

# Geography

## Coasts Year 3

### Remember when

- Hull is in the UK
- Rocks (Science)
- Location of the Seas of the UK

*Children must be able to recall the countries and capital cities of the UK.*

### Sticky knowledge

- Coastal towns on the Holderness coast are Hornsea, Withernsea, Flamborough, Bridlington.
- I know that the wind, sea and changes in temperature cause coastal erosion.
- I know erosion can change the characteristics of the coast creating features such as arches, stacks, stumps and caves.
- I can include human and physical features on my own map.
- I know that sea walls, groynes, boulder barriers are used to prevent and slow coastal erosion.

### Key vocabulary

- |         |                |
|---------|----------------|
| coasts  | shingle        |
| cliffs  | sand           |
| tombolo | rockpool       |
| arch    | spit           |
| beach   | lighthouse     |
| pier    | erosion        |
| harbour | tourism        |
|         | grid reference |

### National curriculum

- 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

- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

- Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

### Y3 Map types

- Political
- Physical
- Topographic

### Y3 Map to include

- Countries
- Capital cities
- mountains and rivers
- basic symbols and key

### Y3 Physical geography

- mountains
- coasts
- land use

### Y3 Human geography

- Culture
- Landmarks
- land use

	Title/ focus	Lesson outline
Lesson 1	<p>LO: To use compass directions and maps to identify the features of coastal areas.</p> <p>SK: Features of coastal areas include beach, farmland, lighthouse, caravan parks</p>	<p>Revisit – 4 countries of the UK and their capital cities – display on IWB. Chd discuss with TP and share with class</p> <p>Locate Hull on a map of the UK – TP and discuss</p> <p>Look at maps- how do you know where the coast is? Children find Hull and locate coastal towns near us.</p> <p>Introduce/revisit (if already taught during Maths) compass directions. Use ordnance survey maps with a key to introduce to basic symbols associated with the coast. Which do you think represents the beach/lighthouse/farmland, buildings.</p> <p>Activity 1:</p> <p>Children complete OS symbols activities in books</p> <p>Blue - matching</p> <p>Green – name the symbol</p> <p>Purple –name symbols in book (more symbols)</p> <p>Introduce the term land use- what the land is used for. What is the land used for in coastal areas near to us? Discuss tourism.</p> <p>Features of coasts e.g. beach, cliffs, towns, villages, wind farms,</p> <p>Activity 2:</p> <p>Children answer questions in books re land use of coastal areas.</p>

<p><b>Lesson 2</b></p>	<p>LO: To know why coasts erode</p> <p>SK: I know that the wind, sea and changes in temperature cause coastal erosion.</p>	<p>How coasts erode – wind, sea, change in temperature.</p> <p>Remember when ... remind them about the types of rocks and soils and which were hard and soft.</p> <p>Discuss that Coastal erosion (CE) is the wearing away of land from the coast line – through the sea, wind and changes in temperature. Also, human impact.</p> <p>Show children video clip of CE along the East coast. Discuss video and ask children to discuss with TP why the East Coast erodes so quickly?</p> <p>Children complete cookie erosion experiment.</p> <p>Elicit that the Holderness coast consists of a lot of boulder clay and chalk cliffs which erode easily.</p> <p>Activity:</p> <p>Blue: Copy correct words into Coastal erosion text. Key words given (not in order)</p> <p>Green: Copy and complete missing words into paragraphs about Coastal Erosion. Key words not given but encouraged to use displays/flipchart.</p> <p>Purple: Copy and complete paragraphs in books in full. Key words not given but encouraged to use display/flipchart if needed.</p>
<p><b>Lesson 3</b></p>	<p>LO: To know the features of coastal erosion</p> <p>SK: I know erosion can change the characteristics of the coast creating features such as arches, stacks, stumps and caves.</p>	<p>The effect of the erosion – arch, stack, stump, cave.</p> <p>Remind children what is a coast. What physical features can we find at the coast? Recap why coastlines look different in different places – types of rock, weather in those locations, etc.</p> <p>Show the children images of caves, arches, stacks and stumps. Name them.</p> <p>Children in partners/ small groups to predict how they are formed using mixed up picture cards with explanation. Discuss children's reasoning. Show correct formation on IWB.</p> <p>Discuss how each feature is formed.</p> <p>Activities:</p> <p>All: Label each feature of coastal erosion on numbered picture</p> <p>Blue: Describe how a cave is formed.</p> <p>Green: Describe how a cave and an arch is formed.</p> <p>Purple: Describe how a cave, arch, stack and stump is formed.</p> <p>Challenge: Draw an outline to show where the original headland would have been.</p> <p>Plenary: Show how coastal erosion can also deposit land in other areas such as Spurn point - <a href="https://www.internetgeography.net/topics/spurn-point/">https://www.internetgeography.net/topics/spurn-point/</a></p>
<p><b>Lesson 4</b></p>	<p>LO: To use fieldwork to map a coastal area</p> <p>SK: I can include human and physical features on my own map</p>	<p>Trip to Bempton Cliffs with Hull Children's University</p> <p>KS2 – Investigating coasts</p> <p>Children will explore the magnificent cliffs at Bempton. Discussion to recap prior learning: how a coastline is created, what features we might expect and who uses these areas. The children will study the local coast formations by working in small groups to identify the features of the coastline and consider how it was created through natural processes such as erosion, wave energy and weather.</p> <p>Children will then create a field sketch (map) of the coastline and label the physical and human features. In groups, the children will identify any wildlife they can see, or evidence that is left behind. They will consider how humans use the coast and the impact this can have, including the challenge or need to defend coastlines.</p> <p>At the end of the session, children will draw a picture or discuss what they think the coast may look like in the future, explaining why their changes have occurred.</p>
<p><b>Lesson 5</b></p>	<p>LO: To know how coastal erosion can be prevented or slowed down</p>	<p>Recap how coastlines erode.</p> <p>Explain that today's lesson will focus on: How to prevent coastal erosion</p>

	<p>SK: I know that sea walls, groynes, boulder barriers are used to prevent and slow coastal erosion.</p>	<p>Discuss various hard engineering options and soft engineering processes. Discuss advantages and disadvantages of each. Discuss how some can result in coastal erosion being prevented or slowed down. Show examples of them being used along the Holderness coast – e.g. at Withernsea <a href="https://www.internetgeography.net/new-sea-defences-at-withersea/">https://www.internetgeography.net/new-sea-defences-at-withersea/</a>(and others such as Skipsea: <a href="https://www.internetgeography.net/coastal-erosion-at-skipsea">https://www.internetgeography.net/coastal-erosion-at-skipsea</a></p> <p>Activity</p> <p>Children to have photographs of each type of coastal erosion prevention engineering process in their books.</p> <p>All – children name the process</p> <p>Blue – Explain what each process is.</p> <p>Green – Explain what each process is and how it works.</p> <p>Purple – As green, include advantages and disadvantages for them.</p> <p>Challenge: Which, if any, would work well along the Holderness Coast?</p>
<p><b>Lesson 6</b></p>	<p>LO: To use fieldwork and research to improve a coastal location</p> <p>SK: I know that sea walls, groynes, boulder barriers are used to prevent and slow coastal erosion.</p>	<p>Design a system to prevent coastal erosion on the Holderness coast.</p> <p>Show children a range of videos about Flamborough <a href="https://www.internetgeography.net/videos/coastal-videos/flamborough-videos/">https://www.internetgeography.net/videos/coastal-videos/flamborough-videos/</a></p> <p>Children work in small groups to use this research in order to improve coastal erosion on the Holderness coast.</p> <p>Children use this to create a poster demonstrating what their method is, how it works and most importantly why it would be helpful along the coastline at Flamborough.</p>
<p>Working towards</p>	<p><b>End of unit assessment</b></p> <p>Working at Age related expectations</p>	<p>Working at a greater depth</p>