LKS2 Programme of Study for Geography

Where on earth are we? Y3	
NC Statutory Learning Objectives	•• improve their locational knowledge through identifying 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) • practise geographical skills through using maps, atlases, globes and digital/computer mapping to locate features studied • use the eight points of the compass to build their knowledge of the wider world.
Key vocabulary	**• Antarctic Circle: • Arctic Circle: Compass points: Day• Equator:• Global Positioning Systems (GPS): • International Date Line (IDL): • Lines of latitude: • Lines of longitude: • Night• Northern Hemisphere: • North Pole:• Ordnance Survey (OS) grid references: • Prime Meridian (Greenwich Meridian, PM):• Southern Hemisphere: • South Pole: • Time zone:**
What is the world like?	**Resources:** • Voyagers link: The latitude and longitude song • A variety of maps of the world, different projections if possible, political and physical • Voyagers world map for display on the whiteboard • Political and physical globes, preferably with at least one that rotates on its axis, in addition to inflatable globes • Class set of atlases.
Activities	➢ Sing longitude and latitude song ➢ Use and compare maps and globes identify and name the continents and oceans and find the UK and London. Locate the Equator and describe where it is. Identify North and South Poles ➢ Play a game testing each other on locating and naming continents, countries, oceans and imaginary lines. ➢ Make a list of similarities and differences between world maps and globes as the children identify them.
How can we describe where places are on the earth's surface?	**Resources:** • Voyagers link: The latitude and longitude song • Voyagers link to Zoom by Istvan Banyai (the book) (video or slide show) • Voyagers resource: Concentric circles • Papier-mâché spheres children have made (in Art or Design & technology); if possible, with world features drawn on in advance, to save lesson time • Internet access to Google Earth • Voyagers teacher resource: Map projection • Historical world maps.
Activities	➢ Sing the longitude and latitude song ➢ View Istvan Banyai's Zoom on YouTube or as a slideshow. What is happening in this story without words? Write a recount for what happens ➢ Develop the idea of scale by asking the children about addresses. Start with the school's address, including postcode, county, country, continent and extend this to the Earth, the Solar System, the Universe. Make links with satnav, postcodes and google earth ➢ Children to make their balloon globe into a flat map.
What do the lines on maps and globes mean?	**Resources:** Voyagers link: The latitude and longitude song • Physical and political world maps and globes • Class set of atlases / Internet access to world maps and Google Earth • Inflatable globes • Voyagers resource: What do I need for my holiday? • World climate and vegetation maps.
Activities	➢ Sing longitude and latitude song ➢ Children find circles parallel to equator and notice what is happening ➢ Find out about tropic and polar circles. Identify and label the zones defined by the Tropic and Polar circles ➢ Play games based on identifying countries in each zone using an inflated globe. Name the hemisphere zone and talk about the weather and climate.

Why do we have night and day?	**Resources:** Voyagers link: The latitude and longitude song • Globes that rotate on their axes, torches, means of darkening the room if possible • Voyagers resource: Teacher information and activity resource • Voyagers video: Latitude and longitude • NASA animation of the rotating earth in day • NASA animation of the rotating earth in night.
Activities	➢ Sing longitude and latitude song ➢ Find out why globes are made to rotate ➢ Watch a video on longitude and latitude
What time is it where you are?	**Resources:** Voyagers link: The latitude and longitude song • Voyagers link: webcams from different parts of the world to see what time it is 'now'. For example: –– London – Paris –– New York – Tokyo –– Sydney–– Mumbai–– Abu Dhabi• Voyagers world map showing time zones • Jules Verne's Around the World in Eighty Days • Michael Palin's Around the World in Eighty Days
Activities	➢ Sing longitude and latitude song find out about international date line ➢ Access webcams around the world and record the times ➢ Set clocks for different time zones in cities around the world and label.
The big finish: play the location game	**Resources:** • • Voyagers link: The latitude and longitude song • Voyagers video: Latitude and longitude Google Earth, showing lines of latitude and longitude (choose View, then Grid); enable Places from the Layers menu • Voyagers resource sheet:World battleships (Mercator) sheet.
Activities	➢ Sing song ➢ Find out about how we give an address to locations around the world ➢ Watch longitude latitude video to reinforce understanding ➢ Use google earth with places enabled ➢ Play battleships ➢ Make own battleship style game

Programme of Study for Geography

Is climate cool? Y4	
NC Statutory Learning Objectives	• locate some of the world's climate zones on a globe or map, name examples and have some understanding of them • describe and give examples of the variety of biomes and vegetation belts • use appropriate geographical vocabulary to describe weather, climate, climate zones, biomes and vegetation belts.
Key vocabulary	Biome, Climate, desert, drought, environment, flora, fauna, grassland, rainfall, temperature, tropical, tundra, vegetation belt, weather
What is it like where we live?	**Resources:** • • Voyagers link: Countryfile weather forecast • A globe and a world map • Voyagers resource: Lines of latitude and climate zones sheet • Map of world annual average air temperatures • Voyagers map of world climate zones.
Activities	➢ Children to share what they already know about weather ,climate and biomes ➢ Watch countryfile weather ➢ Complete the right side of the Lines of Latitude and Climate Zones sheet, using the given terms. Look at the map of world annual average air temperatures, noting that the change in temperature from one zone to the next is gradual. Check that the children if they can locate the Equator, Tropics and Polar Circles, and the hottest and coldest areas, on the map. ➢ Talk about how over a short time of a year, our flora and fauna changes
What are the polar regions like?	**Resources:** Voyagers map of world annual average air temperatures • Voyagers map of the Arctic • Voyagers map of the Antarctic• A globe• Voyagers resource: The five coldest places on earth • Internet access to Google Earth • Voyagers map of World Climate Zones • Voyagers link to Sebastião Salgado's photographs of the Nenets people of Siberia (Arctic Russia) • Voyagers teacher resource: The tundra biome • Voyagers resource: Characteristics of the Arctic and Antarctic polar regions.
Activities	➢ Children to find out about the worlds coldest places ➢ Using maps of the Arctic and Antarctic list the countries in each circle ➢ Locate the 5 coldest places on earth ➢ Look at Sebastião Salgado's photographs of the Nenets people of Siberia and talk about what it must be like to live there. ➢ Children to research the climate, plant and animal life of the polar tundra biome, considering both the Arctic and Antarctic polar climate zones.
Where are the hottest, driest places in the world?	**Resources:** Voyagers map of world annual average air temperatures • Voyagers map of World Climate Zones • Images obtained by Googling named deserts • Voyagers resource sheet: Hot deserts • Map of World Rainfall • Voyagers video: Absolute desert • Voyagers video: Sequence photos of the Sahara.
Activities	➢ children to compare the Map of World Climate Zones with the map of world annual average air temperatures ➢ Use the Internet to introduce information on hot desert biomes ➢ Watch clips from Michael Palin's Saharan adventure, together with a video montage of photos of the Sahara . Discuss as a class what it must be like to live there. ➢ introduce the task for the Big Finish
Where are the hottest, wettest places in the world?	**Resources:** • Globe, map or Internet access to Google Earth • Voyagers resource: Meghalaya - the wettest place on Earth • The Video clip with soundtrack of the monsoon in the Indian rainforest • Voyagers map of world rainfall.

Activities	➢ In pairs or small groups, discuss: What must it be like to live in the wettest place on Earth? What would it be like to go to school in this area? Discuss as a class any advantages or disadvantages, and list these. ➢ Look at images of the annual Indian monsoon in Cherrapunji ➢ Watch the short video clip with a soundtrack of the monsoon in the Indian rainforest. Talk about the big advantages of the monsoon: ➢ children to carry out a case study of the Indian monsoon and focus on how people live in a monsoon climate.
Which climate and biome do we live in?	**Resources:**. Globe, world map or Internet access to Google Earth • Access to the Internet (using tablets and computers, as available)
Activities	➢ Locate the UK on a globe, world map or on Google Earth. Find out what deciduous means children to list as many examples of UK flora (plants – trees, climbers, flowers and grasses) and fauna (animals, birds, reptiles and insects) as they can, sorting them into categories. ➢ Watch video clips of recent, topical, extreme weather events – e.g. the Somerset Levels flooding of 2014 – and explore causes and effects.
The big finish: Climate is cool special report.	**Resources:** Materials to make a poster, video or PowerPoint presentation • Printed copies of maps and information sheets used in Lessons 1–5 • Access to atlases and the Internet, especially to websites used in Lessons 1–5 • Copies of relevant information books • Voyagers thematic maps.
Activities	➢ Prepare a Big Finish Special Report for the particular animal they have chosen. ➢ Share presentation or put posters up around the room for discussion

Do you like to be beside the seaside?Y4	
NC Statutory Learning Objectives	• extend their knowledge and understanding beyond the local area to include the United Kingdom • name and locate (some) counties and cities of the United Kingdom • learn about key topographical features (including coast and rivers) to understand how some of these aspects have changed over time • understand similarities and differences through the study of human and physical geography of a region of the United Kingdom (SW England) and a region in a European country (Costa Blanca, Spain) • describe and understand key aspects of the human geography of coasts, including: types of settlement and land use, economic activity etc.
Key vocabulary	Bay, beach, cliff, coast, coral, dock, dune, erosion, estuary, harbour, headland, pier, port, promenade, quay, rock pool, salt marsh, sand, tide, tourism
Have you been to the seaside?	**Resources:** • A set of atlases – road atlases would be ideal • Voyagers map of the UK, one for each pair of children • Voyagers resource: Different types of coasts • Voyagers link: Oh I do like to be beside the seaside • Images of Benidorm, Costa Blanca, Spain • A postcard-size piece of white card.
Activities	➢ Watch oh I do like to be beside the seaside video. Describe photographs of coasts ➢ Use an atlas and map to locate places in the UK from a given list and describe ➢ Share human and physical items from the seaside ➢ Take a GE street walk through Benidorm and give opinion ➢ Draw a coastline on a postcard
What is the coast of South West England like?	**Resources:** • Voyagers images of the coast of South West England • Voyagers map of South West England • Voyagers resource: Place to see in Cornwall • Voyagers resource: The Great Barrier Reef.
Activities	➢ Locate SW region on a map, arrange photographs to link in correct place on a map, using geographical language talk about physical features, human settlement and economic features, including tourism ➢ Identify 2 places the children would like to visit and draw attention to the great variety of features or characteristics e.g. sand, rock, beach, cliff, industry, fishing, harbour, tourism. ➢ Locate the Great Barrier Reef Australia on a map, globe and Google Earth. Discuss climate and wildlife. Find out why this is an environmental issue and a conservation issue.
What natural features can I see beside the seaside?	**Resources:** • Coast Detective photographs • Cliffs and Beaches activity sheet • Voyagers images of natural coastal features • Labels for the features in the images of natural coastal features • Voyagers images of cliffs, and of beach material • Voyagers resource: The coast of Antarctica • Voyagers resource: The twenty best beaches in the UK.
Activities	➢ Look at the images of cliffs, and of beach material, and match up the two sets of photographs, using the Cliffs and beaches activity sheet. ➢ Match images and labels of natural coastal features and discuss ideas on how these may have occurred ➢ Be a coast detective- detecting similarities and differences ➢ Locate Antarctica on a globe and Google earth-describe its climate ➢ Watch advice for Antarctic visitors and make a poster highlighting the main points ➢ Use best 20 UK beaches and discuss how would children define 'best'?
What other features and activities can be seen around the coast of the UK?	**Resources:** • A fresh fish to show the class, e.g. a mackerel • Voyagers images of human coastal activities • Labels to accompany the images of human coastal activities (printed on card and cut up) • Voyagers resource: Place names, features and activities• Voyagers map of the UK • Voyagers resource: Rock pools • Voyagers resource: Fish and chips sequence • Voyagers resource: Human activities on the coast • Voyagers images of Hong Kong airport.

Activities	➢ Match labels and pictures to coastal activities ➢ Watch rock pool link and create own rock pool ➢ Find out where fish and chips come from observe a real fish ➢ Locate Hong Kong International on map and on Google earth discuss extreme human coastal activity ➢ Human activities coastal activity sheet
Do we like to live beside the seaside?	**Resources:** Access to computer and internet facilities • Voyagers resource sheet: The Big Finish • Each group needs time for the preparation of their presentation • Voyagers link: Oh I do like to be beside the seaside
Activities	➢ Sing song oh I do like to be beside the seaside ➢ Research a specific coastal locality or area ➢ In groups create an estate or travel agent presentation including a poster or tv presentation to share with class next session ➢ Locate St Lucia on map and Google Earth Research some of these holiday islands which rely on tourism
The big finish: Which sort of seaside would you choose?	**Resources:** Voyagers resource sheet: The Big Finish • The preparation work that each group has done for their presentation (see Lesson 5) • Access to other resources as became apparent in Lesson 5.
Activities	➢ Groups put presentations to the class ➢ Using the postcards from first session write to the Head teacher saying which of the localities they would like to live in or visit and why?

Can you come on a great American road trip? Y3	
NC Statutory Learning Objectives	• enhance their locational and place knowledge • focus on North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities • understand geographical similarities and differences through the study of a region in North and South America • use maps, atlases, globes and digital/computer mapping • learn to use the eight points of a compass.
Key vocabulary	Amazon basin, Amazon river, compass points, continent, latitude, longitude, mountain, mountain range, physical feature, river, Rockies, slum, source, tributary, village
Can you be a city detective?	**Resources:** Weather symbols for hot and sunny, cold and rainy, dull and cloudy • Optional: children's weather station and weather measuring equipment • Voyagers video: The sun has got his hat on • Voyagers weather symbols PowerPoint • Voyagers link: NASA lightning • Voyagers link: NASA cloud • Voyagers link: NASA hurricane • Voyagers images: Four weather images • Voyagers video: The Earth from space.
Activities	➢ Lean lyrics to Johnny Cash song I've been everywhere and locate all places. Use atlases and internet to identify countries, cities and states in North America. ➢ Cities of the North American continent ➢ North American cities-road networks and housing ➢ Record location of country and continent for football teams
What are North American cities like?	**Resources:** Voyagers link to the song I've been everywhere! • Voyagers link to the lyrics for I've been everywhere! • Voyagers resource: Cities of the North America continent • Set of atlases and/or access to internet maps • Voyagers resource: North American cities photo sheet • Voyagers: North American cities summary and details.
Activities	➢ Continue task from lesson 1 completing North American summary and report back to class ➢ Listen to the song I've been everywhere ➢ Compose a geographical rap or song about the American cities accompanied by a map
Are you a good city detective?	**Resources:** • Voyagers resource: Cities of the South American continent • Set of atlases and/or access to internet maps • Voyagers resource: South American cities photo sheet • Voyagers resource: North American cities summary and details
Activities	➢ Work in pairs to find out about countries and cities in the continent of South America ➢ Research and record information South American cities ➢ Find cities on Google Earth and look for patterns in the road networks and housing ➢ Continue marking on the map more world football teams
Are South American cities similar to North American?	**Resources:** • Voyagers resource: Cities of the South American continent • Set of atlases and/or access to internet maps • Voyagers resource: South American cities photo sheet • Voyagers resource: South American cities summary and details • Voyagers link to the song I've been everywhere! • Voyagers link to the lyrics for I've been everywhere!'
Activities	➢ Complete discovering South American cities and report back to class ➢ Sing the song I've been everywhere and revisit the big finish task ➢ Compare North American and South American cities
What is route 66?	**Resources:** •.Voyagers link to the song I've been everywhere! • Voyagers link to the lyrics for I've been everywhere! • Resources that they children will need for their presentation in The Big Finish • Voyagers link to Chuck Berry singing Route 66 • Voyagers link to Rolling Stones singing Route 66 • Voyagers link to the lyrics of the song Route 66 • Copy of the 19-day itinerary for following of Route 66 • Atlases.

Activities	➢ Sing the song I've been everywhere and finish presentations including a map ➢ Using Route 66 song and an atlas children to follow the journey ➢ Children could use everything they have learned about Route 66 to make an illustrated map
The big finish:	**Resources:** • The resources needed for the children's presentations
Activities	➢ Each group of children to perform their presentations ➢ Peer assess and evaluate unit ➢ Grande finale- sing the 2 songs that have featured in the unit

How does water go round and round? Y4	
NC Statutory Learning Objectives	• name and locate (some of) the UK's most significant rivers and mountain environments • describe features of a river and a mountain environment in the UK • learn how rivers and mountains are formed • understand where rivers and mountains fit into the water cycle.
Key vocabulary	Altitude, channel, condensation, confluence, erosion, estuary, evaporation, glacier, infiltration, peak, percolation, precipitation
Where does all the rain go?	**Resources:** • Buckets of natural materials: soil, sand, gravel, peat, pebbles/ boulders • Watering cans with roses and/or hose pipe with spray • Cameras and video cameras/recording devices • Voyagers resource: Where did the water go? • Atlases • Voyagers resource: A river begins • Voyagers link to Johann Straus's The Blue Danube Waltz.
Activities	➢ Listen to the Blue Danube and imagine they are standing by a big river. Draw and label the river they imagined. ➢ Create a hill valley and mountain landscape with the natural materials. Predict what will happen to rainfall ➢ Where did the water go ➢ Look at Power Point a river begins and use geographical language to describe where water flows to.
Where does all of the rainfall come from?	**Resources:** Voyagers link to Johann Straus's The Blue Danube Waltz • Voyagers resource: A river begins • Large sheets of paper • Felt pens and/or collage materials • Voyagers resource: Water cycle animation • Voyagers resource: Stages of the water cycle • Voyagers resource: Where does our water come from? • Voyagers resource: Activities about the weather • Voyagers resource: Water cycle activity sheet • Voyagers map of the British Isles with a list of British rivers.
Activities	➢ Think about where rainfall comes from ➢ Watch the water cycle animation, stages of the water cycle and where does our water come from? ➢ Create a diagram which shows the whole of the water cycle. ➢ Locate and name rivers on a map (ongoing task)
What can we learn about the river Thames?	**Resources:** • Virtual tour of the River Thames from the source to the sea • Shorter pictorial guide to the River Thames • Atlases, preferably UK road atlases • Google Earth • Voyagers link to Handel's Water Music.
Activities	➢ Listen to Handel's water music and follow the river Thames using an atlas ➢ Navigate through London on Google Earth with 3d enabled travel along the Thames looking at the buildings along the river bank. Find out why the Thames is so important ➢ Research why are so many cities by rivers.
How and why do people change rivers?	**Resources:** •Local 1:50 000 OS map(for Extension activity). • Voyagers resource: Basic facts about specific rivers, bridges, dams, waterfalls, lakes and canals• Voyagers resource: Information about rivers • Voyagers resource: The River Yangtze • Voyagers resource: The Three Gorges Dam • Voyagers resource: The River Nile • Voyagers resource: The River Niger • Voyagers resource: The Mississippi River • Voyagers resource: The River Ganges.
Activities	➢ Children to find out about a choice of rivers ➢ Write down all the ways people can use rivers

How do rivers wear away mountains?	**Resources:** • • Physical world map (to display on a white/ smart board) • Atlases • Access to Google Earth • Voyagers outline of a world map • Voyagers resource: List of mountain ranges • Voyagers photographs of high mountains • Voyagers resource: A river in miniature.
Activities	➢ Find out the names of mountains and mountain ranges and locate on the map. Find out how mountains are made ➢ Explore why tourists like to visit mountains in summer and winter. What activities do they engage in? Why are mountains so popular? ➢ Explore the PowerPoint ' A river in miniature'
The big finish: How can we model a river or a stream?	**Resources:** • Voyagers link to Handel's Water Music • OS 1:50 000 map extract (preferably local to the school) to show on the white/smartboard • Voyagers resource: A river in miniature • Assorted natural materials: sand, gravel, peat, soil, pebbles/ boulders, slate • A long, narrow natural or man-made slope, preferably outdoors (you could use sand with guttering and plastic sheeting indoors and make a miniature river or stream) • Hosepipe with/without spray or watering can without rose • Digital/video camera.
Activities	➢ Listen to some of Handel's water music, record grid references to locate a stream and follow downstream recording grid references ➢ Watch a river in miniature and children reproduce this using natural materials and geographical vocabulary ➢ Experiment outdoors to observe what happens to different materials ➢ Take photographs ➢ Arrange field work if possible

Can the earth shake, rattle and roll? Y3

NC Statutory Learning Objectives	• Describe and understand the key aspects of volcanoes and earthquakes • understand that the distribution of earthquakes and volcanoes follows a pattern • learn about the 'Pacific Ring of Fire'.
Key vocabulary	
What is happening when the earth shakes?	**Resources:** Voyagers footage of an earthquake • Voyagers model sheet A • Voyagers model sheet B • Coloured pencils or felt-tip pens • Scissors • Glue • Hard-boiled egg(s) (one for demonstration or several for children to use) • Slices of bread, crusts removed (aka 'tectonic plates') • Internet images of the 1906 San Francisco earthquake and others
Activities	➢ Watch the dramatic video of an earthquake. Find out about earthquakes by making a model ➢ Use an egg and bread to find out about the earth's crust and tectonic plates. ➢ Simulate earth quakes using models ➢ Learn about the Richter scale and plot levels on graphs or charts
What is happening when the earth rattles and rolls?	**Resources:** Models of up to five volcanoes • Internet images of volcanoes • One hard-boiled egg • Voyagers diagram 1: The structure of the earth • Voyagers diagram 2: Moving towards (convergent plate boundary) • Voyagers diagram 3: Moving apart (divergent) plate boundary • Iceland photo: Mid- Atlantic Ridge • Voyagers videos of volcanic eruptions • Voyagers videos of Mount St Helens eruption (1980).
Activities	➢ Look at images of volcanoes and learn geographical language associated with them ➢ Find out about converging plates and diverging plates ➢ Look at webcams and videos of volcanoes erupting ➢ Find out why there are no volcanoes in the UK
Does the earth shake, rattle and roll all over?	**Resources:**. • Interactive map of earthquakes and volcanoes • Access to Google Earth • Popocatépetl folk story
Activities	➢ Find out where in the world earthquakes and volcanoes occur. ➢ On Google Earth find the adjacent volcanoes of Popocatépetl and Iztaccíhuatl, in Mexico. Using the link on the Voyagers website, tell the children the folk story about these two volcanoes. Popocatépetl is now active and Iztaccíhuatl is dormant. How do the children interpret the story, geographically? ➢ Using interactive map to highlight where volcanoes and earthquakes are found, find out about the ring of fire. ➢ On a postcard draw a volcano and on the back the most interesting fact they have learned so far.
How and why do people live where the earth shakes, rattles and rolls?	**Resources:** Voyagers link to Quechan painting of life in Tigua, near Cotopaxi, Ecuador • Voyagers resource: Why do people live near volcanoes? • JMW Turner's painting Mount Vesuvius in Eruption 1817 • Voyagers photos of the destructive power of earthquakes e.g. Christchurch (2011), Sichuan (2008), San Francisco (1906 and later), Kobe (1995), Alaska (1964), Pakistan (2005, 2013), Agadir (1960), Haiti (2010).
Activities	➢ Think about the advantages and disadvantages of living near a volcano and the hazards of living in earthquake areas Locate Tigua, Cotopaxi, which is in Ecuador, South America on Google Earth. Also using display talk about the Quechan painting, which depicts life in Tigua near the active volcano Cotopaxi, in the Andes in Ecuador.. discuss ideas about why these people live so close to an active volcano

	➢ Look at pictures of the destructive power of earthquakes and children to describe what they see and what has happened list the dangers or hazards. Elicit ideas on what might be done to overcome or lessen them. ➢ Watch link why do people live near volcanoes, look at Vesuvius eruption painting and children to find out about the destruction of Pompeii and the Herculaneum.
How disastrous have recent earthquakes and/or eruptions been ?	**Resources:** • Voyagers resource: Drop, cover and hold on! • Voyagers resource: Impacts of the Boxing Day tsunami 2004 • Voyagers photographs of Earthquake case study 1: Japan 11th March 2011 • Voyagers photographs of Earthquake case study 2: Boxing Day 2005 • Voyagers photographs of Iceland and its volcanoes
Activities	➢ Learn about recent eruptions and/ or earthquakes. Find out what a tsunami is ➢ Look at drop, cover, hold on resource and search for Japan earthquake drill discuss pictures ➢ Carry out Japan earthquake drill ➢ Investigate earthquake case studies find Thailand on the map
The big finish: Can we make a model volcano that erupts?	**Resources:** • Materials and ingredients to make an 'erupting volcano' • Instructions to make an 'erupting volcano'.
Activities	➢ Make an erupting volcano