

St Paul's Primary School, Newcastle. Glorifying Almighty God, and serving our community.

Investigating places	Investigating patterns	To Communicate Geographically	
Class: 4/5	Title: Erosion and Deposition: Rivers, coasts and manag	Title: Erosion and Deposition: Rivers, coasts and management	

Topic summary: The Earth can be shaped by the action of water in rivers and at coasts. This is called erosion, transportation and deposition. **Erosion** is when rocks and soil are worn away, which puts lots of sand, mud, pebbles and silt into the river. **Transportation** is the moving of the eroded material. The force of the flowing water moves the mud, sand, pebbles and silt created by erosion. **Deposition** is the dumping of material. The sand, mud, pebbles and silt being transported by the river is eventually dropped as the river slows. Over time, erosion can cause cliffs to collapse and so the coastline needs to be managed. This is done by engineers building artificial structures which try to control natural processes. Each engineering strategy has its advantages and disadvantages.

Geography Objectives

- Ask and answer geographical questions about the physical and human characteristics of a location.
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.
- Use a range of resources to identify the key physical and human features of a location.
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.
- Name and locate the countries of Europe and identify their main physical and human characteristics.

Describe key aspects of:

- Physical geography, including: rivers, mountains, volcanoes and earthquakes and the water cycle.
- human geography, including: settlements and land use.

Key vocabulary		
Erosion	The wearing away of rocks	
Transportation	The movement of rocks	
Deposition	The dumping of rocks	
Youthful	A river near its source	
Middle-aged	A river downstream from its source	
Mature	A river near its mouth	
Meanders	Bends and changes to direction in a river	
Ox-box lakes	Parts of a meander cut off from the rest of a river	
Delta	Where a river splits and spreads out into several branches before entering the sea	
Tourist destinations	Places to visit for a holiday	
Coastline	The land along the coast	
Natural physical process	Something that happens by nature	
Artificial structure	Things built by people	
Prevent	To stop something from happening	
Maintain	To look after something	

Unit of work end points

Recap from (Year 3/4)

• Name and label the features of a river (e.g. source, meander, delta, estuary, reaches, river bed and banks, channel, tributaries, mouth)

Rivers:

- **Define** the words erosion, transportation and deposition
- Draw, label and describe the three stages of a river (e.g. youthful, middle-aged and mature)
- Label the three stages of a river for each of the five primary rivers in Europe (Danube, the Volga, the Loire, the Rhine and the Elbe)
- Draw and label the features of a meander, oxbow lake and a delta
- Identify patterns in the relationship between the stages of a river and the amount of erosion and deposition that takes place.

Coasts

- To **know** what a coast is
- To draw and label the main physical features seen at a coast
- To **know** what causes erosion at the coast
- To **describe** the physical processes that create:
 - caves
 - bays
 - headlands
 - arches
 - stacks
 - cliffs
 - beaches
- Identify the similarities and differences in erosion and deposition in rivers and coasts
- Demonstrate how waves erode coasts

Management:

- **Define** the term natural physical process, giving examples
- To **know** what an artificial structure is. **Draw and label** the following defences:
 - Sea walls
 - Rock armour
 - Groynes.
- Describe the purpose, advantages and disadvantages of each of these sea defences.
- Explain why some sea defences are used even though they may not look attractive
- To know where Holderness coastline is
- To identify and label the sea defences used at the Holderness coastline
- Explain why erosion is more prevalent at the Holderness coastline than at any other area in Europe

Deeper learning:

- Do you agree? Speed of river flow and deposition are closely linked
- Investigate coasts (in Europe) that have arches or stack