<table>
<tr><th colspan="2">Objectives and key words</th></tr>
<tr><td>Knowledge:
I know what a coast is
I know different coastal areas around the UK
know how waves and tides are formed
I know what constructive and destructive waves are
I know what erosion is
I know what attrition, abrasion, solution, and hydraulic action are and how they erode the coast
I know what affects the speed of erosion
I can name some erosional landforms
I can explain how a stump is formed
I can find coastal features on an OS map
know what longshore drift is
I know how longshore drift transports material
I know what deposition is
I can describe and explain how beaches, bars and spits are formed
I know what hard and soft engineering is and can give examples
I know the advantages and disadvantages of hard and soft engineering
I know where Mappleton is
I know why the Holderness coastline erodes so fast
I know how Mappleton are managing the coast
I know the different stakeholders involved in a coastal areas</td><td>Key Words:

Erosion
Attrition
Abrasion
Solution
Hydraulic action
Deposition
Bar
Spit
Stump
Beach
Longshore drift
Fetch
Prevailing wind
Holderness
Boulder clay
Hard engineering
Soft engineering
Groynes
Gabions
Sea wall
Beach nourishment
Revetement
Constructive
Destructive</td></tr>
<tr><td colspan="2">NC link code: C7, D2, C8, C2</td></tr>
<tr><td>Prior learning:
Erosional processes (rivers), there is a lot of overlap of the processes involved.
Prior KS2 learning:
The understanding that rivers create landforms along the course also applies to the sea causing landforms, both result from the various processes involved. In Y2 some students learn about living on the coast in one primary.</td><td>Future learning:
Glaciation
Climate change</td></tr>
<tr><td>Hypotheses/outcomes for lessons</td><td>Geographical skills</td></tr>
<tr><td>LO1 What do we see at our coastline
LO2 How are waves and tides formed
LO3 What processes erode material at the coast
LO4 What landforms are made by erosion
LO5 What can OS maps tell us about coastlines
LO6 What Is longshore drift and how does it transport material
LO7 How do depositional landforms shape the coast
LO8 How can we defend against the sea
L09 What are they doing at Mappleton
LO10 Should we be defending the coastline</td><td>Aerial Photos
OS maps
Sketching
Decision Making (leadership)

Enrichment opportunity: coastal fieldwork, usually undertaken locally along the Solway coast either Silloth or St Bees</td></tr>
<tr><td colspan="2">Misconceptions</td></tr>
</table>

Differences between processes of erosion and transport
Success/Assessment
Vocabulary quizzes Homework research tasks AFL on creation of arch, stack, stump sequence Letter Coasts end of unit test
Employment skills and career opportunity
Aiming high Creativity Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication teamwork Staying positive Career link: transport planner https://www.unifrog.org/student/careers/keywords/transport-planner
Pedagogy approaches (and homework suggestions)
LO1 spot the difference, ask students what they think of when you say COAST What is a coast? Ask students, reveal definition, write into book Complete atlas and map activity Look at some coastal areas on google earth – Flamborough head is a good one
LO2 Watch waves video – ask students how waves are formed, get ideas and then write it down Look at factors that affect waves and then discuss what fetch is Look at constructive and destructive waves – watch the video – THINK PAIR SHARE – what are the differences between them? Complete diagrams of the wave types Colour code the sheet
LO3 STARTER – careers (transport planner) Go through the 4 types of erosion with the students Then test to see if they can remember the names of them Students must split page into 4, complete the sentences and draw diagrams, go through answers at end. Complete match up plenary – choose students
LO4 lesson 1 - recap erosion processes Discuss the factors affecting the rate of erosion – bring in some rock types and discuss which they think would erode fastest Look at the pictures – do students know what they or where? Talk through cave, arch stack stump process and then students must create a storyboard Lesson 2 – Discuss how headlands and bays are formed, label map using atlas and then answer exam Q (mark and feedback).
LO5 OS maps – look at coastal features, distances between places, general maps skills.
LO6 Complete coasts wordsearch Watch longshore drift video – ask students how it works Talk through LSD with use of slides to help Complete activity – put sentences in order and then draw a labelled diagram
LO7 Starter – sketch longshore drift to recap What is the landform and how is it formed? Discuss and then student must draw the beach and explain formation (do as a class if LA). Talk through what spits and bars are. Students must then complete the worksheet using the information page. Show pictures – students must decide if it's a bar or spit

LO8 students must complete defences table – either read through as a class, comprehension or carousel activity Go through and test student knowledge
LO9 discuss mappleton, where it is (google earth could be good), why it erodes so fast Read the story as a class and then watch the video. Students answer the questions.
LO10 watch video Then introduce the stakeholders involved – great cowden village. Go through each stakeholder and read as a class. Get students opinion on each – what do they think. Students much decide which person they support and write a letter to the local council persuading them to put coastal defences up to protect the area.