Knowledge Progression

Year 3/4 Geography

	Locational Knowledge	Place Knowledge	Human and Physical Geography	Skills and Fieldwork
Key Vocabulary	Europe, Asia, North America, South America, Africa, Oceania and Antarctica, England, Scotland, Wales, Northern Ireland and Republic of Ireland, Ocean, Equator, Hemisphere, Tropic of Cancer, Tropic of Capricorn, Tropical region, Climate, hot and humid, Equator, Russia, Canals, rivers, landscape, man-made, natural, Convection, Jungle, Logging, Rainforest, Ranching, Moors, Valleys Countryside, Cities, Polar, Savannah, Wildlife, Conservation, Endangered	Continent, Europe, United Kingdom, France, Landmarks, Climate, human features, physical features, region, town, city, compare, similarities, differences, tourism, impact, Address, County, District, Grid reference, Postcode, Region, Code, Land use zone	Villages, Towns, Cities, Earthquakes/Volcanoes, Sedimentary, Igneous, Metamorphic, Erosion, Settlement, arch, sand, pebbles, shingles, undercut, rockfall, landslide, dunes, mudflats, saltmarsh, Borehole, Community, Reservoir, Well, Water tank	Atlas, map, globe, index, continents, symbols, grid, key, directions, Compass points, North, East, South and West, landmarks, human features, physical features, locate, Cardinal points, Compass, East, North, South, West, Pole Star, Column, Grid reference, Row
Previous knowledge/ Learning	*In KS1, our children will:* *G1* - Know that London, Cardiff, Edinburgh and Belfast are the capital cities of the UK and can identify landmarks from each, whilst also sorting: kits, pictures, foods, famous people. *G2* - Know that the English Channel, the Irish Sea and the North Sea surround the UK. *G3* - Know that the seven continents are: Antarctica, North America, South America, Asia, Europe and Australia/Oceania. *G4* - Further to this, they know the Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean and Southern Ocean.	*In KS1, our children will:* *G5* - Know the features of a hot and a cold place. (Antarctica vs Africa) *G6* - Have compared the main differences between a place in England and a small place in a non-European country.	*In KS1, our children will:* *G7* - Know which is the hottest and the coldest season in the UK and recognise the main weather symbols. Can plan outfits and activities based upon weather forecasts. *G8* - Can identify the difference between cities, towns and villages and can explain the advantages and disadvantages of each. *G9* - Identify, in photographs and aerial images, the following physical features: hill, soil, mountain, lake, island, valley, river, cliff, forest and beach and the following human features: city, town, village, factory, farm, house, office, port, harbour and shop.	*In KS1, our children will:* *G10* - Can locate the equator and the North and South Poles. *G11* - Know and use: left, right, below, next to, north, east, south and west. *G12* - Know their address, including the postcode. *G13* - Create and use a map to plan multiple routes to White Cross shops. Then, create their own map that highlights the key physical and human features and includes a key and directional language for the journey around the Tranmere estate and down to White Cross shops.
N.C. Objectives	1. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities. 2. Name and locate counties and cities of the UK, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time. 3. Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)	1. Understand geographical similarities and differences through the study of human and physical geography of a region of the UK, a region in a European country and a region within North or South America.	1. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle. 2. Describe and understand key aspects of human geography, including types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.	1. Use maps, atlases, globes and digital/computer mapping to locate countries and describe the features studied. 2. Use the eight points of a compass. Four and six-figure grid references, symbols and keys (including the use of Ordinance Survey Maps) to build their knowledge of the UK and the wider world. 3. Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs and digital technologies.

Knowledge Progression

Year 3/4 Geography

Key Knowledge – what do we want our children to know before they leave our year group?

Locational Knowledge

POWERFUL KNOWLEDGE:

G1 - Name and locate the main counties in England (Yorkshire, Lancashire, West Midlands, Kent, Sussex, Surrey) and cities in the UK (Leeds, Bradford, Newcastle, Manchester, Liverpool, London, Birmingham, Edinburgh, Cardiff, Belfast), identifying their physical and human characteristics and their topographical features – hills, mountains, coasts and rivers whilst comparing an urban and a rural area.
G2 - Know the Tropic of Cancer and Capricorn, the equator (northern and southern hemispheres), the Arctic and the Antarctic Circle and can demonstrate why areas of the world are warmer/colder than the UK.
G3 - Identify the longest rivers in the world, the largest deserts, the highest mountains and have compared these to the UK's (Ben Nevis, Snowden, The Thames, The Severn, The Aire, The Wharfe)
G4 - Know the key differences (location, environmental regions and associated biomes, cities, human and physical features) between living in the UK, living in Brazil.

HOW DOES THIS LOOK AT TRANMERE?

In cycle 1:
Rainforest & Chocolate
- The children will identify the continents to recap Year 1/2 learning on a world map. To further their understanding, they will identify key vocabulary including: Equator, Tropic of Cancer, Tropic of Capricorn, Northern and Southern Hemisphere, Artic and Antarctic Circle.
- Next, the children identify where are the rainforests of the world are located. Using a satellite image, the children will locate the rainforests that are situated near the Equator including: Brazil, Malaysia, Cameroon, Congo, Madagascar etc. Identifying which are Northern and Southern Hemisphere. They will label them correctly on the map. Having done this, they revisit the satellite image and using it will identify warmer and colder areas of the world. They will justify and explain scientifically why some areas are colder and some are warmer.
- The children will create top trump cards however instead of having a rating for strength etc. they will rate: hills, mountains, rivers, coasts, population density, humidity, rainfall, temperature. The children will create 3 different sets of top trump cards. The first will be the main counties in England, the second will be the major cities in the UK and the third will be regions/cities in Brazil.
- The children will create a fact file on Brazil and a fact file on the UK, these must include information around biomes, human features and physical features. The children will use Microsoft PowerPoint to create a presentation and present it to the class. (Computing link)
- Revisit the map that they have been adding to throughout the topic and spend a series of lessons studying and identifying the longest rivers, the largest deserts and the highest mountains. Once again, look at these on satellite map and compare them to the UK. The children will create a key for their map.
- Where are cocoa trees found? Children will focus on South America and the Yucatan Peninsula. The children will identify that cacao trees grow in hot and wet climates. Their task will be to identify key cacao producing countries and add them to our world map. They will investigate what environmental factors affect the growth of cocoa trees stressing the difference between Northern and Southern hemisphere. This information will be presented using a mind map and illustrations to support their findings. The children will work in small groups to investigate a different cash crop (coffee, cotton, tea, sugarcane etc.). They need to consider the affect this has on the rainforest and indigenous people. The children will create a PowerPoint using their findings to present to their peers.

Place

POWERFUL KNOWLEDGE:

G5 - Know at least five differences between living in the UK and a Mediterranean country (Greece) Explore the similarities and differences in terms of human and physical characteristics. Describe the advantages and disadvantages of Leeds vs Greece.

HOW DOES THIS LOOK AT TRANMERE?

In cycle 1:
Greeks
- The children will investigate modern and Ancient Greece. They will compare geographical similarities and differences of the two places focussing solely on the following human and physical geographical features: climate, landmarks, population density, natural hazards, biomes, cities. In doing so, they will sort objects (plants, fruit, vegetables, beaches, landmarks, climate graphs, hills, mountains, rivers, satellite images, population density graphs {choropleth} and biomes).
- To complete the topic, the children will evaluate the advantages and disadvantages of living in Leeds/Greece and will debate their merits using evidence from the sorting activity.

Human and Physical Geography

POWERFUL KNOWLEDGE:

G6 - Know that earthquakes are usually caused by seismic movements in the tectonic plates.
G7 - Label a volcano: lava, magma, crater, chamber and can talk confidently about where eruptions occur more regularly and why. Furthermore, they evaluate when/where/why earthquakes and volcanoes are more destructive – plate tectonics and the Ring of Fire.
G8 - Label the main features of a river: source, meander, tributary, mouth, bed, flood plain, delta, waterfall.
G9 - Explain the water-cycle including transpiration.
G10 – Know how rivers are utilised (trade links and damning for power)
G11 - Know why most cities are located by a river (Stone Age and Roman link) and have investigated this using satellite imagery.
G12 - Can, on a satellite image, locate some biomes (desert, tropical rainforest, temperate forest) and explain how two biomes differ using bar charts (temperature) or line graphs (rainfall).
G13 - Label layers of a rainforest and can identify patterns in countries where deforestation is an issue and advise the beef, soy and palm industries on the consequences of their actions on a global scale.

HOW DOES THIS LOOK AT TRANMERE?

In cycle 1:
Rainforest & Chocolate
- The children will be introduced to the four main layers of the rainforest: Forest Floor, Understory Layer, Canopy Layer and Emergent Layer. The children will gain an understanding about the key features of the layers including the ecosystems they support. The children will create a double page spread to summarise their learning.
- The children will investigate and discuss how the rainforests are being destroyed and how people are trying to save them. For this lesson, the Action Aid KS2 Rainforest in Trouble resource pack will be used.
This contains aerial photographs which show the Amazon rainforest and the changes which have happened over time. Then share key information about the Amazon river, the levels of the rainforest, deforestation, the demand for timber, the 'slash and burn' process. The children will complete a diamond 9 activity about the impact of deforestation. Children will learn about the consequence for deforestation and how this is both being done legally/sustainably and illegally. Children will debate should the UK government ban/regulate the use of palm oil because of the effect on the rainforest?
- The children will complete a RIC focusing on deforestation being caused by the planting of soy. This is because it is used to feed animals and it is more profitable and there has been a scandal around fast food giants causing deforestation.
- The children will learn about indigenous people. They will produce a double page spread about indigenous people. The children will choose 4 subheadings to research such as: Food, Clothing, Sports, Education, Social Structure, Where They Live etc.
- The children will study a selection of products, including; cocoa, ginger, bananas, wood, vanilla, gold, plastic, wool. They will decide whether the products are found in the rainforest. They will discuss where the products would be found. Becoming an expert in one product, the children will present their findings to the class.

Gateways to the World
- Before selecting their holiday destinations, the children will be introduced to 3 different biomes (desert, tropical rainforest and temperate forest). Looking at natural resources of these biomes – mining, farming, felling trees. The children will identify these on a world map and will choose one of these locations as their holiday destination. As a class, the children will produce bar charts for average monthly temperatures and line graphs for average rainfall within these biomes.

In cycle 2:
Active Planet
- They will research volcanoes answering the following questions: What do volcanoes look like? Where can volcanoes be found? What are the different states of volcanoes called? (dormant, active, extinct, etc.) What happens when volcanoes erupt? (both what we can see and what happens under the surface). The children will be to draw a cross-section of a volcano and label it using the following vocabulary (crater, cone, ash cloud, lava, lateral vent, central vent, magma).
- What are tectonic plates? The children will be given a large jumbled up map of tectonic plates which they will piece back together. Next, they will be shown an enlarged world map which has been stuck onto thin card and cut along the lines of the tectonic plates. Using this model, they will discuss what happens when the plates move apart, against or underneath each other. The children will be given individual world maps. They will research and compare the locations of where earthquakes occur to where volcanoes are found and add this information to their maps specifying the role tectonic plates play in this. The class will be divided into groups and named after one of the tectonic plates, including the following: Eurasian, African, Indian-Australian, Antarctic, Pacific, North American, South American and Caribbean. The children will join hands to form the boundary of their 'plate' and stand next to the group (or 'plate') that they adjoin on the world map. Which of the groups make up the 'ring of fire'?
- The class will discuss that the strength of earthquakes is measured by an instrument called a seismograph and it uses the Richter scale. The children will make a simple seismograph and test it. (Teachers could expand by studying how farming near a volcano is advantageous and by examining how buildings are made earthquake proof)

Go with the Flow (All of the following could be completed in the Egyptians topic around the River Nile)
- Using an Atlas and satellite images identify the world's major rivers and ask them to identify a pattern (vegetation, farming, placement of cities and settlements).
- Having done this, children looking at the River Aire, will identify its source, mouth, delta, tributary whilst learning about how rivers meander and consolidation of vocab of bed, flood plain and waterfall. To do this the children will track the river using satellite maps and OS maps.
- The children will study the water cycle and will learn about how we use rivers (used for trade and damming for hydroelectric power – Hoover Dam)

Skills and Fieldwork

POWERFUL KNOWLEDGE:

G14 - Understand the basic symbols and keys used on an Ordinance Survey map of Yorkshire.
G15 - Know the eight points of a compass and four-figure grid references and can use them practically.
G16 - Plan a walk in the local area highlighting the landmarks using an OS map.

HOW DOES THIS LOOK AT TRANMERE?

In cycle 1:
Paintings, Pictures and Photographs
- The children will look at a map of the local area that includes the school – there will be a large OS map on each table. Children will select 10 symbols and identify their meaning using a key. The children will be told to create their own imaginary map using ten symbols in small groups. The groups will switch around and using the key they will try to identify the symbols on the other groups map. Outdoor learning link: Next, the children will create a walk in the local area using an OS map describing the landmarks and writing instructions that use the 8 points of a compass. In addition, the children will compare their maps with aerial photographs. What information does the OS map give that the aerial photograph doesn't? The children will learn how to read simple 4 figure grid references. Using an OS map of Yorkshire, the children will complete a 4-figure grid referencing quiz focusing on the vocabulary: hamlet, village, town and city.

Local Geography
- Undertake a walk in the local area, sketching, observing and recording the physical features: hills, rivers, streams, woods, forests (this can be a completed by undertaking the walk the children design between Thorpe Lane and High Royds.