



Nourishing the fitrah of each unique child

Geography Policy

*“Travel in the land and see how (Allaah) originated creation...”
(Surah Ankabut 29:20)*

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Geography Policy

Geography teaches us about people, places and environments. At Unique Academy, children will learn about their local area and compare their life in this area with that in other regions in the United Kingdom and in the rest of the world. They learn how to draw and interpret maps and they develop the skills of research, investigation, analysis and problem-solving. Through their growing knowledge and understanding of human geography, children gain an appreciation of life in other cultures, as Allaah mentions:

“We have created you from a male and a female, and made you into nations and tribes, that you may know one another.”
(Surah Hujurat 49:13)

Geography teaching also motivates children to find out about the physical world and enables them to recognise the importance of human beings as *khalifah tul ardh* (custodians of the earth) and therefore ensuring that we all engage in sustainable living for the future of mankind.

Intent

At Unique Academy, Geography is offered through structured lessons to ensure that children acquire the necessary skills as required to meet the aims of the National Curriculum. We aim 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. We aim to develop children's knowledge and understanding of the world its people – which will stay with them for the rest of their lives. Children will have opportunities to investigate places around the world as well as physical and human processes. Lessons are intended to improve children's geographical vocabulary, map skills and geographical facts and provide opportunities for consolidation, challenge and variety to ensure progression through Geography.

Implementation

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. Furthermore, 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 challenge. 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. Our lessons come with end of unit Assessment outcomes to give the teacher and adults leading geography confidence in the progression of skills and knowledge and those outcomes have been met. Key words are also highlighted in each lesson pack, to be used by children to deepen their geographical knowledge.

Impact

At Unique Academy, we aim for the Geography subject discipline to be enjoyed and loved by pupils. We look forward to seeing high quality evidence presented in children's books and for children to use geographical vocabulary accurately and with an improved understanding of the physical and human processes of Geography. Children will also begin to make relevant links with Geography and other subject disciplines such as history and science. Pupils will improve their enquiry skills as well as realise that they have choices to make in the world, which Allaah has given us as *khalifah tul ardh* (custodians of the earth). This deeper understanding should develop in the children a positive commitment to the environment and taking care of the planet and its inhabitants. Children will explore how to collect and analyse a range of data they have gathered. Pupils will also be able to interpret a range of sources of geographical information and they will communicate geographical information in a range of ways. All children will develop the ability to speak confidently about

their geographical learning, knowledge and skills.

Early Years

Geography is taught in the EYFS classes as part of the topics covered each half term. Geographical aspects of the children's work relate to the objectives set out in the Early Years Foundation Stage framework which underpin the planning for children aged three to five. Geography makes a significant contribution to the ELG objectives of developing a child's understanding of the world through activities such as finding out about different places and habitats and investigating our locality.

Key Stage 1

In Key Stage 1, children investigate their local area and a contrasting area in the United Kingdom or abroad, finding out about the environment in both areas and the people who live there. They also begin to learn about the wider world. They carry out geographical enquiry inside and outside the classroom. In doing this, they ask geographical questions about people, places and environments, and use geographical skills and resources, such as maps and photographs.

Key Stage 2

In Key Stage 2, pupils investigate a variety of people, places and environments in the United Kingdom and abroad, and start to make links between different places in the world. They find out how people affect the environment and how they are affected by it. Pupils carry out geographical enquiry inside and outside the classroom. In doing this, they ask geographical questions, and use geographical skills and resources, such as maps, atlases, aerial photographs and ICT. Children will develop geographical enquiry skills, including asking geographical questions, collecting and recording information and identifying different views. They will acquire the appropriate practical skills associated with Geography, including using suitable vocabulary, fieldwork techniques and maps, plans and atlases. Pupils will use secondary sources of information with accuracy, including aerial photographs, satellite images, etc. As well as making its own distinctive contribution to the school curriculum, geography contributes to the wider aims of primary education. Teachers will ensure that links between subjects are maximised.

Geography Curriculum Planning

At Unique Academy our Geography is planned over a 2 year cycle using the Cornerstones curriculum. Our long-term and medium-term plans map out the themes covered each term for each key stage. These plans define what we will teach and ensure an appropriate balance and distribution of work across each term.

Teaching and Learning

At Unique Academy, we use a variety of teaching and learning styles in our geography lessons. We believe in whole-class teaching methods and we combine these with enquiry-based research activities. We encourage children to ask as well as answer geographical questions. We offer them the opportunity to use a variety of data, such as maps, statistics, graphs, pictures, and aerial photographs, and we enable them to use IT in geography lessons where this serves to enhance their learning. Children take part in role-play and discussions, and they present reports to the rest of the class. They engage in a wide variety of problem-solving activities. Wherever possible, we involve the children in 'real' geographical activities, e.g. research of a local environmental problem or use of the Internet to investigate a current issue.

We recognise the fact that there are children of widely different geographical abilities in all classes and we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty, some children not completing all tasks;
- grouping children by ability in the room and setting different tasks to each ability group;
- providing resources of different complexity according to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children.

Assessment outcomes

We assess the children's work in geography by making informal judgements as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they are working at, below or above the expectations of the unit. We record the results in our Assessment outcomes tracker, and we use these to plan future work, to provide the basis for assessing the progress of the child.

Samples of children's Geography work is kept in their learning journey's in early years and topic books in key stage 1.

Resources

We keep Geography resources in a central storage room where there is a box of equipment for each unit of topic. We have a variety of atlases. In classroom bookshelves, we have a good supply of geography topic books. There is internet access and teachers can access educational activities to support the children's individual research in the classes.

Fieldwork

Fieldwork is integral to good geography learning and we include as many opportunities as we can to involve children in practical geographical research and enquiry.

In Key Stage 1 all the children carry out an investigation into the local environment and we give them opportunities to observe and record information around the local area.

Monitoring

The Headteacher is responsible for monitoring the standard of the children's work and the quality of teaching in geography. The Headteacher is also responsible for supporting colleagues in the teaching of geography, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school. The Headteacher evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The Headteacher will conduct classroom visits to observe teaching in Geography.



Geography Curriculum Map

Class	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Nursery	Our school community Community helpers Key workers heroes Who's who? Woodland walk Exploring leaves Who lives in the woods? Wild ones	What happens when I sleep? Nocturnal animals Night owls Out in space Winter wonderland Frozen Where is it always cold?	Into the woods Royal baths Festive lights around the world Celebration food Is it shiny?	Prehistoric safari Carnivore or herbivore Dinosaur island Is It weatherproof?	Outside explorers Our garden Garden hunt Who is in the garden? What is a shadow? Let's investigate	Clean up! Wish you were here? Maps and plans Children around the world Stories from around the world Food from around the world Under the same sky Floating and sinking
Reception	Journeys Who lives here? Remembering our experience World explorers Bear hunt Where we live Where have you been? Marvellous maps Changes	How far?	Food and farming Down on the farm Time to grow	Yearly changes Clean up	Animals around the world Comparing places Handa Look after us Looking after nature Same and different Wild garden	Will it float? What can you do at the beach? Looking after our beaches Who lives on the seashore? Who lives in a rock pool? Seas and oceans Treasure maps
Cycle A Year 1 / 2	Our Wonderful World What is Geography? Maps Location Directional language Continents and oceans Four countries of the UK		Bright lights, Big City Life in the United Kingdom Physical features of the UK What is a city? Human features of the locality Weather in the United Kingdom	Bright lights, Big City This is London London landmarks Aerial photographs Giving directions Comparing capital cities		
Cycle B Year 1 / 2	Let's Explore the World Atlases, maps and cardinal compass points Collecting primary data in locality Fieldwork: Hot, temperate and cold places Characteristics of the United Kingdom Comparing places		Geographical coastline features of the United Kingdom Human features of a coastal town Tourism	Dangers of the coast Celebrating the coast Map making		
Cycle A Year 3 / 4	One Planet, Our World Geographical skills: Reading maps Analysing data Climate zones Locating European countries and cities The United Kingdom: Human and physical features Weather and the local environment		Rocks, Relics and Rumbles Plate Tectonics Ring of fire Features of volcanoes Latitude and longitude Volcanologists report	Rocks, Relics and Rumbles Earthquakes The spread of tsumani Uses of rock Model volcanoes		

<p>Cycle B Year 3 / 4</p>	<p>Interconnected World Geographical skills: Grid references The world: Tropics of Cancer and Capricorn North and South America The United Kingdom: Renewable energy National Rail network Canals</p>		<p>Misty Mountain, Winding River Rivers Case study – River Trent Mountains Topography and contour lines</p>	<p>Misty Mountain, Winding River The science of rivers and mountains Habitats Case study – Somerset Levels flooding Soil</p>		
<p>Cycle A Year 5 / 6</p>	<p>Investigating Our World Geographical skills: Ordnance Survey maps The world: Time and Climate zones Vegetation belts and Biomes Sustainable manufacturing processes The United Kingdom: Transport networks World cities</p>		<p>Farming in the UK Mapping using grid references Case study: Potato farming in Jersey Climate zones</p>	<p>Farming across the world North and South America Citrus Farming Coffee growing in Peru How far has your food travelled?</p>		
<p>Cycle B Year 5 / 6</p>	<p>Our Changing World Geographical skills: Features of Earth Latitude and longitude Time zones The world: Climate change Trade Natural resource management Human settlement patterns</p>		<p>Polar climates Polar day and night Polar oceans Polar climates Polar landscapes</p>	<p>Climate change Natural resources Indigenous people Case study – Tourism in the Antarctic</p>		



Geography Progression Map

Early Years Foundation Stage

<p>Understanding the World (People, culture and communities)</p> <p>Children know about similarities and differences between themselves and others, and among families, communities and traditions.</p>	<p>Understanding the World (The Natural World)</p> <p>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another.</p>
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The Early Learning goals which closely link to the Geography National Curriculum.

<p>Key Stage 1 National Curriculum Expectations</p>	
<p>Locational Knowledge Pupils should be taught to:</p> <ul style="list-style-type: none"> name and locate the world's seven continents and five oceans; name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas. <p>Place Knowledge Pupils should be taught to:</p> <ul style="list-style-type: none"> understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country. <p>Human and Physical Geography Pupils should be taught to:</p> <ul style="list-style-type: none"> identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles; use basic geographical vocabulary to refer to: <ul style="list-style-type: none"> -key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather; -key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop. 	<p>Geographical Skills and Fieldwork Pupils should be taught to:</p> <ul style="list-style-type: none"> use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage; use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map; use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key; use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

Key Stage 2 National Curriculum Expectations

Locational Knowledge

Pupils should be taught to:

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities;
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time;
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Place Knowledge

Pupils should be taught to:

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.

Human and Physical Geography

Pupils should be taught to:

- describe and understand key aspects of:
 - physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle;
 - human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical Skills and Fieldwork

Pupils should be taught to:

- use maps, atlases, globes and digital/computer mapping to locate countries and 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;
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Locational knowledge		Place knowledge	
KS1	LKS2	KS1	LKS2
<p>Building on EYFS knowledge of their own environment, children start to learn the names of key places in the UK beyond their immediate environment. Children also learn the names of the world's oceans and continents.</p> <p>KS1 Geography National Curriculum Pupils develop contextual knowledge of the location of globally significant places. They should develop knowledge about the world, the United Kingdom and their locality.</p> <p>Children can:</p> <ul style="list-style-type: none"> a name and locate the world's seven continents and five oceans; b name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas; c use key vocabulary to demonstrate knowledge and understanding in this strand: United Kingdom, England, Scotland, Wales, Northern Ireland, town, city, village, sea, beach, hill, mountain, London, Belfast, Cardiff, Edinburgh, capital city, world map, continent, ocean, Europe, Africa, Asia, Australasia, North America, South America, Antarctica. 	<p>Building on KS1 knowledge of the UK, children begin to explore more of the world, understand how the world has zones and the significance of those zones. Locating places and features accurately on maps also becomes a focus.</p> <p>KS2 Geography National Curriculum Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America.</p> <p>Children can develop contextual knowledge of the location of globally significant places – both terrestrial and marine.</p> <p>Children develop their understanding, recognising and identifying key physical and human geographical features.</p> <p>Children can:</p> <ul style="list-style-type: none"> a locate the world's countries, using maps to focus on South America, concentrating on environmental regions and key physical and human characteristics; b name and locate counties and cities of the United Kingdom, identifying human and physical characteristics including hills, mountains, rivers and seas, and how a place has changed; c identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones; d use key vocabulary to demonstrate knowledge and understanding in this strand: county, country, town, coast, physical features, human features, mountain, hill, river, sea, climate, tropics, tropical, of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle. 	<p>Children begin to compare places in the UK with a place outside of the UK. This builds on EYFS knowledge and understanding of the world, people and communities. Children can apply the skills of observing similarities and differences to places as well as people.</p> <p>KS1 Geography National Curriculum Pupils develop contextual knowledge of the location of globally significant places. They should develop knowledge about the world, the United Kingdom and their locality. Children begin to understand basic vocabulary relating to human and physical geography.</p> <p>Children can:</p> <ul style="list-style-type: none"> a compare the UK with a contrasting country in the world; b compare a local city/town in the UK with a contrasting city/town in a different country; c use key vocabulary to demonstrate knowledge and understanding in this strand: South America, London, Brasilia, compare, capital city, China, Asia, country, population, weather, similarities, differences, farming, culture, Africa, Kenya, Nairobi, river, desert, volcano. 	<p>Children develop vocabulary relating to physical and human geographical features from KS1. They begin to develop the skills of comparing regions, by focusing on specific features. Children focus on comparing regions of the UK in depth and start to look at an area outside of the UK.</p> <p>KS2 Geography National Curriculum Children can understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country and a region within North or South America.</p> <p>Children can:</p> <ul style="list-style-type: none"> a understand geographical similarities and differences through the study of human geography of a region of the United Kingdom; b explore similarities and differences, comparing the human geography of a region of the UK and a region of South America; c understand geographical similarities and differences through the study of physical geography of a region of the United Kingdom; d explore similarities and differences comparing the physical geography of a region of the UK and a region of South America; e use key vocabulary to demonstrate knowledge and understanding in this strand: Amazon rainforest, Sherwood Forest, Sheffield, city, Yorkshire, physical features, human features, landscape, feature, population, land use, retail, leisure, housing, business, industrial, agricultural.

Human and Physical Geography		Geographical Skills and Fieldwork	
KS 1	LWKS 2	KS 1	LWKS 2
<p>Building on EYFS knowledge of how environments may vary. Children begin to learn about the physical and human features of geography.</p> <p>KS1 Geography National Curriculum Children will understand key physical and human geographical features of the world. They identify seasonal and daily weather patterns.</p> <p>Children can:</p> <ul style="list-style-type: none"> a identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles; b use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather; c use basic geographical vocabulary to refer to key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop. 	<p>Children have a stronger understanding of the difference between physical and human geography. They use more precise vocabulary, explaining the processes of physical and human geography and their significance. They learn more about extreme weather, the processes involved in the causes and effects of extreme weather, as well as beginning to understand the impact of humans on the earth.</p> <p>KS2 Geography National Curriculum Children locate a range of the world's most significant human and physical features. Explain how physical features have formed, why they are significant and how they can change. Explain the impact of humans on the earth in terms of land use, settlements and their direct connection to physical changes.</p> <p>Children can:</p> <p>describe and understand key aspects of:</p> <ul style="list-style-type: none"> a physical geography, including: climate zones, biomes, volcanoes, tornadoes, tsunamis, earthquakes and the water cycle; b human geography, including: types of settlement and land use; c use key vocabulary to demonstrate knowledge and understanding in this strand: mantle, outer core, inner core, magma, volcano, active, dormant, extinct, earthquake, epicentre, shock wave, magnitude, tsunami, tornado, climate, tropics, deforestation, evaporation, water cycle, evaporation, condensation, precipitation, cooling, filter, pollution, settlement, settler, site, need, shelter, food. 	<p>Building on EYFS knowledge of their own environment, children begin to use maps to locate places and name features using keys and symbols. Children also begin to look at how the environment has changed over time.</p> <p>KS1 Geography National Curriculum Children can interpret geographical information from a range of sources. They can communicate geographical information in a variety of ways.</p> <p>Children can:</p> <ul style="list-style-type: none"> a use world maps, atlases and globes to identify the countries, continents and oceans studied at this key stage; b use simple compass directions and locational and directional to describe the location of features and routes on a map; c devise a simple map; and use and construct basic symbols in a key; d use simple fieldwork and observational skills to study the geography of the surrounding area, including key human and physical features, using a range of methods; e use key vocabulary to demonstrate knowledge and understanding in this strand: compass, 4-point, direction, North, East, South, West, plan, record, observe, aerial view, key, map, symbols, direction, position, route, journey, the UK, changes, tally chart, pictogram, world map, country, continent, human, physical. 	<p>Children begin to develop their map skills. They will be able to identify features on a map through the use of symbols and keys. Children begin to use fieldwork skills to monitor and explain patterns in human and physical features.</p> <p>KS2 Geography National Curriculum Children collect, analyse and communicate a range of data gathered through fieldwork that deepens their understanding of geographical processes. They interpret a range of sources of geographical information including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS).</p> <p>Children can:</p> <ul style="list-style-type: none"> a use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied; b use symbols and keys (including the use of Ordnance Survey maps), to build their knowledge of the United Kingdom and the wider world; c use fieldwork to observe and present the human and physical features in the local area using sketch maps, plans and digital technologies; d use key vocabulary to demonstrate knowledge and understanding in this strand: sketch map, map, aerial view, feature, annotation, landmark, distance, key, symbol, land use, urban, rural, population, coordinates.



Cycle A: Year 1 / 2 Geography Schemes of Work
Autumn Term - Our Wonderful World

Overview:

In the Our Wonderful World project, pupils will learn the meaning of the terms 'geography', 'physical feature' and 'human feature'. They will use maps, including picture maps, globes, online mapping tools and world maps. Your child will learn to use positional language, such as next to and behind, and directional language, such as forwards and backwards. They will also become familiar with the cardinal compass points, north, south, east and west. They will learn the names and positions of the continents and oceans of the world and understand the terms equator, Northern Hemisphere and Southern Hemisphere. They will also know the location of some hot and cold places. They will study maps to learn the names, capital cities and positions of the four countries of the United Kingdom and find out the characteristics of a village, a town and a city. They will study aerial photographs and spot familiar areas of their locality from above. Your child will carry out simple fieldwork to find out about local physical and human features.

Vocabulary:

Compare and contrast:

different, same

Settlements and land use:

bus station, bus stop, carpark, cathedral, church, city, cottage, farm, feature, flat, hotel, house, landmark, lane, leisure centre, library, market, museum, office, place of worship, pub, restaurant, roundabout, school, settlement, shop, shopping centre, skyscraper, theatre, town, town hall, train station, university, village, village green, village hall

Geographical resources:

aerial photograph, bird's eye view

Data analysis:

collect, data, information

Fieldwork:

enquiry, fieldwork, human feature, local area, physical feature, record

Physical features:

beach, cliff, coastline, forest, geography, hill, lake, mountain, ocean, physical feature, river, sea, soil, valley,

Maps:

Ordnance Survey map, atlas, digital map, globe, key, map, picture map, route, symbol, world map,

Position:

backward, behind, beside, between, cardinal compass point, close, direction, east, far away, far from, forward, in front of, left, location, near to, next to, north, opposite, position, right, south, straight ahead, turn, west,

UK:

Atlantic Ocean, Belfast, Cardiff, Celtic Sea, Edinburgh, England, English Channel, Irish Sea, London, North Sea, Northern Ireland, Scotland, United Kingdom, Wales, capital city, country

Location:

<p>North Pole, Northern Hemisphere, South Pole, Southern Hemisphere, cold place, continent, equator, hot place</p> <p>World: Africa, Antarctica, Arctic Ocean, Asia, Atlantic Ocean, Australia (Oceania), Earth, Europe, Indian Ocean, North America, Pacific Ocean, South America, Southern Ocean, continent, land, ocean, water, world</p> <p>Sustainability: animal, bird, countryside, damage, future, grass, hedgerow, human, insect, litter, meadow, plant, protect, shelter, shrub, tree, wildflower, wildlife, woodland</p>		
<p>Assessment outcomes: Assess the children's knowledge by asking them to complete the Our Wonderful World question sheet. An Our Wonderful World answer sheet is also provided.</p>		
Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Geographical Skills</p> <p>Lesson 1: What is geography?</p> <p>P. of Study Geography Features 1 Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather.</p> <p>Knowledge Year 1 Physical features are naturally-created features of the Earth.</p> <p>Specific knowledge Year 1 Physical features include a beach, cliff, coastline, forest, hill, mountain, sea, ocean, river, soil, valley and lake.</p> <p>Skill Year 1 Use basic geographical vocabulary to identify and describe physical features, such as beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley and vegetation.</p>	<p>Share the book Here We Are by Oliver Jeffers. Use the book as a starting point to discuss the subject of geography. Explain that geography helps us to learn about the world and its people. Share the Physical and human features presentation and encourage the children to name and describe each feature. For example, 'a bridge is a human feature that helps people to cross a river'. Spread the Physical and human features picture cards on a tabletop. Give children clues about a specific feature, for example, 'This is a human feature. We use it to travel from one place to another'. Encourage the children to guess the feature. Invite them to take turns to give clues for others to guess. Prepare the Physical and human features cut outs and encourage children to choose one or two. Ask them to stick them into their workbook and write words or a simple sentence to describe each feature. To consolidate, give each child one of the Physical and human features bingo recording sheets. Describe each feature in a random order, and ask the children to tick their recording sheets. The winner is the first to tick all their pictures.</p>	
<p>Lesson 2: Maps</p> <p>P. of Study Geography Fieldwork 3 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p> <p>Knowledge Year 1 A map is a picture or drawing of an area of land or sea that can show human and physical features. A key is used to show features on a map. A map has symbols to show where things are located.</p> <p>Skill Year 1 Draw or read a simple picture map.</p>	<p>Display a range of maps, including a globe, picture maps, maps with keys, world maps, atlases, Ordnance Survey maps and digital maps, such as Digimap or Google Maps. Ask the children, 'What is a map, and how are they used?' Allow them to share their ideas and refer to the display to help them articulate their explanations. Explain that maps are used for two primary purposes; to plan a route or find a location. Set out a small world play map and allow children to place small world or model features in different places on the map. Features could include a house, school, garage, shop, trees or a lake. Talk with the children about their reasons for placing features in a specific place, encouraging them to think about how features are connected. For example, a bus stop is useful outside a shop. Once the children have constructed their map, ask them to draw it, labelling the different features. Display the Picture map diagram and involve the children in a game of <i>Show me</i>. For example, 'Can you show me where the school is?' or 'Can you show me where the Masjid is?'</p>	<ul style="list-style-type: none"> • Globes, picture maps, large world map, atlases, Ordnance Survey maps • Computers or tablets • Small world map • Small world or model physical and human features
<p>Lesson 3: Location</p> <p>P. of Study Geography Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language (e.g. near and far; left and right), to describe the location of features and routes on a map.</p> <p>Knowledge Year 1 Positional language includes behind, next to and in front of. Directional language includes left, right, straight ahead and turn.</p> <p>Specific knowledge Year 1 A location is a place or the position of something.</p> <p>Skill Year 1 Use simple directional and positional language to give directions, describe the location of features and discuss where things are in relation to each other.</p>	<p>Ask the children if they know what the word 'location' means. Explain that we use the word to describe a place or the position of something. Give examples of both, to help the children understand the term in context. Share the Picture map diagram and highlight the compass and its cardinal points. Model how to describe the location of features on the map using a range of positional language. For example, 'The café is next to the newsagents'. Invite children to give other examples using language, such as next to, beside, near to, far from and between. Add challenge by asking them to describe the location of features using the cardinal points. For example, 'The synagogue is to the west of the bus stop'. Extend the activity by asking the children, 'How well do we know our classroom?' Encourage them to name parts of the classroom and their location. For example, 'The sink is next to the window'. Work together on a large sheet of paper to sketch a simple map showing the location of the classroom's features and talk about smaller details that could also be added.</p>	<ul style="list-style-type: none"> • Large sheets of paper • Pens

	After creating a group map, ask the children to make individual maps of the classroom.	
<p>Lesson 4: Directional language P. of Study/Geography/Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language (e.g. near and far; left and right), to describe the location of features and routes on a map. Knowledge Year 1 Positional language includes behind, next to and in front of. Directional language includes left, right, straight ahead and turn. Specific knowledge Year 1 Direction is the way you travel to get somewhere. Skill Year 1 Use simple directional and positional language to give directions, describe the location of features and discuss where things are in relation to each other.</p>	Working in a large space, display the Directional language word cards . Invite the children to read the words and explain and model what each word means. Ask children to find a space. Give directions for the children to follow, for example, 'Walk forwards, stop, walk backwards, stop, turn left, stop, walk forwards'. Pair the children and give them the Directions instructions . Ask them select one or more of the cards and follow the directions. Encourage them to make longer sequences by using multiple cards together to form a route. At the end of the session, recap on directional language and ask the children to give some examples.	
<p>Develop 1 - The World</p> <p>Lesson 1: Continents and oceans P. of Study/Geography/Year 1/Location Name and locate the world's seven continents and five oceans. 2 Year 1/Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage. Knowledge Year 1 A continent is a large area of land. The world's seven continents are Africa, Antarctica, Asia, Australia, Europe, North America and South America. The five oceans are the Arctic Ocean, Atlantic Ocean, Indian Ocean, Pacific Ocean and Southern Ocean. Skill(s) Year 1 Name and locate the world's seven continents and five oceans on a world map.</p>	Start by showing the children a view of the world on Google Earth . Explain that Earth is our home, and it is covered in areas of land and water. Use the cursor to rotate the world and explain to the children that the land is divided into seven continents and the water into five oceans. Reinforce the names and locations using the Continents and oceans presentation . Before revealing the last slide, give children globes to explore. Provide sticky tack and the Continents and oceans cut outs , and ask the children to work with a partner to label each ocean and continent on their globe. Share and compare their work. Recap the names and locations of the seven continents and five oceans of the world using the final slide of the Continents and oceans presentation .	<ul style="list-style-type: none"> • Globes • Sticky tack • Atlases • World maps
<p>Lesson 2: Hot and cold places P. of Study/Geography 1/Year 1/Place Understand geographical similarities and differences through studying the human and physical geography of a small area of the UK, and of a small area in a contrasting non-European country. 2 Year 1/Features Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Knowledge Year 1 Places can be compared by size, amenities, transport, location, weather and climate. Year 1 Warmer areas of the world are closer to the equator and colder areas of the world are further from the equator. The equator is an imaginary line that divides the Earth into two parts: the Northern and Southern Hemispheres. Continents have different climates depending on where they are in the world. The climate of a place can be identified by the types of weather, plants and animals found there. Skill(s) Year 1 Identify the similarities and differences between two places. View progression Year 1 Locate hot and cold areas of the world in relation to the equator.</p>	Show the children a large world map or globe. Recap the names and locations of the continents and oceans from the previous lesson. Explain that some places on Earth are hot and others are cold. Show the location of the equator and explain that this is an imaginary and invisible line that goes around the world, dividing it into two halves, the Northern Hemisphere and the Southern Hemisphere. Show the Hot and cold places presentation to reinforce your teaching points. Ask the children to colour in the dots to show which places are hot and cold on the Hot and cold places map , using the key as a guide. To consolidate their learning, play the game <i>Hot place, cold place</i> . Hold up a Hot and cold places word card and ask the children to call out 'hot place' or 'cold place'. Refer to a large map or globe to check their answers.	<ul style="list-style-type: none"> • Large world map or globes • Colouring pencils
<p>Develop 2 - The United Kingdom</p> <p>Lesson 1: Four countries of the UK P. of Study/Geography 2/Year 1/Location Name, locate and identify characteristics of the four countries and capital cities of the UK and its surrounding seas. 2 Year 1/Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage.</p>	Begin by showing the children the BBC Teach video The United Kingdom . After watching the video, show the children the United Kingdom map . Highlight features on the map using the labels and key. Ask the children questions to prompt them to read the map. For example, 'Where is Scotland? Where is Wales? What is the capital city of England? Can you name a city in Northern Ireland?' Show the children the location of the place they live and mark it on the map. Give children a United Kingdom map template and support them in completing the task. At the end of the	

<p>Knowledge Year 1 The United Kingdom (UK) is a union of four countries: England, Northern Ireland, Scotland and Wales. A capital city is a city that is home to the government and ruler of a country. London is the capital city of England, Belfast is the capital city of Northern Ireland, Edinburgh is the capital city of Scotland and Cardiff is the capital city of Wales. The countries of the United Kingdom are made up of cities, towns and villages.</p> <p>Skill(s) Year 1 Name and locate the four countries of the UK and their capital cities on a map, atlas or globe.</p>	<p>session, invite the children to share what they have learned about the countries of the UK.</p>	
<p>Lesson 2: Different types of settlement</p> <p>P. of Study/Geography/Features 3 Use basic geographical vocabulary to refer to key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.</p> <p>Knowledge Year 1 A settlement is a place where people live and work and can be big or small, depending on how many people live there. Towns and cities are urban settlements. Features of towns and cities include homes, shops, roads and offices.</p> <p>Skill Year 1 Identify the characteristics of a settlement.</p>	<p>Introduce the term 'settlement' and show the BBC Teach video Cities, towns and villages. After watching the video, recap key teaching points and allow the children to ask and answer questions. Using a map of the United Kingdom, show children the location of cities, towns and villages in their local area and beyond. Direct the children to choose a settlement type and draw a picture map to show its features. Provide the Features of settlements posters to help them decide which features to add to their map. Invite the children to talk about their maps, describing what type of settlement their map represents and describing some of the human and physical features they included.</p>	
<p>Lesson 3: Aerial photographs</p> <p>P. of Study/Geography/Fieldwork 3 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p> <p>Knowledge Year 1 An aerial photograph or plan perspective shows an area of land from above.</p> <p>Specific knowledge Year 1 Google Earth is a computer program that accesses aerial images of the world via satellites.</p> <p>Skill Year 1 Identify features and landmarks on an aerial photograph or plan perspective.</p>	<p>Introduce the term 'aerial photograph' and describe how an aerial photograph is taken from the air, usually from an aircraft or drone. Explain that Google Earth is a computer program that accesses aerial images via satellites. Use the software to locate a selection of familiar places and use the tools to explore the area. Then provide computers or tablets with Google Earth set to the area around the school. Invite the children to work in pairs to identify and make a simple list of physical and human features they can see. Display the Aerial images presentation and invite the children to identify some of the features on each image and to describe what type of place they think it is.</p>	<ul style="list-style-type: none"> • Computers or tablets
<p>Lesson 4: Woodlands, hedgerows and meadows</p> <p>P. of Study/Geography/Fieldwork 5 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>Knowledge Year 1 Natural environments can be affected by the actions of humans, including cutting down trees or dropping litter. Humans can protect the environment by choosing to preserve woodlands and hedgerows, recycling where possible and disposing of waste carefully.</p> <p>Skill Year 1 Describe ways to protect natural environments, such as woodlands, hedgerows and meadows.</p>	<p>At the beginning of the lesson, ask the children if they have ever seen or visited a woodland, hedgerow or meadow and encourage them to describe what they saw and heard. Share the Woodlands presentation, Hedgerows presentation or Meadows presentation and discuss the importance of the habitat, the damage that people do and the ways in which it can be protected. Take the children on a walk to see the chosen habitat. Ask them to recall the information they already know about the habitat and encourage them to make observations, using the Woodlands spotting sheet, Hedgerows spotting sheet or Meadows spotting sheet. Encourage the children to think about the questions at the end of the spotting sheet, giving verbal answers. Back in the classroom, encourage the children to write answers to the questions in their topic books.</p> <p>Note: Before the lesson, arrange a walk to a local woodland, hedgerow or meadow and complete a risk Assessment outcomes for the visit if needed. Use your chosen location as the context for the lesson and choose the associated resources to support the children's learning.</p>	<ul style="list-style-type: none"> • Clipboards
<p>Innovate - Geographical enquiry</p> <p>Local physical and human features enquiry</p> <p>P. of Study/Geography/Fieldwork 5 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>Knowledge Year 1 Data is information that can be collected and used to answer a geographical question.</p> <p>Knowledge Year 1 Fieldwork includes going out in the environment to look, ask questions, take photographs, take measurements and collect samples.</p> <p>Skill Year 1 Collect simple data during fieldwork activities. View progression</p>	<p>Explain to the children that they are going to do a geographical enquiry to find out what human and physical features are present in their local area. Begin by showing the children a map of the local area and the route they are going to take. Give each child a Local area spotting sheet and clipboard. Explain how to use the spotting sheet to capture data about the local area. Encourage the children to fill in their spotting sheets independently or with support where needed. Offer cameras and tablets for the children to record interesting and unusual features on route. Back in the classroom, collate and analyse the children's data to identify local human and physical features. Invite the children to consider in what type of settlement they live. Challenge them to work in groups to make large picture maps of the route taken and the features seen.</p>	<ul style="list-style-type: none"> • Clipboards • Camera or tablet

Skill Year 1 Carry out fieldwork tasks to identify characteristics of the school grounds or locality.		
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Cycle A: Year 1 / 2 Art and Design Schemes of Work
Spring Term - Bright Lights, Big City

Overview:

In this project, pupils will take tea with the Queen and visit Buckingham Palace online. Using maps and research, they will locate Buckingham Palace, understand compass directions, plan routes around London and learn about the countries of the United Kingdom. Their research will take them back in time to the Great Fire of London and to famous London landmarks, as well as giving them an understanding of what it's like to live in a big city. They will plan a tour for Marley the Meerkat making sure he takes in all the sights and sounds of London before he finally meets his family at London Zoo.

Vocabulary:

Compare and contrast:

compare, geographical feature

Human features and landmarks:

ferris wheel, castle, cathedral, church, concert hall, landmark, monument, palace, skyscraper

Settlements and land use:

airport, art gallery, capital city, cathedral, church, cinema, city, flat, house, job, landmark, large settlement, live, monument, motorway, museum, park, restaurant, river, road, school, shop, statue, street, theatre, tourist, tower block, travel, work

Geographical resources:

aerial photograph

Data Analysis:

collect

Fieldwork:

human Feature, observe, record

Physical Features:

Beach, cliff, cloud, coastline, flatland, forest, hill, island, lake, land, landscape, mountain, mudflat, natural, ocean, physical feature, river, sea

Climate and weather:

autumn, cold, fog, hail, ice, rain, season, snow, spring, storm, summer, sun, weather, wind, winter

Significant places:

landmark, monument

Maps:

grid map, label, picture map

Position:

backward, behind, beside, between, cardinal compass point, direction, east, far from, forward, in front of, left, location, near to, next to, north, position, right, south straight ahead, turn, west

UK:

Belfast, Cardiff, Edinburgh, England, London, Northern Ireland, Scotland, United Kingdom, Wales, capital city, country

Assessment outcomes:

Hold a class quiz to test the children's learning from the project. Share the [United Kingdom quiz presentation](#). Ask the children to hold up a 'true' or 'false' card in response to each question or write 'T' or 'F' on paper to record their answers. Ask the children to identify any strengths from their learning and set goals for improvement using the [Strengths and goals writing frame](#). A [Certificate template](#) is provided to recognise children's individual achievements.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Life in the United Kingdom</p> <p>Lesson 1: The United Kingdom</p> <p>P. of Study Geography 2 Year 1 Location Name, locate and identify characteristics of the four countries and capital cities of the UK and its surrounding seas.</p> <p>2 Year 1 Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage.</p> <p>Knowledge Year 1 The United Kingdom (UK) is a union of four countries: England, Northern Ireland, Scotland and Wales. A capital city is a city that is home to the government and ruler of a country. London is the capital city of England, Belfast is the capital city of Northern Ireland, Edinburgh is the capital city of Scotland and Cardiff is the capital city of Wales. The countries of the United Kingdom are made up of cities, towns and villages.</p> <p>Skill(s) Year 1 Name and locate the four countries of the UK and their capital cities on a map, atlas or globe.</p>	<p>Introduce the children to the United Kingdom map. Encourage the children to locate each country and its capital city, using the key and labels. Invite the children to use the compass to describe where the countries are in relation to each other. For example, London is east of Cardiff; Scotland is north of England. Explain that the United Kingdom is a union of the four countries, England, Northern Ireland, Scotland and Wales. Invite the children to point to where they think they live on the map. Reveal the answer, then ask the children to talk about how near or far those countries are from the place they live. Challenge the children to identify and label each country, capital city, and the place they live on the Blank United Kingdom map, using the United Kingdom map for reference. Invite the children to check their work with a partner.</p>	
<p>Lesson 2: Physical features of the United Kingdom</p> <p>P. of Study Geography Features 1 Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather.</p> <p>Knowledge Year 1 Physical features are naturally-created features of the Earth.</p> <p>Specific knowledge Year 1 Physical features of the UK include mountains, hills, lakes, forests, islands, coastlines and rivers.</p> <p>Skill Year 1 Use basic geographical vocabulary to identify and describe physical features, such as beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley and vegetation.</p>	<p>Show the children the Physical features of the United Kingdom video. After watching, encourage the children to recall the names of common physical features of the United Kingdom, using the correct geographical vocabulary. Encourage them to describe some of the characteristics of each feature. For example, 'A lake is a body of water surrounded by land'. Challenge the children to demonstrate their understanding using the Physical features matching sheet or Physical features labelling sheet. Invite the children to share their answers with the group. Children could also write a list of the physical features shown in the video to help them remember the different types.</p>	
<p>Lesson 3: What is a city?</p> <p>P. of Study Geography Features 3 Use basic geographical vocabulary to refer to key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.</p>	<p>Ask the children 'What is a city?' Invite the children to share their ideas, then watch the What is a city? video. After watching the video, discuss whether their thoughts were right. Explain that a city is a large settlement where lots of people live and work, and recap on capital cities of the United Kingdom by locating them on a map.</p>	

<p>Knowledge Year 1 A settlement is a place where people live and work and can be big or small, depending on how many people live there. Towns and cities are urban settlements. Features of towns and cities include homes, shops, roads and offices.</p> <p>Skill Year 1 Identify the characteristics of a settlement.</p>	<p>Ask 'Have you ever been to a city? What was it like?' Encourage the children to name their nearest cities and find them on a map. Challenge the children to write sentences to describe features and characteristics of a city using the Cities writing frame. Invite the children to share their work and discuss and compare their ideas and experiences.</p>	
<p>Lesson 4: Human features in the locality</p> <p>P. of Study Geography Fieldwork 5 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>Knowledge Year 1 Fieldwork includes going out in the environment to look, ask questions, take photographs, take measurements and collect samples.</p> <p>Specific knowledge Year 1 Human features are man-made and include buildings, roads and bridges.</p> <p>Skill Year 1 Carry out fieldwork tasks to identify characteristics of the school grounds or locality.</p>	<p>Take the children on a walk around the local community to spot human features. Give each child a copy of the Human features spotting sheet, a clipboard and a pencil. Explain that they should use the spotting sheet to answer the question 'What human features do we have in our local area?' Encourage the children to take photographs and use the correct vocabulary to name the features they see. For example, church, shop or bridge. Back in the classroom, look at the photographs, talk about the features seen and discuss why they are important to the community. Explore maps of the local area to identify the relative positions of each feature. Divide the children into small groups and give each group a large sheet of paper and a range of mark-making materials. Challenge the children to work together to draw a picture map of their locality, adding labels where possible. Invite the children to share their maps, making comparisons between them. Did they all include the same features?</p>	<ul style="list-style-type: none"> • Clipboards • Cameras or tablets • Large sheets of paper • Mark making materials
<p>Lesson 5: Weather in the United Kingdom</p> <p>P. of Study Geography Features 2 Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles.</p> <p>Knowledge Year 1 There are four seasons in the UK: spring, summer, autumn and winter. Each season has typical weather patterns. Types of weather include sun, rain, wind, snow, fog, hail and sleet. In the United Kingdom, the length of the day varies depending on the season. In winter, the days are shorter. In summer, the days are longer. Symbols are used to show different types of weather.</p> <p>Skill Year 1 Identify patterns in daily and seasonal weather. View progression</p>	<p>Show the children the Weather presentation. After sharing the presentation, ask the children to identify the four seasons and their characteristic weather types. Ask 'What season is it now? What type of weather do we have today?' Give each child a Weather recording sheet and discuss its purpose. Highlight the use of symbols as a means of recording the weather. Ask 'What symbol would you choose today?' Challenge all children to record the day's weather and make the recording of the weather a daily task. Look at the children's completed charts at the end of the week to discover if the weather is typical of the season.</p>	
<p>Develop - London - a capital city</p> <p>Lesson 1: This is London</p> <p>P. of Study Geography Features 3 Use basic geographical vocabulary to refer to key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.</p> <p>Knowledge Year 1 A settlement is a place where people live and work and can be big or small, depending on how many people live there. Towns and cities are urban settlements. Features of towns and cities include homes, shops, roads and offices.</p> <p>Skill Year 1 Identify the characteristics of a settlement.</p>	<p>Remind the children that a settlement is a place where people live, then share the London presentation. Talk about each slide, then explain to the children that they are going to explore London further by using an online tool called Google Earth. Display Google Earth on a screen and demonstrate how to use the search tool to locate the UK, and then zoom in on London. Explore the location and size of London and then ask the children to describe what they see as you zoom further into the map. Ask 'Can you find an airport? Can you locate a bridge? Where do you think Buckingham Palace might be?' Drag and drop the 'Street View' icon onto the map at places of interest for the children to see the features from a different perspective. Ask the children to write sentences on strips of paper to describe their findings. For example, 'London has many bridges' or 'A river runs through London'. Display the sentences alongside a map, or aerial picture of London, to collectively describe the city's characteristics.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access • Strips of paper • Map or aerial picture of London
<p>Lesson 2: London landmarks</p> <p>P. of Study Geography Features 3 Use basic geographical vocabulary to refer to key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.</p> <p>Knowledge Year 1 Human features are man-made and include factories, farms, houses, offices, ports, harbours and shops. Landmarks and monuments are features of a landscape, city or town that are easily seen and recognised from a distance. They also help someone to establish and describe a location.</p> <p>Specific knowledge Year 1 Significant London landmarks include the Royal Albert Hall, Tower Bridge, Houses of Parliament, Westminster Abbey, Big Ben, Buckingham Palace and Monument to the Great Fire of London.</p> <p>Skill Year 1 Name and describe the purpose of human features and landmarks.</p>	<p>Introduce the children to famous London landmarks using the London landmarks presentation. Encourage the children to describe each landmark and explain its purpose. For example, 'The Royal Albert Hall is used for concerts', and 'The London Eye gives tourists a view across the whole of London.' Ask the children if they recognise any of the landmarks or have ever visited them. Invite the children to complete the London landmarks matching sheet or London landmarks writing frame, to record their learning.</p>	

<p>Lesson 3: Drawing from memory P. of Study Art and design 6 Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. Knowledge Year 1 Drawings or paintings of locations can be inspired by observation (looking closely), imagination (creating pictures in the mind) and memory (remembering places from the past). Skill Year 1 Draw or paint a place from memory, imagination or observation.</p>	<p>Introduce the children to the work of the British artist, Stephen Wiltshire, using online videos and work displayed on his website. Explain that Stephen has a special talent for drawing places from memory. Look at and discuss examples of his work, highlighting the way the artist uses pencil marks to record detail and build shapes in his drawings. Provide the children with a range of drawing materials, including hard and soft pencils, and allow them time to investigate ways of making different lines and shapes. Explain to the children that they are going to draw a London landmark from memory, like Stephen Wiltshire. Ask the children to decide which London landmark they would like to draw and describe it to a friend before starting to draw. Encourage the children to revisit and develop their drawings over time, then display them alongside photographs of the real thing.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access • Drawing paper and pencils • Photographs of London landmarks
<p>Lesson 4: A landmark's story P. of Study History 3 Learn about events beyond living memory that are significant nationally or globally. Knowledge Year 1 Significant historical events include those that cause great change for large numbers of people. Specific knowledge Year 1 The Great Fire of London was a major fire that destroyed a large area of London in 1666. The fire began in a bakery on Pudding Lane. A monument was built near to Pudding Lane to commemorate the Great Fire. Skill Year 1 Describe a significant historical event in British history.</p>	<p>Show the children The Great Fire of London video. After watching, talk about the fire, its causes and the impact it had on the city of London. Invite the children to work in pairs or small groups to read, discuss and answer the questions on the Great Fire of London question sheet. Share their answers. Show the children the Monument to the Great Fire of London picture cards. Explain that the monument was built to commemorate the Great Fire and to celebrate the rebuilding of the city. Explain that many people visit the monument because it marks a site of historical importance. The children can record their knowledge of the Great Fire and the monument, using the Great Fire of London word mat.</p>	
<p>Lesson 5: London's burning P. of Study Music 1 Use their voices expressively and creatively by singing songs and speaking chants and rhymes. Knowledge Year 1 Traditional songs, nursery rhymes and chants have been passed down to different generations using the oral tradition. They usually contain repeated rhythms or melodies, a strong pulse and rhyming words. Skill Year 1 Sing traditional songs, nursery rhymes and chants clearly.</p>	<p>Talk about nursery rhymes and ask for any examples that the children know. Explain that most nursery rhymes are traditional songs that were composed many years ago and were written about events that happened in the past. Play the London's burning video. Ask the children to listen carefully and then explain what event the song might be referring to. Sing the song as a group, encouraging the children to sing the words clearly and finish the lines together.</p>	
<p>Lesson 6: Woodlands, hedgerows and meadows P. of Study Geography Fieldwork 3 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key. Knowledge Year 1 An aerial photograph or plan perspective shows an area of land from above. Skill Year 1 Identify features and landmarks on an aerial photograph or plan perspective.</p>	<p>Show the children the Aerial photographs presentation and explain that the images show places from above. Ask the children what type of place they think the images show and where in the United Kingdom they think it might be. Establish that it is the city of London, the capital city of England and the United Kingdom. Ask the children to study each image carefully, identifying geographical features and famous landmarks. Organise the children into pairs and give each pair one of the Aerial photographs picture cards. Ask the children to work together to identify and label different physical and human features on their photograph by using stickers or writing around the picture.</p>	<ul style="list-style-type: none"> • Stickers
<p>Lesson 7: Giving directions P. of Study Geography Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language (e.g. near and far; left and right), to describe the location of features and routes on a map. Knowledge Year 1 Positional language includes behind, next to and in front of. Directional language includes left, right, straight ahead and turn. Skill Year 1 Use simple directional and positional language to give directions, describe the location of features and discuss where things are in relation to each other.</p>	<p>Project the London grid map onto the IWB. Explain that the grid map shows London and its significant landmarks and geographical features. Ask the children to locate a landmark or feature on the map and explain how to get there from a given starting point. Model examples, using locational (next to, behind, above, in between) and directional (forwards, backwards, left, right) language as well as common verbs (go, stop, turn). Working in small groups and using a printed A3 version of the map, challenge the children to move a counter or small world figure, square by square, around the map, giving each other verbal directions. Children can use the Directions word mat to help.</p>	<ul style="list-style-type: none"> • Counters or small world figures
<p>Lesson 8: Tourism P. of Study Computing 6 Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Knowledge Year 1 To search for digital content, the user needs to know the file name, file type and folder name or keywords and search terms to find the correct information. Skill Year 1 Search for or retrieve digital content, including images and information, in digital folders and online, with supervision.</p>	<p>Display the Visit London website on a large screen. Ask the children to look carefully at the home page and talk about its features. Establish that this is the official visitor website for London and the information is checked regularly for accuracy. People can use the website to find out what to do and where to stay if visiting the city. Invite the children to work in pairs on PCs or tablets to navigate the 'Things to do' page. Set the children a challenge of finding five things to do in London before feeding their discoveries back to the group.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access

<p>Lesson 9: Comparing capital cities P. of Study Geography Place 1 Understand geographical similarities and differences through studying the human and physical geography of a small area of the UK, and of a small area in a contrasting non-European country. Knowledge Year 1 Places can be compared by size, amenities, transport, location, weather and climate. Specific knowledge Year 1 Kuala Lumpur is the capital city of Malaysia. Skill Year 1 Identify the similarities and differences between two places.</p>	<p>Using Google Earth, show the children some other capital cities around the world. Talk about the size, shape and layout of the settlements, then explain that they are going to find out about Kuala Lumpur, the capital city of Malaysia. Show the location and size of Kuala Lumpur, using Google Earth, and ask the children to identify some of its geographical features from the map. Play the Kuala Lumpur video, then ask them to name and describe any features and landmarks of Kuala Lumpur. Give the children the Kuala Lumpur matching sheet and ask them to use the knowledge they have gained from the video to match the labels to the landmarks and features. Encourage the children to share and compare their answers. After the children have completed the task, provide them with the Kuala Lumpur picture cards and invite them to say how they think Kuala Lumpur is the same or different to London. Make a class list to record some of the similarities and differences. Similarities might include both cities having a river or a zoo. Differences might include Kuala Lumpur having a monorail whereas London has overground and underground trains.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access
<p>Innovate - Marley's trip to London Step 1 P. of Study Geography Features 2 Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Knowledge Year 1 There are four seasons in the UK: spring, summer, autumn and winter. Each season has typical weather patterns. Types of weather include sun, rain, wind, snow, fog, hail and sleet. In the United Kingdom, the length of the day varies depending on the season. In winter, the days are shorter. In summer, the days are longer. Symbols are used to show different types of weather. Skill Year 1 Identify patterns in daily and seasonal weather.</p>	<p>Marley needs your help. He's travelling from Kuala Lumpur in Malaysia to visit his friends and family at London Zoo. He will need to know what to wear, how to travel around London and what to see and do. Let's get started! Teacher note: Show the children the Marley the Meerkat introduction video. Ask them to share what they know about Marley and explain what he wants them to do. Discuss the challenge Marley has given them and share the Innovate journal. Use the journal to help the children plan and sequence what they need to do to complete their Innovate challenge. Make a list of clothes that Marley should bring on his trip.</p>	<ul style="list-style-type: none"> • A4 or A3 paper • Drawing equipment • Computers or tablets • Web access
<p>Step 2 P. of Study Breadth Geography Aims 2 Develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes. Knowledge Year 1 A place can be important because of its location, buildings, landscape, community, culture and history. Important buildings can include schools, places of worship and buildings that provide a service to the community, such as shops and libraries. Some buildings are important because they tell us something about the past. Skill Year 1 Name important buildings and places and explain their importance.</p>	<p>Choose a landmark for Marley to visit. Draw it and add a label.</p>	
<p>Step 3 P. of Study Breadth Geography Aims 2 Develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes. Knowledge Year 1 A place can be important because of its location, buildings, landscape, community, culture and history. Important buildings can include schools, places of worship and buildings that provide a service to the community, such as shops and libraries. Some buildings are important because they tell us something about the past. Skill Year 1 Name important buildings and places and explain their importance.</p>	<p>Explain why your chosen landmark is important.</p>	
<p>Step 4 P. of Study Geography Fieldwork 3 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p>	<p>Draw a route from Euston Station to your chosen landmark.</p>	

<p>Knowledge Year 1 A map is a picture or drawing of an area of land or sea that can show human and physical features. A key is used to show features on a map. A map has symbols to show where things are located.</p> <p>Skill Year 1 Draw or read a simple picture map.</p>		
<p>Step 5 P. of Study Geography Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language (e.g. near and far; left and right), to describe the location of features and routes on a map.</p> <p>Knowledge Year 1 Positional language includes behind, next to and in front of. Directional language includes left, right, straight ahead and turn.</p> <p>Skill Year 1 Use simple directional and positional language to give directions, describe the location of features and discuss where things are in relation to each other.</p>	Write directions for your route using positional and directional words.	
<p>Step 6 P. of Study Computing 6 Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Knowledge Year 1 To search for digital content, the user needs to know the file name, file type and folder name or keywords and search terms to find the correct information.</p> <p>Skill Year 1 Search for or retrieve digital content, including images and information, in digital folders and online, with supervision.</p>	Use the London Zoo website to find out seasonal opening times for the zoo.	



Cycle B: Year 1 / 2 Geography Schemes of Work
Autumn Term – Let's Explore the World

<p>Overview: In the Let's Explore the World project, children will learn to use an atlas to find out about the world's continents. They will revisit the four cardinal compass points, and use a key to read a map. Your child will locate the equator, the Northern and Southern Hemispheres and the North and South Poles. They will learn that hot places are closer to the equator and cold areas are further away. Children will know the term temperate and identify areas of the world with a temperate climate. They will learn about the characteristics of the four countries in the United Kingdom and compare England to Somalia in Africa to find similarities and differences. They will take part in fieldwork activities, collecting data about the number of vehicles that pass school and the use of local human features.</p>
<p>Vocabulary: <i>Data analysis:</i> Compare, information, table</p> <p>Fieldwork: Conclusion, data, data collection, enquiry, feature, fieldwork, geographical data, graph, human feature, improve, local area, locality, observation, population, record, table, tally, tally chart, visitor, weather</p> <p>Physical features: beach, cliff, coastline, forest, geography, hill, lake, mountain, ocean, physical feature, river, sea, soil, valley,</p> <p>Maps: human feature, key, locate, map, physical feature, symbol</p> <p>Position:</p>

cardinal point, compass, compass point, direction, east, location, north, south, west

World:
Africa, Antarctica, Asia, Atlantic Ocean, Australia (Oceania), Europe, Indian Ocean, North America, Pacific Ocean, South America, Southern Ocean, area, atlas, chart, country, lake, map, mountain, ocean, physical feature, river, sea, world, continent

Compare and contrast:
England, Somalia, characteristic, climate, compare, difference, landscape, lifestyle, location, population, season, similarity, size

Climate and weather
Autumn, climate, cloud, cold, dry season, hot, mild, rain, season, snow, spring, summer, sun, temperate, temperature, weather, weather pattern, wet season, wind, winter

Location:
North Pole, Northern Hemisphere, South Pole, Southern Hemisphere, country, equator, globe, world map

UK
Atlantic Ocean, Celtic Sea, England, English Channel, Irish Sea, North Sea, Northern Ireland, Scotland, United Kingdom, Wales, characteristic, city, coast, coastline, country, forest, grassland, highland, hill, human feature, island, lake, landscape, lowland, marsh, moorland, mountain, physical feature, population, river, size, temperate climate, town, valley, village,

Sustainability:
carbon dioxide, compost, conservation, damage, deforestation, electricity, energy, environment, gas, landfill, litter, protect, recycle, reduce, reuse, vehicle, water

Assessment outcomes:
Assess the children's knowledge by asking them to complete the [Let's Explore the World question sheet](#). A [Let's Explore the World answer sheet](#) is also provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Geographical Skills</p> <p>Lesson 1: Using an atlas</p> <p>P. of Study Geography</p> <p>Year 2 Location Name and locate the world's seven continents and five oceans.</p> <p>3 Year 2 Location Name, locate and identify characteristics of the four countries and capital cities of the UK and its surrounding seas.</p> <p>3 Year 2 Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage.</p> <p>Knowledge</p> <p>Year 2 An ocean is a large sea. There are five oceans on our planet called the Arctic, Atlantic, Indian, Pacific and Southern Oceans. Seas include the Black, Red and Caspian Seas. The United Kingdom is an island surrounded by the Atlantic Ocean, English Channel, Irish Sea and North Sea. The world's seven continents are Africa, Antarctica, Asia, Australia, Europe, North America and South America.</p> <p>Year 2 An atlas is a book of maps and charts.</p> <p>Skill(s) Year 2 Name and locate seas surrounding the UK, as well as seas, the five oceans and seven continents around the world on a world map or globe.</p>	<p>Ask the children 'What is an atlas?' Invite them to share any thoughts and ideas they have before explaining that an atlas is a book of maps and charts that show areas of the world. Explain that this includes larger physical features, such as continents, countries, oceans and seas and smaller physical features, such as rivers, mountains and lakes. Organise the children into pairs and give each pair a simple atlas, such as the <i>Collins First Atlas</i>. Model how to use the contents page to find different places and features. To consolidate their understanding, ask the children to work in their pairs to complete the Using an atlas question sheet. At the end of the session, use the Using an atlas answer sheet to collaboratively mark the children's work and address any misconceptions.</p>	<ul style="list-style-type: none"> Atlases
<p>Lesson 2: Using compass directions</p> <p>P. of Study Geography Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language (e.g. near and far; left and right), to describe the location of features and routes on a map.</p> <p>Knowledge Year 2 The four cardinal points on a compass are north, south, east and west. A route is a set of directions that can be used to get from one place to another.</p> <p>Specific knowledge Year 2 A compass is an instrument that is used for finding a direction.</p>	<p>Display the Compass poster. Ask the children whether they know what is and how it is used. Encourage them to name the four cardinal points and explain how and why they are used. Ask the children to join in with a physical activity, moving to north, south, east and west areas of the classroom using the Compass poster as a guide. Give the children the United Kingdom map and ask them to answer the Compass directions question sheet, using the compass points to help. At the end of the session, invite the children to share and compare their answers.</p>	

<p>Skill Year 2 Use simple compass directions to describe the location of features or a route on a map.</p>		
<p>Lesson 3: Using a key with a map P. of Study Geography Fieldwork 7 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key. Knowledge Year 2 A map is a picture or drawing of an area of land or sea that can show human and physical features. Maps use symbols and a key. A key is the information needed to read a map and a symbol is a picture or icon used to show a geographical feature. Specific knowledge Year 2 Maps help people to plan a route from one place to another and to identify and locate physical and human features. Skill Year 2 Draw or read a range of simple maps that use symbols and a key.</p>	<p>Display the Whitby map. Explain that the map has a key that helps us to identify and locate human and physical features. Ask the children what they can see on the map, encouraging them to use the key to help them name specific features and their location. Ask children questions about the map, for example, 'Where is the railway station located?' and 'How many lighthouses are there on this map?' Ask the children to work in pairs to discuss and then complete the Using a key recording sheet. At the end of the session, group the children together to share and compare their work and answer more questions about features on the map.</p>	
<p>Lesson 4: Collecting data P. of Study Geography Fieldwork 11 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment. Knowledge Year 2 Fieldwork can help to answer questions about the local environment and can include observing or measuring, identifying or classifying and recording. Specific knowledge Year 2 Data is a collection of facts, such as numbers, words, measurements, observations or descriptions. Studying data helps people to answer questions, draw conclusions, make decisions and take action. Skill Year 2 Ask and answer simple geographical questions through observation or simple data collection during fieldwork activities.</p>	<p>Ask children if they know what the term 'data' means. Allow time for the children to share and discuss their ideas, drawing on their previous experiences of working with data. Explain that they will be collecting data to answer the question 'How many different vehicle types travel past our school?' Model how they will collect their data using the Data collection recording sheet. Take the children outside to a safe space so they can observe the passing vehicles and collect the data. Set a reasonable time limit for the data collection. Back in the classroom, work together to analyse the children's data and encourage them to draw conclusions and answer questions about it using the Data collection question sheet. Ask the children 'What other types of geographical data could we collect?' Where possible, plan to carry out one of the children's data collection ideas.</p>	
<p>Develop 1 - The world Lesson 1: Locating the equator P. of Study Geography Features 2 Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Knowledge Year 2 The equator is an imaginary line that divides the world into the Northern and Southern Hemispheres. The North Pole is the most northern point on Earth. The South Pole is the most southern point on Earth. Skill Year 2 Locate the equator and the North and South Poles on a world map or globe.</p>	<p>Organise the children into groups and give each group a globe. Invite the children to share any knowledge they have of what a globe shows and how it can be used. Ask the children to work together to locate each of these features on their globes; the equator, the North and South Poles and the Northern and Southern Hemispheres. Ask questions to prompt their thinking, for example 'Which countries are located on the equator? Which countries are far away from the equator? Can you name a country in the Northern Hemisphere?' Ask the children to complete the World map and allow them to use their globe for reference before sharing their answers.</p>	<ul style="list-style-type: none"> • Globes • Sticky tack
<p>Lesson 2: Hot, temperate and cold places P. of Study Geography Features 2 Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Knowledge Year 2 A weather pattern is a type of weather that is repeated. Specific knowledge Year 2 Hot places are close to the equator and cold places are far away from the equator. Temperate places are between the hot and cold places. South America, Africa and Asia are on the equator. These continents have a hot climate. The North and South Poles are far away from the equator. They have a cold climate. Europe is in between the equator and the poles. It has a temperate climate. Skill Year 2 Describe simple weather patterns of hot and cold places.</p>	<p>Begin by showing children the Hot, temperate and cold places presentation. Use the presentation to recap on knowledge from the previous lesson and introduce the term 'temperate'. Use the World temperature map to reinforce the location of hot, temperate and cold continents and places around the world. Invite the children to work in pairs to sort the Hot, temperate and cold places sorting cards into the three groups (hot, temperate and cold) and then ask them to mark them on the World temperature map recording sheet. At the end of the session, ask the children to share what they have learned about hot, temperate and cold places.</p>	
<p>Lesson 3: Sustainability P. of Study Geography Fieldwork 11 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment. Knowledge Year 2 Conservation is the protection of living things and the environment from damage caused by human activity. Conservation activities</p>	<p>Explain that sustainability means maintaining the Earth's environment and its natural resources for future generations. Show the children the Environmental damage caused by humans presentation. Talk about the ways in which the environment is being damaged and the problems this damage will cause for people in the future. Encourage the children to share their ideas about how the environment can be protected. Ask the children to read the information on the Sustainability recording sheet and complete the questions included.</p>	

<p>include reducing, reusing and recycling, composting, saving water and saving energy. Conservation activities protect the environment for people in the future.</p> <p>Specific knowledge Year 2 Sustainability means maintaining the Earth's environment and its natural resources for future generations.</p> <p>Skill Year 2 Describe how human behaviour can be beneficial to local and global environments, now and in the longer term.</p>	<p>providing support as required. At the end of the session, mark the recording sheets together and discuss any misconceptions.</p>	
<p>Develop 2 - The United Kingdom</p> <p>Lesson 1: Characteristics of the United Kingdom</p> <p>P. of Study Geography</p> <p>11 Year 2 Fieldwork Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>3 Year 2 Location Name, locate and identify characteristics of the four countries and capital cities of the UK and its surrounding seas.</p> <p>3 Year 2 Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage.</p> <p>Knowledge</p> <p>Year 2 Data can be recorded in different ways, including tables, charts and pictograms.</p> <p>Year 2 The characteristics of countries include their size, landscape, capital city, language, currency and key landmarks. England is the biggest country in the United Kingdom.</p> <p>Year 2 The United Kingdom is split into four countries. England is the largest country. It has a population of 56 million people. It has flat and hilly areas, mountains and lakes. Northern Ireland is the smallest country. It has a population of two million people. There are mountains, rolling hills and the UK's largest lake. Scotland is the second largest country. It has a population of five million people. It has mountains, forests and moorland. Wales is the third largest country. It has a population of three million people. It has mountains, valleys, forests and marshes.</p> <p>Skill(s)</p> <p>Year 2 Collect and organise simple data in charts and tables from primary sources (fieldwork and observation) and secondary sources (maps and books).</p> <p>Year 2 Identify characteristics of the four countries and major cities of the UK.</p>	<p>Use Google Earth to show an aerial view of the United Kingdom. Ask the children to describe its observable characteristics, for example, it is an island, it is relatively small and it is surrounded by seas and oceans. Give the children the Characteristics of the United Kingdom information sheet and the Characteristics of the United Kingdom table. Ask the children to collect data from the information sheet and record it in the table to find out about how the countries compare. Ask the children, in turn, to compose and articulate a statement about the United Kingdom.</p>	
<p>Lesson 2: Comparing places</p> <p>P. of Study Geography Place 1 Understand geographical similarities and differences through studying the human and physical geography of a small area of the UK, and of a small area in a contrasting non-European country.</p> <p>Knowledge Year 2 A non-European country is a country outside the continent of Europe. For example, the USA, Australia, China and Egypt are non-European countries. European countries include the United Kingdom, Germany, France and Spain.</p> <p>Specific knowledge Year 2 There are many similarities and differences between Somalia and England. Similarities include sharing a border with other countries, having four seasons and both having cities and villages. Difference include location, climate, types of seasons, landscape, lifestyle of people and the structure and size of the capital cities.</p> <p>Skill Year 2 Describe and compare the human and physical similarities and differences between an area of the UK and a contrasting non-European country.</p>	<p>Begin by sharing a large world map or Google Earth. Locate the country of England in the United Kingdom and the country of Somalia on the African continent. Ask the children to describe their different locations and begin to draw conclusions about their geographical characteristics. Explain that they will be investigating how Somalia is similar to or different from England. Show children the Somalia presentation. After watching the presentation, invite the children to discuss the information presented and begin to make comparisons between Somalia and England. Ask the children to complete the Somalia and England question sheet, drawing on their knowledge of Somalia and their work from the previous lesson on the characteristics of the UK. At the end of the session, recap on some of the similarities and differences between the two countries.</p>	



**Cycle B: Year 1 / 2 Art and Design Schemes of Work
Spring Term - Coastline**

Overview:

In the Coastline project, children will use maps to learn about the location of the world's seas and oceans and keys to learn about map symbols. They will also find out about the directions on a compass. They will learn about the human and physical features of a coastline, including the effects of erosion and how to stay safe when visiting the coast. They will have the opportunity to learn about the work of the RNLI, what happened to the SS *Rohilla* and about the coastal town of Whitby, including how Captain Cook is linked to the town. They will research the tourism industry and consider what features make a place a successful tourist destination.

Vocabulary:

Human features and landmarks:

Abbey, amusement arcade, bridge, café, harbour, hotel, landmark, lifeboat station, museum, park, shop, statue, street, town, youth hostel

Settlements and land use:

Facility, industry, tourism, tourist

Geographical change

Erosion, past, present

Geographical resources:

aerial photograph

Data Analysis:

Compare, difference, explore, similarity

Fieldwork:

Collect, human feature, observe, physical feature, record

Physical Features:

Arch, bay, beach, cave, cliff, headland, sand dune, sandbank, stack

Physical Processes:

Erode, erosion, material

Significant places:

landmark, monument

Maps:

Compass, key, map, picture map, symbol

Position:

cardinal point, compass, direction, east, north, south, travel, west

World:

Atlantic Ocean, English Channel, Irish Sea, North Sea

Assessment outcomes:

Share the [Coastline quiz presentation](#), encouraging the children to read the questions carefully and discussing possible answers before revealing the answer on the next slide. When the children have answered the five practice questions, ask them to complete the [Coastline quiz](#) independently. Mark the quizzes together using the [Coastline quiz answer sheet](#). Encourage the children to reflect on their learning and experiences throughout the project, explaining key information that they have learnt and memorable moments.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Memorable Experience Option 1: Coastal visit P. of Study Geography Fieldwork 11 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p>	<p>Before visiting the coast, show the children where they are going on an Ordnance Survey map or similar. Highlight which sea or ocean surrounds the coastal location. Explain that they will be exploring the human and physical features of the area and allow them time to look at the Physical and human features picture cards in preparation. On location, encourage the children to explore the area safely and use either the Coastal features spotting sheet or the Physical or human features labelling sheet to record and classify their observations. Ask the children to describe the size, location and position of the features they observe. Begin to</p>	<ul style="list-style-type: none"> • Ordnance Survey map • Cameras or tablets

<p>Knowledge Year 2 Fieldwork can help to answer questions about the local environment and can include observing or measuring, identifying or classifying and recording.</p> <p>Specific knowledge Year 2 Physical features of the coastline include headlands, caves, arches, stacks, bays, beaches, cliffs, sandbanks and sand dunes.</p> <p>Skill Year 2 Ask and answer simple geographical questions through observation or simple data collection during fieldwork activities.</p>	<p>ask and answer questions about how the physical features were formed and how the human features are used. Provide cameras or tablets and drawing materials for the children to record their observations and collect simple data. Back in the classroom, collate and discuss any data and information collected and gather the children's comments. Encourage them to make simple picture maps of the area visited, using the information collected.</p>	
<p>Introductory knowledge</p> <p>P. of Study Geography</p> <p>2 Year 2 Location Name and locate the world's seven continents and five oceans.</p> <p>3 Year 2 Location Name, locate and identify characteristics of the four countries and capital cities of the UK and its surrounding seas.</p> <p>3 Year 2 Fieldwork Use world maps, atlases and globes to identify the UK and its countries, as well as the countries, continents and oceans studied at this key stage.</p> <p>Knowledge</p> <p>Year 2 An ocean is a large sea. There are five oceans on our planet called the Arctic, Atlantic, Indian, Pacific and Southern Oceans. Seas include the Black, Red and Caspian Seas. The United Kingdom is an island surrounded by the Atlantic Ocean, English Channel, Irish Sea and North Sea. The world's seven continents are Africa, Antarctica, Asia, Australia, Europe, North America and South America.</p> <p>Year 2 The United Kingdom is a group of islands with an expansive coastline.</p> <p>Skill(s) Year 2 Name and locate seas surrounding the UK, as well as seas, the five oceans and seven continents around the world on a world map or globe.</p>	<p>Set out a range of large world maps, globes and atlases for the children to explore. Challenge them to find the names and locations of seas and oceans around the world, including those that surround the UK. Then, encourage the children to look at the United Kingdom map. Explain that the United Kingdom is made up of many islands and therefore has a vast and expansive coastline. Use the map to clarify the names and locations of the bodies of water that surround the UK and challenge them to use this information to complete the labels on the United Kingdom recording sheet. Ask the children to work with a partner to check that they have correctly labelled their maps.</p>	<ul style="list-style-type: none"> Large world maps, globes, atlases
<p>Memorable Experience</p> <p>Option 2: Alternative start</p> <p>P. of Study Geography</p> <p>7 Year 2 Fieldwork Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p> <p>11 Year 2 Fieldwork Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>Knowledge</p> <p>Year 2 An aerial photograph can be vertical (an image taken directly from above) or oblique (an image taken from above and to the side).</p> <p>Year 2 Fieldwork can help to answer questions about the local environment and can include observing or measuring, identifying or classifying and recording.</p> <p>Skill(s)</p> <p>Year 2 Study aerial photographs to describe the features and characteristics of an area of land.</p> <p>Year 2 Ask and answer simple geographical questions through observation or simple data collection during fieldwork activities.</p>	<p>Show the children the Features of the coastline video. After watching, ask the children, 'Have you ever been to the coast in the United Kingdom? Where did you go? What did you see?' Discuss whether they have seen any of the features mentioned in the video and encourage them to describe them. Highlight coastal locations the children have visited on a map of the UK and discuss their positioning. Challenge the children to work in pairs to read and sort the Physical and human features picture cards into two groups: physical features and human features. Walk around each group to check that the children have classified the picture cards correctly.</p>	
<p>Engage: Geographical coastline features of the United Kingdom</p> <p>Lesson 1: Map readers</p> <p>P. of Study Geography Fieldwork 3 Use simple compass directions (North, South, East and West) and locational and directional language</p>	<p>Show children the United Kingdom coastline map. Draw their attention to the compass and read the words north, south, east and west. Explain that compass points can describe a location or the direction of travel. Use the map to explore the position of various coastal locations. For example, 'Where on the UK coast is</p>	

<p>(e.g. near and far; left and right), to describe the location of features and routes on a map.</p> <p>Knowledge Year 2 The four cardinal points on a compass are north, south, east and west. A route is a set of directions that can be used to get from one place to another.</p> <p>Skill Year 2 Use simple compass directions to describe the location of features or a route on a map.</p>	<p>Whitby? On which part of the UK coastline is Poole located? Extend to questions about direction of travel. For example, 'In which direction will I travel from Whitby to Portsmouth?' Give two or three more examples, then ask the children to complete the Compass directions question sheet. Invite the children to share their answers and discuss any misconceptions.</p>	
<p>Lesson 2: Reading keys</p> <p>P. of Study Geography Fieldwork 7 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p> <p>Knowledge Year 2 A map is a picture or drawing of an area of land or sea that can show human and physical features. Maps use symbols and a key. A key is the information needed to read a map and a symbol is a picture or icon used to show a geographical feature.</p> <p>Skill Year 2 Draw or read a range of simple maps that use symbols and a key.</p>	<p>Show the children the Coastal town map picture card. Point out the symbols on the map and explain that each one represents a physical or human feature. Ask the children to make suggestions for what each symbol might represent, encouraging them to give reasons for their suggestions. Then, show the Coastal town map that includes a key. Ask 'Were any of your suggestions correct?' Recap on the purpose of a key and ask the children to work in pairs to look more closely at the map and complete the Coastal town map question sheet provided, which also recaps on direction of travel.</p>	
<p>Lesson 3: Physical processes – erosion</p> <p>P. of Study Breadth Geography Aims 4 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p> <p>Knowledge Year 2 An environment or place can change over time due to a geographical process, such as erosion, or human activity, such as housebuilding.</p> <p>Knowledge Year 2 Erosion is a physical process that involves the weathering and movement of natural materials, such as rock, sand and soil. Erosion is caused by wind and water, including waves, floods, rivers and rainfall.</p> <p>Skill Year 2 Describe how an environment has or might change over time.</p> <p>Skill Year 2 Describe, in simple terms, the effects of erosion.</p>	<p>Show the children the Coastal erosion presentation. After sharing the presentation, ask the children to describe what erosion is and how the coastline erodes. Demonstrate how waves cause coastal erosion by following the Coastal erosion demonstration teacher instructions. Ask the children to look carefully at the waves of water as they hit the sand and to describe what is happening. Encourage them to use vocabulary such as 'washing away', 'crumbling', 'breaking' and 'eroding' in their descriptions. Challenge the children to draw diagrams and write sentences to record their learning. Ask, 'What effects do you think erosion can cause to a coastal location over time?'</p>	<ul style="list-style-type: none"> ● Plastic box (approximately 30cm x 45cm x 20cm) ● Beach bucket and spade ● Sand ● Construction blocks ● Water ● Piece of wood (approximately 25cm x 12cm x 1cm) ● Large pebbles ● Camera or tablet
<p>Lesson 4: Human features of a coastal town</p> <p>P. of Study Geography Fieldwork 11 Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</p> <p>Knowledge Year 2 Data can be recorded in different ways, including tables, charts and pictograms.</p> <p>Specific knowledge Year 2 Human features of the coastline include hotels, castles, sea walls, lifeboat stations, harbours, piers, amusement arcades, lighthouses, shops and cafes.</p> <p>Skill Year 2 Collect and organise simple data in charts and tables from primary sources (fieldwork and observation) and secondary sources (maps and books).</p>	<p>Introduce the coastal town of Whitby by sharing its location on a map, and ask if anyone has visited. In pairs, invite the children to explore the town's physical and human features by looking in detail at the Whitby map, using the key to help. Encourage the children to think back to their coastal visit, identifying and discussing any similarities and differences between the location they visited and Whitby. Provide children with the Similarities and differences recording sheet to record their thinking.</p>	<ul style="list-style-type: none"> ● Map of the UK
<p>Develop - Whitby past and present</p> <p>Lesson 1: Comparing past and present</p> <p>P. of Study Breadth Geography 4 Year 2 Aims Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p>	<p>Show the children the Whitby then and now Pinterest board. Look at each picture and ask questions to help guide the children's observations. For example, 'What are the people doing? What human features can you see? How do you know that this picture shows Whitby in the past?' Ask them to feedback any changes they observe between Whitby in the past and Whitby in the present and begin to suggest some of the reasons for the changes. Record the children's comments on a</p>	<ul style="list-style-type: none"> ● Computers or tablets ● Web access

<p>P. of Study History 13 Year 2 Learn about events beyond living memory that are significant nationally or globally.</p> <p>Knowledge</p> <p>Year 2 An environment or place can change over time due to a geographical process, such as erosion, or human activity, such as housebuilding.</p> <p>Year 2 Aspects of everyday life from the past, such as houses, jobs, shops, objects, transport and entertainment, may be similar or different to those used and enjoyed by people today.</p> <p>Skill(s)</p> <p>Year 2 Describe how an environment has or might change over time.</p> <p>Year 2 Describe the everyday lives of people in a period within or beyond living memory.</p>	<p>class data table. After collecting their thoughts, ask the children to choose one element that has changed and complete the Past and present recording sheet. Children could use Google Maps and Street View to explore present-day Whitby further.</p>	
<p>Lesson 4: Tourism</p> <p>P. of Study Breadth Geography Aims 1 Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.</p> <p>Knowledge Year 2 Industries are businesses that make things, sell things and help people live their everyday lives. Land can be used for recreational, transport, agricultural, residential and commercial purposes, or a mixture of these.</p> <p>Specific knowledge Year 2 Tourism is an industry that provides services for visitors when they travel for pleasure or business. Tourist services include accommodation, catering and entertainment.</p> <p>Skill Year 2 Describe the size, location and function of a local industry.</p>	<p>Show the children the Visiting Whitby video. After watching the video, explain that tourism is an industry that provides services and amenities for people who are visiting or on holiday (tourists). Ask the children to discuss some of the reasons that tourists might visit Whitby. Ask, 'What can people do in Whitby? What would they see?' Offer the children maps of Whitby, including the Whitby map from earlier in the project, to identify and locate tourist facilities, including museums, the lifeboat station, the abbey, shops, hotels and beaches. Ask, 'Do you think Whitby makes a good holiday destination?' Encourage the children to use the Visiting Whitby writing frame to record their thinking.</p>	
<p>Develop - Dangers of the coast</p> <p>Lesson 3: Coastal rescue</p> <p>P. of Study Geography Fieldwork 7 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.</p> <p>Knowledge Year 2 A map is a picture or drawing of an area of land or sea that can show human and physical features. Maps use symbols and a key. A key is the information needed to read a map and a symbol is a picture or icon used to show a geographical feature.</p> <p>Skill Year 2 Draw or read a range of simple maps that use symbols and a key.</p>	<p>Show the children the Find my nearest lifeboat station interactive map on the RNLI website. Encourage children to explore the map using the interactive tools and ask questions, such as 'Can you find a lifeboat station on the east coast beginning with S? Can you find an all-weather lifeboat station on the south coast?' Give the children a copy of the RNLI lifeboat stations recording sheet and ask them to use the RNLI's interactive map to help them to fill in the missing lifeboat stations, using the key to add the correct colours for each site. Encourage the children to add two or three lifeboat stations of their choosing. Share and mark the maps together at the end of the session, using the RNLI lifeboat stations answer sheet, and talk about why they think there are so many lifeboat stations on the UK coastline.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access
<p>Lesson 4: Saltwick Nab</p> <p>P. of Study Geography Features 2 Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather.</p> <p>Knowledge Year 2 A physical feature is one that forms naturally, and can change over time due to weather and other forces.</p> <p>Specific knowledge Year 2 Physical features of the coastline include headlands, caves, arches, stacks, bays, beaches, cliffs, sandbanks and sand dunes.</p>	<p>Use the Google Earth search tool to locate Whitby. Encourage the children to comment on and make observations about any physical and human features they observe, based on their prior learning. Then search for Saltwick Nab. Explain that this is a rocky platform situated off the coast of Whitby, which is, at times, hidden by the sea. Provide the Saltwick Nab picture card for the children to observe its shape and form. Ask them to consider the dangers of such a feature, and play the Story of SS Rohilla audio as an example. Challenge the children to write sentences to describe Saltwick Nab, including its location and the reasons it can be dangerous.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access

<p>Skill Year 2 Describe the size, location and position of a physical feature, such as beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley and vegetation.</p>		
<p>Express: Celebrating the coast Lesson 2: Why is Whitby special? P. of Study Breadth Geography Aims 4 Develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes. Knowledge Year 2 A significant place is a location that is important to a community or society. Places can also be significant because of religious or historic events that may have happened in the past near the location. Significant places can also include monuments, such as the Eiffel Tower, or natural landscapes, such as the Great Barrier Reef. Skill Year 2 Name, locate and explain the significance of a place.</p>	<p>Show the children the United Kingdom map template. Ask them to locate Whitby on the map and encourage them to describe which coast it is on and name the sea. Provide small groups of children with the Talking points question sheet and ask them to take turns to pick a question, read it aloud and start a discussion. When the children have discussed each question, ask them to use their ideas to answer the question 'Why is Whitby special?'; recording their ideas as a sentence. At the end of the session, use the children's sentences to create a 'Why is Whitby special?' display.</p>	
<p>Humanities Map making P. of Study Geography Fieldwork 7 Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key. Knowledge Year 2 A map is a picture or drawing of an area of land or sea that can show human and physical features. Maps use symbols and a key. A key is the information needed to read a map and a symbol is a picture or icon used to show a geographical feature. Skill Year 2 Draw or read a range of simple maps that use symbols and a key.</p>	<p>Display a range of different maps and aerial images of the UK coastline with paper and drawing materials for independent map making.</p>	<ul style="list-style-type: none"> • Maps and aerial images of the UK • Paper and drawing materials



Cycle A Year 3 / 4 Geography Scheme of Work
Autumn Term - One Planet, Our World

Overview:

This essential skills and knowledge project teaches children to locate countries and cities, and use grid references, compass points and latitude and longitude. They learn about the layers of the Earth and plate tectonics and discover the five major climate zones. They learn about significant places in the United Kingdom and carry out fieldwork to discover how land is used in the locality.

Vocabulary:

Compare and contrast:

difference, geographical feature, human feature, physical feature, similarity

Geographical change:

earth's crust, Pangaea, continental drift, earthquake, fault, land mass, mountain, plate boundary, supercontinent, tectonic plate, valley, volcano

Geographical resources:

atlas, key, map, symbol, world map

Fieldwork:

data collection, enquiry, evidence, fieldwork, locality, observe, primary data, sketch map

Physical features:

Earth, composition, core, crust, inner core, magma, mantle, outer state, tectonic plate, temperature, thickness

Position:

cardinal compass, compass direction, east, intercardinal point, location, north, north-east, north-west, point, south, south-east, south-west, travel, west

Location:

North Pole, Northern Hemisphere, South Pole, Southern Hemisphere, coordinate, degree, distance, east, equator, globe, latitude, location, longitude, north, south, west

Human features and landmarks:

Aqueduct, bridge, canal, castle, cathedral, city, house, human feature, lighthouse, monument, motorway, motorway system, national railway, port, road, statue, tunnel, village

Settlements and land use:

agricultural, city, commercial, land use, recreational, residential, rural area, settlement, size, town, transportation, urban area, village

Data analysis:

analyse, city, data, first-hand observation, frequency, geographical, interpret, investigation, pattern, primary data, road user, score, table, tally, total, town, village

Environment:

Mediterranean, climate, climate zone, desert, polar, temperate, tropical

Climate and weather:

climate, climate zone, pattern, seasonal weather, weather

Maps:

Ordnance Survey, Ordnance Survey map, easting, four-figure grid reference, grid reference, grid square, horizontal axis, human feature, location, map, northing, physical feature, vertical axis

World:

Europe, France, Greece, Italy, Northern Hemisphere, Romania, Russia, area, capital city, city, climate, continent, country, language, population, state, transcontinental country

UK:

Armagh, Belfast, Birmingham, Bury St Edmunds, County Armagh, Edinburgh, England, Haverfordwest, Inverness, Inverness-shire, Ipswich, Leeds, Lowestoft, Newport, Northern Ireland, Pembroke, Pembrokeshire, Scotland, Sheffield, St Davids, Suffolk, Tenby, United Kingdom, Wales, York, Yorkshire, agriculture, amenity, beach, castle, cathedral, city, cliff, coastline, county, farming, fishing, football stadium, gallery, hill, human feature, industry, landmark, loch, marsh, mining, monument, mountain, palace, parliament building, peninsula, physical feature, river, service, steel production, tourism, tourist attraction, town, town hall, valley

Sustainability:

carbon dioxide, carbon footprint, conserve, energy, global warming, livestock, organic, recycle, reduce, resource, reuse, water treatment plant

Assessment outcomes:

Assess children's geographical knowledge by playing a game of 'true or false'. Organise the children into pairs and give each a set of [True or false sorting cards](#). Ask each pair to discuss the statements and sort them into two groups: true or false. They could create a third group for those of which they are unsure. Allow children to gather evidence from atlases or globes. Check the children's answers using the [True or false answer sheet](#). Ask for a show of hands for how many each pair got right. Identify any common misconceptions that need addressing.

Assess the children's knowledge by asking them to complete the [One Planet, Our World question sheet](#). A [One Planet, Our World answer sheet](#) is also provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Geographical Skills</p> <p>Lesson 1: Locating countries on maps</p> <p>P. of Study/Geography/Fieldwork 1 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p> <p>Knowledge/Year 3 Maps, globes and digital mapping tools can help to locate and describe significant geographical features.</p> <p>Specific knowledge/Year 3 Countries are located within continents. Countries have capital cities and geographical features.</p> <p>Skill/Year 3 Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied.</p>	<p>Set out large world maps or atlases, such as the Collins Primary Atlas or Digimap for Schools print outs, for children to share. Lead a guided session, asking children to locate continents and countries. For example, 'Can you find Turkey? Which continent is it on? Which country is at the most southern tip of Africa?' Extend the questioning to describe the countries' features. You can use the example questions below to help you devise questions for the children to answer. To consolidate their understanding, give all children a copy of the World map recording sheet and ask them to mark the countries and features listed in the key. Allow the children to refer to atlases and globes to help them complete the task. At the end of the session, gather the children together and encourage them to check their work using the World map answer sheet.</p>	<ul style="list-style-type: none"> Large world maps, atlases and globes
<p>Lesson 2: Human and physical features</p> <p>P. of Study/Geography/Place 2 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>Knowledge/Year 3 Geographical features created by nature are called physical features. Physical features include beaches, cliffs and mountains. Geographical features created by humans are called human features. Human features include houses, factories and train stations.</p> <p>Skill/Year 3 Classify, compare and contrast different types of geographical feature.</p>	<p>Invite the children to share their knowledge of the terms 'human feature' and 'physical feature' drawing on examples from their previous learning. Organise the children into small groups and give each group a set of Human and physical features sorting cards. Ask the children to work in their groups to sort the cards into two groups: human features or physical features. Do a check to ensure that each group has sorted their cards correctly and ask the children to talk about each group's similarities and differences. Challenge the children to further refine one of their groupings. For example, they might sort the physical features into water and non-water features or the human features into transport-related and non-transport-related features. When the children are happy with their sorting, ask them to record their refined groupings in a way of their choosing in their workbooks. Ideas could include, lists, diagrams, tables, Venn diagrams or charts.</p>	
<p>Lesson 3: Using four-figure grid references</p> <p>P. of Study/Geography/Fieldwork 3 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge/Year 3 A four-figure grid reference contains four numbers. The first two numbers are called the easting and are found along the top and bottom of a map. The second two numbers are called the northing and are found up both sides of a map. Four-figure grid references give specific information about locations on a map.</p> <p>Skill/Year 3 Use four-figure grid references to describe the location of objects and places on a simple map.</p>	<p>Organise the children into small groups and give each a copy of an Ordnance Survey or Digimap for Schools map of the local area. Ask the children to explore the map and ask for their initial reactions. Ask questions to prompt the children's thinking, such as 'What type of map is this? What place is this? What human and physical features do you see? How do you know what these features are?' Allow the children time to explore the map independently and use the key and their observations to find and describe familiar local features. Show children the video How to take a 4-figure grid reference with Steve Backshall and Ordnance Survey to learn how to use grid references. After watching the video, lead a guided session to locate four-figure grid references, before giving pairs of children a list of grid references to locate and record the features that they find. Children can record the grid references and geographical features in their workbooks or on the Grid references recording sheet. At the end of the session, recap on the main teaching points and invite the children to challenge each other to give and find four-figure grid references.</p>	<ul style="list-style-type: none"> Ordnance Survey map or Digimap for Schools map of the local area Computer or tablet
<p>Lesson 4: Analysing data</p> <p>P. of Study/Geography/Fieldwork 3 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge/Year 3 Primary data includes information gathered by observation and investigation.</p> <p>Specific knowledge/Year 3 Geographical data might relate to human activity in a place, such as how many people visit the local shop in a day, or physical, for example, measuring how deep or fast a river flows at different points.</p> <p>Skill/Year 3 Analyse primary data, identifying any patterns observed.</p>	<p>Begin by asking the children, 'What is primary data?' Encourage them to share their definitions before explaining that primary data is information, often numeric, that is collected through firsthand observation. Give some examples of simple types of primary data that can be collected and allow children to share any previous experiences of collecting geographical primary data. Project the Primary data diagram and read the data together. Ask the children 'What does this data tell us?' Allow the children to discuss their thinking before explaining what the primary data shows. Ask, 'How successful were you in reading and interpreting the primary data? What did you find difficult?' Provide pairs of children with a copy of the Primary data information pack. Challenge them to work in pairs to analyse the data and interpret what it tells them about each place. Give each child a Primary data analysis recording sheet and ask them to answer the questions provided. At the end of the session, ask the children to share their findings.</p>	

<p>Lesson 5: Compass points P. of Study Geography Fieldwork 2 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. Knowledge Year 3 The eight points of a compass are north, south, east, west, north-east, north-west, south-east and south-west. Skill Year 3 Use the eight points of a compass to locate a geographical feature or place on a map.</p>	<p>Hand out compasses for children to handle and explore. Ask them to study the compass and discuss in pairs what they think it is, how it is used, when it might be used and who would be the user. Use the Compass poster to revise the four cardinal compass points and explain how to use the four intercardinal points to find a location on a map. Show children the Funfair map picture card. Explain that all maps have a north arrow, which usually points to the top of the map. Ask questions to help the children become familiar with the map using the cardinal and intercardinal compass points to locate features. For example, 'Which feature is east of the helter skelter? Which feature is north-west of the darts?' Invite the children to complete the Funfair directions recording sheet individually. At the end of the session, gather the children together and mark their work collectively using the Funfair directions answer sheet.</p>	<ul style="list-style-type: none"> Compasses
<p>Develop 1 - The World Lesson 1: Earth P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 3 The Earth is made of four different layers. The inner core is made mostly of hot, solid iron and nickel, and the outer core is made of liquid iron and nickel. The mantle is made of solid rock and molten rock called magma. The crust is a thin layer of solid rock that is broken into large pieces called tectonic plates. These pieces move very slowly across the mantle. Skill Year 3 Name and describe properties of the Earth's four layers.</p>	<p>Introduce the theme of Earth by reading the book <i>The Street Beneath My Feet</i> by Charlotte Guillain. Use the book to introduce the Earth's layers and key vocabulary, such as crust, magma, mantle and core. Use a model of the Earth's layers or the Layers of the Earth presentation to describe the four layers. Invite the children to record the information by completing the Layers of the Earth diagram. Children could use modelling clay to make 3-D models of the Earth's layers to consolidate their understanding.</p>	<ul style="list-style-type: none"> Plasticine or modelling clay
<p>Lesson 2: Plate tectonics P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 3 The crust of the Earth is divided into tectonic plates that move. The place where plates meet is called a plate boundary. Plates can push into each other, pull apart or slide against each other. These movements can create mountains, volcanoes and earthquakes. Skill Year 3 Describe the activity of plate tectonics and how this has changed the Earth's surface over time (continental drift).</p>	<p>Recap the layers of the Earth from the previous session. Show the Plate tectonics presentation and discuss the information on each slide. After sharing the presentation, invite the children to ask and answer questions and deal with any misconceptions. To consolidate their understanding, ask children to complete the Plate tectonics question sheet. At the end of the session, ask the children 'What do you think will happen to the Earth's crust over time?' Encourage them to use their knowledge of plate tectonics to articulate their answers.</p>	
<p>Lesson 3: Latitude and longitude P. of Study Geography Location 3 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Knowledge Year 3 Latitude is the distance north or south of the equator and longitude is the distance east or west of the Prime Meridian. Skill Year 3 Locate significant places using latitude and longitude.</p>	<p>Organise the children into groups and give each group a globe. Begin by asking the children what they know about globes, for example, 'What does a globe help us to do? What features can we see on a globe?' Recap on the terms and meaning of equator, Northern and Southern Hemispheres and North and South Poles. Introduce the terms latitude, longitude and coordinate and explain what they are and what they help us to do. Show the BBC Bitesize video Latitude and longitude to explain how they work. Ask the children to find lines of latitude and longitude on their globes and say which places are located at each given point. Give the children the Latitude and longitude map and Latitude and longitude recording sheet to complete. Talk through how to find the approximate coordinates of different cities and then encourage the children to complete the task independently. Gather the children together at the end of the session to check their answers with the Latitude and longitude answer sheet and amend any errors and misconceptions.</p>	<ul style="list-style-type: none"> Globes Computers or tablets
<p>Lesson 4: Climate zones P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p>	<p>Begin by asking children to explain what the term 'climate' means. Allow the children time to share their ideas, then clarify the term. Show children the Climate zones map and ask them to use the key to identify the characteristics of each of the climate zones. Challenge the children to use the map to complete the Climate zones recording sheet and answer the questions included.</p>	<ul style="list-style-type: none"> Large world maps

<p>Knowledge Year 3 The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical.</p> <p>Skill Year 3 Identify the five major climate zones on Earth.</p>		
<p>Lesson 5: Locating European countries and cities</p> <p>P. of Study Geography Location 3 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>Knowledge Year 3 Countries in Europe include the United Kingdom, France, Spain, Germany, Italy and Belgium. Russia is part of both Europe and Asia.</p> <p>Specific knowledge Year 3 Europe is a continent in the Northern Hemisphere. It has over 50 countries (including transcontinental countries).</p> <p>Skill Year 3 Locate countries and major cities in Europe (including Russia) on a world map.</p>	<p>Display the Europe map on a whiteboard. Ask the children to identify as many countries as they can on the first map before revealing the answers on the second. Ask questions about the European continent and invite the children to describe any European countries that they have visited, being sensitive to those children who may not have travelled. Provide children with the European capital cities drag and drop template. Challenge them to use atlases to find and locate the capital cities of the European countries listed before dragging and dropping them into position on the map. At the end of the session, share the children's work. Invite them to find out more about some of Europe's cities by reading the European countries and cities information pack.</p>	<ul style="list-style-type: none"> Information books about Europe
<p>Develop 2 -</p> <p>Lesson 1: UK human and physical features</p> <p>P. of Study Geography Features 7 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 3 Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture.</p> <p>Skill Year 3 Describe the type, purpose and use of different buildings, monuments, services and land, and identify reasons for their location.</p>	<p>Ask the children to share their existing knowledge of human and physical features, including examples of each type of feature. Working as a class, share out the UK human and physical features cut outs. Ask the children to read the information on their card and then respond to the questions you ask by holding up their card. For example, 'Who has a physical feature? Who has a monument? Who has a feature with or near to water? Who has a feature of historical importance? Who has a feature found in our local area?' Ask subsequent questions as the children hold up their cards, such as 'Is everybody holding up a correct card?' and 'What do we know about any of these features?' Model how to use the information on a card to locate the feature, using the search tool on Google Earth or Digimap for Schools. For each feature, ask the children to zoom in to discover more about its location, explain what other features it is close to, or any other useful information given in the pop up box. Children can record their notes on the Fact file writing frame. At the end of the session, invite the children to share and compare their findings.</p>	<ul style="list-style-type: none"> Computers or tablets
<p>Lesson 2: UK counties</p> <p>P. of Study Geography Location 2 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.</p> <p>Knowledge Year 3 Counties of the United Kingdom include Derbyshire, Sussex and Warwickshire. Major cities of the United Kingdom include London, Birmingham, Edinburgh, Cardiff, Manchester and Newcastle.</p> <p>Specific knowledge Year 3 A county is an area of land according to political divisions. Counties are governed by local governments.</p> <p>Skill Year 3 Name, locate and describe some major counties and cities in the UK.</p>	<p>Begin by asking the children to share their existing knowledge of counties. Use the interactive Counties map to investigate the names and locations of UK counties and invite the children to make observations about their size and location. Ask the children to locate the county in which they live and describe its size, location and position in relation to other counties. Challenge the children to find out more about the characteristics of a county in the United Kingdom by reading one of the Counties of the UK information sheets and answering the questions provided. At the end of the session, invite the children to share and compare their findings to learn more about the counties studied.</p>	<ul style="list-style-type: none"> Computers or tablets
<p>Lesson 3: UK cities</p> <p>P. of Study Geography 7 Year 3 Features Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>2 Year 3 Location Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills,</p>	<p>Begin by asking the children to share their existing knowledge of the different types of settlement, including cities, towns and villages, before revisiting the features of a city, which includes a large population, many schools, houses for thousands or millions of people, amenities like theatres and museums, a wide range of shops and restaurants, a variety of different industries and many places of worship, including a cathedral. Use Google Maps or Digimap for Schools to show the locations of significant cities of the United Kingdom. Organise the children into groups and give each group a city to find out about. Provide the appropriate UK cities information pack and encourage the children to use this and other resources, such as maps, the internet and atlases, to find</p>	<ul style="list-style-type: none"> Computer or tablet Maps and atlases

<p>mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.</p> <p>Knowledge Year 3 Different types of settlement include rural, urban, hamlet, town, village, city and suburban areas. A city is a large settlement where many people live and work. Residential areas surrounding cities are called suburbs.</p> <p>Year 3 Counties of the United Kingdom include Derbyshire, Sussex and Warwickshire. Major cities of the United Kingdom include London, Birmingham, Edinburgh, Cardiff, Manchester and Newcastle.</p> <p>Year 3 A city is a large human settlement, where lots of people live and work. Significant cities of the UK include London, Birmingham and York.</p> <p>Skill(s) Year 3 Describe the type and characteristics of settlement or land use in an area or region. View progression</p> <p>Year 3 Name, locate and describe some major counties and cities in the UK.</p>	<p>out about their chosen city and answer the questions provided. At the end of the session, invite each group to feed back their findings and encourage them to compare the characteristics and features of each of the cities.</p>	
<p>Lesson 4: Carbon footprint</p> <p>P. of Study/Geography/Features 7 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 3 A person's carbon footprint is the amount of carbon dioxide released into the atmosphere from their activities. People can reduce their carbon footprint by driving less, eating less meat, flying less and wasting less food and products.</p> <p>Skill Year 3 Describe the meaning of the term 'carbon footprint' and explain some of the ways this can be reduced to protect the environment.</p>	<p>Play the Carbon footprint audio and discuss it with the children to check their understanding and address any misconceptions. Invite the children to work in groups to sort the Carbon footprint sorting cards into activities that will increase or decrease a person's carbon footprint. Ask groups to discuss ways they could further reduce their carbon footprint today, and in the future. Encourage them to record their knowledge and ideas using the Carbon footprint writing frame. At the end of the lesson, invite feedback from the children's writing.</p>	
<p>Lesson 5: Weather and the local environment</p> <p>P. of Study/Geography/Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 3 Excessive precipitation includes thunderstorms, downbursts, tornadoes, waterspouts, tropical cyclones, extratropical cyclones, blizzards and ice storms.</p> <p>Specific knowledge Year 3 Hot weather can melt tarmac, dry land and encourage people to enjoy the outdoors. Wet weather can cause flooding and encourage people to take shelter. Windy weather can break branches and blow leaves, and discourage people from leaving home. Cold weather can cause slippery pavements, crack pipes and prevent everyday outdoor activities, but encourage outdoor play.</p> <p>Skill Year 3 Explain how the weather affects the use of urban and rural environments.</p>	<p>Ask the children to recall the climate zone in which they live. Encourage them to describe the characteristics of the climate and the seasonal weather patterns of the UK. Explain that they will be carrying out fieldwork to answer the question, 'How does the weather affect our local environment?' Use a map or online mapping tool to show them a route that they will take of the local area. Provide the Effects of weather recording sheet and ask the children to describe the day's weather and predict how the weather is affecting the local environment. After predicting, lead the children along the route, for the children to record their findings. Back in the classroom, encourage the children to use their recording sheets to discuss their findings by asking questions, such as 'Were your observations similar to or different from your predictions? Did the weather cause any damage or problems in your local area? How was human activity affected by the weather?' Ask the children to use their collected data to write a short report about the effect of the weather on the local environment. At the end of the session, encourage them to think how their observations might change over time. Repeat the exercise on a day with a different type of weather to compare the effects.</p>	<ul style="list-style-type: none"> ● Map of the local area ● Cameras or tablets ● Clipboards
<p>Lesson 6: Land use in the UK</p> <p>P. of Study/Geography/Features 7 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 3 Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture.</p> <p>Knowledge Year 3 Different types of settlement include rural, urban, hamlet, town, village, city and suburban areas. A city is a large</p>	<p>Ask the children 'What is land used for in the United Kingdom?' and record their answers as a list. Show the children the Land use presentation for children to learn the five types of land use. Give the children the Land use recording sheet to consolidate their knowledge, and encourage them to mark their work with the Land use answer sheet. At the end of the session, revisit the children's list of land uses and ask them to sort and group each into one of the categories that they have learned.</p>	

<p>settlement where many people live and work. Residential areas surrounding cities are called suburbs.</p> <p>Skill Year 3 Describe the type, purpose and use of different buildings, monuments, services and land, and identify reasons for their location. View progression</p> <p>Skill Year 3 Describe the type and characteristics of settlement or land use in an area or region.</p>		
<p>Innovate</p> <p>Local land use enquiry:</p> <p>P. of Study Geography 3 Year 3 Fieldwork Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>1 Year 3 Aims Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.</p> <p>Knowledge Year 3 Primary data includes information gathered by observation and investigation.</p> <p>Year 3 The term geographical evidence relates to facts, information and numerical data.</p> <p>Skill(s) Year 3 Analyse primary data, identifying any patterns observed. View progression</p> <p>Year 3 Gather evidence to answer a geographical question or enquiry.</p>	<p>Recap what the children know already about their local area. Refer to their map studies and observational work in the locality to discuss its characteristics. Explain that they will be collecting some primary data in the local area to answer the enquiry question, 'How is land used around our school?' Ask the children to recall the ways that land can be used and predict what they might find during their enquiry. Before the field trip, prepare a map and route of the local area to stick to the Land use in the local area recording sheet, which the children will use to collect their data. Organise the children into groups and provide additional adult supervision. Ask the children to use the key to collect data on their recording sheet. Provide cameras or tablets for each group to collect photographic evidence of land use. Back in the classroom, compare and collate the children's data to come to an agreed conclusion about land use in the local area. Encourage them to use the data to answer the questions on the Land use in the local area question sheet to consolidate their learning. Create a collaborative display using a local map and the children's photographs, asking them to write labels for the images and the map.</p>	<ul style="list-style-type: none"> • Cameras or tablets • Clipboards



**Cycle A Year 3 / 4 Design and Technology Scheme of Work
Spring Term - Rocks, Relics and Rumbles**

Overview: This project teaches children about the purpose of shelters and their materials. They name and describe shelters and design and make shelter prototypes. Children then design and build a play den as a group and evaluate their completed product.

Vocabulary:

Compare and Contrast: Classify, compare.

Geographical changes: Pangaea, active, continental drift, convergent, crust, divergent, dormant, extinct, long-term effect, mantle, movement, plate boundary. Short-term effect, tectonic plate, transform.

Geographical resources: Data, map.

Fieldwork: Account, data, fact.

Natural and man-made materials: Extrusive, igneous, intrusive, metamorphic, rock, sedimentary.

Physical features: Earth, crust, inner core, lava, magma, mantle, outer core, pyroclastic, flow, volcano.

Physical processes: Earthquake, epicentre, plate boundary, seismic wave, tectonic plate, tsunami, volcanic eruption.

Significant people: Ring of fire.

Position: Cardinal point, compass, east, intercardinal point, north, north-east, north-west, south, south-east, south-west, west.

Location: North Pole, Prime Meridian, South Pole, degree, equator, latitude, location, longitude.

Assessment outcomes:

Quiz:

Provide the children with one of the quiz boards taken from the [Rocks, Relics and Rumbles quiz](#). Follow the instructions, reading out the questions and making sure the children record their answers in the correct hexagons. At the end of the quiz, present the winning individual, pair or team with a trophy and each child with a certificate, using the [Certificate template](#).

Test:

Assess the children's knowledge of the project by asking them to complete the [Rocks, Relics and Rumbles question sheet](#). They can then mark their tests using the [Rocks, Relics and Rumbles answer sheet](#) provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage</p> <p>Lesson 1: How are rocks used.</p> <p>P. of Study Science Rocks 1 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p> <p>Knowledge Year 3 There are three different rock types: sedimentary, igneous and metamorphic. Sedimentary rocks form from mud, sand and particles that have been squashed together over a long time to form rock. Examples include sandstone and limestone. Igneous rocks are made from cooled magma or lava. They usually contain visible crystals. Examples include pumice and granite. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard. Examples include slate and marble.</p> <p>Skill Year 3 Compare and group rocks based on their appearance, properties or uses.</p>	<p>Remind the children of the appearance and properties of the rocks they looked at previously and explain that their different properties mean they are suitable for different uses. Show them the Uses of rocks presentation and discuss examples of properties that define a rock's use. Instruct the children to use what they have learned to complete the Uses of rocks recording sheet.</p>	
<p>Lesson 2: Fossils</p> <p>P. of Study Science Rocks 1 Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>Knowledge Year 3 Fossils form over millions of years and are the remains of a once-living organism, preserved as rock. Scientists can use fossils to find out what life on Earth was like in prehistoric times. Fossils form when a living thing dies in a watery environment. The body gets covered by mud and sand and the soft tissues rot away.</p>	<p>Show the children the How are fossils made? video on BBC Bitesize. After watching the video, ask them to recall and describe each step of fossil formation. Direct the children to complete the How fossils are formed recording sheet, using sentences to explain each step. At the end of the session, play the video again for them to check their explanations and make sure they've explained each step in the correct order.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access

<p>Over time, the ground hardens to form sedimentary rock and the skeletal or shell remains turn to rock.</p> <p>Skill Year 3 Describe simply how fossils are formed, using words, pictures or a model.</p>		
<p>Lesson 3: Mary Anning P. of Study Breadth History Aims 13 Understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically valid questions and create their own structured accounts, including written narratives and analyses. Knowledge Year 3 Historically valid questions relate to aspects, such as significance; time and chronology; continuity and change; comparing and contrasting or cause and consequence. Specific knowledge Year 3 Mary Anning was a palaeontologist (scientist who studies fossils). She discovered the first complete <i>Ichthyosaur</i> fossil. This was an important discovery because it challenged the way scientists had believed the natural world had developed. Skill Year 3 Devise or respond to historically valid questions about a significant historical figure and suggest or plan ways to answer them.</p>	<p>Use a map of the UK or Google Earth to show the location of Lyme Regis, in Dorset on the south coast. Explain that rocks along the coast there are sedimentary and rich in the fossilised remains of ancient sea creatures. Give the children the Mary Anning information sheet. Ask them to read the information and discuss why Mary Anning's discoveries were so important. Encourage the children to complete the Mary Anning question sheet, using the information sheet and online research to help. Use the Mary Anning answer sheet to check their work.</p>	<ul style="list-style-type: none"> • Map of the UK or Google Earth • Computers or tablets • Web access
<p>Lesson 4: Soil testing P. of Study Science Rocks 1 Recognise that soils are made from rocks and organic matter. Knowledge Year 3 Soils are made from tiny pieces of eroded rock, air and organic matter. There are a variety of naturally occurring soils, including clay, sand and silt. Different areas have different soil types. Skill Year 3 Investigate soils from the local environment, making comparisons and identifying features.</p>	<p>Show the children the Soil presentation to learn more about the constituents and importance of soil and the three basic types. Explain that they are going to discover what type of soil is in the school grounds. Display the Soil investigation and talk through the steps before going outside to collect their samples and complete the investigation. Ensure the children wash their hands thoroughly after handling the soil. Back in the classroom, ask the children to record and display their results for what type of soil they identified in the school grounds. Discuss any discrepancies in their results and explain that there are regional variations in soil type, including within the same locality. As a home learning task, the children could carry out the investigation at home to identify similarities and differences in soil type within their locality.</p>	<ul style="list-style-type: none"> • Trowel or spade • Ruler • Access to outdoors for soil collection
<p>Develop Lesson 1: Plate tectonics P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 3 The crust of the Earth is divided into tectonic plates that move. The place where plates meet is called a plate boundary. Plates can push into each other, pull apart or slide against each other. These movements can create mountains, volcanoes and earthquakes. Specific knowledge Year 3 Over 200 million years ago, all the Earth's continents were joined together as one supercontinent called Pangaea. Continental drift caused the supercontinent to break up and move apart to create the continents we have today. Skill Year 3 Describe the activity of plate tectonics and how this has changed the Earth's surface over time (continental drift).</p>	<p>Share the Plate tectonics presentation with the children. Take time to study each slide and use a world map to identify the location of plate boundaries. Discuss how the tectonic plates move and the potential impact on the Earth's surface. Ask the children to work in pairs to complete the Plate tectonics recording sheet then feedback their answers to the group. Identify and correct any misconceptions the children may have.</p>	<ul style="list-style-type: none"> • World map
<p>Lesson 2: Ring of fire P. of Study Geography Location 3 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Knowledge Year 3 Significant volcanoes include Mount Vesuvius in Italy, Laki in Iceland and Krakatoa in Indonesia. Significant earthquake-prone areas include the San Andreas Fault in North America and the Ring of Fire, which runs around the edge of the Pacific Ocean and is where many plate boundaries in the Earth's crust</p>	<p>Show the children the Ring of Fire presentation. After reading the information, challenge the children to draw the Ring of Fire on the Tectonic plate map. Ask the children to work in pairs to read the Ring of Fire sorting cards and sort them into two groups: true or false. Encourage them to work with another pair to check and compare their answers using the Ring of Fire answer sheet. Gather the children together to see how they have sorted the cards and summarise, in their own words, why the Ring of Fire is significant.</p>	

<p>converge. Over three-quarters of the world's earthquakes and volcanic eruptions happen along the Ring of Fire.</p> <p>Skill Year 3 Name and locate significant volcanoes and plate boundaries and explain why they are important.</p>		
<p>Lesson 3: Features of volcanoes P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 3 A volcano is an opening in the Earth's surface from which gas, hot magma and ash can escape. They are usually found at meeting points of the Earth's tectonic plates. When a volcano erupts, liquid magma collects in an underground magma chamber. The magma pushes through a crack called a vent and bursts out onto the Earth's surface. Lava, hot ash and mudslides from volcanic eruptions can cause severe damage. Skill Year 3 Describe the parts of a volcano or earthquake.</p>	<p>Show the children the Volcanoes presentation. After listening to the presentation, ask the children to work in small groups to recall as much information as they can and note it down on large sheets of paper. They can use the headings: What is a volcano?; Types of volcanic eruption; Status of volcanoes; Types of volcano. Invite the children to discuss their notes and address any misconceptions or errors. Then, ask them to use their knowledge to complete the Volcanoes recording sheet independently. Share and compare the children's work and allow them to edit their work or add more detail if required.</p>	<ul style="list-style-type: none"> • Large sheets of paper
<p>Lesson 4: Latitude and longitude P. of Study Geography Location 3 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Knowledge Year 3 Latitude is the distance north or south of the equator and longitude is the distance east or west of the Prime Meridian. Specific knowledge Year 3 The North Pole is 90°N; the South Pole is 90°S. The equator is the line of 0° latitude. The Prime Meridian is the line of 0° longitude. Skill Year 3 Locate significant places using latitude and longitude.</p>	<p>Show the children the Latitude and longitude presentation. After viewing, highlight significant teaching points and invite the children to explore lines of latitude and longitude using a range of world maps and atlases. Introduce them to the Locating volcanoes recording sheet and work together as a class to find the location of two or more volcanoes before asking the children to complete the activity in pairs. Use the Locating volcanoes answer sheet to check their work.</p>	<ul style="list-style-type: none"> • World maps, atlases
<p>Lesson 5: Fact finding P. of Study Geography Place 2 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America. Knowledge Year 3 Geographical features created by nature are called physical features. Physical features include beaches, cliffs and mountains. Geographical features created by humans are called human features. Human features include houses, factories and train stations. Specific knowledge Year 3 A volcano is a physical feature, typically a conical mountain or hill, that has a crater or vent through which lava, rock fragments, hot vapour, and gas erupt or have erupted. A volcano can be active, dormant or extinct. Skill Year 3 Classify, compare and contrast different types of geographical feature.</p>	<p>Show the children the World volcanoes map. Explain that they will be investigating a volcano of their choosing and creating a fact file about it. Encourage them to use books and a child-friendly internet search engine to find out information about it, including its location, size, type, status and date of last eruption. Encourage the children to record their findings on the Fact file template. When complete, ask them to share their fact files within a small group and compare their choices. The children could complete another fact file as part of their home learning.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access
<p>Lesson 6: Database P. of Study Computing 3 Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Knowledge Year 3 Several pieces of software can be used together to complete one task, such as adding a video to a word processed document. Specific knowledge Year 3 A database is a collection of electronic data that can be searched, selected and stored. Skill Year 3 Use a range of different software to successfully complete a project.</p>	<p>Explain to the children that they will be using their volcano facts to create a collaborative database about volcanoes. Show the children how to open a piece of suitable database-creating software, such as j2data, and create database fields using the information they have gathered. Encourage them to input the data carefully and then challenge them to find specific information from the database. At the end of the session, talk about the advantages of using a database and how the filtering and search functions allow users to query and sort information quickly and easily.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access
<p>Lesson 7: Volcanologist's report P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p>	<p>Explain to the children that they are going to work as volcanologists – scientists who study the activity of volcanoes. They will use research materials to find out how a landscape changes after a volcanic eruption. Ask the children to work in research teams and provide each team with a Volcano information pack. Encourage them to choose one of the volcanoes detailed, or another of their choosing, before discussing</p>	

<p>Knowledge Year 3 Significant geographical activity includes earthquakes and volcanic eruptions. These are known as natural disasters because they are created by nature, affect many people and cause widespread damage.</p> <p>Specific knowledge Year 3 When volcanoes erupt, they emit gases, lava and ash. Volcanic eruptions can destroy habitats, homes and businesses and can change the landscape.</p> <p>Skill Year 3 Describe how a significant geographical activity has changed a landscape in the short or long term.</p>	<p>the information and completing the Volcanologist's report recording sheet. At the end of the session, ask the children to present their findings to other groups before comparing the eruptions, focusing on the consequences of volcanic activity on people and the landscape.</p>	
<p>Lesson 8: Pompeii</p> <p>P. of Study Breadth History Aims 13 Understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically valid questions and create their own structured accounts, including written narratives and analyses.</p> <p>Knowledge Year 3 The causes of a significant event are the things that make the event happen and directly lead up to the event. The consequences of a significant event happen after the event and can be short-term, such as people being killed in a battle, or long-term, such as the change in language and society after an invasion.</p> <p>Specific knowledge Year 3 Pompeii was an ancient Roman city that perished when Mount Vesuvius erupted in AD 79. The archaeological site of Pompeii is historically significant because it provides a large amount of information about Roman life.</p> <p>Skill Year 3 Explain the cause and effect of a significant historical event.</p>	<p>Share The eruption of Mount Vesuvius audio with the children. After listening, use the Mount Vesuvius sorting cards to help the children discuss the causes and effects of each stage of the eruption. Ask them to write a short explanation of the causes and effects, using the statements to help them. Gather the children together to compare their findings and allow them to add to and edit their work. Invite them to word process their explanations and illustrate them using images found online.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access
<p>Lesson 9: Making deductions</p> <p>P. of Study Breadth History Aims 14 Understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed.</p> <p>Knowledge Year 3 Interviews, diaries, letters, journals, speeches, autobiographies, artefacts, photographs and witness statements are historical source materials. However, some historical source materials are more reliable than others.</p> <p>Skill Year 3 Make deductions and draw conclusions about the reliability of a historical source or artefact.</p>	<p>Share the Pompeii excavations information sheet with the children and discuss the work of archaeologist Giuseppe Fiorelli. Display the Pompeii excavations picture cards on the IWB and explain that the illustrations are taken from a magazine called <i>Tour du Monde</i>, published in 1864 during the excavations of Pompeii. Discuss the provenance of the illustrations, asking questions such as 'Are these a primary source? Could the artists have changed the scenes in any way? Are they a reliable source of information?' Encourage the children to look at each picture carefully and ask them to decide what they can infer about life in Pompeii before the eruption. Provide them with the Pompeii excavations recording sheet and encourage them to answer the questions about each of the illustrations. When complete, talk through the children's ideas, then, using the illustrations as a starting point for further research, ask the children to write a report about life in Pompeii before the eruption.</p>	
<p>Develop 2</p> <p>Lesson 1: Earthquakes</p> <p>P. of Study Breadth Geography Aims 4 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p> <p>Knowledge Year 3 Volcanic eruptions and earthquakes happen when two tectonic plates push into each other, pull apart from one another or slide alongside each other. The centre of an earthquake is called the epicentre.</p> <p>Skill Year 3 Explain the physical processes that cause earthquakes and volcanic eruptions.</p>	<p>Recap key facts about tectonic plates and plate boundaries, then share the Earthquakes video. After watching the video, talk through the causes and consequences of an earthquake. Provide the children with blocks of wood covered in coarse sandpaper and encourage them to push them together and try to slide them in different directions. Ask them to describe how the blocks become 'stuck' and then move when the stored energy in the blocks is released. Help the children to relate this to the movement of two plates on a boundary. Provide each child with a copy of the Earthquakes recording sheet. Ask them to label the different parts of the diagram and write sentences to explain the causes and consequences of an earthquake.</p>	<ul style="list-style-type: none"> • Wooden blocks • Sandpaper
<p>Lesson 2: Earthquake activity</p> <p>P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 3 Significant geographical activity includes earthquakes and volcanic eruptions. These are known as natural disasters because they are created by nature, affect many people and cause widespread damage.</p> <p>Specific knowledge Year 3 Earthquakes can cause short and long-term problems. Short-term problems include fear, injury from falling debris and loss of personal</p>	<p>Show online clips and pictures of earthquake activity. Ask the children to describe what they can see happening. Discuss the problems encountered by humans in the short term, such as fear, injury from falling debris and loss of personal items, and in the long term, such as loss of homes, lack of water and sanitation, damaged roads and transport networks and loss of jobs and services. Provide the Central Italy earthquake information pack for the children to analyse in pairs. Encourage them to read the information and fill in the Central Italy earthquake recording sheet. At the end of the session, ask the children to report their findings back to the class, highlighting the short and long-term consequences of the earthquake studied.</p>	<ul style="list-style-type: none"> • Computer or tablet • Web access

<p>items. Long-term problems include loss of homes, lack of water and sanitation, damaged roads and transport networks and loss of jobs and services.</p> <p>Skill Year 3 Describe how a significant geographical activity has changed a landscape in the short or long term.</p>		
<p>Lesson 3: The spread of the Tsunami</p> <p>P. of Study Geography Fieldwork 2 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.</p> <p>Knowledge Year 3 The eight points of a compass are north, south, east, west, north-east, north-west, south-east and south-west.</p> <p>Specific knowledge Year 3 A tsunami is a series of waves in the sea or ocean, caused by an earthquake, volcanic eruption or other underwater explosion. In 2004, an earthquake off the coast of northern Sumatra triggered a series of tsunamis that travelled across the Indian Ocean causing widespread damage and destruction.</p> <p>Skill Year 3 Use the eight points of a compass to locate a geographical feature or place on a map.</p>	<p>Recap on cardinal compass points using a range of maps. Discuss the markers that are in between the cardinal points. Reveal that they are called intercardinal points and ask the children to guess their names. Explain that they are named north-west, north-east, south-west and south-east. Point to the UK on a world map and ask the children to find a country that is north-west, north-east, south-west or south-east of the UK, then do the same for other countries, such as Russia or the USA. When the children have proven their understanding of intercardinal points, watch Tsunamis – the power of the water, a video about the devastation caused by tsunamis. Ask the children to explore the Indian Ocean earthquake information pack, using the data table, compass and key to complete the Indian Ocean earthquake question sheet. Provide the Indian Ocean earthquake answer sheet so they can check their work.</p>	<ul style="list-style-type: none"> • World map • Compasses
<p>Lesson 4: Rumbles</p> <p>P. of Study Music 1 Improvise and compose music for a range of purposes using the interrelated dimensions of music.</p> <p>Knowledge Year 3 Sequences of sounds combine melodies, harmonies, pitches, rhythms and dynamics. Sequences can be written down using informal pictures or symbols in a graphic score or using musical notation.</p> <p>Skill Year 3 Improvise and compose sequences of sounds and vocals and record them using notes or pictures.</p>	<p>Play the children the Rumbles audio and explain that they are listening to the sounds of an earthquake. Display the Rumbles graphic score diagram and discuss how the score could be interpreted to play an earthquake soundscape. Allow the children to test out their ideas, then discuss how easy it was to follow the score and what changes or improvements they would make. Give the children the Graphic score instructions and talk through each step, discussing the instruments that could be used to create their own earthquake soundscape and the sorts of sounds they could create, such as rumbling, rubble falling and crashing. Provide groups of children with long rolls of paper and pens. Encourage them to follow the instructions, developing their ideas over time to create their soundscape. As they practise, record each group's performance and play it back so they can evaluate their work and suggest improvements.</p>	<ul style="list-style-type: none"> • Long rolls of paper • Musical instruments
<p>Express</p> <p>Lesson 1: Delivering our speeches</p> <p>P. of Study Breadth Geography Aims 4 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p> <p>Knowledge Year 3 Volcanic eruptions and earthquakes happen when two tectonic plates push into each other, pull apart from one another or slide alongside each other. The centre of an earthquake is called the epicentre.</p> <p>Skill Year 3 Explain the physical processes that cause earthquakes and volcanic eruptions.</p>	<p>Ask the children to deliver the speeches that they wrote in the Innovate challenge, to a small group of children. Encourage the listeners to act as though they are residents of Quito who need to understand the risk of earthquakes and volcanic activity in the area and how to keep safe. After each speech, give time for the audience to ask questions and clarify points mentioned by the speaker. Encourage the audience to provide simple feedback, focusing on the accuracy and usefulness of the content and clarity of presentation.</p>	
<p>Lesson 2: Uses of rocks</p> <p>P. of Study Geography Features 15 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 3 There are three main types of rock found in the Earth's crust. They are sedimentary, igneous and metamorphic. Sedimentary rocks are made from sediment that settles in water and becomes squashed over a long time to form rock. They are often soft, permeable, have layers and may contain fossils. Igneous rocks are made from cooled magma or lava. They are usually hard, shiny and contain visible crystals. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard and often shiny.</p> <p>Skill Year 3 Name and describe the types, appearance and properties of rocks.</p>	<p>Revisit the Rocks presentation and Uses of rocks presentation from the Engage stage to help the children recall their knowledge of the types and properties of rocks. Take the children on a walk around the locality to identify how rock is used in human features. Ask the children to take photographs of a range of different features made from rock. Back in the classroom, display the photographs and encourage the children to use their prior learning to identify the rock types and why they have been chosen for particular purposes.</p>	<ul style="list-style-type: none"> • Cameras or tablets

Lesson 3: Model volcanoes

P. of Study Geography **Features** 1.5 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

Knowledge Year 3 A volcano is an opening in the Earth's surface from which gas, hot magma and ash can escape. They are usually found at meeting points of the Earth's tectonic plates. When a volcano erupts, liquid magma collects in an underground magma chamber. The magma pushes through a crack called a vent and bursts out onto the Earth's surface. Lava, hot ash and mudslides from volcanic eruptions can cause severe damage.

Skill Year 3 Describe the parts of a volcano or earthquake.

Provide small groups of children with various colours of modelling clay and 3-D labels made from cocktail sticks and self-adhesive labels. Set the children the challenge of creating a labelled model of a volcano, encouraging them to use the diagrams, vocabulary and written work from the project as a guide. As they work, ask the children questions to refine and improve their work. For example, 'Can you use modelling clay to show where the magma comes from before it moves into the vent? Could you write a short description on your label that explains the term 'pyroclastic flow'?' When the children have completed their model, ask them to provide feedback to another group about their work. Encourage them to check any labelling and ask questions about the shape and form of the model. At the end of the session, choose the most complete and well-labelled model. Tell the children why you have chosen that model and provide some points for improvement. Ask the children to evaluate and improve their models, based on the example they have seen.

- Modelling clay in variety of colours
- Cocktail sticks
- Self-adhesive labels



Cycle A: Year 3 / 4 Geography Scheme of Work
Autumn Term - Interconnected World

Overview:

In the Interconnected World project, children will use compasses to plot points on a map. They will revise four-figure grid references before learning about six-figure grid references to accurately pinpoint features on a map. They will identify the Tropics of Cancer and Capricorn and understand the characteristics of a tropical climate. Children will learn about the countries, climates and culture of North and South America. They will identify significant physical features in the United Kingdom and use their map reading skills to learn about the National Rail network. They will extend this learning, by exploring the development of the canal network in the past and how the use of canals has changed over time. The class will conduct an enquiry to prove a hypothesis and use maps and surveys to gather information and draw conclusions.

Vocabulary:

Human features and landmarks:

National Rail network, airport, city, ferry interchange, human feature, interconnection, principal route, railway station, town, train, transport link, compare and contrast, difference, geographical feature, human feature, physical feature, similarity
aqueduct

Settlements and land use:

Canal, leisure, lock, recreation, towpath, transportation, tunnel

Geographical resources:

Atlas, chart, map, physical map, political map

Maps:

Ordnance Survey map, easting, four-figure grid reference, grid reference, grid square, horizontal axis, human feature, location, marker, northing, physical feature, six-figure grid reference, vertical axis

Position:

cardinal compass point, cardinal directions, compass, compass rose, direction, east, features, intercardinal point, key, map, north, north-east, north-west, plotting, position, south, south-east, south-west, west

World:

Argentina, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Greenland, Guatemala, Guyana, Honduras, Mexico, Nicaragua, North America, Panama, Paraguay, Peru, South America, Suriname, The Caribbean, United States of America, Uruguay, Venezuela, city, continent, country, culture, language, religion, values, world

UK:

Anglesey, England, Grampian Mountains, Lake Windermere, Lindisfarne, Llyn Tegid, Loch Ness, Lough Neagh, Mourne Mountains, New Forest, Northern Ireland, Orkney Islands, Pennines, Portglenone Forest, Rathlin Island, River Bann, River Tay, River Trent, River Wye, Rothiemurchus Forest, Scotland, Snowdonia, United Kingdom, Wales, Wentwood Forest, forest, island, lake, loch, mountain, physical feature, river

Sustainability:

Bioenergy, biogas, carbon dioxide, fossil fuel, geothermal energy, hydroelectric power, non-renewable energy, renewable energy, solar panel, solar power, wind farm, wind power

Fieldwork:

Chart, conclusion, data collection, enquiry, evidence, fieldwork, graph, hypothesis, improve, interpret, investigation, local area, present, survey, table

Climate and weather:

Mediterranean, climate, climate zone, contrasting climate, desert, equator, polar, summer, temperate, temperature, tropical, weather, winter

Location:

Northern Hemisphere, Southern Hemisphere, Tropic of Cancer, Tropic of Capricorn, degrees, equator, line of latitude, mangrove, north, rainforest, south, tropics

Assessment outcomes:

Assess the children's knowledge by asking them to complete the [Interconnected World question sheet](#). An [Interconnected World answer sheet](#) is also provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Geographical Skills</p> <p>Lesson 1: Compass points</p> <p>P. of Study Geography Fieldwork 6 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.</p> <p>Knowledge Year 4 The four cardinal directions are north (N), east (E), south (S) and west (W), which are at 90° angles on the compass rose. The four intercardinal (or ordinal) directions are halfway between the cardinal directions: north-east (NE), south-east (SE), south-west (SW) and north-west (NW).</p> <p>Specific knowledge Year 4 Directions can be given using cardinal and intercardinal compass points.</p> <p>Skill Year 4 Use the eight points of a compass, four and six-figure grid references, symbols and a key to locate and plot geographical places and features on a map.</p>	<p>Recap on the cardinal and intercardinal points of a compass and revisit the purpose of a compass. Display the Compass drag and drop template and ask children to drag and drop the labels for the cardinal and intercardinal points into the correct position on the compass. Give children a copy of the Plotting points recording sheet and ask them to complete the map. Encourage the children to use the Plotting points answer sheet to mark their work.</p>	<ul style="list-style-type: none"> Computers or tablets
<p>Lesson 2: Four-figure grid references</p> <p>P. of Study Geography Fieldwork 6 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.</p> <p>Knowledge Year 4 A six-figure grid reference contains six numbers and is more precise than a four-figure grid reference. The first three figures are called the easting and are found along the top and bottom of a map. The second three figures are called the northing and are found up both sides of a map. Six-figure grid references give detailed information about locations on a map.</p> <p>Specific knowledge Year 4 When giving a four-figure grid reference, give the two-digit eastings first followed by the two-digit northings.</p> <p>Skill Year 4 Use four or six-figure grid references and keys to describe the location of objects and places on a map.</p>	<p>Show children the video How to take a 4-figure grid reference with Steve Backshall and Ordnance Survey to help the children recall the knowledge and skills they learned in a previous year. After watching the video, give children a copy of the Four-figure grid references map and the Four-figure grid references recording sheet. Model how to find a square on the map using the eastings and northings. Then ask the children to work in pairs to locate the rest of the four-figure grid references on the map. Mark the children's work collectively, modelling each answer.</p>	
<p>Lesson 3: Six-figure grid references</p> <p>P. of Study Geography Fieldwork 6 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.</p> <p>Knowledge Year 4 A six-figure grid reference contains six numbers and is more precise than a four-figure grid reference. The first three figures are called the easting and are found along the top and bottom of a map. The second three figures are called the northing and are found up both sides of a map. Six-figure grid references give detailed information about locations on a map.</p> <p>Skill Year 4 Use four or six-figure grid references and keys to describe the location of objects and places on a map.</p>	<p>Recap on four-figure grid references from the previous lesson, then share the Six-figure grid references presentation. After discussing the main teaching points and completing the examples, look at the Six-figure grid references map. Invite the children to describe the location of different symbols. When the children have understood the technique, give them a copy of the Six-figure grid references recording sheet to complete. At the end of the session, mark the children's answers collectively, reinforce any teaching points and correct any misconceptions.</p>	
<p>Develop 1 - The World</p> <p>Lesson 1: Tropics of Cancer and Capricorn</p> <p>P. of Study Geography Location 1 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic</p>	<p>Begin by showing the children the Tropics presentation. Use the presentation as a stimulus for a discussion about the tropics and their significance. Allow children time to find the tropics on maps and globes before asking them to complete the Tropics question sheet. At the end of the session, invite feedback and mark the questions collectively.</p>	<ul style="list-style-type: none"> Maps, atlases and globes

<p>and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>Knowledge Year 4 The Tropic of Cancer is 23 degrees north of the equator and Tropic of Capricorn is 23 degrees south of the equator.</p> <p>Specific knowledge Year 4 The tropics is an area of significance between the Tropic of Cancer and the Tropic of Capricorn.</p> <p>Skill Year 4 Identify the location of the Tropics of Cancer and Capricorn on a world map.</p>		
<p>Lesson 2: Countries in North and South America</p> <p>P. of Study Geography Location 5 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>Knowledge Year 4 The North American continent includes the countries of the USA, Canada and Mexico as well as the Central American countries of Guatemala, Honduras, Nicaragua, Costa Rica and Panama. The South American continent includes the countries of Brazil, Argentina, Chile, Colombia, Peru, Venezuela, Uruguay, Ecuador, Bolivia and Paraguay.</p> <p>Skill Year 4 Locate the countries and major cities of North, Central and South America on a world map, atlas or globe.</p>	<p>Begin by using Google Earth to help children identify and locate the continents and the countries of North and South America and ask them to share any knowledge they have of the continents. Give out atlases and invite the children to work in pairs to locate, name and talk about North and South American countries. Provide the children with the Countries of North and South America recording sheet and ask them to use the atlas to locate and label the places named in the key. At the end of the session, show the Countries of North and South America answer sheet on a whiteboard so children can check their work.</p>	<ul style="list-style-type: none"> • Atlases and globes • Computers or tablets
<p>Lesson 3: Contrasting climates in North and South America</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 4 Climatic variation describes the changes in weather patterns or the average weather conditions of a country or continent.</p> <p>Specific knowledge Year 4 Countries nearer the equator are hotter and countries further from the equator are colder. Some countries have contrasting climate zones.</p> <p>Skill Year 4 Explain climatic variations of a country or continent.</p>	<p>Show the children the Climate zones map and recap the names and features of the climate zones. Point to North and South America on the map and ask the children to say which countries are closer to the equator and which are further away. Ask the children what they think this tells them about the climate of these countries, referring to their previous learning about climate zones, the countries of North and South America and the tropics. Invite the children to learn more about the climates of four contrasting places, Canada, USA, Ecuador and Brazil, by reading the Contrasting climates information sheets. After reading the information, ask the children to complete the questions included. When the children have completed the questions, invite them to share and compare their answers. Allow them to find out more about the climate of one of the locations by reading information books, studying atlases or carrying out independent research on the internet. Additional research can be recorded in children's books.</p>	<ul style="list-style-type: none"> • Atlases • Computers or tablets • Information books about North and South America
<p>Lesson 4: Geographical characteristics of North and South America</p> <p>P. of Study Geography</p> <ul style="list-style-type: none"> • 5 Year 4 Fieldwork Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. • 5 Year 4 Location Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. <p>Knowledge</p> <ul style="list-style-type: none"> • Year 4 An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. 	<p>Organise the children into pairs and give them an atlas, such as the Collins Primary Atlas. Invite them to take a tour around the Americas by following your instructions to read specific pages. For example, 'Turn to page 46, where are we? Can you name a country on the west coast of South America? Which country do you think is the largest?' Ask the children questions about maps on different pages and explain the difference between a political map showing countries and cities and a physical map that shows physical features. As they study the North and South America maps, invite the children to locate countries and other significant features, such as capital cities, rivers, islands and lakes. Highlight additional and useful information on each page, for example, data about population or the height of land above sea level. After a guided study period, ask the children to choose one country in either North or South America. Encourage them to use the map, data and further research to write a short paragraph about the country, describing its geographical characteristics. Children can use the North and South America writing frame provided to help them structure their work. At the end of the session, invite some of the children to read their paragraphs aloud.</p>	<ul style="list-style-type: none"> • Atlases • Maps • Computers or tablets • Information books about North and South American countries

<ul style="list-style-type: none"> • Year 4 The North American continent includes the countries of the USA, Canada and Mexico as well as the Central American countries of Guatemala, Honduras, Nicaragua, Costa Rica and Panama. The South American continent includes the countries of Brazil, Argentina, Chile, Colombia, Peru, Venezuela, Uruguay, Ecuador, Bolivia and Paraguay. • Year 4 Political maps show the locations of countries and cities. Physical maps show the locations of physical features. <p>Skill(s)</p> <ul style="list-style-type: none"> • Year 4 Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping. • Year 4 Locate the countries and major cities of North, Central and South America on a world map, atlas or globe. 		
<p>Lesson 5: Life in North and South America P. of Study Geography Location 5 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Knowledge Year 4 The North American continent includes the countries of the USA, Canada and Mexico as well as the Central American countries of Guatemala, Honduras, Nicaragua, Costa Rica and Panama. The South American continent includes the countries of Brazil, Argentina, Chile, Colombia, Peru, Venezuela, Uruguay, Ecuador, Bolivia and Paraguay. Specific knowledge Year 4 Cultural studies of a country include the language, religion and values of the people who originate from, or live in, a particular place. Skill Year 4 Locate the countries and major cities of North, Central and South America on a world map, atlas or globe.</p>	<p>Ask the children what they have learned so far about North and South America, encouraging them to refer to the continent's size, climate and physical features. Tell the children that they will learn more about the culture of the people in Canada, the USA, Ecuador and Brazil. Explain that culture means the language, norms, religion and values of the people who originate from, or live in, a particular place. Organise the children into pairs and give each a copy of the North and South American culture information pack to read. After reading the information, ask the children to work together to answer the questions included. This task could be completed in one extended lesson or over two or three shorter sessions. After completing the questions, ask the children to share their answers and impressions of the mix of cultures in North and South America.</p>	
<p>Develop 2 - The United Kingdom Lesson 1: Significant physical features of the United Kingdom P. of Study Geography Location 4 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time. Knowledge Year 4 Significant rivers of the UK include the Thames, Severn, Trent, Dee, Tyne, Ouse and Lagan. Significant mountains and mountain ranges include Ben Nevis, Snowdon, Helvellyn, Pen y Fan, the Scottish Highlands and the Pennines. Specific knowledge Year 4 Significant physical features of the UK include mountains, rivers, islands, lakes and forests. Skill Year 4 Create a detailed study of geographical features including hills, mountains, coasts and rivers of the UK.</p>	<p>Ask the children to recall the term 'physical feature' and encourage them to list as many physical features as they can. Show the children the Significant physical features of the United Kingdom map. Ask them if they recognise any of the names or know anything about the features, encouraging them to share what they know. Use online mapping tools to explore some of the features listed. After exploration, ask the children to choose one of the features from the map that they would like to find out more about and allow them time to research independently using maps, atlases, information books and online research. Ask the children to make notes to record information gathered on the Significant physical features of the United Kingdom recording sheet. Ask them to present their findings in a short report, using the headings on their recording sheet to help.</p>	<ul style="list-style-type: none"> • Atlases and maps • Computers or tablets • Information books about physical features of the UK

<p>Lesson 2: Renewable energy P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 4 The environment produces natural resources. Humans use some natural resources to make energy. Some natural resources cannot be replaced, like coal or oil. They are non-renewable. Some, like wind or flowing water, are renewable sources of energy. Specific knowledge Year 4 Renewable energy includes solar power, wind power, hydropower, geothermal energy and bioenergy. Skill Year 4 Describe how natural resources can be harnessed to create sustainable energy.</p>	<p>Begin by showing the children the BBC Bitesize video What is renewable and non-renewable energy? Recap key information from the video and ask the children about their experiences of renewable and non-renewable energy. Ask the children to read the Renewable energy information sheet, then encourage them to complete the Renewable energy recording sheet. At the end of the session, mark the recording sheets collectively and answer any questions or misconceptions.</p>	
<p>Lesson 3: National Rail network P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 4 Human features can be interconnected by function, type and transport links. Specific knowledge Year 4 Principle routes link major towns and cities across the country. Many principal routes terminate in London. Railway stations are sometimes linked to ferry interchanges and airports. Skill Year 4 Describe a range of human features and their location and explain how they are interconnected.</p>	<p>Ask the children to describe their experiences of trains and railways. Encourage them to say how and why they travelled and explain that the National Rail network connects towns and cities across the country and allows people and goods to travel to different places. Project the National Rail route diagram on a whiteboard or give out individual copies. Allow the children time to read and discuss the map in pairs before asking questions about the map, key and interconnections between places, such as 'What sort of route connects Scarborough to Hull? Can you find a city on the south coast with a railway station, a ferry interchange and an airport interchange? What is the name of the principal route between Edinburgh and London?' After a period of guided questioning, invite the children to work in pairs or teams to complete the National Rail routes question sheet. At the end of the session, mark the children's work collectively using the National Rail routes answer sheet and ask them to articulate what they have learned about the rail system across Britain.</p>	
<p>Lesson 4: Canals of Britain P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 4 Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. Specific knowledge Year 4 The canals in Britain are man-made waterways that were created during the Industrial Revolution to transport raw materials and goods around the country. Locks, tunnels and aqueducts are all features of canals. Canals declined when railways and roads developed but were conserved after the Second World War and are used for recreation and leisure today. Skill Year 4 Explain ways that settlements, land use or water systems are used in the UK and other parts of the world.</p>	<p>Recap on children's learning from the previous lesson, asking 'Why do we have a National Rail route? What did you learn about the way transport systems are interconnected? Why is it important for people and goods to be able to move quickly and easily from one place to another?' After the recap, show the children the Canals presentation to learn about the history, structure and modern uses of Britain's canal system and discuss the information included. Ask the children to use their knowledge to complete the Canals recording sheet. As they work on questions 6 and 7, allow the children to carry out further research using computers or tablets to view the videos <i>The Boat People</i> and <i>Conserving Britain's Canals</i> from the BBC One series Canals: The Making of a Nation. At the end of the session, mark the children's work collectively and discuss how and why the way canals are used has changed over time. To learn more about canals, visit the Canal and River Trust website.</p>	<ul style="list-style-type: none"> • Computers or tablets



Cycle B: Year 3 / 4 Design and Technology Scheme of Work
Spring Term - Misty Mountain, Winding River

Overview:

In the Misty Mountain, Winding River project, children will learn about the characteristics and physical processes of rivers, including how they shape the landscape over time, their significance around the world and the impact of flooding. They will learn how to use the eight points of a compass, four and six-figure grid references, symbols and a key to locate and plot geographical places and features on a map, as well as how contour lines are used to show the topography of an area. They will have the opportunity to learn about the stages of the water cycle and about mountains and their different formations, studying mountain ranges in the United Kingdom and around the world. They will also learn about habitats and how human and natural influences can have an impact on the environment.

Vocabulary:

Compare and contrast:

V-shaped valley, altitude, bog, delta, downstream, elevation, estuary, floodplain, flow, gully, interlocking spur, lake, meander, mountain, mouth, oxbow lake, physical feature, rill, river, riverbed, source, spring, stream, tributary, waterfall

Human features and landmarks:

human feature

Settlements and land use:

Crops, energy, farming, floodplain, food, freshwater, goods, habitat, hydroelectric power, irrigate, leisure, natural resource, renewable, river, settlement, transport

Geographical changes:

Delta, deposition, erosion, floodplain, flow, landscape, meander, rock, sediment, soil, transportation, water, waterfall, wind

Geographical Resources:

Ordnance Survey map, atlas, map, sample, sampling, satellite map, topography

Data analysis:

Cause, compare, effect, human, identify, map, measure, physical, record, report, research

Natural and man-made materials:

Clay, deposition, erosion, loam, rock, sand, sediment, silt, soil, transportation

Environment:

Altitude, altitudinal zone, climate, forest, glacier, habitat, landscape, oxygen, rainforest, tundra

Physical features:

Anticline, base, dome, face, fault-block, fold, hill, lava, magma, mountain, peak, plate boundary, plateau, range, ridge, slope, snow line, summit, syncline, tectonic plate, tree line, valley, volcanic

Physical processes:

change of state, cloud, collection, condensation, condense, cool, evaporate, evaporation, hail, heat, precipitation, rain, sleet, snow, temperature, water cycle

Significant places

Energy, farming, goods, leisure, mountain, natural resource, range, river, settlement, transport

Maps:

Easting, four-figure grid reference, grid reference, location, northing, six-figure grid reference

Position:

cardinal point, compass, east, grid reference, intercardinal point, location, north, north-east, north-west, south, south-east, south-west, west

World:

Africa, Asia, Australia (Oceania), Europe, North America, South America, continent, country

UK:

Climate, contour line, grid reference, landscape, leisure, mountain, peak, range, river, settlement, topography, tourism, wildlife

Assessment outcomes:

Quiz

Provide each child with a [Misty Mountain, Winding River quiz](#). Read out each of the questions, using the [Misty Mountain, Winding River quiz answer sheet](#), and ask the children to write the correct question number above each answer. Share the answers and address any errors or misconceptions.

Test

Assess the children's knowledge learned during the project by asking them to complete the [Misty Mountain, Winding River question sheet](#). Check their answers using the provided [Misty Mountain, Winding River answer sheet](#).

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Memorable Experience Lesson 1: River visit P. of Study Geography Fieldwork 5 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Knowledge Year 4 An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. Skill Year 4 Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.</p>	<p>Before planning and carrying out the river visit, read the River visit teacher information. Prepare children for the visit by investigating the area to be visited using Ordnance Survey and satellite maps. Ensure that children can find and identify four-figure grid references. For those who need to recap on this skill, encourage them to watch the video How to take a four-figure grid reference with Steve Backshall and Ordnance Survey. For children who are secure with four-figure grid references, you could introduce finding and identifying six-figure grid references. Discuss what is expected of the children during the visit by sharing the River visit recording sheet. On location, direct the children to carry out the investigations described and record their findings. Back in the classroom, share and compare the children's data and make a class database of river facts using a collaborative tool, such as Google Sheets.</p>	<ul style="list-style-type: none"> • Ordnance Survey map of area • 6m waterproof tape measure • Metre ruler • Float, such as an orange or plastic ball • Timer • Clipboard and pencil
<p>Introductory Knowledge P. of Study Geography Place 2 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America. Knowledge Year 4 A physical feature is one that forms naturally and can change over time due to physical processes, such as erosion and weathering. Physical features include rivers, forests, hills, mountains and cliffs. An aspect of a physical feature might be the type of mountain, such as dome or volcanic, or the type of forest, such as coniferous or broad-leaved. Specific knowledge Year 4 A river is a body of water that flows downhill, usually to the sea. The place where a river starts is called the source. Tributaries are small rivers or streams that flow into larger rivers or lakes. Meanders are bends in rivers. The place where a river flows into the sea is called the mouth. Skill Year 4 Describe and compare aspects of physical features.</p>	<p>Introduce the topic to the children by watching the Rivers video. After watching the video, discuss important learning points and answer any questions the children may have about the content. Give each child a Rivers word mat and then play the video again. Ask them to highlight the words as they hear them in the video. Challenge the children to match the words on the word mat to the correct definition on the River definitions recording sheet. Gather the children together and use the River definitions answer sheet to check their work. Useful links:</p> <ul style="list-style-type: none"> • Rivers - Royal Geographical Society • Streams and Rapids - Primary School Geography Encyclopedia 	
<p>Memorable Experience Option 2: Alternative start P. of Study Geography Fieldwork 5 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Knowledge Year 4 An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. Skill Year 4 Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.</p>	<p>Present the children with the River study recording sheet and explain that they will be investigating the River Thames. Working in pairs, direct the children to use Google Maps, and its associated tools, to explore the upper, middle and lower courses of the river, collecting information and exploring the river's features. When they have completed their study, invite them to share and compare their findings and draw up a collective profile of the River Thames.</p>	
<p>Engage - Rivers Lesson 1: Journey of a river P. of Study Geography Fieldwork 5 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Knowledge Year 4 An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area.</p>	<p>Recap on the three stages of a river, using the Rivers video. After watching and recapping on the characteristics of each stage of a river's journey, divide the children into small groups. Provide the children with the Journey of a river information sheet, then ask them to complete the Journey of a river question sheet. At the end of the session, ask the children to use the Journey of a river answer sheet to mark their work and address any misconceptions. Useful link:</p> <ul style="list-style-type: none"> • Rivers - BBC Bitesize 	

<p>Specific knowledge Year 4 Rivers, and the landscape that surrounds them, have different characteristics. The upper course of a river is typically steep, narrow and rocky. The water is fast-flowing and turbulent. The middle course of a river is wider, deeper and curves in meanders. The water flows more slowly. The lower course of a river is flat and wide. The water runs into estuaries or creates deltas.</p> <p>Skill Year 4 Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.</p>		
<p>Lesson 2: Case study – River Trent</p> <p>P. of Study Geography Fieldwork 6 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.</p> <p>Knowledge Year 4 A six-figure grid reference contains six numbers and is more precise than a four-figure grid reference. The first three figures are called the easting and are found along the top and bottom of a map. The second three figures are called the northing and are found up both sides of a map. Six-figure grid references give detailed information about locations on a map.</p> <p>Specific knowledge Year 4 The River Trent is the third longest river in the UK. The river has a range of physical and human features along its course.</p> <p>Skill Year 4 Use four or six-figure grid references and keys to describe the location of objects and places on a map.</p>	<p>Divide the children into pairs and ask them to use Google Earth to view an aerial perspective of the River Trent. Encourage them to locate its source, the Head of Trent, at Biddulph Moor, Staffordshire, and trace its journey to its mouth at the Humber Estuary. As the children track the river's journey, ask them to note down any physical and human features they can see. Then offer the children maps that include a section of the River Trent. Demonstrate how to identify and locate human and physical features along the river using four or six-figure grid references, symbols and the key. Ask the children to work in pairs or small groups to identify and locate 10 significant human and physical features along the River Trent's course, recording them on the Human and physical features recording sheet. Compare the children's findings and ask them what they now know about the river. Instruct the children to use their knowledge to write a geographical description of the River Trent. Encourage them to include an explanation for how the features identified are interconnected and link to the river, using their knowledge and further research to help.</p> <p>Useful link:</p> <ul style="list-style-type: none"> River Trent facts for kids - Kiddle 	<ul style="list-style-type: none"> Computers or tablets
<p>Lesson 3: Changing landscapes</p> <p>P. of Study Breadth Geography</p> <p>2 Year 4 Aims Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p> <p>6 Year 4 Features Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge</p> <p>Year 4 Rivers, seas and oceans can transform a landscape through erosion, deposition and transportation.</p> <p>Year 4 Rivers transport materials in four ways. Solution is when minerals are dissolved and carried in the water. Suspension is when fine, light material is carried. Saltation is when small pebbles and stones are carried along the riverbed. Traction is when large boulders and rocks are rolled along the riverbed.</p> <p>Skill(s)</p> <p>Year 4 Explain how the physical processes of a river, sea or ocean have changed a landscape over time. View progression</p> <p>Year 4 Describe and explain the transportation of materials by rivers.</p>	<p>Show the children the Changing landscapes video. Talk about the information and vocabulary in the video, focusing on erosion, transportation and deposition, and answer any questions the children have. Ask the children to discuss and summarise what they have found out about the ways in which a river can change a landscape and the physical processes that take place to do so. Working in small groups on large sheets of paper, ask the children to create a shared knowledge bank summarising key information about how rivers can change the landscape. Challenge the children to use the information and additional research to make a group presentation using presentation software, such as PowerPoint. They can divide the information so that each child takes a different aspect. The children can work on their presentations over time, being ready to share them with an audience in the Express stage.</p>	<ul style="list-style-type: none"> Large sheets of paper
<p>Lesson 4: Rivers of the world</p> <p>P. of Study Geography Location 5 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p>	<p>Organise the children into pairs and give each an atlas. Demonstrate how to locate examples of world rivers, using the index. Give each pair a copy of the World rivers recording sheet and ask them to complete it using the atlas and online research. Invite them to share and compare their completed sheets. Then encourage the</p>	<ul style="list-style-type: none"> Atlases Computers or tablets

<p>Knowledge Year 4 Significant mountain ranges include the Himalayas, Urals, Andes, Alps, Atlas, Pyrenees, Apennines, Balkans and Sierra Nevada. Significant rivers include the Mississippi, Nile, Thames, Amazon, Volga, Zambezi, Mekong, Ganges, Danube and Yangtze.</p> <p>Skill Year 4 Name, locate and explain the importance of significant mountains or rivers.</p>	<p>children to choose one world river to research and complete a World rivers writing frame to show their findings.</p> <p>Useful link:</p> <ul style="list-style-type: none"> Rivers of the World – YouTube 	
<p>Lesson 5: Uses of rivers</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 4 Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power.</p> <p>Specific knowledge Year 4 Rivers are used for leisure, farming, generating energy, transportation and settlements.</p> <p>Skill Year 4 Explain ways that settlements, land use or water systems are used in the UK and other parts of the world.</p>	<p>Ask the children to read the Uses of rivers information sheet. Afterwards, allow them to discuss the information with a partner and consider why rivers are so important. Ask the children to make a list of river uses, using the information in the text to help. To consolidate their understanding, ask them to use the Uses of rivers writing frame to write paragraphs. To extend their study, encourage the children to find out about ways in which a local, national or world river is used. Their work and research can be used to create a 'How we use rivers' display.</p>	
<p>Develop - Mountains</p> <p>Lesson 1: What are mountains?</p> <p>P. of Study Geography Place 2 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>Knowledge Year 4 A physical feature is one that forms naturally and can change over time due to physical processes, such as erosion and weathering. Physical features include rivers, forests, hills, mountains and cliffs. An aspect of a physical feature might be the type of mountain, such as dome or volcanic, or the type of forest, such as coniferous or broad-leaved.</p> <p>Specific knowledge Year 4 A mountain is a natural elevation of the Earth's surface, rising to a summit. Mountains have an elevation greater than that of a hill, usually greater than 610m.</p> <p>Skill Year 4 Describe and compare aspects of physical features.</p>	<p>Show the children the Marvellous mountains presentation. After watching the presentation, ask the children to get into pairs. Provide the Marvellous mountains question sheet and invite the children to discuss and record their answers, using discussion to reinforce their understanding of the information presented. Ask the children to use the information gathered, as well as other available resources, to write a short paragraph to answer the final question, 'What is a mountain?' Invite the children to share and compare their answers.</p>	
<p>Lesson 2: Mountain types</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 4 Mountains form over millions of years. They are made when the Earth's tectonic plates push together or move apart. Mountains are also formed when magma underneath the Earth's crust pushes large areas of land upwards. There are five types of mountain: fold, fault-block, volcanic, dome and plateau.</p> <p>Skill Year 4 Identify, describe and explain the formation of different mountain types.</p>	<p>Use the Types of mountain presentation to introduce the children to different types of mountain. Use the illustrations and information to help develop their awareness of each type and encourage them to begin to make comparisons. Divide the children into groups and give each the Types of mountain sorting cards. Ask them to sort the mountains into groups: dome, fault-block, fold, plateau and volcanic. Where it is not obvious from the image, ask the children to use information texts or online research to find out. Reveal the correct answers using the Types of mountain answer sheet.</p>	<ul style="list-style-type: none"> Information texts Computers or tablets
<p>Lesson 3: Topography and contour lines</p> <p>P. of Study Geography Location 4 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.</p> <p>Knowledge Year 4 Topography is the arrangement of the natural and artificial physical features of an area.</p>	<p>Introduce the children to the purpose and interpretation of contour lines by watching the video Understanding contour lines with Steve Backshall and Ordnance Survey. Using copies of the Ordnance Survey Explorer OL6 map, ask the children, 'What do you notice about how the contour lines are used on the map? What type of landscape do you think this is?' Together, identify a peak and its height by using the contour lines. Recap on the use and identification of four or six-figure grid references and find the grid reference for the peak identified. Provide the children with the Contour lines recording sheet. Challenge them to</p>	<ul style="list-style-type: none"> Ordnance Survey maps

<p>Specific knowledge Year 4 A contour line is a line on a map that joins areas of equal height and shows the elevation of features in the landscape.</p> <p>Skill Year 4 Identify the topography of an area of the UK using contour lines on a map.</p>	<p>identify at least five other peaks on the map, recording their name, height in metres and grid reference.</p>	
<p>Lesson 4: Mountains of the United Kingdom</p> <p>P. of Study Geography Location 4 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.</p> <p>Knowledge Year 4 Significant rivers of the UK include the Thames, Severn, Trent, Dee, Tyne, Ouse and Lagan. Significant mountains and mountain ranges include Ben Nevis, Snowdon, Helvellyn, Pen y Fan, the Scottish Highlands and the Pennines.</p> <p>Specific knowledge Year 4 There are four mountain ranges in the UK that are home to each country's highest mountain: Ben Nevis, in the Grampian Mountains, Scotland; Scafell Pike, in the Cumbrian Mountains, England; Snowdon, in the Snowdonia Mountains, Wales; and Slieve Donard, in the Mourne Mountains, Northern Ireland.</p> <p>Skill Year 4 Create a detailed study of geographical features including hills, mountains, coasts and rivers of the UK.</p>	<p>Show the children the United Kingdom mountain ranges map. Ask them to describe the mountain ranges' locations in the UK using cardinal and intercardinal compass points. Explain that they will be creating a detailed study of one mountainous area. Talk through the Mountain study recording sheet to help the children consider ways to collate and present their information. Provide access to the internet, information books, atlases and maps for them to use in their research. Allow the children to develop their studies over time, extending it to home learning, if needed.</p>	<ul style="list-style-type: none"> • Information texts • Computers or tablets • Maps and atlases
<p>Lesson 5: Mountains of the world</p> <p>P. of Study Geography Location 5 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>Knowledge Year 4 Significant mountain ranges include the Himalayas, Urals, Andes, Alps, Atlas, Pyrenees, Apennines, Balkans and Sierra Nevada. Significant rivers include the Mississippi, Nile, Thames, Amazon, Volga, Zambezi, Mekong, Ganges, Danube and Yangtze.</p> <p>Skill Year 4 Name, locate and explain the importance of significant mountains or rivers.</p>	<p>Ask the children to read the World mountains information sheet. Ask them to use maps or atlases to find and study the location of each mountain, highlighting and revisiting the names and locations of continents and countries when looking at the location of each mountain range. Give each child a copy of the World mountains recording sheet to complete, encouraging them to use the world maps, atlases, information books and online resources to do so.</p>	<ul style="list-style-type: none"> • Information texts • Computers or tablets • Maps and atlases
<p>Develop 2 - The science of rivers and mountains</p> <p>Lesson 1: The water cycle</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 4 Water cannot be made. It is constantly recycled through a process called the water cycle. The four stages of the water cycle are evaporation, condensation, precipitation and collection. During the water cycle, water changes state due to heating and cooling.</p> <p>Skill Year 4 Use specific geographical vocabulary and diagrams to explain the water cycle.</p>	<p>Show the children the Water cycle video. Afterwards, recap the four stages – evaporation, condensation, precipitation and collection – and how temperature changes drive the water cycle. Display the Water cycle labelling sheet on the IWB and work with the children to label the stages. After completing the diagram, ask the children to work independently to complete the Water cycle recording sheet. Share and compare their work, dealing with any misconceptions and mistakes. Ask each child to illustrate their work by drawing and labelling a water cycle diagram.</p> <p>Useful link:</p> <ul style="list-style-type: none"> • What is the water cycle? – BBC Bitesize 	<ul style="list-style-type: none"> •
<p>Lesson 3: Comparing habitats</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 4 Altitudinal zonation describes the different climates and types of wildlife at different altitudes on mountains. Examples include forests that grow at low altitudes and support a wide variety of plants and animals, tundra that is found at higher altitudes and supports plants and animals that</p>	<p>Recap what a habitat is, what it must provide for living things, namely food, water, air and shelter, and how living things must be suited to their habitat in order to survive. Ask the children to name a familiar habitat, an animal or plant that lives there and how it is suited to its habitat. Explain that due to the varying altitude of mountainous areas, different habitats can exist, with a habitat near the top of a mountain being very different to one at the bottom. Share the Altitudinal zones information sheet with the children. Discuss the four different zones, pointing out</p>	

<p>are adapted to harsher environments, and the summits of mountains, which are usually covered in ice and snow and don't support any life.</p> <p>Skill Year 4 Describe altitudinal zonation on mountains.</p>	<p>the differing climates, conditions and living things. Then, ask the children to complete the Altitudinal zones recording sheet to record their understanding.</p>	
<p>Lesson 5: Case study – Somerset Levels flooding</p> <p>P. of Study Geography Fieldwork 1 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 4 Secondary data includes information gathered by geographical reports, surveys, maps, research, books and the internet.</p> <p>Specific knowledge Year 4 Flooding can happen for a wide variety of natural and human reasons including excessive rainfall, lack of river dredging, land use and the topography of the land. Flooding can cause a wide range of problems including damaging property and equipment, contaminating farmland and cutting people off from vital services and supplies of food and water.</p> <p>Skill Year 4 Collect and analyse primary and secondary data, identifying and analysing patterns and suggesting reasons for them.</p>	<p>Ask the children to define the word 'flood' and then explain that flooding can cause many different problems for people and the environment. Describe the 2014 flooding of an area of the Somerset Levels, England, which flooded after the heaviest rainfall the area had seen in 30 years. Ask the children to read the Flooding information pack in pairs. Encourage them to discuss what they have learned as they answer the Flooding question sheet provided. At the end of the session, discuss the questions, using the Flooding answer sheet as guidance, and show the children online images, news reports and video clips of the flooding. Encourage the children to discuss what they can see. Ask them to describe how they would have felt if they had been a victim of the flood in 2014.</p> <p>Useful links:</p> <ul style="list-style-type: none"> • Floods – CBBC Newsround • UK floods: Somerset flood zone – YouTube • Extreme Weather: The Somerset Floods – YouTube • Aerial views show Somerset Levels four months after flooding – YouTube 	
<p>Lesson 6: Importance of soil</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 4 Different types of soil include clay, sandy, silty and loamy.</p> <p>Specific knowledge Year 4 A layer of soil covers much of the land on Earth. It is made of rock particles, air, water and humus, which is decayed plant and animal material. The properties of soil include texture, structure, porosity, chemistry and colour. Loam is a soil type with roughly equal amounts of sand, silt and clay particles. Loam is good for plant growth.</p> <p>Skill Year 4 Describe the properties of different types of soil.</p>	<p>At the beginning of the lesson, ask the children what they already know about soil and why they think it is important. After the discussion, share the Soil types presentation to introduce soil properties and the term 'loam'. Tell the children that they will be investigating soil samples from their local area. Follow the science investigation What is soil? with the children. When their jars of soil and water have separated and the children have recorded their results, encourage them to identify the loam soils best for supporting healthy plant growth.</p>	<ul style="list-style-type: none"> • Soil samples • Identical jars with straight sides • Water • Spoons • Rulers • Camera or tablet



Cycle A Year 5 / 6: Geography Schemes of Work
Autumn – Investigating Our World

Overview: This essential skills and knowledge project teaches children about locating map features using a range of methods. They learn about the Prime Meridian, Greenwich Mean Time (GMT), and worldwide time zones and study interconnected climate zones, vegetation belts and biomes. Children learn about human geography and capital cities worldwide before looking at the UK motorway network and settlements. They carry out an enquiry to identify local settlement types.

Vocabulary:

Compare and contrast: Compare, continent, human geography, life expectancy, literacy rate, population, population density, religion, wealth.

Human features and landmarks: A road, B road, airport, canal, city, ferry terminal, motorway, rail, road, town, transport link, transport network.

Data analysis: Data, demographic, economic, interpret.

Environment: Mediterranean, animal, aquatic biome, boreal forest, climate, climate zone, desert, desert biome, ecosystem, environment, forest, forest biome, freshwater, grassland, grassland biome, ice sheet, landscape, marine, mountain, plant, polar, rainfall, savannah, season, taiga, temperate, temperature forest, temperature grassland, temperature, tropical, tropical forest, tundra, tundra biome, vegetation, vegetation belt, weather conditions.

Positions: Cardinal compass point, compass direction, east, four-figure grid reference, grid line, human feature, intercardinal compass point, key, locality, location, map scale, map symbol, north, north-east, north-west, physical feature, residential, rural, six-figure grid reference, south, south-east, south-west, urban, west.

UK: Brighton, Bristol, Cardiff, Exeter, London, Oxford, Reading Southampton, distance, relative location.

Geographical resources: Ordnance Survey Explorer map, Ordnance Survey map, time zones map.

Geographical change: Change over time, industrial growth, population growth, settlement hierarchy.

Maps: Ordnance Survey map, contour line, depression, elevation, four-figure grid reference, gradient, hill, mountain, peak, relief map, sea level, slope, terrain, topography, two-dimensional representation, valley.

Location: GMT, Greenwich Mean Time, North Pole, Prime Meridian, South Pole, degree, line of longitude, meridian, time zone.

World: Africa, Argentina, Asia, Australia, Austria, Buenos Aires, Cairo, Egypt, Europe, Kula Lumpur, Malaysia, New Zealand, North America, South America, United States, Vienna, Washington DC, Wellington, capital city, continent, country, world.

Sustainability: Carbon footprint, eco-friendly, hazardous substances, life cycle thinking, recycle, reduce, renewable energy, resource efficiency, reuse, sustainable manufacturing process, waste.

Assessment outcomes:

Assess the children's knowledge by asking them to complete the [Investigating Our World question sheet](#). An [Investigating Our World answer sheet](#) is also provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage</p> <p>Lesson 1: Using Ordnance survey maps</p> <p>P. of Study Geography 3 Year 5 Fieldwork Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p> <p>5 Year 5 Fieldwork 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.</p> <p>Knowledge Year 5 Aerial photography is used in cartography, land-use planning and environmental studies. It can be used alongside maps to find out detailed information about a place, or places.</p> <p>Year 5 Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.</p> <p>Year 5 Scale is the relationship between the size of an object on a map and its size in real life. For example, a scale of 1:25,000 means that 1cm on the map is equal to 25,000cm, or 250m, in real life. So 4cm on the map is equal to 1km.</p> <p>Skill(s) Year 5 Analyse and compare a place, or places, using aerial photographs, atlases and maps. View progression</p> <p>Year 5 Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</p>	<p>Ask the children to recall what they know about maps, encouraging them to describe how to use compass directions, keys and grid references to locate features. Organise the children into small groups and give each group an Ordnance Survey (OS) Explorer map of the local area with a 1:25,000 scale. Follow the guidance below to help the children explore the map and key. After a period of collective exploration, provide the children with the Ordnance Survey map recording sheet, which will prompt them to answer questions and write a description of the local area using the information they have found out from the map. Encourage the children to share their work at the end of the lesson, highlighting where children have used the scale, compass directions and key to help them write their descriptions.</p> <p>Exploring an OS Explorer map</p> <ol style="list-style-type: none"> 1. Ask the children to fully open the map. 2. Ask them to find the scale at the bottom of the map. Explain that scale is the relationship between the size of an object on the map and its size in real life. Using a scale enables all of the information to fit onto the map. An OS Explorer map scale of 1:25,000 means that 1cm on the map is equal to 25,000cm, or 250m, in real life. It is easier to say that 4cm on the map is equal to 1km. For this reason, the grid lines are 4cm apart, making each square 1km² in real life. 3. Tell the children that towns and cities are usually written in bold capital letters. Ask them to find familiar place names, then look for smaller settlements usually written in lowercase text. 4. Ask the children to use the key to identify roads, including motorways, main A roads, secondary B roads and minor roads. Encourage them to follow the roads with their fingers, spotting the towns and villages they pass through and noting how A roads meet at different towns and villages. 5. Ask the children to identify footpaths. Encourage them to follow the footpaths with their fingers, spotting the features they pass and discussing why the footpath might have been made. 6. Ask the children to use the symbols on the key to identify buildings and amenities in their local area. 7. Ask the children to use cardinal and intercardinal compass points to explain where places are in relation to each other. For example, Rotherham is north-east of Sheffield. 	<ul style="list-style-type: none"> • Ordnance Survey (OS) Explorer maps of the local area
<p>Lesson 2: Contour lines</p> <p>P. of Study Geography Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 5 The geographical term 'relief' describes the difference between the highest and lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat.</p> <p>Skill Year 5 Identify elevated areas, depressions and river basins on a relief map.</p>	<p>Ask the children what they have learned in previous lessons about Ordnance Survey maps, including the use of grid references. Introduce the children to map contour lines and explain that they are a two-dimensional representation of elevated areas of a landscape, such as hills or mountains. Explore contour lines further by visiting and reading the Ordnance Survey webpage, A beginners guide to understanding map contour lines. Use the text and the diagrams to explain the concept of contour lines and watch the Steve Backshall video for context. To consolidate their understanding, ask the children to search for contour lines on a local Ordnance Survey Explorer map. Ask the children to find steep and gradual slopes, and the peaks of hills and mountains, giving four-figure grid references to identify their locations. Give all children a Contour lines recording sheet to complete to record their work.</p>	<ul style="list-style-type: none"> • Ordnance Survey (OS) Explorer maps of the local area

	At the end of the session, mark the children's work collectively and address any misconceptions.	
<p>Lesson 3: Exploring the map grid squares P. of Study Geography Fieldwork 5 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. Knowledge Year 5 Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features. Skill Year 5 Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</p>	Begin by showing the children the Six-figure grid references presentation . Use the presentation to recap on the purpose and configurations of six-figure grid references. Organise the children into groups and give each group a local Ordnance Survey Explorer map and a four-figure grid reference for an area of the map. Explain that this is the area that they will be investigating. Provide each group with a copy of the Ordnance Survey grid square recording sheet and ask them to work together to complete it. At the end of the session, ask the children to present and compare their findings. Ask questions to encourage children to make comparisons between the areas they investigated. For example, 'How is land used in the locality? Is there more rural or urban land? Which squares are more likely to be used for leisure and why? Which squares are highly-populated residential areas?'	<ul style="list-style-type: none"> • Ordnance Survey (OS) Explorer maps of the local area
<p>Develop 1 Lesson 1: Time zones P. of Study Geography 3 Year 5 Fieldwork Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. 1 Year 5 Location Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Knowledge Year 5 Aerial photography is used in cartography, land-use planning and environmental studies. It can be used alongside maps to find out detailed information about a place, or places. Year 5 The Prime (or Greenwich) Meridian is an imaginary line that divides the Earth into eastern and western hemispheres. The time at Greenwich is called Greenwich Mean Time (GMT). Each time zone that is 15 degrees to the west of Greenwich is another hour earlier than GMT. Each time zone 15 degrees to the east is another hour later. Skill(s) Year 5 Analyse and compare a place, or places, using aerial photographs, atlases and maps. View progression Year 5 Identify the location and explain the function of the Prime (or Greenwich) Meridian and different time zones (including day and night).</p>	Show the children the Time zones video on BBC Bitesize to introduce the children to time zones. Talk about the video, including why Earth has time zones, and address any misconceptions, if necessary. Show the Time zones presentation to explain how time zones are calculated. Use the information to prompt discussion and questioning and encourage the children to calculate time zones worldwide. To consolidate their understanding, ask children to work in pairs to complete the Time zones question sheet using the Time zones map to help. At the end of the session, mark the children's work collectively.	<ul style="list-style-type: none"> • Globe (optional)
<p>Lesson 2: Climate zones P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 5 The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation. Specific knowledge Year 5 Climate zones have the same average weather conditions, such as temperature, rainfall and seasons. The climate determines the vegetation, or plants, of an area. Skill Year 5 Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.</p>	Share the Climate zones, vegetation belts and biomes presentation with the children. Discuss the definitions carefully and ensure that children understand the link between the three terms. Explain that they will learn more about climate zones in this lesson. Ask the children what they already know about climate zones from previous learning, encouraging them to use the names polar, temperate, Mediterranean, desert and tropical. Display the Climate zones map and ask questions about the locations of the climate zones and key features, including distance from the equator, temperature and precipitation. After exploring the map, give the children the Climate zones information sheet and ask them to read about the locations before recording their learning on the Climate zones question sheet . Mark the children's work together, using the Climate zones answer sheet .	
<p>Lesson 3: Vegetation belts P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p>	Revisit the Climate zones, vegetation belts and biomes presentation and explain that they will now learn about vegetation belts. Give pairs of children a copy of the Vegetation belts information sheet . Encourage them to look at the map first, identifying similarities with the Climate zone map , and then ask	<ul style="list-style-type: none"> • Computers or tablets

<p>Knowledge Year 5 The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation.</p> <p>Specific knowledge Year 5 Vegetation belts are areas where certain species of plant grow. As animals eat plants, plants that grow in a vegetation belt determine the animals that live there.</p> <p>Skill Year 5 Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.</p>	<p>them to read the information to find out about plants that grow in the vegetation belts. To consolidate their knowledge, give the children access to computers and the Vegetation belts drag and drop template. Encourage the children to match the plants to the vegetation belts, using the information sheet to help. Share the Vegetation belts answer sheet to help the children mark their work.</p>	
<p>Lesson 4: Biomes</p> <p>P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 5 The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation.</p> <p>Specific knowledge Year 5 Biomes are large areas that share similar climates, vegetation belts and animal species. They also include aquatic areas.</p> <p>Skill Year 5 Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.</p>	<p>Revisit the Climate zones, vegetation belts and biomes presentation. Ask the children to recap their knowledge of climate zones and vegetation belts and ensure the children understand the definition of the word 'biome'. Display the Biomes map to identify the locations of the five major biomes. Ask the children if they can see any similarities and differences between the names of the vegetation belts and the biomes highlighting that four are the same and one is different. To find out more about each biome, give the children the Biomes information pack to read. Challenge them to complete the Biomes question sheet and then mark their work collectively using the Biomes answer sheet, allowing the children to correct their work as necessary.</p>	
<p>Lesson 5: Human geography</p> <p>P. of Study Geography 1 Year 5 Place Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>4 Year 5 Fieldwork Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 5 The seven continents (Africa, Antarctica, Asia, Australia, Europe, North America and South America) vary in size, shape, location, population and climate.</p> <p>Year 5 Geographical data, such as demographics or economic statistics, can be used as evidence to support conclusions.</p> <p>Skill(s) Year 5 Identify and describe the similarities and differences in physical and human geography between continents. View progression</p> <p>Year 5 Summarise geographical data to draw conclusions.</p>	<p>Display the World map and encourage the children to recall any knowledge they have about the continents, including their names, locations, comparative sizes, seas, climates, significant physical features and capital cities. You could annotate the map with their suggestions. Explain that they will find out more about the human geography of the continents by studying secondary geographical data. Display the European data diagram and model how to read and interpret the data, inviting the children to contribute their ideas. Organise the children into pairs and give each pair a set of Continents data sorting cards and a Continents data question sheet. Challenge them to work together to read and interpret the data and answer the questions. At the end of the session, discuss the children's findings and model the answers using the Continents data answer sheet.</p>	
<p>Lesson 6: World cities</p> <p>P. of Study Geography Location 2 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>Knowledge Year 5 Major cities around the world include London in the UK, New York in the USA, Shanghai in China, Istanbul in Turkey, Moscow in Russia, Manila in the Philippines, Lagos in Nigeria, Nairobi in Kenya, Baghdad in Iraq, Damascus in Syria and Mecca in Saudi Arabia.</p> <p>Specific knowledge Year 5 Capital cities are usually the seat of government of a country. They are large settlements with a wide range of human features and transport links and can be a centre for business and trade.</p> <p>Skill Year 5 Name, locate and describe major world cities.</p>	<p>Use the Capital cities of the world map to name and locate some of the world's capital cities. Invite the children to study the capital cities in more detail by reading the Capital cities information sheet. After reading the information, ask the children to choose a capital city that they would like to research in more detail. Provide the City guide writing frame for the children to complete using the information sheet and research. At the end of the session, put the children into groups of six and ask them to share their discoveries.</p>	<ul style="list-style-type: none"> • Computers or tablets • Information books about capital cities

<p>Lesson 7: Sustainable manufacturing processes P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 5 Industries can make their manufacturing processes more sustainable and better for the environment by using renewable energy sources, reducing, reusing and recycling and sharing resources. Skill Year 5 Identify and explain ways that people can improve the production of products without compromising the needs of future generations.</p>	<p>Explain to the children that factories make the products and goods we use and enjoy. However, some manufacturing processes are not sustainable, such as using fossil fuels, wasting natural resources, and choosing the cheapest methods of manufacturing rather than the most environmentally friendly. Recap the term sustainability and explain that many companies today are thinking carefully about sustainable manufacturing processes. Organise the children into pairs or groups and invite them to complete the Sustainable manufacturing processes sorting cards. Check the children's understanding using the Sustainable manufacturing processes answer sheet and discuss the reasons for, and implications of, using each sustainable process. Ask the children to use their knowledge of sustainable processes to write a persuasive letter to local manufacturers. Encourage the children to explain why sustainable manufacturing processes are important and use persuasive language to encourage the company to make sustainable changes. If possible, send the letters to a local business and see if the children receive a reply.</p>	
<p>Develop 2 Lesson 1: Relative locations and distances P. of Study Geography Location 1 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time. Knowledge Year 5 Relative location is where something is found in comparison with other features. Skill Year 5 Describe the relative location of cities, counties or geographical features in the UK in relation to other places or geographical features.</p>	<p>Give pairs of children a copy of the <i>Collins Junior Atlas</i>. Explain that they will learn more about the United Kingdom by identifying the relative locations and distances between places, using the scale and compass. Share the Relative locations and distances presentation. Work through each slide, explaining the concepts and completing the examples included. Give each child a copy of the Relative locations and distances question sheet and encourage them to use the map on page 9 of the <i>Collins Junior Atlas</i> to answer the questions. At the end of the session, share the Relative locations and distances answer sheet to help the children mark their work and ask quick-fire quiz questions to see if they can remember the distances between and the relative locations of the UK cities studied.</p>	<ul style="list-style-type: none"> • <i>Collins Junior Atlas</i> • Rulers
<p>Lesson 2: Transport networks P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 5 Transport networks can be tangible, such as rails, roads or canals, or intangible, such as air and sea corridors. These networks link places together and allow for the movement of people and goods. Transport networks are usually built where there is a high demand for the movement of people or goods. They run between places where journeys start or finish, such as airports, bus stations, ferry terminals or railway stations. Specific knowledge Year 5 A motorway is a main road built for fast travel over long distances. In the United Kingdom, they run north to south and east to west across the country, connecting towns and cities and transport links and allowing people and goods to be moved quickly. Skill Year 5 Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.</p>	<p>Begin by asking the children what they know about transport networks, referring to their learning in the Year 4 project Interconnected World about rail networks and waterways. Explain that motorways are main roads built for fast travel over long distances, and the motorway network connects towns, cities and transport links across the UK. To illustrate this idea, show the children the motorway network, using an interactive online map, such as Google Maps. Use the zoom and search functions to highlight the characteristics of motorways. Ask the children if they have ever travelled on a motorway and encourage them to describe the experience. Allow the children to explore the interactive map in pairs and ask questions to help them understand how motorways work. For example, 'Which motorways can you see going into and out of London? Which two cities does the M5 connect? Which motorways travel north to south? Which travel east to west?' When the children have explored the map, provide the Motorways question sheet for the children to complete, using their prior knowledge, maps or other sources of information. At the end of the session, check the children's answers against the Motorways answer sheet. Encourage the children to summarise their understanding of why people and industries use the motorway network.</p>	<ul style="list-style-type: none"> • Road atlases • Computers or tablets
<p>Lesson 3: Settlement hierarchy P. of Study Breadth Geography Aims 2 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time. Knowledge Year 5 Settlements come in many different sizes and these can be ranked according to their population and the level of services available. A settlement hierarchy includes hamlet, village, town, city and large city. Specific knowledge Year 5 Settlement hierarchy is a way of grouping and ranking settlements according to their type, significance, number and size. This can be shown in a</p>	<p>Use the Settlement hierarchy presentation to introduce and explore the concept of settlement hierarchy. Ask the children to describe how the settlements change as they move from one category to another and encourage them to use the criteria and their knowledge and experience to place their locality on the hierarchy scale. Ask the children to complete the Settlement hierarchy question sheet using the information provided in the presentation. At the end of the session, talk about the children's work and ask questions to help them summarise their understanding, for example, 'How do you think a settlement might change over time? How would a settlement</p>	

<p>settlement hierarchy diagram. Settlements get bigger, have a larger population and have more facilities, workplaces and transport links as you move up the settlement hierarchy diagram. The number of each type of settlement decreases as you move down the settlement hierarchy diagram.</p> <p>Skill Year 5 Describe how the characteristic of a settlement changes as it gets bigger (settlement hierarchy).</p>	<p>change if the population grew? How might a settlement change if an industry was built nearby?'</p>	
<p>Innovate Local settlement classification enquiry: P. of Study Breadth Geography Aims 2 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time. Knowledge Year 5 Settlements come in many different sizes and these can be ranked according to their population and the level of services available. A settlement hierarchy includes hamlet, village, town, city and large city. Specific knowledge Year 5 Settlement hierarchy is a way of grouping and ranking settlements according to their type, significance, number and size. This can be shown in a settlement hierarchy diagram. Settlements get bigger, have a larger population and have more facilities, workplaces and transport links as you move up the settlement hierarchy diagram. The number of each type of settlement decreases as you move down the settlement hierarchy diagram. Skill Year 5 Describe how the characteristic of a settlement changes as it gets bigger (settlement hierarchy).</p>	<p>Share the enquiry question, 'What typical features and evidence can we find to identify and classify a local settlement?' Explain to the children that their enquiry will focus on identifying human features of a local settlement to classify it on the settlement hierarchy diagram. Organise the children into small enquiry groups and give each group a Settlement enquiry recording sheet to help guide their work and record their findings. Show children the settlement they will be exploring using an Ordnance Survey map or digital mapping tool, such as Google Earth and its Street View function. As they start their enquiry, encourage them to make predictions about what type of settlement they are investigating and what typical features they might expect to see to prove their predictions. Allow the children time to carry out the initial stage of their enquiry before taking them to the settlement to gather evidence through the fieldwork activities set out in the booklet. When the children's enquiries are complete, invite them to display their work and give a short presentation about their findings.</p>	<ul style="list-style-type: none"> ● Computers or tablets ● Atlases and road maps ● Local data including population data (see the useful link) ● Clipboards ● Cameras or tablets



Cycle A Year 5 / 6: Geography Schemes of Work
Spring – Sow, Grow and Farm (Farming in the UK/Farming across the world)

Overview: This project teaches children about the features and characteristics of land use in agricultural regions across the world, including a detailed exploration of significant environmental areas.

Vocabulary:

Compare and contrast: Compare, difference, identity, similarity.

Human features and landmarks: Cargo, dock, plantation, shop, supermarket, transport, transportation.

Settlements and land use: Agriculture, allotment, arable, business, city, commercial farm, crop, farming, floriculture, forestry, housing, livestock, market garden, mixed, national park, pastoral, rural, town, urban, village, viticulture.

Data analysis: Calculate, compare, conclude, data, evidence, hypothesis, measure, research, summarise.

Fieldwork: Data, investigate, observe, question, survey, visit.

Natural and manmade materials: Land, nutrient, soil.

Environment: Mediterranean, climate zone, desert, feature, humidity, polar, rainfall, season, temperate, temperature, tropical.

Physical features: Coastline, desert, forest, grassland, highland, hill, loan, mountain, plain, rainforest, sand, slit, soil, transport links, valley.

Physical processes: Climate, drainage, fertiliser.

Climate and weather: Mediterranean, climate zone, cold, desert, frost, humidity, polar, rainfall, season, temperate, tropical, warm, wet.

Significant places: South America, developing country, equator.

Positions: Compass, contour line, east, grid reference, map symbol, north, north-east, north-west, south, south-east, south-west, west.

UK: Climate, gradient, topography.

Assessment outcomes:

Quiz:

Give each child one of the sheets from the [Sow, Grow and Farm quiz](#). Ask them to create a question to fit each answer that relates to the knowledge they have gained during the topic. When finished, ask the children to cut them up, so the questions and answers are separate, and give them to a different pupil to see if they can match them together. At the end of the session, ask the children to check their questions and answers were matched correctly and address any queries or misconceptions.

Test:

Assess the children's knowledge learned during the project by asking them to complete the [Sow, Grow and Farm question sheet](#). Check their answers using the provided [Sow, Grow and Farm answer sheet](#).

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage</p> <p>Lesson 1: Allotment habits</p> <p>P. of Study Breadth Science Aims 3 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.</p> <p>Knowledge Year 5 Population changes in a habitat can have significant consequences for food chains and webs.</p> <p>Specific knowledge Year 5 A food web is a set of interconnected food chains that show how animals rely on plants and other animals for food.</p> <p>Skill Year 5 Describe, using their knowledge of food chains and webs, what could happen if a habitat had a living thing removed or introduced.</p>	<p>Provide the children with the Allotment food web diagram and discuss the plants and animals in the web, using the correct vocabulary, including 'producer', 'consumers' and 'apex predators'. Ask the children to use the diagram and Food chain picture cards to create a single allotment food chain, identifying the producer, primary, secondary and tertiary consumers and which animal is the apex predator. Encourage the children to predict what would happen if the producer in their food chain became less or more abundant. Repeat with each consumer in their food chain. Extend to looking at the whole food web. Ask questions, such as 'Which predator eats the most varied diet? What would happen in the allotment if the rabbit population increased? What would happen if the allotment holder used pesticides that killed slugs?' Ask the children to write a paragraph to explain how living things are dependent on one another within a habitat, using specific examples as evidence.</p>	
<p>Lesson 2: Animal life cycles</p> <p>P. of Study Science Habitats 6 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>Knowledge Year 5 A life cycle is the series of changes in the life of a living thing and includes these basic stages: birth, growth, reproduction and death. Mammals' life cycles include the stages: embryo, juvenile, adolescent and adult. Amphibians' life cycles include the stages: egg, larva (tadpole), adolescent and adult. Some insects' (butterflies, beetles and bees) life cycles include the stages: egg, larva, pupa and adult. Birds' life cycles include the stages: egg, baby, adolescent and adult.</p> <p>Skill Year 5 Compare the life cycles of animals, including a mammal, an amphibian, an insect and a bird. View progression</p>	<p>Display the Life cycle diagrams to show the life cycles of a fox (mammal), frog (amphibian), blackbird (bird) and cabbage white butterfly (insect). Recap on what a life cycle shows and explain how they are typically displayed. Ask the children to explore the life cycles, identifying and recording any similarities and differences they observe. Gather the children together and discuss their comparisons, allowing them to add to their records, where necessary. To deepen the children's knowledge, challenge them to choose a different mammal, amphibian, bird or insect to research. Examples could include a human, newt, sparrowhawk or ladybird. Ask them to produce a diagram of their chosen animal's life cycle, then make comparisons with one of the initial life cycle diagrams.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access
<p>Lesson 3: Plant life cycles</p> <p>P. of Study Science Habitats 7 Describe the life process of reproduction in some plants and animals.</p> <p>Knowledge Year 5 Flowering plants reproduce sexually. The flower is essential for sexual reproduction. Other plants reproduce asexually. Bulbs, corms and rhizomes are some parts used in asexual reproduction in plants.</p> <p>Knowledge Year 5 Reproduction is the process of producing offspring and is essential for the continued survival of a species. There are two types of reproduction: sexual and asexual. Sexual reproduction involves two parents (one female and one male) and produces offspring that are different from the parents. Asexual reproduction involves one parent and produces offspring that is identical to the parent.</p> <p>Skill Year 5 Group and sort plants by how they reproduce. View progression</p> <p>Skill Year 5 Describe the life process of reproduction in some plants and animals.</p>	<p>Provide the children with the Plant reproduction information sheet. Give them time to read the information and encourage them to refer to other sources, such as information texts and useful websites, to help them clarify their understanding. Ensure the children understand the fundamental differences between sexual and asexual reproduction. Asexual reproduction doesn't involve flowers, only one parent is needed, and the offspring are genetically identical to the parent. Provide a range of fruits, vegetables and plants, and encourage children to examine the reproductive structures, such as seeds (broad beans), rhizomes (root ginger), tubers (potato or yam), bulbs (onion or garlic), corms (celeriac) and runners (mature strawberry plant). Ask the children to use the Plant reproductive structures poster to help them identify, sort and group the structures, recording their findings.</p>	<ul style="list-style-type: none"> • Information texts • Computers or tablets • Web access • Range of fruit, vegetables and plants
<p>Lesson 4: Dissections</p> <p>P. of Study Science Habitats 7 Describe the life process of reproduction in some plants and animals.</p> <p>Knowledge Year 5 Parts of a flower include the stamen, filament, anther, pollen, carpel, stigma, style, ovary, ovule and sepal. Pollination is when the male part of a plant (pollen) is carried, by wind, insects or other animals, to the female part of the plant (carpel). The pollen travels to the ovary, where it fertilises the ovules (eggs). Seeds are then produced, which disperse far away from the parent plant and grow new plants.</p>	<p>Show the children the BBC Bitesize animation How do flowering plants reproduce? Encourage them to make notes, focusing on the process, key flower parts and their functions. Discuss what they have learned from the animation and recap on the process of sexual reproduction. Provide pairs of children with a large flower (daffodils and lilies are ideal) along with the Flower diagram. Give the children time to examine the flower, identifying and naming the parts they can see. Encourage them to carefully dissect the flower with tweezers and pointed scissors, demonstrating any tricky bits. As they remove each part, ask the children to group the pieces, such as petals, together. Once dissected, ask them to identify, sketch and label the structures associated with sexual</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access • Large flowers, such as daffodils or lilies • Tweezers and pointed scissors

<p>Skill Year 5 Label and draw the parts of a flower involved in sexual reproduction in plants (stamen, filament, anther, pollen, carpel, stigma, style, ovary, ovule and sepal).</p>	<p>reproduction, using the Annotated flower diagram to help. Encourage discussion and comparison, identifying whether all flowers had all the parts, whether they looked the same and how many of each part they had.</p>	
<p>Lesson 5: Growing P. of Study Science Enquiry 17 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Knowledge Year 5 A method is a set of clear instructions for how to carry out a scientific investigation. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding. Skill Year 5 Plan and carry out a range of enquiries, including writing methods, identifying variables and making predictions based on prior knowledge and understanding.</p>	<p>Recap on sexual and asexual reproduction in plants, then provide the children with compost, containers and tools to plant broad beans, potatoes, strawberries and shallots. Encourage the children to look at the seeds, tubers, runners and bulbs before planting and predict how they will grow and reproduce. Position the planters indoors or outdoors and ask the children to tend to the plants and make regular observations, looking for signs of reproduction, such as flowers, runners or shoots. After around three months, the plants should have completed their life cycles and be ready for harvesting.</p>	<ul style="list-style-type: none"> • Compost • Containers • Selection of seeds, tubers, runners and bulbs
<p>Lesson 6: Seasonality P. of Study Design and technology Food 4 Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Knowledge Year 5 Seasonality is the time of year when the harvest or flavour of a type of food is at its best. Buying seasonal food is beneficial for many reasons: the food tastes better; it is fresher because it hasn't been transported thousands of miles; the nutritional value is higher; the carbon footprint is lower, due to reduced transport; it supports local growers and is usually cheaper. Skill Year 5 Describe what seasonality means and explain some of the reasons why it is beneficial.</p>	<p>Display a range of seasonal fruit and vegetables that can be grown on an allotment. Explain that the food displayed is seasonal; it is at its peak, either in terms of harvest or flavour. Allow the children to explore and name the produce, then ask them to read the Seasonality information sheet. After reading, encourage the children to explain some of the reasons why eating seasonal food is beneficial to both themselves and the environment. Ask the children to use the BBC Good Food Seasonal calendar and the Seasonal allotment recording sheet to plan what they would grow in an allotment. They should plan for a good mix of produce where at least one food is ready to harvest each month. After the task, ask the children to compare and explain their choices to each other. At the end of the session, ask the children to consider ways that their eating could become more seasonal, such as looking at the origins of foods on its packaging or growing produce themselves in containers or grow bags. Opportunities to make a range of seasonal dishes can also be offered to consolidate their understanding of seasonality.</p>	<ul style="list-style-type: none"> • Seasonal fruit and vegetables that can be grown in an allotment • Food packaging
<p>Lesson 7: Dig for victory P. of Study Breadth History Aims 8 Gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'. Knowledge Year 5 Historical terms include topic related vocabulary, which may include abstract nouns, such as peasantry, civilisation, treason, empire, rebellion and revolt. Specific knowledge Year 5 The Dig for Victory campaign encouraged everyone to grow fruits and vegetables on open land to counteract food shortages created during the Second World War. Skill Year 5 Articulate and organise important information and detailed historical accounts using topic related vocabulary.</p>	<p>Display the Dig for Victory posters. Ask the children if they have heard the term before and invite them to share any knowledge they have of the campaign. Explain to the children that they are going to work in research teams to find out more about the campaign, using a range of historical resources to help them. Give each team a copy of the Dig for Victory information pack and invite them to investigate the resources and make notes on the topic. The children can use the Dig for Victory question sheet to help prompt their thinking. Invite the children to share and compare their findings and consider whether the scheme should be reintroduced. Their summaries can be a short, written response or a class debate.</p>	
<p>Develop 1 Lesson 1: Farming in the UK P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 5 The topography of an area intended for agricultural purposes is an important consideration. In particular, the topographical slope or gradient plays a large part in controlling hydrology (water) and potential soil erosion. Skill Year 5 Explain how the topography and soil type affect the location of different agricultural regions.</p>	<p>Share the Farming in the United Kingdom information sheet with the children. After reading the content, ask the children to discuss the information, focusing on how the factors of climate, topography and soil determine how the land is used. To consolidate their understanding, challenge them to work in pairs to answer the Farming in the United Kingdom question sheet. Invite the children to share their answers, checking against the Farming in the United Kingdom answer sheet and correcting, if necessary.</p>	

<p>Lesson 2: Mapping using grid reference P. of Study Geography Fieldwork 5 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. Knowledge Year 5 Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features. Specific knowledge Year 5 Map features, such as contour lines and symbols, can help to determine the type of land use of an area. Skill Year 5 Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</p>	<p>Explain to the children that Ordnance Survey maps can be used to locate places and human and physical features in the landscape by using six-figure grid references. Show the video How to take a six-figure grid reference with Steve Backshall and Ordnance Survey. Provide copies of Ordnance Survey maps of the local area and ask the children to find the six-figure grid references for some given locations or features on the map. Then, provide some six-figure grid references and ask the children to find out what is located at each point. Using their knowledge from the previous session on farming, invite the children to use the maps to locate local farms. Ask questions, such as 'Where are the farms located? What does the map tell you about the topography of the farmland? What type of farming do you think is in that area? What evidence is there to support your ideas?' Encourage the children to look at the contour lines, map symbols and geographical features to help them to explain their reasoning.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access • Ordnance Survey maps
<p>Lesson 3: A farmer's year P. of Study PSHE - Relationships 4 Year 5 Relationships Learn to listen and respond respectfully to a wide range of people, including those whose traditions, beliefs and lifestyle are different to their own. 4 Year 5 Relationships Learn how to discuss and debate topical issues, respect other people's point of view and constructively challenge those they disagree with. P. of Study RHE - Relationships education 4 Year 5 Relationships Know the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs. Knowledge Year 5 A debate is a serious discussion of a subject in which many people take part. In a debate, facts and opinions are used to support a viewpoint. Topical issues might include global warming or whether a school uniform should be worn. Year 5 Farmers work throughout the year to rear animals and grow crops. The type of work they need to do changes with the seasons. Skill(s) Year 5 Debate topical issues, problems and events that are of concern to them as individuals and to society.</p>	<p>Play A farmer's year audio. After listening to the audio, invite the children to ask and answer questions about what they have heard. Ask 'What do you think are the main challenges for a UK farmer?' Allow them to discuss and debate their ideas and explain their answers. Challenge the children to represent the year of the farmer by filling in the A farmer's year recording sheet. They can refer to the glossary to help them use the correct terminology.</p>	
<p>Lesson 4: Impact of modern farming P. of Study Breadth Science Aims 2 Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future. Knowledge Year 5 Farming in the UK can be divided into three main types: arable (growing crops), pastoral (raising livestock), mixed (arable and pastoral). Intensive farming in the past has resulted in the loss of habitats. Specific knowledge Year 5 Modern farming methods, such as excessive tillage, monoculture, removal of hedgerows, use of synthetic fertilisers and chemical pesticides, irrigation technologies and autumn planting, all impact on wildlife and the natural environment. Skill Year 5 Research and describe different farming practices in the UK and how these can have positive and negative effects on natural habitats.</p>	<p>Share the Modern farming information sheet with the children. After reading, ask the children to explain some of the types and consequences of modern farming practices. Divide the children into small groups and give each a set of Modern farming sorting cards. Encourage each group to read, discuss and sort the cards into two groups: positive impact or negative impact. Invite the children to walk around each group's sorting to compare their responses. Ask the children to reflect on their findings collectively. Which modern farming practices do they consider beneficial, with the positive effects outweighing the negative? As an extended or home learning task, challenge the children to choose a card and research the aspect further to develop a fact file.</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access
<p>Lesson 5: Case study: Potato farming in Jersey P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p>	<p>Play the Potato farming in Jersey audio and encourage the children to take notes on the Potato farming recording sheet under the headings: climate, soil, problems, history, landscape, and growing and harvesting. After listening, ask the children to talk about their notes in pairs and encourage them to add any information they have missed. Play the audio again and ask the children to</p>	<ul style="list-style-type: none"> • Computers or tablets • Web access

<p>Knowledge Year 5 Soil fertility, drainage and climate influence the placement and success of agricultural land.</p> <p>Specific knowledge Year 5 The warm climate, sloping topography, good transport links and seaweed fertiliser make Jersey an ideal place to grow Jersey Royal potatoes. Only potatoes grown on Jersey can be called Jersey Royals.</p> <p>Skill Year 5 Describe how soil fertility, drainage and climate affect agricultural land use.</p>	<p>consider if the information recorded is correct and if any other information could be added. Challenge them to use their notes to create individual non-chronological reports on the topic using the Jersey Royals non-chronological report template. Pair the children so they can evaluate their partner's work and check for accuracy of information.</p>	
<p>Lesson 6: Still life</p> <p>P. of Study Art and design 23 Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).</p> <p>Knowledge Year 5 A tint is a colour mixed with white, which increases lightness, and a shade is a colour mixed with black, which increases darkness.</p> <p>Specific knowledge Year 5 Artists who have painted still life compositions include Michelangelo Merisi da Caravaggio, Francisco de Zurbarán, Claude Monet, Mary Cassatt, Vincent van Gogh, Paul Gauguin and Paul Cézanne.</p> <p>Skill Year 5 Mix and use tints and shades of colours using a range of different materials, including paint.</p>	<p>Show the children the Still life presentation. When looking and talking about each of the images, discuss the content, colour and composition of each painting. Ask 'How has each artist used tints and shades in their composition? How does this help with perspective and form?' Invite the children to develop still life compositions, using seasonal fruits and flowers. The children can explore their ideas in a sketchbook first, before developing a painting on the subject matter.</p>	<ul style="list-style-type: none"> • Sketchbooks or cartridge paper • Selection of paints and brushes
<p>Develop 2</p> <p>Lesson 1: Climate zones</p> <p>P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 5 The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation.</p> <p>Skill Year 5 Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.</p>	<p>Show the children the Climate zones map. Ask them to use the key to examine the map and the data provided to discuss the features of each climate zone. Show the children the BBC Bitesize Climate zones video and encourage them to review the information presented, including any discrepancies, and ask any questions to clarify learning points. Ask the children to use the information gathered to complete the Climate zones question sheet. Invite them to share their findings on the topic in a class discussion.</p>	
<p>Lesson 2: North and South America</p> <p>P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 5 North America is broadly categorised into six major biomes: tundra, coniferous forest, grasslands (prairie), deciduous forest, desert and tropical rainforest. South America has a vast variety of biomes, including desert, alpine, rainforest and grasslands.</p> <p>Knowledge Year 5 Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use. Farmers living in different countries adapt their farming practices to suit their local climate and landscape.</p> <p>Skill Year 5 Identify and describe some key physical features and environmental regions of North and South America and explain how these, along with the climate zones and soil types, can affect land use. View progression</p> <p>Skill Year 5 Explain how the climate affects land use.</p>	<p>Display the Climate zones map. Discuss the different climate zones of North and South America, comparing them to the UK. Explain that the two continents make up the largest stretch of land in the world and can be divided into environmental regions, or biomes, based on their physical features, climate, geology, vegetation and soil types. Share the Farming in North and South America sorting cards with the children. Invite them to work in pairs to read each card and decide which type of farming they think is best suited to each of the environmental regions. Encourage the children to match each type of farming with an environmental region, discussing their ideas and explaining their reasoning. Invite the children to feedback their thoughts and check their answers against the Farming in North and South America answer sheet.</p>	

<p>Lesson 3: Citrus farming in California P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 5 Soil fertility, drainage and climate influence the placement and success of agricultural land. Specific knowledge Year 5 The soil and climate of California make it ideal for growing citrus fruits. Skill Year 5 Describe how soil fertility, drainage and climate affect agricultural land use.</p>	<p>Display a range of citrus fruits, such as oranges, lemons, grapefruits and tangerines, and explain that they grow in tropical climates that have hot summers and mild, wet winters. Display the Climate zones map and ask 'In which countries do you think citrus fruits are grown?' Allow the children time to make suggestions, referring to their prior knowledge of countries, continents and climate zones. Discuss the children's answers, then show them the location of California on a world map. Explain that California is one of the world's most significant producers of citrus fruits. Invite the children to work in pairs to view the Citrus farming in California presentation. Instruct them to make notes to record significant information, particularly about ways in which the soil and climate of California support citrus production. When the children have completed their task, ask them to present back their recordings. To extend the task, the children could carry out further research on the topic and create their own presentations.</p>	<ul style="list-style-type: none"> • Citrus fruits • Computers or tablets • Web access
<p>Lesson 4: Coffee growing in Peru P. of Study Geography Location 2 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Knowledge Year 5 Farming challenges for developing countries include poor soil, disease, drought and lack of markets. Education, fair trade and technology are ways in which these challenges can be reduced. Specific knowledge Year 5 Coffee is grown in Peru because the warm climate, frequent rainfall and rich soil provide perfect growing conditions. Growing and processing coffee is a difficult, time-consuming task because the process has changed little over time and most of the work is still done by hand. Skill Year 5 Identify some of the problems of farming in a developing country and report on ways in which these can be supported. View progression</p>	<p>Display a range of coffee packaging. Ask the children to read the packaging and mark on a shared world map where the coffee originated. Ask 'Which climate do you think best supports coffee growing and production?' Encourage the children to offer suggestions that refer to their previous learning about climate and the Climate zones map. Explain that they will be further investigating coffee farming in Peru, a developing country in South America. Share the Coffee farming in Peru video with the children. Ask 'What do you think life is like for a coffee farmer in Peru?' Display the Coffee farming in Peru poster to help support their answers. Provide the children with the Coffee farming in Peru sorting cards. Ask them to work in pairs to match each problem with a solution, explaining why they think they go together. At the end of the session, ask the children to explain which solution they felt was the most significant for the coffee farmers and why.</p>	<ul style="list-style-type: none"> • Coffee packaging
<p>Lesson 5: How far has your food travelled P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 5 Transport networks can be tangible, such as rails, roads or canals, or intangible, such as air and sea corridors. These networks link places together and allow for the movement of people and goods. Transport networks are usually built where there is a high demand for the movement of people or goods. They run between places where journeys start or finish, such as airports, bus stations, ferry terminals or railway stations. Specific knowledge Year 5 The journey that food travels from producer to consumer is measured in food miles. Skill Year 5 Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.</p>	<p>Ask the children to bring in a variety of food packaging from fresh fruit and vegetables and other foods. Encourage them to search each label for the food's place of origin and mark its position on a large world map. When the children have finished, talk about the number of countries represented and their distances from the UK. Explain that the journey food travels is measured in food miles. Ask the children questions, such as 'What transportation systems do you think are used to move food?' Discuss their responses and draw some conclusions about the need to keep food fresh and transport it as quickly and cheaply as possible. Invite the children to read the Journey of bananas information sheet to identify how different transportation systems are used to ensure bananas arrive fresh to customers in the UK. Ask the children to use internet research to complete one of the Journey of food recording sheets. Encourage them to share their findings with others to see if the journeys of a variety of foods are similar or different.</p>	<ul style="list-style-type: none"> • Food packaging from fruit, vegetables and processed foods • Large world map • Computers or tablets • Web access
<p>Lesson 6: Should we import food? P. of Study PSHE – Relationships 4 Year 5 Relationships Learn to listen and respond respectfully to a wide range of people, including those whose traditions, beliefs and lifestyle are different to their own. 4 Year 5 Relationships Learn how to discuss and debate topical issues, respect other people's point of view and constructively challenge those they disagree with.</p>	<p>Explain that transporting food and keeping it fresh until it arrives at its destination uses energy and produces greenhouse gases, such as carbon dioxide. These gases are emitted into the atmosphere and can contribute to climate change. Ask the children to read the Should we import food? information sheet, then split them into two teams to debate the motion, 'People should always buy and eat food that is grown in their own country'. Share the Debate sorting cards with the children and give them time to prioritise them, encouraging them to think carefully about each point and find out more</p>	

<p>P. of Study RHE - Relationships education 4 Year 5 Relationships Know the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs.</p> <p>Knowledge Year 5 A debate is a serious discussion of a subject in which many people take part. In a debate, facts and opinions are used to support a viewpoint. Topical issues might include global warming or whether a school uniform should be worn.</p> <p>Year 5 There are arguments for and against importing food. For example, on the one hand, importing food gives consumers more choice of food all year round, but on the other hand, it adds to greenhouse gas emissions that have caused climate change.</p> <p>Skill(s) Year 5 Debate topical issues, problems and events that are of concern to them as individuals and to society.</p>	<p>information, if necessary. Use the guidance in the Debating teacher information to set up and run the debate and vote to see if the motion is passed or rejected.</p>	
<p>Innovate</p> <p>Step 1:</p> <p>P. of Study Geography Fieldwork 5 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.</p> <p>Knowledge Year 5 Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.</p> <p>Skill Year 5 Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</p>	<p>Use a map of your local area to identify a suitable location for your market garden. Record a six-figure grid reference and describe the site's geographical features.</p>	
<p>Step 2:</p> <p>P. of Study Design and technology Food 4 Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>Knowledge Year 5 Seasonality is the time of year when the harvest or flavour of a type of food is at its best. Buying seasonal food is beneficial for many reasons: the food tastes better; it is fresher because it hasn't been transported thousands of miles; the nutritional value is higher; the carbon footprint is lower, due to reduced transport; it supports local growers and is usually cheaper.</p> <p>Skill Year 5 Describe what seasonality means and explain some of the reasons why it is beneficial.</p>	<p>Use your knowledge of seasonality to create a planting and growing plan for your site.</p>	
<p>Step 3:</p> <p>P. of Study Geography Features 12 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 5 Soil fertility, drainage and climate influence the placement and success of agricultural land.</p> <p>Skill Year 5 Describe how soil fertility, drainage and climate affect agricultural land use.</p>	<p>List three crops that you won't be able to grow and explain the reasons why.</p>	
<p>Step 4:</p> <p>P. of Study Breadth Science Aims 2 Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.</p> <p>Knowledge Year 5 Farming in the UK can be divided into three main types: arable (growing crops), pastoral (raising livestock), mixed (arable and pastoral). Intensive farming in the past has resulted in the loss of habitats.</p>	<p>List the farming practices you will and won't use in your market garden and write the reasons for your choices.</p>	

<p>Skill Year 5 Research and describe different farming practices in the UK and how these can have positive and negative effects on natural habitats.</p>		
<p>Step 5: P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 5 Transport networks can be tangible, such as rails, roads or canals, or intangible, such as air and sea corridors. These networks link places together and allow for the movement of people and goods. Transport networks are usually built where there is a high demand for the movement of people or goods. They run between places where journeys start or finish, such as airports, bus stations, ferry terminals or railway stations. Skill Year 5 Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.</p>	<p>Choose four places where you will sell your produce. Find out the distance to each location and explain which methods of packaging and transportation you will use.</p>	
<p>Step 6: P. of Study PSHE – Relationships 4 Year 5 Relationships Learn to listen and respond respectfully to a wide range of people, including those whose traditions, beliefs and lifestyle are different to their own. 4 Year 5 Relationships Learn how to discuss and debate topical issues, respect other people’s point of view and constructively challenge those they disagree with. P. of Study RHE - Relationships education 4 Year 5 Relationships Know the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs. Knowledge Year 5 A debate is a serious discussion of a subject in which many people take part. In a debate, facts and opinions are used to support a viewpoint. Topical issues might include global warming or whether a school uniform should be worn. Skill(s) Year 5 Debate topical issues, problems and events that are of concern to them as individuals and to society.</p>	<p>List three benefits of buying local produce.</p>	
<p>Express Lesson 1: Presenting our farms P. of Study Spoken language 2 Gain, maintain and monitor the interest of the listener(s). Skill Year 5 Use challenging and sophisticated vocabulary to gain and maintain the interest of the listener.</p>	<p>Challenge the children to plan a presentation to share the outcome of their Innovate challenge with a local farmer or grower. Ask them to plan what they are going to say and decide how they are going to illustrate their presentation. Encourage them to practise, then record their work. Watch it back to evaluate aspects, such as clarity of speech, appropriate information, ability to keep the listener’s interest and appropriate summary at the end. When the children are ready, invite the audience to attend and encourage them to ask each group questions at the end. Ask the audience to give feedback to each group, explaining what they found interesting and exciting about their ideas and whether they feel their farm would be successful.</p>	<ul style="list-style-type: none"> • Computers or tablets
<p>Lesson 2: Debate it! P. of Study PSHE – Relationships 4 Year 5 Relationships Learn to listen and respond respectfully to a wide range of people, including those whose traditions, beliefs and lifestyle are different to their own. 4 Year 5 Relationships Learn how to discuss and debate topical issues, respect other people’s point of view and constructively challenge those they disagree with. P. of Study RHE - Relationships education. 4 Year 5 Relationships Know the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs.</p>	<p>Set the children the question ‘Should countries grow all their own food or should they rely on trade with other countries to feed the people that live there?’ Challenge the children to discuss and debate the question, using their subject knowledge and appropriate vocabulary to clearly explain their ideas, and ask questions of others to gain more information and clarity. At the end of the discussion, create a list of class decisions based on the question. For example, ‘We think that there should be more allotments available for people to grow their own food so the amount of imported food decreases’ or ‘There should be a government advertising campaign to encourage people to shop locally and only eat in season, as this would save fuel and give money to local farmers.’</p>	

Knowledge Year 5 A debate is a serious discussion of a subject in which many people take part. In a debate, facts and opinions are used to support a viewpoint. Topical issues might include global warming or whether a school uniform should be worn.

Skill(s) Year 5 Debate topical issues, problems and events that are of concern to them as individuals and to society.



Cycle A: Year 5 / 6: Geography Schemes of Work
Autumn – Our Changing World

Overview:

During the Our Changing World project, children will revise the features of the Earth and learn more about time zones. They will recall how to use lines of latitude and longitude to pinpoint places on a world map and learn about map scale. They will measure distances on a map and revisit grid references, contour lines and map symbols. Children will learn about global warming and climate change and discover how climate change and extreme weather affect people worldwide. They will learn about global trade and find out about the export of manufactured goods, food or natural resources. Children will analyse recent road traffic accident figures and carry out fieldwork to find out about the safety of a local road. They will study patterns of human settlements and carry out a fieldwork investigation to describe local settlement patterns.

Vocabulary:

Human features and landmarks:

customer service, farming, fishing, industry, manufacturing, mining, occupation, quarrying, retail, tourism, transportation

Settlements and land use:

Crops, diverse, farming, fishing industry, language, mine, mining, natural resource, population, rural, tribe, urban

Geographical resources:

Ordnance Survey Explorer map, atlas, large scale map, map, scale, scale bar, scale ratio, small scale map

Fieldwork:

aerial photograph, conclusion, data collection, enquiry, evidence, fieldwork, geographical enquiry, local area, locality, observation, pattern, report, sketch map

Environment:

Arctic tundra, alpine tundra, aquatic biome, atmosphere, biome, burning fossil fuels, carbon dioxide, climate, climate change, climate zone, deforestation, desert, biome, extreme weather, forest biome, freshwater, global warming, grassland biome, greenhouse effect, habitat destruction, human activity, interconnection, marine region, overpopulation, population, rearing livestock, savannah, temperate grassland, tundra biome, weather conditions, weather pattern

Climate and weather:

climate change, cyclone, drought, extreme temperature, extreme weather event, flood, heatwave, hurricane, landslide, sandstorm, severe storm, typhoon, wildfire

Significant places:

China, Ecuador, Germany, Russia, Saudi Arabia, economy, export, farming, fossil fuel, import, industry, manufacturing, mining, natural resource, ore, shipping, trade

Maps:

Ordnance Survey map, contour line, easting, four-figure grid reference, geographical feature, grid reference, hill, human feature, icon, key, location, mountain, northing, peak, physical feature, sea level, six-figure grid reference, slope, symbol, topography, two-dimensional representation

Location

Antarctic Circle, Arctic Circle, GMT, Greenwich Mean Time, North Pole, Northern Hemisphere, Prime Meridian, South Pole, Southern Hemisphere, Tropic of Cancer, Tropic of Capricorn, equator, geographical feature, globe, line of latitude, line of longitude, location, meridian, time zone

Data analysis:

Global Climate Risk Index, analyse, collate, conclusion, data, data collection, developing country, factsheet, findings, graph, improvement, interviewee, locality, poverty, ranking, report, survey, survey data, traffic data

Position:

Northern Hemisphere, Prime Meridian, Southern Hemisphere, coordinate, degree, east, equator, horizontally, latitude, longitude, north, position, south, vertically, west

UK:

T-shaped settlement, Y-shaped settlement, circular settlement, city, compact settlement, cross-shaped settlement, dispersed settlement, growth, hamlet, linear, settlement, occupation, rural, settlement, town, urban, village

Sustainability

agricultural runoff, biodiversity, biome, carbon footprint, clearcutting, contour strip cropping, deforestation, depletion, ecosystem, endangered species, erosion, ethical, food chain, forestry, fossil fuel, global warming, habitat, irrigation, metal ore, mining, monoculture, natural resource management, oppose, pesticide, pollution, recycle, reduce, renewable energy, reuse, selective harvesting, support, sustainable

Assessment outcomes:

Assess the children's knowledge by asking them to complete the [Our Changing World question sheet](#). An [Our Changing World answer sheet](#) is also provided.

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Engage: Geographical Skills</p> <p>Lesson 1: Features of Earth</p> <p>P. of Study Geography Location 5 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>Knowledge Year 6 The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude, from which all other longitudes are measured.</p> <p>Specific knowledge Year 6 The Tropic of Cancer and the Tropic of Capricorn are at 23.5° north and south of the equator. The Arctic Circle and Antarctic Circle are 66.5° north and south of the equator.</p> <p>Skill Year 6 Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night).</p>	<p>Display a globe or use Google Earth. Ask the children if they can describe any of the Earth's geographical features, such as the equator, North and South Poles and so on, and indicate their positions. Recap all the features listed in the skill and knowledge, introducing the Arctic and Antarctic Circles. Give all children a copy of the Features of Earth recording sheet and ask them to write definitions for the features listed in the key. Provide atlases to help the children with their work. At the end of the session, share the Features of Earth answer sheet and encourage children to correct any errors or misconceptions</p>	<ul style="list-style-type: none"> Globes and atlases
<p>Lesson 2: Time zones</p> <p>P. of Study Geography Location 5 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>Knowledge Year 6 The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude, from which all other longitudes are measured.</p> <p>Specific knowledge Year 6 Greenwich Mean Time, or GMT, is taken from the Prime Meridian. There are 24 time zones around the world because there are 24 hours in a day. The times are calculated from GMT. Times to the east of the Prime Meridian are ahead of GMT (GMT+), times to the west are behind GMT (GMT-).</p> <p>Skill Year 6 Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night).</p>		
<p>Lesson 3: Using lines of latitude and longitude</p> <p>P. of Study Geography Fieldwork 1 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.</p> <p>Knowledge Year 6 Invisible lines of latitude run horizontally around the Earth and show the northerly or southerly position of a geographical area. Invisible lines of longitude run vertically from the North to the South Pole and show the westerly or easterly position of a geographical area.</p> <p>Skill Year 6 Use lines of longitude and latitude or grid references to find the position of different geographical areas and features.</p>	<p>Share the Latitude and longitude presentation to revise the importance and purpose of lines of latitude and longitude. Allow time for the children to ask and answer questions about the information shared and to complete the examples to consolidate their understanding. Challenge the children to practice using lines of latitude and longitude by completing the Latitude and longitude question sheet using the Latitude and longitude map. At the end of the session, gather the children together to share and compare their answers, using the Latitude and longitude answer sheet to help them mark their work.</p>	
<p>Lesson 4: Using scale on a map</p> <p>P. of Study Geography Fieldwork 2 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p>	<p>Use the Maps of different scales presentation to introduce map scales, ratio and the difference between large scale and small scale maps. Provide pairs of children with a <i>Collins Junior Atlas</i>. Encourage the children to explore the maps in the atlas, looking at their scale and comparing the maps' details. Ask the</p>	<ul style="list-style-type: none"> <i>Collins Junior Atlas</i>

<p>Knowledge Year 6 Satellite images are photographs of Earth taken by imaging satellites.</p> <p>Specific knowledge Year 6 Maps are smaller than the places they represent, so they have to be drawn to scale. A scale on a map is written as a ratio, for example, 1cm:800km. Small scale maps show larger areas with less detail. Large scale maps show smaller areas with more detail. The scale on a map is used for measuring the size or distance between features.</p> <p>Skill Year 6 Use satellite imaging and maps of different scales to find out geographical information about a place.</p>	<p>children to complete the Maps of different scales recording sheet, using the maps listed, to consolidate their understanding. Work through the children's answers using the Maps of different scales answer sheet and address any misconceptions.</p>	
<p>Lesson 5: Scale and distance</p> <p>P. of Study Geography Fieldwork 2 Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p> <p>Knowledge Year 6 Satellite images are photographs of Earth taken by imaging satellites.</p> <p>Specific knowledge Year 6 Distances on maps can be measured using grid lines, the scale, a ruler, a finger, string and the scale bar.</p> <p>Skill Year 6 Use satellite imaging and maps of different scales to find out geographical information about a place.</p>	<p>Organise the children into groups and give each group an Ordnance Survey Explorer map. Bring the children's attention to the scale at the bottom of the map. Describe the scale as 1:25,000, which means 1cm on the map is equivalent to 250m in real life and 4cm is the same as 1km. Encourage the children to describe the detail of a map at this scale, then ask them how the scale could be used to find the size and distance between features on the map. Invite the children to find out more about using the scale and measuring distance by reading the Scale and distance recording sheet and completing the tasks included. At the end of the session, gather the children together to mark their work, encouraging them to demonstrate their techniques to find their answers. Discuss which methods are the most accurate.</p>	<ul style="list-style-type: none"> • Ordnance Survey (OS) Explorer maps • Rulers • String
<p>Lesson 6: Grid references, contours and symbols</p> <p>P. of Study Geography Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 6 A geographical area can be understood by using grid references and lines of latitude and longitude to identify position, contour lines to identify height above sea level and map symbols to identify physical and human features.</p> <p>Specific knowledge Year 6 A grid reference is a set of numbers that describes a position on a map. Contour lines join points of equal height above sea level and show an area's terrain. Map symbols are pictures or icons that represent physical and human features.</p> <p>Skill Year 6 Use grid references, lines of latitude and longitude, contour lines and symbols in maps and on globes to understand and record the geography of an area.</p>	<p>Organise the children into groups or pairs and give each an Ordnance Survey map or copies of maps from Digimap for Schools. Encourage them to use the map and the Grid references, contour lines and map symbols information sheet to revise their knowledge of these features and encourage them to describe how they can help us locate and learn more about a place. Invite the children to work together to analyse the area's geography on their map, recording their findings on the Grid references, contour lines and symbols recording sheet. At the end of the session, invite the children to share their findings, either by comparing the places they explored or by describing their findings of the same place.</p>	<ul style="list-style-type: none"> • Ordnance Survey maps or Digimap for Schools print outs
<p>Develop 1 - The World</p> <p>Lesson 1: Climate change</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 6 Climate change is the long-term change in expected patterns of weather that contributes to the melting of polar ice caps, rising sea levels and extreme weather. Climate change is caused by global warming. Human activity, such as burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock, all contribute to global warming.</p> <p>Skill Year 6 Explain how climate change affects climate zones and biomes across the world.</p>	<p>Use the climate zones and biomes maps on pages 62 and 64 in the Collins Junior Atlas to recap and deepen the children's knowledge of climate zones and world biomes. Ask the children to describe the characteristics of the climate zones and biomes using their existing knowledge and the information provided on the maps. Encourage them to see the interconnection between the climate zones and the types of biomes present. After exploration, invite the children to consider the enquiry question, 'How is climate change affecting climate zones and biomes across the world?' Encourage them to share their existing knowledge and then ask the children to read the Climate change information sheet. After reading the information, invite the children to discuss what they have found out and express how they feel about the impact climate change has on the world. After discussing their thoughts, feelings and ideas, ask the children to use the information to write an answer to the enquiry question, using the Climate change word mat to help. Encourage children to share their work with others and give and receive feedback.</p>	<ul style="list-style-type: none"> • Collins Junior Atlas
<p>Lesson 2: Climate change, extreme weather and people</p> <p>P. of Study Geography</p>	<p>Show children the Global Climate Risk Index presentation. Use the presentation to introduce the children to the Global Climate Risk Index, the effects of climate change and the world's countries, which are most vulnerable to extreme weather events. Give all children the Climate change, extreme</p>	<ul style="list-style-type: none"> • Computers or tablets

<p>6 Year 6 Features Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>1 Year 6 Aims Develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes.</p> <p>Knowledge</p> <p>Year 6 Physical processes that can affect a landscape include erosion by wind, water or ice; the deposition of stone and silt by water and ice; land movement, such as landslides and tectonic activity, such as earthquakes or volcanic eruptions.</p> <p>Year 6 Climate and extreme weather can affect the size and nature of settlements, shelters and buildings, diet, lifestyle (settled or nomadic), jobs, clothing, transport and transportation links and the availability of natural resources.</p> <p>Skill(s)</p> <p>Year 6 Describe the physical processes, including weather, that affect two different locations.</p> <p>Year 6 Evaluate the extent to which climate and extreme weather affect how people live.</p>	<p>weather and people information sheet. Ask the children to read the data and information and discuss the key points in small, working groups. Pose the question, 'How are climate change and extreme weather affecting people's lives around the world?' Provide each group with large sheets of paper and marker pens. Ask them to plan an answer to the question, drawing on the evidence in the presentation and information sheet. Invite the children to work together using word processing software to write a collective answer to the question. At the end of the session, encourage the children to present their work to the class.</p>	<ul style="list-style-type: none"> • Large sheets of paper and marker pens
<p>Lesson 3: Trade around the world</p> <p>P. of Study Geography Location 1 Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>Knowledge Year 6 North America, Europe and East Asia are the main industrial regions of the world due to a range of factors (access to raw materials, transportation, fresh water, power and labour supply).</p> <p>Specific knowledge Year 6 Countries worldwide trade with each other. They export and import goods, such as fossil fuels, metal ores and food. Some countries, such as Saudi Arabia, Russia and Iraq, have natural resources to export, such as coal, oil, gas and metal ores. Others, such as North America, Canada and Ukraine, have fertile farmland for growing crops and raising animals. Other countries, such as the United States of America, Mexico, the UK, China and Germany, use natural resources to make products, such as cars and toys, which they export worldwide.</p> <p>Skill Year 6 Name, locate and explain the distribution of significant industrial, farming and exporting regions around the world.</p>	<p>Ask the children to use the Trade vocabulary sorting cards to match the definitions to the words to ensure they understand the meaning of key vocabulary in the lesson. Give pairs of children a <i>Collins Junior Atlas</i> and ask them to study the trade and products map on page 71. Encourage the children to analyse the map, using the key to identify different types of manufacturing and farming, sources of fossil fuels and metal ores and the trade routes between countries. Encourage them to begin to draw conclusions about the location of particular industries, drawing on their existing knowledge about climate zones, biomes and the geography and geology of Earth. Ask questions to prompt the children's thinking, for example, 'Why do you think Saudi Arabia is a major oil exporter? What do you notice about the location of farming industries in relation to climate zones and biomes? How are exports shipped around the world?' Give the children the Trade around the world information pack. Ask them to read the information to learn more about global trade and encourage them to answer the questions provided. At the end of the session, mark the children's work together, asking them to provide evidence to support their answer.</p>	<ul style="list-style-type: none"> • <i>Collins Junior Atlas</i>
<p>Lesson 4: Natural resource management</p> <p>P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 6 Natural resource management (NRM) manages natural resources, including water, land, soil, plants and animals. It recognises that people rely on healthy landscapes to live and aims to create sustainable ways of using land now and in the future.</p> <p>Skill Year 6 Explain the significance of human-environment relationships and how natural resource management can protect natural resources to support life on Earth.</p>	<p>Read the Natural resource depletion information sheet and allow the children time to discuss their responses to the information presented. Explain the need for natural resource management, that is, creating sustainable ways of using the land so that future generations have a healthy planet on which to live. Also explain that, as with most ethical considerations, there are people who support and people who oppose sustainable practices. Organise the children into pairs and give out one of the scenarios from the Natural resource management information pack. Ask the children to read the scenario and imagine they are natural resources management advisors. Encourage them to talk together and decide how they would persuade their character to change their current work practices. After the discussion, encourage them to record their answer on the relevant Natural resource management writing frame. At the end of the lesson, ask the children to share their answers.</p>	

<p>Develop 2 - The United Kingdom</p> <p>Lesson 1: Analysing road safety data</p> <p>P. of Study Geography Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 6 Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies).</p> <p>Specific knowledge Year 6 Traffic data about road accidents in Great Britain in 2019 show that most fatalities happened on fast rural roads. Most accidents happened on urban roads due to the volume of traffic, but there were fewer deaths. Factors that cause accidents on rural roads are speeding, blind bends, people walking in the road, no cycle lanes and motorcyclists overtaking or having little knowledge of the roads. Urban roads have higher traffic volumes but are usually wider, have fewer bends, cycle lanes and more footpaths, so accidents are less likely to be fatal. Motorways Have the lowest number of accidents in each category.</p> <p>Skill Year 6 Analyse and present increasingly complex data, comparing data from different sources and suggesting why data may vary.</p>	<p>Ask the children to study the data about traffic accidents in the UK from the RoSPA Road Safety Factsheet. Encourage them to talk to a partner about what the data shows and any trends and patterns they can see. Ask the children to present the data using graph paper or graphing software to make it clear to read and easy to understand. When the children have presented their data, ask them to write a list of the key findings from the data and encourage them to deduce why some road types and speeds might be more dangerous than others. Encourage the children to read the information about pedestrians, cyclists, car users, motorcyclists, and horse riders from the RoSPA factsheet to learn more about why certain accidents happen on different roads. Invite the children to use the information to write an explanation about why most accidents happen on slower, urban roads and most fatalities happen on faster, rural roads to complete their work.</p>	<ul style="list-style-type: none"> • Computers or tablets with graphing software
<p>Lesson 2: Road safety fieldwork</p> <p>P. of Study Geography Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 6 Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies).</p> <p>Skill Year 6 Analyse and present increasingly complex data, comparing data from different sources and suggesting why data may vary.</p>	<p>Before the lesson, choose a road to study in the locality, preferably an urban road with a 30mph speed limit or a rural road with a 60mph speed limit, to mirror the most dangerous roads identified in the previous lesson. At the beginning of the lesson, recap what the children learned from the road accident data and explain that they will now study a road in their locality to see if there are features that could cause accidents. Give each child a copy of the Road safety fieldwork recording sheet, a clipboard and access to a camera or tablet. Go through the tasks included and then conduct the visit to collect information and data. When the children are back in the classroom, help them collate and present their survey data as a class and discuss if they spotted common concerns about dangerous areas of the road. Encourage the children to present their data in a report, describing how they collected the data, what they found and a conclusion about their findings, adding suggestions for road safety improvements, if possible.</p> <p>Note: Complete a detailed risk Assessment outcomes and ensure that the children can safely carry out all their tasks with adequate supervision.</p>	<ul style="list-style-type: none"> • Clipboards • Camera or tablet
<p>Lesson 3: Human settlement patterns</p> <p>P. of Study Geography Location 2 Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.</p> <p>Knowledge Year 6 A geographical pattern is the arrangement of objects on the Earth's surface in relation to one another.</p> <p>Specific knowledge Year 6 Settlements can be rural or urban. Their patterns include linear, circular, Y-shaped, T-shaped and cross-shaped. They can also be compact or dispersed. Settlements grow and change over time. Hamlets can become villages; villages can become towns, and towns can become cities.</p> <p>Skill Year 6 Describe patterns of human population growth and movement, economic activities, space, land use and human settlement patterns of an area of the UK or the wider world.</p>	<p>Revise what children already know about human settlements. Introduce patterns and types of settlements by asking them to read the Human settlement patterns information sheet. Discuss the information, focusing on the different types of settlements, their formations and reasons for growth. Organise the children into groups and give each group a set Human settlements picture cards. Ask the children to analyse the aerial images and discuss their size, patterns and type using the vocabulary and descriptions from the information sheet to help. After the discussion, encourage the children to use the Human settlement patterns recording sheet to record their learning. At the end of the session, work together as a class to answer and mark the questions.</p>	



Cycle B: Year 5 / 6: Geography Schemes of Work
Spring – Frozen Kingdoms (Polar regions/ Climate change)

Overview:

In the Frozen Kingdoms project, children will learn about the regions of the Arctic and Antarctic. They will learn about the similarities and differences between these two regions, including the climate, landscape and natural resources. They will learn how to use grid references, lines of latitude and longitude, contour lines and symbols to identify the geographical locations of the Arctic and Antarctic, and how these, along with the tilt of the Earth, affect day length and warmth. They will investigate polar oceans to learn how they differ from other oceans on Earth and how climate change increases Earth's temperature and leads to rising sea levels. They will learn about the indigenous people of the Arctic, including how their lives have changed over time, and about the positives and negatives of tourism in Antarctica. They will also learn about classifying animals, animal adaptations and evolution, and polar exploration and discovery.

Vocabulary:

Compare and contrast:

Climate, climate zone, hemisphere, human, human feature, physical feature, polar, precipitation, season, summer, topography, vegetation, wildlife, winter

Human features and landmarks:

Home, indigenous, nomadic, population, settlement, tradition, village

Settlements and land use:

Commercial, energy, extract, forest, gas reserve, hydropower, mine, natural resource, oil reserve, plantation

Geographical Change:

Animal, litter, plant, pollution, protect, tourism, vandalism

Geographical resources:

Map, satellite map

Fieldwork:

Analyse, collect, compare, data, enquiry, research

Natural and Man-made Materials:

Freshwater, ice, iceberg, natural resources, pollution, salt water, sea ice, snow

Environment:

carbon footprint, climate, climate change, deforestation, drought, extinction, extreme weather, flood, fossil fuel, global warming, greenhouse effect, population, recycle, reduce, renewable, reuse, sustainable

Physical features:

boreal forest, glacier, ice field, ice shelf, iceberg, mountain, tundra

Climate and Weather:

Diet, insulate, lifestyle, nomadic, settlement, transport

Significant Places:

Energy, industry, natural resource

Maps:

Degree, globe, lines of latitude, lines of longitude, map

Location:

Antarctic Circle, Arctic Circle, North Pole, Northern Hemisphere, Prime Meridian, South Pole, Southern Hemisphere, Tropic of Cancer, Tropic of Capricorn, degree, Equator, latitude, location, longitude, polar day, polar night

Assessment outcomes:

Quiz

Explain to the children that a Y6 class have taken a quiz that now needs marking. Provide the children with a completed [Frozen Kingdoms quiz](#). Ask them to mark it, deciding if the answers are right or wrong, and add notes or explanations to help the students who have taken the quiz to understand the concepts that they haven't grasped. Go through the questions as a class, using the [Frozen Kingdoms quiz answer sheet](#) for guidance.

Test

Assess the children's knowledge learned during the project by asking them to complete the [Frozen Kingdoms question sheet](#). Check their answers using the provided [Frozen Kingdoms answer sheet](#).

Lesson objective(s)	Suggested activities and differentiation	Resources
<p>Memorable Experience</p> <p>Option 1: Polar Expedition</p> <p>P. of Study/Geography/Place 3 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>Knowledge Year 6 Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures.</p> <p>Specific knowledge Year 6 Antarctica is a continent, located south of the Antarctic Circle (66.5°S). Most of the landscape is ice-covered mountains, glaciers or ice sheets. The South Pole (90°S) is the most southern geographical point on Earth. The Antarctic has long, cold, dark winters and cool, light summers.</p> <p>Skill Year 6 Describe the climatic similarities and differences between two regions.</p>	<p>Invite a member of your local polar museum or geographical society to talk to the children about the polar regions using maps, satellite imaging resources and other artefacts they have available. Ask the visiting expert to recap on the location of the polar regions and use the children's bank of knowledge statements as a discussion point. Explain to the children that they will be working in small teams to complete a virtual polar expedition. They must gather information about the polar region they choose using the Arctic information sheet or Antarctic information sheet. They can also prepare questions to ask the expert to help them gain further information. Invite the children to work together to complete the Arctic recording sheet or Antarctic recording sheet, depending on which region they have chosen. When complete, ask each team to share their findings with the visiting expert and make informed observations about the similarities and differences between the two locations.</p>	
<p>Introductory knowledge</p> <p>P. of Study/Geography/Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Knowledge Year 6 A geographical area can be understood by using grid references and lines of latitude and longitude to identify position, contour lines to identify height above sea level and map symbols to identify physical and human features.</p> <p>Specific knowledge Year 6 Latitude and longitude enable locations on Earth to be identified in relation to the equator and the Prime Meridian. Latitude and longitude are measured in degrees.</p> <p>Skill Year 6 Use grid references, lines of latitude and longitude, contour lines and symbols in maps and on globes to understand and record the geography of an area.</p>	<p>Display the Earth diagram and use this to introduce or recap on the location of the Northern and Southern Hemispheres and key lines of latitude and longitude, such as the equator and Prime Meridian. Locate the Arctic Circle at 66.5° North (66.5°N) and the Antarctic Circle at 66.5° South (66.5°S) and discuss any similarities and differences between their locations. Ask the children to share what they know about either location, making a bank of knowledge statements to revisit later in the week. Provide the children with the Earth labelling sheet to complete, and check their work through a summary discussion.</p>	
<p>Memorable Experience</p> <p>Option 2: Alternative start</p> <p>P. of Study/Geography/Place 3 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>Knowledge Year 6 Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures.</p> <p>Specific knowledge Year 6 Antarctica is a continent, located south of the Antarctic Circle (66.5°S) Most of the landscape is ice-covered mountains, glaciers or ice sheets. The South Pole (90°S) is the most southern geographical point on the Earth. The Antarctic has long, cold, dark winters and cool, light summers.</p> <p>Skill Year 6 Describe the climatic similarities and differences between two regions.</p>	<p>Use Google Earth, including the Street View tool, to locate and explore the polar regions. Explain to the children that they will be working in small teams to complete a virtual polar expedition. They must gather information about a polar region of their choosing using satellite imagery and the Arctic information sheet or Antarctic information sheet. Invite them to work together to complete the Arctic recording sheet or Antarctic recording sheet, depending on which pole they have chosen. When complete, ask each team to share their findings and make informed observations about the similarities and differences between the two locations. Where appropriate, the children can share their findings with a local geographical society via email, video link or letter.</p>	

<p>Engage: Geographical Skills</p> <p>Lesson 1: Polar climates</p> <p>P. of Study Geography Place 3 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</p> <p>Knowledge Year 6 Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures.</p> <p>Specific knowledge Year 6 The Arctic region has cold winters and cool summers. Average Arctic temperatures range from -43°C to 13°C depending on the season and location. The Antarctic region has cold winters and cool summers. Antarctica is the coldest, windiest and driest place on Earth. Average temperatures range between -60°C and -20°C.</p> <p>Skill Year 6 Describe the climatic similarities and differences between two regions.</p>	<p>Show the children the Climate zones map. Encourage them to make observations about the location of the different climate zones. Ask the children to share what they already know about the polar climates, using the knowledge and information gathered through completing their virtual expeditions. Ask the children to use the Arctic information sheet and Antarctic information sheet to delve more deeply into the climatic differences between the two polar regions and complete the Polar regions question sheet. When complete, discuss the children's work, addressing any misconceptions.</p>	
<p>Lesson 2: Polar day and night</p> <p>P. of Study Geography Location 5 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>Knowledge Year 6 The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude, from which all other longitudes are measured.</p> <p>Specific knowledge Year 6 The boundaries of the polar regions are marked by the Arctic and Antarctic Circles. The polar regions experience the largest differences in daylight, as the effect of Earth's tilt is much more pronounced. It is the tilt towards the Sun that creates near-constant daylight, known as polar day or Midnight Sun. The tilt away from the Sun creates near constant darkness, known as polar night.</p> <p>Skill Year 6 Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night).</p>	<p>Recap on Earth's rotation to explain day and night with the children, then show them the Polar day and night diagram. Ask them to describe what the diagram is showing, focusing on the North and South Poles. When the children have explained what they can see, use a rotating globe, and a torch as the Sun, to bring the diagram to life. Focusing on the Arctic Circle, ask the children to observe what happens to the daylight during a day in the Arctic summer and winter, then demonstrate what happens to the Antarctic Circle using the same technique. Encourage them to explain that at some times of the year, the poles are in near-constant daylight, known as polar day, or Midnight Sun. At other times of the year, the poles are in near-constant darkness, known as polar night. Allow the children time to explore and demonstrate the concept of polar day and night using tabletop globes and torches, then give them the Polar day and night sorting cards. Encourage them to sort the cards into two groups: true or false. Share and compare their answers with others, then hand out the Polar day and night answer sheet against which the children can check their work and clarify any misconceptions. As an extension, the children could use all the provided resources and photographs of their experiments with globes and torches to write an explanation about polar day and night.</p>	<ul style="list-style-type: none"> • Rotating globes • Torches • Digital cameras
<p>Lesson 3: Polar oceans</p> <p>P. of Study Breadth Geography</p> <p>2 Year 6 Aims Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.</p> <p>6 Year 6 Features Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge</p>	<p>Explain to the children that they will be using their growing knowledge of the polar regions to answer the geographical enquiry 'How are polar oceans different to other oceans on Earth?' Invite the children to ask any questions they have about the enquiry before explaining how the World oceans recording sheet will help them to organise their thinking and research. Describe how to complete the sheet before encouraging them to get started. The children should use online research, the list of useful links below and the Polar oceans information sheet to help them build their enquiries. As the children work, talk to them about the search terms they are using and help them assess the accuracy and provenance of the information they find. When the children have completed their recording sheet, ask them to analyse their findings to write an answer to the enquiry question. At the end of the session, ask them to share and discuss their answers.</p> <p>Useful links:</p> <ul style="list-style-type: none"> • Oceans and seas – DK Find out! 	<ul style="list-style-type: none"> • Computers or tablets

<p>Year 6 Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions.</p> <p>Year 6 The polar oceans are significantly colder than other world oceans. This influences the presence of sea ice, glaciers and icebergs.</p> <p>Skill(s)</p> <p>Year 6 Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques. View progression</p> <p>Year 6 Explain how the presence of ice makes the polar oceans different to other oceans on Earth.</p>	<ul style="list-style-type: none"> • Arctic and Antarctic comparisons and similarities – Cool Antarctica • The Arctic and the Antarctic – Ocean <p>Arctic Ocean</p> <ul style="list-style-type: none"> • The Arctic Ocean explained – National Geographic • Arctic Ocean – Basic Planet • The Arctic Ocean – National Geographic <p>Southern Ocean</p> <ul style="list-style-type: none"> • Antarctic Ocean – Basic Planet • The Antarctic Ocean – National Geographic 	
<p>Lesson 4: Polar landscapes</p> <p>P. of Study/Geography/Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 6 The Arctic is a sea of ice surrounded by land and located at the highest latitudes of the Northern Hemisphere. It extends over the countries that border the Arctic Ocean, including Canada, the USA, Denmark, Russia, Norway and Iceland. Antarctica is a continent located in the Southern Hemisphere. Antarctica does not belong to any country. Physical features typical of the Arctic and Antarctic regions include glaciers, icebergs, ice caps, ice sheets, ice shelves and sea ice.</p> <p>Specific knowledge Year 6 Icebergs are large pieces of frozen freshwater that have calved from glaciers, ice shelves or larger icebergs. Glaciers are slow-moving masses of ice that are made of compacted snow. Mountains are raised pieces of land that are usually covered in snow and ice. Ice fields are large areas of connected glaciers. Tundra is land where it is too cold for trees to grow as the ground is permanently frozen (permafrost). Boreal forests are large areas of land just south of the Arctic Circle where coniferous trees grow.</p> <p>Skill Year 6 Compare and describe physical features of polar landscapes.</p>	<p>Divide the children into groups and give each a set of the Polar landscape picture cards. Allow them time to read and discuss the information on the cards. Ask the children to use the information to complete the Polar landscapes recording sheet. After completing the sheet, invite the class to make comparisons between the features, in a discussion. Ask questions, such as 'What do these polar features have in common? How are they the same or different?' Encourage the children to search for further images and information about one of the features, using a range of information sources including maps, books and the internet.</p>	<ul style="list-style-type: none"> • Maps • Information texts • Computers or tablets
<p>Lesson 5: Climate change</p> <p>P. of Study/Geography/Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>Knowledge Year 6 Climate change is the long-term change in expected patterns of weather that contributes to the melting of polar ice caps, rising sea levels and extreme weather. Climate change is caused by global warming. Human activity, such as burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock, all contribute to global warming.</p> <p>Skill Year 6 Explain how climate change affects climate zones and biomes across the world.</p>	<p>Write the phrase 'climate change' on the IWB. Ask questions to promote discussion with the children, such as 'What is climate change? Do you know any facts about climate change? How do you think climate change affects the polar regions?' After an initial discussion, invite the children to work in pairs to read the Climate change blog text. Ask them to identify important facts and information and consider the cause and effects of climate change. Invite the children to answer the Climate change question sheet. Ask 'What conclusions can we draw, on the evidence we have, about climate change?'</p>	
<p>Lesson 6: Natural resources</p> <p>P. of Study/Geography/Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 6 Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water.</p>	<p>Ask the children to use the Natural resources recording sheet and online research to list a range of different natural resources, where they are found and the ways in which humans use these resources. Ideas could include wood for furniture making and building, fish for food and oil and natural gas for cooking and heating. When the children have listed the natural resources, ask them what sort of natural resources they think are available in the Arctic. Take the children's answers and the reasons behind their thinking, then ask them to read the Natural resources in the</p>	<ul style="list-style-type: none"> • Computers or tablets

<p>Specific knowledge Year 6 Natural resources in the Arctic include oil, gas, metals, minerals, fish, wood and freshwater. Combinations of these natural resources can be found in every country in the Arctic Circle and under the Arctic Ocean.</p> <p>Skill Year 6 Describe the distribution of natural resources in an area or country.</p>	<p>Arctic information sheet. Encourage them to discuss the information and complete the Natural resources in the Arctic question sheet in pairs, using further research to add more detail to their answers. Ask the children to discuss their work in groups, identifying any similarities and differences.</p>	
<p>Lesson 7: Indigenous people P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Knowledge Year 6 The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement.</p> <p>Specific knowledge Year 6 Traditionally, indigenous people in the Arctic adapted to the cold, harsh conditions by hunting and eating animals native to the area, such as seals, whales and walrus and using reindeer skins to keep warm. Many lived nomadic lifestyles following reindeer herds.</p> <p>Skill Year 6 Explain how humans function in the place they live.</p>	<p>Show the children the Indigenous peoples of the Arctic information sheet. Ask them to read the information in pairs, then choose one of the groups to study further. Encourage them to use online research to complete the Indigenous people recording sheet. Once they have collected the information, ask the children to complete an Indigenous people editable template on computers or tablets. At the end of the session, ask them to share their work with other groups. Encourage them to evaluate how the climate and landscape affect the lives of people in the Arctic, how the people have successfully adapted to these conditions and whether their ways of life share any similarities or differences.</p>	<ul style="list-style-type: none"> • Computers or tablets
<p>Lesson 8: Case study – Tourism in the Antarctic P. of Study Breadth Geography Aims 2 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.</p> <p>Knowledge Year 6 Tourism is an industry that involves people travelling for recreation and leisure. It has had an environmental, social and economic impact on many regions and countries.</p> <p>Specific knowledge Year 6 Visitor numbers are currently low in Antarctica, cruise ships are well regulated, there are no hotels or facilities for permanent residents, and tourists are asked to follow strict guidelines to ensure the land and wildlife isn't damaged.</p> <p>Skill Year 6 Present a detailed account of how an industry, including tourism, has changed a place or landscape over time.</p>	<p>Recap on the term 'tourism' and ask the children to list the facilities that tourists require, such as accommodation, food, activities, entertainment and transport links. Ask the children to talk about the positive and negative effects of tourism on an area, such as an increase in income, use of land for building hotels and venues, overcrowding of popular areas and pollution. Hand out the Antarctica tourism case study information pack and ask the children to read it in small groups, analysing the data and drawing conclusions about the impact of tourism on Antarctica. Ask them to use books and online resources to research the subject further and complete the Antarctica tourism case study question sheet. Encourage each group to feed back what they have discovered about tourism in Antarctica.</p>	<ul style="list-style-type: none"> • Computers or tablets • Information texts