

Geography AQA

Paper 1. Section C – Physical landscapes in the UK

Coasts

Exam Booklet

3.1.3.1 UK physical landscapes

Key idea	Specification content
The UK has a range of diverse landscapes.	An overview of the location of major upland/lowland areas and river systems.

3.1.3.2 Coastal landscapes in the UK

Key idea	Specification content
The coast is shaped by a number of physical processes.	Wave types and characteristics. Coastal processes: • weathering processes – mechanical, chemical • mass movement – sliding, slumping and rock falls • erosion – hydraulic power, abrasion and attrition • transportation – longshore drift • deposition – why sediment is deposited in coastal areas.
Distinctive coastal landforms are the result of rock type, structure and physical processes.	How geological structure and rock type influence coastal forms. Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks. Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars. An example of a section of coastline in the UK to identify its major landforms of erosion and deposition.
Different management strategies can be used to protect coastlines from the effects of physical processes.	The costs and benefits of the following management strategies: • hard engineering – sea walls, rock armour, gabions and groynes • soft engineering – beach nourishment and reprofiling, dune regeneration • managed retreat – coastal realignment. An example of a coastal management scheme in the UK to show: • the reasons for management • the management strategy • the resulting effects and conflicts.

EXAM PRACTISE QUESTIONS

1. Describe the location of major upland areas in the UK (2 marks) *pg.39 in revision guide*

(D) escribe	(D) escribe

2. Describe the location of lowland areas in the UK (2 marks) *pg.39 in revision guide*

(D) escribe	(D) escribe

3. Define weathering (1 mark) *pg.40 in revision guide*

Description

4. Explain how rock is broken down by weathering (6 marks) *pg.40 in revision guide*

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

5. Describe the process of mass movement (1 mark) *pg.40 in revision guide*

Description

6. Describe the process of sliding (1 mark) *pg.40 in revision guide*

Description

7. Describe the process of slumping (1 mark) *pg.40 in revision guide*

Description

8. Describe the process of rockfalls (1 mark) *pg.40 in revision guide*

Description

9. Describe the features of a constructive wave (2 marks) *pg.40 in revision guide*

(D) escribe	(D) escribe

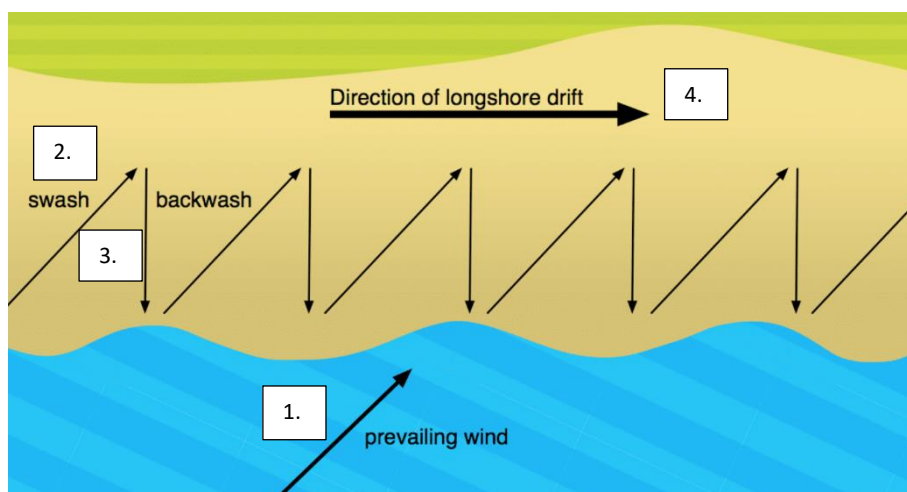
10. Explain how destructive waves shape the coastline (2 marks) *pg.40 in revision guide*

(K)nowledge	(U)nderstanding

11. Define each type of coastal erosion (3 marks) *pg.41 in revision guide*

Type of erosion	Definition
Hydraulic Power	
Abrasion	
Attrition	

12. Add the number from the diagram to the statements below to describe the process of longshore drift (4 marks) *pg.41 in revision guide*



The swash carries material up the beach, in the same direction as the waves	
Waves follow the direction of the prevailing wind and hit the coast at an angle	
Overtime material zig zags along the coast	
Backwash carries material down the beach at right angles, back towards the sea due to gravity.	

13. Define the four types of transportation (4 marks) *pg.41 in revision guide*

Type of erosion	Definition
Traction	
Saltation	
Suspension	
Solution	

14. Describe the process of deposition *pg.41 in revision guide*

Description

15. Describe the features of a concordant coastline (2 mark) *pg.42 in revision guide*

(D) escribe	(D) escribe

16. Describe the features of a concordant coastline (2 mark) *pg.42 in revision guide*

(D) escribe	(D) escribe

17. Explain the formation of Headlands and Bays (3 marks) *pg.42 in revision guide*

Step 1	
Step 2	
Step 3	

18. Explain how a stack is formed in a coastal landscape. Use one or more labelled diagrams. (4 marks) *pg.42 in revision guide*

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Step 1	
Step 2	
Step 3	
Step 4	

19. Explain how wave cut platforms form along the coast as a result of erosion. (4 marks)

Sequence the following statements correctly into the table below. *pg.42 in revision guide*

Statement	Correct number
The collapsed material is washed away and a new wave cut notch starts to form	
Waves erode the base of the cliff through hydraulic action and abrasion, forming a wave cut notch.	
After repeated collapses the cliff retreats and leaves a gently sloping rocky platform called a wave-cut platform which is exposed at high tide.	
Repeated erosion causes the rock above the notch to become unstable and eventually collapses.	

20. Explain how sand beaches are formed (2 marks) *pg.43 in revision guide*

(K)nowledge	(U)nderstanding

21. Explain how shingle beaches are formed (2 marks) *pg.43 in revision guide*

(K)nowledge	(U)nderstanding

22. Explain the formation of spits and bars using the word bank below. (4 marks) *pg.43 in revision guide*

Headland	Low	Longshore drift
Lagoon	Recurved	Prevailing wind
Backwash	Salt marsh	

Fill in the blanks below:

Spits are a depositional landform formed at a sharp bend in the coastline. _____ transports sediment along the coastline in the direction of the _____. Swash carries material up the beach at an angle and _____ straight back down due to gravity. Where the coastline changes direction, in an area of _____ energy, material is deposited and builds up to form a spit. A cross wind can change the direction of longshore drift and form a _____ end. Behind the spit it is sheltered from waves and material accumulates to form a _____. A bar is formed when a spit joins two _____, cutting off the bay from the sea. This means a _____ can form behind the bar.

23. Explain how sand dunes form in coastal areas (4 marks) *pg.43 in revision guide*

Step 1	
Step 2	
Step 3	
Step 4	

24. Identify one coastal feature shown in grid square 4339 (1mark) *pg.44 in revision guide*

Description



25. Identify the features found along the Dorset coastline (3 marks) *pg.45 in revision guide*



a. _____



b. _____



c. _____

26. Explain the costs and benefits of groynes for coastal management. (6 marks) *pg.46 in revision guide*

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

27. Explain the costs and benefits of sea walls for coastal management. (4 marks) *pg.46 in revision guide*

(K)nowledge	(U)nderstanding
(K)nowledge	(U)nderstanding

28. Explain the cost and benefits of a soft engineering scheme (4 marks) *pg.46 in revision guide*

(K)nowledge	(U)nderstanding
(K)nowledge	(U)nderstanding

29. Explain the cost and benefits of managed retreat (4 marks) *pg.46 in revision guide*

(K)nowledge	(U)nderstanding
(K)nowledge	(U)nderstanding

30. Using an example you have studied explain why it needed protecting from erosion (4 marks)

(K)nowledge	(U)nderstanding
(K)nowledge	(U)nderstanding

31. Using an example you have studied explain how coastal management strategies have protected the coastline (4 marks)

(K)nowledge	(U)nderstanding	(U)nderstanding
(K)nowledge	(U)nderstanding	(U)nderstanding

Question	Discuss the success of a coastal management scheme you have studied. (6 marks)			
	A (application)	K (knowledge)	U (understanding)	U (understanding)
Paragraph 1				
Paragraph 2 (Challenge – grade 6 +)				
Conclusion (Challenge – grade 8+)				

Question	Using an example you have studied, explain the formation of major landforms found there. (6 marks)		
	K (knowledge)	U (understanding)	U (understanding)
Paragraph 1			
Paragraph 2 (Challenge – grade 6 +)			