Objectives and key words				
<ul> <li>I know what a glacier is</li> <li>I know where you can find Glaciers</li> <li>I understand what the last ice age was like</li> <li>I know why there are now no glaciers in the UK</li> <li>I know how glaciers are formed</li> <li>I understand that glaciers move and how they do</li> <li>I know that glaciers change the landscape</li> <li>I understand how glaciers have formed the landscape in Cumbria</li> <li>I can identify different glacier features from aerial photos</li> <li>I am able to identify glacial feature on an OS map</li> <li>I can use OS maps to show how past glaciers moved over the land</li> <li>I can identify the features caused by glaciers depositing material</li> <li>I know how glacial and glaciated areas are used today</li> <li>I can use OS map to plan a walk in a glaciated area</li> </ul>	Key Words (Tier 1, Tier 2, Tier 3): Alpine glacier Ice sheet Glaciologist Ice age Zone of accumulation Zone of ablation Glacial Interglacial Crevasse Snout Plucking Striations Moraine Meltwater Corrie Tarn Arete Pyramidal peak Hanging valley Ribbon lake U-shape valley Moraine			

NC link code: A2, C4, C8,	C10.	C11.	D1.	D3
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Prior	learning:
1 1101 1	icarring.

- Climatic variations
- Atmospheric circulation

Prior learning at KS3:

Some students will already have looked at the Lake

District, tourism and national Parks at KS2

## Future learning:

- What is Climate change
- Impact of climatic change

Hypotheses/objectives for lessons	Geographical skills			
LO1 What are glaciers and where are they LO2 What was the last ice age like and why are there no glaciers in the UK today (CC)	OS map skills Drawing sketches from			
LO3 How are glaciers formed and how do they move	aerial photos and OS			
LO4 How do glaciers change the landscape	maps			
LO5 How can OS maps show us where glaciers were deleted (added LO7)	Using aerial photos			
LO6 What landforms are made by glaciers	and OS maps to			
LO7 What can aerial photos tell us about glaciation (skills book)	identify features			
LO8 What landforms are made by glacial deposition				
LO9 How do we use glaciated areas today DELETED added to L10	Enrichment			
LO10 How could we plan a DoE style walk, that includes glaciated features using an OS	opportunity: This unit			
map	links to the DoE Bronze			
	undertaken in Y9/10,			
	as students will see the			
	features they learnt			
	about.			
Misconceptions				
Glaciers don't move				

# The climate has always been the same Glaciers are retreating

#### Success/Assessment

- Opportunities through Blooket to assess vocabulary from the key word list
- Vocabulary definition quiz
- HW activities via Educake
- An AFL activity on Glacial features
- An extended question, summarising ideas from the topic and prior learning:

### Employment skills and career opportunity

Aiming high Creativity Leadership Listening Presenting Problem solving
Literacy Numeracy Independence Communication Teamwork Staying positive

Career link: <a href="https://www.unifrog.org/student/careers/keywords/town-planner">https://www.unifrog.org/student/careers/keywords/town-planner</a>

#### Pedagogy approaches (and homework suggestions)

LO1 P242 read and complete the activities

PPt in P1 file also for what and where they are.

Folder with lesson

LO2 Either PPt and sheet (completing activities on each) OR RGS lesson on glacial time scale and interactive ICT activity on geological time scales

LO3 P 244 how and why do Glaciers form and move (information as a class and activities) Youtube videos

LO4 P246 How do they change the land?

Ppts in folder. Students need to know plucking, abrasion and freeze thaw. Sketch each one, discuss what they are. They should have a good idea if they have done the NHTW well. This may take less than one lesson. Retrieval quiz in folder.

LO5 Deleted

LO6 Corrie, tarn, arete, pyramidal peak, hanging valley, ribbon lake, U-shape valley (for higher sets, Fjord?) Erosion features powerpoint. Use of OS map, labelling features. Sketch the various landforms with labels/annotations. Good OS map of Helvellyn in the book and as a printout for labelling

LO7 Use an aerial photo to label features. This is probably going to be part of the lesson above.

There is a section in the skills book (13.2) that has an aerial photo and an OS map of the same location in Wales. Could be used for discussion/practice questions. Alternatively, Google maps and the inside cover of the blue book could be used for Helvellyn, this links better with the previous work on Helvellyn

LO8 ppt in folder on moraine types. Higher sets can learn the various types of moraine, lower to understand what moraine is.

LO9 Deleted

LO10 Revise grid references, map symbols, how to measure distance plan a walk to and from Helvellyn from Glenridding.

Use the webcam to start students off on the paper copy.

After route is plotted some students may be able to measure the distance of the walk and convert to km.