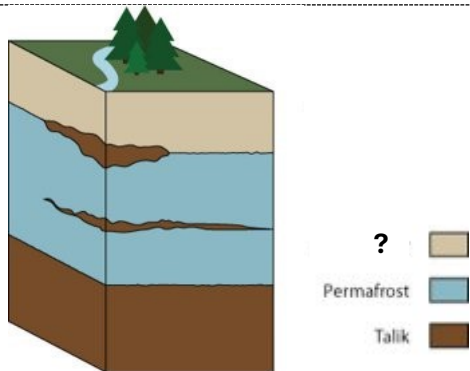
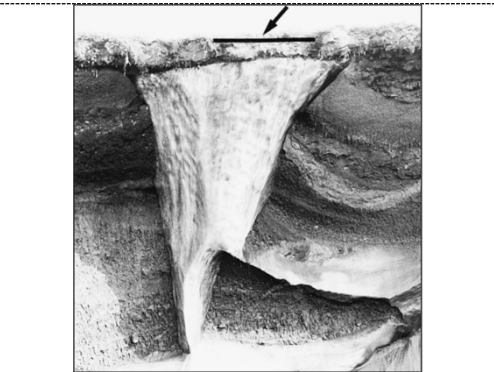




Permafrost	Ground that remains at or below 0°C for at least two years in a row. Usually that means that the ground is frozen and does not thaw during summer. Ground includes soil, rocks, sediment, organic material and ice.	 From Permafrost StoryMap
Continuous Permafrost Zone	In this zone, almost all of the ground (90-100%) is frozen.	
Discontinuous Permafrost Zone	In this zone, 50-90% of the ground is frozen.	
Sporadic Permafrost Zone	In this zone, 10-50% of the ground is frozen.	
Isolated Zone	In this zone, less than 10% of the ground is frozen.	
Subsea Permafrost Zone	In this zone, frozen ground occurs beneath the coastal seas in the polar and subpolar regions.	
Permafrost Zones	Permafrost areas are divided into zones based on the amount of frozen ground in the area.	 Canadian Permafrost Association
Active Layer	The upper layer of the ground in permafrost areas, which thaws during the summer. The active layer is often between 0.5m and 2m thick, depending on local climate and ground properties.	 From Borealb



Drunken Forest	Trees leaning in random directions in a permafrost region.	 A "Drunken Forest" in Fairbanks, Alaska by Brandon Lucas
Pingo	Uplifted frozen hills of permafrost occurring in both the continuous and discontinuous permafrost zones. The ground becomes uplifted into dome shaped hills through the freeze of liquid groundwater (closed-system pingo) or by liquid water seeping into a permafrost area and elevating the surface once solidified (open-system pingo). A cracked ridge often forms on top during the freeze process.	
Ice Wedge	When the ground freezes it often cracks in a polygonal pattern. Snowmelt water and rain can flow into the cracks and freeze, and in this way ice wedges are built up over long time and can grow to several meters thickness. The ice wedges can create polygonal patterns on the ground covering vast areas of the Arctic tundra.	 Garry Island NWT, by Worsley 2014
Polygons	A type of patterned ground formed from the action of ice wedge. As multiple ice wedges form, surrounding ground is uplifted through seasonal expansion (freeze) and contraction (melt), creating channels at the ice wedge location. Seasonal melting produces small ponds within this landscape.	



Beaded Stream	A route of small, round connected water ponds created from melting of ice wedge surfaces. Each pond overlies an ice wedge formation.	
Talik / thaw bulb	Ground in permafrost areas that is not frozen. They usually occur under lakes and streams in permafrost areas.	 By Ben Jones, USGS
Thermokarst	Landscapes that occur as a result of melting ice rich permafrost. The ice rich ground is very robust when frozen and has the ability to support a variety of land covers. Since water is most dense at 4°C, when it begins to freeze (0°C) it expands. For this reason, when permafrost ice melts, the landscape collapses from the sudden decrease in volume. This land failure creates a landscape of holes, trenches, slumps, ponds and uprooted vegetation.	
Thaw Slump	Landslides where ice-rich permafrost on the slopes of a valley thaws out rapidly, leaving eroded areas of exposed soil.	 Holmes Creek NWT by Trevor Lantz



Frost Creep	The displacement of soil on a hillslope from continuous freeze-thaw cycles. When permafrost is frozen, the ground surface moves horizontally away from the slope; when thaw occurs, the ground features continue to rearrange.	
Stone Circles	Permafrost features formed over hundreds of freeze cycles. As the underground water freezes, larger rocks are heaved upwards into concentric circles. When circles connect, they create a mesh pattern, called Sorted Net Permafrost.	
Stripes	Permafrost features created from the influence of freeze cycles. Similar to stone circles, as underground water freezes, rocks are sorted by size. In this case, they are sorted in vertical lines across the landscape.	
Hummock/Mound	A permafrost driven generation of small heaps of vegetation covered earth. Created either from ice heave or continuous ice growth within the mounds. A field of these is home to two vegetation types: one tolerant environment on top, and another less tolerant in the trenches between.	
Solifluction	A permafrost features formed from the detachment and slow downslope movement of the active layer (surface layer of permafrost that melts seasonally).	



Arctic	The area around the North Pole. Sometimes it is defined by the Arctic Circle: latitude 66 degrees 34 minutes North, the southern limit of continuous winter darkness. It may also be defined by the area north of northern tree line, or as the area where the mean temperature in July is below 10°C.	 From Britannica
Tundra	A type of landscape with a cold climate, frozen ground (permafrost), low growing vegetation (mostly grasses) and usually no trees.	 By Tomáš Malík / Unsplash