



Landforms of Erosion

Learning Objective:

-Analyse how the sea can create new coastal features



Learning Outcomes:

- Describe** what factors can change coastal landforms
- Explain** how headlands and bays form
- Suggest** how erosion can *create* wave cut platforms

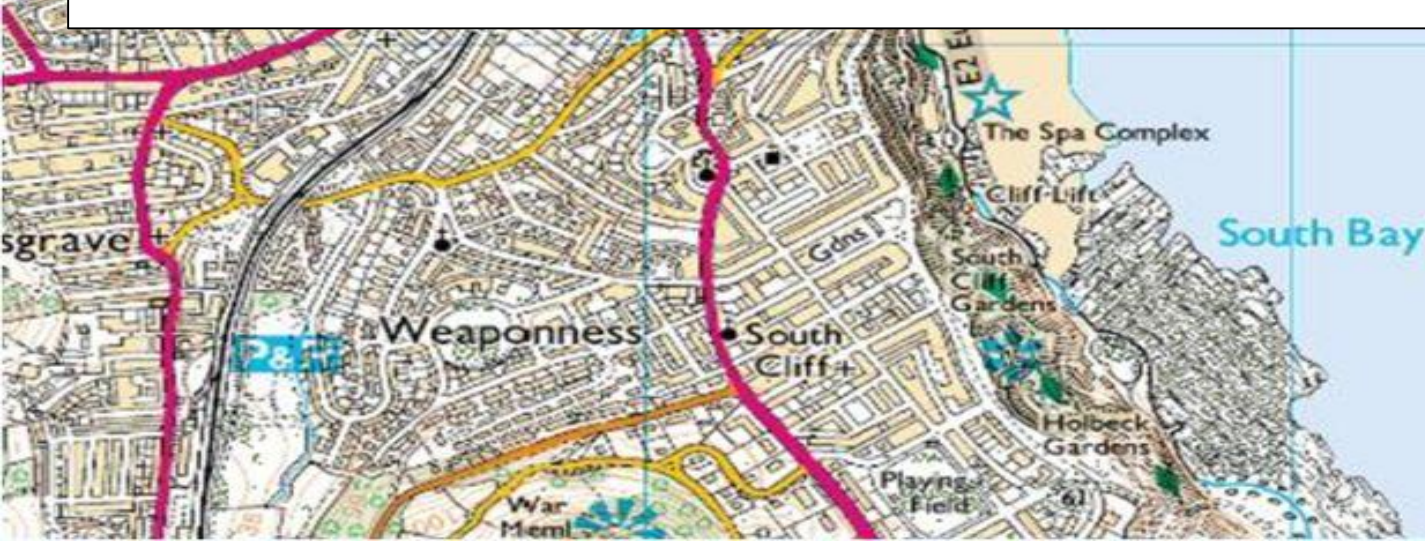


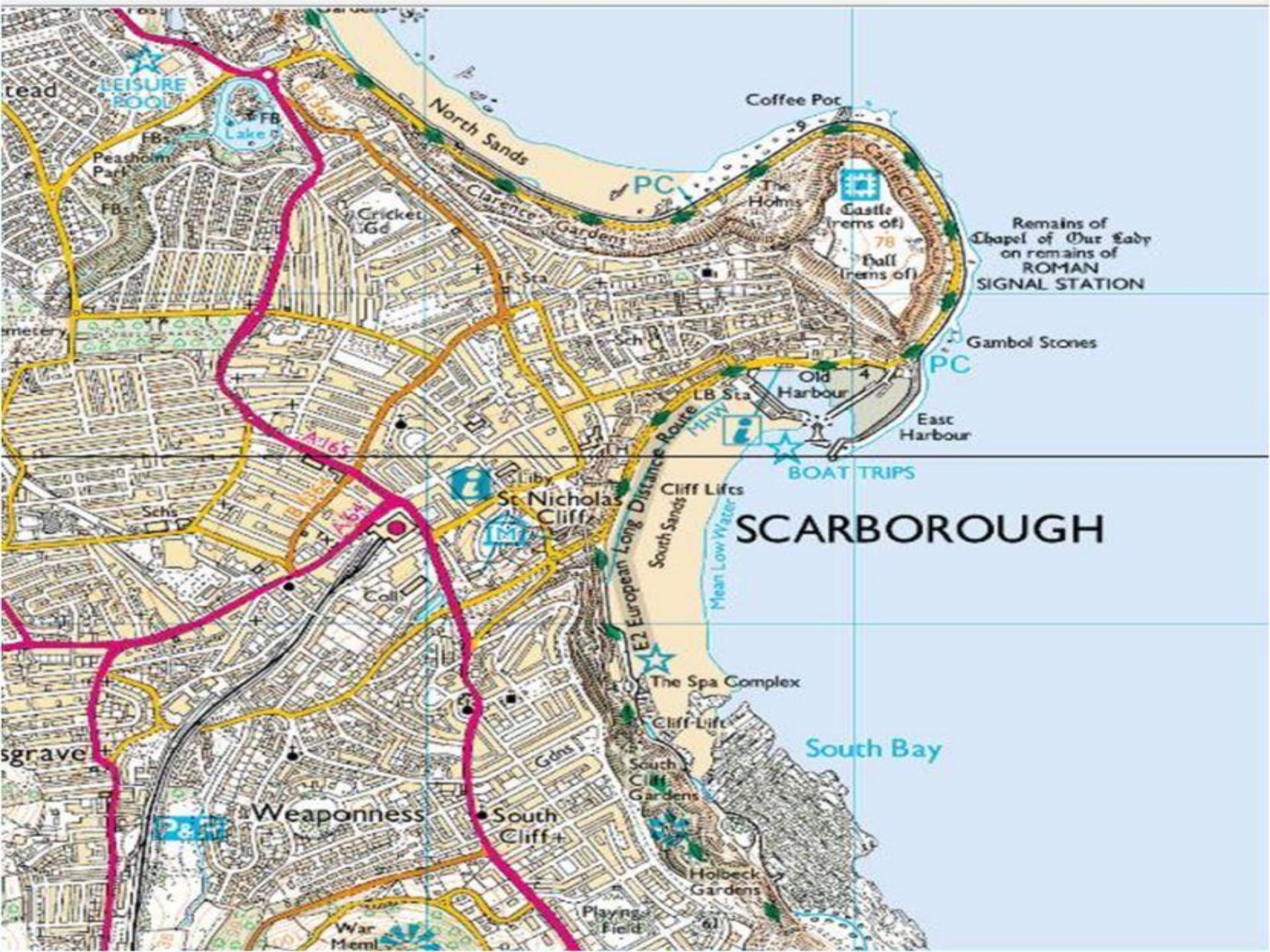
Which is the strongest and which is the weakest?



How can geology influence the coast?

- Some rocks are **more resistant** than others (granite and limestone Vs clays and sands)
- Rocks can be **tilted** a certain way
- **Faults** can form (how?) – lines of **weakness** in rocks





LEISURE POOL

Peasholm Park
Lake

North Sands
Clarence Gardens

Coffee Pot

Castle Cliff
78
Hall (remains of)

Remains of Chapel of Our Lady on remains of ROMAN SIGNAL STATION

Gambol Stones

East Harbour

BOAT TRIPS

SCARBOROUGH

St Nicholas Cliff

Cliff Lifes
South Sands

Mean Low Water

South Bay

The Spa Complex

Cliff-Life
South Cliff Gardens

Holbeck Gardens

Weaponness

South Cliff

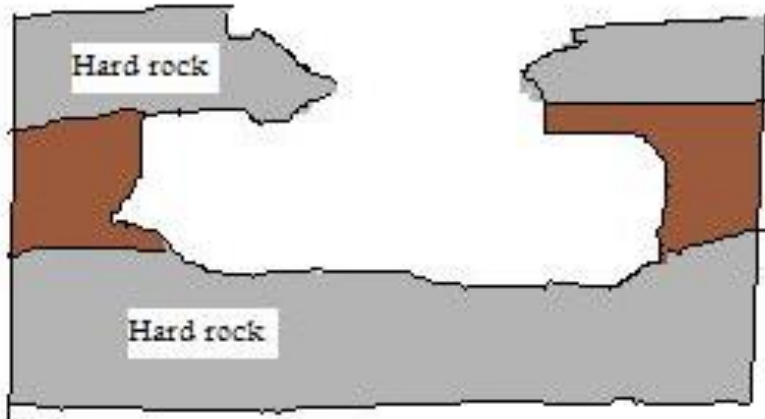
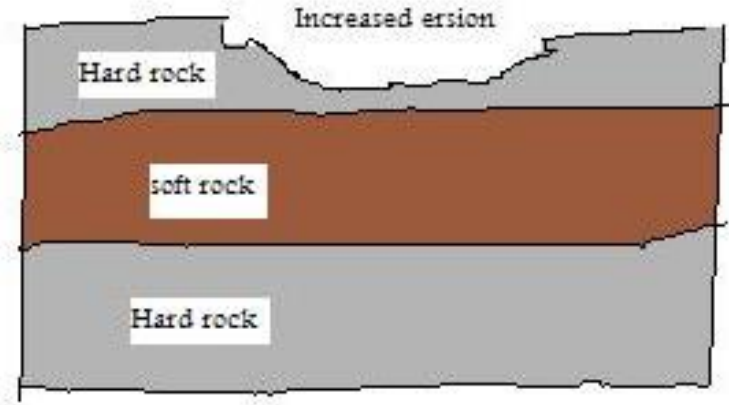
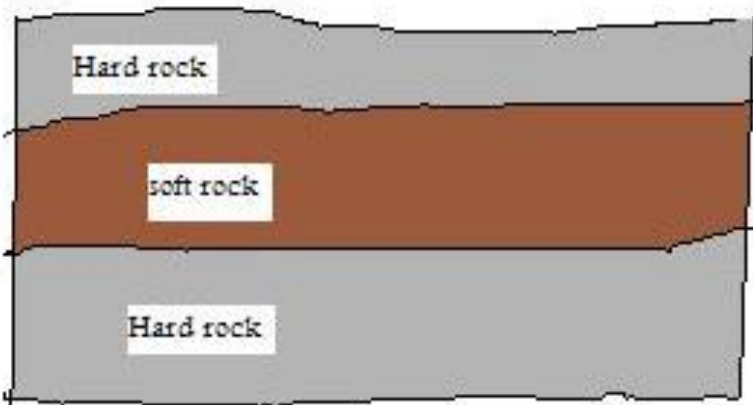
Playing Field

War Meml



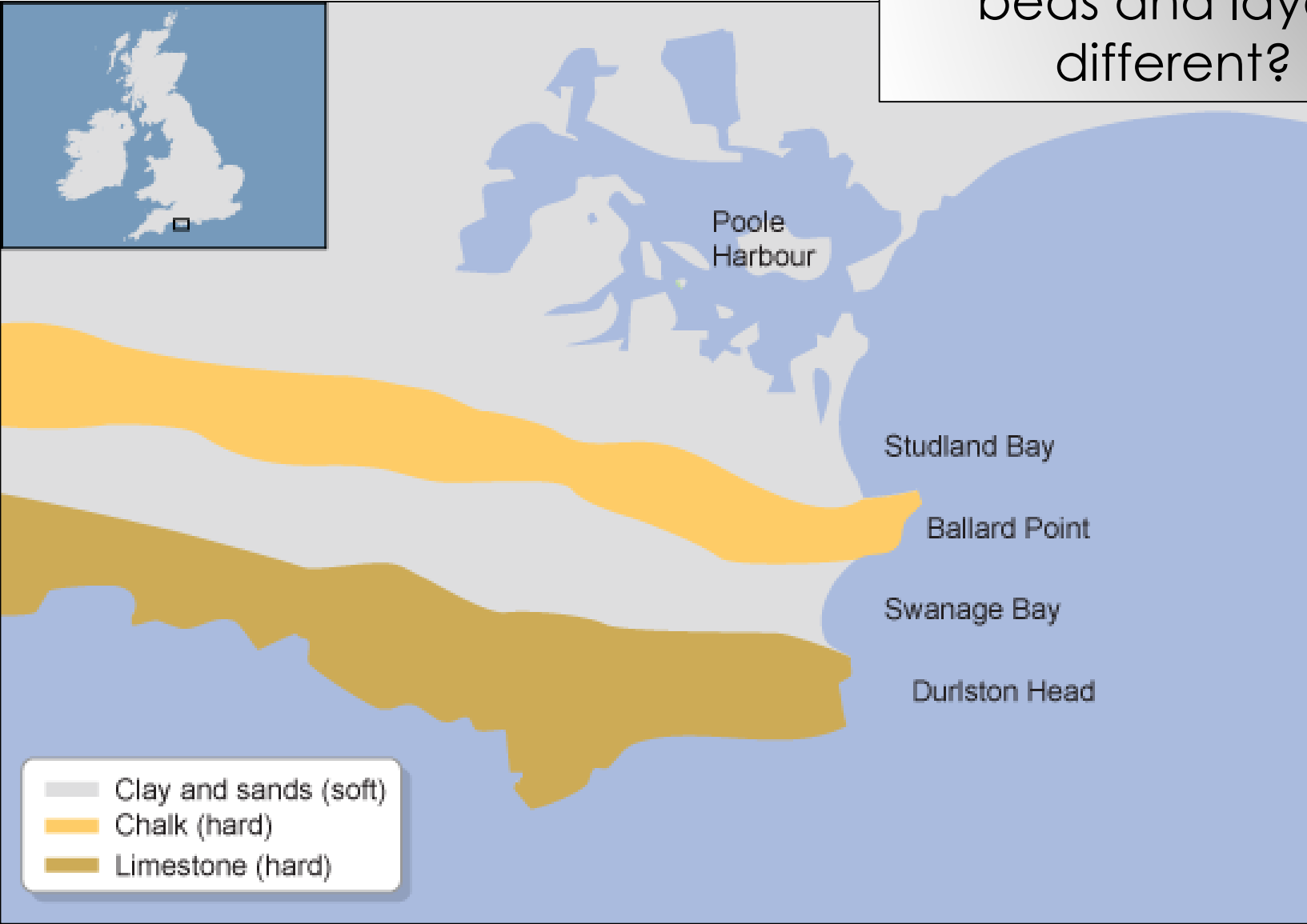
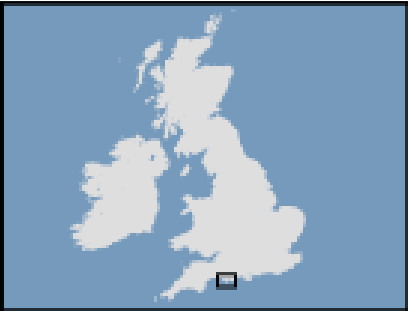






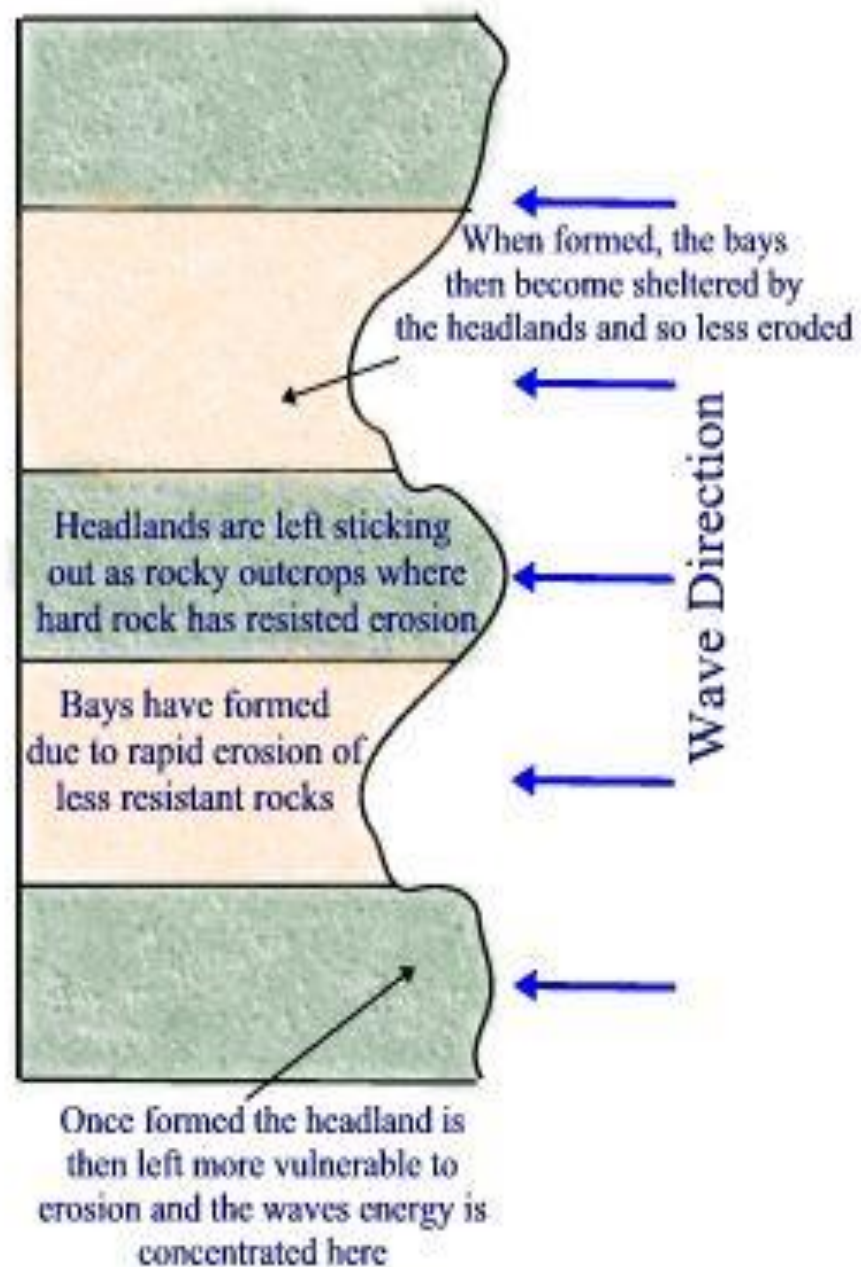
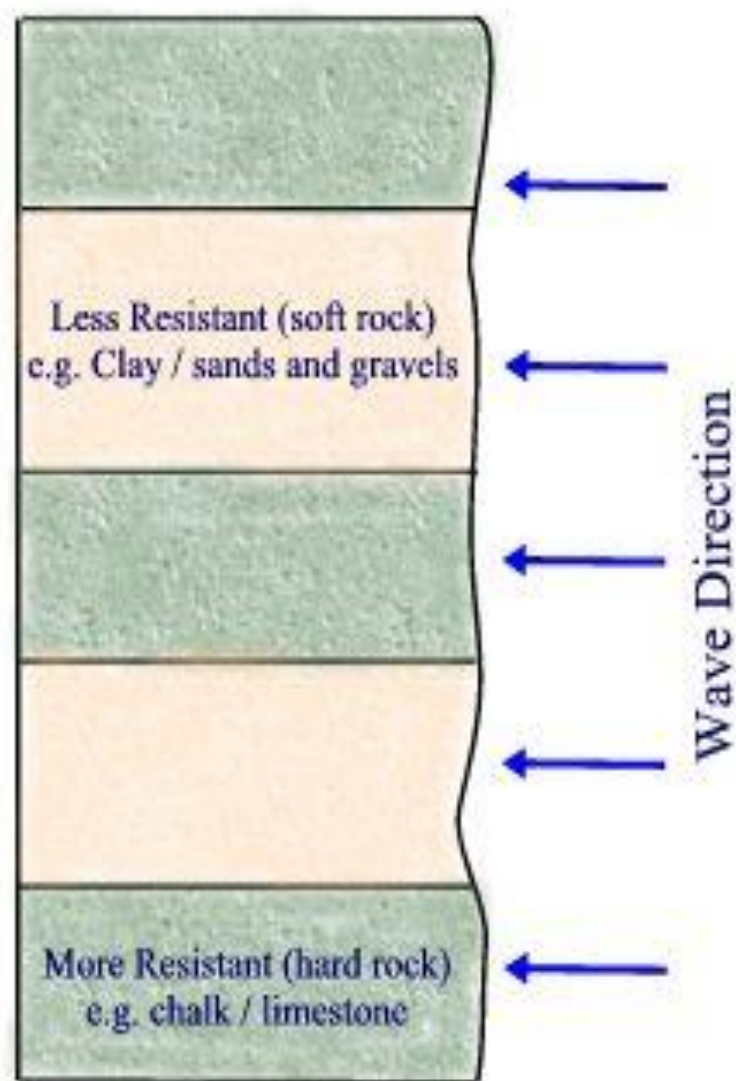
Cove formation – result from beds and layers that run **parallel** to the coast

How are these rocks in beds and layers different?



- Clay and sands (soft)
- Chalk (hard)
- Limestone (hard)

The Formation of Headlands and Bays



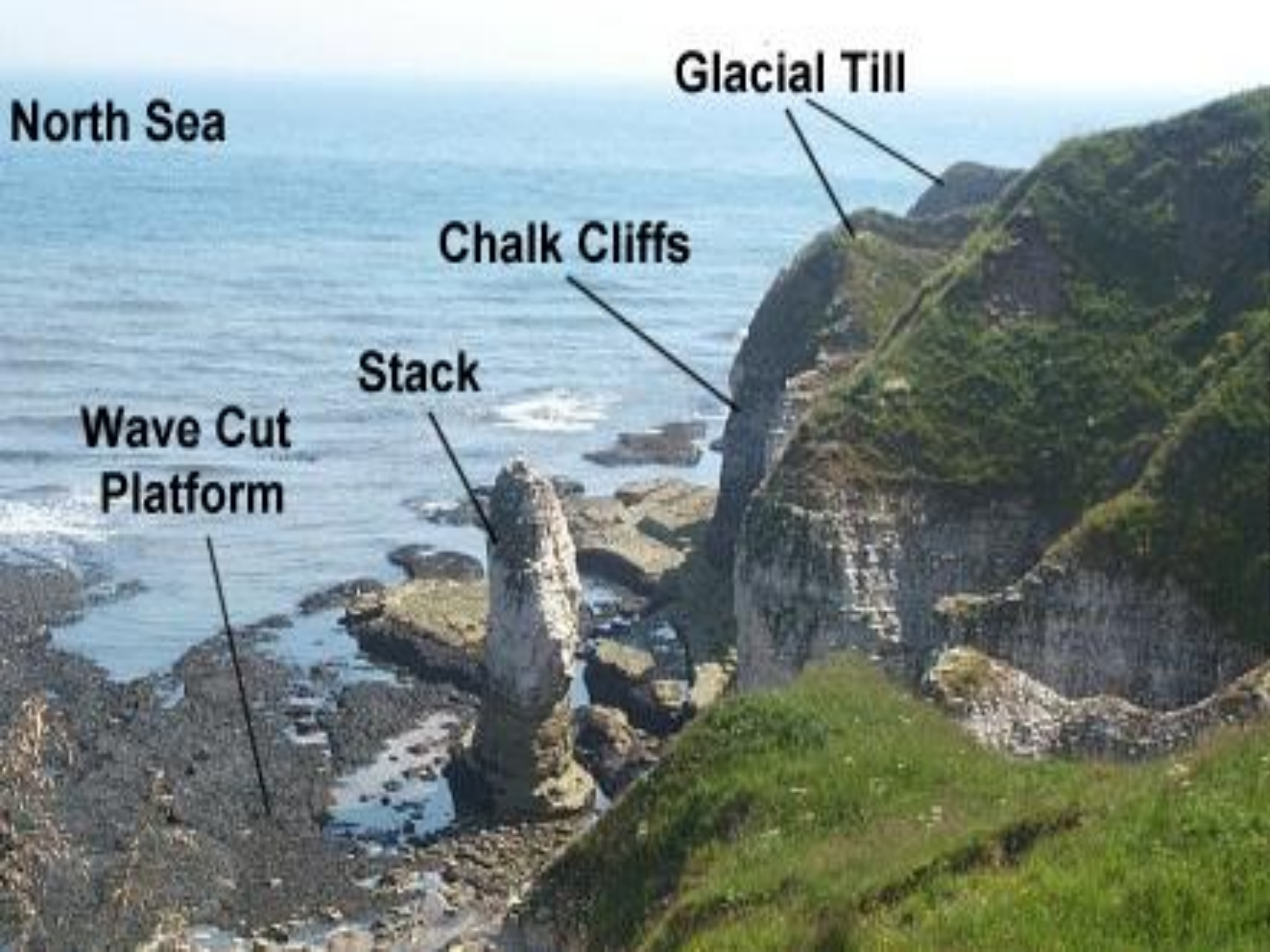
North Sea

Glacial Till

Chalk Cliffs

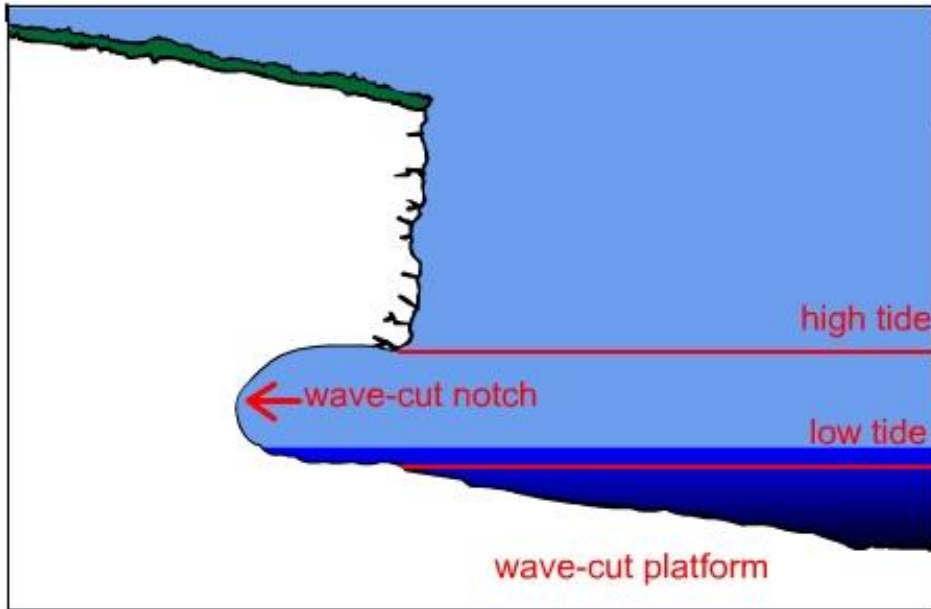
Stack

Wave Cut Platform





Wave-cut platform



- The waves attack the base of the cliff at high tide through the processes of corrasion, attrition, solution and hydraulic action.
- Over time the cliff will be undercut and a **wave-cut notch** is formed.
- The notch can get deeper over hundreds of years, undercutting the cliff.
- Eventually the cliff becomes unstable and collapses. Further cliff retreat will form a **wave-cut platform**, which is made smooth through abrasion by the sea.

Challenge question:

Is it a good time to go rock pooling after a period of stormy weather?

Explain your answer.

