

**Unit 1: Physical Geography**

**Section B: Ice on the land**

| Key Ideas   | Specification Content   | 😊 | 😐 | 😞 |
|---|---|---|---|---|
| The amount of ice on a global and continental level has changed in the past.  | The last Ice Age (Pleistocene) – time scale and extent of maximum ice cover in the northern hemisphere. Present extent of ice cover. Contrasts and evidence of changes – global temperatures.   |   |   |   |
| The amount of ice depends on the glacial budget. This has seen a loss since 1950 and there are seasonal changes due to fluctuations in temperature. | Glacial budget: accumulation and ablation, advance and retreat. Case study of a glacier – recent retreat since nineteenth century: causes and evidence. Seasonal shifts in temperature and glaciers.  |   |   |   |
| Ice is a powerful force in shaping the land as a result of weathering, erosion, transportation and deposition.                                      | Freeze thaw weathering. Processes of erosion – abrasion and plucking. Processes of movement and transportation – rotational slip and bulldozing. Deposition and the reasons for it.   |   |   |   |
| Distinctive landforms result from different processes.  | Landforms resulting from erosion – characteristics and formation of corries, arêtes, pyramidal peaks, truncated spurs, glacial troughs, ribbon lakes and hanging valleys.<br>Landforms resulting from transportation and deposition – drumlins, lateral, medial, ground and terminal moraine. |   |   |   |
| Landscapes that are actively affected by snow and ice attract tourists. This leads to conflict and issues over the use of such areas.               | Case study of an Alpine area for winter sports and an area for sightseeing of glaciers – the attractions for tourists; economic, social and environmental impact. The need for management and the management strategies used and their level of success. Avalanche hazards.                   |   |   |   |
| Glacial retreat can pose a threat to the economies of areas relying on tourism and result in damage to fragile environments.                        | The impact of retreat and unreliability of snowfall in some resorts. The economic, social and environmental impact – including the concept of fragile environments.   |   |   |   |