

Subject	Geography	Year Group	9	Sequence No.	2	Topic	What's happening along our coasts and in our oceans?
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Retrieval	Core Knowledge	Student Thinking
What do teachers need retrieve from students before they start teaching new content ?	What specific ambitious knowledge do teachers need teach students in this sequence of learning?	What real life examples can be applied to this sequence of learning to development of our students thinking, encouraging them to see the inequalities around them and 'do something about them!'
<p>L1-link back to Y7 topic 2 map/locational knowledge used to name landlocked countries Link back to Y7 T1 human and physical geog to state human or physical features of a coast</p> <p>L2 link back to Y7 Rivers topic as students learn the 3 main processes in a river occur along the coast too. They focus on differences between rivers and coasts too.</p> <p>L3 link back to Y7 T1 geography timeline-highlight on there the time period we will be studying</p> <p>L4 retrieve the geographical meaning of the word challenges</p> <p>L5-6 They are looking at ways to manage the challenges they learnt about in L4</p>	<p>Landlocked country-one that does not have a coastline <u>What is the coast?</u> The coast, also known as the coastline or seashore, is the area where land meets the sea or ocean, or as a line that forms the boundary between the land and the ocean or a lake. <u>Why is the coast important?</u> Socially-around 40% of people live near a coastline. Tourism. Economically-provides jobs, helps exports and imports Environmentally-aquatic and land habitats-food chains and ecosystems All rely on each other to operate fully</p> <p><u>What processes take place along the coast?</u> Erosion-is the wearing away of rock along the coastline. Destructive waves are responsible for erosion on the coastline. There are four types of erosion: Hydraulic action - this is the sheer power of the waves as they smash against the cliff. Air becomes trapped in the cracks in the rock and causes the rock to break apart. Abrasion - this is when pebbles grind along a rock platform, much like sandpaper. Over time the rock becomes smooth. Attrition - this is when rocks that the sea is carrying knock against each other. They break apart to become smaller and more rounded. Solution - this is when sea water dissolves certain types of rocks. In the UK, chalk and limestone cliffs are prone to this type of erosion. Transportation/Longshore drift-Sediment is moved along the coastline in a process known as longshore drift. The prevailing wind blows waves carrying sediment into the beach at an angle, the waves break on the shore and as the water runs back into the sea it carries the sediment back down the beach, perpendicular to the angle of the shoreline under the influence of gravity. This results in a zigzag motion as sediment is transported along the coastline. This process means that over time beaches can change shape. Deposition-dropping of material</p>	<p>From the knowledge gained in this topic students will learn about contrasting coastal environments in the world. Gain a better understanding of issues we cause in coastal environments and how we can solve/deal with these issues. They will do this through the following activities:</p> <ul style="list-style-type: none"> Students take a virtual tour of Cornwall and Phuket coast-to focus on similarities and differences between different coastlines Students explain why the coast is so important Students apply their geology knowledge to describe the type of rocks found along the Jurassic coast Students discuss the worst challenge that the coast is facing They will carry out a short debate Students have to assess strategies that are available to manage the coast and decide on the best way to overcome challenges

	<p>Weathering describes the breaking down or dissolving of rocks and minerals on the surface of the Earth. Water, ice, acids, salts, plants, animals, and changes in temperature are all agents of weathering.</p> <p><u>Jurassic coast</u> Earth is 4.6 billion years old The Jurassic coast can be found along the South West coast of England-Dorset</p> <p><u>Geology</u> There are three main types of rocks: sedimentary, igneous, and metamorphic. Each of these rocks are formed by physical changes—such as melting, cooling, eroding, compacting, or deforming—that are part of the rock cycle. Sedimentary rocks are formed from pieces of other existing rock or organic material. The formation of sedimentary rocks begins with the weathering, or breaking down, of the exposed rock into small fragments. Through the process of erosion, these fragments are removed from their source and transported by wind, water, ice, or biological activity to a new location. Once the sediment settles somewhere, and enough of it collects, the lowest layers become compacted so tightly that they form solid rock. Igneous rocks (derived from the Latin word for fire) are formed when molten hot material cools and solidifies. Igneous rocks can also be made a couple of different ways. When they are formed inside of the earth, they are called intrusive, or plutonic, igneous rocks. If they are formed outside or on top of Earth’s crust, they are called extrusive, or volcanic, igneous rocks. These rocks are very resistant and are difficult to erode. Metamorphic rocks are rocks that have been changed from their original form by immense heat or pressure. An example of this transformation can be seen with granite, an igneous rock. Granite contains long minerals that are not initially aligned, but when enough pressure is added, those minerals shift to all point in the same direction while getting squeezed into flat sheets. These rocks can be difficult to erode and are often used as building materials.</p> <p><u>Challenges faced by the coast</u> Coastal pollution as a result of plastic not only does it kill animals if digested it if we consume animals that have eaten plastic it impacts us. If animals are dying as a result of this it will impact biodiversity in the sea and destroy food chains and food webs Overfishing-linked to the commercialization of fishing. Huge trawlers drag up 1000s of species in short spaces of time. We are not giving the sea life enough time to reproduce and develop, eventually food chains and webs will collapse</p>	
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