

YEAR 8 GEOGRAPHY – CYCLE 2 AND 3 – GLACIATION

BOX 1: UK PHYSICAL LANDSCAPE	
landscape	an area of land with distinct features e.g. glaciated landscape
landform	a natural feature e.g. a corrie
altitude	the height above sea level
relief	height difference between highest and lowest point on a landscape
upland	areas of land at higher elevation e.g. mountains
lowland	areas of land at a lower elevation e.g. the mouth of a river
longest river UK	UK → River Severn → Wales and England → 354 km long
highest mountain UK	UK → Ben Nevis → Scotland → 1345 m

BOX 2: GEOLOGICAL TIMESCALE	
age of Earth	4600 million years old
bacteria	bacteria begin to produce oxygen → 3600 million years ago
dinosaurs appear	first dinosaurs appear → 240 million years ago
mammals appear	first mammals appear → 200 million years ago
humans appear	first humans appear → Homo sapiens → 300,000 years ago
Carboniferous	period of time → 359.2 to 299 million years ago
Jurassic	period of time → 199.6 to 145.5 million years ago
Quaternary	period of time → 2.6 million years ago to the present day

BOX 3: THE ROCK CYCLE	
geology	the geology of an area → e.g. the types of rocks found in an area
igneous rocks	formed from cooled magma e.g. basalt
sedimentary rocks	from compressed fossils and rocks at bottom of ocean e.g. limestone
metamorphic rocks	rocks changed into harder rocks by heat and pressure e.g. marble
weathering	weakening of rocks
erosion	wearing away and breaking up of rocks and soil
transportation	moving material from one place to another
deposition	when material is dropped or left behind (e.g. pieces of rock)

BOX 4: GLACIATION KEYWORDS	
glacier	a slow moving mass of ice (made from compressed snow)
ice sheet	a large glacier covering large areas of land e.g. the size of a country
glaciologist	scientist → e.g. studies effects of climate change on melting glaciers
glacial	period of time → cooler → last ice age ended 11,700 years ago
interglacial	period of time → warmer → we are currently in an interglacial period
accumulation	more freezing than melting → glacier grows
ablation	more melting than freezing → glacier shrinks
crevasses	huge cracks in a glacier (can be 40 meters deep)

BOX 5: DISTRIBUTION OF GLACIERS	
glaciers → ice age	distribution → 20,000 years ago → glaciers covered most of the UK
glaciers → today	distribution → high latitudes and high altitudes e.g. poles and mountains
glaciated landscapes	no longer covered by glaciers anymore → but these areas were once carved/shaped by glaciers during the last ice age → e.g. Lake District

BOX 6: PROCESSES	
erosion	-abrasion → rocks scrape like sand paper → makes other rocks smooth -plucking → glacier freezes around rocks → pulls them out of ground
weathering	-freeze-thaw weathering → ice expands in rock cracks, breaks up
transportation	-bulldozing → glacier pushes moraine (rocks) as glacier moves
deposition	-moraine → glacier melts → leaves piles of rocks that were eroded -erratics → large boulders → dropped by melting ice → look out of place

BOX 7: HOW DOES A CORRIE FORM?	
glacial landform → a corrie	a corrie → large armchair shaped hollow on mountain side → 1. snow collects in a sheltered hollow on the side of a mountain 2. snow is compacted → air squeezed out → becomes glacier 3. back wall of corrie → gets steeper (by freeze-thaw and plucking) 4. base (bottom) of the corrie → gets deeper (by abrasion) 5. glacier → slides downhill → circular movement → 'rotational slip' 6. less erosion at front of glacier → corrie lip formed 7. after ice age → glacier melts → rain fills corrie → tarn lake forms
arête	two corries erode both sides of mountain → creates a sharp edge
pyramidal peak	three corries erode around mountain → creates sharp mountain peak

BOX 8: ECONOMIC USES OF GLACIATED LANDSCAPES → OPPORTUNITIES ☺	
farming	sheep farming on upper slopes → dairy farming on lower slopes
tourism	Lake District → 18 million visitors a year → spend money while on holiday → boosts local economy by £1.46 billion → tourism creates 18,000 jobs

BOX 9: LAND USE CONFLICTS IN GLACIATED LANDSCAPES → CHALLENGES ☹	
conflicts and challenges ☹	<ul style="list-style-type: none"> modern farm buildings → ruin beautiful landscape tourism → damage wildlife e.g. littering, trampling vegetation lots of employment only 'seasonal' e.g. not paid all year round wealthy people from elsewhere buy 'holiday homes' → increases house prices → locals struggle to afford to buy a home erosion of footpaths, traffic congestion and noise pollution

BOX 10: SUSTAINABLE MANAGEMENT + CONSERVATION OF GLACIATED LANDSCAPES ☺	
sustainable management and conservation ☺	<ul style="list-style-type: none"> 'Drive Less See More' → campaign to reduce traffic congestion 'Fix the Fells' → project to reduce footpath erosion 10 mph speed limit on Lake Windermere (slows watersports) → safer → reduces noise pollution → protects wildlife

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