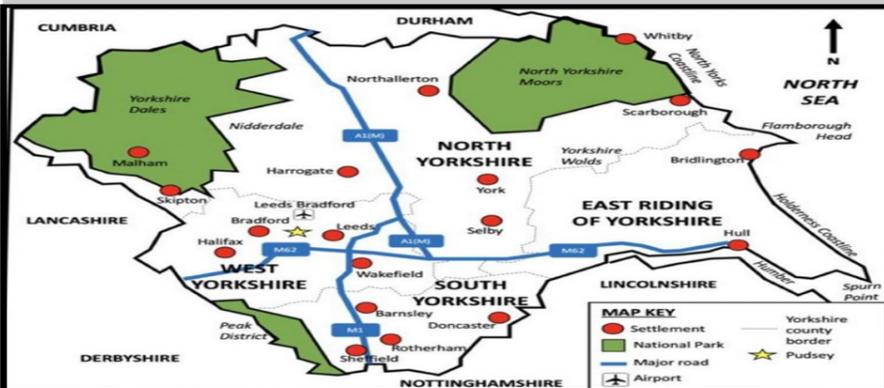


Why is the landscape of Yorkshire dynamic?

- Yorkshire's landscape has changed over geological time to make a unique landscape. Yorkshire is home to two national parks which are protected
- During the last ice age (Holocene) Yorkshire was covered in glacial till (material deposited by a glacier) called boulder clay. This makes the coastline to the East of the county extremely erodible
- Over two million years ago, during the Carboniferous period, Yorkshire was a tropical rainforest, as it was close to the equator
- The landscape has heavily been influenced by glaciation, when the last ice age occurred nearly 12,000 years ago. This was called the 'Loch Lomond Stadial'



How did glaciation shape the land in Yorkshire?

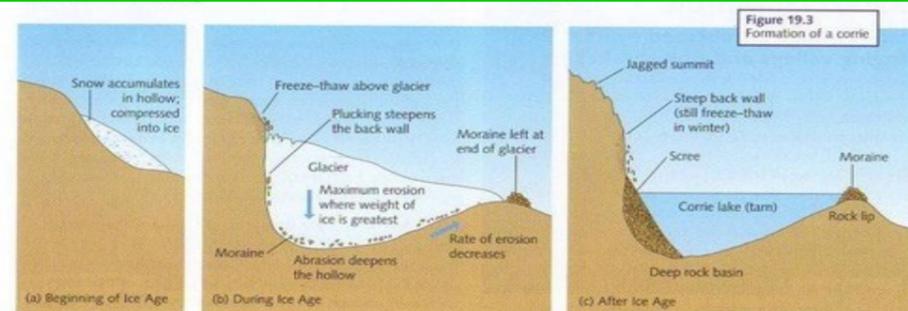
Glaciers are known as nature's bulldozers. They are slow moving but can shape the landscapes.

- Corries are the most common landforms created in the glaciation period.
- Snow accumulates in hollows facing North (as there is less sunlight in this direction), overtime this is compressed into ice.
- Freeze-thaw weathering is occurring on the backwall of the corrie and this material is used for plucking (pulling of material from the bottom of the glacier) and abrasion (the sandpaper effect) —these erosion processes **widen** and **deepen** the corrie
- Overtime plucking and abrasion widen and deepen the corrie and the glacier flows down a hill
- After the ice age, the snow melts leaving a tarn and a rock lip

Key Words

Geological Time	This refers to a time period of million of years when different events occurred that shaped our planet.
Holocene	This is the last geological time period when the UK was covered by ice, and we were in an Ice Age.
Erosion	This is the breaking down of rocks by a movement.
Glaciers	These are areas that are covered in ice. Glaciers move and erode the land at the side and below them.
Plucking	This is the motion of ice freezing around an object and pulling it away. This is a form of erosion.
Abrasion	This where rocks act as a sandpaper effect and cause the rock below it to become smooth.
Corrie	This is an arm-chair shaped hollow that is created by snow being compressed into ice.
Hydraulic action	The sheer force of a wave hitting the cliff face, and pulling away rock with it.
Headland and Bay	This is a coastal erosion landforms that is created by erosion on a coastline. Bays are often where there is soft rock along the coast.

Formation of a Corrie



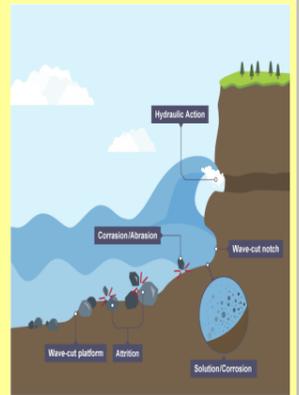
How do coasts change the landscape?

What are the processes and rock types in Yorkshire?

Along the Holderness Coast, the rock is a soft rock (meaning it easily erodes) called boulder clay.

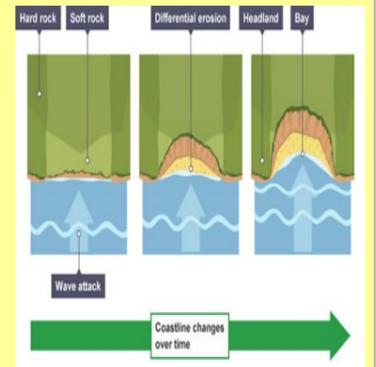
Coastal Erosion Processes

- Hydraulic Action**—the sheer force of the water crashing into the cliff face
- Abrasion**—this is when pebbles grind along a rock platform, much like sandpaper. Over time the rock becomes smooth
- Attrition**—where rocks knock against each other to become more rounded



How does a headland and bay form?

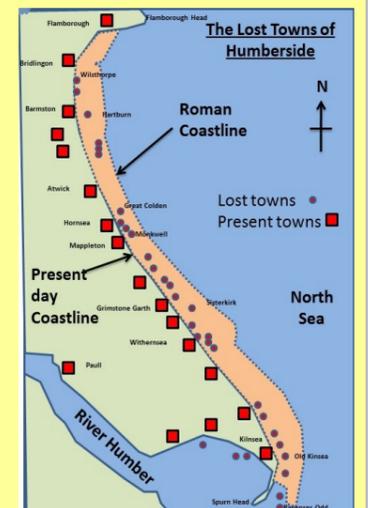
- Coastlines have alternating bands of **hard and soft rock**. The soft rock is more easily eroded (less resistant)
- Overtime, through the processes of erosion the soft rock is eroded away
- Over several years this will create a bay and a headland sticking out at either side
- In the bay, a beach is formed due to it been protected from the wind



Why are we losing settlements on the Holderness?

Why is the Holderness eroding so quick?

- The Holderness Coast is the fastest eroding coastline in Europe. It erodes at 2m per year
- This is due to the fact that the coast is made from soft boulder clay and therefore more easily eroded
- Many settlements are at risk from going into the North Sea
- The council want to protect certain towns and villages along the coastline. For example, the town of Hornsea, has several coastal defences to protect the town from eroding into the sea
- In some areas, the sea is allowed to flood the area—this is called **coastal realignment**



Trinity TV

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