Topic: Physical geography

Our Island Home and its physical features

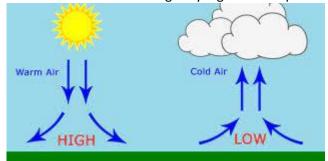
#### 7f1 To know the countries of the UK.



To be able to plan a basic journey around the UK using cities and physical features.

You will need to be able to plan a journey using maps and different UK cities. i.e. we landed at Heathrow airport then caught the train into London, where we spent a few days before heading North to York...

7f2 To know the weather brought by high and low pressure.



High pressure= clear skies, no rain, warm temperature (summer day) cold temperature in winter.

Low pressure= clouds, wind, rain, warmer winters, and cooler summers

To be able to relate high and low pressure to people's activities.

High pressure in summer will result in lots of outdoor activities as the temperatures are warmer. It can also contribute towards droughts as there is very little rainfall.

Low pressure will bring wetter weather (both summer & winter) which can lead to flooding.

7f3 To know the definitions for the different types of rock: Sedimentary, Igneous, Metamorphic.

Sedimentary- Formed as pressure compacts sediment together

Igneous- intrusive volcanic magma cools down as it reaches the earths surface.

Metamorphic- Sedimentary rock undergone change due to exposure to high heat and/ or pressure

To know that some rocks are permeable, and some are impermeable.

Sedimentary (i.e. sandstone/ limestone) = permeable

Igneous (Granite/marble) = impermeable

Metamorphic (Slate) = impermeable

To know a good use for each type of rock.

Sedimentary (i.e. sandstone/ limestone) = Bricks, building materials for walls, cement, and mortar Igneous (Granite/marble) = fancy kitchen worktops, tiles for the shower/bathrooms.

Metamorphic (Slate) = Roof tiles

#### **KNOWLEDGE ORGANISER**

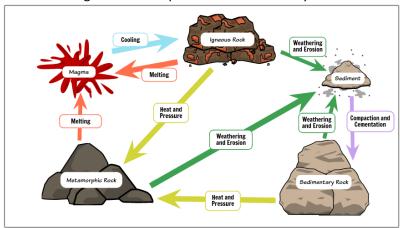
## 7f4 To be able to define magma, lava and sediment

Magma- molten rock, found under the earths surface

Lava- when molten rock reaches the earths surface (often via a volcanic eruption)

**Sediment-** loose material ranging in size from large boulders to fine grans of silt which can be transported by; wind, water and gravity.

To be able to give a basic explanation of the rock cycle.



# 7f5 To be able to define weathering and erosion.

Weathering- breaking down of material in-situ

Erosion- breaking down and transportation of material

To be aware of the different types of erosion.

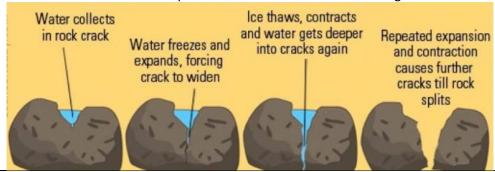
Hydraulic action- share force of the water breaking rocks apart

Abrasion- rocks scraping the bedrock (like sand paper)

Attrition- rock bouncing into each other breaking bits off

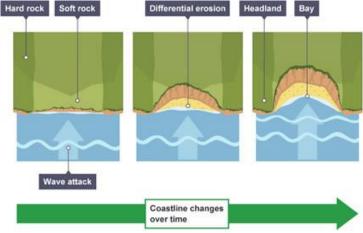
**Solution-** fine sediment (i.e. chalk) dissolving in the water.

To be able to offer a basic explanation for freeze-thaw weathering.



# 7f6 To be able to offer basic explanations for the formation bays

Bays will have softer rock compared to their more resistant headlands, the softer rock is less resistant to erosion so will retreat inland as its eroded away.



To be able to identify landforms created by Freeze-thaw weathering.



7f7 To know the definitions for: Source, Confluence, Tributary, Drainage Basin, Watershed, Flood Plain, Mouth.

**Source-** the start of the river (often high in a mountainous valley)

Tributary- a small stream/ river which joins a larger river channel

Confluence- the junction where two rivers meet

Drainage basin- the area drained by a river

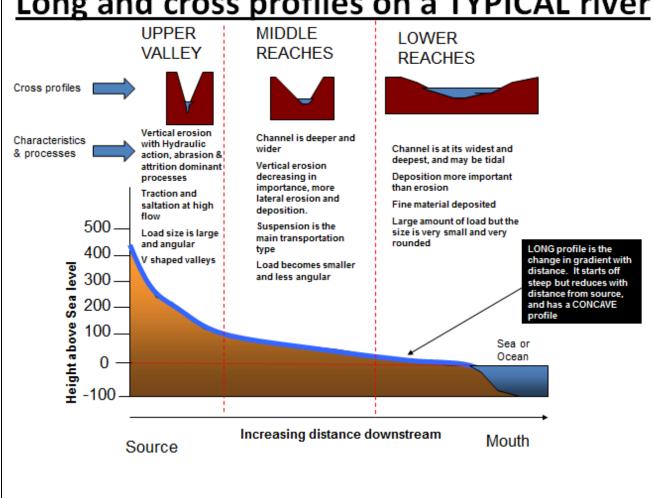
Watershed- the perimeter (edge) of a drainage basin

Floodplain- (depositional feature) the flat land which surrounds the river sides in the lower course.

Mouth- the end of the river where it meets the sea or lake.

To have a basic understanding of how rivers change along their long profile.

# Long and cross profiles on a TYPICAL river



## **KNOWLEDGE ORGANISER**

7f8 To be able to offer a basic explanation for the formation of a waterfall. Waterfall moves back River Hard rock Soft rock Plunge pool 4 Erosion continues 1 Falling water and 2 The hard rock above 3 The hard rock collapses into the and the waterfall slowly rock particles or is undercut as erosion eats its way upstream, plunge pool to be boulders loosen and of the soft rock wear away the softer broken up and washed leaving a gorge continues. behind. away by the river. The rock. position of the falls moves back. 7f9 To know the definitions for: Infiltration, Saturation, Surface runoff, Through flow, Interception. Infiltration- when water moves vertically from the surface into the soil Saturation- when the soil stores water **Surface runoff-** water moving over the surface Throughflow- water moving through the soil **Interception-** process where leaves from vegetation intercepts rainfall. To know two factors that increase the risk of flooding and two the decrease it. Increase risk of flooding -Prolonged heavy rainfall -Impermeable surfaces -deforestation -geology Decreases flooding -afforestation -permeable surfaces -flood storage 7f10 To know the definitions for social, economic, environmental Social- Anything which affects people **Economic-** things to do with money and jobs **Environmental-** things to do with our surroundings/ environment To be able to relate these to some of the impacts of flooding Social impacts- people lose homes, loss of belongs, have to move into temporary accommodation, deaths and injuries. Economic- businesses will lose money has trading stops or premises destroyed, insurance will have to pay money, people may lose jobs as businesses are closed. Environmental- landscape may be damaged, vegetation and trees destroyed etc.