

Geography Sample Answer

2021 Long Question 1B

In this answer, I am going to discuss the formation of a beach, a coastal landform. A beach is a build-up of material between the high tide mark and the low tide mark. It forms due to processes of deposition. It mainly consists of sand and shingle. Constructive waves are waves that have a swash stronger than their backwash. They usually occur at a rate of 8 per minute. Longshore drift is the zigzag transportation of material along the coast. When interrupted, the waves end up depositing material which can build up to form a beach. On some beaches with soft coastlines, groynes are built. These are pieces of wood that are built at right angles to the sea. They interrupt longshore drift and encourage deposition by trapping sediment. This can be seen on beaches in Wexford as they are prone to erosion. Wave refraction is the bending of waves as they enter the bay. As the waves bend, they lose their energy which results in them depositing their material which can lead to them helping to form a beach.

A beach is divided up into two parts: the foreshore and the backshore. The foreshore is positioned right beside the water and it is flat in profile. It consists mainly of sand and shingle. There are distinctive ripple marks known as ridges and runnels found on the sand. Sometimes small mounds of sand can form depending on the wave action of the day. These are called berms. The berms are separated by crescent shaped hollows called cusps. The backshore is steeper in profile. It is made up of much larger rocks. The backshore is formed due to storm waves. The storm waves have a lot of power so they have the ability to carry large rocks up onto the beach and onto

the backshore. Sometimes sand is blown offshore and dried by the wind. This sand is deposited at the backshore and over time, it accumulates to form sand dunes. These are another feature of deposition that can be found at the beach. Sand dunes are very prone to erosion so sometimes marram grass is found on the sand dunes to bind the sand particles together. A beach and sand dunes can be found at Tramore Beach Co. Waterford