Glacial Fundamentals & Environments

- **Glacier**: A massive, slow-moving river of ice formed from years of squished snow that shapes the land as it travels.
- **Active Glacial Environment:** A cold area where glaciers still exist today, actively carving the land and moving rock.
- **Relict (Relic) Glacial Landscape:** A landscape shaped by glaciers in the past that is no longer cold enough to have ice today, such as Snowdonia in Wales.

Glacial Cycles & Climate

- **Glacial**: A cold period in Earth's history when global temperatures drop, glaciers grow, and sea levels fall.
- **Interglacial**: A warmer period between ice ages when global temperatures rise and glaciers melt back.
- **Milankovitch Cycles:** Natural changes in the shape of Earth's orbit around the Sun that alter how much heat we receive, helping explain why ice ages happen.

Glacial Processes & Erosion

- **Rotational Slip:** How a glacier moves in a hollow, pressure and heat melt ice at the bottom to create a slippery layer, letting the heavy ice slide downhill in a curved motion.
- **Freeze-Thaw Weathering**: Water repeatedly freezes and expands in rock cracks, weakening mountain walls until chunks break off.
- **Plucking**: Glacial erosion where meltwater freezes rock onto the ice, pulling chunks of rock out of the mountain as the glacier glides downhill.

- **Abrasion:** Glacial erosion where trapped rocks at the bottom of the glacier scrape against the bedrock like giant sandpaper, grinding it down.

Glacial Landforms

- **Corrie:** An armchair-shaped hollow on a mountain formed when trapped ice deepens the rock through plucking and abrasion.
- **Tarn:** A deep mountain lake that fills up inside a corrie after the glacier melts away.
- **U-Shaped Valley:** A broad, steep-sided valley with a flat bottom carved out by a giant glacier moving through a river valley.

Glacial Transport & Deposition

- **Till:** A messy, unsorted mixture of rocks, sand, and clay carried along and dropped by a glacier.
- **Moraine:** Piles or ridges of rock and sediment (till) left behind as a glacier melts.
- **Terminal Moraine:** A ridge of sediment left at the very front edge (the end) of a glacier.
- **Lateral Moraine:** A ridge of sediment deposited along the outer sides of a glacier.
- **Ground Moraine:** A blanket of sediment frozen into the base of the glacier that gets scattered across the valley floor as the ice melts.