| Curriculum Plan   |  | Subject  | SWO Geography: Glaciation   | Year  | 12   |  |
|---|--|--|---|---|--|--|
| Spring 1  |  | W/C 10 <sup>th</sup> January   | W/C 17 <sup>th</sup> January  | W/C 24th January  |  |  |
| How you will access home learning   |  | The PowerPoint and lesson materials will be available in our Y12 group on Microsoft Teams. If you are isolating and working from home, check the Geography Teams group on the day that you have your lesson. There will be a post which gives information about the work and instructions about what time to join the lesson live. If there is no work set on Teams, this may be because your teacher is absent. If this happens, then please use your Geography AS textbook (on Kerboodle) to complete the activities listed below for that week. |   |   |  |  |
| How you be able to interact with your teacher and gain feedback on your work  Retrieval  How we will help you to recall previously learnt knowledge |  | You will be able to join each lesson via Microsoft Teams. This will enable you to listen to teacher delivery, to ask questions, and to complete the same tasks live, as those who are working in the lesson. You can join in with questioning in the lesson using the chat function to check your understanding.   |   |   |  |  |
|   |  | Quiz on the causes of long-term<br>climate change to recall knowledg<br>from GCSE  | · · · · · · · · · · · · · · · · · · ·   | Quick vocabulary test on ice masses   |  |  |
|   | What you will be<br>learning about<br>this week                          | An introduction to glaciation and the bigger picture; the Pleistoce and long-term climate change.  | Present and past Pleistocene distribution of ice cover; the role of the cryosphere and classification of ice masses. Warm-based and cold-based glaciers | _   | andscapes and permafrost;<br>esses and landforms   |  |
| Learning  | How we will teach<br>you the new<br>knowledge or<br>ideas                | PowerPoint content, teacher led explanations to talk through analysis of maps to explain the distribution of ice coverage during the last glacial maximum, as well as images that show evidence of glaciation  | PowerPoint content and teacher led explanations and scaffolded activities. Using images to explain the classification of different ice masses.          | scaffolded acti   | rent, teacher led explanations and<br>vities. Images of peri-glacial<br>animated diagrams will be used to<br>es. |  |
| New L   | Activities that will help you learn and practice what you've been taught | Read page 50-51 of the AS textbook of explain the characteristics of the Pleistocene. Use p.51-53 to explain the causes of long term climate change and describe the Little Ice Age  | environments. Read p.54 and define the term 'cryosphere' and describe the different types   | Use p.56-61 to help you to produce an overview of periglacial processes and landscapes. Explain what permafrost is and what periglacial landscapes are like. Use the images on the PowerPoint to support your notes. Key processes to explain are frost shattering/freeze-thaw weathering, nivation, frost heave and solifluction |  |  |

|  |   | Key landforms are block fields, patterned ground, stone polygons and pingos.  |
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|  |   | Exam Questions: Explain the importance of freeze-thaw weathering in the formation of periglacial landforms. (6 marks) |
|  | You can ask any questions during the live lesson through using the chat function on Microsoft Teams. The Teams lessons will be recorded so you can refer to teacher explanations and listen to them again. Use your online Kerboodle textbook to refer to any previous content. If you have questions in relation to any of the 12-mark exam questions, you can use the frameworks provided, and modelled explanations, to help you answer the questions. If you need to e-mail me to ask a question, then please attach a copy of the work that you have completed so far, so I can be specific in giving you feedback and help. |   |

|   |   | W/C 31st January  | W/C 7th February   |  |  |
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| How   | you will access home<br>learning  | The PowerPoint and lesson materials will be available in our Y12 group on Microsoft Teams. If you are isolating and working from home, check the Geography Teams group on the day that you have your lesson. There will be a post which gives information about the work and instructions about what time to join the lesson live. If there is no work set on Teams, this may be because your teacher is absent. If this happens, then please use your Geography AS textbook (on Kerboodle) to complete the activities listed below for that week.  |  |  |  |
| How you be able to interact with your teacher and gain feedback on your work  Retrieval  How we will help you to recall previously learnt knowledge |   | You will be able to join each lesson via Microsoft Teams. This will enable you to listen to teacher delivery, to ask questions, and to complete the same tasks live, as those who are working in the lesson. You can join in with questioning in the lesson using the chat function to check your understanding.  |  |  |  |
|   |   | Multiple choice knowledge questions on key question one of the specification; How has climate change influenced the formation of glaciated landscapes over time?  |  |  |  |
|   | What you will be<br>learning about this<br>week                                   | What processes operate within glacier systems? Glacial mass balance, accumulation, ablation and equilibrium   | How do glaciers move, and what factors affect the rate of movement?  |  |  |
| Learning  | How we will teach<br>you the new<br>knowledge or ideas                            | PowerPoint content and teacher led explanations and scaffolded activities on the inputs, outputs and stores of the glacial system.  Explanations will be around the interpretation of glacial mass balance diagrams. The 8 mark exam question will be modelled and scaffolded in the lesson activities.   | PowerPoint content and teacher led explanations and scaffolded activities. Use of diagrams and animations to demonstrate processes such as internal deformation and basal slip. Independent research on the rate of ice movement in glaciers from different locations.   |  |  |
| New Lea   | Activities that will<br>help you learn and<br>practice what<br>you've been taught | Use p.62-63 of the textbook to complete your A3 diagram on mass balance. Practise activities to calculate the mass balance of specific glaciers, including the Gulkana glacier, shown in the table in Figure 8 on p.65. Exam Practice: Explain how the glacial mass balance concept contributes to an understanding of glacial systems (8)  | Read p.66-67 of your textbook and explain the processes of ice movement including internal deformation and basal slip. Explain the factors that affect the rate of movement and use this website to research the rate of ice movement in Greenland's Jakobshavn glacier; Greenland's Fastest-Flowing Glacier Speeds Up   Climate Central |  |  |
|   | What you can do if you are stuck  | You can ask any questions during the live lesson through using the chat function on Microsoft Teams. The Teams lessons will be recorded so yo can refer to teacher explanations and listen to them again. Use your online Kerboodle textbook to refer to any previous content. If you have questions in relation to any of the 12-mark exam questions, you can use the frameworks provided, and modelled explanations, to help you answe the questions. If you need to e-mail me to ask a question, then please attach a copy of the work that you have completed so far, so I can be specific in giving you feedback and help. |  |  |  |