Name:

Unit: Physical landscapes in the UK.
Coastal landscapes in the UK

Revision guide companion

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1. Wave types and characteristics

2. Coastal weathering and erosion

3. Coastal landforms caused by erosion

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James Craigmyle

Different types of wave, constructive and destructive

Destructive waves

The waves that…

Destructive waves have…

They are …

Their backwash…

Destructive wave - annotated sketch

Constructive waves

Constructive waves have…

They're low and long.

The swash is…

The backwash is…

Constructive wave - annotated sketch

Coastal weathering and erosion
Rock is broken down by weathering
Mechanical weathering is… Biological Weathering is… Chemical Weathering is…

Mass movement	
1. Mass movement is… **2.** Its more likely to happen when… **3.** Three types:	Sliding
Slumping	Rock falls

Waves wear away the coast using four main types of erosion	
Hydraulic Power	Abrasion
Attrition	Solution

Only two types of erosion can change the shape of a coastline	
1:	2:

The rate of erosion depends on two main factors	
Wave type:	Rock type:

Coastal landforms caused by erosion	
Headlands and bays form where erosion resistance is different	
Some types of rock…	Annotated sketch to show sequence:
Headlands and bays…	
The less resistant…	
The resistant rock…	

Waves erode cliffs to form wave-cut platforms			
1. Waves cause… **2.** This forms a… **3.** The rock above… **4.** The collapsed material… **5.** Repeated collapse… **6.** A wave-cut platform… Annotated Diagrams to show the sequence…			

Headlands are eroded to form caves, arches and stacks

1. Headlands are…
2. Waves crash…
3. Repeated erosion…
4. Continued erosion…
5. Erosion continues…
6. This forms a …

Headlands are eroded to form caves, arches and stacks

Add annotations to show where specific erosion is operating and the role of gravity.

Coastal transportation
Coastal transportation is the movement of material Material is transported along the coast by the process of *longshore drift*. Waves follow the direction… They usually hit the coast… The swash… The backwash… Over time…
Annotated sketch to show longshore drift.

There are four processes of transportation that you need to know about:	
Traction (pushed)	Saltation (bounced)
Suspension (carried)	Solution (dissolved)

Coastal deposition

Deposition is the dropping of material

1. Deposition happens when…

2. The amount of material that is deposited depends on…

3. Low energy or constructive waves…

Coastal landforms caused by deposition

Beaches are formed by deposition

1. Beaches are found…

2. They are formed by …

3. Sand and shingle beaches…

Sand beaches are flat and wide…

Shingle beaches are steep and narrow…

Spits and Bars are formed by longshore drift

Spits are just…

Spits:

1. Spits form…
2. Longshore drift…
3. Strong winds…
4. The sheltered area…
5. Over time…

1. Start	**2.** Finish

1. Spit and Bay – Annotated Sketch	**2.** Bar – Annotated Sketch

Coastal management includes both hard and soft engineering strategies
Hard engineering

Strategy and description	How it protects the coastline	Benefits	Disadvantages
Sea wall			
Rock armour			
Gabion			
Groyne			

Soft engineering

Strategy and description	How it protects the coastline	Benefits	Disadvantages
Beach nourishment and reprofiling			
Dune regeneration			
Managed retreat			

Coastal management scheme in the UK. **Example:_____**
Reasons for management
Management strategy
Resulting effects and conflicts