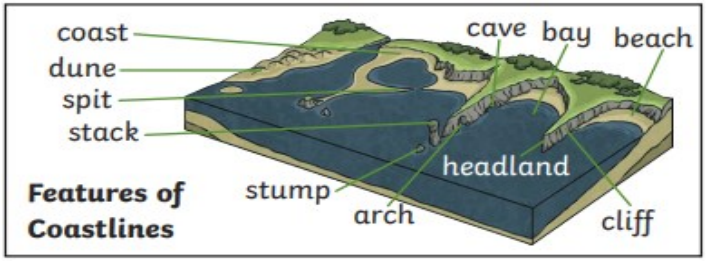
St Hilary School – Project Knowledge Organiser (Geography first page / History second page)		
Project: Coasts / Local History (impact of Cornwall on the development of communication)	**Year 6**	Concepts: Place, Environment & Scale

What should I already know?

The basic geographical vocabulary used to refer to: key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather

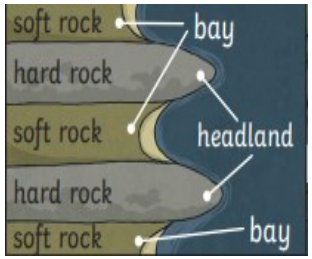


Vocabulary—Features of a Coastline

Arch	The waves eventually break right through the headland, creating an arch.
Bay	An area of sea protruding into the land.
Beach	A low lying area where the land meets the sea, made up of fine, loose sediment.
Cave	A cave is formed when waves force their way into cracks in the cliff face.
Cliff	A high altitude area where the land meets the sea, made of hard rock.
Coast	The area where the land and sea meet.
Dune	Ridges or mounds of loose, wind-blown sand.
Headland	An area of land protruding into the sea.
Spit	A **coastal** landform, a depositional ridge, or an embankment of sediment.
Stack	A geological landform consisting of a steep and often vertical column or columns of rock in the sea.
Stump	Erosion causes the stack to collapse, leaving a **stump**.

Bays and Headlands

Where there is harder and softer rock, the softer rock will erode more quickly and can form bays. The harder rock erodes more slowly and can form headlands surrounding bays.

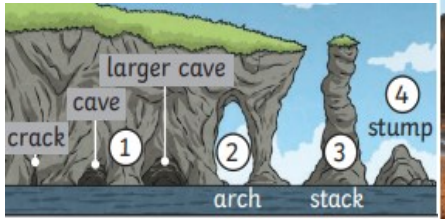


What knowledge will I know about coasts by the end of the project?

-Waves are created by the movement of air across the sea.
-Tides are created by the gravitational pull of the moon.
-The sea's waves lead to hydraulic action and erosions of the land.
-The land is made up of different rocks, some hard some soft, leading to bays and headlands.
-Further erosion leads to cracks, caves, arches, stacks and stumps.
-Coasts are where the land meets the ocean - this can take different forms such as beach and cliffs.
-Coastal erosion can threaten land use and so beach protection measures, such as rock armour and seawalls, are created.
-Ocean plastic, and beach litter. Beaches are becoming poisonous habitats due to human activity.

Arches, Stacks and Stumps

Softer or weak sections of the rock are eroded more easily. 1. Over time, waves cause cracks to open forming caves. 2. If a cave forms in a headland, it may break through causing an arch to form. 3. The top of the arch can weaken and may collapse into the sea leaving a stack. 4. Over time, the stack will erode leaving a small stump of rock.



Spits

Formed by deposition. 1. The tide carries eroded material along the coastline. 2. Deposits form a long, thin sandy area of land. 3. Changing winds may cause the spit to form a hook shape. 4. Mud flats develop on the inland side of the spit.

Vocabulary

Abrasion	When pebbles grind along a rock platform. Over time the rock becomes smooth.
Acidic	A chemical substance, usually a liquid, which reacts with other substances to form salts. Some acids burn or dissolve other substances that they come into contact with.
Attrition	When rocks that the sea is carrying knock against each other. They break apart to become smaller and more rounded.
Border/ Boundary	The outer part or edge of a region or country that divides it from another.
Deposition	When material/sediment is moved and dropped off in a different place.
Dissolve	When a solid substance mixes with a liquid to make a solution.
Erosion	When natural materials are worn away and transported to a different place.
Hydraulic action	The weight of a wave crashing on a cliff face, pushing the air in cracks and caves, under pressure, to force open the crack/ cave.
Longshore drift	The process through which sediment is moved across a beach.
Weathering	The process of wearing away rocks by the weather.

Changing Landscapes

Landscapes can change over time for many different reasons:

- New houses/buildings and roads are built
- Old buildings are demolished or updated
- Areas of land may be cleared for farming or building. Some landscapes are important and there are things in place to stop development such as:
- Listed buildings
- National/country Parks
- Green belt/conservation areas
- Sites of Special Scientific Interest
- World Heritage Sites

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Project: Local History (impact of Cornwall on the development of communication)	**Year 6**	Concepts: Chronology, Significance, Cause & Consequence

Vocabulary	
Guglielmo Marconi	Italian inventor and electrical engineer known for his creation of radio-wave based wireless telegraph system.
Thomas Edison	An American inventor and businessman.
John Pender	Scottish entrepreneur formed the Eastern Telegraph Company (largest cable-operating company in the world)
Morse Code	Is a method used in telecommunication to encode text characters as sequences of two different signal durations, called *dots* and *dashes*.
Telegraphy	The science or practice of using or constructing communication systems for the transmission or reproduction of information.
Wireless	Transmission of telegraph signals by radio waves.
Transmission	The process of broadcasting or sending out something by radio or television.
Aerial	Existing, happening, or operating in the air.
Cable & Wireless	Was a British telecommunications company.
Porthcurno	Is a small village covering a small valley and beach on the south coast of Cornwall.

Interesting facts...

- **The ETC became the largest cable-operating company in the world and Porthcurno became not just the hub of communication for this country but the hub for the British Empire and – in time – the most important telegraph station in the world.**
- **In 1944, 705,000,000 words had been transmitted over Porthcurno cables.**

Development in communication over time

1870

A telegraph cable was laid on the shore of Porthcurno to India.

1876

Thomas Edison takes out a U.S. patent on a communicating device of communicating wirelessly between two ships at sea.

1894

Italian inventor Marconi starts building a commercial radio communication device.

1900-1901

Marconi built a wireless station at Poldhu, Cornwall to communicate with ships.

1901 (December)

Marconi travelled to Newfoundland and received short signal (3 dots– representing 'S') from Poldhu.

1902 (December)

Porthcurno cable station built 170ft wooden mast to 'spy' on Marconi's wireless station.

1914

Poldhu wireless station taken over by Royal Navy during WW1.

1941

Tunnels were created in the cliffs at Porthcurno to protect communications during WWII.

1988

The first undersea optical fibre systems arrived in Cornwall. Work resumed in the Porthcurno area.