

Name:

Group:

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

Revision guide companion

Contents

1. Wave types and characteristics
2. Coastal weathering and erosion
3. Coastal landforms caused by erosion
4. Coastal transportation, longshore drift and deposition
5. Coastal landforms caused by deposition
6. Coastal erosion and management case study

Different types of wave, constructive and destructive

Destructive waves

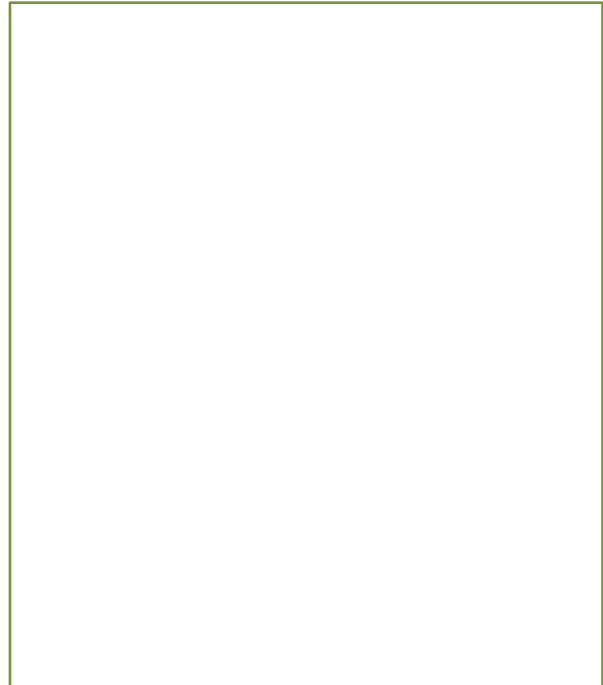
The waves that...

Destructive wave - annotated sketch

Destructive waves have...

They are ...

Their backwash...



Constructive waves

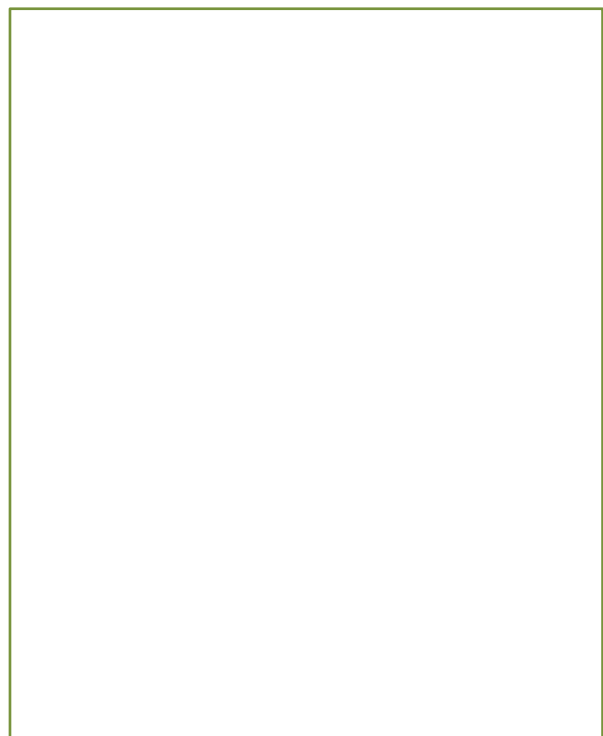
Constructive waves have...

Constructive wave - annotated sketch

They're low and long.

The swash is...

The backwash is...



Coastal weathering and erosion

Rock is broken down by mechanical and chemical weathering

Mechanical weathering is...

Chemical Weathering is...

Mass movement

1. Mass movement is...

Sliding

2. They're more likely...

3. Three types:

Slumping

Rock falls

Waves wear away the coast using four main types of erosion

Hydraulic Power

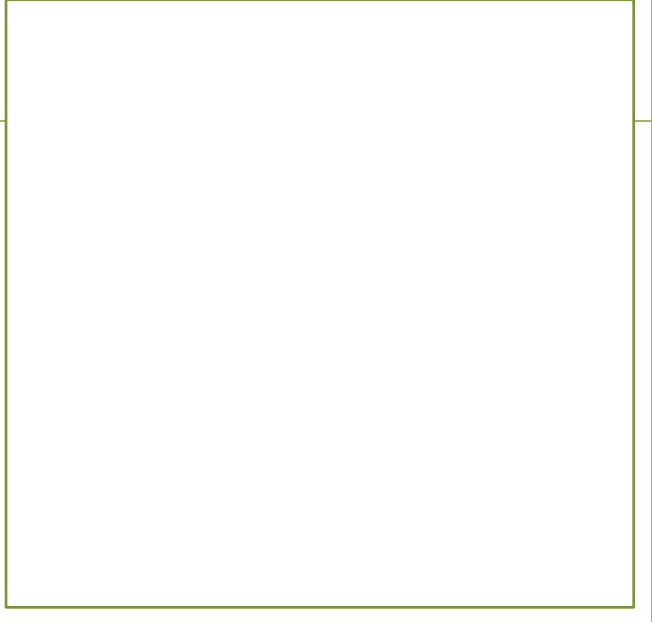
Abrasion

Attrition

Solution

Coastal landforms caused by erosion

Headlands and bays form where erosion resistance is different

Some types of rock...	Annotated sketch
Headlands and bays... The less resistant... The resistant rock...	

Waves erode cliffs to form wave-cut platforms

<ol style="list-style-type: none"> 1. Waves cause... 2. This forms a... 3. The rock above... 4. The collapsed material... 5. Repeated collapse... 6. A wave-cut platform... <p>Annotated Diagrams to show the sequence...</p>			

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 is when...
2. Coasts are...
3. The amount of material...
4. 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...

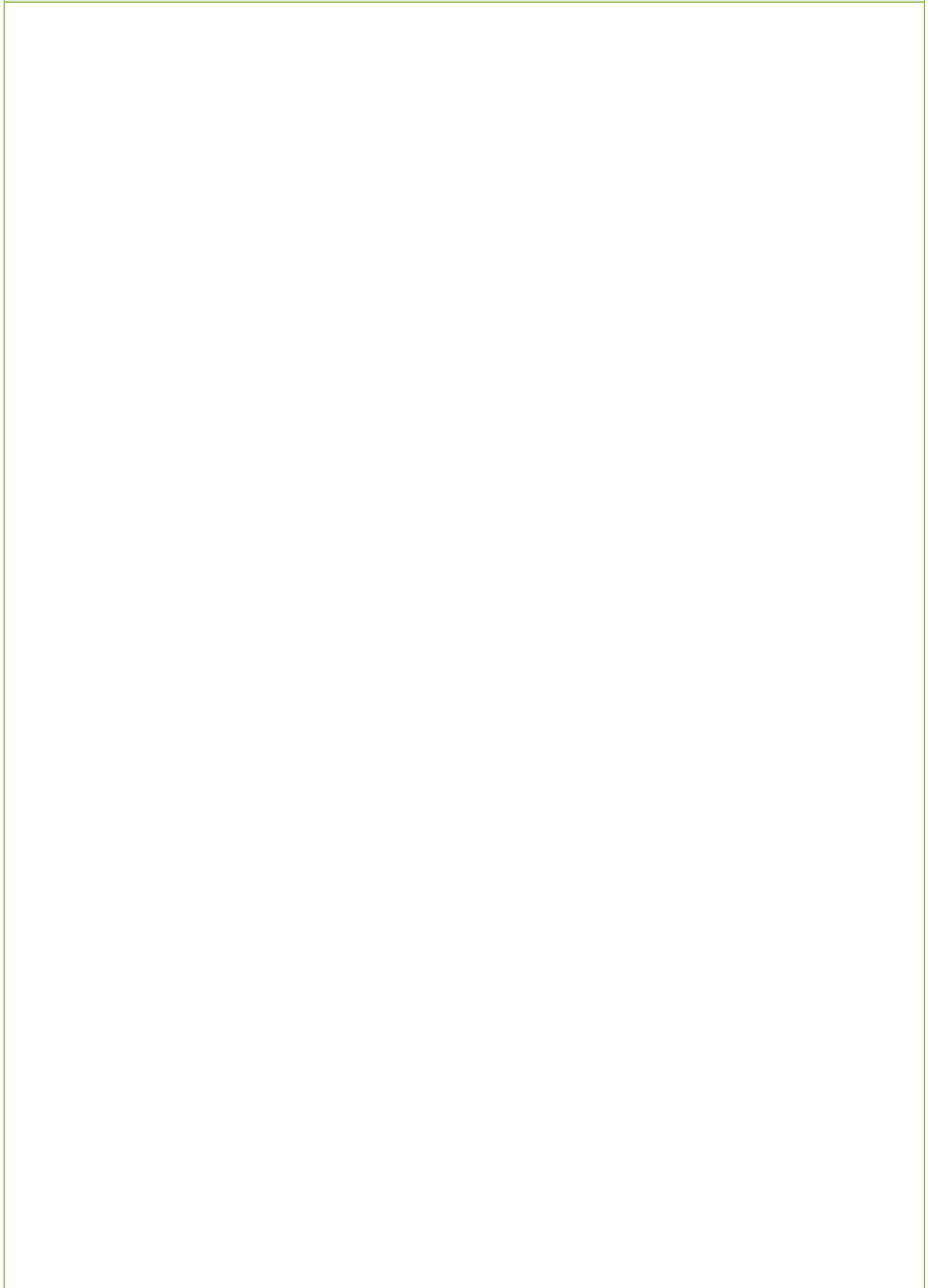
1. Start

2. Finish

1. Spit and Bay - Annotated Sketch

2. Bar - Annotated Sketch

Example: Section of coastline in the UK and its landforms of erosion and deposition



Coastal management includes both hard and soft engineering strategies

Hard engineering

Strategy	What it is	Benefits	Disadvantages
Sea wall			
Rock armour			
Gabion			
Groyne			

Soft engineering

Strategy	What it is	Benefits	Disadvantages
Beach nourishment and reprofiling			
Dune regeneration			
Managed retreat			

Example: Coastal management scheme in the UK

Reasons for management

Management strategy

Resulting effects and conflicts