

Coastal management strategies 3.1.3.4

Q1	Match the terms with their coastal engineering definition			
A	Wire baskets filled with rocks that are stacked along a cliff foot.			
B	Excavators moving sand from one place to another in the same section of beach			
C	Boulders of granite extending at right angles to the beach in a line and intended to capture sand and interrupt the power of waves			
D	Lorries removing sand from the end of a beach and transferring it back along to an upcoast section of beach			
E	Large concrete moulded shapes that are formed at the site requiring protection and stacked in an interconnecting matrix			
	Beach reprofiling	Tetrapods	Groynes	Beach recycling Gabions

Q2	Tick if these are examples of Hard or Soft engineering techniques	Hard eng.	Soft eng.
A	Offshore reefs		
B	Timber groynes		
C	Living shorelines		
D	Rip rap		
E	Granite boulder groynes		
F	Gabions		
G	Beach nourishment		

Q3	Which of these statements accurately describes the way in which coastal management techniques function? Explain why some are false.	True	False
A	Soft engineering is called this because it involves sand redistribution – rather than hard, solid rock.		
B	Revetments work by absorbing some wave energy and enabling beach build-up through swash but restricting loss by backwash.		
C	Offshore reefs work by re-directing waves into the gaps between the reefs so they carry more sand to the beach in those places.		
D	Groynes are most effective where longshore (littoral) drift occurs along a coastline by leading to a wider and steeper gradient beach.		
E	Beach nourishment is a natural redistribution of sediment store that takes place mainly at the end of stretch of coastal longshore drift.		

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Q4	<i>Explain how groynes reduce coastal erosion where they are located, but increase it further down the coast, using the following systems concepts</i>	
<i>Inputs</i>		<i>Store</i>
<i>Outputs</i>		<i>Sediment cell</i>

Q5	<i>Identify the factors that are 'more' and 'less' likely to make an ICZM an effective form of coastal management. Two have been inserted already.</i>	
Less effective:	Unreliable and ineffective monitoring equipment for recording coastal conditions Untrained analysis of data and extraction of invalid, inaccurate and unreliable information	
More effective:		