

Subject	Year	Term
Geography AQA	10 (to start in final half term Year 9)	Autumn term 1 (start in summer term 2- Year 9)
Topic		
UK physical landscapes- Glaciation		
Content + skills (Intent)		
<p><b>Prior Learning (Topic)</b></p> <p><b>KS1/KS2-</b></p> <p>Use basic geographical vocabulary to refer to key physical features, including hill, mountain, sea, ocean, river, valley            Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key            Name and locate counties 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            Describe and understand key aspects of physical geography including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle            Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</p> <p><b>KS3 at Balcarras</b></p> <p>Year 7- Adventure landscapes            Year 8- Perishing places            Year 9- Clean water for everyone?</p>		
<p>In this section, students are required to study UK physical landscapes and <b>two</b> from Coastal landscapes in the UK, <b>River landscapes in the UK</b> and <b>Glacial landscapes in the UK</b>.            The aims of this unit are to develop an understanding of the geomorphological, biological and meteorological processes and features in different environments, and the need for management strategies governed by sustainability and consideration of the direct and indirect effects of human interaction with the Earth and the atmosphere.</p>		
<p><b>Future Learning (Topic)</b></p> <p>KS4 at Balcarras- River landscapes (Year 10), Natural hazards- (climate change) (Year 10), Ecosystems (cold environments) (Year 11), geographical skills across all GCSE topics,            KS5 at Balcarras- Coastal systems (Year 12), Water and carbon cycle (Year 13), Population and the environment (Year 13) geographical skills across all A-level topics</p>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>A series of lessons split into key themes. Pupils will explore ice as a powerful force and how it has shaped the physical landscape of the UK over time. Distinct glacial landforms both erosional and depositional and their formation will be explored. Lastly glaciated upland areas will be explored to see how they provide opportunities for different economic activities, and management strategies can be used to reduce land use conflicts.</p> <p>Teacher led lesson content            Group and independent research task            GCSE exam style questioning            Group discussion/debates and questioning            Reading key articles and textbooks</p>	<p>Provide SHORT and FREQUENT retrieval practice tests in a low stake environment</p> <p>Pupils will receive a past paper question booklet which covers all previous exam questions available to us. These will be regularly set and marked</p>	

## Misconceptions

### **Glaciers are white**

Glaciers are all sorts of colours. From afar, they often look white. Close to, they can be white, blue, grey, red, green, or even black!

### **Retreating glaciers flow backwards**

A glacier is a pile of ice, and will always flow downwards under gravity. If more ice melts at the snout than is replenished at the top by snowfall, then the glacier will recede, or shrink – it will still flow downwards, but the snout position moves back.

### **Glaciers move slowly**

Some glaciers on steep slopes in temperate regions can flow very fast indeed. Fox Glacier, in New Zealand, is one of the fastest-flowing valley glaciers in the world. Fox Glacier can flow at up to 5 metres per day.

### **Melting icebergs will cause sea level to rise**

Icebergs are already floating in the ocean, so melting will not raise sea level. Melting of land-based ice (such as glaciers) will raise sea level.

### **Other misconceptions.....**

<https://www.antarcticglaciers.org/antarctica-2/introductory-antarctic-resources/common-misconceptions-explained/>

Continual low-stakes formative testing in lessons through verbal questioning

This topic will be covered within the Year 10 mock exam – summative feedback

GCSE record sheet, ALPS analysis, data shared in interim reports and formal reports and parents evening.

## How can parents help at home?

Support with homework and revision techniques for graded assessments. Discuss current affair issues by watching/reading the news. Download the BBC or Guardian news app and set to environmental notifications to receive the most update articles. Watching relevant documentaries e.g. David Attenborough, wildlife/environments.

### **Places to explore**

Previous glaciated environments in the UK (Snowdonia, The Lake District)

Vertical chill, London- indoor ice climbing-Are you an adventurer? What would it be like to climb ice?

### **Watch this**

The power of the planet- 3 Ice

Frozen Planet – iPlayer

Meltdown in the shadow of Nepal's lost glaciers- Netflix

Touching the void

### **Listen to this**

Seneca podcasts

<https://senecalearning.com/en-GB/blog/geography-gcse-podcasts-by-seneca/>

Apple podcasts glaciers

<https://podcasts.apple.com/gb/podcast/glaciers/id615562171>

The climate question- What will happen if all the glaciers melt?

<https://www.bbc.co.uk/sounds/play/w3ct2drw>

Podcast with the GA on Glaciers and Glaciation

<https://www.antarcticglaciers.org/2020/09/podcast-with-the-ga-on-glaciers-and-glaciation/>

Melting away: understanding the impact of disappearing glaciers

<https://www.theguardian.com/science/audio/2021/may/11/melting-away-impact-of-disappearing-glaciers-podcast>

### **Check this out**

Glacier National Park Webcams

<https://www.nps.gov/glac/learn/photosmultimedia/webcams.htm>

All about glaciers

<https://education.nationalgeographic.org/resource/glacier-moving-rivers-ice>

The glacier trust

<http://theglaciertrust.org/>

## Conversation Starters

What would happen if the UK entered an ice age?  
Glaciers don't matter as they only cover 10 percent of land area on Earth  
Glaciers flow  
Mount Kilimanjaro can't be glaciated as it sits on the equator

## Helpful further reading/discussion

### Reading

#### Non-fiction

Ian Stewart & John Lynch [2007]: Earth – The Power of the Planet - BBC Books

Touching the void by Joe Simpson

The secret lives of glaciers by Dr M Jackson

In the shadow of melting glaciers by Mark Carey

#### Academic reading

<https://education.nationalgeographic.org/resource/glacier-moving-rivers-ice>

Have a look at the Hodder magazines online through the VLE via dynamic learning

#### Fiction

The Northern lights series by Phillip Pullman  
The White darkness by Geraldine McCaughrean  
The winter place by Alexander Yates  
After the snow by S D Crocket

### Vocabulary Lists

#### *Speaking like a geographer (Splag)*

Freeze-thaw weathering

Erosion

Deposition

Bulldozing

Conflicts

Land use conflicts

Plucking

Rotational slip

Till

<https://filestore.aqa.org.uk/resources/geography/AQA-8035-SSV.PDF>

### Careers Links

<https://www.bas.ac.uk/jobs/careers-at-bas/science/>

<https://www.antarcticglaciers.org/students-3/careers/careers/>

<https://www.careermatch.com/job-prep/career-insights/profiles/glaciologist/>