future of the planet. Children will become competent in collecting, analysing and communicating a range of data gathered. They will be able to interpret a range of sources of geographical information and they will communicate geographical information in a variety of ways. All children in the school will be able to speak confidently about their geography learning, skills, and knowledge.

John Keble Key stage 1 and 2 Geography curriculum overview 2023-24

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	All about Me	Let's Celebrate	What a Wonderful World		Traditional Tales	Animals and Me
Reception	All about Me		What a Wonderful World		People Who Help Us	
Year 1			Our School & Local Area	We are the United Kingdom		Village, Town and City (Settlements) + London
Year 2		Climate Around The World		Contrasting Study: Kenya/Brazil		Rivers UK overview
Year 3		Volcanoes & Earthquakes		Agriculture		Climate and biomes
Year 4		Mountain ranges & famous mountains		Coastal Processes and landforms + (River Thames)		Population & Tourism
Year 5		Why is California Thirsty?		Oceans		Migration
Year 6		Energy & Climate Change		Geography around the world		Local Area Enquiry

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Identify features of the school.	Know that everyone has a birthday and they are usually celebrated in a similar manner around the world.	Know that there are different countries in the world and talk about the differences they have experienced (on holidays) or seen in photos. Talk about where their families come from. Know how you would travel to different countries. To know how they travel to school.		Talk about where food comes from	Create simple maps in their play, representing features like water and land with blue/green.
Reception	Describe and talk about their immediate environment (classroom, school, home) Talk about members of their immediate family and community.		Compare and contrast what it is like to live in a hot country and a cold country. Understand what the equator is. Talk about how a country changes due to proximity to the equator. Draw information from a simple map. Create their own simple map.		Recognise similarities and differences between jobs and occupations. Recognise similarities and differences between jobs around the world e.g. teaching in Brazil/Arctic	Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class. Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate –maps.

	Spring 1	Vocabulary	Spring 2	Vocabulary	Summer 1	Summer 2
Year 1	**Our School and the local area** In this unit, pupils will: use simple fieldwork and observational skills to study the geography of their school & its grounds. use simple compass directions and locational and directional language to describe the location of features and routes on a map. use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; use and construct basic symbols in a key; and locate features and routes on a map. Synoptic Tasks: Where is our school and what is nearby?	• Windrose, • North • South • East • West • Compass direction • Route • Map • Urban • Local Area • Church • Car park • Shops • School • Restaurant • Supermarket • Key, • Symbols • Landmarks • Surveys • Busy • Busiest • Traffic • Route	**The United Kingdom** In this unit, pupils will: use topographical maps and photographs as evidence to explore the physical and human features of the four nations that make up the United Kingdoms They will learn the location of the four nations of the United Kingdom on the British Isles describing their borders and coastlines. They will identify key human settlements and key features such as mountains, lakes and national flags. Synoptic Tasks: What is the United Kingdom?	• Settlement • Village • City • Urban • Rural • The United Kingdom of Great Britain and Northern Ireland. • British Isles • Map of Europe • World • Island • Nation/Country • England • Wales, • Scotland, • Northern Ireland • Republic of Ireland • Capital City • Government • London • Edinburgh • Cardiff • Belfast • border • topographical map • highlands • lowlands • mountains/mountainous • isles • lochs • Ben Nevis • Physical feature • Human feature • Coastline • Irish Sea • Atlantic Ocean • North Sea • Aberdeen • Glasgow • bridges • climate • Saltire national flag • moorlands • dales • English Channel • Cross of St. George • Birmingham • Newcastle • Manchester • Liverpool • hills	**London** In this unit, pupils will: Identify where London is located in the world, identifying it on maps of the UK, Europe and the world. Know that London is the capital city of the United Kingdom and where the government meets at the Houses of Parliament. Identify and locate famous London landmarks such as Buckingham Palace, Tower Bridge, the London Eye and St Paul's Cathedral. Use maps, aerial photographs and symbols to locate places and landmarks in London. Use compass points and positional language to navigate between landmarks on a map. Identify some physical geographical features of London, including the River Thames, hills and parks. Identify the differences between cities, towns and villages and how London compares with other types of settlements. Note the advantages and disadvantages of living in a large city like London. Use geographical knowledge to plan a trip to London Synoptic Task: Can you plan a trip to London?	• London • capital city • government • Houses of Parliament • River Thames • Europe • United Kingdom (UK) • aerial photograph • scale • landmark • skyline • navigation • compass points • route • map • physical features • hill • park • city • town • village • settlement • built-up area • advantages • disadvantages

				• Cardiff, • Swansea • Brecon Breacons • Yr Wyddfa • valley • St Georges Channel • Bristol Channel • farmland • y Ddraig Goch • Lough Neagh • Slieve Donard • Giant's Causeway		

Year 1 - Spring 1 - Our School and the local area.

Synoptic Task: **Where is our school and what is nearby?**			
Lesson	Learning objective	Pupils will	Vocabulary
1	To use simple compass directions *Skills: use compass directions and simple directional language*	● Follow instructions to move around classroom: turn **right**,turn **left**, go under the **nearest** table; go round the **furthest** chair ● Learn that we use compass points to help us describe where things are. ● Establish NESW points in the classroom and practise pointing to them Establish NESW in the playground and practise running to the NSEW of the playground. ● Visit the upper floors of the school and look out of a **north** window, **south** window, **east** window and **west** window and record what you can see. N=Wembley Stadium, S=Playground and flats, E=Secondary school, W=Tesco and other shops. ● Refer to a map of the classroom with a **windrose** to describe the position of furniture and other objects using the four compass points e.g. “The door is to the west” Use additional maps (of classrooms and playground) to reinforce this practice.	Windrose, North South East West Compass direction
2	To develop observational skills of their local area. *Skills: Use observational skills to study the key human and physical features of surrounding environment.* *record and present features in the local area including sketch maps*	● Recap on the four compass points ● Learn that we live in an **urban** area which means there are lots of **shops** and **traffic** in our **local area**. ● Go on a guided tour of the local area noting the physical features like: **main road, bus stop (southbound), bus stop (northbound), car park, supermarket, restaurant (Burger King) parade of shops, school x 2, (St. Matthew’s)church.** ● On a blank, basic map of the local area (containing windrose), children add the features they come across. (stickers?). ● Return to the classroom and use the maps and compass language to describe what is North and West of the school.	Route Map Local Area Church Car park Shops School Restaurant Supermarket
3	To use symbols and keys on maps *Skills:* *Use aerial photographs and plan perspectives* *Devise a simple map* *Use keys and symbols on maps*	● Look at aerial photographs of the school (Google maps) and surroundings and make a link to the map they drew last week. Identify the same **landmarks**. ● Notice how the map (Google Maps) uses symbols to identify the landmarks. Children consider why **symbols** are used. ● Zoom out to show a wider area with the children identifying through the symbols ■ How many local schools can they see on the map? ■ Can you see any schools NESW of ours? ■ How many places of worship can they see? ■ Can you see a symbol for a park? ■ Where is the park? NESW of the school? ■ How do you know it is a park in the photograph? ■ Can you see a symbol for a hospital/doctor? ● Convert their map from last week using symbols to represent the different landmarks of the local area.	Key, Symbols Landmarks

		● Compass language should be used by the teacher and the children to visually describe their map features.	
4	To use simple fieldwork and observational skills *Skills: Use fieldwork skills to study the key human and physical features of the surrounding environment.*	● Walk out to the front of the school and observe what new additions to Crownhill Road have been made (speed bumps and traffic calming, speed limit of Crownhill compared with St. John's road). Children consider why they have been put there. ● Teacher points out the school street sign and explains its meaning. Children consider why it has been put there. ● Children conduct three small **traffic surveys** counting the number of cars that go past Manor Park Road, Crownhill Road and Burns Road over a two minute period and record their final results in a table. ● Consider what information we do and do not need to collect (e.g. is the colour of the car important?) ● Children use this table to decide which is the **busiest** road and consider the implications for having a school near a busy road: (necessity of crossings, school street, need to take care).	Surveys Busy Busiest Traffic
5	To use simple fieldwork and observational skills *Skills: use compass directions* *Skills: Use keys and symbols on a map.*	● Recap on NESW language by showing a map of London and showing that our school is in North & West London We call this Northwest London. Show fictional descriptions of schools in other compass areas of London and mark them on the map as they are read. Refer to the windrose to ascertain where North, South, East and West are. ● Look at a simplified map of the school that demonstrates a route to a particular location. Recap on the compass directional language to describe the route. "1)Travel east until the end of the corridor. 2)Travel north to the end of the corridor, 3)Travel west to the end of the corridor…We have reached the nursery class!" ● Children record NESW language to sentence stems/cloze sentences to describe the route to various locations in the local area using a simplified map: the park, Harlesden High Street, the supermarket, the church, the bus stop.	Route
6	Synoptic Task	Where is our school and what is nearby?	

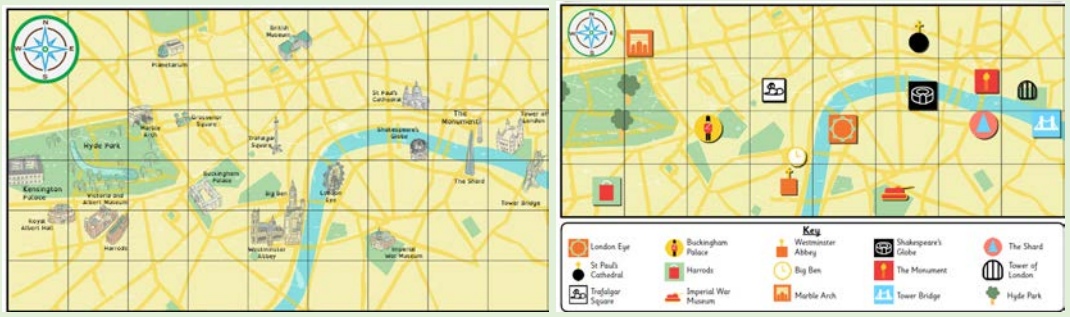
Synoptic Task: What is the United Kingdom?			
Lesson	Learning objective	Pupils will	Vocabulary
1	To know the location of the UK, nations and its capital cities. *Skills: Use keys and symbols on a map.* *Skills: use compass directions and simple directional language* *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries*	● Learn that a **settlement** is a place where people live and work. ● Learn that a **village** is a small settlement and a **city** is a large settlement. ● Lean that an **urban** areas is where people live and work closely together (cities and towns) ● Learn that **rural** areas are places with fewer people and smaller settlements (villages) and that most of the land in the UK is rural. ● Learn that the United Kingdom is formally known as **The United Kingdom of Great Britain and Northern Ireland** - Locate the **British Isles** on a **map** of **Europe** and the **world**. ● Learn that the UK is made up of one large island (land completely surrounded by water), Great Britain, and several tiny islands (not Isle of Mann). ● Learn that the UK is made up of four **countries** (also called **nations)**: **England, Wales, Scotland and Northern Ireland** and identify them on maps of the UK. Learn that the **Republic of Ireland** is not part of the United Kingdom and locate it on a map of the UK. ● Learn that a **capital city** is where the **government** of a country is based and is an urban location. Locate **London, Edinburgh, Cardiff** and **Belfast** on a map of the UK and identify to which nation they belong. ● Learn that London is both the capital city of England and also the capital city of the United Kingdom ● Discern between capital cities and countries that are part of the UK and which are not (e.g. Paris, France; Berlin, Germany; Madrid, Spain) ● *By the end of this lesson children should:* ○ Recognise and locate the UK on a map and globe ○ Name the four countries that make up the UK. ○ Know that capital cities are not countries.	Settlement Village City Urban Rural The United Kingdom of Great Britain and Northern Ireland. British Isles Map of Europe World Island Nation/Country England Wales, Scotland, Northern Ireland Republic of Ireland Capital City Government London Edinburgh Cardiff Belfast
2	To know the physical and human features of Scotland *Skills: Use keys and symbols on a map.* *Skills: use compass directions and simple directional language* *Skills: use maps, atlases, globes and digital/ computer*	● Recap on the definitions of **rural** and **urban** ● Recap on the geographical position of Scotland and its **capital city Edinburgh** on a map of the British Isles. Learn to describe Scotland as having a **border** with England. ● Learn that Scotland is the second largest country in the United Kingdom (behind England). ● Learn that a **topographical map** shows where **highlands, lowlands** and **mountains** are in the United Kingdom. Use the map to determine that Scotland is a **mountainous country** with very few lowland parts. ● Learn that much of Scotland is rural with settlements in the highlands and on many of the 900 islands (**Isles**) of Scotland. ● Learn that mountains, lakes (**lochs**) coastlines and islands are known as **physical features**. Identify the highest physical feature as **Ben Nevis** and learn that it is the highest mountain in the whole of the United Kingdom. look at photographs of some major physical landmarks: ○ Loch Ness	border topographical map highlands lowlands mountains/mountainous isles lochs Ben Nevis Physical feature Human feature Coastline Irish Sea Atlantic Ocean

	mapping to locate countries	○ Loch Lomond ○ Cairngorms ○ Isle of Skye ● Learn that the **coastline** of Scotland meets the **Irish Sea, the Atlantic Ocean and the North Sea**. ● Learn that urban areas are in the flatter parts of Scotland (**Aberdeen, Glasgow** and **Edinburgh**) and that this is where most people in Scotland live. ● Learn that **cities, statues, buildings, roads** and **bridges** are **human features** (because they have been built by humans). Look at photographs of some major human landmarks in Scotland. ○ Firth of Forth Bridge ○ Edinburgh Castle ○ Stirling Castle ● Learn that the **climate** in Scotland is colder than in England because of the higher land and it is further north. ● Recognise that the **Saltire** of St. Andrew is the **national flag** of Scotland. ● *By the end of this lesson children should:* ○ *Be able to locate Scotland on a map of the UK and describe its location in relation to coastlines and borders with neighbouring country.* ○ *Be able to name some cities in Scotland including its capital.* ○ *Recall some of the physical and human landmarks of Scotland.*	North Sea Aberdeen Glasgow bridges climate Saltire national flag
3	To know the physical and human features of England *Skills: Use keys and symbols on a map.* *Skills: use compass directions and simple directional language* *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries*	● Recap on the definitions of **physical features** and **human features.** ● Recap on the geographical position of **England** on a map of the **British Isles** and the location of its **capital city London.** ● Learn that England is the largest country in the United Kingdom. ● Use a **topographical map** to show that the land is higher in the north and west of England and flatter in the south and east. ● Recap that **mountains, lakes, coastlines and moorlands** are known as physical features. Identify the highest physical feature as Scafell Pike and remind children that this is not the highest mountain in the UK. ● Learn that moorlands and **dales** are areas of high land (they are hilly) but they are not as high as mountains. Learn that look at photographs of some major physical landmarks: ○ Lake Windermere ○ Staffordshire Moorlands ○ White cliffs of Dover ● Learn that the **coastline** of England meets the **Irish Sea, the Atlantic Ocean, the North Sea** and **The English Channel**. Use photographs to explore different types of coastlines (sandy beaches, shingle and pebble beaches and cliffs). ● Learn that much of England is **rural** but that most people live in **towns and cities** which are **urban** settlements. Use a map to discern which cities are located in England and which are not. ● Look at photographs of some major **human landmarks** in England: ○ House of Parliament	moorlands dales English Channel Cross of St. George Birmingham Newcastle Manchester Liverpool hills

		○ York Minster ○ Albert Dock Liverpool ○ Angel of the North Statue ● Recognise that the **Cross of St. George** is the **national flag** of England. ● *By the end of this lesson children should:* ○ Be able to locate England on a map of the UK and describe its location in relation to coastlines and borders with neighbouring countries ○ Be able to name some cities in England including its capital. ○ Recall some of the physical and human landmarks of England	
4	To know the physical and human features of Wales *Skills: Use keys and symbols on a map.* *Skills: use compass directions and simple directional language* *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries*	● Recap on the locations and landmarks of England and Scotland. ● Recap on the geographical position of **Wales** on a map of the **British Isles** and the location of its **capital city Cardiff.** Learn to describe its position as sharing a **border** with England but not with Scotland. ● Learn that Wales is smaller than England and Scotland. ● Use a **topographical map** to show that Wales is a **mountainous** country. ● Recap that **mountains, lakes, coastlines and hills and valleys** are known as physical features. Identify the highest physical feature as Yr Wydffa (formerly Mount Snowdon) and remind children that this is not the highest mountain in the UK. o Brecon Beacons. ● Learn that Wales has an **island** Anglesey (Ynys Mon) which is connected to the mainland by a bridge (an example of a human feature). ● Learn that in Wales people speak English and/or Welsh. ● Learn that the **coastline** of Wales meets the **Irish Sea, St Georges Channel and the Bristol Channel**. Use photographs to explore different types of coastlines (sandy beaches, shingle and pebble beaches and cliffs). ● Learn that much of **Wales** is **rural** with a lot of **farmland** but that most people live in **towns and cities** which are **urban** settlements. Use a map to discern which cities are located in Wales and which are not. ● Recognise that the **Y Ddraig Goch** (Red Dragon) is the **national flag** of Wales. ● *By the end of this lesson children should:* *o Be able to locate Wales on a map of the UK and describe its location in relation to coastlines and borders with its neighbouring country* *o Be able to name some cities in Wales including its capital.* *o Recall some of the physical and human landmarks of Wales*	Cardiff, Swansea Brecon Breacons Yr Wyddfa valley St Georges Channel Bristol Channel farmland y Ddraig Goch
5	To know the physical and human features of Northern Ireland *Skills: Use keys and symbols on a map.*	● Recap on the locations of **England, Scotland** and **Wales.** ● Recap on the geographical position of **Northern Ireland** on a map of the **British Isles** and the location of its **capital city Belfast.** Reinforce understanding that it is not on the island of Great Britain but on the island of Ireland. ● Recap that Northern Ireland has a **border** with the Republic of Ireland, a country that is not part of the **United Kingdom.** ● Learn that Northern Ireland is the smallest country in the United Kingdom and compare the different size of populations across the four nations.	Lough Neagh Slieve Donard Giant's Causeway

	Skills: use compass directions and simple directional language *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries*	● Use a **topographical map** to show that the land is higher in the north, east and west of Northern Ireland but flatter in the south and centre. ● Recap that **mountains, lakes, coastlines and rivers** are known as physical features. Identify the highest physical feature as Slieve Donard and remind children that this is not the highest mountain in the UK by comparing it with mountains from the four nations. ● Look closely at a map of Northern Ireland to identify **Lough Neagh**, the largest lake in the UK. ● Learn that the **coastline** of Northern Ireland meets the **Irish Sea,** and **the Atlantic Ocean**. Use photographs to explore the **Giant's Causeway.** ● *By the end of this lesson children should:* o *Be able to locate Northern Ireland on a map of the UK and describe its location in relation to coastlines and borders with neighbouring countries* o *Understand that the Republic of Ireland shares the island with Northern Ireland but is not part of the U.K.* o *Recall some of the physical and human landmarks of Northern Ireland.*	
6	Synoptic Task	What is the United Kingdom?	

Synoptic Task: ***Can you plan a trip to London?***			
Lesson	Learning objective	Pupils will	Vocabulary
1	To know where London is in the world Plan Bee 1 London AND *London as a capital city | KS1 Geography | Oak National Academy* *Use maps at different scales and aerial photographs to locate places.*	● Recap on what the children already know about London from the previous topic and their own personal experience.. ● Learn that there are other towns and cities around the world called London and look at their location on a map (e.g. London, Kentucky, London, South Africa and London in Canada). Explain to the children that we are going to be learning about the most famous London of all, the London where we live. Ensure all children can find London, England on a world, european and UK map. ● Learn to describe London's location as being in the South East of England. ● Learn that London is the capital city of the United Kingdom and that this means the government of the country makes decisions about the country. Learn that the government led by the Prime Minister is responsible for making the laws, collecting the taxes and deciding how this money should be spent. View images of the Houses of Parliament. ● Use a map and aerial photographs to identify the houses of Parliament in London next to the River Thames. ● Learn the difference between an aerial photograph and a non-aerial photograph. ● Demonstrate to the children that the different maps they have viewed today are at different **scale**. Children consider which maps are most useful for different purposes i.e. ○ Where in the world is London? ○ Where in London is Europe? ○ Where in the UK is London? ○ Where in London are the Houses of Parliament? ○ What is the name of the river that flows through London? ● *By the end of the session, pupils should:* ○ *Know that London is a city in the country of UK, on the continent of Europe.* ○ *Identify where London is on a map of the UK, a map of Europe and a map of the world.* ○ *Be able to choose a map of an appropriate scale to find the information they need.*	scale aerial photograph river mouth River Thames Parliament Europe UK Government Capital City
2	To identify and locate London landmarks Plan Bee London 2 additional support can be found: Oak Academy Life in London	● Recap on what the children already know about London from the previous topic and their own personal experience. ● Share their favourite places to visit in London. ● Learn that London is one of the most famous cities in the world and that there are lots of **landmarks** and features that people all around the world recognise as being located in London. ● Learn to identify London landmarks from visual image and silhouettes of the London skyline ● Discern between London landmarks and non-London landmarks e.g. (Eiffel Tower, Pyramids of Giza) ● Learn to locate and describe the location of London landmarks from aerial photographs and maps e.g. North of the river Thames, south of the River Thames, crossing the River Thames. ■ London Eye ■ Buckingham Palace	landmarks skyline

	Use maps and aerial photographs to identify landmarks.	■ Queen Elizabeth Tower (colloquially known as Big Ben) ■ Tower Bridge ■ Trafalgar Square ■ Monument (link to previous history topic). ■ Tower of London ■ Thames Barrier ■ The Shard (UK's tallest building) ■ St Paul's Cathedral ● *By the end of this session, pupils will:* ○ *Identify and describe some different London landmarks* ○ *Recognise significant world landmarks that are not in London* ○ *Locate London landmarks on aerial photographs and maps.*	
3	To use compass points and positional direction to navigate between London landmarks. PlanBee London 3 Use maps, symbols and compass directions to navigate routes.	● Recap on recall of London/non-London landmarks ● Use two maps of London one with labelled illustrations of London landmarks and one with symbols and a key for London landmarks to describe their position using compass points. ●  Learn to describe a route using squares as distance and compass points as direction between different London ● Learn that finding our way from one place to another is called **navigation** ● Learn the different methods of travelling around London: **taxi, bus, underground, overground, cycle lanes, walking.** ● *By the end of the session, pupils will:* ○ *Can children use a map to identify and locate various landmarks?* ○ *Can children use compass points and positional language to navigate between points on a map?* ○ *Can children use a key to identify landmarks on a map?*	
4	To know the physical geographic features of London	● Recap on the following geographical features:	

	PlanBee London 4 Use photographs as geographical evidence to identify physical features.	A **sea** is a large body of water that surrounds land. A **river** is stream of water that runs from one place to another, finally ending up in the sea. A **lake** is large body of water that is surrounded by land. Lakes can be natural or man-made.  **sea**  **river**  **lake** London has the River Thames, as well as lots of smaller rivers. It also has several lakes, usually in London's parks. This picture shows the lake in Regent's Park.   **valley**  **mountain**  **hill** A **mountain** is like a really steep, tall **hill**. Mountains are often pointier at the top than hills. A **valley** is the low land in between two mountains.  London doesn't have any mountains and so doesn't have any valleys either. It does have some hills but is generally very flat.	

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 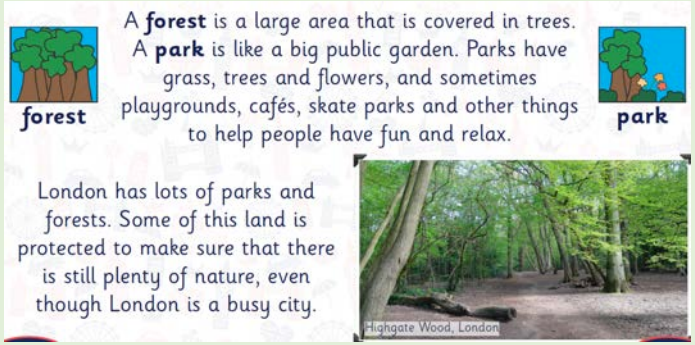

Use visual sources of London to establish which of the above physical features are located in London.

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<tr><th>Yes</th><th>No</th></tr>
<tr><td>Hill (Primrose Hill)
Large park and woodland (Hampstead)
Lake</td><td>Mountain, valley
Forest
Sea, coast, cliff</td></tr>
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Use this evidence to suggest if images (from around the world) were taken in London or not (e.g. this is not in London because I can see mountains in the background) or compare an image taken from London and one that was not using the above language (e.g. Yorkshire Dales).
By the end of the session, pupils will:

Identify a variety of geographical features
Use their knowledge of the features of London to identify if a photo is of London or not
Use appropriate vocabulary to describe the geographical features of London

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<td>Comparing life in London to life in towns and villages.</td>
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Recap on the definition of rural and urban. Remind children that London is the largest city in the UK.
Learn the name of other major UK cities in the UK: London, Birmingham, Glasgow, Liverpool, Manchester, Leeds and Bristol recapping the capitals the children have already learned in a previous

</td>
<td>city
town
village</td>
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	Use maps and satellite images to compare settlements.	topic (Cardiff, Edinburgh, Belfast). Use satellite imagery to show these places in the UK as **built-up areas** ● Use visual and video evidence to learn that villages are small settlements with a small number of houses for a few hundred people. Most villages are found in the countryside and may be surrounded by farms where food is produced and sold to people in towns and cities. Some villages have a few shops. And there may be a place of worship, like a church. And there's usually a school. ● Learn that some villages will be built on the coast, in a valley or in the mountains (unlike London) or by forests. ● Use maps and aerial photography of villages to compare and contrast with maps of London. ● Learn that a town is a larger settlement than a village. More people live in a town – normally a couple of thousand - so they need more homes and more shops. You might even find some leisure facilities like a swimming pool. There are several places of worship and of course, towns have schools too. ● Learn that London has many more transport links to travel around the city compared with a village or town - this is because more people live there. ● Learn that London has many more places of worship and different types of places of worship than other towns and villages - this is because more people live there. ● Learn that London has many more shops and leisure facilities than other villages and towns - this is because more people live there. ● Children consider the advantages and disadvantages of living in London compared with other types of settlements.	settlement built up advantages disadvantages
6	Synoptic Task	***Can you plan a trip to London?*** (see Plan Bee lesson 6)	

	Spring 1	Vocabulary	Spring 2	Vocabulary	Summer	Vocabulary
Year 2	Climate Around the World In this unit, pupils will: Name and locate different continents and oceans of the world. Learn about the temperate weather regions and recognise that the UK has a temperate climate. Recognise some of the symbols that are used to describe the weather. Learn about the characteristics of mediterranean, polar, equatorial and arid climates. Synoptic Tasks: What is the difference between climate and weather?	• Windrose, • North • South • East • West • Compass direction • Route • Map • Urban • Local Area • Church • Car park • Shops • School • Restaurant • Supermarket • Key, • Symbols • Landmarks • Surveys • Busy • Busiest • Traffic • Route	What is it like to live in Tanzania In this unit, pupils will: Locate Tanzania on a map of the world and use maps of varying scale as well as photography to learn about the landscape of Tanzania. Recognise major physical and human landmarks. Use testimony from residents of Tanzania to compare how life is similar and different to the life in the UK Synoptic Tasks: How is life in Tanzania similar and different to life in Britain?	• Continent • Africa / Europe • climates • countries • compass directions • Transport • Route • (Indian) Ocean • Climate • rural & urban landscape • Sources • Coastline • Border • Lake • Equator • Aerial photograph • Satellite Images • Globe • Physical Feature • Human Feature • Location • Game Reserve • Mountain • Volcano (dormant) • Sea port • occupation • Similarities • differences • community • safari guide • charity • earn • plantation • endangered • crops • similarities / differences • water pump • farmer • market • lamps • village	Rivers In this unit pupils will: Know what a river is and the key features of a river system, including how rivers flow from their source to the sea. How rivers shape the landscape through processes such as erosion and deposition. Know how rivers change along their course, from the upper course to the lower course. identify some causes and impacts of flooding, and examples of flooding events. Identify rivers in the United Kingdom on a map, including the River Severn. Understand how rivers affect human settlements and the surrounding environment. Synoptic Task: How does a river change from its source to its mouth?	• Reservoir • Hydroelectricity • Source. • Mouth • Tributary • Drainage basin • Confluence • Erosion • Transportation. • Deposition • Landform • Meander • Floodplain • Estuary • Waterfall • Confluence • Course • Downstream • Tributary • Landform • Upper course • Middle course • Lower course • Bank • Bed • Drainage basin • Floodplain • Deforestation • Storm • Source • Mouth • River Severn • Tributary • Estuary

Year 2 - Autumn - Climate around the world

Synoptic Task: What is the difference between climate and weather?			
Lesson	Learning objective	Pupils will	Vocabulary
1	To name, locate and recognise the world's seven continents and five oceans. *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries*	● Learn the difference between a **country** and a **continent**. ● Learn the names of the seven continents and recognise them by shape and also by location on a **globe** and a map. ● Learn that London is a **city** in the country of the United Kingdom which is a country located on the continent of Europe. ● Locate other **countries** and **capital cities** in the continent of Europe using a map. ● Learn the names of the five **oceans** and locate them on maps and a globe. ● Describe the location of the oceans in relation to the continents they separate and by using compass points. ● *By the end of the lesson pupils should know:* ○ *the difference between a country and a continent.* ○ *know the names of the seven continents of the world and locate them accurately on a map* ○ *Know the names of the five oceans of the world and place them accurately on a map.*	Continent, Atlas, Country, Ocean North America, South America, Africa, Europe, Asia, Oceania, Antarctica, Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean,
2	To know the weather patterns of the temperate climate of the UK *Skills: use fieldwork to observe, including graphs.*	● Identify the common weather that we experience in the UK and the weather symbols used to describe to us the weather on apps and television. ● Learn the difference between **climate** (the average weather over a long period of time) and **weather** (day to day). Weather is what we get; climate is what we can expect. ● Learn that because we have an absence of extreme weather in the UK, we can describe the climate in the UK as **temperate.** Climate zone video. Learn that a temperate climate has warm summers and cool winters. ● Use bar charts to examine the average rainfall/hours of sunshine/average temperature in the UK over different months and seasons and make comments about the weather patterns of the UK using adjectives, comparative and superlatives such as ***hottest, hotter, warmer, colder, chillier, wettest, rainiest, dryest*** ● Complete fieldwork preparation to make a rain gauge and then set up to record rainfall levels over the course of the term and decide which months to do this to record rainfall patterns over different seasons. ● Compare temperatures/rainfall in the UK with other climate zones around the world (polar, equatorial) to understand why the UK is described as a temperate climate. ● *By the end of the lesson pupils should know:* ○ the difference between climate and weather ○ *how to describe the seasonal weather pattern of a temperate climate* ○ *how geographers measure rainfall.*	weather, weather patterns climate temperate climate zone extreme weather hottest, hotter warmer, warmest colder, coldest chillier, chilliest wetter, wettest rainier, rainiest

3	To know the characteristics of a Mediterranean climate *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries* *Skills: use fieldwork to observe, including graphs.*	● Reap on the first lesson to identify the position of the continents in the world/ ● Use a map that demonstrates **climate zones** to understand that not everywhere in the world has the same climate. Identify the names and key characteristics of the different climate zones: **Temperate, Mediterranean, Polar, Tropical, Arid.** Use the map to describe the climate zones found within certain continents e.g. "*In the north of Europe there is a polar climate. Most of Europe has a temperate climate. In the south of Europe there is a Mediterranean climate*." ● Remind themselves that climate is the expected weather over time. ● Look closely at a map of Europe to identify the north/south divide between a temperate climate and a mediterranean climate. ● Learn that a mediterranean climate has hot, dry summers and mild, wet winters. Compare the temperatures between Spain/Greece and the UK to determine the difference between a mediterranean and temperate climate. ● Consider the benefits and the problems with a Mediterranean climate such as: ○ makes certain countries in Europe popular holiday destinations in the summer months which brings money to these countries. ○ **wildfires** in hot, dry summer months. *By the end of the lesson pupils should know:* ○ *that not everywhere in the world has the same weather pattern* ○ *that a mediterranean climate has hot,dry summers and mild,wet winters.* ○ *that the UK does not have a mediterranean climate*	Weather, Climate, Climate zones, Average weather, Mediterranean climate Polar climate Tropical climate Arid climate Wildfire
4	To understand how the average temperatures differ between the Equator and the Poles. *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries* *Skills: use fieldwork to observe, including graphs.*	● Recap on the first lesson to identify the oceans and the continents of the world . ● Learn that there is an imaginary line that encircles the world called the **Equator.** Demonstrate this line on a map and a globe. Identify **countries and continents** through which the Equator runs. ● Learn that the UK is in the **northern hemisphere** and identify countries relevant to the class's demographics in both hemispheres. ● Identify that the Earth has two geographical **poles**. Using photographic evidence, the children explain the differences in climate that they can observe between the poles and the equatorial regions. ● Children use temperature data to confirm or refute their observations. ● Children use rainfall data to confirm or refute their observations. Children learn that although Antarctica is covered in ice, it has a very dry climate with low rainfall. ● Children learn to sort images into polar and equatorial. ● Learn that there are **extreme climates** in the Equatorial and Polar regions which make it difficult for humans to **settle.** *By the end of the lesson pupils should know:* ○ where the equator and poles are on a map and globe. ○ Identify the northern and southern hemispheres ○ How the temperature differs as you move away from the Equator to the poles.	Equatorial climate zone Northern Southern Hemisphere Pole Extreme climate
5	To know the characteristics of Arid climates and	● Recap on the different climate zones in the world and their characteristics. ● Recap on the definition of an **extreme climate.** ● Learn the location of arid climate zones in the world.	Arid climate zone temperature degrees celsius

	how they affect living conditions. *Skills: use maps, atlases, globes and digital/ computer mapping to locate countries* *Skills: use fieldwork to observe, including graphs.*	● Use photographs to draw conclusions about the features of arid climate zones. ● Use temperature and rainfall data to confirm or refute their observations. *By the end of the lesson pupils should:* ○ *Know that an arid climate is a climate with an absence of rain.* ○ *Provide examples of different extreme climates* ○ *Make accurate observations using photographs as sources of evidence*	
6	Synoptic Task	● What is the difference between climate and weather?	

Year 2 - Tanzania

Synoptic Task: How is life in Tanzania similar and different to life in Britain?			
Lesson	Learning objective	Pupils will	Vocabulary
1	To know the location of Tanzania on a map of the world and a map of Africa Use maps and atlases to locate countries and describe location	● Locate the **continent** of **Africa** on a map of the world and describe its position in relation to the continent of **Europe** and the location of the UK ● Learn that **Africa** is three times bigger than Europe. ● Use photographs to learn that Africa has different **climates** (hot, cold, dry & wet) (see lesson 2) ● Use a map to learn that the continent of Africa has more than 50 **countries** on it. ● Use **compass directions** to describe the relative positions of different countries in Africa (including Tanzania) ● Learn that Tanzania is in Eastern Africa and that it's about 10 hours away in a plane (or 150 hours in a car!). Look at **transport routes** by car, train, ship and plane to ascertain the most direct route. *By the end of the lesson, pupils should:* ○ *Know that Tanzania is a country in Eastern Africa* ○ *Accurately describe the position of Tanzania in relation to its borders with other countries and its coastline.* ○ *Know that Tanzania is a long distance away from the UK*	Continent Africa Europe climates countries compass directions Transport Route Ocean
2	To compare the climate and landscape of Tanzania to the UK Use photographs and maps to compare landscapes.	● Recap on the location of the **continent** of **Africa** and the **country** of **Tanzania**. ● Learn that Tanzania has borders with eight different countries, three lakes (Victoria, Tanganyika and Nyasa) and it also has a coastline with the **Indian Ocean** ● Use photographs as evidence to see what Tanzania looks like, understanding that it is a **diverse** country with different **climates** and both **rural** and **urban** landscapes. ● Use photographs to elicit what they can see, hear and what they might feel if they were in that landscape. ● Learn that because of how near to the **equator** Tanzania is, it has a warm climate at low levels but is still very cold in the mountains. ● Learn that it rains for only part of the year in Tanzania. *By the end of the lesson, pupils should:* ○ *Know some of the borders and coastlines that Tanzania has.* ○ *Know that Tanzania has a warm climate because it is near the Equator and say how this differs from the UK.* ○ *Be able to explain how the landscape of Tanzania is different to the landscape of the UK*	Indian Ocean Climate rural & urban landscape Sources Coastline Border Lake Equator

3	To know the physical and human features of Tanzania Use aerial photographs and satellite imagery (digital mapping).	● Recap on the definition of **physical** and **human** features (Year 1) ● Identify human and physical features in photographs of Tanzania ● Learn that aerial photographs are pictures taken from above either from planes, drones or even satellites. Explore the idea of scale. Explain that as the scale gets smaller, we can see more features and consider what scale map would be useful to show: **Where Africa is. Where in Africa, Tanzania is, What parts of Tanzania are urban and rural? Where the great lakes in Tanzania are? What major landmarks does Dar-Es-Slam have?** Demonstrate with Google Earth From satellite imagery identify the location of the three major lakes. ● Use satellite imagery to look at Mount Kilimanjaro from both an aerial view and also a 3D computer generated image. Identify the crater and the snow and the lack of greenery at higher altitudes. Discuss the different information that can be obtained from the different views. ● Use aerial and satellite imagery to view Dar Es Salam to identify human features such as bridges and buildings and natural features such as the bay and parkland and natural greenery and the coast. Discuss the information that can be obtained from the images: Dar-Es-Salam is on the coast, it is an urban area with lots of buildings. It has a port. ● Use aerial and satellite imagery to view the Mayowosi game reserve. Discuss what information can be obtained about the game reserve. (there are very few buildings, it is rural) *By the end of the lesson, pupils should:* ○ *Know that maps can represent locations at different scales.* ○ *Identify physical features in Tanzania* ○ *Identify human features in Tanzania*	Aerial photograph Satellite Images Globe Physical Feature Human Feature Location Game Reserve Mountain Volcano (dormant) Sea port
4	To use a case study of jobs in Arusha to compare life with life in Britain Use interviews and case studies as geographical evidence.	● Recap on the definition of an **occupation** and why people have them. ● Recap that so far we have learned that geographers use photographs and maps as evidence to find out what a place is like. ● Learn that geographers also interview people to find out what life is like in a country. ● Learn that Arusha is a small city in the North of Tanzania near to Mount Kilimanjaro ● Learn about some of the jobs that are available in Arusha, Tanzania and consider whether they are jobs that cannot be done in the UK (coffee farmer - climate reasons, Safari guide - habitats, Dala Dala driver) and jobs that can be done (teacher, supermarket worker, hotel manager). ● Learn how similar jobs may still be different in Arusha compared to the UK ○ *Teacher:Many children in Tanzania go to primary school but some children aren't able to. They might have to work or help at home. I teach the children different subjects like Kiswahili, English, maths and science. There are 45 children in my class so it can be difficult to help everyone.* ○ *Farmer: My family and I grow many different crops including bananas, cabbages, corn, peppers and tomatoes. We don't have much land and most of what we grow is to eat ourselves. Sometimes we sell a few crops at a nearby market.* ○ *Charity Worker: The charity I work for tries to make sure everyone has clean and safe water. Some people living in villages around Arusha don't have piped water in their homes and have to walk long distances to collect it. Some homes and schools don't have toilets.*	occupation similarities differences community safari charity earn plantation guide endangered crops farmer

		By the end of the lesson, pupils should: ○ *Know that geographers obtain information by speaking with people in the locality.* ○ *Recognise some occupations that are different to those in the UK.* ○ *Recognise how some occupations differ to the same occupation in the UK.*	
5	To use a case study of a child's life in Arusha to compare with life in Britain. Compare places using geographical sources.	● Recap on how geographers find out information about what a country is like to live in (photographs, maps, interviews with people) ● Use a case study of a child living in a village in Tanzania (Zahra) to compare how life is similar and different to the children's own life in London, England. ○ Housing ○ Schooling ○ Access to drinking water ○ Access to food ○ How leisure time is spent. ● Consider how Zahra's life might be different if she lived in a city in Tanzania. *By the end of the lesson, pupils should:* ○ *Recognise how a child's life differs to a child's life in the UK.* ○ *Recognise how a child's life is similar to a child's life in the UK.* ○ *Recognise how a child's life differs within the same country depending on where in that country they live.*	similarities differences water pump crops farmer market lamps village
6	Synoptic Task	● How is life in Tanzania similar and different to life in Britain?	

Synoptic Task: How does a river change from its source to its mouth?			
Lesson	Learning objective	Pupils will	Vocabulary
1	To describe the key features of a river system and explain how rivers drain the land ● OA lesson 1 Interpret diagrams and images of river systems.	● Begin by revisiting pupils' prior knowledge about water and rivers. ○ What is a river? ○ Where might we find rivers? ○ Can you name a river you know? ● Explain that rivers are found in many places around the world and can be large or small. Smaller rivers are sometimes called streams. ● Clarify key idea: ○ A river is a flow of water that moves across the land and into the sea, a lake or another river. ○ Ask pupils to briefly discuss with a partner: ○ Why might rivers be important to people and wildlife? ○ Take feedback and introduce that rivers have many important uses. ● Show pupils an image of a river. ● Ask: ○ What do you notice about this river? ○ What might rivers be used for? ● Explain that rivers can vary in size and may be large rivers or small streams. ● Check understanding with a quick question: ○ True or False: Large rivers are often called streams. ● Correct explanation:Small rivers are often called streams, not large rivers. ● Explain that rivers are important for many reasons. Rivers can be used for: ○ Drinking water ○ Water activities such as rowing or canoeing ○ Transport by boat ○ Producing hydroelectric energy ○ Creating reservoirs for storing water ● Provide an example such as the River Thames in London, where boats transport people and visitors along the river. Explain that rivers are also important for wildlife. ● Example: Fish such as salmon rely on clean rivers to survive and reproduce. If rivers become polluted, wildlife can be harmed. ● Check understanding: ● True or False: It is important to keep rivers clean. ● Discuss why this is important. ● Correct explanation:Clean rivers protect wildlife and ecosystems. ● Ask chns to work with a partner and explain why rivers are important for people and wildlife. Encourage pupils to identify at least three reasons. ● Examples may include:	● Reservoir ● Hydroelectricity ● Source. ● Mouth ● Tributary ● Drainage basin ● Confluence

		○ Rivers provide water. ○ Rivers support wildlife. ○ Rivers allow transport and activities. ● Explain that rivers drain water from the land. When rain falls, the water eventually travels to rivers and then to the sea or a lake. However, most rain does not fall directly into rivers. Most rain falls on the land surrounding the river. Water can reach the river in three ways: ○ 1. Direct rainfall into the river. ○ 2. Surface runoff – water flowing across the land, especially on steep slopes or rock. ○ 3. Infiltration – water soaking into soil and slowly travelling underground towards the river. ● Explain that rivers therefore collect and transport water across the landscape. ● Check understanding: ● True or False: All rainwater sinks into the soil. ● Correct explanation: Some water flows over the surface, particularly on steep slopes or bare rock. ● Share the following statements and in pairs, chn to: What is incorrect about each statement / What the correct explanation should be. ○ 1. Water travels from the sea to the mountains. ○ 2. Most rainwater falls directly into rivers. ○ 3. All rainwater sinks into the soil. ● Clarify: ○ Rivers flow from mountains or hills to the sea or lake. ○ Most rain falls on land, not directly into rivers. ○ Some rain flows across the surface, while some soaks into soil. ● Introduce a diagram of a river system. ● Explain the key features: ○ Source ■ The beginning of the river. ■ Often located in mountains or hills. ○ River ■ The main flow of water moving towards the sea. ○ Tributary ■ A smaller river or stream that joins the main river. ○ Confluence ■ The point where two rivers meet. ○ Drainage Basin ■ The entire area of land where rainfall drains into the river system. ○ Mouth ■ Where the river flows into a sea or lake. ● Explain that as tributaries join the river, the river becomes larger and stronger. ● Task: chn are to write about the river.	

		● They must: ○ 1. Label the following features: ○ Source ■ Mouth ■ Tributary ■ Confluence ■ Drainage basin ○ 2. Write a short explanation for each feature. ○ Example sentence: ■ The source is where the river begins in the hills or mountains. ■ A tributary is a smaller river that joins the main river. ● Plenary ● Review the key learning. ○ Where does a river start? ○ Where does a river end? ○ What is a tributary? ○ What is a drainage basin? ○ How do rivers drain the land? ● By the End of the Lesson, Children Will Be Able To ○ Explain why rivers are important for humans and wildlife. ○ Describe how rivers drain water from the land. ○ Identify key features of a river system, including source, mouth and tributary. ○ Understand that rainfall flows over land or through soil before entering rivers. ○ Use geographical vocabulary to describe a river system.	
2	To describe processes happening in a river and the landforms that they create OA lesson 2 Identify river landforms using photographs and diagrams.	● Revisit learning from Lesson 1: key features of a river system. ● Ask: ○ 1. Where does a river start? ○ 2. Where does a river end? ○ 3. What is a tributary? ○ 4. What happens to rainfall in a drainage basin? ● Think–Pair–Share: “If a small grain of sand was dropped into a river, what might happen to it?” ● Take brief feedback and introduce the three processes: ○ It may be moved along (transportation) ○ It may scrape the riverbed/banks (erosion) ○ It may be dropped when the river slows (deposition) ● Explain that moving water has energy. The faster and deeper the river, the more energy it has, and the more material it can move. ● Explain that rivers carry material in different ways: ○ Floating (lighter materials carried on the surface) ○ Bouncing along the riverbed (medium-sized material)	Erosion Transportation. Deposition Landform Meander Floodplain Estuary Waterfall Confluence

		○ Rolling along the riverbed (larger/heavier stones) ○ Dissolved material (e.g., salts that cannot be seen) ● Explain: when the river slows, it loses energy and can no longer carry as much material. The material is deposited (dropped), often forming areas of sand or silt. ● Ask: ○ Where might a river slow down? (e.g., wider areas, shallower areas, near the mouth) ● Explain: transported material scrapes the riverbed and banks, wearing them away. Larger, faster rivers cause more erosion because they carry more material and have greater force. ● Ask: ○ Why do larger rivers erode more than smaller rivers? Expected idea: more energy + more transported material → greater scraping and force. ● Introduce that river processes create landforms. ● Waterfall: Explain formation: ○ River flows from hard rock to soft rock ○ Soft rock erodes faster ○ A steep drop/cliff forms ○ Water flows over the drop, forming a waterfall ○ Ask: Why does the soft rock create a cliff? (It erodes faster than hard rock.) ● Meander Define: a bend in a river. ○ Explain: ○ Outside of bend = deeper, faster flow → erosion ○ Inside of bend = shallower, slower flow → deposition ○ Ask: Where does erosion happen on a meander? (Outside bend.) ● Floodplain Define: flat land on either side of the river that can flood. ○ Explain that during heavy rain the river may overflow its banks and flood the floodplain. ● Estuary Define: at the mouth of the river where fresh water meets and mixes with salt water. ● Provide four photographs/diagrams. Chn to: ○ 1. Match each landform: waterfall, meander, floodplain, estuary ○ 2. Write one clear sentence for each describing: ■ what it is ■ which process/processes are involved (erosion, transportation, deposition) ■ Example sentence stem: ■ “A _____ is formed when _____ happens, causing _____.” ● Plenary) ● Retrieval Quiz (oral or mini whiteboards): ○ 1. Define erosion. ○ 2. Define deposition. ○ 3. Which process moves material along the river? ○ 4. Where does erosion occur on a meander? ○ 5. What is an estuary?	

		• Finish with the summary statement (pupils complete): “Rivers shape the land by _____, _____ and _____, creating landforms such as _____, _____, _____ and _____.”
		• By the end of the lesson, pupils will:
		  ○ Define and use the terms erosion, transportation, deposition and landform.
		  ○ Explain that rivers erode, transport and deposit material.
		  ○ Describe how material can be transported by a river (e.g., floating, rolling, bouncing, dissolved).
		  ○ Identify and describe key river landforms: waterfall, meander, floodplain, estuary.
		  ○ Explain how landforms are created by river processes.	

3	To describe changes in a river and its landforms as it flows along its course.
	OA lesson 3
	
	Use maps and diagrams to understand river processes and changes.
		• Revisit Lesson 2 learning: river processes and landforms.
		• Ask chn to define and give an example of:
		  ○ Erosion (wearing away)
		  ○ Transportation (moving material)
		  ○ Deposition (dropping material)
		  ○ Landform (feature created by processes)
		• Ask:
		  ○ 1. Which process wears away the riverbed and banks?
		  ○ 2. Which process moves sand, mud and rocks along the river?
		  ○ 3. What happens when a river slows down?
		• Display a river course diagram divided into upper, middle and lower course.
		• Ask:
		  ○ Where is the source?
		  ○ Where is the mouth?
		  ○ Which direction is downstream?
		  ○ True or False: The upper course is close to the sea. Correct: False (the lower course is close to the sea).
		• Explain that rivers change as they travel downstream. Key changes:
		  ○ Rivers become wider and deeper towards the mouth.
		  ○ On average, rivers become faster downstream.
		  ○ Rocks become smaller and rounder downstream.
		• Ask:
		  ○ Why does a river get bigger?
		• Explain that rivers grow because:
		  ○ Tributaries join the main river, adding more water.
		  ○ Water also joins through soil and rock (groundwater movement).
		• Use an image of a tributary joining a main river to show how the river becomes wider after the confluence.
		• Ask:
		• Rivers get bigger downstream because:
		  ○ A) The sea erodes the river
			Course
			Downstream
			Tributary
			Landform
			Upper course
			Middle course
			Lower course

		○ B) People make rivers bigger ○ C) More water joins from tributaries, soil and rock ○ Correct: C ● Show (or describe) two contrasting examples: ○ A river near its source ○ A river further downstream ● Chn to discuss: ○ Which one is wider? ○ Which one is deeper? ○ Which one is faster? ● Explain: Rivers are usually narrower, shallower and slower near the source; wider, deeper and faster further downstream. ● Explain:As material is transported, rocks collide and scrape, causing erosion. Over time they become: ○ smaller ○ rounder ○ and may become sand/sediment near the mouth. ● Ask: ○ As rivers erode rocks, they become: ○ A) smaller and rounder ○ B) larger and rounder ○ C) larger and more angular ○ Correct: A ● Provide three statements. Chn to choose who is correct: ○ Rivers get bigger and slower downstream. ○ Rivers get smaller and faster downstream. ○ Rivers get bigger and faster downstream. ● Correct idea: Rivers are generally small near the source and become bigger and faster downstream. ● Revisit key landforms from Lesson 2 and locate them along the river course. Explain typical locations: ○ Waterfalls – usually found in the upper course. ○ Meanders – more common in the middle and lower course. ○ Floodplains – found in the middle and lower course. ○ Estuaries – found at the mouth (lower course) where river meets sea. ● Ask: ○ 1. Where are waterfalls usually found? (Upper course) ○ 2. Where is the estuary located? (At the mouth) ● Task: River Course Table + Landform Matching ● Chn complete a table with three rows:	

		• Upper course
		  ○ Write one sentence describing:
		  ○ size (narrow/shallow)
		  ○ speed (slow)
		  ○ rock material (large rocks)
		• Middle course
		  ○ Write one sentence describing:
		  ○ size (wider/deeper)
		  ○ speed (faster)
		  ○ rock material (smaller rocks/sediment)
		• Lower course
		  ○ Write one sentence describing:
		  ○ size (very wide/deep)
		  ○ speed (fast, then slows near sea)
		  ○ rock material (very small sediment/sand)
		• Then chn match landforms to the correct part of the river course:
		  ○ Waterfall → Upper course
		  ○ Meander → Middle / Lower course
		  ○ Floodplain → Middle / Lower course
		  ○ Estuary → Lower course (mouth)
		• Plenary
		• Pupils complete the summary: "As a river flows downstream, it becomes _____ and _____. The rocks become _____ and _____. Waterfalls are usually found in the _____ course and an estuary is found at the _____."
		• Expected answers:
		  ○ wider, deeper (and faster)
		  ○ smaller, rounder
		  ○ upper
		  ○ mouth
		• By the end of the lesson, pupils will:
		  ○ Define the course of a river and explain downstream direction.
		  ○ Identify the upper course, middle course and lower course of a river.
		  ○ Describe how a river changes as it flows downstream (size, speed, material).
		  ○ Explain why rivers become wider and deeper downstream (tributaries and water joining through soil/rock).
		  ○ Describe how rocks become smaller and rounder downstream due to erosion.
		  ○ Identify where key river landforms are usually found along the river course.	

4	To explain the reasons why rivers flood.	• Revisit Lesson 3: how rivers change from source to mouth. • Ask: ○ 1. What are the three parts of a river's course? (Upper, middle, lower)	Bank Bed Drainage basin

	OA lesson 4 Use maps and diagrams to understand river processes and changes.	○ 2. What happens to a river as it flows downstream? (Wider, deeper, faster) ○ 3. Name one landform found in the upper course and one found in the lower course. ○ 4. What is a floodplain? ● Clarify: floodplains are the flat areas beside rivers and are the first areas to flood. ● Show an image of a flooded river. ● Ask: ○ What can you see? ○ What might have caused the river to overflow? ● Introduce definition:A river floods when it cannot hold all the water entering it from tributaries, soil and rock. ● Ask: ○ What is a flood? ● Use a cross-profile diagram (river channel, bed and banks). Explain: ○ The banks are the sides of the river. ○ Flooding occurs when water rises above the top of the banks. ● Ask: ○ A river floods when water goes over the top of its: ○ A) bed B) banks C) mouth ○ Correct: B) banks ● Explain that storms can cause flooding because: ○ Large amounts of water enter the river from tributaries and surface runoff. ○ Water level rises quickly and may overflow the banks. ● Explain that steep slopes increase flood risk because: ○ Rainwater runs quickly downhill into the river. ○ Water reaches the river rapidly, increasing the river level. ● Explain that trees can reduce flooding because: ○ Water soaks into soil and is taken up by roots. ○ Trees collect and store water, reducing surface runoff ● Ask: ○ Trees reduce flood risk because: ○ A) They speed up water reaching the river ○ B) They collect and store water so less reaches the river quickly ○ C) They soak water from the river ○ Correct: B ● Explain: ○ Urban areas have hard surfaces (concrete/tarmac). ○ Rainwater cannot soak into soil. ○ Water flows quickly into drains and then into rivers. ○ River levels rise rapidly, increasing flood risk.	Floodplain Deforestation Storm

		● Ask: ○ Building towns and cities increases flood risk because: ○ A) Water is stored by drains ○ B) Water is stored by buildings ○ C) Water is moved quickly to the river by drainage systems ○ Correct: C ● Explain that towns and cities have expanded over time. ● As urban areas grow, there is: ○ more concrete ○ more roads and buildings ○ less ground to absorb water ○ greater flood risk. ● Explain: Cutting down trees means less water is absorbed and stored in soil. More rainfall runs over the surface into rivers. River levels rise faster, increasing flood risk. ● Ask: ○ Deforestation increases flood risk because: ○ A) Soil stores more water ○ B) There are fewer trees to collect and store rainwater ○ C) It creates new rivers ○ Correct: B ● Task: Provide a photograph of a river in a valley with signs of human settlement. ● Chn identify two reasons why the river may flood, choosing from: ● Natural causes ○ heavy/long-lasting rainfall ○ steep slopes (fast runoff) ○ river already close to top of banks ● Human causes ○ deforestation (fewer trees to absorb water) ○ buildings and roads (hard surfaces increase runoff) ● Example sentence stems: ○ “This river may flood because…” ○ “A natural reason is…” ○ “A human reason is…” ● Plenary ● Ask: ○ 1. What is a river flood? ○ 2. Name one natural cause of flooding. ○ 3. Name one human cause of flooding. ○ 4. What is the name for the flat area beside a river that often floods?	

		• Finish with summary statement: "Rivers flood when _____."
		• By the end of the lesson, pupils will:
		  ○ Define what a flood is in relation to a river's banks.
		  ○ Explain that flooding happens when a river cannot hold all the water entering it.
		  ○ Identify and explain natural causes of flooding, including heavy rainfall and steep slopes.
		  ○ Identify and explain human causes of flooding, including urban surfaces and deforestation.
		  ○ Use key vocabulary accurately to explain why rivers flood.	

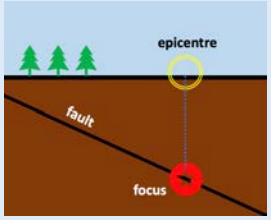
5	To locate different rivers in the UK on a map and describe the features found along the River Severn.
	• Lesson 5 OA
	
	Use photographs and geographical diagrams to explain physical processes (erosion, transport, deposition).
		• Revisit Lesson 4: causes of river flooding.
		• Ask
		  ○ 1. What is a flood? (When water rises over the river's banks.)
		  ○ 2. Name one natural cause of flooding. (Heavy/long-lasting rainfall; steep slopes.)
		  ○ 3. Name one human cause of flooding. (Urban surfaces/drainage; deforestation.)
		  ○ 4. What is a floodplain?
		• Explain that rivers are linked to settlement and land use, and that today's lesson focuses on UK rivers and map location skills.
		• Display a UK map with major rivers shown as blue lines.
		• Ask
		  ○ What does the colour blue usually represent on a map?
		  ○ What do you notice about where rivers begin and where they end?
		• Clarify: Rivers are drawn as blue lines and many flow towards the sea.
		• Show a relief map and explain:
		  ○ High land is shown in brown/orange colours.
		  ○ Low land is shown in green.
		  ○ River sources are usually in high land; river mouths are usually in low land.
		• Ask:
		  ○ The source of a river is found:
		  ○ A) at the sea B) in an area of high land C) where two rivers join
		  ○ Correct: B
		• Explain why many towns and cities are built near rivers:
		  ○ access to water
		  ○ transport and trade
		  ○ flat land on floodplains (easier to build on)
		• Ask:
		  ○ Many towns and cities are built near rivers because:
		  ○ A) rivers are always in flat areas
		  ○ B) rivers can be used to transport people and goods
		  ○ Correct: B
		• Share the following information:
		  ○ River Severn – longest river in the UK; flows through Wales and England.
			Source
			Mouth
			River Severn
			Tributary
			Estuary

		○ River Thames – longest river flowing entirely in England; passes through London. ○ River Tay – longest river in Scotland. ○ River Bann – longest river in Northern Ireland. ● Chn to use an atlas to: ○ 1. Locate and label on a UK outline map: ○ River Tay ○ River Thames ○ River Severn ○ River Bann ● Explain that the River Severn begins at its source in the Cambrian Mountains (high land). Introduce OS map features used to identify high land: ○ height numbers (metres above sea level) ○ contour lines close together (steep slopes) ● Describe a key upper-course feature: "The Severn Breaks Its Neck" – a waterfall approximately seven kilometres from the source. ● Explain: As the Severn flows downstream it becomes larger and begins to meander. Settlements such as Shrewsbury are found along the river. ● The Severn Estuary forms where fresh river water meets salt water from the sea. The river becomes very wide in the estuary. ● Task: chn to create a storyboard (sequenced boxes) showing the River Severn from start to end. ● Storyboard must include: ○ 1. Source in the Cambrian Mountains (high land) ○ 2. Waterfall "The Severn Breaks Its Neck" (upper course) ○ 3. Meanders further downstream ○ 4. Shrewsbury (settlement along the river) ○ 5. Severn Estuary (fresh water meets salt water) and the river reaching the sea ● Each box includes: ○ a labelled drawing ○ one sentence describing the stage using vocabulary ● Sentence stems: ○ "At the source…" ○ "Further downstream…" ○ "Near the mouth…" ● Plenary ○ 1. Name two rivers found in different UK nations. ○ 2. Where is the source of a river usually found: high land or low land? ○ 3. What is an estuary? ○ 4. Name two features found along the River Severn. ● By the end of the lesson, pupils will:	

		○ Locate major rivers in the UK on a map (Tay, Thames, Severn, Bann). ○ Identify that rivers generally begin in high land at the source and flow towards lower land at the mouth. ○ Describe key physical and human features along the River Severn, including: source in the Cambrian Mountains waterfall “The Severn Breaks Its Neck” (upper course) meanders further downstream settlement at Shrewsbury Severn Estuary (where fresh water meets salt water)	
6	Synoptic Task	● How does a river change from its source to its mouth?	

	Autumn 2	Vocabulary	Spring	Vocabulary	Summer	Vocabulary
Year 3	**Volcanoes and Earthquakes** In this unit, pupils will: Learn what a volcano is and its structure as well as the different categories of volcanoes. They will learn how and why volcanoes erupt linking their understanding of plate tectonics and the makeup of the subterranean earth to understand why earthquakes occur and how scientists measure and study them.	• inner core • outer core • mantle • crust • continental • oceanic • magma (chamber) • molten rock • (secondary) vent, • crater • pressure • lava • viscous • solidifies • active • dormant • extinct • earthquake • tremors • aftershocks • tectonic plates • plate boundary • fault line • epicentre • seismic waves • tsunami • focus • seismograph • seismogram • magnitude • richter scale • rubble • landslides • withstand • natural disaster • prevalent(ce)	**Agriculture** In this unit, pupils will: Learn the difference between arable and pastoral farming. They will learn how farmers have transformed the land to make their crops grow successfully and how fertilisers and pesticides are used to ensure successful yields. They will look at case studies to deepen understanding of particular farming techniques and understand the extent to which the land of the UK is used for pastoral and arable farming.	• Farmers • Farm • Raise (rear) • Produced (produce) • Distribute • Agriculture • Arable • Pastoral • Mixed (farming) • Arable, • Pastoral • Fertile soil • harvest • crops • plough(ed) • Livestock • graze • Herd(ing) • Dairy • Marshland • Forest • Hedges • Clearing • Draining • yields • fertilizers • pesticides • organic • manure • seasonal • locally-sourced • increasing population • flock • grazing • rear(ing) • sheepdog • shear(ing) • lamb / ewe / ram • pasture	**Climate and biomes** In this unit, pupils will: Learn what climate zones are and where the main climate zones of the world are located. Read and interpret climate graphs to identify patterns in temperature and rainfall. Identify the difference between climate zones and biomes. Learn how plants and animals adapt to survive in different biomes around the world. Identify changes in climate can affect living things and environments. Explain how climate influences the way people live in different parts of the world.	• Latitude • Temperature • Location • Climate zone • Altitude change • Climate graph • Data • Horizontal axis • Vertical axis • Temperature • Rainfall • Climate • Climate zone • Biome . • Vegetation belt • Species • Biome • Adapt • Interdependent • Environment • Drought • Species • Greenhouse gases • Greenhouse effect • Global warming • Climate change • Drought • Heat wave • Habitat • Climate crisis

Synoptic Task (x2): How are volcanoes similar and different? How do earthquakes affect people and the environment?			
Lesson number	Learning objective	Pupils will:	Vocabulary
1	To know what a Volcano is *OW Volcanoes 1&3* *Geographical skills: use maps, atlases, globes and digital/computer mapping to describe features studied.* *Use aerial photographs and plan perspectives to recognise landmarks and basic physical features.*	● Recap on how igneous rocks are formed. ● Learn about the structure, thickness and temperatures of **inner core, outer core, mantle** and **crust** of the Earth's interior and represent as a diagram (see slide 22) ● Learn that there are two types of crust: **continental** and **oceanic.** ● Learn that the **molten rock** in the mantle is called **magma**. Learn that because the crust is thin that sometimes this magma can burst through weaker points. These are volcanoes. ● Learn the structure of a volcano **(vent, secondary vent, magma chamber, crater, slope)** and represent with a labelled diagram. ● Learn that when the magma erupts from a volcano it lands on the surface, cools and forms more igneous rock on the surface (and so building the volcano up).	inner core outer core mantle crust continental oceanic magma (chamber) molten rock (secondary) vent, crater
2	To know why volcanoes erupt. *OW Volcanoes 2&4* *Use aerial photographs and diagrams to identify physical processes*	● Recap the structure of a volcano including magma chamber, vent and secondary vents. ● Learn that hot things expand. Learn that magma beneath the ground collects in magma chambers below the volcano. The more magma and heat that collects, the more **pressure** builds up until it has to flow out of the main or secondary vents. ● Learn that molten rock below the ground is known as **magma** but above the ground it is known as **lava.** ● Use images and video to review the characteristics of hot and cold lava. Learn that hot lava can be thin and runny or thick and sticky (**viscous)** and that it **flows**. Recap that lava eventually cools, **solidifies** and becomes solid (igneous) rock. ● Learn that gases cannot escape from thick viscous lava and so when volcanoes erupt with thick, viscous lava they often have very big explosions. Use case studies (i.e. Mount Vesuvius in 79AD) ● Learn that some volcanic eruptions can be quite gentle because the lava is not as viscous. Use video case studies such as Mt. Kilauea which has been erupting since 1983. ● Learn that some volcanoes are **active,** some are **dormant** and some are **extinct**. ■ Active volcanoes are volcanoes that have erupted recently and are likely to erupt again. ■ Dormant means sleeping. Dormant volcanoes are currently inactive but might erupt again. ■ Extinct volcanoes are unlikely ever to erupt again.	pressure lava viscous solidifies active dormant extinct

		Use Reading lessons to explore case studies from the Opening Worlds booklet chapter 4-6 as comprehension activities.	
3	*Synoptic Task*	How are volcanoes similar and different?	
4	To know why Earthquakes occur *OW Earthquakes 2&3* *Geographical skills: use maps, atlases, globes and digital/computer mapping to describe features studied.*	• Read first hand account of being in an Earthquake (slide 1) and learn the vocabulary **earthquake, tremors, aftershocks.** • Recap on the structure of the Earth from lesson 1. • Learn that the crust is made up of pieces called **tectonic plates.** Use a map to see these. • Learn that that when the molten rock in the mantle moves this can sometimes cause the tectonic plates to move. • Learn that where two tectonic plates meet, this is known as a **plate boundary.** These can be both underwater and on land. • When these two plates move past each other or bump into each other earthquakes occur(Use lesson 3 Slide 8-18. • Learn that a **fault line** is where Earthquakes could occur on a plate boundary. (i.e. where plate boundaries move away from each other these are not fault lines). • Use the map to pose questions such as When there is an Earthquake in New Zealand why is it not also felt in the United Kingdom?. • Use the activity slide 21-24 (lesson 3) for children to demonstrate understanding where Earthquakes are likely and unlikely to occur.	earthquake tremors aftershocks tectonic plates plate boundary fault line
5	To know that Earthquakes have different strengths. *OW Earthquakes 4* *Geographical skills: use maps, atlases, globes and digital/computer mapping to describe features studied.* *Geographical skills: present physical features of geography using data/graphs (Not local area)*	• Recap that earthquakes occur near plate boundaries when two plates move past each other or bump into each other. This can be under the sea or on land. • Use the case study of the 2004 Indonesian Earthquake to understand the terms **epicentre** and **seismic waves** and how this is represented in a diagram. Demonstrate the epicentre on a plate boundary. Learn that the closer to an epicentre the stronger the earthquake will feel; the further away the less strong the effects. • Learn that an earthquake below the water causes a **tsunami.** Use animation NOAA Tsunami Animationto demonstrate. (Do not use genuine video footage as per Opening Worlds suggestion). • Learn that the **focus** of the Earthquake is where the earthquake starts below the ground. The epicentre is its position on the surface. • Learn that the machine that measures the power of an earthquake is called a **seismograph.** This produces a **seismogram.** The power of an earthquake is called its **magnitude** • Learn the **richter scale** • Use a table of the magnitude of significant historical earthquakes to plot the information into a bar graph and create statements. 	epicentre seismic waves tsunami focus seismograph seismogram magnitude richter scale
6	What are the effects of earthquakes on human settlements	• Learn that earthquakes can reduce buildings to **rubble** and can cause **landslides.** • Explore and sort different effects that an earthquake has on **infrastructure.** (broken railway lines and roads broken water pipes, broken electricity supply) and natural landscape.	rubble landslides withstand natural disaster

	OW Earthquakes 5 & 6	• Build buildings with wire to show the effect of tremors and earthquakes (http://www.ideers.bris.ac.uk/meta/WISERScienceKit.pdf) • Use a case study (such as Japan) to learn how tall buildings are built to **withstand** earthquakes because humans are unable to prevent this **natural disaster**. Use this video link • Learn that in countries where earthquakes are **prevalent**, people are educated and practise what to do in the case of an earthquake.	prevalent(ce)
7	Synoptic Task	• Complete synoptic task: What are the effects of earthquakes on people and the environment?	

Synoptic Task: Why is farming important to human civilisations?			
Lesson number	Learning objective	Pupils will:	Vocabulary
1	Know what agriculture is *OW Agriculture 1*	● Learn that many of the food products that they see in the supermarkets come from farms and that many of the other food materials are made with products that are grown on farms: ○ bread, meat, milk, rice, apples, cheese etc. ● Learn that many foodstuffs are not taken to the supermarkets straight away but are instead **processed** before being **distributed.** ○ Milk, apples, rice are cleaned, washed and packed. ● Learn that the work of farmers is known as **agriculture** and use photographic evidence and "interview" evidence to learn the types of tasks that farmers do: ○ feeding and caring for animals. ○ milking cows ○ shearing sheep ○ wrapping up hay for animals to eat. ○ checking the barley and wheat have enough water to grow. ● Learn the difference between **arable, pastoral** and **mixed** farming. ● *By the end of the lesson, pupils will:* ○ *Know the key features of arable farming* ○ *Know the key features of pastoral farming* ○ *Know the definition of agriculture.*	Farmers Farm Raise (rear) Produced (produce) Distribute Agriculture Arable Pastoral Mixed (farming)
2	To know the difference between arable and pastoral farming *OW Agriculture 2 & 3* *Use photographs and maps to identify land use*	● Recap on the difference between **arable** and **pastoral** farming. ● Learn that for **crops** to grow successfully, arable farms need: ○ **fertile soil** ○ flat land (so that it is suitable for machinery to **plough** and **harvest** the crops. ○ soil that is neither too wet nor too dry ○ a **climate** that is warm, not very, very cold. ○ sheltered from strong wind ● Learn that for **livestock** farming the land does <u>not</u> need: ○ to be **fertile** as grass will grow in poor soil (perfect for **grazing** animals) ○ flat land as animals can walk up and down hillsides ○ animals can be moved inside in the cold winters and have natural coats to protect them. ● Learn some of the products that are obtained from pastoral farming: ○ meat from sheep (lamb) cows (beef) and pigs (pork, bacon) ○ leather from hides of cows. ○ wool from sheep ● *By the end of the lesson, pupils will:* ○ *know that the landscape determines the type of agriculture that can take place.*	Arable, Pastoral Fertile soil harvest crops plough(ed) Livestock graze Herd(ing) Dairy

		○ *know that arable farming needs fertile soil.* ○ *know the products that are obtained from pastoral farming.*	
3	To know how farming changes the landscape *OW Agriculture 4* *Use photographs and maps to identify land use*	● Recap on the type of land suitable for arable or pastoral farming. ● Learn that humans have learned how to **drain marshland** to make it suitable for farming. Use photographic and aerial imagery to show examples. ● Learn that **forests** need to be **cleared** in order to make it suitable for farming. Use photographic and aerial imagery to show examples. ● Learn that farmers use **hedges** and **dry stone walls** to divide up the land and to protect their **crops** from strong winds. Use photographic and aerial imagery to show examples. ● Understand that these choices humans make change **habitats** and will affect the animals which live there. ● *By the end of the lesson, pupils will:* ○ *Explain different ways that landscapes can be changed to enable farming.*	Marshland Forest Hedges Clearing Draining
4	To know how our food choices affect farmers OW Agriculture 5 Analyse case studies of farming practices.	● Recap on what arable land requires to grow crops successfully. ● Learn that people's food preferences determine what crops a farmer chooses to grow because farmers want and need to make money. ● Learn that an **increasing population** needs an increasing amount of food to eat. ● Learn that farmers want to increase their **yields** so that there is more food for us to buy and more money for them to make. ● Learn that to increase their yields, farmers may choose to: ○ buy, clear, prepare more land to grow crops in. ○ use **chemical fertilisers** to encourage crops to grow bigger, stronger and faster (so that more survive). ○ use **chemical pesticides** to prevent insects from eating their crops (pests). ● Learn that some people want to buy **organic** food because they do not want to eat food that has been grown using **chemicals**. Often this food is more expensive because it is harder to grow. ● Learn that some farmers use **manure** as an **organic** fertiliser. ● Using apples as a case study learn that food that is **seasonal** in this country needs to be transported thousands of miles from another part of the world if people want to buy it at other times of the year. and that some people prefer to buy only food that is **locally-sourced.** ● *By the end of the session, pupils will:* ○ *know why some farmers choose to use chemical fertilisers* ○ *know why some farmers choose to use chemical pesticides* ○ *understand what locally sourced and organic means.*	yields fertilizers pesticides organic manure seasonal locally-sourced increasing population
5	To know how pastoral farmers operate OW Agriculture 6 Use data and geographical	● Recap on the difference between arable and pastoral farming. ● Use a case study to look closely at a sheep farm operation. ● Use data to look at the proportion of sheep farming in the UK as a whole and or within one of the home nations. ● Learn that farmers use **rams** and **ewes** to breed more sheep. ● Learn the role of a sheepdog in **herding** and protecting the **flock**	flock grazing rear(ing) sheepdog shear(ing) lamb / ewe / ram

	evidence to explain food production.	• Use video and photo footage to learn that **shearing** is the process by which wool is obtained from sheep and is necessary to ensure the sheep don't overheat in the summer and protects them from insect-borne illness. • Learn that sheep can spend winters on lower fields to protect them from the cold winters and that in the spring they are moved inside so that they can give birth to lambs. This is known as the **lambing season.** Use interview evidence to learn that lambing season places intensive burdens on farmers. • Learn that lambs are also **slaughtered** to provide meat.	pasture
6	Synoptic Task	• Why is farming important to human civilisations?	

Year 3 -Summer– Biomes and Climate

Synoptic Task: How does the climate affect a place and the way that people live?			
Lesson number	Learning objective	Pupils will:	Vocabulary
1	*To understand what the main climate zones are and describe where they are found using lines of latitude* OA Lesson 1 Use maps and lines of latitude to locate climate zones.	● Ask chn: ○ 1. Where are the hottest places on Earth usually found? ○ 2. Where are the coldest places on Earth usually found? ○ 3. What do we call the imaginary line around the middle of the Earth? ● Clarify: ○ The Equator receives the most direct sunlight. ○ The poles receive less direct sunlight and are colder. ● Explain that today pupils will learn how geographers use lines of latitude to locate the main climate zones of the world. ● Show a world map and ask ○ Why do you think places near the Equator are usually hotter? ○ Why are places near the North Pole and South Pole colder? ● Explain that climate is the average weather over a long period of time (about 30 years). Places with similar climate are grouped into climate zones. ● Introduce the five main climate zones: ○ Equatorial climate zone ○ Tropical climate zone ○ Desert climate zone ○ Temperate climate zone ○ Polar climate zone ● Explain that climate zones cover large areas of the world and may include many countries. ● Check understanding: ● True or False: ○ Every country has its own unique climate zone. ○ Correct answer: False ● Reason: Climate zones can cover large areas and include several countries. ● Explain the five main lines of latitude: ○ Equator ○ Tropic of Cancer ○ Tropic of Capricorn ○ Arctic Circle ○ Antarctic Circle ● These lines help geographers describe the location of climate zones. ● Quick check: ○ The Arctic Circle is: ○ A) an ocean	Latitude Temperature Location Climate zone Altitude

		○ B) a pole ○ C) a line of latitude ○ Correct: C ● Explain the following climate zones ○ Equatorial Climate Zone ■ Found around the Equator ■ Hot and wet all year ○ Tropical Climate Zone ■ Found between the Tropic of Cancer and Tropic of Capricorn ■ Hot with wet and dry seasons ○ Desert Climate Zone ■ Found north and south of the tropics ■ Very dry and very hot during the day ○ Temperate Climate Zone ■ Found between the tropics and polar regions ■ Moderate temperatures and changing seasons ○ The UK is in this climate zone ■ Polar Climate Zone ■ Found near the Arctic and Antarctic Circles ■ Very cold and dry ● Check understanding: Which climate zone is the UK located in? ○ A) Equatorial ○ B) Tropical ○ C) Temperate ○ D) Arctic ○ Correct: Temperate ● Task A ● Part 1: ● Match the labelled letters on a map to the correct lines of latitude: ○ Equator ○ Arctic Circle ○ Antarctic Circle ○ Tropic of Cancer ○ Tropic of Capricorn ● Part 2: ○ Shade the five main climate zones on the world map and complete the key. ● Explain: Temperature changes depending on distance from the Equator. ○ Places near the Equator receive more direct sunlight → hotter temperatures. ○ Places far from the Equator receive less direct sunlight → cooler temperatures. ● Example comparison:	

		○ Equatorial climate zone → higher temperatures ○ Polar climate zone → lower temperatures ● Additional Factor: Altitude Explain that altitude also affects temperature. ○ Higher altitude = colder temperatures ○ Mountains often have snow at the top even in warm climate zones. ● Example: Mount Kilimanjaro ○ Located near the Equator (hot region) ○ Has snow at the top because it is very high above sea level. ● Task B ● Look at a photograph of Mount Kilimanjaro. ● Pupils answer: ○ 1. Describe the conditions at the top of the mountain. ○ 2. Explain why these conditions are different from the land around it. ● Expected ideas: ○ Snow at the top means temperatures are cold. ○ The mountain has a high altitude, which makes it colder. ○ The surrounding area is hot because it is near the Equator. ● Plenary ● Quick recap questions: ○ 1. What is a climate zone? ○ 2. Which line of latitude runs around the middle of the Earth? ○ 3. Which climate zone is the UK in? ○ 4. Why can mountains near the Equator still have snow? ● By the end of the lesson, pupils will: ○ Explain what a climate zone is. ○ Identify the five main climate zones of the world. ○ Use lines of latitude to describe where climate zones are located. ○ Explain how distance from the equator affects temperature. ○ Understand that altitude can also affect temperature	
2	To read information from climate graphs and identify patterns in climate data read information from climate graphs and identify patterns in data OA Lesson 2	● Revisit Lesson 1: climate zones and latitude. ● Ask: : ○ 1. What is a climate zone? ○ 2. Name one of the five main climate zones. ○ 3. Which climate zone is the UK located in? ○ 4. What line of latitude runs around the middle of the Earth? ● Show a simple bar graph comparing objects. ● Ask: ○ What information is this graph showing? ○ Which object is the longest? ○ Which is the shortest?	Climate graph Data Horizontal axis Vertical axis Temperature Rainfall

		• Explain: Graphs help us present data clearly and spot patterns easily.
		• Explain that a climate graph shows information about weather conditions over time. A climate graph usually shows:
		  ○ Temperature – shown by a line graph
		  ○ Rainfall – shown by bars
		• Explain how the graph works:
		  ○ Horizontal axis → months of the year
		  ○ Left vertical axis → temperature in °C
		  ○ Right vertical axis → rainfall in mm
		• Check understanding: Which of the following shows how weather conditions change over time?
		  ○ A) Thermometer
		  ○ B) Climate graph
		  ○ C) Weather forecast
		  ○ Correct answer: B
		• Task A: Pupils label the axes of a climate graph.
		• Labels:
		  ○ Month (horizontal axis)
		  ○ Temperature (°C) – left vertical axis
		  ○ Rainfall (mm) – right vertical axis
		• Then complete the sentence:
		  ○ On a climate graph:
		  ○ The red line shows _____
		  ○ The blue bars show _____
		• Expected answers:
		  ○ Temperature
		  ○ Rainfall
		• Explain that climate graphs help geographers:
		  ○ Identify patterns in weather
		  ○ Compare different locations
		  ○ Understand climate zones
		• Explain how to interpret the graph:
		  ○ Rainfall
		  ■ Shown with blue bars
		  ■ Measured in millimetres
		  ■ Taller bars = more rainfall
		  ■ Shorter bars = less rainfall
		  ○ Temperature
		  ■ Shown with a red line
		  ■ Measured in degrees Celsius
		  ■ Higher line = warmer temperatures	

		• Questions chn are to answer
		  ○ Which month is the wettest?
		  ○ Which month is the driest?
		  ○ Which month is the hottest?
		• Task B
		• Pupils study a climate graph and answer:
		  ○ 1. Which month has the most rainfall?
		  ○ 2. Which month has the least rainfall?
		  ○ 3. Which month is the hottest?
		• Expected answers (example graph):
		  ○ Wettest month → November
		  ○ Driest month → April
		  ○ Hottest month → July
		• Show two different climate graphs. Explain that different climate zones have different patterns:
		• Example:
		  ○ Location A
		  ■ Cooler temperatures
		  ■ More rainfall
		  ○ Location B
		  ■ Higher temperatures
		  ■ Less rainfall
		• Explain that climate data helps people make decisions about:
		  ○ where people live
		  ○ farming and food production
		  ○ clothing and housing
		• Give examples of adaptation:
		  ○ Inuit (polar climates): wear thick clothes to stay warm.
		  ○ Maasai people (hot climates): move to find water and land for animals.
		• Activity C
		• Chn to compare two climate graphs and decide if statements are true or false.
		• Example statements:
		  ○ 1. Both graphs show rainfall and temperature over a year.
		  ○ 2. Location B is wetter all year than location A.
		  ○ 3. The hottest month in location B is July.
		  ○ 4. The hottest month in location A is January.
		• Expected answers:
		  ○ 1. True
		  ○ 2. False
		  ○ 3. True
		  ○ 4. True	

		• Plenary - Quick quiz questions:
		  ○ 1. What does a climate graph show?
		  ○ 2. What does the red line represent?
		  ○ 3. What do the blue bars represent?
		  ○ 4. What units measure rainfall?
		  ○ 5. Why might two places have different climate graphs?
		• - By the end of the lesson, pupils will:
		  ○ Explain what a climate graph is and what it shows.
		  ○ Identify temperature and rainfall data on a climate graph.
		  ○ Use the horizontal and vertical axes to interpret climate data.
		  ○ Identify patterns such as wettest, driest and hottest months.
		  ○ Explain how climate data helps people understand different climate zones.	

3	To understand and explain the difference between climate zones and biomes
	OA Lesson 3
	Compare climate zones and biomes using maps and diagrams
		• Revisit Lesson 2: climate graphs and patterns.
		• Ask:
		  ○ 1. What does a climate graph show?
		  ○ 2. What do the blue bars represent? (Rainfall)
		  ○ 3. What does the red line represent? (Temperature)
		  ○ 4. What is climate? (Average weather over a long time)
		• Show images of animals (e.g., camel, arctic fox, grey squirrel, poison dart frog).
		• Ask:
		  ○ Which climate zone might each animal live in?
		  ○ What clues help you decide? (heat, cold, vegetation, habitat)
		• Explain that this lesson focuses on how living things relate to different environments.
		• Define a biome: A biome is a large region of the world with:
		  ○ a similar climate
		  ○ similar plants
		  ○ similar animals
		• Check understanding (multiple choice):
		  ○ Which three features are similar in a biome?
		  ○ A) rainfall, temperature and animals
		  ○ B) climate, plants and animals
		  ○ C) mountains, plants and animals
		  ○ Correct: B
		• Explain the key comparison:
		  ○ Climate zones are based mainly on weather patterns and climate.
		  ○ Biomes include plants and animals as well as climate.
		  ○ A climate zone can contain more than one biome.
		• Example given: The equatorial climate zone can include both:
		  ○ tropical rainforest biome
		  ○ savannah biome
			Climate
			Climate zone
			Biome .
			Vegetation belt
			Species

		• Provide two maps:
		• Map A: biomes
		• Map B: climate zones
		• Chn to answer
		  ○ 1. How are they similar?
		  ○ 2. How are they different?
		• Expected points:
		  ○ Both show large regions with shared features.
		  ○ Biomes include plants/animals; climate zones focus on climate.
		  ○ One climate zone can contain more than one biome.
		• Teach the six major biomes:
		  ○ Tropical rainforest
		  ○ Savannah
		  ○ Desert
		  ○ Temperate deciduous forest
		  ○ Boreal forest
		  ○ Tundra
		• Key characteristics (pupil-friendly):
		• Tropical Rainforest
		  ○ hot and wet
		  ■ very high biodiversity (many plants and animals)
		  ■ found in regions such as the Amazon, Congo Basin, SE Asia
		  ○ Savannah
		  ■ between rainforest and desert
		  ■ tall grasses, scattered trees
		  ■ animals such as elephants and giraffes
		  ○ Desert
		  ■ very dry
		  ■ little plant and animal life
		  ■ hot in the day, cold at night (in many deserts)
		  ○ Temperate Deciduous Forest
		  ■ found in parts of Europe, eastern North America, parts of Asia
		  ■ trees lose leaves in winter
		  ■ many animals and birds
		  ○ Boreal Forest
		  ■ largest land-based biome
		  ■ cold climate
		  ■ tall pine trees, often snowy conditions
		  ○ Tundra
		  ■ found in polar regions	

		■ soil frozen most of the year ■ very little vegetation ● Check for Understanding ○ True or False: ○ Very few plants and animals can live in the desert biome. ○ Correct: True ○ Justification: ○ Because deserts are very dry and have very little vegetation. ● Chn to complete the following activities ● Part 1: Match biome to fact ● Pupils match each biome to a correct fact: ○ Temperate deciduous forest → trees lose leaves in winter ○ Tundra → soil is frozen most of the year ○ Desert → too dry for most animals to survive ○ Tropical rainforest → home to half the world's plant species (large proportion) ● Part 2: Atlas skills ● Using an atlas and the biome map, pupils find one country located in each: ○ savannah ○ desert ○ temperate deciduous forest ○ tropical rainforest ● Accept a range of correct answers (examples may include Kenya, Australia, UK, Peru). ● Plenary ● Pupils complete the sentence stems: ○ 1. Climate is… ○ 2. A climate zone is… ○ 3. A biome is… ○ 4. A climate zone can contain more than one biome because… ● Expected final point: Because biomes include living things and vegetation patterns, which can vary within the same climate zone. ● By the end of the lesson, pupils will: ○ Define weather, climate, and climate zone. ○ Define a biome and explain what it includes. ○ Explain that climate zones and biomes are different. ○ Explain that a climate zone can contain more than one biome. ○ Identify and locate major biomes on a world map. ○ Describe key features of major biomes (climate and typical plants/animals). ○ Identify countries located within selected biomes using an atlas.	
4	To understand how plants and animals	● Revisit Lesson 3: climate zones and biomes. ● Ask:	Biome Adapt

	have adapted to live in different biomes. *OA Lesson 4* *Compare climate zones and biomes using maps and diagrams.*	○ 1. What is a climate zone? ○ 2. What is a biome? ○ 3. What is one difference between a biome and a climate zone? ○ 4. Name one major biome (e.g., tropical rainforest, savannah). ● Show two images side-by-side: ○ tropical rainforest (dense trees, heavy rain) ○ savannah (tall grass, scattered trees, dry season) ● Ask pupils: ○ What differences can you see in each environment? ○ What challenges might plants and animals face in each biome? ● Explain: Tropical rainforests are found near the Equator, in places such as the Amazon, the Congo Basin, and parts of South East Asia. This biome is hot and wet all year, with lots of rainfall and fairly stable temperatures. ○ Use climate graph examples: ■ Identify rainfall and temperature patterns in a rainforest location (e.g., Manaus, Brazil). ■ Explain that rainfall is high throughout the year and temperatures stay similar. ○ Plant adaptations in tropical rainforest ■ Drip tips – leaf tips that help shed water during heavy rain. ■ Buttress roots – wide roots that support very tall trees and prevent them falling. ○ Animal adaptations in tropical rainforest ■ Tree frogs – long strong legs and sticky pads to climb tall trees. ■ Sloths – long limbs and curved claws to hang and move through branches. ○ ● Explain: ○ Plants and animals rely on each other for survival. ○ Animals get food and shelter from plants. ○ Plants rely on animals for seed dispersal and nutrients. ● Check understanding (True/False): ○ There is no connection between plants and animals in the rainforest. ○ Correct: False ○ Reason: they are interdependent. ● Activity 1 – Annotating Adaptations ● Task A ● Pupils annotate images of: ○ a tree frog ○ a sloth ● Pupils add notes showing: ○ the adaptation ○ how it helps survival in the rainforest	Interdependent Environment Drought Species

		• Expected points:
		  ○ Tree frog: sticky pads, long strong legs → climbing and gripping in trees.
		  ○ Sloth: long limbs, curved claws → gripping branches and swinging/hanging.
		• Explore How plants and animals adapt to the tropical savannah
		• Explain:
		  ○ Savannahs are found near the Tropics of Cancer and Capricorn.
		  ○ They have a wet season and a dry season.
		  ○ Temperatures stay warm (approximately 15–30°C) but rainfall changes greatly through the year.
		  ○ Use climate graph examples:
		  ■ Identify a long dry period and wetter months (e.g., Livingstone, Zambia).
		  ○ Plant adaptations in tropical savannah
		  ■ Baobab trees – store water in thick trunks; roots reach deep underground.
		  ■ Grasses – grow quickly in the rainy season and stop growing in the dry season (dormant).
		  ○ Animal adaptations in tropical savannah
		  ■ Elephants – large ears help keep cool by releasing heat and providing shade.
		  ■ Rhinoceros – wide jaw helps eat large amounts of grass when food is scarce.
		• Introduce interdependence in tropical savannah
		• Explain:
		• Trees provide shade and shelter.
		• Animals help spread seeds and return nutrients to the soil.
		• Activity 2 – Interdependence Discussion
		• Show an image of animals sheltering near trees.
		• Ask Chn to explain:
		  ○ How do animals use the plants?
		  ○ How do plants benefit from animals?
		• Expected points:
		  ○ Shade and shelter for animals.
		  ○ Nutrients from waste; seeds spread by animals.
		• Main Task
		• Task B – Research a Biome - research can be given to the chn. They don’t need to search for it.
		• Chn to choose one major biome (e.g., temperate deciduous forest, desert, tundra, boreal forest, savannah, tropical rainforest).
		• They research:
		  ○ 1. Two plants found there and one adaptation each.
		  ○ 2. Two animals found there and one adaptation each.
		  ○ 3. One example of interdependence (how plants and animals rely on each other).
		• Output options:
		  ○ Fact file	

		○ Poster ○ Short written report ● Plenary ● Pupils complete: ○ 1. An adaptation is… ○ 2. Interdependent means… ○ 3. One rainforest adaptation is… because… ○ 4. One savannah adaptation is… because… ● By the end of the lesson, pupils will: ○ Define the terms biome, adapt, interdependent, and environment. ○ Describe how plants adapt to survive in the tropical rainforest biome. ○ Describe how animals adapt to survive in the tropical rainforest biome. ○ Describe how plants adapt to survive in the tropical savannah biome. ○ Describe how animals adapt to survive in the tropical savannah biome. ○ Explain what interdependence means using examples from at least one biome. ○ Carry out simple research about a biome and describe how plants and animals rely on each other.	
5	To recognise that sudden changes in climate have an effect on living things. OA Lesson 5 Interpret geographical evidence about climate change.	● Revisit Lesson 4: adaptations and interdependence. ● Ask: ○ What is an adaptation? Give an example from the rainforest or savannah. ○ What does interdependent mean? ○ Why might an animal struggle if its habitat changes quickly? ● Show one image of: ○ polar bears on ice ○ and one image of: ○ cracked dry ground / dried riverbed ● Ask: ○ 1. What is happening in each image? ○ 2. What might happen to animals or plants that live there? ○ 3. How might this link to the idea of interdependence? ● Explain key ideas clearly and in sequence: ○ 1. Human activities (e.g., burning fuels for power/heat, factories, transport) release greenhouse gases. ○ 2. Greenhouse gases build up in the atmosphere. ○ 3. This increases the greenhouse effect, warming the planet. ○ 4. Warmer temperatures cause changes to rainfall patterns and weather conditions. ○ 5. These changes across the world are called climate change. ○ 6. Climate change is happening quickly; this is called a climate crisis because living things may not adapt fast enough. ● Activity 1 – Sequencing Task	Greenhouse gases Greenhouse effect Global warming Climate change Drought Heat wave Habitat Climate crisis

		• Chn order statements (1–6) to show the correct sequence of climate change.
		• Expected order:
		  ○ 1. Human activities emit greenhouse gases
		  ○ 2. Greenhouse gases build up in the atmosphere
		  ○ 3. The planet gets warmer (increased greenhouse effect)
		  ○ 4. Temperature and rainfall patterns change around the world
		  ○ 5. Climate change happens quickly and leads to a climate crisis
		  ○ 6. If plants and animals do not adapt quickly enough, they may not survive
		• Ask chn:
		• What are the effects of climate change?
		  ○ Effect 1: Melting ice and habitat loss
		  ■ Warmer temperatures can melt ice near the poles.
		  ■ Polar animals (e.g., polar bears) lose their habitat.
		  ■ When one species struggles, others are affected because food chains and ecosystems are interdependent.
		  ○ Effect 2: Heat waves
		  ■ Heat waves can happen more often in places with normally mild summers (e.g., the UK).
		  ■ Heat waves can cause:
		  ■ rivers or lakes to dry up
		  ■ plants and vegetation to wither
		  ■ limited water supply for people
		  ■ restrictions on water use
		• Check question (True/False): A heat wave happens when temperatures suddenly drop for a short time."
		• Correct: False (temperatures rise above usual).
		  ○ Effect 3: Drought and wildfire risk
		  ■ Drought = long period with little/no rain.
		  ■ Impacts:
		  ■ water shortage for humans, animals, plants
		  ■ dry landscapes increase wildfire spread
		  ■ habitats can be destroyed and species threatened
		• Check question (True/False):
		• "A drought is the result of a long period with little or no rain."
		• Correct: True
		• Activity 2 – Cause and Effect Table
		•
		• Pupils complete a table:
		•	

<table>
<tr>
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<table>
<tr><th>Climate change event</th><th>What happens to the environment</th><th>What happens to living things?</th></tr>
<tr><td>Heat wave</td><td></td><td></td></tr>
<tr><td>Drought</td><td></td><td></td></tr>
<tr><td>Melting ice</td><td></td><td></td></tr>
</table>

Support pupils to include: habitat loss, water shortage, food supply reduced, vegetation dying.
Main Task
Task B: Climate change awareness poster
Pupils design a poster to raise awareness of climate change.
Poster must include:

1. A clear message/slogan
2. At least one effect (heat wave, drought, melting ice, habitat loss)
3. At least two actions people can take to help

Suggested actions

Walk more / drive less
Turn off lights and appliances
Reuse and recycle
Eat more plant-based meals
Take showers instead of baths
Use less water (e.g., shorter showers)

Plenary
Pupils complete an exit reflection:

1. Climate change is…
2. One effect of climate change on living things is…
3. One action I can take to help is…

By the end of the lesson, pupils will:

Define greenhouse gases, climate change, drought, and heat wave.
Explain, in a simple sequence, how human activity can lead to climate change.
Describe at least two effects of climate change on living things (e.g., habitat loss, food supply changes).
Identify how heat waves can affect water, plants, and people.
Identify how drought can affect water supply, vegetation, and risk of wildfire.
Suggest practical actions people can take to reduce the impacts of climate change.

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<td>6</td>
<td>Synoptic Task</td>
<td>How does the climate affect a place and the way that people live?</td>
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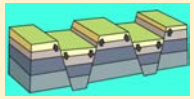
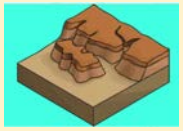
	Autumn 2	Vocabulary	Spring	Vocabulary	Summer	Vocabulary
Year 4	**Mountains** In this unit, pupils will: Learn how to discern mountains from hills both in photographs and topographical maps, label their key features and identify the world's and the UK's most prominent ranges and peaks using grid references to do so. Children will also learn the different ways that mountains are formed and the different ways that humans have settled and made use of mountains and their slopes understanding also how the temperature and climate differ at different heights.	• mountain(ous) • summit • peak • slope • foot • relief map • Ben Nevis • yr Wyddfa • Scafell Pike • Slieve Donnard • grid references • fold mountains • block mountains • dome mountains • volcanic mountains • plateau mountains • mountainous region • valley • terraces • grid reference • Alps • Himalayas • Andes • Rockies • Everest • Kilimanjaro • K2 • settlements • supplies • construction • leisure • farmlands • terraces • Pennines, • Lakeland Fells • Grampians • Cairngorns • Brecon Beacons • (Bannau Brycheeiniog) • Trekking • Mountainous region • (in)accessibility • habitats	**Coastal Processes** In this unit, pupils will: Learn how different coastal landforms are made through the processes of erosion and deposition. They will learn about the different habitats that are formed as a result of coastal processes as well as how humans have shaped the coast to enable ships to dock, tides to be managed and sand to be retained on beaches.	• Great Britain • Island • Ireland • Coastline, • Cliffs • Harbour • Sand Dunes • Salt Marshes • Waves • Eroding / Erosion • Settlements • Transportation • Groynes • Deposits/Deposition • Landform • Coastal Landform • Bay / Beach • Shingle Beach • Sand Beach • Headland • Arches • Caves • Stacks • Rock Pools • Shallow • Coral Reef • Coastal Habitat • downstream • estuary • mudflats • salt marshes • Thames Barrier • Tidal	**Population and Tourism** Children will learn: What population means and how populations are distributed across different parts of the world. Why some places are more densely populated than others. What tourism is and why people travel to different places for holidays and leisure. How tourism can have positive and negative impacts on places and environments. How tourism affects local communities, economies and landscapes. How geographers use maps, photographs and data to study population and tourism patterns.	• population • population density • settlement • tourism • tourist • attraction • environment • economy • transport • urban • rural • landscape • location • impact • sustainability

Year 4 - Autumn 1– Mountain ranges & famous mountains

Synoptic Task: How do mountains differ around the world?			
Lesson number	Learning objective	Pupils will	Vocabulary

1	To know what a mountain is
	
	Opening Worlds Mountains 1
	
	Geography Skill: use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
		• Learn that a hill is land that is higher than the land around it and that a mountain is a special type of hill that higher and steeper. A hill that is higher than 600 metres is a **mountain.**
		• Learn that the temperature falls the higher up a mountain you go. Sometimes there is snow at the top of a mountain.
		• Learn that the top of a mountain is known as the **summit.** A pointed summit is also known as a **peak** (not all mountains have peaks i.e. Table Mountain)**;** the base of the mountain is sometimes known as the **foot** and understand that a mountain has a steep **slope.**
		• Learn how mountains are formed by the movement of tectonic plates
		• Use a **relief map** of the UK with a key to identify which parts of the UK are **mountainous.** Use compass points to describe the terrain.
		  ▪ Know that Scotland and Wales are very mountainous
		  ▪ Know that the north of England is more mountainous than the south.
		• Recap (from Year 2) the highest point of each of home nations as well as their location on a map using grid references:
		  ▪ Ben Nevis (Scotland & and also the tallest in the UK
		  ▪ Snowdon (now known as Yr Wyddfa [err-Oi-th-va)
		  ▪ Scafell Pike (England)
		  ▪ Slieve Donnard (Northern Ireland)
			mountain
			summit
			peak
			slope
			mountainous
			foot
			relief map
			Ben Nevis
			yr Wyddfa
			Scafell Pike
			Slieve Donnard
			grid references

2	To know how mountains are formed.	• Recap on the volcanoes unit to remind the class what the structure of the Earth is like. Learn that there are five different types of mountains and how they are formed. • Learn that **fold mountains** are formed when tectonic plates collide together and push the rock upwards (like a concertina).  • Learn that fault **block mountains** are formed when cracks in the earth's crust cause some of the crust to be pushed up and other rocks to be pushed down. 	fold mountains block mountains dome mountains volcanic mountains plateau mountains

		• Learn that **dome mountains** are formed because molten rock under the earth pushes some of the crust upwards.  • Learn that **volcanic mountains** are formed when the lava solidifies on the slopes and plateau after an eruption.  • Learn that **plateau mountains** formed when the surrounding plateau is eroded by wind and water leaving deep valleys  .	
3	To know what a mountain range is *Opening Worlds Mountains 2* *Geographical skills: use maps, atlases, globes and digital/computer mapping to describe features studied.* *use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world*	• Recap on how to read grid references and how mountains are represented on maps. Recap on the the highest points in each of the four home nations. • Learn that a group of mountains is normally found together. These places are called **mountainous region** • Identify mountainous and non mountainous regions on various relief maps of the UK and other countries using compass points and grid references to describe their location. • Use a map to identify some of the world's major ranges e.g. Himalayas, Alps, Andes, The Rockies, and identify major mountain landmarks e,g. Everest, K2, Kilimanjaro • Learn that the lower land between two mountains is called a **valley.**	mountainous region valley terraces grid reference Alps Himalayas Andes Rockies Everest Kilimanjaro K2

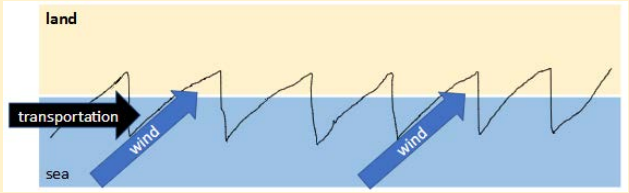
4	To know how humans have settled on mountains.
	Opening Worlds Mountains 3-4
	
	Skill: Use aerial photography to determine information
		• Recap that mountains have steep slopes, are colder nearer the top and often have snow. Consider whether this makes a suitable place to settle.
		• Consider whether cities or smaller **settlements** are found in mountainous regions.
		  ▪ Difficulty of **construction**.
		  ▪ Difficulty of **supplies.**
		  ▪ What would the roads in a mountain be like?
		• Use photographs of human settlements in the mountainous regions to ascertain why people live there:
		  ▪ Leisure - Hotels: consider why people may want to holiday on or by mountains. (i.e. Zermatt)
		  ▪ Farmlands. show both arable and pastoral farmland including **terraces**
		• Use a case study of the Andes to learn about a settlement on a mountain.
			settlements
			supplies
			construction
			leisure
			farmlands
			terraces

5	To know the mountainous regions of the UK
	
	Geography Skills: present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.
	
	Opening Worlds Mountains 5
		• Use a map to identify the names of a number of **mountainous regions** in the UK: Pennines, Lakeland Fells Cairngorms, Grampians, Brecon Beacons (Bannau Brycheiniog [Ban-eye Brock-eye-nee-og]), Snowdonia (Yr-Eryri [err-eye-ree]).
		• Represent mountain ranges on a UK map using appropriate key or shading.
		• Examine some of the activities that people like to do in these regions: **trekking**. Examine some of the dangers of trekking the mountainous regions and how people need to take precautions and appropriate equipment.
		  ▪ lack of phone/data signal
		  ▪ sudden change or inclement weather
		  ▪ **inaccessibility** for emergency services.
		• Learn how mountains are **habitats** for UK wildlife.
			Pennines,
			Lakeland Fells
			Grampians
			Cairngorns
			Brecon Beacons
			(Bannau Brycheeiniog)
			Trekking
			Mountainous region
			(in)accessibility
			habitats

Synoptic Task		***How do mountains differ around the world?***	

Why does the UK coastline look different in different places?			
Lesson number	Learning objective	Pupils will	Vocabulary

1	To know that the coastline changes due to erosion.
	
	Opening Worlds Coastal Processes 1
	
	Geography Skill: Use maps to locate coastal landforms
		• Recap on the four nations of the UK and their location on the **island** of **Great Britain** and the island of **Ireland** using the cardinal points of the compass to do so.
		• Recap on the term **coastline** from Year 2.
		• Learn that the coastline is shaped by the sea, the land and the air and results in different types of coastlines being formed, for example:
		  ○ the **cliffs** of Dover
		  ○ **beaches** of Brighton
		  ○ **salt marshes** of Norfolk.
		  ○ **sand dunes** of Formby
		• Learn that humans have learned to shape some coastlines for their own purposes for example:
		  ○ **Promenade** at Blackpool
		  ○ **Harbour** of Aberaeron
		• Learn that waves form coastlines through **erosion** (a process of crashing against rocks and flinging pebbles and rocks onto the coastline too.)
		• Use a case study (such as Holderness coast) in Yorkshire to examine the consequences of erosion on the coastline and the local **settlements.**
		• *By the end of the lesson, pupils will:*
		  ○ *be able to explain the process of erosion.*
		  ○ *know that there are different types of coastline*
		  ○ *know that erosion shapes the coastline.*
			Great Britain
			Island
			Ireland
			Coastline,
			Cliffs
			Harbour
			Sand Dunes
			Salt Marshes
			Waves
			Eroding / Erosion
			Settlements

2	To know that the coastline changes due to transportation and deposition. *Opening Worlds Coastal Processes 2* Use diagrams and photographs to identify erosion processes.	• Recap on the process of **erosion** that forms our coastlines. • Use video materials to observe the motion of the waves - how they do not move in straight lines and approach the shore at an angle. • Learn that waves **transport** material (rocks, sand and pebbles) up and down the coastline in a process known as **transportation** . This material is deposited further down the beach in a process known as deposition. Thus the shape of the coastline is changed.  • • Learn how humans attempt to slow down the process of transportation to keep sand at sandy beaches by building **groynes** (low walls that are built out into the sea). • *By the end of the lesson, pupils will:* ○ *describe the motion of waves along a coastline in pictorial form*	Erosion Transportation Groynes Deposits/Deposition

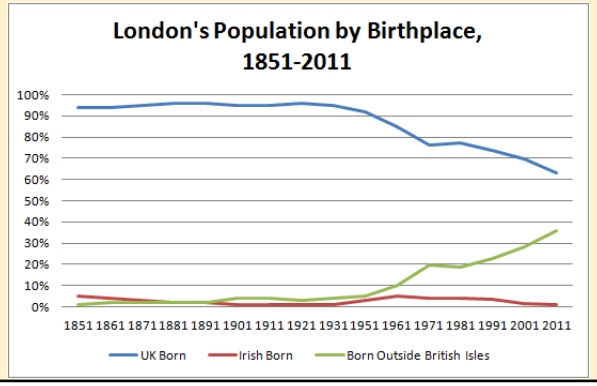
		○ *know that transportation and deposition shape the coastline.* ○ *Know that groynes are used to retain sand at some beaches.*	
3	To know the different landforms found at the coast. *Coastal Processes 3 & 4* *Use images to identify coastal features*	● Recap on how **waves** alter coastlines though the process of **erosion, transportation** and **deposition.** ● Learn the term **landform** through exemplification (e.g. a mountain is a landform, a river is another type of landform, an island is a landform). ● Learn that a **bay** is a **coastal landform** and identify bays in various maps and satellite images. ● Use photographs to identify other coastal landforms and consider how erosion and/or transportation and deposition have been instrumental in their formation. ○ **sand beach** ○ **bay** ○ **shingle beach** ○ **cliff** ○ **headland** ○ **stacks** ○ **arches** ○ **caves** ● *By the end of this lesson, pupils will be able to:* ○ *identify a bay from a map and or aerial photograph* ○ *identify different coastal landforms.* ○ *explain how these coastal landforms were formed*	Landform Coastal Landform Bay / Beach Shingle Beach Sand Beach Cliff Headland Arches Caves Stacks
4	To know the features of different coastal habitats. Coastal Processes 5 *Use images and videos to identify and compare coastal features*	● Recap on visually identifying different **coastal landforms.** ● Learn that as an **island nation**, the UK has many different coastal habitats. ● Use photographs and video evidence to observe the features of the following **coastal habitats** in the UK: ○ **sand dunes** (flora and fauna) ○ **rock pools** (flora and fauna) ● Use photographs and video evidence to observe the features of the following coastal habitats around the world: ○ **coral reef** (flora and fauna) ● *By the end of this session, pupils will:* ○ *know features of a coastal sand dune habitat* ○ *know the features of a rock pool habitat* ○ *know the features of a coral reef habitat.*	Rock Pools Shallow Coral Reef Coastal Habitat
5	To know the features of an estuary habitat. BBC Use geographical evidence to explain	● Recap on the coastal habitats learned in the previous lesson. ● Learn that rivers flow **downstream** to the sea. - follow the journey of a river to the sea. ● Learn that where the river meets the sea is known as an **estuary**. The salty ocean water mixes with the freshwater of the river. The river brings mud down to the coast and a habitat known as **mudflats** and **salt marshes** are created. ● Use photographs and aerial imagery to identify mudflats and estuaries and their features (flora and fauna)	downstream estuary mudflats salt marshes Thames Barrier tidal

	coastal change.	• Learn that estuary water levels rise and fall due to the **tides** causing the river levels to rise. Use a case study of a local tidal management system (Thames Barrier) to understand how humans manage this.	
Synoptic Task		***Why does the UK coastline look different in different places?***	

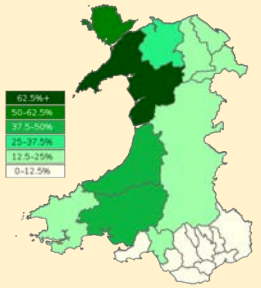
Year 4 - Summer - Population and Tourism

Lesson number	Learning objective	Pupils will	Vocabulary

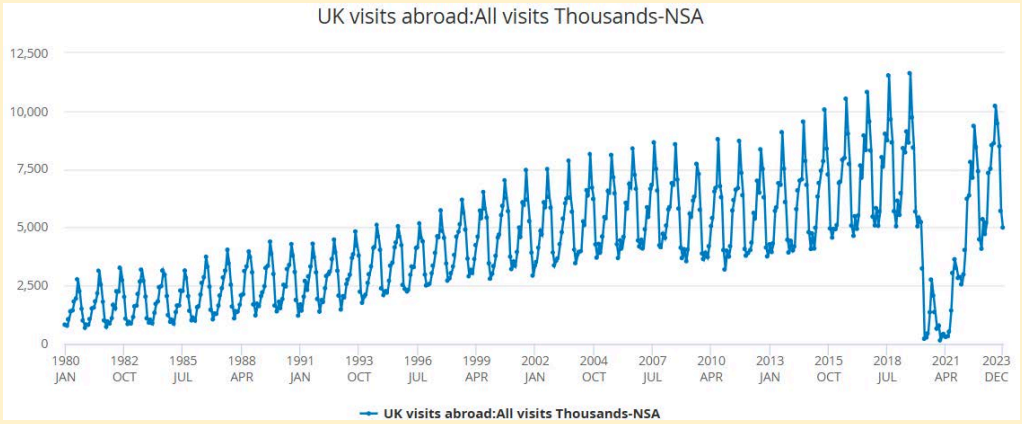
1	To know that population is used to describe the number of people
	
	OW Population 1
	
	Use data to analyse population distribution
		• Learn that population is the count of people in an area ie. population of the class, school, city, country, world.
		• Learn that the population of London is 10 million.
		• Learn that the population of UK is nearly 70 million and break this down into the four nations.
		• Learn how to calculate population density and use the terms sparsely populated and densely populated - link this to rural and urban.
		• Use the example from the booklet of Australia and the UK.
		• Use population data to generate comparative statements, graphical data of populations of different parts of the world.
		• *By the end of this session, pupils will:*
		  ○ *Be able to define population*
		  ○ *Understand how to work out population density.*
		  ○ *Use population data to make simple statements and/or graphs.*	

2	To know what is meant by ethnically-diverse *OW Population 3* *Interpret geographical data about population density.*	• Learn that every ten years adults living in the country have to answer some questions about themselves in a **census.** This gives the government **data** about its population including its **ethnicity.**. • Learn that the census in 2011 showed that the number of people in London who answered the census to say they were born outside of the UK was 37%. Over 190 different countries were mentioned - this makes London the most **ethnically diverse** city in the UK. 	

		• Use graphical data to demonstrate the **trend** in the diversity of London's population.
		• Use school photographs of John Keble to demonstrate how its population has changed.
		• Children carry out a census of the school choosing the data they wish to collect.
		• *By the end of this session, pupils will:*
		  ○ *Know how governments get data for their population.*
		  ○ *Know that London is the most ethnically diverse city in the UK*
		  ○ *Collect relevant data to conduct their own census.*	

3	To know Wales has its own distinct language and culture
	OW Population 4,5&6
	
	Use population information and geographical evidence to compare places.
		• Recap on the four nations of the UK and that the population density of Wales is more sparse than England
		• Draw comparisons. Like London, Cardiff is an ethnically diverse city with people who speak English and/or their home language.
		• Learn that the Welsh speak their own language as well as English. There is a Welsh language television station and children learn Welsh in Welsh schools. The road signs are in both Welsh and English.
		• Wales have their own parliament (like in Scotland) that allows it to make some decisions about how it runs hospitals and schools.
		• Explore the idea of identity. Many Welsh people may identify as solely Welsh, others as Welsh and British. Many people who were born in the UK but whose parents or grandparents were born elsewhere may identify as British, their home country or both. Allow the children to discuss and express their own identity.
		• Learn that some people in Wales (and in Scotland) do not identify as British and would like Wales (and Scotland) to become independent countries separate from the United Kingdom. A **referendum** was held in Scotland but less than half of the population voted for independence.
		• *By the end of this session, the children should:*
		  ○ *Be able to express some of the ways the Welsh demonstrate their own national identity.*
		  ○ *Know that some people in Wales and Scotland want their country to be independent of the UK.* 	

4	To know what is meant by Tourism Analyse impacts of tourism using geographical evidence.	• Know that someone who wants to stay away from the area they live in for at least one night is called a tourist. Tourism is the word that describes all the things that tourists do. • Use images from Wales, Snowdonia, Llandudno, Cardiff, Caenarvon, Pembrokeshire Coast to prompt the children to consider why people would go on a holiday to these places. (there should be arrange of visible activities: seaside, mountains, wildlife, historical monuments, sporting activities) • Learn that tourism is important to a country as tourists spend money creating income for local people. Tourists buy souvenirs, rent hotels, buy meals at restaurants which creates a **tourist industry.** • Learn when people go on holiday within the UK it is known as **domestic tourism.** Going **abroad** or **overseas** is how we refer to holidays in another country. • Use data in a range of forms to comment on British tourism trends. destinations for British people	



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Number of visits abroad by British people per year (in millions)						
	2009	2011	2013	2015	2017	2019
Spain	12	12	13	14	17	18
France	10	10	10	10	10	10
Italy	3	3	3	4	5	5
USA	3	4	3	4	4	5

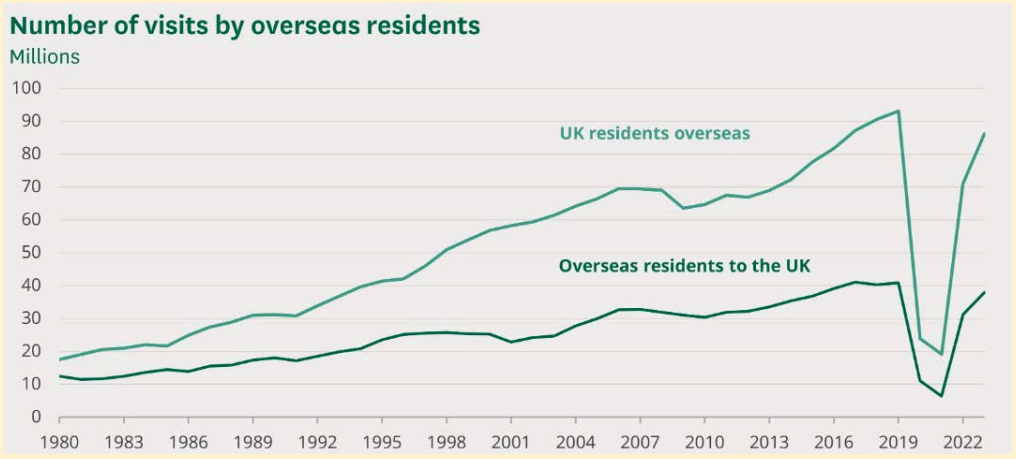
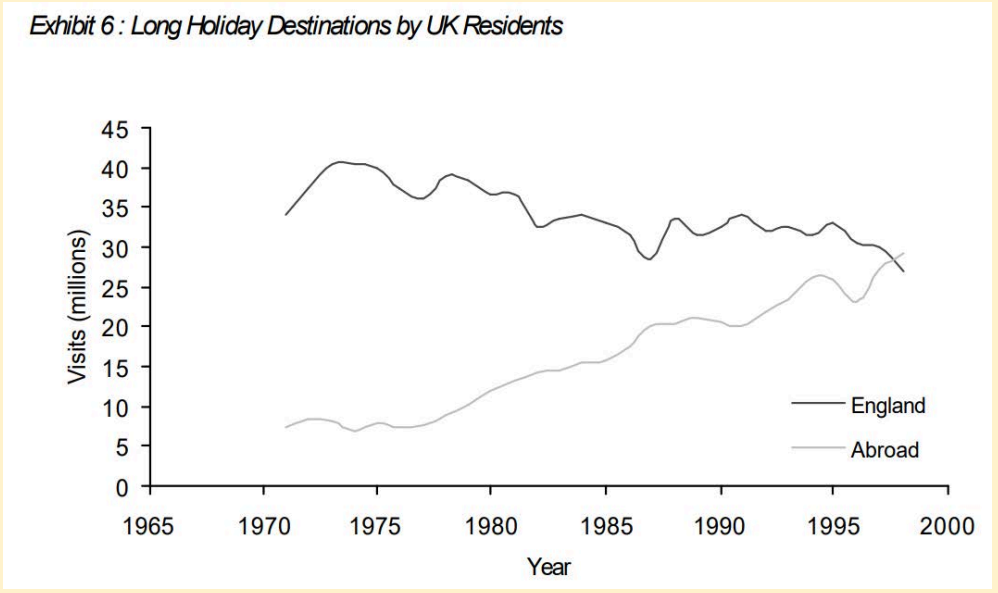
		•  Number of visits by overseas residents Millions 100 90 80 70 60 50 40 30 20 10 0 1980 1983 1986 1989 1992 1995 1998 2001 2004 2007 2010 2013 2016 2019 2022 UK residents overseas Overseas residents to the UK  Exhibit 6 : Long Holiday Destinations by UK Residents Visits (millions) 45 40 35 30 25 20 15 10 5 0 1965 1970 1975 1980 1985 1990 1995 2000 Year England Abroad	

		Exhibit 9 : Domestic Tourism Spending in the UK, 200 *Breakdown* / *% of spend* Accommodation (non-package trip) 25 Eating and drinking 22 Travel 20 Buying clothes 8 Other shopping 7 Entertainment 7 Package trip 5 Other expenditure 4 Services or advice 2 Total 100 ● By the end of this session, pupils will: ○ *Be able to explain what the tourism industry is.* ○ *Understand the difference between domestic and international tourism.* ○ *Use data to describe trends in tourism.*	
5	To understand how location, climate and physical and human features influence tourism Use geographical enquiry to evaluate sustainability.	● Learn that tourism depends on the location, climate, physical and human features of each country for example Switzerland's mountainous climate makes it ideal for skiing, Egypt's ancient monuments make it ideal for cultural tourism and Spain's hot, dry climate makes it perfect for sunseekers. ● Children look at temperature and rainfall data charts to recognise **peak season** for holidays (both skiing and sun seekers). Understand the effect that peak season has on the price of holidays. ● Children are given scenarios of features that customers want in a holiday. Children use a bank of information sources (temperature, rainfall, photographs, maps) to decide on suitable destinations.	
Synoptic Task		***How do geographers use data to learn about geography?***	

	Autumn 2	Vocabulary	Spring	Vocabulary	Summer	Vocabulary
Year 5	**Why is California Thirsty** In this unit, pupils will: Learn how humans obtain and store and use water. They will learn that consumption of water is rising due to demands of the population growth. Understand that climate change is affecting the availability of water and lean about the consequences of drought. Synoptic Task: Why is California so thirsty ?	• Precipitation • state • mediterranean • Consumption • Water Supply • Irrigation • Lakes • reservoirs • dams • Groundwater • thermal • drought • precipitation • mediterranean climate • economy • water supply • pressure • reserves • aqueduct • canal • farmers • population • residents • precipitation • severity • likelihood • inevitable •	**Oceans** In this unit, pupils will: Learn how humans interact with oceans and how ocean lanes play an important part in trade. They will learn how ocean currents are important for regulating the world's temperature, rainfall and climate and play a role in the formation of hurricanes and tsunamis. They will also learn how human behaviour affects marine life and the impact these changes have on the world's climate. Synoptic Task: How do people and oceans affect each other?	• Oceans • Transported • Manufactured • Trade • Maritime • Container • Ship Port • Freight • Shipping Routes/ Lanes • Eight points of compass • Tides (high & low) • Current • Flow • Gyres • Equator • Phytoplankton • Climate • Coasts • Tsunami • Hurricane • Earthquake • Regulate • Atlantic • Evaporated • Rainfall • Phytoplankton • Earth's atmosphere • (Average) (global) Temperature • Global climate • Atmosphere • Greenhouse Effect • Fossil Fuels • Greenhouse Gases • Regulate • Greenhouse gases • Atmosphere • Marine animals/life • Habitats • Overfishing • Drift-net Fishing • Fossil Fuel • Oil Rigs • Environmental disaster • Oil Tankers • Oil Spills	**Migration** Children will learn: What migration means and the different types of migration (for example internal and international migration). Why people move from one place to another, including reasons such as work, safety, education or family. The difference between push factors and pull factors that influence migration. How migration affects people, places and communities. How migration has shaped cities and populations in the United Kingdom and around the world. How geographers use maps, data and case studies to understand migration patterns. Synoptic Task: ***Why do people migrate?***	• migration • migrant • immigration • emigration • push factors • pull factors • population • settlement • urban • rural • community • diversity • culture • opportunity • movement

				• Impact		

Year 5 -Autumn 1– Why is California Thirsty?

Synoptic Task: Why is California so thirsty?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	To know how humans obtain, store and use water. *Skill: Use maps and keys to determine information.* *OW Why is California Thirsty 1&2*	• Recap on the water cycle (OW 1) include the word **precipitation.** • Learn that California is a **state** on the west of USA with a population of millions and some of its major cities. Learn that it has a **mediterranean** climate and so has a large **consumption** of water. • Learn that 75% of the water falls north of Sacramento but 75% of the consumption is used in the south of California and consider the implication of the **water supply.** • Learn that water is needed for drinking and for growing crops (link back to learning in rivers and Ancient Egypt topics). Learn that some crops need more water than others. Recap that taking water to crops is known as **irrigation** (see Rivers and Ancient Egypt topics). • Learn that water is stored naturally in **lakes** and also by humans in **reservoirs**. Children sort images deciding if it is a lake or a reservoir looking for features such as **dams**. • Use a map of California with a key to identify features such as rivers, lakes, reservoirs and create statements such as Where are the most reservoirs? Where are the largest reservoirs? Why are so many reservoirs needed in California?	Precipitation state mediterranean Consumption Water Supply Irrigation Lakes reservoirs dams
2	To know why California is running out of water. *Skill: Use aerial photography to determine information* *OW Why is California Thirsty 3*	• Recap on the key vocabulary of precipitation, irrigation and reservoirs. • Look at a satellite image of California demonstrating the reduction in **groundwater** since 2002. Create statements to explain what the images show. • Look at satellite (**thermal**) images of the climate in California and draw links between these and the groundwater reduction images. • Look at photographs showing water levels in a Californian dam between 2011 and 2014 to understand the term **drought** due to reduced **precipitation.** • Learn that Californian farmers through (videos and images) pumped groundwater to irrigate their farms. • *(Children should look at the rainfall statistics of the UK in the month of November and then begin a fieldwork study to measure and present the rainfall over the month and record as a line graph to see if this year bucks a downward or upward trend.)*	Groundwater thermal drought precipitation
3	To know how drought has affected farmers in California.	• Recap on the characteristics of a **mediterranean climate** and that this is the **climate** of California. • Learn that almonds grow in a mediterranean climate and that 80% of the world's almonds are grown in California. • Use graphs to show the importance of Almond farming to the **economy** of California.	mediterranean climate economy water supply pressure reserves

	Skill: Read and represent information graphically.
	
	OW Why is California Thirsty 4
		• Learn that 4 ½ litres of water are used to produce one almond which places a strain on the **water supply.** Represent this graphically (4 ½ = 1almond 9 = 2 almonds etc.)
		• Learn that the drought in California between 2011-2014 has had a big impact on the almond farmers. Children consider the question: Do they continue to farm almonds and make lots of money or do they stop farming almonds because of the **pressure** on the water supply?
		• Learn that droughts can be caused by four different factors:
		  ▪ Lack of rainfall
		  ▪ The water supply (**reserves** of water being used up)
		  ▪ Type of crops grown
		  ▪ Human activity (wastage, over-consumption).	

4	To know how Californians responded to pressures on their water supply. *Skill: Use maps and keys to determine information.* *OW Why is California Thirsty 4*	• Recap on the definition of manmade and natural. • Look at an image of canals/aqueduct and determine clues that it is not natural but is manmade. • Learn that an **aqueduct** is a man made channel to transport water from one location to another. Recap that this is not the same as a **canal** (which is used to transport goods and people between locations by use of a barge). • Learn that the aqueducts were built in the 1930s to enable **farmers** to grow their crops across the state to feed the growing **population** across California. • Learn through the use of maps how the reservoirs are built along the aqueduct. • Learn how **residents** have changed their behaviour to respond to the drought in California.	aqueduct canal farmers population residents
5	To know how the drought ended and how future droughts can be **mitigated**. Skill: *Read and represent information graphically.* *OW Why is California Thirsty 5*	• Recap on how a California drought affected farmers and residents in California. • Use photographic evidence of California in 2019 to determine that the drought was over. • Learn that in 2017 through the use of **precipitation** charts there was increased rainfall. • Present this information graphically (bar charts). • Learn that in 2018-2019 a lower **temperature** meant that there was more snow which because of the lower temperature melted very, slowly. • Recap on how human behaviour can impact the **severity** of a drought. Children suggest ways that Californians can reduce the **likelihood** of an **inevitable** drought in the future.	precipitation severity likelihood inevitable
6	Synoptic Task	• **Why is California so thirsty ?**	

Year 5 -Spring 1– Oceans

Synoptic Task: How do people and oceans affect each other?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	To know how oceans are used for trade. *Skill: Use maps and eight compass points to describe shipping route* *OW Oceans 1&2*	● Recap on the difference between an **ocean** and a **sea.** ● Recap on what a **continent i**s and the position of the oceans in the world. ● Learn that many of the products in our supermarkets are not/cannot be grown or **manufactured** in the UK and so are **transported** from **overseas** in a process known as **trade.** ● Learn that more than 90% of all trade from overseas happens via **container** ships. This is known as **maritime** trade. ● Learn that large quantities of goods transported for trade are known as **freight**. Ships transfer their freight at **ports** onto trains and lorries. ● Learn that ships follow **shipping routes** around the world ● Recap on the four cardinal points of the **compass** and learn the four additional points of compass NW, NE, SE, SW. Use these compass points to describe shipping routes across the globe. ● *By the end of this lesson, pupils should* ○ *Know that many goods are not manufactured or grown in Britain and need to be transported from other parts of the world.* ○ *Know that the majority of trade with the world is conducted via maritime trade* ○ *Be able to describe some shipping routes using eight points of a compass.*	Transported Manufactured Trade Maritime Container Ship Port Freight Shipping Routes/Shipping Lanes All eight points of the compass
2	To know the links between oceans and the climate. *Skill: Interpret maps of ocean currents.* *OW Oceans 3*	● Recap on the oceans of the world and the key vocabulary of **maritime trade**. ● Learn that the oceans are constantly moving and that this is evident in **high and low tides, waves,** and **flow.** ● Use a map to recognise and locate the **ocean current**s around the Earth. ● Learn that some ocean currents are warm and some ocean currents are cold, bringing warm water away from the **Equator** and cold water towards the Equator and that this affects the temperature of the air and therefore the Earth's **climate.** ● Learn that **gyres** are currents that run in circles. ● Learn that oceans produce oxygen by supporting **phytoplankton.** ● *By the end of this lesson, pupils should:* ○ *Know that ocean currents affect climate.* ○ *Know that ocean currents draw warm water away from the Equator and cold water towards the Equator.* ○ *Know that ocean currents produce oxygen.*	Tides (high & low) Current Flow Gyres Equator Phytoplankton Climate
3	To know the interaction between oceans and coasts *Skill: Analyse interaction between*	● Recap on how the oceans move around the world. ● Learn that the **Atlantic** has **coastlines** with four landmasses (**North** and **South America, Africa** and **Europe**.	Coasts Tsunami Hurricane Earthquake Current (cold & warm)

	oceans and coasts using maps.
	
	OW Oceans 4
		• Use topographical maps to compare Pacific coastline of South America and the Atlantic coastline to observe differences. (mountainous on the pacific coast) and link this to prior learning about **tectonic plate movement** and the prevalence of **earthquakes**.
		• Learn how earthquakes in the oceans and near the coasts lead to **tsunamis** using case studies and maps to demonstrate the correlation.
		• Learn that the Atlantic coast around the **Caribbean** is susceptible to **hurricanes** because heat in the ocean provides energy for the winds to gain in speed/strength.
		• Learn that the effect on the UK coastline of the Atlantic ocean is that winds blow from the west, picking up water from the ocean (evaporation) and when this air rises up over the hills of Wales and the Pennines for example it releases the water causing rain.
		• *By the end of this lesson, pupils should:*
		  ○ *Know that earthquakes near coastlines and beneath the oceans cause tsunamis*
		  ○ *Know that ocean temperatures cause hurricanes over the Caribbean*
		  ○ *Explain how the Atlantic coast brings wind and rain to the UK.*	

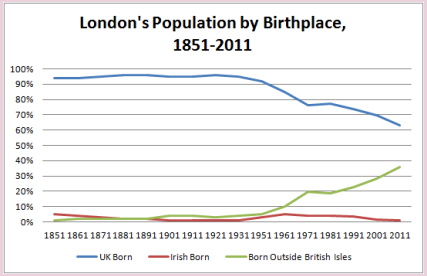
4	To know how oceans affect the climate.
	
	SkillUse geographical evidence to study ocean ecosystems.
	
	OW Oceans 5
		• Recap on how ocean currents move hot and cold water around the world's **oceans** and **regulate** the temperature of the oceans and the air above it.
		• Recap on how winds over the **Atlantic** bring **evaporated** water from the ocean over the UK which then falls as **rainfall**. Understand that the ocean therefore **regulates** our rainfall.
		• Recap on how the ocean supports **phytoplankton** which remove carbon dioxide from, and produce oxygen for, the air we breathe. Understand that the oceans therefore **regulate** the gases in the **Earth's atmosphere.**
		• Understand that the **gases** in the air act as a **greenhouse effect** which in turn affects the temperature of the Earth.
		• Learn how burning of **fossil fuels** contributes to the greenhouse effect.
		• *By the end of the lesson, pupils should*
		  ○ *know that oceans regulate rainfall*
		  ○ *know that oceans regulate temperature*
		  ○ *explain the greenhouse effect*
			Oceans
			Regulate
			Atlantic
			Evaporated
			Rainfall
			Phytoplankton
			Earth's atmosphere
			Climate
			(Average) Temperature
			Global climate
			Atmosphere
			Greenhouse Effect
			Fossil Fuels
			Greenhouse Gases

5	The impact of human behaviour on oceans Skill: *Interpret environmental data and case studies about oceans.* *OW Oceans 6*	• Recap on how oceans **regulate** the **temperature** of the Earth. • Learn that the **average global temperature** of the oceans has risen by about 1 degree since 1880 because the amount of **greenhouse gases** in the **atmosphere** has increased. • Learn that oceans therefore affect people's lives but also people's lives affect oceans. • Learn that warmer seas affect **marine animals**' **habitats**. • Learn that **overfishing** and **drift net fishing** depletes fish stock and causes entanglements for other marine creatures and birds. • Learn that humans drill for oil (a **fossil fuel**) in the oceans (on **oil rigs**) and are **transported** by massive ships called **oil tankers**. Learn that if and when these tankers spill the oil causes **environmental disaster** harming marine life. • Learn that the disposal of plastics is disastrous for marine life and that **ocean currents** and **gyres** mean that the plastic enters the food chain.	Regulate average global temperature greenhouse gases atmosphere marine animals/life Habitats Overfishing Drift-net Fishing Fossil Fuel Oil Rigs transported environmental disaster

		● Use the case study of the South Aral sea examine the impact of human life on the world's oceans. ● *By the end of this lesson, pupils should:* ○ *Be able to explain some ways in which humans have affected the ocean environment.*	Oil Tankers Oil Spills Impact
6	Synoptic Task	● **Synoptic Task: How do people and oceans affect each other?**	

Year 5 -Summer – Migration

Synoptic Task: Why do people migrate?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	To know that migration is the movement of people from one place to another. Use maps to track migration routes. *OW Population Lesson 2*	● Learn that when one person moves from one place to live in another place it is called **migration**. ● Link to prior learning such as history of the Anglo Saxons when Angles, Jutes and Saxons migrated to Great Britain in the sixth and seventh centuries or when the first people migrated to Great Britain over 800,000 years ago in the Stone Age. ● Know that the **population distribution** of Great Britain is uneven. **T**here is **greater population density** in the south east. Use a map to demonstrate this. ● Know that much migration of the last century is from rural to urban areas due to the ease of good transport links, jobs and amenities. ● Consider why some people might choose to migrate to the countryside. ● *By the end of this lesson, pupils should:* ○ *Be able to define migration*	migration (recap on location
2	To know why people might choose to migrate Analyse geographical data about migration patterns *OW Migration Lesson 1& 2*	● Learn the difference between **internal** and **international migration -** that international migration involves the crossing of of a country's **borders.** ● Use case studies (such as Danielle from Northern Ireland) to describe the differences in the location of the subject's original location and new location. Recall correct geographical terminology such as urban, rural, transport,city, town, village, coast, inland, harbour etc. ● Describe routes taken to get from the original location to the new destination. ● Use photographic and map evidence to predict what the subject will find easy and hard about migrating to the new location. ● Learn the terms **push** and **pull factors** using examples of why people might choose to migrate. Use a case study i.e. Danielle in OW booklet). ● Learn the difference between **voluntary** and **involuntary** migration (also forced migration) using a case study to exemplify (i.e. farmers to California in the 1930s from Oklahoma). ● *By the end of this lesson, pupils should:* ○ *Define internal and external migration.* ○ *Give reasons why somebody would voluntarily migrate* ○ *Give reasons why somebody would have to migrate (involuntary migration).*	
3	To know why people might choose to migrate Use case studies to compare migration experiences.	● Learn the difference between **immigration** and **emigration** ● Learn countries have border controls and that passports are needed to move between countries. ● Use a case study of a migrant coming to London to describe the differences in the location between London and where they came from. ● Use the case study to understand the challenges faced by migrants when moving to a new location. ● *By the end of this lesson, pupils should:* ○ *Define immigration and emigration* ○ *Give some of the challenges that migrants face*	

	OW Migration Lesson 3	○ *Know that countries have border controls*
4	To know how people may become refugees *OW Migration Lesson 4* *Use photographs and video footage*	● Learn that some people are forced to migrate due to natural disasters. ● Learn that some people are forced to migrate due to war and conflict. ● Learn that people who flee war, violence, conflict or persecution and who cross an international border to find safety are called **refugees.** ● Understand the role of the UNHCR ● Use photographic and video source material to understand what a **refugee camp** is. ● Learn that refugees who have not yet been officially accepted by the host country are known as **asylum seekers.** ● Learn that some asylum seekers face dangerous journeys. ● *By the end of this lesson, pupils should:* ○ *Be able to explain what a refugee is* ○ *Understand how people can become refugees* ○ *Understand how refugees are supported* (Note: Local Charity Refugee Education should be engaged to help deliver this lesson) PLEASE BE MINDFUL OF PERSONAL EXPERIENCES WHEN DELIVERING THIS LESSON.
5	To know how the local area has changed because of migration Collect and interpret data	● Recap briefly on the history of the local area - Link to Year 2 History topic and Year 4 HMT Windrush ● Use graphical data to explore how London's **population** has changed due to migration:  ● Children should undertake a Harlesden - Willesden via Roundwood Park self-guided walk ● Children should conduct fieldwork survey of local businesses to establish the cultural heritage of the shop and present their findings graphically. ● *By the end of this lesson, pupils should:* ○ *Be able to present how migration has contributed to the local area.*
6	Synoptic Task	● ***Why do people migrate?***

	Autumn 1	Vocabulary	Spring	Vocabulary	Summer	Vocabulary
Year 6	**Energy & Climate Change** Children will learn: What energy is and how it is used in homes, schools and transport. What the UK's energy mix is and the different sources of energy such as gas, oil, coal and renewable energy. What fossil fuels are and why governments are trying to reduce their use. The causes and effects of climate change, including the greenhouse effect, extreme weather and rising sea levels. How climate change affects people, ecosystems and environments around the world. How individuals, communities, governments and international organisations can respond to climate change at local, national and global scales. Synoptic task: ***In what ways can our actions locally benefit people globally?***	• energy • fossil fuels • energy mix • renewable energy • climate change • greenhouse effect • methane • extreme weather • ecosystem • adaptation • conservation • irrigation • scale • local • regional • national • global • afforestation • insulation • heat pump • surplus energy • IPCC • UN Sustainable Development Goals	**Geography Around the World** Children will learn: How geography helps us understand how the world works and how places are connected. How everyday activities such as food production, clothing and transport are linked to global geography. How maps, data and news stories help geographers understand global issues. How geographical issues such as migration, flooding, climate change and conflict affect different places. How places around the world are connected through trade, resources and human activity. How geographical knowledge helps people understand global challenges and make informed decisions Synoptic task: ***Around the world in 80 days: what have we learnt about our world?***	• geography • global • environment • migration • flooding • climate change • natural disaster • human features • physical features • environment • resources • connections • trade • sustainability • enquiry • evidence • data	**Local Area Enquiry** Children will learn: How to identify human and physical features in the local area using maps and aerial photographs. How to recognise different land uses, such as residential and commercial areas. How geographers use sources of evidence such as maps, media reports, surveys and fieldwork. How to use historical maps and photographs to understand how the local area has changed over time. How to investigate local issues through fieldwork and enquiry. How to suggest future improvements or changes that could benefit the local area. Synoptic task: What future changes might benefit our local area?	• enquiry • fieldwork • OS maps • aerial photograph • human features • physical features • land use • residential • commercial • settlement • survey • evidence • historical maps • local area • investigation

Synoptic Task: In what ways can our actions locally benefit people globally?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	*To understand what the UK's energy mix is and explain how different types of energy are used* *Use data to identify energy sources*	● What uses energy in our classroom? (Slides: Today's lesson / Think & Discuss) ● Pupils discuss: ○ What in the classroom needs electricity to work? (screen, lights, computer, heating) ○ Does the school use any other sources of power in addition to electricity? ○ Purpose: activates prior knowledge about energy use. ● Revisiting Prior Knowledge – Types of Power in the UK (Slides: Energy in the UK) Show the images and ask: ● What sources of power can you see in the photographs? ○ Coal ○ Hydro-electric power ○ Gas ○ Oil ● Brief recap: The UK uses many types of energy for heating, cooking, transport and electricity. ● Learning New Knowledge – How Different Energy Sources Are Used ● Gas in the UK (Slide: How is gas used?) Pupils learn that gas is used for: ○ Heating ○ Cooking ○ Generating electricity ● Oil in the UK (Slide: How is oil used?) ● Oil is used mainly for: ○ Transport (petrol and diesel) ○ Sometimes heating ○ Rarely for electricity generation ● Explain the term refinery. ● Coal in the UK (Slide: How is coal used?) ● Coal is used for: ○ Heating ○ Cooking ○ Electricity generation ● Discussion: Which of these sources do pupils think is most common today? ● Key Concept – The UK's Energy Mix (Slides: The energy mix in the UK) ● Explain: The energy mix = the combination of energy sources + the proportion each supplies. Show 2021 data from the slides: ○ Gas: 40%	Energy mix Fossil fuels Turbine Renewable energy Non-renewable energy Emissions Net zero Refinery

		○ Oil: 36% ○ Coal: 3% ○ Hydro-electric power: 1% ● Pupils identify which are largest/smallest contributors. ● Interpreting a Pie Chart – Energy Mix 2021 (Slides: Pie chart + Describing a pie chart) ● Ask pupils: ○ What name do we give to coal, oil and gas? (Fossil fuels) ○ Which segments are biggest/smallest? ○ What overall pattern can they see? ● Model description on board (from slide example): ● "The pie chart shows the UK's energy mix in 2021. Gas and oil provided most of the UK's energy. Gas was 40% and oil was 36%. Wind (9%) and nuclear (6%) were next, with five other sources providing the remaining 9%." Discussion – Why Reduce Fossil Fuels? (Slides: Fossil fuels in the energy mix and Greenhouse effect) ● Prompt questions: ○ Why are decision makers trying to reduce fossil fuels? ○ How does burning fossil fuels affect greenhouse gases? ○ What does the rise in global temperatures tell us? ● Recap key point from slide: CO_2 is a greenhouse gas and human activity has increased its concentration. ● Changes Over Time – The UK's Energy Mix Then and Now (Slides: Changes in the UK's energy mix) ● teach pupils: ○ In 1965, 98% of UK energy came from fossil fuels. ○ In 2021, 79% came from fossil fuels. ○ The government aims to: ○ Cut carbon emissions by 68% by 2030 ○ Achieve net zero by 2050 ● Discussion: How would reducing fossil fuels help meet these targets? ● Generating Electricity – How Do Different Sources Work? (Slides: hydropower, turbines, fossil fuel stations, wind, tidal, wave, geothermal, solar, biofuel) ● Teach key examples: ● Hydro-electric power: water flows down to turn turbines. ● Coal, oil, gas: burned to heat water → steam → turbine. ● Wind power: wind turns turbines. ● Tidal power: movement of tides drives turbines. ● Wave power: rise + fall of waves drives turbines. ● Geothermal: heat underground creates steam to drive turbines. ● Solar: no turbines needed; panels capture sunlight. ● Biofuel: vegetation burned or added to petrol. ● Pupils sketch or annotate a diagram (e.g., tidal power station) if time allows.	

		• What Are Renewable Energy Sources? (Slides: Renewable energy sources)
		• Teach definition: Renewable = constantly renewed, will not run out in our lifetimes, most do not emit carbon.
		• Sorting task (from slide): Pupils categorise:
		  ○ Renewable: tidal, geothermal, biofuel, wave, solar, hydro, wind
		  ○ Non-renewable: gas, coal, oil
		• Main Written Task – Review Questions (Slide: Lesson 1 Resources for printing)
		• Pupils answer in books:
		  ○ Describe the energy mix in the UK.
		  ○ What percentage of the UK's energy mix comes from fossil fuels?
		  ○ Why is the UK moving away from fossil fuels?
		  ○ What is renewable energy?
		  ○ How can renewable energy help us reach net zero?
		• Challenge: Draw and annotate the tidal power station diagram.
		• By the end of this lesson, pupils will know:
		  ○ The term energy mix and what the UK's energy mix looked like in 2021.
		  ○ How gas, oil, and coal are used in the UK.
		  ○ Which sources of energy are renewable and which are non-renewable.
		  ○ How electricity can be generated using turbines and other technologies.
		  ○ Why the UK is reducing fossil fuel use to lower carbon emissions and reach net zero.	

2	To form and justify an opinion about onshore wind power, using geographical knowledge and evidence.
	Skills: recall, interpreting maps, analysing evidence, forming and justifying opinions, critical thinking.
		• *Pupils recap key definitions from Lesson 1:*
		  ○ *Energy mix: combination of power sources and the proportions each supplies.*
		  ○ *Net zero: carbon emissions balanced by carbon absorption.*
		  ○ *Renewable energy: constantly renewed, will not run out.*
		  ○ *UK's energy mix: dominated by gas, oil and wind power.*
		• *Show the 2021 data again:*
		  ○ *Gas 40%*
		  ○ *Oil 36%*
		  ○ *Hydro-electric 1%*
		  ○ *Coal 3%*
		• *Quick oral quiz: "Which fuel contributed the most? Which the least?"*
		• *Sorting Task – Renewable or Non-Renewable? (Slide: Renewable or non-renewable energy sources?)*
		• *Pupils classify:*
		  ○ *Renewable: wind, solar, geothermal, tidal*
		  ○ *Non-renewable: coal*
		• *Discuss: Why is coal non-renewable? Why are renewables important for net zero?*
		• *Moving to Renewable Energy – Why It's Complicated (Slide: Moving to renewable energy)*
		• *Explain: The UK must increase renewable energy to reach net zero. Every type of power generation has both benefits and costs. This sets the context for forming opinions later.*
		• *The Role of Wind Power in the UK (Slides: Role of wind power in the UK)*
			Prevailing wind
			Upland / exposed
			National grid
			Onshore / offshore wind farm
			Planning permission
			Renewable / non-renewable
			Net zero
			Controversial
			Benefit / cost

		• *Teach pupils:*
		  ○ *Wind power made up 9% of the UK's energy mix in 2021.*
		  ○ *It contributed 25% of the UK's electricity in 2022.*
		• *Discussion question:*
		  ○ *Why might the UK have good potential for wind power?*
		  ○ *(Lead pupils to think about coastline, exposure, weather systems.)*
		• *Interpreting a Map – Average Windspeeds Across the UK (Slides: Map + describe and explain distribution) Pupils examine the windspeed map (also in booklet p.15).*
		• *Questions to guide them:*
		  ○ *Where are the highest average windspeeds?*
		  ○ *What patterns do you notice? (e.g., western coasts, highland areas)*
		  ○ *Why is this the case?*
		• *Introduce relevant geographical facts from the slides:*
		  ○ *Prevailing wind in the UK comes from the west (from the Atlantic).*
		  ○ *Mountains and upland areas are more exposed → higher windspeeds.*
		• *Quick check: Review UK countries and major upland areas—Highlands, Cairngorms, Lake District, Snowdonia, Pennines, Yorkshire Dales.*
		• *How Wind Power Works (Slides: Development of wind power / electricity generation)*
		• *Teach pupils:*
		  ○ *Wind turns the turbine blades.*
		  ○ *A generator produces electricity.*
		  ○ *Electricity travels through underground cables or electricity pylons to the national grid.*
		• *Offshore Wind Power (Slides: Offshore wind power)*
		• *Key points:*
		  ○ *Windspeeds at sea are even higher → good for generating electricity.*
		  ○ *The UK has offshore wind farms in the North Sea and Irish Sea.*
		  ○ *A group of turbines = a wind farm.*
		• *Optional: Show pupils a digital map of offshore wind farms (as the slides prompt).*
		• *Onshore Wind Power (Slides: Onshore wind power)*
		• *Teach pupils:*
		• *Many onshore wind farms are in Scotland, Northern Ireland, and Wales. Onshore wind farms can be controversial. Gaining planning permission can be difficult.*
		• *Discussion:*
		  ○ *Some people like how turbines look.*
		  ○ *Some people dislike how turbines look.*
		  ○ *What do pupils think?*
		• *Show the clip if available.*
		• *Costs and Benefits of Onshore Wind Power (Slides: Costs and benefits)*
		• *Pupils examine the information:*
		• *Possible benefits include:*	

		○ *Renewable* ○ *Low carbon* ○ *Cheaper than fossil fuels once built* ○ *Helps the UK reach net zero* ○ *Possible costs include:* ○ *Visual impact* ○ *Noise concerns* ○ *Local wildlife/ecosystem concerns* ○ *Need for suitable locations* ○ *Public objections* ○ *Planning delays* ● *Explain: Local opinions matter, but the government must also consider national priorities, such as climate targets.* ● *Main Task – Forming and Justifying an Opinion (Slide: What is your opinion?)* ● *Pupils answer the following questions in full sentences:* ○ *What is your opinion about onshore wind power?* ○ *If the location was suitable, would you be willing for a wind farm to be near you? Why or why not?* ○ *Should onshore wind power be developed further in the UK? Justify your view.* ○ *Provide sentence starters from the slide:* ○ *I think that… because…* ○ *In my opinion… because…* ○ *On the one hand… on the other hand…* ○ *It depends on…* ○ *While I think… I also realise…* ○ *Encourage pupils to use evidence from the lesson (windspeed maps, benefits and costs, energy mix data).* ● *By the End of the Lesson, Pupils Will Know:* ○ *That wind power contributes significantly to UK electricity generation.* ○ *How windspeeds vary across the UK and why.* ○ *The difference between onshore and offshore wind power.* ○ *That onshore wind power has both costs and benefits.* ○ *How to state and justify an informed geographical opinion.*	
3	To form and justify an opinion about whether more nuclear power stations should be built in the UK.	● Review why the UK has good potential for wind power: ○ Prevailing wind from the west ○ Large areas of land suitable for onshore turbines ○ High windspeeds in exposed uplands ○ Strong winds over seas → offshore wind farms ● Review why onshore wind power is controversial: ○ Can be expensive to build	Nuclear reactor Uranium Radioactivity Atomic power Byproduct Low carbon Non-renewable

	Skills: recalling prior learning, analysing data, interpreting maps, evaluating benefits and costs, forming balanced arguments, critical thinking.	○ Some think turbines create visual pollution ○ Older turbines can be noisy ○ Supply is not constant (wind variation) ○ These points prepare pupils to compare wind and nuclear power later. ● Introducing Today's Focus – Nuclear Power (Slides: The role of nuclear power in the UK) ● Explain that nuclear power, like wind power, has both costs and benefits and is considered controversial. Show the energy mix information: ○ Nuclear power made up 6% of the UK's energy mix in 2021. ○ In 2022, nuclear contributed 15% of UK electricity. ● Ask: Why might nuclear power matter for the UK's energy future? ● Teach pupils: All things are made from atoms. In a nuclear reactor, heat is generated by splitting uranium atoms — this is atomic power. The heat turns water into steam, which drives turbines to generate electricity. Nuclear stations are usually built on the coast, because they require large amounts of cooling water. Show example: Sizewell power station in Suffolk. ● Historical Context – Sellafield Story (Slides: Let's listen to a story) ● Explain key ideas: ○ Britain's first nuclear power station opened in 1956. ○ There was excitement about new technology and national progress. ○ Introduce the word byproduct (e.g., electricity is produced but so is radioactive waste). ● Discussion prompt: ○ Why might people have been excited at Sellafield during the Queen's visit? ● Teach: Nuclear is non-renewable because uranium cannot be replaced. BUT… nuclear reactors do not emit carbon dioxide when operating. Show the image of uranium. ○ Ask: Is nuclear power low-carbon? Yes. Is it renewable? No. ● Teach pupils: In 2023, the UK had nine nuclear reactors across four sites. Eleven old stations have closed. Four new sites are proposed. ● Task: Describe the distribution of nuclear power stations (mostly on coasts; widely spread; not near major cities; often clustered). ● Pupils learn: Once running, reactors provide continuous power. A reactor can supply enough energy to power every home in Suffolk for 178 years over its lifetime. Nuclear reactions do not emit carbon dioxide, helping the UK reach net zero. Sizewell B will save 85 million tonnes of CO_2 compared to gas. ● Nuclear plants create many jobs (over 700 at Sizewell), supporting local economies. ● Discussion: Which of these benefits relate to national priorities? Which to local benefits? ● Teach pupils: Safety considerations: ○ Nuclear power creates radioactivity, harmful to living things. ○ Stations are designed with many layers of safety and constant monitoring. ○ Radioactive waste remains dangerous for thousands of years and needs secure storage. ○ Costs: ○ Nuclear stations are extremely expensive to build and shut down. ○ Very rare accidents can occur, but consequences are serious.	Decommissioning Net zero Controversial

		○ Example: Chernobyl (1986) Reactor meltdown released radioactive material. 30 people died and everyone within 30 km was evacuated. A protective shield now covers the site. ● Ask: What does this example teach us about the risks? ● Pupils list: Benefits: ○ Low carbon ○ Continuous electricity ○ Supports economy ○ Helps meet net zero targets ● Costs: ○ High building and decommissioning costs ○ Radioactive waste ○ Very rare but serious accidents ○ Public concern and local opposition ● Explain: Just like wind power, governments must balance local opinions with national energy needs. ● Main Task – Debate Preparation and Opinion Writing ● Debate question: ○ Should more nuclear power stations be built in the UK? ● Pupil task: ○ State their opinion. ○ Justify it clearly using evidence from the lesson. ○ Consider both arguments and counterarguments. ○ Sentence starters from the slide: ○ I think that… because… ○ On the one hand… on the other hand… ○ While I think… I also realise… ○ It depends on… ○ Pupils make notes using the "arguments vs. counterarguments" organiser provided in the slide deck. ● By the End of the Lesson, Pupils Will Know: ○ What nuclear power is and how it generates electricity. ○ Why nuclear power is considered low-carbon but non-renewable. ○ The distribution of nuclear power stations in the UK. ○ The main benefits of nuclear power (continuous supply, low carbon, supports net zero, creates jobs). ○ The main costs (radioactive waste, expense, rare but serious accidents). ○ How to form a balanced, justified opinion on building new nuclear power stations.	
4	To understand the human and natural causes of climate change and explain	● Review with pupils: ○ What is net zero? ○ Why might nuclear power help us reach net zero? (low carbon when operating) ○ Why is nuclear power controversial? (radioactive waste, cost, safety concerns)	Vocabulary Climate change Greenhouse effect Carbon cycle

	how greenhouse gases affect global temperature.
	
	Skills: ordering processes, interpreting maps, explaining cause and effect, applying scientific vocabulary, evaluating solutions.
		• This brings forward previous learning about energy and climate change links.
		• Recap – The Process of Climate Change Pupils arrange the steps showing how climate change happens:
		  ○ People burn fossil fuels.
		  ○ The amount of carbon dioxide in the atmosphere rises.
		  ○ Average global temperature rises.
		  ○ Increase in extreme weather events.
		• Discuss: Is this process fast or slow? Which steps are human-caused?
		• Recap – The Greenhouse Effect
		• Ask pupils:
		  ○ What is the greenhouse effect?
		  ○ Is it a good thing?
		• Explain: The natural greenhouse effect keeps Earth warm enough for life. Humans have strengthened it by adding extra greenhouse gases. Show the slide data:
		  ○ Global temperatures in 2019 were 1.1°C higher than before industrialisation.
		  ○ Carbon dioxide is a greenhouse gas.
		• Ask: Why does 1.1°C matter?
		  ○ (→ It affects weather patterns, oceans, ecosystems.)
		• Show the world map.
		• Ask:
		  ○ What does this map show?
		  ○ How are unusually warm areas distributed?
		  ○ Clusters in the Arctic, northern latitudes, parts of Africa/Asia, across many continents.
		  ○ What patterns can pupils identify?
		• Pupils write a short description: “Unusually warm areas are widely spread but especially strong in the Arctic and northern regions…”
		• Teach pupils: Carbon is stored in fossil fuels (coal, oil, gas), deep underground for millions of years.
		• Burning fossil fuels releases this stored carbon as carbon dioxide.
		• CO_2 remains in the atmosphere for a long time → increasing warming.
		• Key idea: Human activity is adding carbon faster than the natural cycle can absorb it.
		• Ask: Why does afforestation combat climate change?
		• Pupils discuss:
		  ○ Trees absorb CO_2 through photosynthesis.
		  ○ More trees = more carbon removed from the air.
		  ○ Forests store carbon in trunks, branches and soil.
		• Teach pupils: Methane is released when cows and sheep digest grass. It is also released by bacteria in rice paddies. Methane is a powerful greenhouse gas but remains in the air for less time than CO_2.
		• Discussion: How could we reduce methane emissions?
		  ○ Change animal feed
		  ○ Reduce meat and dairy consumption
			Carbon dioxide
			Methane
			Afforestation
			Fossil fuels
			Emissions
			Paris Agreement
			Global temperature rise
			Greenhouse gases

		○ Improve rice farming methods ○ Capture methane from waste ● Explain that climate change is a global problem, so countries must reduce emissions together. ● Teach pupils: In 2015, leaders from over 190 countries met in Paris. Goal: limit global temperature rise to 1.5°C. Richer countries agreed to support poorer countries. The UK committed to increasing renewable power and ending sales of petrol/diesel-only cars by 2030. ● Discussion: ○ Why might these goals be challenging to implement? ○ Cost ○ Technology differences ○ Public opinion ○ Dependence on fossil fuels ○ Unequal resources between countries ● Main Task – Climate Change: Causes, Effects, Solutions ● Pupils answer: what are the causes of climate change? ○ Burning fossil fuels; deforestation; methane from agriculture; industrial processes; strengthened greenhouse effect. ● What are the effects of climate change? ○ Rising temperatures; melting ice; sea-level rise; extreme weather events; threats to ecosystems; droughts; floods. ● What are some possible solutions to climate change? ○ Renewable energy; afforestation; reducing fossil fuels; cutting methane; international agreements; lifestyle changes. ● Describe the advantages and disadvantages of one solution. ○ e.g., afforestation, onshore wind, nuclear power, reducing car use. ● Pupils choose a solution and evaluate it with clear reasoning. ● By the End of the Lesson, Pupils Will Know: ○ That climate change is caused mainly by increased greenhouse gases from human activities. ○ The role of the greenhouse effect and how humans have strengthened it. ○ How CO_2 and methane are produced, stored and released. ○ How temperature varies around the world and why warming is uneven. ○ That global agreements such as the Paris Agreement aim to limit climate change. ○ Possible solutions and their advantages and disadvantages.	
5	*Learning Objective & Skill* *To understand the effects of climate change on the Arctic, Antarctica,*	● Ask pupils to recall definitions and concepts from previous lessons. ○ Planting many trees is afforestation. ○ Balanced carbon emissions = net zero. ○ The greenhouse gas from cows, sheep and rice paddies = methane. ○ The 2015 international agreement = Paris Agreement. ● Recap – Uneven Global Temperature Change ● Discuss the world map showing temperature anomalies.	Vocabulary Sea level rise Meltwater Glacier Tide gauge Vulnerable Intense

	global sea levels, ecosystems, weather and human settlements.
	
	Skills: recalling prior knowledge, interpreting geographical data/maps, reasoning about cause and effect, applying new vocabulary, explaining impacts.
		• Ask pupils:
		  ○ What does this map tell us?
		  ○ Where are temperatures rising the most?
		  ○ Why might warming affect different regions differently?
		  ○ Key point: Warming is not uniform across the planet.
		• Discuss: What is the Arctic like?
		  ○ Sea ice, cold climate, polar ecosystems, indigenous communities.
		• How might rising temperatures affect it?
		  ○ Melting sea ice
		  ○ Loss of habitat for polar bears/seals
		  ○ Coastal erosion
		  ○ Rising sea levels globally
		  ○ Changes to traditional lifestyles
		• Key idea: Melting land ice increases global sea levels.
		• Show image of meltwater flowing into the sea.
		• Explain: Sea ice melting does not raise sea level, but land glaciers melting does.
		• Discuss: What is Antarctica like?
		  ○ A continent covered in thick ice sheets; extremely cold; remote ecosystems.
		• How might rising temperatures affect it?
		  ○ Ice sheet collapse
		  ○ Rising global sea levels
		  ○ Habitat disruption for penguins and other wildlife
		• Teach: Glaciers in places like the Swiss Alps are melting. As seawater warms, it expands, adding to sea level rise. A tide gauge measures water height—evidence used by scientists.
		• Teach pupils: The Maldives are low-lying islands with many areas less than 1 metre above sea level.
		• Sea level is predicted to rise 0.5–1 metre by 2100.
		• Ask:
		  ○ How might rising sea levels affect low-lying islands such as the Maldives?
		• Pupils may suggest:
		  ○ Flooding
		  ○ Loss of homes and land
		  ○ Loss of coral reefs
		  ○ Tourism decline
		  ○ Threat to freshwater supplies
		  ○ People needing to relocate
		• Discuss:
		  ○ Bleaching of coral reefs
		  ○ Ocean acidification
		  ○ Damage to ecosystems
		  ○ Impacts on fishing communities
			Conservation
			Irrigation
			Extreme weather
			Low-lying
			Ecosystem
			Adaptation

		• Thinking About the Future Pupils complete a timeline of possible impacts, e.g.:
		  ○ In 2 years: increased beach erosion
		  ○ In 20 years: fewer tourists, fewer jobs, economic strain
		  ○ Longer term: some islands may become uninhabitable
		  ○ Responses to Sea Level Rise
		• Teach three real-world responses:
		  ○ Thames Barrier (London)
		  ○ Protects the city from unusually high tides and storm surges.
		  ○ Maldives – Artificial Island
		  ○ Built 2m above sea level to provide safer land for housing.
		  ○ Amsterdam – Floating Houses
		  ○ Adapting design and architecture to respond to rising water.
		• Discuss: Which solutions protect, adapt, or delay the impacts?
		• Ask pupils: How might climate change affect ecosystems?
		• Possible responses:
		  ○ Loss of species
		  ○ Food chains disrupted
		  ○ Habitat loss
		  ○ More invasive species
		  ○ More forest fires, droughts, floods
		• Explain: Climate change increases the likelihood of floods, hurricanes, tornadoes and storms.
		• Ask: How might extreme weather events damage ecosystems and settlements?
		  ○ Destroy homes
		  ○ Kill wildlife
		  ○ Damage crops
		  ○ Cause flooding and erosion
		  ○ Disrupt transport and services
		• Teach definitions:
		  ○ Vulnerable – at risk, exposed to harm
		  ○ Intense – powerful, severe, hard to stop
		• Pupils practise by creating sentences using both words.
		• Teach pupils: Heatwaves and droughts make vegetation vulnerable to intense wildfires. Crop failure → food prices rise. Farmers use methods such as drip irrigation to conserve water.
		• Pupils fill in the cloze passage on the slides and then review the correct answers.
		• Main Task – Climate Change Review Questions
		• Pupils answer four structured questions:
		• What are the causes of climate change?
		  ○ Burning fossil fuels; deforestation; methane from agriculture; strengthened greenhouse effect.
		• What are the effects of climate change?	

		○ Sea level rise; glacier melt; extreme weather; ecosystem damage; droughts; fires; threats to settlements; impact on food supply. ● What are some possible solutions to climate change? ○ Afforestation; reducing fossil fuels; renewable energy; climate agreements; improved farming techniques; protecting at-risk areas. ● Describe the advantages and disadvantages of one solution. ● Evaluate one: sea defences, afforestation, renewable energy, public transport, floating houses, etc. ● Encourage use of geographical vocabulary and evidence from the lesson. ● By the End of the Lesson, Pupils Will Know: ○ How climate change affects the Arctic, Antarctica and global oceans. ○ Why sea levels are rising and how this threatens low-lying places like the Maldives. ○ How ecosystems are disrupted by heatwaves, droughts, wildfires and extreme weather. ○ That climate change impacts agriculture, food prices and water use. ○ How countries and communities are adapting to or protecting themselves from sea level rise.	
6	To understand how people, communities, governments and international organisations can respond to climate change at different scales. Skills: applying prior knowledge, analysing solutions, evaluating scale, critical thinking, using geographical vocabulary.	● Pupils fill in missing words: ○ Cattle and sheep release methane. ○ Dry vegetation is vulnerable to wildfires. ○ These intense fires burn out of control. ○ Radioactive waste must be stored safely for a long time. ○ Farmers and scientists work to conserve water. ○ One method is drip irrigation. ● Recap – How Climate Change Causes Sea Level Rise ● Discuss the two main reasons: ○ Land ice melts, and meltwater flows into the sea. ○ Warm seawater expands, increasing its volume. ● Ensure pupils can explain both processes in their own words. ● Recap – Effects of Climate Change (Maldives Case Study) ● Pupils recall effects such as: ○ Coastal erosion ○ Flooding ○ Loss of income from tourism ○ Coral reef damage ○ Loss of wildlife habitat ● Teach pupils three major response types: ○ Building barriers/walls ○ Creating new land (e.g., artificial islands) ○ Floating settlements ● Ask: How expensive might these solutions be? ○ → Encourage pupils to think critically about cost differences.	Vocabulary Scale Local / regional / national / global IPCC UN Sustainable Development Goals Afforestation Insulation Heat pump Surplus energy Conserve Methane Intense / vulnerable

		● Pupils revisit the timeline of effects (black) and solutions (red). ● Example from slides: ○ In 2 years: sea level rise increases erosion. ○ In 20 years: tourism drops → fewer jobs. ● Pupils add new solutions to their diagram. ● Teach pupils that geographers think about issues at different scales: ○ Home ○ Street ○ Town / city / village ○ County / region ○ Country ○ World ● For each example, pupils identify the scale: ○ Tornadoes increasing → global / regional ○ Hurricanes increasing → global / regional ○ Land ice melting, sea level rising → global ● Lead pupils to recognise that some impacts are local, while others affect the entire planet. ● Examples from slides: ○ Global scale ○ Paris Agreement ○ UN and IPCC coordinating climate knowledge ○ UN Sustainable Development Goals (Goal 13: Climate Action) ○ Countries pledging to limit warming to 1.5°C ○ National scale ○ UK government setting targets for net zero ○ Deciding on renewable energy use ○ Afforestation: planting 30,000 hectares per year until 2030 ○ Ensuring electricity supply for households and industry ○ Funding national-scale climate planning ● Discussion: Why might afforestation be controversial? ○ (e.g., land use conflicts, cost, impact on farming.) ○ Regional scale ○ Planning where woodland should be planted ○ Managing land use at county or regional level ○ Local scale ○ (Slides: Local responses to climate change) ○ Fitting insulation in homes and workplaces ○ Installing heat pumps (air-source or ground-source) ○ Installing solar panels, selling surplus energy to the grid ○ Local councils improving public transport or recycling	

		• Pupils extend their timeline:
		  ○ Red = solutions
		  ○ Black = effects
		• Encourage pupils to add solutions at different scales, e.g.:
		  ○ Household: reduce energy use
		  ○ Local: plant community woodland
		  ○ National: renewable power
		  ○ Global: climate agreements
		• Final Discussion – What Can We Do About Climate Change?
		• Pupils discuss practical, personal and local actions such as:
		  ○ Conserving energy at home
		  ○ Recycling or reducing waste
		  ○ Walking/cycling instead of driving
		  ○ Reducing food waste
		  ○ Supporting renewable energy use
		  ○ Talking to others about climate change
		• Main Written Task – Climate Change Review
		• Pupils answer: What are the causes of climate change?
		  ○ Burning fossil fuels, deforestation, methane emissions, strengthened greenhouse effect.
		• What are the effects of climate change?
		  ○ Sea level rise, extreme weather, ecosystem disruption, droughts, wildfires, rising food prices.
		• What are some possible solutions to climate change?
		  ○ Afforestation, renewable energy, international agreements, insulation, heat pumps, solar panels.
		• Describe the advantages and disadvantages of one solution.
		• Evaluate one solution clearly (e.g., solar panels, afforestation, flood barriers).
		• Encourage pupils to use vocabulary, evidence and scale.
		• By the End of the Lesson, Pupils Will Know:
		  ○ That climate change requires responses at global, national, regional, local and personal scales.
		  ○ Examples of international responses (Paris Agreement, SDGs, IPCC).
		  ○ Examples of national responses (afforestation, renewable energy expansion).
		  ○ Examples of local responses (insulation, solar panels, heat pumps).
		  ○ That different solutions have advantages and disadvantages.
		  ○ That individuals and communities can contribute to climate action.	

7	Synoptic Task	In what ways can our actions locally benefit people globally?	

Synoptic Task: Around the world in 80 days: what have we learnt about our world?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	Reflect on and discuss how geography helps us to understand the world and how it works Use maps and atlases to locate global regions.	● Revisit previous experiences: enquiry, map work, fieldwork, critical thinking, using sources. ● Show two pupil statements: ○ "We only learn geography at school." ○ "Geography is happening all around us every day." ● Pupils discuss Who do you agree with and why? Share responses. Conclusion: geography is everywhere, all the time. ● Show three images: ○ Getting dressed ○ Walking/travelling to school ○ Eating dinner ● For each, pupils discuss using guiding questions: ○ Getting dressed: ○ Where do your clothes come from? Who made them? ○ How did they reach your home? ○ What are the environmental impacts? ○ What supply chain is involved? ○ Travelling to school: ○ How do you travel? What routes do you take? ○ Human & physical features along the way ○ Impact of transport on environment ○ Eating dinner: ○ Where does the food come from? ○ How is it grown or made? ○ How does food contribute to climate change? ● Share the statement: "Geography is happening all around us every day." and ask chn to discuss if it's true or false. Answer: True. Justification: Geography is the study of the world, and we interact with the world every day. ● Introduce idea: news stories often involve geography. ● Pupils share news events they know (local, national, global) ● Suggest migration, flooding, conflict, natural disasters. ● For each theme, pupils use provided questions to explore geographical links: ○ Migration: Why do people move? Benefits of migration? How is the UK population changing? ○ Flooding: Where is flooding happening? Physical & human features - Causes & impacts, Water cycle connections	Supply chain Migration – Conflict Climate change

		○ Conflict: Where is the conflict? Countries involved, Causes, Impact on people's lives ● Given a climate-related image, pupils add questions around it that show its geographical connections. Examples include: ○ What are causes of climate change? ○ Why are some people affected more? ○ What climate data do we use? ○ How are people taking action? ● Share that geography helps us understand news Explain: ○ Knowledge that helps us: Know where places are / what they are like; Similarities and differences between places; Connections between people around the world; Weather and climate; Physical features (rivers, mountains, earthquakes); Human impacts on the environment ○ Skills that help us: Using maps and atlases; Reading and questioning; Researching and organising information; Interpreting data; Critical thinking (seeing connections and impacts) ● Task: News Story Reflection. Pupils choose a news story and write how geographical knowledge and skills helped them understand it. Share example from Izzy: using map skills to understand the Euros football tournament. ● By the end of this lesson, pupils will know: ○ Geography is happening all around us, every day, and is connected to our daily lives. ○ News stories often have geographical causes and impacts, such as migration, flooding, earthquakes, climate change, and conflict. ○ Geographical knowledge and skills help us make sense of the news, including using maps, asking questions, researching, interpreting data and thinking critically.	
2	To use maps and geographical skills to investigate the physical and human geography of Europe. Use maps and atlases to locate global regions.	● *Ask chn: What do you know about the continent of Europe?* ● *Possible responses:* ○ *Europe is made up of around 44 countries.* ○ *It is located north of Africa and west of Asia.* ○ *The UK is part of Europe geographically.* ○ *Europe has a range of climates, from cool in the north to warm in the south.* ○ *It has many major cities such as Paris, Berlin, Madrid, Rome, and Athens.* ○ *Europe includes physical features such as the Alps, the Pyrenees, and the Danube River.* ● *Ask: How can we describe Europe geographically?* ● *Explain: Europe is extremely diverse. Imagine you could describe Europe using only one word and one picture. What would you choose, and why? One word or image can't capture the full diversity of Europe—this can lead to misconceptions and stereotypes.A misconception is an incorrect idea. A stereotype is a fixed idea about a place that is often untrue. For example, thinking that all European countries are wealthy or that all of Europe has the same climate would be misunderstandings.* ● *Quick Check: True or false: "Europe has only one type of climate." - false. Europe has many different climate zones.*	continent climate zone physical features human features population distribution economic activity

		• *Ask: What geographical differences exist across Europe? How might different places in Europe be different?*
		• *Possible responses:*
		  ○ *Climate – Mediterranean in the south, colder in the north*
		  ○ *Landscape – mountains, plains, coastlines, rivers*
		  ○ *Land use – farming, industry, tourism*
		  ○ *Economic activity – technology, fishing, manufacturing*
		  ○ *Population distribution – densely populated cities vs rural areas*
		  ○ *Culture – languages, traditions, religions*
		• *We can use different sources to show Europe's diversity:*
		  ○ *Climate maps*
		  ○ *Population density maps*
		  ○ *Relief maps*
		  ○ *Photographs*
		  ○ *Aerial or satellite images*
		  ○ *Graphs and data tables*
		  ○ *Political maps showing countries and capitals*
		• *Each one tells us something different about the continent.*
		• *Example Investigation: Comparing Spain and Norway*
		• *Climate*
		  ○ *Spain: warm, dry summers; Mediterranean climate*
		  ○ *Norway: cold winters; sub-arctic in the north*
		• *Landscape*
		  ○ *Spain: plateaus, mountains, long coastline*
		  ○ *Norway: fjords, mountains, glaciers*
		• *Human Features*
		  ○ *Spain: major cities like Madrid and Barcelona*
		  ○ *Norway: smaller population, capital city Oslo*
		• *Population*
		  ○ *Spain: approx. 47 million*
		  ○ *Norway: approx. 5.5 million*
		• *Quick Check: Give one way that European countries might be different from one another.*
		  ○ *climate*
		  ○ *landscape*
		  ○ *population*
		  ○ *culture*
		  ○ *land use*
		• *Task A - Write three quiz questions about Europe for another pupil in Year 6. They could be about:*
		  ○ *climate*
		  ○ *physical features*	

		○ *human features* ○ *major cities* ○ *land use* ○ *economic activity* ● *Example:* ● *Q: What mountain range runs through several countries in central Europe?* ● *A: The Alps* ● *Task B: Create a Europe Diversity Collage. Use any of the following:* ○ *drawings* ○ *maps* ○ *climate graphs* ○ *population data* ○ *satellite images* ○ *key words* ○ *photographs* ● *Your collage should show the diversity of landscapes, climates, and human features in Europe.* ● By the end of this lesson, pupils will know: ○ *Europe is a diverse continent with many countries.* ○ *It has a wide variety of climates, landscapes, and cultures.* ○ *We can use maps, images, and data to investigate European geography.* ○ *Geographical skills help us understand similarities and differences across Europe.*	
3	use geographical knowledge, skills and data to investigate different places.	● Ask: ○ What do we know about Europe? ○ Have you visited any European countries? ○ Do you know people from Europe? ○ Have you learned a European language? ● Europe is one of the seven continents. ○ 1. How many continents are there? Seven. ○ 2. Can you name all seven? North America, South America, Europe, Africa, Asia, Oceania, Antarctica. ● Explain Europe's Location. Europe is in the Northern Hemisphere. It is the second smallest continent by area. It lies: ○ west of Asia ○ north of Africa ○ south of the Arctic Circle ○ east of the Atlantic Ocean ● Quick Check: Which of the following is NOT a continent? ○ A: Africa ○ B: Antarctica ○ C: Arctic	climate biome land use population density data

- D: Asia
- C: Arctic — it is an ocean, not a continent.

- Countries in Europe. There are 44 countries in Europe. Russia spans both Europe and Asia. A small part of Turkey is also in Europe.
- Quick Check: How many countries are in Europe?
  - A: 14
  - B: 24
  - C: 34
  - D: 44
  - D: 44.
- Quick Check: Which ocean borders Europe to the west?
  - A: Arctic
  - B: Atlantic
  - C: Indian
  - D: Pacific
  - B: Atlantic
- Task A — True or False Table
- Students complete a table deciding whether statements are true or false.

Statement	True or False?
Europe is the largest continent in the world.	False
Madrid is the capital of Spain.	True
Mont Blanc is the highest mountain in Europe.	False (it is Mount Elbrus)
The largest glacier in Europe is in Iceland.	True
Many of Europe's fjords are in Greece.	False (fjords are found in colder climates such as Norway)

- Ask chn: Where does your knowledge of Europe come from? Possible sources include:
- family or friends from Europe
  - atlases
  - maps
  - the internet
  - books
  - temperature data
  - rainfall data
  - satellite images

		○ asking questions ○ fieldwork ● Skills geographers use: ○ interpreting maps ○ asking questions ○ organising information ○ analysing data ○ critical thinking ● Sources geographers use: ○ atlases ○ books ○ globes ○ images ○ internet ○ maps ○ other people ● Quick Check — True or False “All of our knowledge about places comes from the internet.” ● False. Justification: Our knowledge comes from many different sources, not just the internet. ● Interpreting Maps. Students look at maps of: ○ Europe (countries, rivers, oceans, altitude, distances) ○ A region of England (roads, railways, rivers, towns) ● What maps DO show: ○ country names ○ major rivers ○ bodies of water ○ mountains ○ altitude ○ cities ○ distances ● What maps DO NOT show: ○ exact temperatures ○ rainfall ○ population density ○ detailed land use ○ individual houses ● Quick Check: Which of the following would NOT appear on a map of Europe? ○ A: bodies of water ○ B: individual houses ○ C: major rivers ○ D: names of countries	

		○ B: individual houses. ● Using Images. Images tell us about: ○ physical features ○ human features ○ biomes ○ land use ○ climate clues ○ population density ○ environmental issues ○ culture and traditions ● Example: Images of Norway. Students identify: ○ fjords ○ mountains ○ snow ○ forests ○ settlements ○ beaches ● Conclusion: One photo does NOT represent an entire country. ● True or False Check: “One picture can tell us what a whole country is like.” False. Justification: We need many different sources, not just photos. ● Task B — Interpreting a Photograph. Students analyse an image (coastline, sea, mountains, tourists), concluding: ○ It is by a large body of water. ○ There are mountains. ○ Climate appears warm. ○ It may be a tourist destination. ● This photo is later revealed to show Greece. ● Data geographers use includes: ○ weather ○ climate ○ land use ○ population density ○ life expectancy ○ income ○ rainfall ○ temperature ● Task C — Comparing Norway and Croatia Using Data Students use the given data to compare: ○ climate ○ size ○ population	

		○ land use ○ income ○ life expectancy ● Example answers: ○ Norway has a colder climate because it is further north. ○ Norway is larger in area and population. ○ Croatia uses more land for farming. ○ Average income is higher in Norway. ○ Landscapes differ due to climate and biomes. ● By the end of this lesson, pupils will know: ○ Europe has a range of magnificent physical features and landmarks. ○ Geographers use maps and images to investigate differences between European countries. ○ Geographers use data and statistics to compare and understand different places.	
4	Reflect on and discuss the landscapes, environment and physical features of North and South America Analyse environmental patterns.	● show chn a map and ask: where are North and South America located? North America is shown in orange. South America is shown in grey. ● Ask: ○ What do you already know? ○ Can you name any famous landmarks? ○ Do you know facts about any countries in these continents? ○ Can you name any countries or capital cities? ● Explain; North and South America are joined by Central America, which is part of North America. Both continents are bordered by: ○ the Atlantic Ocean to the east ○ the Pacific Ocean to the west ● North America ○ 3rd largest continent by area ○ Includes: Greenland, the Caribbean islands, Central America ○ Largest country by area: Canada ● South America ○ 4th largest continent ○ Made up of 12 countries ○ Largest country: Brazil ● Quick Check Sort these countries into North and South America: ○ Canada ○ Belize ○ Greenland ○ Argentina ○ Brazil ○ Ecuador	Physical features. Landscape. Wilderness. Natural resources

		○ Answers: North America → Canada, Belize, Greenland South America → Argentina, Brazil, Ecuador ● Explain:North and South America have a wide range of physical landscapes, such as: ○ mountains ○ glaciers ○ beaches ○ rainforests ○ waterfalls ● Explain: A physical landscape is made of physical features—natural, not built by humans. Can you name any? You might have said: Grand Canyon, Amazon rainforest, Andes mountains, Rocky Mountains, etc. ● Quick Check Which TWO are not physical features? A. Waterfall B. Bridge C. Mountain D. Road ● Answer: B (bridge) and D (road) – both made by humans. ● Share examples of physical features ○ Glacier Bay National Park – Alaska, USA Home to over 1,000 glaciers. ○ The Andes – South America The longest continental mountain range in the world. Aconcagua (6,961m) is the highest mountain in the Americas. ○ The Caribbean Islands – North America Famous for beautiful beaches and coastlines. ○ Iguazu Falls – Argentina & Brazil A spectacular system of waterfalls. “Iguazu” means “great water”. ● Quick Check What is the highest mountain in the Andes? A. Aconcagua B. Denali C. Everest D. Kilimanjaro ● Answer: A. Aconcagua ● Task A Research a physical landscape in North OR South America. Complete the table. Example Answer - Grand Canyon ●	

Type of physical feature	Country/countries	An interesting fact
Physical feature: steep-sided river valley	Located in: USA	Fact: 277 miles long and over one mile deep

- Explain Many landscapes have been changed by humans:
  - growing crops
    building houses or roads
    developing cities
    mining
    extracting natural resources
  - Can you think of more examples?
- Ask: what is a wilderness area?
- A wilderness is:
  - wild
    natural
    largely untouched by people
    free from roads, buildings, or major development
  - Very few places on Earth remain fully untouched.
  - Examples:
  - Amazon rainforest (South America)
    Boreal forests (Canada/Alaska)
    Arctic tundra (USA, Canada, Greenland)
- Ask True or False Check "There are people living everywhere in North and South America." Answer: False. Some places are wilderness areas with no permanent human settlements.
- Examples of Wilderness Areas
  - Torres del Paine National Park – Chile
    A protected landscape of mountains, lakes, and glaciers.
  - Boreal Forests – Canada & Alaska
    One of the world's largest land biomes.
  - Arctic Tundra – northern USA, Canada, Greenland
    Very cold, with frozen ground and limited vegetation.
  - Amazon Rainforest – 8 countries
    Largest rainforest on Earth.
- Quick Check Where is tundra found? Choose two:
  A. Brazil
  B. Greenland

		C. Jamaica D. USA ○ Answer: B. Greenland and D. USA ● Quick Check ○ Where is Torres del Paine National Park? A. Argentina B. Brazil C. Chile D. Ecuador ○ Answer: C. Chile ● Explain: Wilderness areas are getting smaller. For example, 17% of the Amazon rainforest has already been lost—an area the size of France. ○ Causes: ○ logging hydroelectric dams cattle ranching mining agriculture urban development wildfires climate change ○ Effects: ○ loss of habitats reduced biodiversity changes to climate ● True or False Check “The Amazon rainforest is getting smaller.” Answer: True. Justification: Because human activities—logging, cattle ranching, mining, and urban development—are destroying parts of the rainforest. ● Task B — Fact File Research a wilderness area in North or South America. Include: ○ Type of wilderness Country/countries Description Why it is under threat Actions being taken to protect it ● By the end of this lesson, pupils will know ○ Where North and South America are located on a world map. ○ Examples of physical features and landscapes found within these continents. ○ What wilderness areas are and why they are under threat.	

5	list some of Africa's natural resources and describe some of the consequences of mining cobalt. Present geographical findings using maps and graph	• Show a world map, ask pupils to locate the continent of Africa. Quick think-pair-share: ○ Name a country in Africa. ○ What physical features or landmarks do you know? • Explain using images/maps: Africa as a diverse continent with deserts, rainforests, mountains, lakes. Introduce natural resources. Show examples: ○ Oil, natural gas, coal (non-renewable) ○ Gold, copper, lithium, diamonds, cobalt ○ Agricultural resources: cocoa, tomatoes, coffee ○ Timber from rainforests ○ Renewable energy: solar power, hydroelectric, wind • Brief discussion: Why might these resources be important? What are the problems with using non-renewable fuels? • Quick Check: ○ Which of the following are renewable: hydroelectric power, natural gas, oil, wind? ○ Answer: hydroelectric and wind • Task A – Research and Map Work using the provided worksheet. For each natural resource in the table, find an example of an African country where it is an important industry. Challenge: Add an explanation of why that resource is important for the country's economy. • Explain what sustainability means. • Explore cobalt mining in the DRC: ○ 70% of the world's cobalt comes from the DRC Used in mobile phones, laptops, electric vehicles ○ Positive impacts: ○ Provides jobs Supports national economy Infrastructure improvements ○ Negative impacts: ○ Pollution (air, water, land) Deforestation and habitat loss People forced to move Dangerous working conditions Child labour • True/False Check: "The world's demand for mineral resources is decreasing." Answer: False • Task B – Persuasive Letter Write a letter to the CEO of a large electronics company explaining: ○ How cobalt is mined unsustainably What negative impacts mining has What the company should do (fair pay, safer working conditions, recycling materials, reducing waste, sustainable sourcing) ○ Sentence starters (for support):	Natural resources Minerals Non-renewable Renewable Economy. Sustainability. Cobalt

		○ "I am writing to tell you about…" "Cobalt is important because…" "However, mining cobalt can cause…" "I believe your company should…" ○ Challenge: Add a paragraph explaining how consumer behaviour can reduce demand for new minerals. ● Plenary – Quick Review Ask pupils to complete: ○ "One new natural resource I learned Africa has is…" "One positive impact of cobalt mining is…" "One negative impact of cobalt mining is…" "To be more sustainable, companies could…" By the end of this lesson, pupils will know: ● That Africa has a wide range of natural resources, including renewable and non-renewable examples. ● Why minerals such as cobalt are important in everyday technology. ● Some of the positive and negative consequences of cobalt mining in the Democratic Republic of Congo (DRC) and how this links to sustainability.	
6	Synoptic Task	Around the world in 80 days: what have we learnt about our world?	

Synoptic Task:Local area: What future changes might benefit our local area?			
Lesson number	Learning objective and skill	Pupils will	Vocabulary
1	*To identify and describe the main physical and human features and land uses in the local area using maps and aerial photographs.*	● Introduce chn to a local area that's contrasting to out local area (e.g., Whitley Bay). Use an aerial photograph and discuss: ○ Physical features (e.g., coast, beach) ○ Human features (e.g., houses, shops, schools) ○ Land use: residential and commercial (and any others present) ● Ask: What are the two main types of land use in Whitley Bay? ● A) Residential B) Agricultural C) Industrial D) Commercial ● Correct answer: A and D ● Share an aerial photo of your Harlesden- a current one and maps. Can use google Earth / maps for this. ● Chn to identify the following things ○ 3 human features ○ 2 physical features ○ 2 main land uses ● Introduce sources of evidence: ○ Current OS maps (most up to date) ○ Media reports (local news) ○ Local people (interviews/surveys) ○ Fieldwork (observations) ● Ask chn to name three sources of evidence that can help identify local issues. ○ Possible answers: OS maps, local news, interviews with residents, fieldwork. ● In groups, chn to create a list of three local issues that could be investigated (realistic and observable). ● By the end of today's lesson, pupils will: ○ Describe the main land uses in your local area ○ Use an aerial photograph and an OS map to identify human and physical features ○ Suggest what they already know about the local area and what they still need to find out	Inquiry, historical maps, OS maps, media
2	To use historical maps and other evidence to describe how the local area has changed over time in terms of size, land use and settlement	● Use a historical map of Harlesden and identify: ○ Size of settlement ○ Separate villages nearby ○ Road patterns / coastline features ○ Evidence of limited development ● Ask: What do historical maps show? ● Correct idea: what an area was like in the past. ● Share a map possibly just after WW 2 and modern day and compare the three	Settlement, land use, population, census, change over time

	Conduct fieldwork and collect primary data.	○ Settlement expands ○ Villages merge ○ New roads and housing appear ○ Land use becomes more mixed ● Chn to evaluate the maps using the following sentence starters: ○ Today my local area is a _____ because _____. ○ Since (earlier date) it has _____. ○ The land around our school is mainly _____. ● By the end of the lesson, pupils will: ○ Use historical maps or photographs to describe how a local area has changed ○ Compare settlement size, land use and patterns across time ○ Explain how population and area can change as a settlement grows	
3	To identify a local geographical issue and explain why it is important using evidence from maps, media, local people and prior knowledge *Plan a geographical enquiry*	● Ask chn: What issues exist locally? ● Share the following issues from a range of evidence types: ○ OS map: missing crossings, lack of green space, busy roads ○ Media: complaints about litter, antisocial behaviour, closures ○ People: residents' concerns about safety, transport, facilities ○ Fieldwork notes: rubbish hotspots, broken equipment, traffic speed ● Discuss if any of these are similar problems people in Harlesden may face ● Give chn a range of issue that people in Harlsden may face: traffic, lack of green spaces, constant road works, fly tipping, pollution, school streets ● In groups, chn to select one issue, or one of their own they wish to investigate, using the following criteria: ○ Can it be investigated safely and realistically? ○ Can evidence be collected in school time? ○ Does it affect people or environment? ● Chn to then write one inquiry question, e.g.: ○ "How safe is the road outside our school at drop-off time?" ○ "How much litter is there in the local park and where is it concentrated?" ○ "How accessible are local shops/services for people without a car?" ● By the end of the lesson, pupils will: ○ Use evidence to identify a local issue ○ Explain why the issue matters and who it affects ○ Decide on one issue to investigate and write an inquiry question	Issue, evidence, viewpoint, priority, inquiry question
4	To plan a geographical fieldwork investigation by selecting appropriate	● Share with chn the focus of the lesson. They will be ○ 1. Choosing fieldwork methods ○ 2. Making a fair plan ● Ask: Why do we use the same method in each place? ● Correct idea: to make results fair and comparable. ● In groups, chn are to create a fieldwork plan including:	Fieldwork, data, method, sample, tally chart, route

	methods to collect fair and reliable data. *Plan a geographical enquiry*	○ What you will measure (e.g., cars, litter, noise, facilities) ○ Where and when you will collect data ○ Your method (counts, photos, surveys, map marking) ○ How you will record results (tables, tallies, annotations) ○ Safety rules and adult supervision ● By the end of the lesson, pupils will: ○ Plan a simple fieldwork investigation ○ Choose methods to collect data (counts, surveys, observations, mapping) ○ Explain how to keep fieldwork fair, accurate and safe	
5	To present and interpret fieldwork data in order to identify patterns, hotspots and conclusions about a local issue Conduct fieldwork and collect primary data. Analyse geographical data	● Ask chn, in geography, what is a hotspot? ● Correct: a place where the issue is most concentrated. ● Using their plan from the previous lesson, chn should carry out field work to investigate their question. ● Following the collection of data, chn should begin to present and interpret the data that's been collected. Chn should: ○ Create one chart (bar chart or tally summary) ○ Create one annotated map showing hotspots ○ Write 3 evidence statements, using: "The data shows…" and "This suggests…" ● By the end of the lesson, pupils will: ○ Investigate a question and collect data ○ Present fieldwork data clearly (tables, graphs, annotated maps) ○ Identify patterns and possible causes ○ Use evidence to explain the results	Pattern, trend, hotspot, annotation, conclusion
6	To propose and justify a realistic improvement to the local area using evidence from a geographical inquiry. - Synoptic Task Present fieldwork findings and conclusions.	● Explain that today's lesson will be their opportunity to answer the synoptic task big question: What future changes might benefit our local area? ● Explain chn will be: ○ 1. Creating solutions ○ 2. Presenting and justifying recommendations ● Ask:Why must recommendations be based on evidence? ● Correct idea: so decisions are fair, justified and more likely to work. ● In groups, chn to create a proposal pack (one page) / presentation including: ○ The issue and who it affects ○ Key evidence (data + hotspot) ○ Your recommended change (e.g., crossing, bins, lighting, bike storage, traffic calming) ○ Expected benefits ○ Possible trade-offs and how to reduce them ○ Who you would share it with (e.g., headteacher, council, local newspaper) ● By the end of the lesson, pupils will: ○ Propose one realistic improvement for your local area ○ Explain how your proposal would help people and/or the environment	Recommendation, sustainability, impact, stakeholder, trade-off

		○ Use evidence to justify your recommendation ○ Consider possible drawbacks and how to reduce them	