

Knowledge Organiser – How does ice shape the landscape?



Key Words

1. **Glacier** - A glacier is a large mass of ice often shaped like a river that flows very slowly, under the force of gravity.
2. **Erosion** - the wearing away of land
3. **Deposition** - when rocks are dropped by the glacier
4. **Alpine glacier** - form on mountainsides and move down slopes through valleys.
5. **Continental ice sheet** - spread out and cover larger areas. Today, there are only two ice sheets in the world
6. **Glaciologists** - Earth scientists who investigate glaciers all over the world
7. **Ice Age** - long interval of time (millions to tens of millions of years) when global temperatures are relatively cold
8. **Interglacial cycle** - a geological interval of warmer global average temperature lasting thousands of years
9. **Glacial cycle** - an interval of time (thousands of years) within an ice age that is marked by colder temperatures
10. **Snout** - the lowest end of a glacier
11. **Zone of accumulation** - the zone of a glacier in which the amount of snow and ice that is deposited exceeds that lost



12. **Zone of ablation** - The natural removal of snow or ice from the surface of a glacier or snowfield. This can occur through melting or sublimation and, at or near the snout of a glacier, it can also occur by calving.

13. **Meltwater** - water formed by the melting of snow and ice

14. **Freeze-thaw weathering** - Water enters cracks in the rock. When temperatures drop, the water freezes and expands causing the crack to widen. The ice melts and water makes its way deeper into the cracks. The process repeats until cracks appear and rocks break away.

15. **Plucking** - Melted water at the base and sides of the glacier freeze onto the surrounding rock. As the glacier moves, the rock which is embedded in the ice is pulled away.

16. **Abrasion** - The bits of rock which are embedded in the ice from plucking and freeze-thaw weathering scrape and grind against the rock at the base and sides of the glacier, wearing it away.

17. **Moraine** - material left behind by a moving glacier.