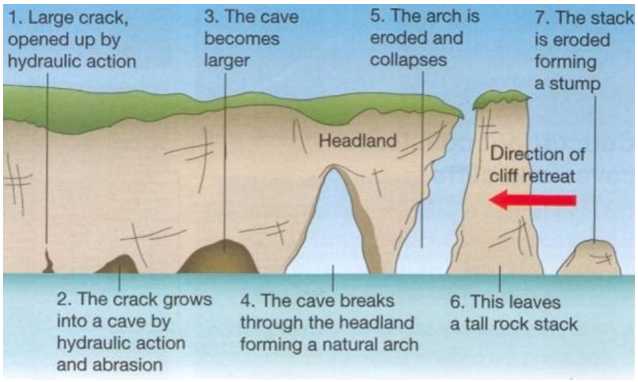
St Sebastian's Primary School Knowledge Organiser

Term - **Summer 1** Subject **Geography - Coastlines** Year Group - **5**

Vocabulary		
Word	**Picture**	**Definition**
coast		The part of land adjoining or near the sea.
cliff		A steep rockface.
erosion		The process of which a surface is gradually destroyed through the action of the wind, rain etc.
tide		The alternate rising and falling of the sea.
bay		A broad inlet of the sea where the land curves inwards.
cave		A natural underground chamber.
headland		A narrow piece of land that projects from the coastline into the sea.
arch		A wave-eroded passage through a small headland.
stump		A pillar of rock which exists offshore from a cliff.
wave		A large body of water curling into aa arched form.



Strategies to Protect Coastlines From Erosion

Hard Engineering

1. **Sea Walls**

Made out of hard material (e.g. concrete) to reflect waves back out to sea. **Pros** – prevents coastal erosion and flooding. **Cons** – expensive to build and maintain. Can cause greater erosion downdrift due to waves reflecting off seawall.

2. **Rock Armour**

Large rocks dumped to absorb and reflect wave energy. **Pros** – allows material to be deposited. **Cons** – expensive. Boulders need to be transported long distances (e.g. from Norway).

3. **Gabions**

Wire cages filled with rocks to form a wall. **Pros** – cheaper and easier than many other management strategies. **Cons** – the wire cages corrode over time. Can be considered to be ugly structures.

4. **Groynes**

Wooden/stone fences built at right-angles to the coast. **Pros** – traps material transported by longshore drift. **Cons** – can be costly. Can cause greater erosion downdrift.

Soft Engineering

1. **Beach Nourishment and Reprofiling**

Sand/shingle/pebbles shifted up the beach profile. **Pros** – creates wider beaches which reduces erosion and flooding. **Cons** – constant maintenance needed, especially after extreme weather/high tides.

2. **Dune Regeneration**

Creating/restoring sand dunes through beach nourishment or planting vegetation to stabilise sand. **Pros** – provides a barrier between land and sea. **Cons** – often limited to small areas as nourishment is expensive.

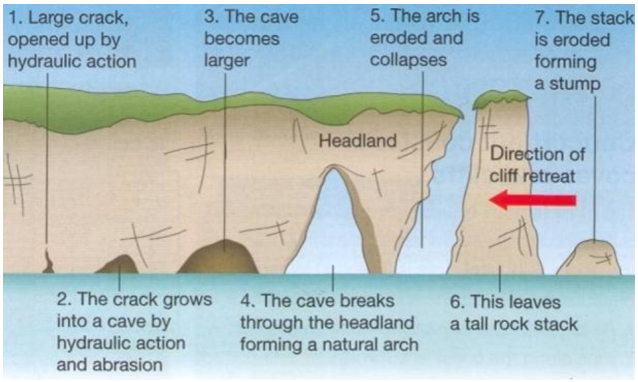
3. **Managed Retreat**

Coastal Realignment Removal of sea defences to allow the formation of salt marshes. **Pros** – cheap and easy. No maintenance. Prevents erosion and flooding elsewhere. **Cons** – salt can alter ecosystems. Land and buildings will be lost – compensation cost could be high.

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