

Subject	Year	Term
Geography	8	Summer term 2
Topic		Concept
What is the future of Antarctica?		Physical and human interactions
Content + skills (Intent)		
<b>Prior Learning (Topic)</b> <b>KS1/2</b> <ul style="list-style-type: none"><li>• Naming Oceans and Continents</li><li>• Weather patterns at the equator and poles</li><li>• Using atlases and globes, lines of latitude, Antarctic and Arctic circle</li><li>• Physical Geography Climate zones</li></ul> <b>KS3 at Balcarras:</b> Sustainability (year 7), Oceans (year 7), Human impacts on the physical landscape (Year 7), Climate Change (year 8)		
<p>Through this topic students will develop contextual knowledge of Cold Environments, their characteristics, and their fragility and the range of risks that they are threatened by, plus a consideration of strategies to manage and preserve this Ecosystem. A brief introduction to cold environments (Arctic and Antarctica) will start the topic to explore key characteristics, climate and adaptations of animals. Students will then study A history of Antarctica, its exploration and a look at modern scientific uses of Antarctica, as well as the Antarctic Treaty. This will allow students to consider the pressures on the continent and what the future might hold for Antarctic based on the threats and human uses. Pupils will be encouraged to explore the issues facing the future threats/uses of Antarctica and take part in a debate for oracy and be able to draw a conclusion. Misconceptions about the Arctic and Antarctica will be addressed.</p>		
<b>Future Learning (Topic)</b> <b>KS3 @ Balcarras</b> Global Tourism (year 9), How and why are ecosystems important (year 9) <b>KS4 @ Balcarras:</b> The living World (year 11), Resource management (year 11) <b>KS5 @ Balcarras :</b> Water and Carbon (year 13), Global Governance (year 13),		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
An Introduction to the differences and similarities between the Arctic and Antarctica through map interpretation and climate graph analysis of these. Study of animals and adaptations that are there to highlight the importance this has. A study of the history of exploration in Antarctica, the Antarctic Treaty and its implementation and importance will take place through discussion and video clip use. Pupils will explore expeditions in Antarctica through video clips and consider the impacts of this long term and the growth of tourism here. Study of the potential threats to Antarctica including tourism and mining as well as climate change will take place. A debate on the future of Antarctica will take place in class.	Pupils will make notes which includes annotated maps and factfiles to recall the characteristics of Antarctica, its importance and the Antarctic Treaty.  Pupils will write a blog/letter or extract as if they have been on expedition to the South Pole to show their understanding of what has been taught.  Guided Reading will set and marked  Feedback/Marking of class notes and homework will take place  Contribution to the debate by pupils	
How can parents help at home?		

Discuss current affair issues by watching/reading the news. Download the BBC or Guardian news app and set to environmental/science notifications to receive the most update articles. Watching relevant documentaries. Support with homework or use of preparation for the debate.

#### Useful websites:

<https://discoveringantarctica.org.uk/introducing-antarctica/> General facts on Antarctica  
<https://www.bbc.co.uk/bitesize/articles/z438cqt> animal adaptations to Antarctica  
<https://www.rmg.co.uk/stories/topics/race-south-pole-scott-amundsen> info about Captain Scott  
<https://www.nationalgeographic.org/encyclopedia/antarctica/> An overview of the continent  
<https://www.bas.ac.uk/science/science-and-society/education/antarctic-factsheet-geographical-statistics/> The British Antarctic Survey are the group who run scientific research in Antarctica.  
<https://www.antarcticglaciers.org/antarctica-2/introductory-antarctic-resources/ten-antarctic-facts/> The science behind the ice  
<https://www.nationalgeographic.com/travel/destination/arctic> arctic travel stories  
<https://coolantarctica.com/Travel/arctic-travel.php> lots of facts on cold environments

#### Conversation Starters:

The Wilderness status of Antarctica is under threat.  
 Why is it so cold in Antarctica? How can animals or people cope?  
 Who was Captain Scott or Edward Wilson?  
 Who was the first person to the South pole?  
 What do scientists do in Antarctica?  
 Does anyone own Antarctica? What is the Antarctic Treaty?  
 What should we do with Antarctica in the future?  
 Antarctica should be mined and used.  
 Exploration to the South Pole should be banned

#### Helpful further reading/discussion

##### Reading

Philip Pulmans the Northern Lights  
 Black Ice by Matt Dickinson  
 Shackleton's Journey by William Grill  
 Shipwreck at the Bottom of the World: The Extraordinary True Story of Shackleton and the Endurance by Jennifer Armstrong  
 DK Eyewitness Books: Arctic and Antarctic by Barbara Taylor  
 Race to the Pole, Ranulph Fiennes  
 ENDURANCE: SHACKLETON'S INCREDIBLE VOYAGE by Alfred Lansing  
 LAST MAN OFF: A TRUE STORY OF DISASTER AND SURVIVAL ON THE ANTARCTIC SEAS by Matt Lewis  
 THE WORST JOURNEY IN THE WORLD by Apsley Cherry-Garrard  
 ANTARCTICA: A NOVEL by Kim Stanley Robinson  
 ALONE IN ANTARCTICA by Felicity Aston

##### Vocabulary Lists

Antarctica  
 Arctic  
 Adaptation  
 Latitude  
 Climate  
 Antarctic Treaty  
 Expedition  
 Wilderness  
 Fragile  
 Protection  
 Scientific research  
 Climate change  
 Glacier  
 Sea level rise

##### Careers Links

Jobs linked to this lesson include; research scientists  
<https://www.bas.ac.uk/jobs/vacancies/>  
 General advice on how to get jobs in Antarctica  
<http://antarctica.kulgun.net/Jobs/>  
 Do you want to lead expeditions in Antarctica  
<https://secretcompass.com/how-to-be-expedition-leader/>  
 What about running a marathon in Antarctica?  
<https://www.icemarathon.com/>  
 Roles within the British Antarctic Survey  
[Current Vacancies - British Antarctic Survey \(bas.ac.uk\)](https://www.bas.ac.uk/current-vacancies)  
 Information you gained from the talk from Matt Dickinson Author and

<p>LEAN FALL STAND by Jon McGregor</p> <p>RACE TO THE POLE: CONQUERING ANTARCTICA IN THE WORLD'S TOUGHEST ENDURANCE RACE by Ben Fogle and James Cracknell</p> <p>THE BIRTHDAY BOYS by Beryl Bainbridge</p>		<p>explorer who has been to the South Pole and to Everest.</p> <p>For more links see the Careers page on the VLE</p>
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