

Geography Curriculum – What will the children actually learn?

Key Threshold Concepts (Substantive Knowledge)

When constructing our curriculum, we considered key threshold concepts or “the big ideas” which shape the ways pupils think within each subject. These threshold concepts, also known as “substantive knowledge,” are explored in every year group which help pupils gradually increase their understanding of them. Over time this approach of revisiting concepts helps children to *know more and remember more*. In our Geography lessons children are taught the key threshold concepts (substantive knowledge) below:

- i) Investigate places
- ii) Investigate patterns
- iii) Communicate geographically

The key threshold concepts for each class are set out in our three learning Milestones. Milestone 1 (Years 1 & 2), Milestone 2 (Years 3 & 4) and Milestone 3 (Year 5 & 6). These can be seen below alongside the topics that are to be taught in each class.

Topic Specific Milestones

In addition to the key threshold Milestones our curriculum sets out progression in the form of topic specific ‘Milestones’ for every topic taught. Each Milestone contains a range of descriptors which provide details of the skills, within each topic, to be covered and taught in class. KS1 children work to achieve the objectives set out in Milestone 1. Lower KS2 children work to achieve the objectives set out in Milestone 2 and upper Key Stage 2 children work to achieve the objectives set out in Milestone 3.

Vocabulary:

Research has shown that pupils with the most extensive vocabulary have:

- better reasoning, inference and pragmatic skills
- academic success and employment
- better mental health in adulthood.

Each milestone introduces a range of age appropriate geographical vocabulary. These are set out below.

Key Threshold Milestone 1 (Year 1 & 2)

Milestone 1

Investigate places

- Ask and answer geographical questions (such as: What is this place like? What or who will I see in this place? What do people do in this place?).
- Identify the key features of a location in order to say whether it is a city, town, village, coastal or rural area.
- Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied.
- Use simple fieldwork and observational skills to study the geography of the school and the key human and physical features of its surrounding environment.
- Use aerial images and plan perspectives to recognise landmarks and basic physical features.
- Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas.
- Name and locate the world's continents and oceans.

Investigate patterns

- Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom and of a contrasting non-European country.
- 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.
- Identify land use around the school.

Communicate geographically

- Use basic geographical vocabulary to refer to:
 - key physical features, including: beach, coast, forest, hill, mountain, ocean, river, soil, valley, vegetation and weather.
 - key human features, including: city, town, village, factory, farm, house, office and shop.
- Use compass directions (north, south, east and west) and locational language (e.g. near and far) to describe the location of features and routes on a map.
- Devise a simple map; use and construct basic symbols in a key. Use simple grid references (A1, B1).

Milestone 1 vocabulary



Vocabulary	Definition
place	A geographical point, such as a town, city, etc
investigate	To inquire into (a situation or problem, especially a crime or death) thoroughly; examine systematically, especially in order to discover the truth
pertinent	Relating to the matter at hand; relevant
city	A large town
town	A densely populated urban area, typically smaller than a city and larger than a village, having some local powers of government and a fixed boundary
village	A group of houses, together with other buildings such as a church and a school in the countryside
coastal	Relating to things that are in the sea or on the land near a coast
rural	Relating to, or characteristic of, the countryside or country life
continent	A very large area of land, such as Africa or Asia, that consists of several countries
surrounding	The conditions, scenery, etc, around a person, place or thing; environment
locate	To find out where something or someone is

Vocabulary	Definition
environment	External conditions or surroundings, especially those in which people live or work
characteristic	A distinguishing quality, attribute, or trait
map	A drawing of a particular area such as a city, country, or continent, showing its main features as they would appear if looked at from above
world	The planet that we live on
atlas	A book of maps
globe	A ball-shaped object with a map of the world on it, usually fixed on a stand
countries	Territories distinguished by its people, culture, language, geography, etc.
ocean	One of the five very large areas of sea on the Earth's surface
human features	Human geography looks at the impact and behaviour of people and how they relate to the physical world
physical features	Physical geography looks at the natural processes of the Earth, such as climate and plate tectonics
United Kingdom (UK)	England, Scotland, Wales and Northern Ireland; officially the United Kingdom of Great Britain and Northern Ireland



Milestone 1 vocabulary (continued)

Vocabulary	Definition
vegetation	Plants, trees and flowers
factory	A large building where machines are used to make large quantities of goods
farm	An area of land, together with the buildings on it, that is used for growing crops or raising animals, usually in order to sell them
house	A building in which people live, usually the people belonging to one family
office	A room or a part of a building where people work sitting at desks
shop	A building or part of a building where things are sold
compass	An instrument that you use for finding directions. It has a dial and a magnetic needle that always points to the north
north	The direction that is on your left when you are looking towards the direction where the sun rises
south	The direction that is on your right when you are looking towards the direction where the sun rises
east	The direction that you look towards in the morning in order to see the sun rise
west	The direction that you look towards in the evening in order to see the sun set
construct	To build or make something, e.g. a building, road or machine
symbol	Something that represents or stands for something else, usually by convention or association, especially a material object used to represent something abstract

Vocabulary	Definition
grid reference	A method of locating a point on a map or plan by a number referring to the lines of a grid drawn upon the map or plan and to subdivisions of the space between the lines
surrounding	The conditions, scenery, etc. around a person, place or thing; environment
environment	External conditions or surroundings, especially those in which people live or work
characteristic	A distinguishing quality, attribute or trait
locate	To find out where something or someone is
seasonal	Occurring at a certain season or certain seasons of the year
daily	Happening every day
weather	The condition of the atmosphere in one area at a particular time, e.g. if it is raining, hot or windy
hot	Having a high temperature
cold	Having a low temperature
equator	An imaginary line around the middle of the Earth at an equal distance from the North Pole and the South Pole

Milestone 1 vocabulary (continued)



Vocabulary	Definition
North Pole	The place on the surface of the Earth that is furthest towards the north
South Pole	The place on the surface of the Earth that is furthest towards the south
beach	An area of sand or stones beside the sea
coast	An area of land that is next to the sea
hill	An area of land that is higher than the land that surrounds it
mountain	A very high area of land with steep sides
river	A large amount of fresh water flowing continuously in a long line across the land
soil	The substance on the surface of the Earth in which plants grow
valley	A low stretch of land between hills, especially one that has a river flowing through it.

TOPICS TAUGHT in KS1:

In addition to the specific skills that the children will keep revisiting through the key concepts or substantive knowledge there will be specific learning related to individual topics. At Stapleford Primary School children are taught in mixed age classes e.g. Years 1 & 2 together etc. As a result, we have a two-year topic plan to prevent the children repeating subject matter. More detail is shown below as to what will be taught within each topic.

KS1 (Class 3 – Years 1 & 2) Rolling Programme

Geography <small>(see Chris Quigley: Geography Curriculum Companion for topic details)</small>	Human and Physical:	Geographical Skills:	Locational knowledge:	Human and Physical:	Place Knowledge:	Locational knowledge:
	- Climate - Weather - Extreme weather	Mapping the world - Describing maps of the world 1 - Describing maps of the world 2	The United Kingdom - UK England - UK Scotland - UK Wales - UK Northern Ireland	Australia - Aboriginal people - Animals - Great Barrier Reef - Daintree Rainforest	Compare UK England: London with Australia: Sydney	Continents and oceans: - The Arctic Ocean - The Atlantic Ocean - The Pacific Ocean - The Indian Ocean - The Southern Ocean

What will children learn within each topic?

Climate

- i) Locate and label where polar climates are found.
- ii) Locate and label where equatorial climates are found.
- iii) Locate and label where desert climates are found.
*Compare and contrast the three climates above.
- iv) Define the word climate.
- v) Describe the physical features of polar climates.
- vi) Describe the physical features of equatorial climates.
- vii) Describe the physical features of desert climates
*Are there any similarities between the physical features of the three climates above?
- viii) Investigate why vast numbers of plants and animals thrive in equatorial climates.

Weather & Extreme Weather

- i) Define the word weather.
- ii) Observe and record the weather for a half term.
- iii) Where does the physical process of weather take place?
- iv) What is:
 - a) the atmosphere?
 - b) a heatwave?

- c) a drought?
- d) a flood?
- e) a monsoon?
- f) a blizzard?
- g) a gale?
- h) a cyclone?
- i) a tornado?
- v) Label common weather symbols (include extreme weather symbols)
- vi) Categorise types of weather e.g. mild (breeze), fair, stormy, extreme (hurricane) etc.
- vii) Compare and contrast three types of extreme weather.
- viii) Compare and contrast the weather across all four seasons.
- ix) Summarise the effect of extreme weather on an individual area e.g. floods from monsoons in Bangladesh.

Describing maps of the world 1

- i) What is a globe?
- ii) What is a map?
- iii) What is an atlas?
- iv) What is a satellite image?
- v) Label a compass rose showing north, south, east and west.
- vi) Label an image of Earth showing the North Pole, South Pole, axis, equator, northern hemisphere and southern hemisphere.

Describing maps of the world 2

- i) Compare and contrast a map of Earth with a satellite image.
- ii) Point out the main differences between a map and a globe.
- iii) Use an atlas and explain the method to find:
 - a) United Kingdom
 - b) five oceans
 - c) seven continents
 - d) location of the school

The United Kingdom

- i) List (and show on a map) the countries that make up:
 - a) Great Britain
 - b) The United Kingdom
 - c) The British Isles
- ii) Summarise the geographical location of the United Kingdom.
- iii) Explain some of the key features of the United Kingdom's government.
- iv) Compare and contrast a republic with a monarchy e.g. Republic of Ireland and the United Kingdom.

The United Kingdom – England

- i) What is the flag of England called?
- ii) What is the national emblem of England?
- iii) What is the highest peak in England?
- iv) What are the Pennines?
- v) What is the largest lake in England?
- vi) What is the capital of England?
- vii) What is most land in cities and the countryside used for?
- viii) Compare and contrast the human features of cities and rural areas?

The United Kingdom – Scotland

- i) What is the flag of Scotland called?
- ii) What is the national emblem of Scotland?
- iii) What is the highest peak in Scotland?
- iv) Locate and mark Loch Ness on a map.
- v) What are archipelagos and mounros?
- vi) Locate and mark on a the Shetland archipelago.
- vii) What is the capital city of Scotland?
- viii) Compare and contrast the physical and human features of the Scottish Island of Shetland with those of the English Isle of Wight.

The United Kingdom – Wales

- i) What is the flag of Wales called?
- ii) What is the national emblem of Wales?
- iii) What is the highest peak in Wales?
- iv) What is special about the National Park called the Pembrokeshire Coast?
- v) Compare and contrast the physical and human features of Wales and Scotland.

The United Kingdom – Northern Ireland

- i) What is the flag of Northern Ireland called?
- ii) What is the capital city of Northern Ireland?
- iii) Locate and mark the Giant's Causeway on a map. What is it?
- iv) What is special about Lough (Lake) Neagh? Locate and mark it on a map.
- v) Compare and contrast the human and physical features of Northern Ireland and Wales.

Australia

- i) Locate and mark Australia on a map and a globe.
- ii) Which ocean surrounds Australia?
- iii) Is Australia a country or a continent? (both)

- iv) What is Australia's capital city called?
- v) What is Uluru?
- vi) What is Australia's highest peak?
- vii) What is Australia's longest river?
- viii) Compare and contrast the main human and physical features of Australia and the United Kingdom.

Aboriginal people

- i) Who are aboriginal people?
 - a) What percentage of Australia's population is Aboriginal?
 - b) Define the words:
 - ancestors
 - indigenous
 - descendants
 - migrants
 - sacred
- ii) Locate and mark Arnhem land and Uluru (Ayres Rock) on a map.
- iii) Why is Uluru sacred to Aboriginal people?
- iv) Compare and contrast everyday life in an Aboriginal village with a city in Australia.
- v) In what ways do the indigenous Aboriginal people have different lifestyles from European settlers in Australia?

Animals (of Australia)

- i) What is a monotreme?
- ii) What is a marsupial?
- iii) Name some of the common birds found in Australia.
- iv) What does nocturnal mean? Name some nocturnal animals that live in Australia.
- v) What is the largest carnivorous animal in Australia?
- vi) How many kangaroos live in Australia?
- vii) Compare and contrast some Australian wildlife with the wildlife found in England.

The Great Barrier Reef

- i) What is the Great Barrier Reef and how large is it?
- ii) Locate and label the Great Barrier Reef on a map.
- iii) How many types of corals and fish can be found on the Great Barrier Reef?
- iv) Investigate the diversity of marine mammals found near the Great Barrier Reef.
- v) Summarise information about the Great Barrier Reef's physical features.
- vi) Summarise how human activity is affecting the health of the Great Barrier Reef.

Daintree Rainforest

- i) Locate and mark the Daintree Rainforest on a map.
- ii) Which climate do rainforests thrive in?
- iii) How old is the Daintree Rainforest?
- iv) Name some endangered animals that live in the Daintree Rainforest.
- v) Compare and contrast the location of the Daintree Rainforest with Sydney.

London and Sydney

- i) Locate and mark London and Sydney on a map.
- ii) Compare and contrast the cities of London (England) and Sydney (Australia)
 - a) locations
 - b) weather
 - c) populations
 - d) landmarks
 - e) similarities
 - f) tourism

Continents and oceans

- i) Locate and mark on a map the seven continents.
- ii) Locate and mark on a map the five oceans.
- iii) Explain the difference between a country and a continent.
- iv) Explain the difference between a sea and an ocean.
- v) Why is Antarctica not inhabited?

The Oceans: Arctic Ocean, Atlantic Ocean, Pacific Ocean, Indian Ocean and Southern Ocean.

- i) Organise information about the physical features of the five oceans e.g.
 - a) What natural resources are found below the floor of the Arctic Ocean?
 - b) Which is the largest island in the Atlantic Ocean?
 - c) What is the Mariana Trench?
 - d) Which is the largest of the Oceans?
 - e) How much of the Earth's surface does the largest ocean cover?
 - f) What is commonly seen floating in the Southern Ocean?
- ii) Which natural resource lies beneath the Indian Ocean?
- iii) What is the Suez Canal and why is it important? (transport of goods)
- iv) Compare and contrast two oceans

Key Threshold Milestone 2 (Year 3 & 4)

Milestone 2

Investigate places

- Ask and answer geographical questions about the physical and human characteristics of a location.
- Explain own views about locations, giving reasons.
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.
- Use fieldwork to observe and record the human and physical features in the local area using a range of methods including sketch maps, plans and graphs and digital technologies.
- Use a range of resources to identify the key physical and human features of a location.
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.
- Name and locate the countries of Europe and identify their main physical and human characteristics.

Investigate patterns

- Name and locate the equator, northern hemisphere, southern hemisphere, the tropics of Cancer and Capricorn, Arctic and Antarctic Circle and date time zones. Describe some of the characteristics of these geographical areas.
- Describe geographical similarities and differences between countries.
- Describe how the locality of the school has changed over time.

Communicate geographically

- Describe key aspects of:
 - physical geography, including: rivers, mountains, volcanoes and earthquakes and the water cycle.
 - human geography, including: settlements and land use.
- Use the eight points of a compass, four-figure grid references, symbols and key to communicate knowledge of the United Kingdom and the wider world.

Milestone 2 vocabulary



Vocabulary	Definition
hemisphere	One half of the Earth
Tropic of Cancer	An imaginary line around the Earth 23.5° north of the equator
Tropic of Capricorn	An imaginary line around the Earth 23.5° south of the equator
Arctic	The area of the world around the North Pole. It is extremely cold and there is very little light in winter and very little darkness in summer
Antarctic	The area around the South Pole
time zone	One of the areas into which the world is divided, where the time is calculated as being a particular number of hours behind or ahead of Greenwich Mean Time (the local clock time at Greenwich, UK)
topographical	Relating to the physical features of an area of land, e.g. its hills, valleys and rivers
land use	The management and modification of the natural environment or wilderness into a built environment, such as settlements, and semi-natural habitats, such as arable fields, pastures and managed woods
volcano	A mountain from which hot melted rock, gas, steam and ash from inside the Earth sometimes burst
water cycle	The circulation of the Earth's water: water evaporates from the sea into the atmosphere, where it condenses and falls as rain or snow, returning to the sea by rivers or returning to the atmosphere by evaporation
earthquake	A shaking of the ground caused by movement of the Earth's crust.

TOPICS TAUGHT in Lower KS2:

In addition to the specific skills that the children will keep revisiting through the key concepts or substantive knowledge there will be specific learning related to individual topics. At Stapleford Primary School children are taught in mixed age classes e.g. Years 3 & 4 together etc. As a result, we have a two-year topic plan to prevent the children repeating subject matter. More detail is shown below as to what will be taught within each topic.

Lower KS2 (Class 2 – Year 3 & 4) Rolling Programme

Geography <small>(see Chris Quigley: Geography Curriculum Companion for topic details)</small>	Physical geography: Earthquakes and volcanoes: plate tectonics - Earthquakes and volcanoes: The Pacific Ring of Fire - Earthquakes and volcanoes: Impact Describing maps of the world 1	Locational knowledge: Europe: - Europe: population - Europe: Rivers - Europe: Mountains	Human geography: Transportation: - Transportation Cities - Transportation: National - Transportation: International Describing Maps of the world 2	Physical geography: - Landscapes: Weathering - Erosion & deposition: Rivers - Erosion & deposition: Coasts	Human & physical geography: The Water Cycle: - The Water Cycle: The Cycle - The Water Cycle: Clouds & precipitation Climate Change	Human geography: International trade: food International trade: natural resources International trade: tourism Describing Maps of the world 3

What will children learn within each topic?

Earthquakes and volcanoes: Plate tectonics

- i) Label and describe the Earth's:
 - a) core
 - b) outer core
 - c) mantle
 - d) crust
- ii) What is a tectonic plate?
- iii) Locate and label the main plate tectonic boundaries on a map.
- iv) Categorise the Earth's main tectonic plates in terms of how they are moving.
- v) Explain the tectonic process that would lead to an earthquake.
- vi) Explain the physical process that would result in a mountain range being formed.
- vii) What are the similarities and differences in the physical features of a volcano and a mountain?

Earthquakes and volcanoes: The Pacific Ring of Fire

- i) Locate and label The Pacific Ring of Fire on a map.
- ii) Explain the process that forms volcanoes. (Subduction)
- iii) Explain why 90% of the world's volcanoes happen around the Pacific Ring of Fire.
- iv) Explain the difference between magma and lava.
- v) Explain the difference between active, dormant and extinct volcanoes.
- vi) Investigate one of the Pacific Ring's most explosive volcanoes.

Earthquakes and volcanoes: Impact

- i) Locate and label on a map the areas affected by the:
 - a) 2004 Boxing Day Tsunami
 - b) 1906 San Francisco earthquake
 - c) 79 CE eruption of Vesuvius.
- ii) Investigate the extent of the area affected by the 2004 Boxing Day tsunami.
- iii) Describe the scale used for measuring the magnitude of earthquakes.
- iv) Describe the scale for measuring the intensity of volcanoes.
- v) Investigate the consequences of the eruption of Mount Vesuvius in 79 CE.

Describing maps of the world 1

- i) Locate and label the equator on a map.
- ii) Locate and label the Tropic of Capricorn and the Tropic of Cancer on a map.
- iii) Where is the area known as the tropics? (between the Tropic of Capricorn and the tropic of Cancer)
- iv) Describe the weather in the tropics.

Europe

- i) Which landmass is Europe part of?
- ii) What are the two main boundaries between Europe and Asia?
- iii) How many countries are there in Europe?
- iv) How many different languages are spoken in Europe?
- v) Locate and label the countries of Europe.
- vi) Investigate some of the cultural differences between eastern and western European countries e.g. food, languages
- vii) Compare and contrast the location of Europe and of North America.

Europe: Population

- i) What is the population of Europe? Why is this surprising?
- ii) Define the words:
 - a) inhabitants
 - b) city-state
 - c) population
- iii) Summarise information about the populations of the largest and smallest European countries.
- iv) Investigate the Vatican City.
- v) Graph the populations of the countries of Europe.

- vi) Demonstrate how densely populated Europe is compare to Africa.
- vii) Compare the population of the United Kingdom with France.

Europe: Rivers

- i) Define the words:
 - a) primary
 - b) source
 - c) delta
 - d) traverse
- ii) Mark the routes of the five primary rivers in Europe on a map and label them with their name and length.
- iii) On the same map, label their sources and the bodies of water into which they flow.
- v) Locate and label the landlocked seas in Europe.
- vi) Investigate one of the five primary rivers in Europe.

Europe: Mountains

- i) What are two names for the top of a mountain?
- ii) How do you measure the height of a mountain?
- iii) What is a mountain range?
- iv) What is the highest mountain in Europe?
- v) Which mountain range is it part of?
- vi) What is the highest peak in the European Alps?
- vii) Locate and label the 11 European mountain ranges on a map.
- viii) Organise information about the 11 European mountain ranges.

Transportation: Cities

- i) Define the words:
 - a) transportation
 - b) congestion
 - c) pollution
- ii) List the main types of transport used in cities. What are their advantages and disadvantages?
- iii) Classify types of transport in terms of the amount of pollution they create.
- iv) How is London trying to reduce transport congestion?
- v) How is London trying to reduce traffic pollution?

Transportation: National

- i) List some reasons why people travel in the UK.
- ii) List, in order, the most frequently used forms of transport in the UK.
- ii) What are the advantages and disadvantages of each type of travel?
- iii) Explain what a transport network is.
- iv) Why are canals not used as much as they used to be for transporting goods?
- v) Do you agree? – Motorways are the best way to travel between cities.
- vi) Identify and mark on a map:

- a) a motorway
- b) a main road
- c) a secondary road
- d) a minor road
- e) a railway
- f) a bridleway
- g) a cycle path
- h) an airport
- i) a canal

Transportation: International

- i) What does international transportation mean?
- ii) What is the main reason for international transportation?
- iii) Explain what the following are:
 - a) canal
 - b) cargo ship
 - c) port
- iv) Locate and label on a map:
 - a) The Suez Canal
 - b) The Panama Canal
 - c) Shanghai (the world's largest port)

Write a description about each of the above. Why are they important?
- v) List, in a table, the advantages and disadvantages of:
 - a) Air travel
 - b) Sea freight
 - c) Passenger ships
 - d) Rail
 - e) road

Describing maps of the world 2

- i) Explain what the Prime Meridian is and identify it on a globe.

Landscapes and weathering

- i) Explain how landforms change due to the physical process of weathering?
- ii) Explain how the two types of weathering (mechanical and chemical weathering) affect landforms.
- iii) What are some of the human processes that contribute to chemical weathering?
- iv) Provide examples of where chemical weathering can be seen.
- v) Explain how changing human process may lead to a reduction in chemical weathering.

Erosion and deposition: Rivers

- i) Define:
 - a) erosion
 - b) transportation
 - c) deposition
- ii) Draw, label and describe the three stages of a river.
- iii) Draw and label the features of:
 - a) a meander
 - b) an ox-bow lake
 - c) a delta
- iv) Identify patterns in the relationship between the stages of a river and the amount of erosion and deposition that takes place.
- v) Explain why, when a river floods at its mature stage, the soil becomes more fertile.
- vi) Investigate the River Volga delta and relate this to your knowledge of deposition.

Erosion and deposition: Coasts

- i) What is a coast and which country has the longest coastline in Europe?
- ii) Draw and label the main physical features seen at a coast.
- iii) What causes erosion at coasts?
- iv) Describe the physical processes that create:
 - a) caves
 - b) bays
 - c) headlands
 - d) arches
 - e) stacks
 - f) cliffs
 - g) beaches
- v) Compare and contrast erosion and deposition in coasts and rivers.
- vi) Explain how sea walls, rock armour and groynes are used to try to reduce the amount of coastline erosion. What are the advantages and disadvantages of each?

The water cycle: The cycle

- i) Define the word atmosphere.
- ii) What does the term continuous cycle mean?
- iii) Illustrate and describe the five steps of the water cycle.
- iv) Relate your knowledge of the water cycle to your knowledge of the formation of rivers.

The water cycle: Clouds and precipitation

- i) What is a cloud and how are they formed?
- ii) Define the word precipitation.

- iii) Draw and label the different types of clouds in their correct position in the atmosphere.
- iv) What do the prefix “nimbo” and the suffix “nimbus” mean?
- v) Identify clouds in pictures.
- vi) Explain how meteorologists use clouds to forecast the weather.

Climate change

- i) Define the words weather and climate.
- ii) Describe the physical process of climate change.
- iii) Describe the:
 - a) Causes of climate change
 - b) Effect of climate change on the planet
 - c) Effect of climate change of animals
 - d) Effect of climate change on humans
 - e) How attempts have been made to manage climate change
- iv) Compare and contrast human processes before and after the industrial revolution and explain how this is thought to have affected the Earth’s climate.
- v) Identify three geographical areas around the world where climate change is having a noticeable effect e.g. receding glaciers, melting polar ice caps, higher temperatures, extreme weather.

International trade: Food

- i) Define the words
 - a) import
 - b) export
 - c) food miles
 - d) food security
- ii) Create a graph of the most traded foods internationally.
- iii) Why are oranges and bananas imported into the United Kingdom?
- iv) Explain some of the concerns about food miles.
- v) Give reasons why coffee is the most traded beverage.
- vi) Investigate the seafood trade and draw conclusions about why some foods are more traded than others.

International trade: Natural resources

- i) Define what a natural resource is.
- ii) List and describe the uses of some common natural resources.
- iii) Locate and label on a map where:
 - a) most of the world’s nickel and copper is mined.
 - b) most of the world’s oil is produced.
- iv) Explain what copper ore is and how it is processed into a useful material. (Batteries for electric cars)
- v) Explain why the diversity in physical features across the world give rise to the import and export of natural resources.

International trade: Tourism

- i) Define the word tourism.
- ii) What is international tourism and why is it good for the economy of the country being visited?
- iii) Locate on a map the most visited tourist destinations in France, England, Spain, Germany, Greece, Italy and Russia.
- iv) Classify types of tourism.
- v) Explain why diversity of tourist attractions is useful.
- vi) Explain why people travel on from one country to another for tourism.
- vii) Relate your knowledge of international tourism to your knowledge of international travel and make some generalisations.

Describing maps of the world 3

- i) Locate and label on a map:
 - a) The equator
 - b) The prime meridian
 - c) The western and eastern hemispheres.
 - d) Lines of latitude (explain what the lines are used for).
 - e) Lines of longitude (explain what the lines are used for).
- ii) Using your knowledge of map techniques (above) describe the locations of:
 - a) Greenwich in London
 - b) Stapleford Primary School
 - c) The capital cities of England, Scotland, Wales and Northern Ireland.
 - d) Any five European capital cities e.g. Paris, Berlin, Rome, Athens, Madrid
- iii) Use your knowledge of longitude to explain the concept of time zones.
- iv) Explain what the international date line is and how it is linked to the prime meridian.

Key Threshold Milestone 3 (Year 5 & 6)

Milestone 3

Investigate places

- Collect and analyse statistics and other information in order to draw clear conclusions about locations.
- Identify and describe how the physical features affect the human activity within a location.
- Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location.
- Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways.
- Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps – as in London's Tube map).
- Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.
- Name and locate the countries of North and South America and identify their main physical and human characteristics.

Investigate patterns

- Identify and describe the geographical significance of latitude, longitude, equator, northern hemisphere, southern hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).
- Understand some of the reasons for geographical similarities and differences between countries.
- Describe how locations around the world are changing and explain some of the reasons for change.
- Describe geographical diversity across the world.
- Describe how countries and geographical regions are interconnected and interdependent.

Communicate geographically

- 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: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies.
- Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world.
- Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land).

Milestone 3 vocabulary



Vocabulary	Definition
sampling	The act or process of taking a small part or quantity of something as a sample for testing or analysis
systematic	Characterised by the use of order and planning; methodical
analyse	To consider something carefully or use statistical methods in order to fully understand it
effectiveness	The quality of working well and producing the results that were intended
aerial	Existing, occurring, moving or operating in the air
London Tube map	A schematic transport map of the lines, stations and services of the London Underground, known colloquially as 'the Tube', hence the map's name
climate	The general weather conditions that are typical of a place
biome	A major ecological community, extending over a large area and usually characterised by a dominant vegetation
settlement	A place newly settled; colony

Vocabulary	Definition
economic	Concerned with the organisation of the money, industry and trade of a country, region or society
trade	The exchange of goods and services between one country and another. Goods bought into a country are called imports, and those sold to another country are called exports
distribution	The way in which something is shared out among a group or spread over an area
energy	The power derived from the utilisation of physical or chemical resources, especially to provide light and heat or to work machines
food	Anything that nourishes or stimulates; whatever helps something to keep active, grow, etc.
minerals	Substances that are formed naturally in the Earth. Minerals are usually solid, inorganic, have a crystal structure and form naturally by geological processes
water supply	The provision of water by public utilities, commercial organisations, community endeavours or by individuals, usually via a system of pumps and pipes
Ordnance Survey (OS)	The national mapping agency of the United Kingdom which covers the island of Great Britain
population	All the inhabitants of a particular place
depict	Represent in words; describe.

TOPICS TAUGHT in Upper KS2:

In addition to the specific skills that the children will keep revisiting through the key concepts or substantive knowledge there will be specific learning related to individual topics. At Stapleford Primary School children are taught in mixed age classes e.g. Years 5 & 6 together etc. As a result, we have a two-year topic plan to prevent the children repeating subject matter. More detail is shown below as to what will be taught within each topic.

Upper KS2 (Class 1 – Years 5 & 6) Rolling Programme

Subject	Year A (2022-2023), (2024-2025) (2026-2027) etc.			Year B (2021-2022), (2023-2024), (2025-2026) etc.		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Geography <small>(see Chris Quigley: geography Curriculum Companion for topic details)</small>	Human & physical geography Biomes and Climate Zones: - Temperate deciduous forest biome - Marine biome - Desert biome	Place knowledge: South America: - South America – population - South America – rivers - South America - mountains	Locational knowledge: Using maps: features Using maps: four-figure grid references Using maps: six-figure grid references	Human & physical geography Biomes and Climate Zones: - Taiga biome - Freshwater biome - Rainforest biome	Place knowledge: North America: - North America - population - North America - rivers - North America - mountains	Human & physical geography Biomes and Climate Zones: - Ice biome - Savannah biome - Grassland biome

What will children learn within each topic?

Biomes and climate zones:

- What is a biome?
- Define the word climate.
- What is a climate zone?
- Compare and contrast the locations of the seven climate zones.

Temperate deciduous forest biome

- Locate three temperate forest biomes on a map.
- Create a knowledge web for temperate deciduous forest biomes.
- Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- Describe the human processes that affect this biome.

Marine biome

- i) Locate three marine biomes on a map.
- ii) Describe the difference between a terrestrial and aquatic biome.
- iii) Create a knowledge web for marine biomes.
- iv) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- vi) Describe the human processes that affect this biome.

Desert biome

- i) Locate three desert biomes on a map.
- ii) Create a knowledge web for desert biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- vii) Describe the human processes that affect this biome.

South America:

- i) Locate South America on a globe and on a map:
 - a) Label the landlocked countries of South America on a map.
 - b) Mark South America's largest lake on a map (Lake Titicaca – shared by Bolivia and Peru)
 - c) Mark the Falkland Islands (British overseas territory) on a map.
- ii) Describe the geographical features of South America
 - a) Climate zones
 - b) biomes
 - c) population
 - d) languages
- ii) Define the words:
 - a) indigenous
 - b) colony
- iii) Explain the link between colonisation and the diversity of languages spoken across South America e.g. they speak Dutch in Suriname.

South America – population:

- i) Define the terms:
 - a) population density
 - b) sparsely populated
- ii) What is the approximate population of South America?
- iii) What does the term “median age” mean and what is the median age in South America?
- iv) Locate on a map the five most populous cities in South America.
- v) Compare and contrast the populations of Brazil and Canada.
- vi) Why do you think areas in the Amazon basin less populated than coastal areas at the mouth of the Amazon River?

South America – rivers:

- i) Define the term:
 - a) tributary
- ii) Describe what a river basin is.
- iii) Locate and mark on a map the three main river basins in South America.
- iv) List information about the physical features of South America's three main river basins.
- v) Locate on a map the highest waterfall in the world (Angel falls).
- vi) Compare and contrast the location into which the Amazon and the Volga rivers discharge.
- vii) Propose reasons why the Amazon does not have a delta whereas the Volga does.

South America – mountains:

- i) Compare and contrast the features of a topographic map and those of a political map, using examples from South America.
- ii) Why might a geographer use a variety of map types?
- iii) Locate and mark on a map:
 - a) the Andes mountain range
 - b) the highest peak in the Andes (Aconcagua 6,961m)
 - c) the highest capital city in the world (Machu Picchu)
- iii) Define the term:
 - a) seismic activity
- iv) Describe where the Andes mountain range is and how it was formed (tectonic subduction).
- v) What is a plateau? Suggest reasons why civilisations chose to build cities on them (citadels).

Using maps: Features

- i) On a map of Europe locate and label:
 - a) title
 - b) compass rose
 - c) key
 - d) lines of longitude and latitude
 - e) scale
 - Describe the purpose of each.
- ii) Using the above features create your own map of an area you know well.
- iii) Investigate how scales of maps, of the same place, give differing levels of detail.

Using maps: Four-figure and six-figure grid references

- i) What are the horizontal and vertical lines on a map called?
- ii) What is a grid reference?
 - a) What is a four-figure grid reference?
 - b) What is a six-figure grid reference?

- c) Why might you use a six-figure grid reference rather than a four-figure grid reference?
- iii) Use your knowledge of four-figure grid references to find the grid reference for:
 - a) Stapleford Primary School
 - b) five places in the countryside near to your school e.g. the churches in Stapleford, Bramfield and Waterford.
 - c) the centre of Hertford.
 - d) the centre of London, Paris, Madrid, Berlin, Rome and Athens.
- iv) Use your knowledge of six-figure grid references to name and locate 10 places on urban and rural maps.

Taiga biome

- i) Locate three taiga biomes on a map.
- ii) Create a knowledge web for taiga biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.

Freshwater biome

- i) Locate three freshwater biomes on a map.
- ii) Create a knowledge web for freshwater biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.

Rainforest biome

- i) Locate three rainforest biomes on a map.
- ii) Create a knowledge web for rainforest biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.

North America:

- i) Compare and contrast the geographical location of North America with that of Europe.
- ii) At which latitude is the border between the two largest countries (USA and Canada) in North America?
- iii) Compare and contrast the physical and human diversity of areas of high and low latitude in North America.
- iv) Investigate why the southern parts of North America are more prone to hurricanes than the northern parts.

North America – population:

- i) Define the terms:
 - a) colonise
 - b) indigenous

- c) metropolitan
- d) most populous
- e) sparsely populated
- f) population density
- ii) Compare and contrast the most and least populous places in North America.
- iii) Graph information about the populations of the ten most populous cities in North America.
- iv) Describe the changes in the population of North America from the 1500s to the 1600s.

North America – rivers:

- i) Locate and label on a map three of the most significant rivers of North America.
- ii) Describe the significant physical features of each of these rivers.
- iii) Define the term:
 - a) confluence
- iv) Investigate the physical features found along the Colorado River E.g. Grand Canyon, Dams
- v) Investigate how goods are traded using North American rivers.
- vi) Explain why pollution in a river affects more than one population. Use the Rio Grande as an example.

North America – mountains:

- i) Locate and mark on a map:
 - a) the geographical location of North America's mountain ranges
 - b) the highest peak in North America (Denali 6,194m)
- ii) Show how the western coast of North America is part of a wider seismic zone (The Pacific Ring of Fire).
- iii) Compare and contrast the features of a topographic map and those of a political map, using examples from North America.
- iv) Why might a geographer use a variety of map types?
- v) Compare and contrast the physical features of mountainous regions of North America with the Great Plains.

Ice Biome

- i) Locate three ice biomes on a map.
- ii) Create a knowledge web for ice biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.

Savannah biome

- i) Locate three savannah biomes on a map.
- ii) Create a knowledge web for savannah biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.

Grassland biome

- i) Locate three grassland biomes on a map.
- ii) Create a knowledge web for grassland biomes.
- iii) Compare and contrast the knowledge web you have created for this biome with those you have created for other biomes.
- iv) Describe the human processes that affect this biome.