


**The main UK rock types and distribution (PEE).**

- Relief = changes in height
- Upland = igneous and metamorphic
  - Pennines
  - Lake District
  - Dartmoor
  - Exmoor
- Lowland = sedimentary

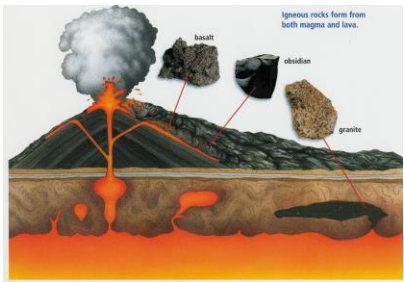


**Distribution – pattern, example, exception.**

- Igneous and meta north of the Severn-Tees line
- Exception is Dartmoor in SW England


**Igneous rocks (HIV):** examples, formation, characteristics, locations

- Hard and impermeable
- Volcanic (granite, basalt)
- Formed by magma
  - Intrusive (granite)
  - Extrusive (basalt) -
- Granite – Dartmoor: tor
- Basalt: Giant’s Causeway (Northern Ireland)
- No fossils




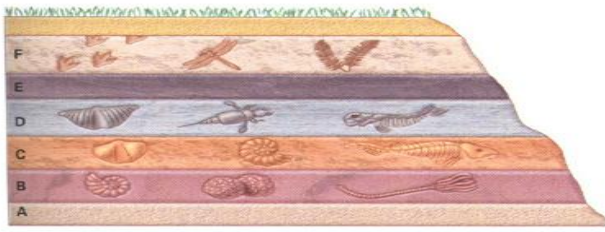
**Metamorphic rocks (MPH):** examples, formation, characteristics, locations.

- Metamorphic (affected by magma)
- Pressure and heat
- Very hard; layered crystals. Impermeable.
- Changes:
  - Shale to slate (Snowdonia)
  - Limestone to marble (Devon)



**Sedimentary rocks (SSS):** : examples, formation, characteristics, locations

- Soft
- Formed in layers.
- Different colours.
- Fossils
- Porous / permeable
  - Sandstone
  - Chalk at Seaford / South Down
  - Limestone in Derbyshire
  - London clay

**Upland: tors on Dartmoor**

- Granite outcrops in south-west England. Eg. Haytor
- Moorland (300m+) ecosystem
- Highland cattle graze on boggy moorland. Rough grazing. Irregular fields with stone walls and natural ditches caused by streams.

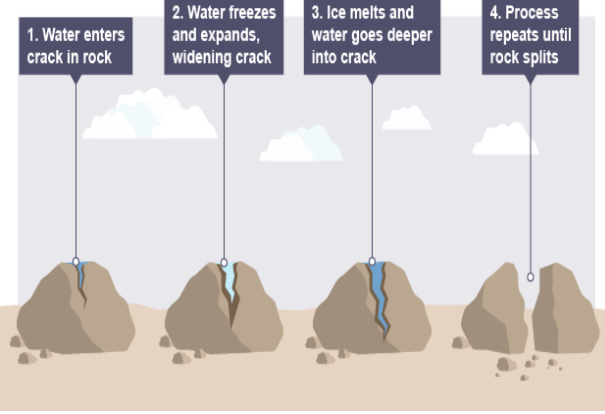


**Human influences on upland landscapes.**

- Farming: steep slopes and poor soils. Poor soils due to moorland - impermeable rocks. Boggy. Sheep farming is dominant.




**Mechanical weathering: freeze-thaw weakens rocks**



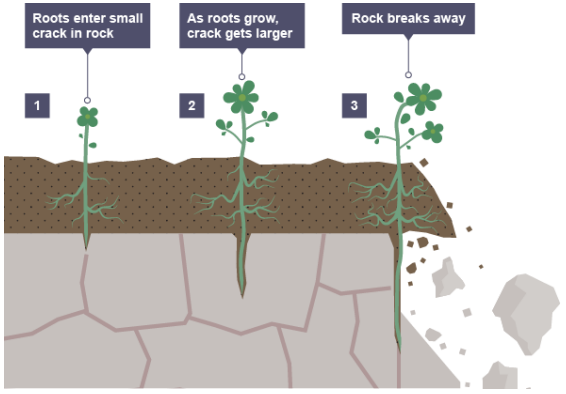
**Chemical weathering: acid rain weakens rocks**

- Rain water and sea water can be a weak acid.
- Limestone rock in Derbyshire can dissolve over time (statues, pavements)
- Chalk cliffs on the coast also dissolve.




**Biological weathering weakens rocks:**

- Plants and animals weaken rocks.



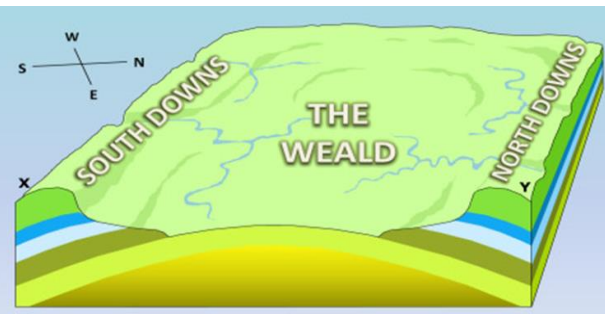
- No arable farming.
- Forestry: lines of trees (not random). Creates jobs and tourism.



- Limited industry: quarrying.
- Military training areas.
- No large settlements: hamlets, villages,

**Lowland: the South Downs**

- Southern England, bordering English channel
- Folded sedimentary rocks; layers.
- Chalk; porous.
- Rolling, undulating hills.



Purbeck (and earlier)
  Weald Clay
  Upper Greensand and Gault

Hastings Beds
  Lower Greensand
  Chalk

**Human influences on the lowland landscapes:**

- Farming:
  - Arable = crops. Use of regular field shapes; clear ditches.
  - Pastoral = cattle (cows and sheep)
  - Mixed (arable and pastoral)
- Settlement: hamlets, villages, towns, cities
- Industry on flat land
- Draining of some wetlands for farming
- Turning some heathland into parks.

+ jobs, + tourism = farm productivity, GDP.  
- Destroy natural habitats – farm pollution