Revision Notes

Headlands and bays

Another group of features shaped by erosion are headlands and bays. Headlands are formed when the sea attacks a section of coast consisting of alternating bands of hard and soft rock.

The bands of soft rock, such as sand and clay, erode more quickly than those of more resistant rock, such as chalk. This leaves a section of land jutting out into the sea called a headland. The areas where the soft rock has eroded away, next to the headland, are called bays.

Coastlines where the geology alternates between strata (or bands) of hard rocks and soft rocks is called a discordant coastline. Discordant coastlines will have alternating headlands and bays. Concordant coastline is where the rock remains the same along the coastline. Concordant coastlines tend to have fewer bays and headlands.

Discordant and concordant coasts in Dorset

Along the coastline of the Isle of Purbeck in Dorset (south coast of England), there are both discordant and concordant coasts. The discordant coast has been formed into Studland Bay (soft rock), Ballard Point (hard rock), Swanage Bay (soft rock) and Durlston Head (hard rock). After Durlston Head the rock remains hard. This concordant coast has fewer features.

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