United Curriculum: Geography

	N3 - 4	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn	**Marvellous Me / Look at Me** The house and street I live on **It's Getting Cold / Bears** Weather and habitats around the world Exploring weather patterns in our weather station **Polar Express / Special Days** Polar habitats		**Here I Am** [Aut 1] Locating our school in our local area, and identifying local physical and human features on a map and during fieldwork Walk of the school grounds noting human and physical features	**Mini Mappers** Studying the human and physical geography of the local area with an introduction to scale and fieldwork Walk of the local area to identify human and physical features Curiosity	**United Kingdom** [Aut 1] Locating the UK, Great Britain and the British Isles, and regions and counties; identifying physical features and regeneration of one region Land use change locally – Gorton Mill.	**Looking at South America and Brazil** Locating lines of longitude and latitude and South America; understanding Brazil's physical features and climate, and its human settlements in Rio De Janeiro. Virtual fieldwork of Brazil (in particular the favelas)	**Investigating World Trade** [Aut1] Understanding the distribution of the world's natural resources and these are traded between places across the world Where is OUR food from – looking at produce in local shops Respect	**Improving the Environment** [Aut 2] Recognising the importance of renewable energy through investigating wind power. Reducing waste, and the actions that humans can take to improve the environment. Explore local reusable energy supplies e.g NW wind farms Respect
Spring		**Spring in Our Step** Weather and wildlife in winter and spring Minibeast hunting on the school field in winter and summer Curiosity	**Where We Are** Locating our local area in the UK; identifying the four countries of the UK; some key human and physical features Identifying Manchester on a map of the UK	**Hot and Cold Deserts** [Spr 1] Locating hot and cold deserts, and identifying common physical and human features Virtual fieldwork of deserts overseas	**Volcanoes** Understanding the structure of the Earth; how volcanoes are formed; and the impacts they can have on human settlement using case studies of Etna and La Soufriere Virtual fieldwork of a volcano	**Tropical Rainforests** [Spr 2] Understanding the key features of a rainforest ecosystem, the contributions they make to the world and threats they face (using Amazon Rainforest) Compare to our temperate ecosystem	**Looking at North America and Water** Understanding the water cycle and the distribution of the world's water; examining the physical and human geography around rivers in North America. Research Dorset oil pollution	**On the Move** [Spr 1] Understanding push and pull factors in migration from the Northern Triangle to the USA, and Syria to countries in Europe; understanding the benefits of migration to the UK. Migration to Manchester links Respect
Summer	**All Creatures Great and Small 1 / 2** Animals that live in grassland and tropical rainforest habitats, and locating these on a globe Hunting for familiar animals on the school grounds Curiosity	**Where We Live** Picture maps and plan views, simple human and physical features **Science Detectives** Comparing our community with settlements in Kenya Enquiry activity – sorting photos of local and overseas settlements	**There You Are** Understanding where we live on the global scale; locating continents and comparing the human and physical features of an area in the UK with an area in Kenya Enquiry activity – sorting photos of human/physical features local and overseas Civility	**Rivers, Seas and Oceans** Locating the seas around the UK and oceans of the world. Identifying physical and human features around rivers and coastal areas Visit a local river to see river features	**Looking at Europe and Tourism** [Sum 1] Comparing the human and physical features of the Alps, the Amalfi Coast, and a local area, and exploring the impact of tourism in these areas Tourism in Manchester – open top bus tour Curiosity	**Earthquakes and Human Settlements** Understanding why earthquakes take place and what effects they had in Haiti and Japan Compare with the Manchester earthquake in 2002 Respect	**Climate Across the World** [Sum 1] Understanding climate zones, biomes, and vegetation belts, and the effects of global warming on vulnerable biomes. Refer to our own temperate biome	**I am a Geographer** Posing questions, completing fieldwork and presenting a geographical investigation Redevelopment of the school field investigation Curiosity Civility

N3-4: Autumn

	Building on prior understanding	Pupils should be exposed to	How knowledge will be built upon
Substantive		• Talk about where I live (e.g. flat/house number, name of street) • Identify appropriate clothes to go outside in different types of weather • Some animals, like bears, hibernate in the winter • Types of weather include sunny, rainy, windy, snowy • We see puddles when it's rainy, shadows during the day and rainbows when there is sunshine and rain • Location of UK on a globe • Habitats are the places that living things live • Different animals live in different habitats • Different countries in the world experience different types of weather • The North Pole and the South Pole are at the top and bottom of the Earth	• We live on the Earth (Y1 Aut) • My home, our school and our community is at the local scale (Y1 Aut) • **Science:** A habitat is a place that living things live. A very small habitat is called a micro-habitat. These can be found within larger habitats (Y2 Spr)
Disciplinary		**Using map types:** • Globe	
VCs		• **Location & place:** Where I live • **Location & place:** North Pole and South Pole	• **Location & place:** Countries and capital cities of the UK; some human and physical features of the UK (Y1)

Relevant **Development Matters (N3-4)** statements:

- Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.

N3-4: Summer

	Building on prior understanding	Pupils should be exposed to	How knowledge will be built upon
Substantive		• Location of Africa on a globe • The Serengeti is a grassland, with habitats home to animals like zebras, lions, giraffes, hippos, vultures, snakes, toads and scorpions • The Congo Basin is a tropical rainforest, with habitats home to animals like gorillas, chimpanzees, elephants, crocodiles, leopards, peafowl, frogs, lots of fish and spiders	
Disciplinary	<u>Using map types:</u> • Globe		
VCs	• **Location & place:** Where I live	• **Location & place:** Location of the continent of Africa	• **Location & place:** Countries and capital cities of the UK; some human and physical features of the UK (Y1) • **Location & place:** Comparison of areas in UK with areas in contrasting non-European country (Kenya)

Relevant **Development Matters (N3-4)** statements:

- Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.

Reception: Spring

	Building on prior understanding	Pupils should be exposed to	How knowledge will be built upon
Substantive	• Talk about where I live (e.g. flat/house number, name of street) (N3-4)	• There are differences in the wildlife we see and the weather in spring and winter • Insects like ants, bees, and ladybirds are animals • Spiders and insects live in the habitats around our school • Some plants have flowers	
Disciplinary	<u>Using map types:</u> • Globe	• A&P: Show care and concern for living things in the environment	• A&P: Recognise simple hazards and plan steps we can take to reduce them (Y1 Aut)
VCs	• **Location & place:** Where I live	• **Interconnections**: We can see patterns in the world around us	• **Interconnections**: Humans are affected by physical features everyday (e.g. weather) (Y1)

Relevant **Development Matters (Reception)** statements:

Relevant **Early Learning Goals** (for end of Reception):

- Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps.

Reception: Summer

	Prior understanding	Pupils should be exposed to	How knowledge will be built upon
Substantive		• Features include beach, hill, forest, river, sea, village, town and city • Location of Kenya on a globe • Handa's life in Kenya is different to our lives in the UK today. Not everyone in the UK lives the same way we do, and not everyone in Kenya lives like Handa does	• There are poorer and wealthier areas in every county and city (Y1 Sum) • Human and physical features of Nairobi and local city in the UK (Y1 Sum) • Human and physical features of Naro Maru and local rural area in the UK (Y1 Sum)
Disciplinary	Using map types: • Globe	• **Using scale:** Use prepositions (e.g. bigger/smaller; nearer/further) • **Using scale**: Know that drawings are not the same size of features in real life • **Perspective**: A map is a drawing of a place from above • **Perspective**: Look at and identify objects from a plan view • **Scale drawing**: Draw around objects to make a plan view of them, and identify objects from a plan photograph/drawing of them • **Location**: Interpret and give locations using prepositional language • **Direction**: Interpret and give directions using directional language (not left and right) • **Interpretation**: Relate familiar features on a map to everyday life • **Interpretation**: Identify similarities and differences between my local area and another place • **Interpretation**: Give and interpret their own or basic symbols and key Using map types: • Photographs of objects in elevation view (from front) • Photographs of objects in plan view (from directly above) • Simple picture maps • Photographs of objects and places in oblique view (from diagonally above)	
VCs	• **Location & place:** Where I live • **Location & place:** Location of the continent of Africa	• **Geographical scale:** We can look at maps and globes that show places of different sizes • **Location & place**: Comparing our community with those in Kenya	• **Geographical scale**: Our community is at the local scale, our country is at the national scale, continents are at the global scale (Y1) • **Geographical scale**: When making comparisons, the two places need to be at the same scale (Y1)

Relevant **Development Matters (Reception)** statements:
- Recognise some environments that are different to the one in which they live.
- Draw information from a simple map.

Relevant **Early Learning Goals** (for end of Reception):
- Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.

Year 1: Autumn

Here I am

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Talk about where I live (e.g. flat/house number, name of street) (N3-4 Aut1) • Location of UK on a globe (N3-4 Aut1) • Materials can be artificial (man-made) or natural (N3-4 Aut2)	• We live on the **Earth**. • My home, our school and our community is at the **local scale**. • Human settlements can be a **city**, **town**, or **village**, depending on their size. • **Human** features are man-made, **physical** features are those that would be there without humans • Human features in my local area include: [dependent on school] • Physical features in my local area include: [dependent on school] • Key words: **river, forest, soil, hill, shop, house** and **office**	• Mapping our local area (Y2 Aut) • Countries of the UK (Y1 Spr) • Settlements can be hamlets, villages, towns or cities (Y3 Spr)
Disciplinary	• A map is a drawing of a place from above (Rec Spr2) • Draw around objects to make a plan view of them (Rec Spr2) • Look at and identify objects from a plan view (Rec Spr2) • Observe using senses (Rec Spr2) • Interpret and give locations and directions using prepositional language (not left and right) (Rec Spr2) • Identify familiar features (Rec Spr2) **Using map types:** • Photographs of objects in elevation view (EYFS) • Photographs of objects in a plan view (EYFS) • Picture map (EYFS) • Photographs of places in an oblique view (EYFS)	• A plan view is the view of an object or place from above • Draw a route on a map and label features in correct order • Interpret and give locations and directions using left, right, near and far • Recognise simple hazards and steps we can take to avoid them • Draw a basic fieldsketch of one area • Observe and name features in the environment **Using map types:** • Simple map (Google maps) in a plan view	• Draw a route on a map to simple scale (using 1 square : 1 pace) (Y2) • Interpret and give locations using 4 compass points (Y2) **Using map types:** • Satellite image (Google Earth) in plan view (Y2) • Photographs of places in a plan view (Y2)
VCs	• **Location & place:** Where I live (N3-4)	• **Geographical scale**: Our community is at the local scale	• **Geographical scale:** Our country is at the national scale (Y1) • **Geographical scale:** Continents are at the global scale (Y1) • **Geographical scale:** Recognise maps at the local, national and global scale, and select the most appropriate one (Y3)

Year 1: Spring

Where we are

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Features include beach, hill, forest, river, sea, village, town and city (N3-4 Sum1) • My home, our school and our community is at the local scale (Y1 Aut) • Human settlements can be a city, town or village, depending on their size (Y1 Aut) • Human features are man-made, physical features are those that would be there without humans (Y1 Aut) • Key words: **river, forest, soil, hill, shop, house** and **office** (Y1 Aut)	• My home, our school and our community is at the local scale, UK and countries are at the **national scale.** • The UK is made of four **countries**: England, Scotland, Wales and Northern Ireland. • The **capital cities** of the four countries in the UK are **London** (England), **Edinburgh** (Scotland), **Cardiff** (Wales) and **Belfast** (Northern Ireland). • **Rural** means countryside, **urban** means towns and cities. • Rural areas include farmland. This can be for either **pastoral** or **arable farming.** • The amount and types of wildlife varies between rural and urban areas. In urban areas, we have urban foxes, hedgehogs and squirrels. In rural areas, we have deer, badgers, wetland birds and birds of prey. • **Coastal** areas are areas of land that are near the sea. They can be rural or urban. • Features in coastal areas include **beach, cliff**, **sea** and **ocean.**	• The seas that surround the UK are the North Sea, the Irish Sea and the English Channel (Y2 Sum) • UK, Great Britain, British Isles (Y3 Aut) • The UK is spit into regions and counties (Y3 Aut) • Features around rivers include valleys, mountains, hills and vegetation (Y2 Sum) • There are several mountain ranges in the UK, including Grampian Mountains (Scotland), Pennines (England) and Cambrian Mountains (Wales) (Y3 Aut) • The three longest rivers in the UK are the Severn, Thames and Trent (Y3 Aut)
Disciplinary	**Using maps types:** • Simple map (Google maps) in a plan view • Photographs of places in an oblique view	• Identify land and water on a map • Identify country boundaries on a map • Looking at images in **oblique view**	• Identify county boundaries on a map (Y3)
VCs	• **Geographical scale**: Our community is at the local scale (Y1)	• **Geographical scale:** Our country is at the national scale • **Location & place:** Countries and capital cities of the UK; some human and physical features of the UK • **Interconnections:** Humans are affected by physical features everyday (e.g. weather)	• **Geographical scale:** Continents are at the global scale (Y1) • **Geographical scale:** Recognise maps at the local, national and global scale, and select the most appropriate one (Y3) • **Location & place:** Rivers of the UK; seas surrounding the UK (Y2) • **Interconnections**: Human features are often shaped by physical features (Y2)

Year 1: Summer

There you are

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Different countries in the world experience different types of weather (Rec Sum1) • The North Pole and the South Pole are at the top and bottom of the Earth (Rec Sum1) • Location of Kenya on a globe (Rec Sum1) • Handa's life in Kenya is different to our lives in the UK today. Not everyone in the UK lives the same way we do, and not everyone in Kenya lives like Handa does (Rec Sum1) • We live on the Earth (Y1 Aut) • Human features are man-made, physical features are those that would be there without humans (Y1 Aut) • My home, our school and our community is at the local scale, UK and countries are at the national scale Rural means countryside; urban means towns and cities (Y1 Spr) • Rural areas include farmland. This can be for either pastoral or arable farming (Y1 Spr)	• There are seven **continents** in the world, six of which people live on. • There are countries within each continent (except Antarctica). • While the school and community are at the local scale, and countries are at the national scale, continents are at the **global scale.** • The **Equator** is an imaginary line **across** the Earth. • The **North Pole** and the **South Pole** are at the top and bottom of the Earth. • Kenya is a country in Africa which has the equator running through it. • Urban areas in different parts of the world have similarities and differences. • There are poorer and wealthier areas in every city. • Human and physical features of Nairobi and local city in UK. • Rural areas in different parts of the world have similarities and differences. • Human and physical features of Naro Moru and local rural area in UK.	• The are five oceans (Y2) • Lines of longitude and latitude are imaginary lines that help us locate places on Earth (Y4) • Lines of longitude run north to south. The main one is called the Prime Meridian (Y4) • Lines of latitude run east to west. The main ones are called the Equator, Tropics of Cancer and Capricorn, Arctic and Antarctic Circle (Y4) • The Equator splits the Earth into the Northern and Southern Hemispheres (Y4) • The Prime Meridian splits the Earth into the Eastern and Western Hemispheres (Y4)
Disciplinary	• Identify similarities between my local area and another place (EYFS) • Identify country boundaries on a map (Y1 Spr) • **Science:** Use a Venn diagram to classify items into two or three sets based on properties (Y1 Sum) **Using map types:** • Simple map (Google maps) • Photographs of places in an oblique view • Globe (EYFS)	• Use an atlas to find the right map • A globe is a round map of the Earth • Use and interpret 2 compass points (N and S) **Using map types:** • Infant atlas	• Use and interpret 4 compass points (Y2) **Using map types:** • Junior atlas (Y3)
VCs	• **Geographical scale:** Our community is at the local scale; our country is at the national scale (Y1)	• **Location & place:** Seven continents; Equator, North Pole and South Pole • **Location & place:** Comparison of areas in UK with areas in contrasting non-European country (Kenya) • **Geographical scale:** Continents are at the global scale • **Geographical scale:** When making comparisons, the two places need to be at the same scale	• **Location & place:** Five oceans (Y2) • **Geographical scale:** Recognise maps at the local, national and global scale, and select the most appropriate one (Y3)

Year 2: Autumn

Mini mappers

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Human features are man-made, physical features are those that would be there without humans (Y1 Aut) • Rural means countryside; urban means towns and cities (Y1 Spr) • While the school and community are at the local scale, and countries are at the national scale, continents are at the global scale (Y1 Sum)	• **Location** is a point on a map. • **Place** is the emotional attachment to a **location.**	• The weather is short-term. Climate is long-term summary of the weather conditions (Y2) • Precipitation is the fall of water as rain, sleet, snow or hail (Y2)
Disciplinary	• Give and interpret their own or basic symbols and key (EYFS) • Know that drawings are not the same size of features in real life (EYFS) • Look down on objects to draw a plan view of them (Y1 Aut) • Draw a route on a map and label features in the correct order (Y1 Aut) • Use and interpret 2 compass points (NS) (Y1 Sum) **Using maps:** • Simple maps (Google maps) in a plan view • Photographs of places in oblique view	• Draw routes between locations on playground on squared paper using scale 1 square : 1 pace (*or 1 metre, if pupils have learned this in maths by this stage in Y2*) • Draw a sketch map of a route with some approximate scale and features in correct order • There are four compass directions, **north, south, east and west** and these are different from left, right, up and down. • **Scale** is used to show size proportionally • Give and interpret basic OS map symbols	• Draw an object to scale (Y4) • Use an interpret 8 compass points (Y3) **Using map types:** • Photographs of places a plan view
VCs	• **Geographical scale:** Our community is at the local scale, our country is at the national scale, continents are at the global scale (Y1)		• **Geographical scale:** Recognise maps at the local, national and global scale, and select the most appropriate one (Y3)

Year 2: Spring

Hot and cold deserts

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Different countries in the world experience different types of weather (N3-4 Aut1) • The North Pole and the South Pole are at the top and bottom of the Earth (N3-4 Aut2) • **Science:** Weather is a description of what the conditions are like in a particular place (Y1 Aut2) • Human features are man-made, physical features are those that would be there without humans (Y1 Spr) • There are seven continents in the world, six of which people live on (Y1 Sum) • There are countries within each continent except Antarctica (Y1 Sum) • The Equator is an imaginary line across the earth (Y1 Sum)	• The weather is short-term. **Climate** is long-term summary of the weather conditions • **Precipitation** is the fall of water as rain, sleet, snow or hail • **Deserts** are places where there is very little precipitation • **Hot deserts** have a very hot and dry climate • **Cold deserts** have a very cold and dry climate • Hot and cold deserts are found in all **continents** and vary in size • Hot deserts are usually found near the **Equator** • Cold deserts are usually found near the **North** and **South Poles** • Features of a hot desert include rocks, **sand dunes**, **oases**, and small **settlements**. • Features of a cold desert include **mountains**, **ice sheets**, and small **settlements**, including **research stations**. • The **Sahara** Desert is the largest hot desert in the world; the **Antarctic** Desert is the largest cold desert (and the largest desert overall) • Different animals and plants live in hot and cold deserts.	• **Science:** Adaptations of animals and plants in hot and cold deserts: Arctic fox, shrubs, camels and cacti (Y2 Spr2) • Climate zones share long-term weather patterns. There are six main climate zones: polar, temperate, arid, tropical, Mediterranean and mountains (Y5) • Biomes are areas of the world that, because of similar climates, have similar landscapes, animals and plants (Y5)
Disciplinary	• Identify similarities and differences between my local area and one other place (Y1 Sum) • **Science**: Use a Venn diagram to classify items into two or three sets based on properties (Y1 Sum) **Using map types:** • Simple map (Google maps) • Photographs of areas in an oblique view • Globe	• Identify similarities and differences between two non-local places **Using map types:** • Satellite image (Google Earth) in a plan view	• Explain similarities and differences, using geographical knowledge (Y3)
VCs	• **Location & place:** Seven continents; Equator, North Pole, South Pole (Y1) • **Geographical scale:** Our community is at the local scale, our country is at the national scale, continents are at the global scale (Y1)	• **Location & place:** Locating hot and cold deserts across the world • **Geographical scale:** Some physical features – like rivers or deserts – span local, national and even global scales • **Interconnections:** Human features are often shaped by physical features	• **Location & place:** Locating climate zones and biomes (Y5) • **Geographical scale:** The effects of physical features – like volcanoes – can be felt at the local, national and global scale (Y3) • **Interconnections:** Physical features are affected by human activities (Y4)

Year 2: Summer

Rivers, seas and oceans

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• **Human** features are man-made, **physical** features are those that would be there without humans (Y1 Aut) • Key words: river, forest, soil, hill, shop, house and office (Y1 Aut) • The UK is made of four countries: England, Scotland, Wales and N Ireland; their capital cities are London, Edinburgh, Cardiff and Belfast (Y1 Spr) • **Rural** means countryside; **urban** means towns and cities (Y1 Spr) • Rural areas include farmland. This can be for either **pastoral** or **arable** farming (Y1 Spr) • **Coastal** areas are areas of land that are near to the sea. They can be rural or urban (Y1 Spr) • Features in coastal areas include **beach**, **cliff**, **sea** and **ocean** (Y1 Spr) • Science: **Sustainability** means meeting the needs of the people today, whilst meeting the needs of people of the future. (Y2 Spr1) • Science: Biodiversity is all the different living things in an area (Y2 Spr2)	• **Rivers**, **lakes**, **seas** and **oceans** are all bodies of water. Rivers flow into lakes and seas; seas connect to oceans. • Rivers travel from **highland** areas (the **source**) to **lowland** areas (the **mouth**). • Human features around rivers include **valleys**, **mountains**, **hills** and **vegetation.** • **Land use** is how land is used by humans. • Land use can be for **economic** uses, including **farms, factories** and **leisure**, or **settlements**. • **Agriculture** is the word used to describe the practice of farming. It can be arable (plants) or pastoral (animals). • The seas that surround the UK are the **North Sea**, the **Irish Sea** and the **English Channel.** • There are five **oceans** in the world. These are larger than seas • The seas around the UK flow into the **Atlantic Ocean.** • **Harbours** are found (and **ports** can be found) where the land meets the sea. • Humans use seas and oceans for **economic** and **leisure** uses, the main economic use is **trade**. • Overfishing is damaging **biodiversity** in the oceans. • **Sustainable management** of fishing is needed to protect species.	• The three longest rivers in the UK are the Severn, Thames and Trent (Y3) • A river has three courses: upper, middle and lower (Y5) • Comparing human and physical features around the rivers Severn, Mississippi and Danube (Y5) • The water cycle (**Science** Y4; Y5) • Improving the environment (Y6)
Disciplinary	• A plan view is the view of an object from above (Y1 Aut) • Use and interpret 4 compass points (Y2 Aut) • Science: Use a Venn diagram to classify items into two or three sets based on properties (Y1 Sum) **Using map types:** • Simple maps (Google maps) in plan view • Photographs of places in oblique view • Globe • Satellite image (Google Earth) in plan view	**Using map types:** • Photographs of places in a plan view	**Using map types:** • OS maps (Y3) • Physical vs political maps (Y3)
VCs	• **Location & place:** Countries and capital cities of the UK; some human and physical features (Y1) • **Location & place:** Seven continents (Y1) • **Interconnections:** Human features are often shaped by physical features (Y2)	• **Location & place:** Seas surrounding the UK • **Location & place**: Five oceans	• **Location & place:** Rivers of the UK (Y3)

Year 3: Autumn

The United Kingdom

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Human settlements can be a city, town or village, depending on their size (Y1 Aut) • Human features are man-made, physical features would be there without humans (Y1 Aut) • The UK is made of four countries: England, Scotland, Wales and N Ireland; their capital cities are London, Edinburgh, Cardiff and Belfast (Y1 Spr) • Rural means countryside; urban means towns and cities (Y1 Spr) • Features in rural areas include farm, hill, mountain, forest and river (Y1 Spr) • Features in urban areas include office, shop, house, factory (Y1 Spr) • Features in coastal areas include beach, cliff (Y1 Spr) • Rivers, lakes, seas and oceans are all bodies of water. Rivers flow into lakes and seas; seas connect to oceans (Y2 Sum) • Features around rivers include valleys, mountains, hills and vegetation (Y2 Sum) • The seas that surround the UK are the North Sea, the Irish Sea and the English Channel (Y2 Sum) • Land use is how land is used by humans (Y2 Sum)	• The **UK** is made of four countries: England, Scotland, Wales and N Ireland; **Great Britain** is made up of England, Scotland and Wales; **British Isles** is made up of England, Scotland, Wales, Northern Ireland and Ireland • England and the UK are split into **regions** • Regions in England and the UK are split into **counties** • There are several **mountain ranges** in the UK, including Grampian Mountains (Scotland), Pennines (England) and Cambrian Mountains (Wales) • The three longest rivers in the UK are the Severn, Thames and Trent • Settlements can be **hamlets**, **villages**, **towns** and **cities**, depending on their size • Physical features of the North West (or the region that your school is in) include **mountains**, **hills**, **forests**, **cliff**, **beach**, **river**, and **valley** • Human features of the North West (or the region that your school is in) include **national parks**, **hamlets**, **villages**, **towns** and **cities**, **factories**, **offices** • **Land use** in the North West (or the region that your school is in) has changed over time (green space is filled; towns have become larger)	• The Lake District is a National Park in England (Y3) • Bournemouth is located on the south coast of England, and there are a variety of human and physical features there (Y3) • Many people in the Amalfi Coast, the Alps, Bournemouth and the Lake District rely on tourism, and there are ways that it can be managed responsibly (Y3) • Comparing human and physical features around the river Severn with rivers Danube and Mississippi (Y5)
Disciplinary	• Use and interpret 4 compass points (Y2 Aut) • Identify land and water on a map (Y1 Spr) • Identify country boundaries on a map (Y1 Spr) **Using map types:** • Simple maps (Google maps) • Satellite images (Google Earth) • Photographs of areas in oblique view • Photographs of areas in plan view	• Use and interpret 8 compass points • Identify county boundaries on a map • Give and interpret standard OS symbols • Political maps show human boundaries and features; physical maps show physical boundaries and features **Using map types:** • OS maps • Physical maps	**Using map types:** • Thematic maps
VCs	• **Location & place:** Countries and capital cities of the UK, and some human and physical features (Y1); seas surrounding the UK (Y2)	• **Location & place**: Rivers of the UK; UK, Great Britain, British Isles; counties and regions in the UK; land use in the UK	• **Location & place:** In depth study of the River Severn (Y5)

Year 3: Spring

Volcanoes

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• There are seven continents in the world, six of which people live on (Y1 Sum) • There are five oceans in the world. These are larger than seas (Y2 Sum) • Agriculture is the farming of plants (arable) and animals (pastoral) to eat (Y2 Sum) • **Science:** Substances can exist as solids, liquids and gases (Y2 Sum) • Features in rural areas include farm, hill, mountain, forest and river (Y1 Spr) • **Science:** The Earth's crust is the outermost layer of our planet. It is made of rocks and minerals (Y3 Aut1) • **Science:** Igneous rock is formed when magma cools down (Y3 Aut1) • **Science:** Plants need air (oxygen and carbon dioxide), water, light, **nutrients** from the soil, space, and a suitable temperature to grow (Y3 Aut2)	• The Earth is made of four main layers: the **inner core** (solid), the **outer core** (liquid), the **mantle** (semi-liquid) and the **crust** (solid) • The crust is split into **tectonic plates** that meet at plate boundaries. • Tectonic plates move: towards each other, away from each other, or alongside each other. • A **volcano** is an opening in the Earth's crust through which material can **erupt**. • Volcanoes can be formed at **destructive** plate boundaries, where plates move toward each other. • Volcanoes can be formed at **constructive** plate boundaries, where plates move away from each other. • Volcanoes can be **active**, **dormant** or **extinct**. • The **Pacific Ring of Fire** is an imaginary line where lots of volcanoes exist. • Products of volcanoes include **lava**, **pyroclastic flows**, **ash clouds**, **lahars**. • There are two main types of volcano, **shield** (less violent eruptions) and **composite** (explosive). • **Shield** volcanoes are more likely to form at **constructive** plate boundaries and **composite** volcanoes are more likely to form at **destructive** plate boundaries. • Volcanoes can also be tourist attractions; provide **nutrients** in the soil; and the heat can be used to heat water. • **La Soufriere** is a volcano on the island of St Vincent in the Caribbean that erupted in April 2021. • **Etna** is a volcano on the island of Sicily (Italy) which erupts regularly, including at least 50 times in 2021.	• Tectonic activity causes earthquakes (Y4 Sum) • **History:** St Vincent is an island in the Caribbean, and was home to the Garifuna people (Y5 Sum)
Disciplinary	• Identify similarities and differences between two non-local places (Y1 Sum) • Political maps show human boundaries and features; physical maps show physical boundaries and features **Using map types:** • Globe; Satellite images (Google Earth); Photographs of places in oblique view; Photographs of places in plan view	• World maps can be drawn from different perspectives, including the Pacific-centred map • Explain similarities and differences, using geographical knowledge	• The Mercator projection is what is commonly use but distorts continents and makes European countries look larger. Peters projection shows continents on a more accurate scale (Y5)
VCs	• **Location & place:** Seven continents and five oceans; Equator, North Pole, South Pole (Y1) • **Geographical scale:** Some physical features can span local, national and even global scales	• **Location & place:** Locating volcanoes across the world; location and effects of eruption at La Soufrière (Saint Vincent) and Etna (Italy). • **Geographical scale:** The effects of physical features – like volcanoes – can be felt at the local, national and even global scale.	• **Geographical scale:** While physical effects are felt most predominantly at the local or national scale, responses can be at the global scale (Y4)

Year 3: Summer

Looking at Europe & Tourism

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• The **capital cities** of the four countries in the UK are London (England), Edinburgh (Scotland), Cardiff (Wales) and Belfast (Northern Ireland) (Y1 Spr). • **Coastal** areas are areas of land that are near to the sea. They can be rural or urban. (Y1 Spr) • **Harbours** are found (and **ports** can be found) where the land meets the sea (Y2 Sum) • The weather is short-term. **Climate** is long-term summary of the weather conditions (Y2 Spr) • **Land use** can include **economic**, (including farms, factories and leisure) or settlements (Y2 Sum)	• **Europe** is made up of 50 countries; **Russia** is split across Asia and Europe. • **Tourism** is the business of supporting and encouraging people to visit a place for fun. • We can categorise effects into **social**, **economic** and **environmental.** • The **Alps** stretch across France, Italy, Switzerland, Austria and other countries. It is popular with tourists, and this has positive and negative impacts. • The **Amalfi Coast** is located in Italy and there are a variety of human and physical features along the Amalfi Coast. It is popular with tourists, and this has positive and negative impacts. • Many people rely on tourism, and it needs to be managed sustainably. • Case study: Tourism in local area, and how this changed over time.	• Comparing human and physical features in around a local river in the UK, the Danube in Europe, Mississippi in North America and the Amazon river in South America (Y5) • Categorising effects of earthquakes into social, economic and environmental (Y4)
Disciplinary	• Science: Use a Carroll diagram to classify items based on their properties (Y1 Spr) • Identify country boundaries on a map (Y1 Spr) • Interpretation: Use an atlas to find the right map (Y1 Sum) • Identify similarities and differences between two non-local places (Y2 Spr) • Political maps show human boundaries and features; physical maps show physical boundaries and features (Y3 Aut) • Use and interpret 8-compass points (Y3 Aut) **Using map types:** • Satellite images (Google Earth) • Photographs of places in oblique and plan view • OS maps	• Say whether a map is at the local, national or global scale • Spatially match locations on maps of different scales • Identify a range of political and physical boundaries **Using map types:** • Junior atlas	**Using map types:** • Thematic maps
VCs	• **Location & place:** Human and physical features in the UK (Y1, Y3) • **Interconnections:** Human features are often shaped by physical features (Y2) • **Geographical scale:** Our community is at the local scale, our country is at the national scale, continents are at the global scale (Y1)	• **Location & place:** Locating countries (including Russia) in Europe; Human and physical features of the Amalfi Coast and the Alps • **Interconnections:** There are similarities and differences between places, even if they have similar physical and/or human features • **Geographical scale:** Recognise maps at the local, national and global level and select the most appropriate one	• **Location & place:** Human and physical features around the Danube River (Y5) • **Interconnections:** There are similarities and differences between HICs, MICs and LICs (Y4)

Year 4: Autumn

Looking at South America & Brazil

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Names of common human and physical features (Y1-3) • While the school and community are at the local scale, and countries are at the national scale, continents are at the global scale (Y1) • There are seven continents in the world, six of which people live on (Y1 Sum) • There are five oceans in the world (Y2 Sum) • The equator is an imaginary line across the earth (Y1 Sum) • The North Pole and the South Pole are at the top and bottom of the Earth (Y1 Sum) • There are poorer and wealthier areas in every county and city (Y1 Sum) • **History:** Hunter-gatherers are people who travel looking for animals to hunt and plants and berries to gather (Y3 Aut) • Agriculture is the farming of plants (arable) and animals (pastoral) to eat (Y2 Sum)	• Lines of **longitude** and **latitude** are imaginary lines that help us locate places on Earth. Lines of longitude run north to south. The main one is called the **Prime Meridian**. Lines of latitude run east to west. The main ones are called the **Equator**, **Tropics of Cancer** and **Capricorn**, **Arctic** and **Antarctic Circle** • The Equator splits the Earth into the **Northern** and **Southern Hemispheres**; the Prime Meridian splits the Earth into the **Eastern** and **Western Hemispheres** • **South America** is made up of 12 countries. Brazil is located in South America; it is the largest country on the continent. The **Andes Mountains** are found along the entire western coast of South America, covering 7 countries • Brazil can be split into political and physical regions. Three physical regions include: the **Amazon rainforest**, **Cerrado** and **Mata Atlantica.** • **Indigenous** people are the first people who lived in the place and the generations of people who came after. The Kayapo are indigenous people who live in the Amazon rainforest. They clear small patches of rainforest for **agriculture**, but are also **hunter-gatherers** • **Rio de Janeiro** is one of the largest cities Brazil. Some of its population live in **favelas** (makeshift settlements), but there are also wealthy areas that are popular with tourists.	• Lines of longitude are important for considering time zones (Y5) • Lines of latitude are important for considering climate zones (Y5) • Rainforest have particular features, and unique flora and fauna that have adapted to the habitat (Y4) • **History:** People have lived in the Amazon rainforest for millions of years, and populations fell quickly when Spanish and Portuguese explorers brought diseases and forcibly took control of the lands (Y5)
Disciplinary	• **Mathematics:** Identify horizontal/vertical lines and pairs of perpendicular /parallel lines (Y3) • Use and interpret 8 compass points (Y3 Aut) • Identify country boundaries on a map (Y1 Spr) • Political maps show human boundaries and features; physical maps show physical boundaries and features (Y3 Aut) • Identify a range of political and physical boundaries (Y3 Sum) **Using map types:** • Simple maps (Google maps); Satellite images (Google Earth); junior atlas • Photographs of places in plan/oblique view		**Using map types:** • Thematic maps
VCs	• **Location & place:** Seven continents, five oceans; Equator, North Pole and South Pole (Y1)	• **Location & place:** Locating countries in South America • **Location & place:** Physical and human features of Brazil • **Location & place:** Lines of longitude and latitude	• **Location & place:** Climate, time zones and biomes across the world (Y5)

Year 4: Spring

Tropical rainforests

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Science: Living things depend on each other in their habitats, for food or shelter (Y2 Spr) • Science: Plants need **oxygen**, **carbon dioxide**, water, light, nutrients from the soil, space, and a suitable temperature to grow (Y3 Spr2) • Science: An **ecosystem** is made up of all organisms living in an area and the non-living features of the environment (Y4 Aut1) • Science: The water cycle relies on evaporation and condensation. Water is collected in the oceans from rivers and seas; it evaporates and then condenses to form clouds; it then precipitates and the cycle begins again (Y4 Spr1) • The weather is short-term. **Climate** is long-term summary of the weather conditions. **Precipitation** is the fall of water (Y2 Spr) • **Lines of latitude** run east to west (Equator, **Tropics of Cancer and Capricorn**, Arctic and Antarctic Circle) (Y4 Aut) • The **Amazon rainforest** is in S America (Y4) • **Agriculture** is the farming of plants (arable) and animals (pastoral) to eat (Y2 Sum)	• **Biomes** are large ecosystems that contain specific species of organisms. • **Tropical rainforests** are biomes that are found in places with **high temperatures** and lots of **precipitation**. • Tropical rainforests are found between the **Tropics of Cancer** and **Capricorn**, in the area known as the **Tropics.** • Tropical rainforests are found in five continents: Oceania (Australasian); Asia (Southeast Asian); Africa (Congo Basin); South America (Amazon) and North America (Central American) • **Atmospheric circulation** drives **weather** and **climate** conditions around the world, causing the hot and wet places in which tropical rainforests form. • Rainforests are made of four main layers of different heights: the **emergent**, the **canopy**, the **understory** and the **forest floor.** Each layer of the rainforest has different types of plants and animals that live there. • Tropical rainforests have very high **biodiversity**, and there is **interdependence** between species. • Tropical rainforests provide resources for humans, such as **medicines** and foods. This is important at the local and global scale. • Plants in tropical rainforests absorb CO_2 from the atmosphere, which is important for keeping our planet cool. • Chopping down trees is called **deforestation**. • **Deforestation** of the Amazon rainforest at the national level is making way for **agriculture**, **mining** and **logging** • At a global level, some countries at COP26 promised to end deforestation by 2030. At a local level, there are things we can do to reduce deforestation.	• Tropical rainforests are one type of biome; there are several others in the world (Y5) • Flora and fauna have adapted to hot deserts, tundra, temperate forests and coral reefs (Y5) • Science: Adaptations can be behavioural, physiological or structural (Y6) • Science: Adaptations that provide an organism with an advantage are more likely survive and reproduce. This is how species evolve (Y6) • Deforestation has serious effects: it increases the likelihood of flooding and contributes to global warming (Y5)
Disciplinary	• Mathematics: Measure length and height (mm/cm/m) (Y3) • Draw routes around school on squared paper using 1 square : 1 pace (Y2 Aut) Using map types: • Satellite images (Google Earth) • Globe	• Draw an object to scale • Recognise that people have differing opinions about environmental issues • Scale is used to identify the different impacts of change (small scale vs large scale logging)	• Calculate distances on a map using scale of 1 unit : 1, 2, 4, 5 or 10 units (Y5) • Draw a basic map using scale of 1 unit : 1, 2, 4, 5 or 10 units (Y6) • Express opinions about environmental issues with reasons (Y5)
VCs	• **Geographical scale:** The effects of physical features can be felt at the local, national and global scale (Y3) • **Interconnections:** Human features are often shaped by physical features (Y2)	• **Interconnections:** Human activity can affect physical features (e.g. deforestation of Amazon)	• **Geographical scale:** Actions at the local or national scale can have a huge impact on the global scale • **Interconnections:** Many places at the local, national and global scale rely on trade with other places across world (Y5)

Year 4: Summer

Earthquakes and settlements

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	Year 3 Spring (Volcanoes): • The Earth is made of four main layers: the inner core (solid), the outer core (liquid), the mantle (semi-liquid) and the crust (solid) • The crust is split into pieces called tectonic plates that meet at plate boundaries. • Tectonic plates move: towards each other, away from each other, or alongside each other. • Volcanoes can be formed at destructive plate boundaries (where plates move toward each other_, or at constructive plate boundaries (where plates move away from each other). We can categorise effects into social, economic and environmental (Y3 Sum)	• An **earthquake** is the sudden shaking of the Earth's surface. They are caused by movements of the **tectonic plates**. Minor earthquakes can occur anywhere; major earthquakes usually occur at **plate boundaries.** • Earthquakes usually occur at boundaries where the plates are sliding past each other. They can also occur at **destructive** and **constructive** plate boundaries. • The **focus** is the point inside the Earth where the earthquake came from; the **epicentre** is the point on the Earth's surface above. • The size of an earthquake is measured on the **Richter scale**, which goes from 1-10. Those measuring 7 or higher cause major damage. • Countries in the world can be classified as **low- medium- or high-income countries** (LIC, MIC, HICs). They appear in all continents. • Humans can minimise the effects of earthquakes with earthquake-proof buildings, evacuations and having earthquake survival kits. This is usually different in HICs and LICs. • Haiti is a LIC in North America that experienced an earthquake in 2010. Tohoku is in Japan, a HIC in Asia, and it experienced an earthquake and tsunami in 2011. • Primary effects are those that happen immediately that are the direct result; secondary effects are a result of primary effects.	• Forced migration occurs when people can no longer live safely in their home (Y6) • Natural disasters in KS3
Disciplinary	• (**Mathematics**: Numbers written as decimals correct to one decimal place Y4-5 – **optional**, Richter scale) • **Mathematics**: Coordinates in the first quadrant (Y4) • Identify similarities and differences between two non-local places (Y2 Spr) • Explain similarities and differences, using geographical knowledge (Y3 Spr) **Using maps:** • Simple maps (Google maps) • Globe	• Locate places and features using letter and number coordinates on a map	• Interpret and locate places and features using 4-figure grid reference (Y5)
VCs	• **Geographical scale:** The effects of physical features can be felt at the local, national and global scale (Y3) • **Interconnections:** Human features are often shaped by physical features (Y2)	• **Location & place:** Location and effects of earthquakes in Haiti/Japan • **Geographical scale:** While physical effects are felt most at the local or national scale, the response can be at the global scale • **Interconnections:** Humans adapt to living in earthquake-prone areas • **Interconnections:** Similarities and differences between LICs, MICs and HICs	• **Location & place:** Locating countries in North America (Y5) • **Geographical scale:** Actions at the local or national scale can have a huge impact on the global scale, particularly on the Earth's climate (Y6)

Year 5: Autumn

Investigating World trade

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Local, national and global scale (Y1 Sum) • Science: A **natural resource** is a material or substance that is produced by the environment (not man made) and may be used to support life. Food and water are natural resources. (Y2 Aut2). • **Agriculture** is the farming of plants (arable) and animals (pastoral) to eat (Y2 Sum) • Humans use seas and oceans for economic and leisure uses, and the main economic use is **trade**. (Y2 Sum) • Science: A **fossil** is physical evidence of an ancient plant or animal (Y3 Aut) • Tropical rainforests provide **resources** for humans, such as medicines and foods. This is important at the local and global scale. (Y4 Spr) • Countries in the world can be classified as low, medium or high-income countries (**LIC, MIC, HIC**) (Y4 Sum)	• Examples of **natural resources** include wood, food, water and **fossil fuels**. • **Fossil fuels** are materials made from fossils over millions of years, like coal and oil. Humans use these to run cars and electrical items. • **Natural resources** are unevenly distributed across the world, and can be renewable or non-renewable (finite). • People can be **employed** in different industries and sectors including **primary, secondary, tertiary and quaternary.** • **HICs**, **MICs** and **LICs** tend to have primary, secondary, tertiary and quaternary industries at different levels. • **Trade** is the process of buying and selling goods. **Imports** are goods that are brought into the country. **Exports** are goods that are traded out of the country. • UK imports food from across the world. • There have been changes in what is grown where, how it is farmed, how it is transported and how it is sold. **Agriculture** has moved from **subsistence** to **commercial** so that food can be traded. • **Fair trade** is a way of making sure that farmers are paid a fair price for the food they grow.	• Burning fossil fuels is contributing to global warming and climate change (Y5 Sum) • Distribution of the world's water (Y5 Spr) • **Science:** fossil fuels are a non-renewable energy store (Y6 Aut)
Disciplinary	• Mathematics: Coordinates in the first quadrant (Y4) • Science: Design a table to collect data with the appropriate number of rows and columns and correct headings (Y3 Spr) • Recognise simple hazards and plan steps we can take to reduce them (Y1 Aut) • Locate places and features using letter and number coordinates on a map (Y4 Sum) Using maps: • Simple maps (Google maps); Satellite images (Google Earth); OS maps	• Locate places using 4-figure grid references • Express opinions about environmental issues with reasons	• Locate places using 6-figure grid references (Y6) • Locate places using longitude and latitude coordinates (Y6)
VCs	• **Geographical scale:** Our community is at the local scale, our country is at the national scale, continents are at the global scale (Y1) • **Interconnections:** Human features are shaped by physical features (Y2)	• **Geographical scale:** Trade takes place at the local, national and global scale; over time, trade has tended to become more and more global • **Interconnections:** Many places at the local, national and global scale rely on trading with other places across the world	• **Geographical scale:** Actions at the local or national scale can have a huge impact on the global scale, particularly on the Earth's climate (Y6)

Year 5: Spring

Looking at North America & Water

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Key human and physical features, including coasts, beach, hill, mountain, valley, harbour, port (KS1) • Rivers, lakes, seas and oceans are all bodies of water. Rivers flow into lakes and seas; seas connect to oceans. (Y2 Sum) • Rivers travel from highland areas (the source) to lowland areas (the mouth) (Y2 Sum) • Science: The water cycle relies on evaporation and condensation. Water is collected in the oceans from rivers and seas; it evaporates and then condenses to form clouds; it then precipitates and the cycle begins again (Y4 Spr) • Science: When a solute dissolves in a solvent, a solution is formed. A solution is a mixture (Y5 Aut1)	• **[For Jan 2024]** North America is located to the west of Europe and is the third largest continent. • **[For Jan 2024]** North America is made up of 23 countries in the Caribbean, Central America, and Northern America. • The amount of water on Earth is constant. Most is **saltwater** stored in oceans, and most **freshwater** is stored as ice or underground. • Water cycle: Evaporation from the air, and **transpiration** from trees means that water vapour rises into the air. It condenses to form clouds and precipitation occurs when the clouds get heavy. **Surface runoff** is the flow of water overground; **throughflow** is the flow of water underground. • The **upper course** of a river is in high, mountainous ground and the river is narrow and fast-flowing; the **lower course** of a river is in low, flat ground and the river is wide and slow-flowing; the **middle course** is between the two. • Location of Missouri, Mississippi, Yukon, Rio Grande, Churchill, Mackenzie and Colorado rivers. • **Waterfalls** are formed in the upper course of the river when water gradually erodes soft rock. • **Meanders** are bends in the river that form in the middle and lower courses. • **Floodplains** are flat land either side of a river, on which the river deposits nutrients when it floods. They are formed in the lower course of the river.	• Carrying out fieldwork around a river (Y6) • Formation of other river features (KS3)
Disciplinary	• Mathematics: Read scales/ number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts (Y3); Convert between units of measure, including m to km (Y4); Recognise % and know it means parts per 100 (Y5) • Explain similarities and differences, using geographical knowledge (Y3 Spr) • Interpretation: Political maps show human boundaries and features; physical maps show physical boundaries and features (Y3 Aut) Using maps: • Satellite images (Google Earth); Junior atlas	• Calculate distances on a map using scale (1 unit : 1, 2, 4, 5 or 10 units)	• Draw a basic map using scale of 1 unit : 1, 2, 4, 5 or 10 units (Y6)
VCs	• **Location & place:** Locating countries in Europe (Y3) and South America (Y4) • **Location & place:** Rivers of the UK (Y3)	• **Location & place:** Locating countries in North America • **Location & place:** Distribution of the world's water	• **Location & place:** Migration from Northern Triangle to USA (Y6)

Year 5: Summer

Climate across the world

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• **Science: Extreme weather** is very different from the weather that you would usually expect to see in the country (Y1 Aut2) • The weather is short-term. **Climate** is long-term summary of the weather conditions (Y2 Spr) • **Hot deserts** have a very hot and dry climate; cold deserts have a very cold and dry climate (Y2 Spr) • **Science:** Living things are **adapted** to their environment. This means they may not be able to survive in other habitats (Y2 Spr2) • Lines of longitude & latitude are imaginary lines : Equator, Tropics of Cancer and Capricorn, Arctic and Antarctic Circle; Prime Meridian (Y4 Aut) • **Biomes** are large ecosystems that contain specific species of organisms (Y4 Spr) • Tropical rainforests are forests that are found in places with high temperatures and lots of precipitation (Y4 Spr) • Plants in tropical rainforests absorb carbon dioxide from the atmosphere, which is important for keeping our planet cool. (Y4 Spr) • Chopping down trees is called deforestation (Y4 Spr) • Fossil fuels are materials made from fossils of organisms over millions of years, like coal and oil. Humans use these to run cars and electrical items (Y5 Aut)	• **Climate zones** share long-term weather patterns. Six main ones: **polar**, **temperate**, **arid**, **tropical**, **Mediterranean** and **mountains** • Climate zones are usually found in more than one continent; and some continents have several climate zones. • Some climate zones (e.g. temperate) usually have a much higher **population density** than others. • The major biomes of the world are: **tundra**, **tropical rainforests**, **coral reefs**, **temperate forests** and **hot deserts.** • **Vegetation belts** are areas that have similar plant life, owing to similar climate, soil and drainage. • **Global warming** relates to an increase in Earth's temperature only; it causes **climate change** which relates to a broader set of changes. Global warming and climate change both happen naturally but both have been accelerated by **human activity** • Global warming (and resulting climate change) is being accelerated by too many **greenhouse gases**, like **carbon dioxide**, in the atmosphere from burning **fossil fuels**, **agriculture**, **deforestation.** • The effects of climate change on the UK include **drought**, **heatwaves**, sea level rise and flooding. These effects can be particularly damaging to our **vulnerable** species including the curlew, newt and door mouse. • Globally, climate change is creating **extreme weather** events, causing sea levels to rise and increasing risk to **vulnerable** and **endangered** species.	• Adaptation includes responses that would help us to survive in a changing climate. Mitigation includes actions that help to prevent - or mitigate - the impacts of climate change (Y6 Aut1) • **Science:** Role of non-renewable and renewable energy sources for generating electricity, in the context of climate change (Y6 Aut2) **NB.** The curriculum has been sequenced in a way that allows this Year 5 unit to flow easily into Year 6 Improving the Environment unit (Aut). While this unit focuses on the causes and effects of climate change, the Year 6 unit focuses more on what can be done to adapt to and mitigate it.
Disciplinary	• **Mathematics:** Number of mins in an hour; hours in a day (Y2); Interpret and construct bar graphs (Y3) and line graphs (Y4) • World maps can be drawn from different perspectives, including the Pacific-centred map (Y3) • Use an atlas to find the right map (Y1 Sum) • Explain similarities and differences, using geographical knowledge (Y3 Spr) • Express opinions about environmental issues with reasons (Y5) **Using maps:** • Satellite images (Google Earth); range of photographs; Junior atlas; Globe	• The Mercator projection is what is commonly use but distorts continents to make European countries look larger. Peters projection shows continents on a more accurate scale • Interpret and construct climate graphs **Using maps:** • Thematic maps (showing climate zones and population density)	• Using a wider range of thematic maps (KS3) • Recognise other map projections (KS3)
VCs	• **Location & place:** 7 continents, 5 oceans (Y1-2), longitude/latitude (Y3-4)	• **Location & place:** Locating climate zones and biomes across the world.	• **Location & place:** Building locational knowledge of Asia and Africa (KS3)

Year 6: Autumn

Improving the environment

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• Overfishing is damaging biodiversity in oceans. Sustainable management of fishing is needed to protect species (Y2 Sum) • Trees in tropical rainforests (like all plants) **absorb carbon dioxide** from the atmosphere, which keeps our planet cool (Y4 Spr) • Chopping down trees is called **deforestation** (Y4 Spr) • At a global level, some countries at COP26 promised to end deforestation by 2030. At a local level, there are things we can do to reduce deforestation (Y4 Spr) • **Science:** Fossil fuels, batteries and the Sun are all examples of chemical energy stores (Y5 Aut) • **Global warming** relates to an increase in Earth's temperature only; it causes **climate change** which relates to a broader set of changes Global warming (and resulting climate change) is being accelerated by too many greenhouse gases, like carbon dioxide, in the atmosphere from **burning fossil fuels**, **agriculture**, **deforestation** (Y5 Sum) • Effects of climate change in the UK and globally (Y5 Sum) • **Science:** Power stations can use both renewable and non-renewable sources of energy (Y6 Aut1) • **Science:** A non-renewable energy source is one where we have a fixed amount of the source, and where it would take too long for more to be formed. Burning fossil fuels to transfer electrical energy is an example of a non-renewable energy source (Y6 Aut1) • **Science:** Renewable energy sources quickly refill replenish themselves, meaning that we can use them again and again. Wind, solar, geothermal and hydrological power are all examples of renewable energy sources (Y6 Aut1)	• **Adaptation** includes responses that would help us to survive in a **changing climate.** • Examples of **adaptation** methods in the UK include the **Thames barrier** and increased use of air conditioning. • Global examples of **adaptation** methods include building houses on stilts and dams. • **Mitigation** includes actions that help to prevent - or mitigate - the impacts of climate change. • Examples of mitigation include wind power and using other sources of renewable energy (to reduce greenhouse gas emissions) and reforestation (to increase absorption of greenhouse gases). • Wind power is renewable and does not emit **carbon dioxide;** however it does create visual and noise **pollution**. • Plastic waste is created across the world, and often ends up in oceans. This can come from household or industrial waste, as well as fishing nets from fishing industry. • **Plastics** take hundreds of years to break down. They threaten biodiversity and can kill **organisms** directly or indirectly by destroying **habitats**. • Creating plastics requires fossil fuels and releases greenhouses gases into the atmosphere. • Customers have power at the local scale have the power to influence industry at the national and global scale.	• The Earth's changing climate from the Ice Age to now (KS3)
Disciplinary	• Express opinions about environmental issues with reasons (Y5) Using maps: • Simple (Google maps) map; satellite image (Google Earth); junior atlas; globe; photographs of places in plan and oblique view; OS maps; thematic maps	• Evaluate responses to environmental issues	• Use Geographical Information Systems (GIS) to view, analyse and interpret places and data (KS3)
VCs	• **Geographical scale:** While physical effects are felt most predominantly at the local or national scale, the response can be at the global scale (Y4)	• **Geographical scale:** Actions at the local or national scale can have a huge impact on the global scale, particularly on the Earth's climate	• **Geographical scale:** Use scales more mathematically, measuring and carefully calculating distances (KS3)

Year 6: Spring

On the move

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Substantive	• There are poorer and wealthier areas in every county and city (Y1 Sum) • **Science**: Animals, including humans, need oxygen, food, water and the right temperature to survive (Y2 Aut2) • Europe is made up of 50 countries (Y3 Sum) • We can categorise effects into social, economic and environmental (Y3 Sum) • Countries in the world can be classified as low-, middle- or high-income countries. HICs, MICs and LICs appear in all continents (Y4 Sum) • North America is made up of 23 countries, across Northern America, Central America and the Caribbean (Y5 Spr)	• **Maslow's hierarchy of needs** show what humans need to survive and thrive • **Migration** is the process of moving from one place to another. It does not have to be between countries, but where it is it is called **immigration** (in) or **emigration** (out) • People migrate because of **push** and **pull factors** • Voluntary migration usually happens because of economic or social factors. • Expectations of migration are not always met in reality. • **European** case study: Poland to UK 2004-today • **North American** case study: Mexico to USA • **Forced migration** happens as a result of life-threatening events, such as conflict or physical disasters • **Asylum seekers** are people who are forced to leave their country. They apply for asylum and, if it is accepted, they are granted refugee status • **Refugees** are given international protections and support in settling in a different country • **Asian/European** case study: Syria to countries in Europe • Many people migrate to and from our local area, which impacts our community.	• Further case studies of migration, exploring push and pull factors in more depth (KS3) • **History**: Vikings were migrants who moved because of push and pull factors (Y6 Spr) • **History**: The Windrush generation are people who arrived from Commonwealth countries 1948-71. Many were victims of racial discrimination
Disciplinary	• Identify country boundaries on a map (Y1 Spr) • Identify similarities and differences between two non-local places (Y2 Spr) • Explain similarities and differences, using geographical knowledge (Y3 Spr) • Interpretation: Express opinions about environmental issues with reasons (Y5 Aut) **Using maps:** • Simple (Google maps) map; satellite image (Google Earth); junior atlas; globe; photographs of places in plan and oblique view; thematic maps		
VCs	• **Interconnections:** There are similarities and differences between HICs, MICs and LICs (Y4) • **Location & place:** Europe (Y3) and North America (Y2)	• **Location & place:** Migration from Syria to countries in Europe; and Northern Triangle to USA • **Interconnections:** Migration is usually the result of a related set of push and pull factors	• **Location & place:** Pupils build locational and place knowledge in KS3 by revisiting Europe, North America and South America, and expanding this to Asia and Africa (KS3)

Year 6: Summer

I am a geographer

	Required prior knowledge	Knowledge to be explicitly taught	How knowledge will be built upon
Disciplinary	• Recognise simple hazards and plan steps we can take to reduce them (Y1 Aut) • Draw a basic fieldsketch of what can be seen (Y1 Aut) • Draw an object to scale (Y4 Sum) • Use and interpret 8 compass points (Y3 Aut) • Locate places and features using 4-figure grid references (Y4 Sum) • Give and interpret standard OS symbols (Y2 Aut) **Science:** • **A&P:** There are four main stages of enquiry: Planning; Measuring & Observing; Recording & Presenting; Analysing & Evaluating (Y2 Spr) • **A&P:** Scientists look for patterns in data to try to identify correlations (Y5 Spr) • **A&P:** Set a hypothesis to test (Y2 Aut) • **A&P:** Select most appropriate equipment to measure (the variables) that will give you the best chance of an accurate result (Y3 Spr) • **A&P:** A dependent variable is what you measure; an independent variable is what you change; controlled variables are things that stay the same (Y3 Aut) • **A&P:** Scientists must work out if the factor is the cause of the outcome in a correlation (Y5 Sum) • **A&P:** Write an appropriate method (Y3 Aut) • **A&P:** Draw diagram of the investigation (Y4 Sum) • **M&O:** Anomalous results should be discarded and rerecorded (Y3 Sum) • **M&O:** Data is repeatable if the same person repeats the investigation and gets the same results; data is reproducible if the investigation is repeated by a different person and the results are the same (Y3 Sum) • **M&O:** Taking multiple readings allows you to see if your data is repeatable, helps identify outliers and allows a mean to be calculated (Y6 Sum) • **R&P:** Design a table to collect data with the appropriate number of rows and columns and correct headings (Y3 Spr) • **R&P:** Record numerical or descriptive observations in a table (Y1 Aut) • **R&P:** Decide which graph is most appropriate for the enquiry (Y6 Aut) • **A&E:** Draw conclusions (e.g. 'the greater the… , the greater the…') (Y3 Sum) • **A&E:** Suggest ways to improve practical procedures to obtain more accurate measurements **(Y3 Sum)** • **A&E:** Ask further questions that could be explored to extend findings (Y2 Spr) **Using maps:** • Simple (Google maps) map; satellite image (Google Earth); junior atlas; globe; photographs of places in plan and oblique view; OS maps; thematic maps	• Draw a basic map to scale (1 unit : 1, 2, 4, 5 or 10 units) • Create questionnaires and surveys • Locate places and features using 6-figure grid references • Produce a detailed risk assessment	**KS3:** • Plan and undertake complete investigations undertaken in contrasting locations • Carry out fieldwork independently from the teacher • Calculate distances on a map using a range of scales • Recognise and select the most appropriate projection • Draw accurate maps using a range of scales • Use Geographical Information Systems (GIS) to view, analyse and interpret places and data • Interpret contours as a representation of height