



May we give them roots to grow and wings to fly.

Our Curriculum – Medium-Term Planning



Term and Year:	Summer 2
Class:	Year 3/4
Subject:	Geography
Key Unit Question:	What is coastal erosion?
Key Themes:	Space
Memorable Experience:	Durham Heritage Coast – Fieldwork Walk – Adventure Access

Vocabulary that will be taught:

Abrasion: Waves throwing pebbles at cliffs

Arch: A coastal feature formed when waves erode through a headland

Cave: A hollow in a cliff formed by wave action enlarging a crack in the cliff

Cliff: A steep, rocky slopes that may overlook the sea

Coast: Where the land meets the sea

Corrosion: Dissolving of rock by acid in water

Deposition Landforms: Areas built up by materials brought in by the sea

Erosion Landforms: Areas worn away by waves and weather conditions

Stacks: A detached pillar of rock on a sea coast separated from the mainland by erosion

Tombolo: Where an island becomes attached to the mainland by a narrow piece of land

National Curriculum Objectives:

- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

Rationale:

This unit of work allows pupils to fully immerse themselves in our local geography. Living so close to the Durham Heritage Coast, this unit provides the children with the opportunity to investigate what coasts are, how they are formed, how they are protected and why they are constantly changing. Within the unit, children study the processes of erosion and deposition and how they affect the coast, find out the names of some different coastal formations and find out what disasters can happen on precarious cliff edges. They also have the chance to debate how changing a coastal area will affect the local environment and play the role of travel agents as they find coastal holidays for a variety of customers.

Prior Knowledge:

In KS1, children have learned that land masses are surrounded by oceans and seas. Children should be able to name the 5 main seas. Children will have prior knowledge of the UK and the 4 countries that it is made of.

In KS1, children will have learned about the seaside in our locality and should be able to identify physical and human features of the seaside.

The children should also have an understanding of what the purpose of a map is and how symbols are used within maps.

What do we intend pupils to know and be able to do at the end of this unit?

Substantive knowledge:

- I know what coastal erosion is
- I know how caves, stacks and arches are formed
- I know the different strategies of coastal management

Disciplinary knowledge:

- I can make observation about how people are improving or damaging the environment
- I can use map sites on the internet
- I can identify and explain different views of a wide range of people



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Key lesson questions		Activities/Key points
Lesson 1	<u>What are coasts?</u> - I can identify coastal area using maps - I can understand that coastal areas are constantly changing - I can explain what coastal erosion is	- What is a coast? Ask children to come up with a definition in pairs e.g. a zone where the land meets the sea. What coastal areas have you visited? Where were they? What were they like? Ask children to think, pair, share their ideas. Can they say where they are on the map of the UK? - Show the children a map of Europe, then a map of the world. Have the children been to any coastal regions or resorts in Europe or in the world? Can they locate them on the map? - Explain that coastal areas are in a constant state of change. Some areas are being worn away (erosion landforms) and some are being built up (depositional landforms). Explain that different rock types affect how the coast is shaped. - Go to Google Maps or similar and explore some of the different coastal areas around Britain. Using the 'satellite' view, zoom in to coastal areas such as the cliffs of Dover, Brighton's shingle beaches and the sandy beach at Blackpool. How have each of these coastal areas been formed? - Challenge the children to put each picture near its location on the map and then write what type of landform it is showing.
Lesson 2	<u>What is coastal erosion?</u> - I can explain how coastal erosion take place - I can describe how caves, stacks and arches are formed - I can understand that human activity can also cause erosion	- What did we learn last lesson about how coasts are formed? Ask children to define erosion and depositional landforms. - Show children the pictures on the slides of caves, stacks and arches and ask them to explain how they think they were formed. Ensure children understand that it is often because of weak spots, such as cracks, that these features are formed. How else could coastal erosion be caused? Ask children to think, pair, share their ideas. - Human activity can also cause erosion. Explain what happened to the Holbeck Hotel in Scarborough in 1993. Why do you think building on a cliff edge can increase the risk of cliff instability? - Give children some picture cards showing examples of coastal stacks, caves and arches. Ask children to sketch, draw or paint an example of each one and write a short explanation of how each one is formed. Children could put the pictures and explanations onto a large sheet of paper to create a collage of coastal erosion formations. - What do you think we can do to reduce the risk of coastal landslides? Ask children to discuss any ideas or strategies that they have seen. You may wish to go on the Environment Agency's website and look at the risks in your local area. https://www.gov.uk/check-coastal-erosion-management-in-your-area
Lesson 3	<u>What are the different strategies of coastal management?</u> - I can identify the different strategies of coastal management - I can name some advantages and disadvantages of coastal management strategies - I can explain how coastal management strategies affect people's lives	- Share with the children that coasts are constantly changing and there is a danger of landslides in certain coastal areas. - Remind children about the Holbeck Hall Hotel disaster. Do you know any strategies to prevent events like this happening? How can we protect our shores from damage? What other dangers are there in coastal areas? Ask children to think, pair, share their ideas. - Go through the slides explaining coastal management strategies including sea walls, revetments, gabions and groyne. Share the information on the slides explaining how these coastal management strategies protect against flooding and land damage. - Challenge the children to think about what would happen if we didn't have these coastal management strategies and if we are going against nature by putting these strategies into action. - Ask children to describe each coastal management strategy and then write a list of advantages and disadvantages to using the coastal management strategies.

Lesson 4	<u>What are the different types of beaches?</u> • I can identify different types of beaches • I can describe the physical features of different types of beaches • I can describe the human features of different types of beaches	• Which beaches have you been to? Ask children to locate some of the beaches in Britain they have visited on the map on the slides. What were these beaches like? Were they big, small, sandy, pebbly? What kind of facilities for visitors did they have? Invite children to share their answers with the class. • Show the children the pictures of various beaches in the UK and other world countries on the slides. Ask them to identify their different physical and human features. Do you think this beach would attract holidaymakers? What kind of holidaymakers? Can you spot the main differences between shingle and sand beaches? Create a list of similarities between the two different types of beaches on the slides. • Tell children that they work for a company called Super Seashores. This company transforms beaches into tourist areas. Organise the children into groups and give each group one of the Super Seashores Cards detailing the beach they have just purchased. • In groups, children will design a new tourist area based on what kind of beach they have been given. Will you need equipment for sunbathing? Could you have water sports facilities? Do you need chairs if the beach is shingle? What facilities for refreshments will you need? Are there any dangerous areas people should stay away from? etc. • Children create an annotated beach design using symbols and keys on a large sheet of paper. When all groups have finished, give each group time to present their ideas to the class. Which beach would you most like to go to? Does the design fit the kind of beach there is?
Lesson 5	<u>How will changes in land affect people?</u> • I can name the 4 categories of land use • I can identify different viewpoints and explain reasons behind them • I can understand how changing land use affects people in different ways, now and in the future	• Share the information on the slides about land use in the UK. Show children the picture on the slides of an unspoilt coastal area and ask them how the following people might use the land or what their interest in it might be: a local resident who owns a cafe; a sea angler; a local government official; a travel company representative; a holiday-maker; a scientist. Tell children that there is a proposal for a new hotel to be built on the coast. How might each of the above people feel about the proposal? Do they all agree? What are the main points of contention? Ask children to think, pair, share their ideas. • Split the class into five different groups and allocate one of the characters to each group: a local resident who owns a cafe; a sea angler; a local government official; a travel company representative; a holiday-maker; a scientist. You can give each group their Character Card to remind them which character they have been assigned. Ask each group to come up with three different statements showing their opinion about the proposed hotel, why they think it would have a positive or negative effect on the environment and how it would affect the people in the local area. • When each group has their three statements, a spokesperson from each group presents the statements in a class debate. When all the statements have been delivered, invite anyone else with something else to say to air their views. • When all opinions have been voiced, have a class vote for or against the proposed hotel. Has anyone changed their minds? Why?
Lesson 6	What is coastal erosion? End of Unit Assessment / Knowledge Harvest	