

Geography Unit Plan

Y6 – Autumn 1- Journey to Antarctica?

National Curriculum:





Pupils should be taught to:

- locate the world's countries, using maps to focus on Europe and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities
- name and locate countries and cities of the United Kingdom, 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;
- 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).
- 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
- describe and understand key aspects of:
 - *Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountain, volcanoes and earthquakes, and the water cycle;*
 - *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*
- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied;
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of OS maps) to build their knowledge of the UK and the wider world;
- 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.

Prior Learning What children have learned previously	Current Learning What children will learn now and build on previous knowledge	Future Learning What children will learn building on what they are learning now
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<p>In Year 5 children will be required to:</p> <ul style="list-style-type: none"> - Locational Knowledge: Locate the main countries in Europe and North or South America. Locate and name principal cities. Compare 2 different regions in UK rural/urban. Locate and name the main counties and cities in England. Linking with History compare land use maps of UK from past with the present, focusing on land use. Identify the position and significance of latitude/longitude and the Greenwich Meridian. Linking science, time zones, night and day. - Place Knowledge: Compare a region in UK with a region in North or South America with significant differences and similarities. E.g. Link to Fairtrade. - Human & Physical: Describe and understand key aspects of: Physical geography including volcanoes and earthquakes, looking at plate tectonics and the Ring of Fire. Human geography including trade between UK and Europe and ROW. Fair/unfair distribution of resources. - Geographical Skills & Field Work: Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Use the eight points of a compass, four-figure grid references, symbols and key to build their knowledge of the UK in the past and present. Use fieldwork to observe, measure 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. 	<p>In Year 6 children will be required to:</p> <ul style="list-style-type: none"> - Locational Knowledge: On a world map, locate the main countries in Africa, Asia and Australasia/Oceania. Identify their main environmental regions, key physical and human characteristics and major cities. Name and local the key topographical features including coast, features of erosion, hills, mountains and rivers. Understand how these features have changed over time. - Place Knowledge: Compare a region in UK with a region in North or South America with significant differences and similarities. E.g. Link to Fairtrade. Understand some of the reasons for similarities and differences. - Human & Physical: Describe and understand key aspects of: physical geography including climate zones, biomes and vegetation belts. Distribution of natural resources focussing on energy. Explore types of settlements in modern Britain. - Geographical Skills & Field Work: Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Extend to 6 figure grid references with teaching of latitude and longitude in depth. Expand map skills to include non-UK countries. Use fieldwork to observe, measure 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 	<p>KS3 Geography Curriculum</p>
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Threshold Concepts:

 Locational Knowledge	 Place Knowledge	 Human & Physical	 Geographical Skills & Field Work
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Subject Specific Pedagogy:

Children engage in a valid **geographical enquiry** or puzzling key question through which the learning grows over the sequence of lessons. Children are encouraged to devise their own enquiry questions & ways of tackling them.

GEOGRAPHICAL ENQUIRY










KNOWLEDGE OF UNDERSTANDING OF

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COMMUNICATION

Children are always required to organise and communicate their findings at the end of a sequence of learning so their learning gains coherence. Children use their understanding of the geography studied to help them decide how to organise & present their ideas most effectively.

Unit Focus:	Physical				
Key Vocabulary:	Antarctic Polar understanding composition latitude longitude landmass seasonal variation terrain	Shackleton misconception expedition glaciers influence exploration mountainous exploration Endurance	Ecosystem Biodiversity Current River	Regions Weather] Bays	Map Co-ordinates OS Scale Compass 6 figure reference
Key Text(s):	Shackleton's Journey				
Number of weeks:	6 weeks		Number of sessions:	12 sessions	

Key Learning:		Geographical enquiry: <ul style="list-style-type: none"> Suggest questions for investigating Use primary and secondary sources of evidence in their investigations Investigate places with more emphasis on the larger scale; contrasting and distant places Collect and record evidence unaided Analyse evidence and draw conclusions e.g. from field work data on land use comparing land use/temperature, look at patterns and explain reasons behind it 	Maps: <ul style="list-style-type: none"> Follow a short route on an OS map. Describe features shown on OS map Locate places on a world map Use atlases to find out about other features of places (e.g. mountain regions, weather patterns) Confidently identify significant places and environments Recognise world map as a flattened globe 							
		Direction/Location: <ul style="list-style-type: none"> Use 8 compass points confidently and accurately; Use 4 figure co-ordinates confidently to locate features on a map. Begin to use 6 figure grid references; use latitude and longitude on atlas maps 	Scale/Distance: <ul style="list-style-type: none"> Use scale to measure distances Draw/use maps and plans at arrange of scales 							
Teaching Sequence:										
Significant Place:		Antarctica								
Week 1	Session 1:	Key Question: Enquiry & Communicate: <i>Antarctica; a curious continent?</i>	Task: Children are given a map of the world, locate Antarctica and other key geographical information such as bays around the coast. Discuss how the map notes mainly coastal locations, which have been named. Provide a zoomed in version of Antarctica, create a key for the different land uses/forms. Create a 'top trump' card for Antarctica. Note specifications such as average temperature, land forms, length of days, length of seasons, along with other physical geographical features. Differences about seasons are recorded.							
		Key Learning: <ul style="list-style-type: none"> Locate Antarctica's place on the Earth and on a map Understand the physical geography of Antarctica as a polar region; different land forms and terrain Recognise the seasonal/geographical variations in time Understand Antarctica's size and composition 								
	Session 2:	Key Question: Enquiry & Communicate: <i>So why is it so cold at the poles?</i>	Task: Key language: latitude, longitude, equator, northern hemisphere, southern hemisphere, time zone, Greenwich Meridian, Tropics of cancer and Capricorn and Arctic and Antarctic Circle. Watch video Quiz, quiz trade Label map with the above words. Children complete the jigsaw sharing their facts and knowledge about each key word. How would the world be different if the equator line was here?							
		Key Learning: <ul style="list-style-type: none"> Know why Earth's polar regions are so cold Explain why one Pole is colder than the other;. Know Antarctica is colder than the Arctic 								
		Key Learning: <ul style="list-style-type: none"> Explain what a glacier is and how they form Identify main types of glacier Use and develop specialist geographical vocabulary/terminology to describe glacial movement 								
Week 2	Session 3:	Key Question: Enquiry & Communicate: <i>What does Antarctica mean?</i>	Task: Children are given a range of photographs and key words. They are asked to deduce clues from these words and images. They need to make connections between them. Next introduce sentences. They must communicate there understanding of the images and key words to complete the sentences. Words and photographs are related to seasons and climate in Antarctica. Complete a mind map.							
		Key Learning: <ul style="list-style-type: none"> Reach informed conclusion as to why hot/cold climate zones influence of the earth's orbit on the climate zones? <ul style="list-style-type: none"> Communicate what is life like at the South Pole. Understand the best time of year to Mvisit Antarctica. 								
	Session 4:	Key Question: Enquiry & Communicate: <i>Do people live on Antarctica?</i>	Task: True or false game about life on Anatrctica related to life on it. Children will gain key knowledge from tell me more cards with information regarding the environment, length of days and other key information associated with living in Antarctica and life on it. Children are asked to pack a suit case with all essential items.							
		Key Learning: <ul style="list-style-type: none"> Categorise aspects of the fragile environment. Understand the tilt of the Earth and it's affect on daylight. Communicate daily life in Antarctica. 								
Week 3	Session 5:	Key Question: Enquiry & Communicate: <i>Natural or not; Antarctica's long unbroken data records?</i>	Task: Show children the video clip describing the unique current that surrounds Antarctica. https://www.youtube.com/watch?v=iaEcJc3JTb0 Complete a video comprehension to gather key facts. Create a model of the Antarctic circumpolar current. Use ice cubes and water, video the model in action. Draw a diagram to show the direction and depths of the current.							
		Key Learning: <ul style="list-style-type: none"> Engage in virtual fieldwork, using multi-media and multi-sensory approach Make links between types of environment, location and geographical process. Collect and interpret data about oceans, the atmosphere and the land. Visualise what data is suggesting. Observe any trends, patterns or links. 								

	Session 6:	<p>Key Question: Enquiry & Communicate: <i>How much do you know about slow-moving but incredibly powerful rivers of ice?</i></p> <p>Key Learning:</p> <ul style="list-style-type: none"> • Explain what a glacier is and how do they form. • Identify main types of glacier. • Explain what is happening to Pin Island Glacier. • Use and develop specialist geographical vocabulary/terminology to describe glacial movement. 	<p>Task: Show key video. https://www.youtube.com/watch?v=WJgpDyP9ewQ Give children a map and several key glaciers that they have to place on the map. Comparison task: Use venn diagram to show the difference between an alpine glacier and an ice sheet.</p> <p>Complete the iceberg/glacier experiment. Childre are asked how a glacier occurs and the type of water. Children investigate what happens when a glacier is made from fresh water in comparison to salt water.</p>
	Significant Place:	Antarctica	
Week 4	Session 7 and 8:	<p>Key Question: Enquiry & Communicate: <i>What was the planned journey of the Endurance expedition?</i></p> <p>Key Learning:</p> <ul style="list-style-type: none"> • Know which explorer got to the South Pole first. • Communicate the journey including any significant geographical information. • Begin to use and develop specialist language; gather key words as the story unfolds that will help them better describe the place. • Interpret knowledge of route taking by Endurance expedition. • Read and interpret maps by using co-ordinates, measuring distances and describing what particular symbols show individually and collectively about the place. • Use aerial photographs and range of maps as an integral part of children's observations, investigations, recording and analysis of information and for identifying and discussing features. 	<p>Task: https://www.youtube.com/watch?v=2yzq96ZUi7A</p> <p>Children are given three words and three images in groups related to Shackleton's journey. They must make links between them and discuss this as a team.</p> <p>Children are given an A3 map on Antarctica. They have mini flaps that they can add after showing the route of Shackleton's journey. Each flad should mark a significant part of the journey and beneath it contain more detail.</p> <p>Children are given the map of Shackleton's journey. They must use map symbols to show where camps were. They must also work out the 6 figure compass reference to refer to these camp sites.</p> <p>Children will have a scale to work from. They must track the distance between key camps and calculate and convert the distance travelled.</p>
	Session 9:	<p>Key Question: Enquiry & Communicate: <i>Are Antarctic ecosystems changing?</i></p> <p>Key Learning:</p> <ul style="list-style-type: none"> • Identify pressures/threats facing Antarctic ecosystems. • Discuss and evaluate real decisions that affect the environment and take actions, evaluating any change as a result. 	<p>Task: Children are provided with a list of key elements which are affecting climate change and therefore impacting on the ecosystems in Antartica. Children must discuss and categorise these factors from the most dangerous to the least in regards to their impact.</p> <p>Children chose the top 5 factors and process each factor.</p> <p>Factor-> effect on Antarctic ecosystems-> Possible solution/improvement.</p> <p>Use the concept cartoon image to develop discussion. Children to create a footprint showing the changes that they could make.</p>
Week 6	Session 10:	<p>Key Question: Enquiry & Communicate: <i>Antarctica; Do we like it?</i></p> <p>Key Learning:</p> <ul style="list-style-type: none"> • Summarise and record some of the positive/negative qualities and discuss common elements identified. • Use the positive and negative vocabulary to compile an environmental assessment record that can be used to investigate different environmental qualities • Use annotated digital maps to show features that might be removed or added to improve the curious continent 	<p>Task: Children create a diamond 9 of facts about the Antarctic. They must organise them from most important to least important, record in books.</p> <p>Colour code the diamond 9 using a positive and negative key to distinguish.</p> <p>What if...? Children receive a question related to smething being added or removed from Antarctica. They must argue for and against.</p> <p>Eg.</p> <div style="text-align: center;"> <pre> graph TD A[Should there be tourism in Antarctica?] --> B[For] A --> C[Against] </pre> </div> <p>Children now complete an explanation about whether they like Antarctica. Children to focus on the effect of Antarctica on the rest of the world.</p>