

Unit 2: Gradational Processes Quiz

Topic: Wave action and Coastal landforms (A)

Name _____

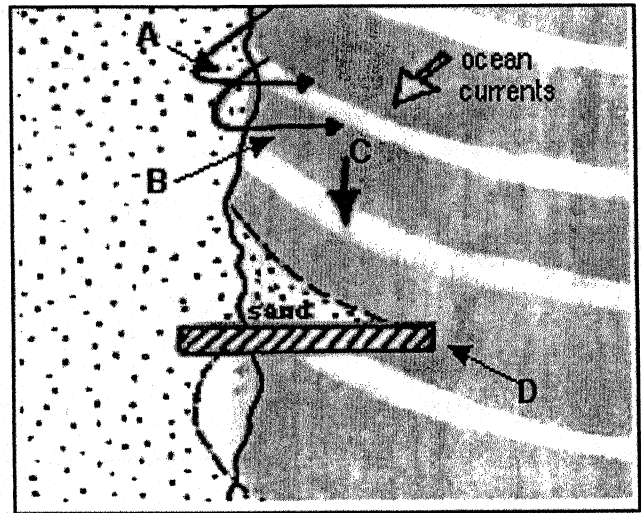
Use the diagram on the right to answer questions 1-4

1. Sand driven up the beach by the power of the wave at location A is called _____

2. Water returning back into the ocean at location B is referred to as _____

3. The movement of sand along the beach as shown by the arrow at C is called _____

4. Walls built to stop sand from moving along the beach are known as _____



5. Why do waves break when they near the shoreline?

6. Define corrasion.

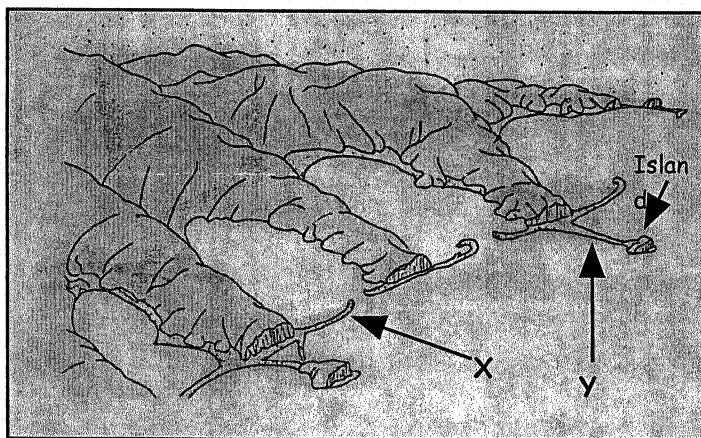
7. A long ridge of sand formed by wave action and ocean current is called _____

1. Why are ocean cliffs often steep and even vertical?

2. Name feature Y on the diagram.

3. Name feature X on the diagram.

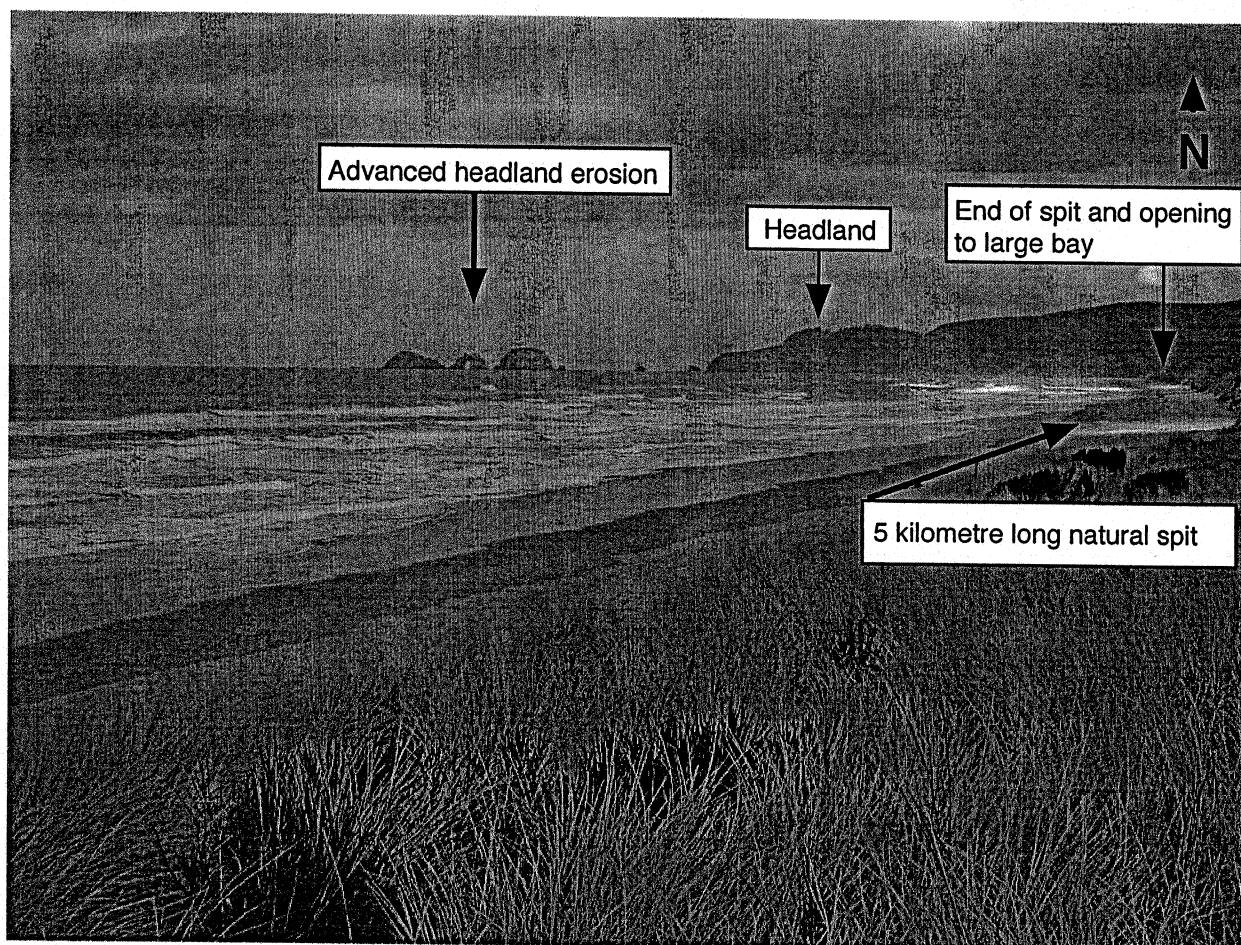
4. Define attrition.



5. The movement of sand along a beach caused by the action of waves and ocean currents is known as _____.

6. As waves attack headlands, caves turn into tunnels which grow in size to create arches. What feature is formed when an arch collapses? _____

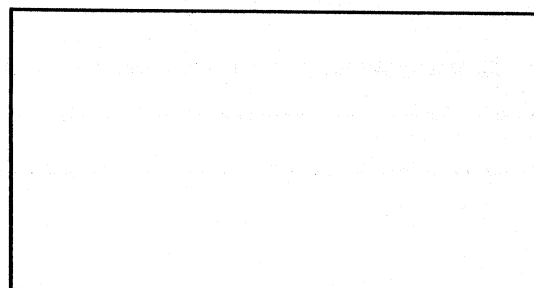
7. The process in which materials are dissolved by sea water is known as _____.



Use the photograph above to answer the questions below.

1. The spit in the photograph has taken thousands of years to form. Do you think the waves approaching this beach now are constructive waves or destructive waves? _____ Support your answer.

2. With the use of a diagram describe longshore drift.



3. In which compass direction is the sand moving? _____

Unit 2: Gradational Processes

Topic: Coastal Landforms

Name: _____

4. The long spit is evidence that a great deal of sand is being deposited on this beach. Where is the supply of sand coming from?

5. Locate the distant headland area. Name the 2 features of headland erosion evident in the photograph.
_____ and _____

6. The breakup of rock has been generated by 4 processes - corrosion, abrasion, attrition, and hydraulic action. Define abrasion and hydraulic action.

Abrasion _____

Hydraulic action _____

7. As waves crash and retreat, air is able to enter cracks in rock cliffs. As the next wave strikes the cliff this trapped air can greatly increase the work of hydraulic action. Explain how.

8. What will be the final stage of cliff erosion once all the rock has broken apart and disappeared from view? _____

9. Cliffs along the distant headland are very steep, some even with vertical drop-offs. Why are rocky ocean cliffs often so steep?

10. Name the depositional feature that would form if the existing spit joined an island to the mainland.

11. Is there anyway to slow the sand from moving along this beach? Explain.

corrasion	groyne	estuary	refraction
tombolo	spit	headland	hydraulic action
stack	swash	bay	tunnel
backwash	arch	caves	longshore drift
undercutting	plunging wave	wave of oscillation	

Pick the correct term from the words in the box to fill in the blanks below.

1. A long sandy depositional feature formed by wave action. _____
2. The first stage of cliff retreat. _____
3. The movement of sand and water onto the beach caused by wave action. _____
4. A wave commonly seen in deep ocean water. _____
5. Refers to the bending action of waves as they approach the shoreline. _____
6. A sandy depositional feature that joins an island to the mainland. _____
7. The main reason why ocean cliffs are often very steep. _____
8. The second stage of cliff retreat. _____
9. Wave-driven water returning to the ocean by force of gravity. _____
10. This feature is designed to stop the movement of sand along the beach. _____
11. A destructive wave that often will remove sand from the beach. _____
12. Hard rocky areas along shorelines become this feature. _____
13. The horizontal movement of sand along a beach caused by wave action. _____
14. An advanced stage of cliff retreat in which water action has eroded a large opening through a headland. _____
15. This shoreline area commonly contains a mixture of fresh and salt water and the water level rises and falls with the tides. _____
16. The eroding power of wind-driven waves. _____
17. Also known as abrasion. _____
18. A small opening through a headland that allows water to go from one side to the other.

19. A rock pillar in the ocean that indicates an advanced stage of headland erosion.
