Geography Curriculum Map

Intent:

- Inspire students about the world around them through a topical and challenging curriculum- give them curiosity about the world around them.
- Students understand their place in the world through the student of a variety of scales and locations to help them interpret human and physical landscapes.
- Support students emotional, social, physical, and political development to enable them to thrive in society.
- Provide students with the knowledge and understanding to make links across subjects and contexts throughout their lives.
- Support students to develop empathy and understand their role and responsibility to both the human and physical world.

KS2 'Subject' Curriculum

- Pupils should extend knowledge beyond their local area- to include UK, Europe, and South America.
- Locational knowledge-Europe, North and South America' focusing on key human and physical geographical features, countries and cities.
- Name and locate counties and cities of the UK, identifying geographical regions based upon topographical features and land-use patterns.
- Identify lines of longitude and latitude, northern and southern hemisphere, and time zones.
- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.
- Physical geography climate zones, biomes, rivers, mountains, volcanos and earthquakes, and water cycle.
- Human geography types of settlement, land use, economic activity, distribution of natural resources.
- Geographical skills/fieldwork use of maps, atlas', globes to locate countries and features. Use the 8-point compass, 4 and 6-figure grid references, and map symbols. Local work observing, measuring and recording features via maps and sketches.

Intrinsic Subject Value

Geography is essential for students developing their sense of place in their wider world and developing an understanding for their actions and responsibilities. Without geography, students will struggle to understand the landscape around them, it may also mean they struggle to consider different cultures, ethnicities, populations and interactions. Alongside this, students will develop an appreciation of the interdependence between humans and nature. Geographers thrive in society as they develop the social, emotional, and political literacy they need to engage in the 21st century. Without geography, society will not be able to tackle the issues of racism, over-population, resource deficit and climate change as geography provides the fundamental basis of understanding of all of these.

'Subject' themes that run through the curriculum

Sustainability
Risk/Conflict

Scale

Place

Interdependence

ear 7

SOL Title: Africa

Rationale:

Students will have developed an understanding of spatial awareness of world at KS2 and understand basic differences between locations. In this topic students will further this knowledge looking at the variations within the continent of Africa. This topic helps them to continue developing their place knowledge to understand the geographical similarities and differences between different regions and conquer stereotyping and misconceptions surrounding Africa. Within this, students develop an appreciation for their own sense of place, and the contrasts between their own lives and those elsewhere as they tackle issues of inequality and challenges such as famine and drought, which will be essential when later considering challenges in megacities and eventually global inequality.

Substantive Knowledge:

- Is Africa a country or continent?
- What are the stereotypes about Africa?
- How many countries does Africa have?
- What are the human features in Africa?
 (Pyramids of Giza, Marrakesh)
- What are the physical features in Africa?
 (Mt Kilimanjaro, Sahara Desert)
- How do we complete a fieldsketch?
- What is a biome?
- Which biomes exist in Africa?
- What are the deserts of Africa like?
- How developed are African countries?
- What are the challenges faced in Africa?
 (Drought and Famine)

Disciplinary Knowledge:

- Contextual knowledge of location.
- Application of subject specific terminology
- Concept of misconceptions leading to bias.
- Data interpretation.

Difficult Knowledge and Scaffolding:

- How do we measure development in Africa? (use of dual coding, focus on key terminology, comparing countries).
- How do lines of latitude affect where biomes are?

Prior learning / retrieval:

- What is a continent?
- What are the names of the 7 continents?
- What are the names of the 5 oceans?
- What are human features?
- What are physical features?
- What is a biome?

SOL Title: Changing Landscapes

Rationale:

This topic introduces students to the types of landscapes, and the impacts they have on landscapes. In developing this knowledge, students are required to apply their understanding from the KS2 and use this to develop a locational knowledge and an appreciation for a variety of human actions and their impacts around the world. In studying this, students will also consider sustainability and how human-kind can alter their behaviour to care for the planet, they will also develop a greater appreciation for the interdependence and interactions between humankind and the physical environment. This will be further developed at a smaller scale when considering rivers, coasts and extreme environments later on in KS3.

Substantive Knowledge:

- What is a landscape?
- How can we describe landscapes?
- What makes a 'British' landscape?
- How can humans impact landscapes?
- How do humans affect the oceans?
- What are the impacts of plastics in the ocean?
- How can we reduce our plastic usage?
- Which is climate change? What is the evidence for climate change?
- How have humans caused climate change?
- What are the global effects of climate change?
- How we can mitigate climate change?

Disciplinary Knowledge:

- Application of subject specific terminology
- Concept of sustainability
- Consideration of human impact.
- Data interpretation

Difficult Knowledge and Scaffolding:

- What are the perceptions of the British landscape?
- Evidence for climate change.
- Mitigating climate change

Prior learning / retrieval:

- What is a human feature?
- What is a physical feature?
- What is a landscape?
- Where is Britain? (links to UK mapping).

SOL Title: Map Skills

Rationale:

Building on KS2 knowledge, students will recap and recall key map skills learning such as compass directions, scale, distance and grid references. They will then develop this further in relation to OS maps, and in the application of multiple skills at a variety of scales. This topic is an important opportunity for students to develop their geographical skills and improve upon their fieldwork capabilities, supporting them to be more capable and equipped geographers. This will be further built upon in year 8 when students undertake an independent fieldwork enquiry, and later on in KS4 when students will be expected to independently practice geographical skills and apply these skills to a variety of contexts.

Substantive Knowledge:

- What is a map?
- Which countries make up the UK?
- How can we represent features on maps? (OS Symbols)
- How do we follow directions on a map?
- How do we navigate using longitude and latitude?
- How do we measure straight and curved distance on a map?
- How do we do a 4-figure grid reference?
- How do we do a 6-figure grid reference?
- Why is a 6-figure grid reference better than a 4-figure?
- What is meant by relief?
- How can we show height on maps?

Disciplinary Knowledge:

- Analysis of landscapes using map skills.
- Graphical literacy
- Data interpretation.
- Use of fieldwork equipment

Difficult Knowledge and Scaffolding:

- 6-figure grid references.
- Curved distance on map- measuring and conversion using scale.
- Students applying skills in conjunction with one another.

Prior learning / retrieval:

- What is a map?
- What is a grid reference?
- Map symbols recall.
- What is a key?
- What are the 8 points of a compass?

Links to KS3 NC:

- Extend their locational knowledge and deepen their spatial awareness of the worlds countries- focus on Africa.
- Geographical skills- maps, atlases, photographs and graphs.
- Understand geographical similarities, differences and links between places through the study of the human and physical geography of a region in Africa.

Disciplinary literacy:

- Country
- Continent
- Stereotype
- Biome
- Hot Desert
- Development
- Literacy Rate
- Life Expectancy
- Infant mortality rate

Assessment;

Questioning

Low-stakes quizzing

Retrieval

End of topic knowledge and application assessment.

Careers:

- Humanitarian aid worker.
- Census planner
- Oceanographer
- Botanist
- Zoologist

Links to KS3 NC:

- Investigating how geographical processes interact resulting in distinctive human and physical features.
- Understand the similarities and differences between geographical regions.
- Understanding how human and physical processes interact to influence and change landscapes.
- Use world maps, atlases, and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans

Disciplinary literacy:

- Landscape
- Describe
- Coastal landscape
- Fluvial landscape
- Climate change
- Carbon footprint
- Non-renewable
- Effect
- Response
- Sustainable
- •

Assessment:

Questioning

Low-stakes quizzing

Retrieval

End of topic knowledge and application assessment.

Careers:

- Cartographer
- Geologist
- Sustainability officer.
- Marine biologist
- Geomorphologist

 How can map skill help us with fieldwork?

Links to KS3 NC:

- Interpretation of geographical information
- Communication of geographical information through maps.
- Routine application of map skills within the classroom.
- Practice of geographical skills → grid references, OS symbols, direction, distance, scale, height.

Disciplinary literacy:

- Map
- OS map
- Direction
- Compass
- Map Symbol
- Longitude
- Latitude
- Scale
- Relief
- Direct distance
- Actual distance
- Contour
- Space
- Grid reference

Assessment:

Questioning

Low-stakes quizzing

Retrieval

Mid-point knowledge assessment.

End of topic knowledge and application assessment.

Careers:

- Cartographer
- Ordnance Survey
- GIS specialist

SOL Title: Settlement

Rationale:

In KS2 students will have developed their locational knowledge of UK cities and settlements, they will also be familiar with their local area. Within this topic we support students to develop this further and thus help them to develop their sense of place and identity. Further to this, students then consider settlements across a variety of scales, from villages to megacities. Within they consider access to services (economic geography), the development of new settlement and the challenges and opportunities faced in a rapidly growing urban environment. This topic will be important when students later consider the processes of urbanisation and migration (year 9) and the impacts that this can have on development across the world.

Substantive Knowledge:

- What is a settlement?
- What is the settlement hierarchy?
- What are the types of settlement?
- What settlements are in my local area?
- What are services?
- What services can a settlement have?
- What are convenience goods?
- What are comparison goods?
- Where are the major UK cities?
- What is a greenfield and brownfield site?
- What is a megacity?
- What are the challenges and opportunities in a megacity? (Mumbai)

Disciplinary Knowledge:

- Contextual knowledge of their local
- Application of higher tier terminology
- Map and data analysis

Difficult Knowledge and Scaffolding:

- How does the threshold population affect settlement type?
- What are convenience and comparison goods?
- What are the positives and negatives of a greenfield and brownfield site?
- What are the challenges of living in a megacity?

Prior learning / retrieval:

- What is a human feature?
- What is a physical feature?
- What is meant by scale?
- What is meant by place?

SOL Title: The Wellington Enquiry

Rationale:

An introduction to enquiry. Students investigate a local issue according to Geographical enquiry processes. Throughout KS2 might have undertake a small-scale on site fieldwork, and have some experience in collecting primary data. Throughout this topic we develop students independence in carrying out a fieldwork enquiry, with students considering types of data, methods of data collection, data presentation and concluding and analysing results. This will also build upon their ability to work as part of a group, in doing this, students will become more reflective and they develop their evaluative skills. Further to this, students will later undertake further fieldwork into KS4 where they will independently apply their geographical knowledge and skills to a physical geography enquiry.

Substantive Knowledge:

- What is an enquiry?
- What are the key parts of an enquiry?
- How do I collect primary and secondary
- What is primary and secondary data?
- What is qualitative and quantitative data?
- Why do we do a risk assessment?
- What makes a good questionnaire?
- What are open and closed questions?
- How do I work as part of an enquiry
- How do I present my enquiry data?
- How do I reach conclusions from my data?
- How do I evaluate my investigation?

Disciplinary Knowledge:

- Carrying out fieldwork- eg, designing an enquiry, data collection methods, data presentation etc.
- Developing independence
- **Graphical literacy**
- Group work and I.T. skills

Difficult Knowledge and Scaffolding:

- How do we design an enquiry?
- Selecting appropriate data collection methods.
- Selection of data presentation methods.
- Drawing conclusions from data.

Prior learning / retrieval:

• What is a settlement?

SOL Title: Weather and Climate Rationale:

In KS2 students will likely have learnt the differences between weather and climate, as well as an understanding for how climate has changed since the ice age. Within this topic, students will continue to develop their appreciation for the interdependence between physical landscapes and humankind (furthering knowledge form year 7).In learning about weather and climate, students will build upon their knowledge of both the national and international environments worldwide. Students will consider the power of natural phenomena such as extreme weather and the reliance of humans on the natural world. This will build on the year 7 topic of changing landscapes and rivers, as well as preparing students for the tectonics topic in year 9 and KS4.

Substantive Knowledge:

- What is weather?
- What is climate? How can we measure the weather?
- How can weather affect our lives?
- Why is UK weather so changeable?
- How are climates different around the world?
- What is a climate graph?
- Why is UK weather so changeable?
- What were the causes and effects of the beast from the east?
- What were the effects and responses to the Australian bushfires?
- How is climate change affecting our planet?
- What are the impacts of flooding?

Disciplinary Knowledge:

- Developing independence
- **Graphical literacy**
- Group work and I.T. skills
- Data analysis

Difficult Knowledge and Scaffolding:

- The human and natural causes of climate change.
- How can we describe pressure zones and weather fronts using maps?
- How does the GAC affect biome location?

Prior learning / retrieval:

- What is weather?
- What is climate?
- What are the types of weather?

SOL Title: Rivers

Rationale:

Students will have previously looked fluvial environments at KS2, however, this is often limited to the water cycle and causes and consequences of flooding. In year 7 they will have also learnt about the global impacts of humans on landscapes and have started to understand the interactions between human and physical geography. Students bring together their experiences and understanding of landscapes and map skills to learn about the relationship between water and the land. Students will begin to understand the physical

processes of change as well as the landforms that arise when hydrology meets geology. Along with how human activity in river drainage

basins are influenced by topological changes.

Substantive Knowledge:

- What is a river?
- How does the water cycle affect rivers?
- What is a drainage basin?
- What are the features of a drainage
- What is the long profile of a river?
- What are the processes in a river?
- How do waterfalls form?
- How does a meander form?
- What is flooding?
- Why does a river flood?
- What impacts does flooding have?
- What caused the Boscastle flood?
- How can we manage rivers?

Disciplinary Knowledge:

- Use of subject specific terminology.
- Cost/benefit analysis and use of judgement and inference.
- Concept of sustainability
- Data interpretation.
- Evaluation and critical thinking

Difficult Knowledge and Scaffolding:

- How do fluvial processes alter the shape of the river from upper to lower course?
- Formation of oxbow lakes.
- Flood hydrographs.
- Human interference and the impacts on the drainage basin.

Prior learning / retrieval:

- What are the key parts of the water cycle?
- What is a landscape?
- Is a river a human or physical feature?

SOL Title: Industry

Rationale:

In KS2 students should have developed an understanding of the primary, secondary and tertiary sectors of industry, at KS3 this will be expanded upon to include the quaternary sector. In this topic, students will develop their understanding of land-use and economic development in the UK and elsewhere across the globe, recapping key ideas from the settlement topic earlier in the year. Further to this, there will again be consideration for the impacts that humankind has on the planet, furthering knowledge from year 7 changing landscapes. Following this, students will consider the importance of economic geography for global development in year 9.

Substantive Knowledge:

- What is industry?
- What are the 4 types of economic activity?
- What is tourism?
- Why has tourism increased?
- What positive and negative effects can tourism cause?
- How has tourism affected Kenya?
- What is ecotourism?
- How has eco-tourism supported the
 - Galapagos Islands?
- Why has the UK steel industry declined?
- What are the impacts of industrial
- decline? What are business and science parks?
- What are the features of business and science parks?

Disciplinary Knowledge:

- Graphical literacy
- Group work and I.T. skills.
- Use of subject specific terminology.
- Cost/benefit analysis and use of judgement and inference.
- Concept of sustainability

Difficult Knowledge and Scaffolding:

- What is the quaternary industry? And giving examples.
- How can tourism be made more sustainable? (example of the Galapagos)
- UK moving to the post-industry economy.
- DME- deciding industry location.

- How do we complete a 4-figure grid reference?
- How do we complete a 6-figure grid reference?
- What do OS map symbols show us?
- What is a settlement?
- What is a service?
- What is the threshold population?

Links to KS3 NC:

- Interpret Ordnance Survey maps in the classroom and the field, including using grid references and scale, topographical and other thematic mapping, and aerial and satellite photographs.
- Extending their locational knowledge and deepen their spatial awareness.
- Development of place knowledge of their local area.
- Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in human geography relating to population and land use.

Disciplinary literacy:

Settlement

Hierarchy

Services

Greenfield site

Brownfield site

Megacity

Threshold population

Sphere of influence

Comparison goods

Convenience goods

Assessment:

Questioning

Low-stakes quizzing

Retrieval

End of topic knowledge and application assessment.

Careers:

- Cartographer
- Urban Planner
- Site manager
- Project manager
- GIS analyst

- What makes a good field sketch?
- What is a human feature?
- What is a physical feature?
- What is an enquiry?
- What sections make up an enquiry?
- What is primary data?
- What is secondary data?

Links to KS3 NC:

- Use of GIS to view, analyse and interpret places and data.
- Develop students sense of place in their locale.
- Build on their knowledge of globes, maps and atlases and apply and develop this knowledge routinely in the classroom and in the field.
- Use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data
- Use of topographical maps, satellite images and graphical data.

Disciplinary literacy:

- Enquiry
- Fieldwork
- Hypothesis
- Introduction
- Methodology
- Results
- Conclusion
- Evaluation
- Primary data
- Secondary data

Assessment:

Questioning

Low-stakes quizzing

Retrieval

Students to complete their own fieldwork write up to create a portfolio answering and evidencing their enquiry.

End of topic knowledge and application assessment.

Careers:

- Cartographer
- Field studies council
- The forestry commission
- Town planner
- Politician

- What is the weather in the UK like?
- What are the different climate zones?
- What is a biome?
- What are the types of global biomes?

Links to KS3 NC:

- Understand how human and physical processes interact to influence and change landscapes, environments and the climate, and how human activity relies on the effective functioning of natural systems.
- Development of locational knowledge.
- Understanding the key physical processes of weather and climate, including the change in climate from the ice age to the present.
- Understanding of how human and physical processes interact to influence environments and climates.

Disciplinary literacy:

- Weather
- Climate
- Meteorologist
- Precipitation
- Humidity
- Prevailing wind
- Air mass
- Ocean current
- Bushfire
- Response
- TemperateAir pressure

Assessment:

Questioning

Low-stakes quizzing

Retrieval

End of topic knowledge and application assessment.

Careers:

- Cartographer
- Volcanologist
- Meteorologist
- Environments Agency
 Aid worker
- **Emergency Services**
- Town planner
- Crisis planner

- What does the term fluvial mean?
- What are the 3 parts of a river profile?
- What is a drainage basin?
- What is erosion, deposition and transportation?

Links to KS3 NC:

- Build on knowledge of globes, maps and atlases.
- Use of GIS to view analyse and interpret places.
- Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in physical geography relating to hydrology and rocks.
- And, human geography relating to urbanisation and the use of natural resources.
- Locational knowledge- UK example.
- Understand how human and physical processes interact to influence and change landscapes, environments, and the climate; and how human activity relies on the effective functioning of natural systems.

Disciplinary literacy:

- River
- Long Profile
- Erosion
- Deposition
- Transportation
- Drainage Basin
- Water cycleFlooding
- Hard engineering
- Soft engineering

Assessment:

Questioning

Low-stakes quizzing

Retrieval

Mid-point knowledge assessment. Students complete knowledge test of key landforms, features, and processes along the river profile.

Careers:

- Water quality analyst
- Hydrologist
- Catchment officer
- Planning advisor
- Environments agency
- Geomorphologist

Prior learning /retrieval:

- What is industry?
- What are the different types of settlement?
- How has land use changed in Taunton Deane?
- What does economic mean?
- What are the 4 types of economic activity?
- What is a landscape?
- How can humans affect landscapes?
- What is tourism?
- What is meant by sustainability?

Links to KS3 NC:

- Developing locational knowledge and expanding their spatial awareness.
- Understanding the processes within human geography including economy activity in the primary, secondary, tertiary sectors.
- Building on knowledge of globes and atlases.

Disciplinary literacy:

- Industry
- Economic
- Primary
- SecondaryTertiary
- Tourism
- Industrial revolution

Manufacturing

- Sustainable
- Ecotourism

Assessment: Questioning

Low-stakes quizzing

Retrieval
End of topic knowledge and application assessment.

Careers:

- Hotel manager
- Resort manager
- Farmer

		Countryside OfficerEcologistTravel Agent

SOL Title: Tectonics and Hazards

Rationale:

In KS2 students have developed an appreciation for geological timescales and the basics of plate tectonics such as the earths' structure and location of tectonic plates. Within this topic they will develop an understanding of how tectonic processes change the world and the hazards this can produce. Students will begin to understand why earthquakes, volcanoes and tsunamis happen. Students will learn about the Indian Ocean Tsunami and consider how aid can be used to help people affected by natural hazards. This knowledge is essential for their understanding of the natural world and its effects on society. Students will develop the scheme of knowledge building upon Year 8 Weather and Climate topic, this will also provide a base of knowledge prior to the Year 10 Natural Hazards Topic.

Substantive Knowledge:

- What parts make up the structure of the earth?
- What are plate boundaries, and which boundaries make up our earth?
- What causes tectonic plates to move?
- What are the 3 types of plate margin?
- What is an earthquake?
- What were the effects and responses to the Lombok Earthquake of 2018?
- How does a tsunami form?
- When did the Indian Ocean Tsunami happen?
- What were the impacts of the Indian Ocean Tsunami?
- Who are Shelterbox?
- How do Shelterbox help countries after natural disasters?)
- What is the structure of a volcano?
- What causes volcanoes to erupt?

Disciplinary Knowledge:

- Use of subject specific terminology
- Map analysis
- Evaluative/DME skills (how should we respond?)
- Cost/benefit analysis and use of judgement and inference.

Difficult Knowledge and Scaffolding:

- Naming and giving exemples of plate boundaries.
- Formation of tsunamis.
- The types of volcanoes and their properties.
- Evaluating the effects of earthquakes/tsunamis and volcanoes.

SOL Title: Population

Rationale:

Following on from their work in year 8 regarding settlement and year 7 Africa, students will now begin to understand the conflicts and inequalities of the world they live in, developing an understanding of inequality and global policy. Students are now ready to learn about more complex population dynamics including why people migrate, population policy and the use of population pyramids to manage and predict future population demographics. Students will learn about the factors that influence population and develop empathetic knowledge of the reasons for international migration which is largely debated through politics in modern society. Following on from this, students will consider the economic and societal impact this has across the world in their development topic.

Substantive Knowledge:

- What is population?
- What has happened to global population over time?
- What are push and pull factors?
- Why do populations change (changes in birth and death rate)?
- What is the natural increase?
- What was the Chinese One Child Policy?
- What were the positives and negatives of the One Child Policy?
- What is a population pyramid?
- What is migration?
- What are the types of migrants?
- Why do people migrate?
- How has migration affected the UK?
- Why are people migrating from Mexico?

Disciplinary Knowledge:

- Use of subject specific terminology
- Graphical skills: population pyramids
- Map analysis
- Evaluative skills One Child Policy

Difficult Knowledge and Scaffolding:

- The effects of global population on resources.
- Using population pyramids to represent changing populations.
- The types of migrants.
- Causes of migration from Mexico.

Prior learning / retrieval:

• What is population?

SOL Title: Development

Rationale:

Having understood the reasons why people migrate out of 'LIC' countries, student can now build on their understanding of how some countries have become more developed that others and what can be done to address this. In addition to this, they will again revisit the idea of urbanisation which will have been discussed in year 8 settlement. This builds further on the year 7 work on Africa and its inequalities but also link to work done throughout year 8 industry where students consider economic development. Development will be studied further in Year 11 in the Economic World Topic. It is important for students to study this as it promotes a considerate global citizen and prepare them to tackle global issues such as poverty, governance and aid.

Substantive Knowledge:

- What is development?
- How do we measure development?
- What is the development gap?
- Why is there a development gap?
- Why are some countries rich and some countries poor?
- What is globalisation?
- What has caused globalisation?
- What is fast fashion?
- Why is fast fashion a problem?
- How do TNCs affect their host countries?
- How do we help less developed countries?
- How does Fairtrade help farmers in LICs?
- Why is Russia a superpower?
- Why is sustainable development needed?

Disciplinary Knowledge:

- Use of subject specific terminology
- Data analysis skills (development indicators)
- Evaluative skills (TNCs)
- Research and IT skills (aid organisation research)

Difficult Knowledge and Scaffolding:

- The measures of development- what do they show?
- How can we address the development gap?
- Causes of globalisation?
- Evaluating the impacts of TNCs.
- The relationship between population and development.

SOL Title: Coasts

Rationale:

Students will develop an appreciation of the interactions of human and physical phenomena through studying coastal landscapes, this is important as it is an important environment for management within their local area. This topic develops on the topic of landscapes in year 7 and can be compared and contrasted with the work on rivers in summer 2 of year 7. Through studying the interactions of human and physical processes, students develop a greater appreciation for how landscapes change and how human activity relies on the functioning of natural systems. Students may develop this further in their study of UK Physical landscapes in KS4 and beyond.

Substantive Knowledge:

- Which processes change the coast?
- What are the two types of wave?
- What is longshore drift?
- How do waves transport material?
 Which landforms can be created through erosion?
- How do cave-arch-stack-stumps form?
- How do wave-cut platforms form?
- Which landforms can be created through deposition?
- How do spits and bars form?
- What are the impacts of coastal erosion?
- How can we manage a coast through hard engineering?
- How can we manage the coast through soft engineering?

Disciplinary Knowledge:

- Evaluative / DME skills.
- Concept of sustainability
- Use of subject specific terminology
- Map analysis
- Cost/benefit analysis and use of judgement and inference.

Difficult Knowledge and Scaffolding:

- Process of wave formation
- Chronology of landform formation.
- Evaluations of hard and soft management strategies.

Prior learning / retrieval:

- What is a human feature?
- What is a physical feature?
- What is a landscape?
- What is erosion?
- What is deposition?
- What is transportation?

SOL Title: Extreme Environments

Rationale:

At KS2 students will have done local studied for small-scale ecosystems, they may have also developed an understanding of some global biomes having a basic knowledge of their climate and species. In this topic, students develop a wider understanding of ecosystems not found in the UK (tropical rainforests and glacial environments) and why they are important. Students develop on their understanding of ecosystems from our Year 7 Africa topic and also develop further on their awareness of global biomes explored throughout the weather and climate topic in year 8. In Year 11 students will study case studies a tropical rainforest and a desert as part of their Living World topic. This topic is essential in understanding the interdependence between human and physical phenomena and the importance of sustainability.

Substantive Knowledge:

- What and where are the biomes found?
- What is a biome?
- What is the climate of a tropical rainforest?
- What do climate graphs show?
- How have plants and animals adapted to tropical rainforests?
- Why are rainforests important?
- What is deforestation?
- Why does deforestation happen?
- How can rainforests be managed?
- How much of the earth is covered by
- How has the amount of ice cover
- changed? ______
- Which erosional landforms are found in glaciated environments?
- What is a corrie?
- What is an arete?
- What is a pyramidal peak?
- How are glaciated areas shown on maps?
- How do humans affect glacial environments?

Disciplinary Knowledge:

- Graphical skills construction and interpretation of climate graphs
- Evaluative / DME skills e.g. How should the rainforest be managed?

The 3 types of plate boundaries (using subject specific terminology).

Prior learning / retrieval:

- What are physical and human features?
- What is an earthquake?
- What is a volcano?
- Why do volcanos and earthquakes
- What dangers can tectonic hazards bring?

Links to KS3 NC:

- Extend their locational knowledge and deepen their spatial awareness of the world's countries using maps of the
- Physical geography relating to geological timescales and plate tectonics
- How human and physical processes interact to influence, and change landscapes
- Understand geographical similarities, differences, and links between places through the study of human and physical geography of a region ... within Asia

Disciplinary literacy:

- Core
- Mantle
- Crust
- Tectonic plates
- Convection currents
- Constructive boundary
- Destructive boundary
- Conservative boundary
- Earthquake
- Focus
- **Epicentre**
- Volcano
- Tsunami
- **Effects**
- Immediate Response
- Long term response
- Primary effect
- Secondary effect

Assessment:

Questioning

Low-stakes quizzing

Retrieval

Knowledge quiz

Application task- shelterbox assessment

Careers:

- Cartographer
- Volcanologist
- Aid worker
- **Emergency Services**
- Crisis planner

- What is settlement?
- What are the types of settlement?
- What is development?
- How developed is Africa?
- How can we measure development?
- Why do parts of Africa struggle with development?

Links to KS3 NC:

- Extend their locational knowledge ... Asia (including China...)
- Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in: Human geography relating to: population
- Build on their knowledge of globes, maps and atlases and apply and develop this knowledge routinely in the classroom and in the field
- Use Geographical Information Systems (GIS) to view, analyse and interpret places and data
- Develop greater competence in using geographical knowledge, approaches and concepts [such as models and theories] and geographical skills in analysing and interpreting different data sources.

Disciplinary literacy:

- Population density
- Population distribution
- Push factor
- Pull factor
- Birth rate
- Death rate
- Natural increase
- Migration
- Refugee
- Population pyramid

Assessment:

Questioning

Low-stakes quizzing

Retrieval

End of topic knowledge and application assessment.

Careers:

- Census analyst
- Lawyer
- Journalist
- Politician
- Data analyst

Prior learning / retrieval:

- What is development?
- What are the different development indicators?
- What is birth rate?
- What is death rate?
- What is infant mortality?
- What is life expectancy?
- What are the 4 types of industry?
- How can industry affect development?

Links to KS3 NC:

- Human geography relating to: population and urbanisation; international development; economic activity in the primary, secondary, tertiary and quaternary sectors; and the use of natural resources.
- Extend their locational knowledge and deepen their spatial awareness of the world's countries using maps of the world to focus on Africa, Russia, Asia (including China and India)
- Build on their knowledge of globes, maps and atlases and apply and develop this knowledge routinely in the classroom and in the field
- Use Geographical Information Systems (GIS) to view, analyse and interpret places

Disciplinary literacy:

- Development
- Standard of living
- Development indicator
- Birth rate
- Death rate
- Life expectancy
- Infant mortality
- Literacy rate
- Trade
- Import
- Export
- Sustainable development
- Fairtrade
- Globalisation
- Superpower
- Trans-national corporation (TNC)

Assessment:

Questioning

Low-stakes quizzing

Retrieval

Mid-point knowledge assessment. End of topic knowledge and application assessment.

Careers:

- Crisis Planner
- Aid worker

Links to KS3 NC:

- Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in physical geography relating to hydrology and coasts.
- Understand how human and physical processes interact to influence, and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems.
- Interpret Ordnance Survey maps in the classroom and the field, including using grid references and scale, topographical and other thematic mapping, and aerial and satellite photographs
- Use Geographical Information Systems (GIS) to view, analyse and interpret places and data

Disciplinary literacy:

- Coast
- Constructive wave
- Destructive wave
- Erosion
- Deposition
- Transportation
- Longshore Drift
- Weathering
- Attrition
- Abrasion
- Hydraulic action
- Solution
- Traction Suspension
- Saltation
- Soft engineering Hard Engineering

Assessment:

Questioning

Low-stakes quizzing

Retrieval

assessment

Mid-point knowledge assessment. End of topic knowledge and application

Careers:

- **Ecologist**
- Conservationist
- Geomorphologist Town planner
- Defence planner
- Engineer

- Concept of sustainability
- Use of subject specific terminology

Difficult Knowledge and Scaffolding:

- Using climate graphs to identify biomes.
- Managing the rainforest.
- Causes and management of desertification.
- Landforms of glaciation- use of process to explain formation.
- Recognising glacial landscapes on OS
- Effect of climate change on extreme environments.

Prior learning / retrieval:

- What are human and physical features?
- What is biome?
- What biomes can you find in Africa?
- What is climate? What is the climate of the rainforest?
- What does a climate graph show?
- How can climate affect development? What is sustainability?

Links to KS3 NC:

- The world's countries ...focusing on their environmental regions, including polar and hot deserts, key physical and human characteristics,
- Physical geography relating to
- ...weather and climate Human geography relating to... the use of natural resources
- How human and physical processes interact to influence, and change landscapes, environments, and the climate; and how human activity relies on effective functioning of natural systems
- use Geographical Information Systems (GIS) to view, analyse and interpret places and data

Disciplinary literacy:

- Biome
- Ecosystem
- Food Web Adaptation
- Climate
- Deforestation
- Sustainable management
- Hydro-electric power

	T	1		
	- GIS Analyst		Ecotourism	
	- Urban planner		Logging	
	- Accountant		Interdependence	
			Glacier	
			Ice sheet	
		•	Ice field	
		•	Plucking	
		•	Abrasion	
		•	Corrie	
		•	Pyramidal peak	
		•	Arête	
		Assessi	essment:	
		Question	stioning	
		Low-sta	-stakes quizzing	
		Retriev		
		Mid-po	point knowledge assessment.	
		End of	of topic knowledge and application	
		assessn	sment.	
		Careers	ers:	
			Conservationist	
		_	Botanist	
		_	Zoologist	
			Miner	
			Sustainable energy planner	
			Sustainable Chergy planner	