

AdAstra

Rivers and Coasts

How does this unit link to prior learning?

Year 7 What is Geography? (Map skills), Weather and Climate (Water Cycle) and Weather and Climate (Flooding)

What will you be learning about?

In this unit you will discover how coastal processes happen and what landforms these processes help to create. You will explore the challenges of living in the coastal environment and the different management strategies we use to protect coastlines. You will then move on to rivers and discover the processes and landforms we can find along a river's course. Finally you will compare the causes, effects and responses to flood events in Boscastle and Bangladesh.

Key Focus

Within this unit there is a focus on understanding how physical processes cause landforms to form and change over time. You will look at a number of cases studies to explore these processes. You will also explore the interactions between people and places in coastal and river environments. Each lesson will start with knowledge retrieval, which will cover the knowledge, understanding and skills you have developed in previous lessons.

We will develop our learning by studying the following sequence of lessons:	
 Introduction to Coasts: you will be finding out what the different types of coastal areas in the UK are like and what coastal areas are used for. Waves: you will be able to identify and describe how waves are formed. You will be able to explain and compare the two different types of waves. What is Erosion? You will be able to define the term 'erosion' and describe the 4 different types of erosion. Features formed by Erosion: You will be able to describe the erosional features of a coastline and explain how these features are formed. You will 	 10. The Water Cycle: You will label and describe the water cycle. You will explain the impact humans can have on the flow of water in the water cycle. 11. Drainage Basins: You will define new key terms such as tributary and drainage basin. You will identify the key features of a river's drainage basin. 12. Erosion and Waterfalls: You will revisit the 4 types of erosion and explore how they are involved in the formation of a waterfall. 13. Meanders: you will identify what a meander is and explain how they are
 create the landforms using playdoh – Awe and Wonder. 6. Features form by Deposition: you will understand how material is transported by the sea. You will be able to understand and describe the process of longshore drift and explain how the landforms created by deposition are formed. 7. Interim Assessment: You will be assessed on the first part of the unit and any gaps or misconceptions will be addressed. 8. Landslide at Holbeck Hall. You will identify and explain the causes of the Holbeck Hall Cliff Collapse. You will be able to categorise and evaluate the effects of the cliff collapse. 8. Coastal Management: You will understand the difference between hard and soft engineering and then identify the positive and negative features of a variety of coastal management techniques. 9. Lyme Regis Case Study Coastal Management. You will identify the hazards and management solutions found at Lyme Regis. You will evaluate the effectiveness of the coastal management techniques used. 	 formed by physical processes. 14: What would happen if Lode Heath Flooded? You will create a list of the causes of flooding and complete an infiltration study around school. Awe and Wonder. 15: Cumulative Assessment: You will be assessed on what you have learnt in this unit, and also what you have learnt during Year 7 geography. 16: Closing The Gap and Addressing Misconceptions. 17: Boscastle Floods: You will identify the effects of flooding at Boscastle, You will be able to categorise the causes into human and physical and explain how they interacted to cause flooding. 18: Bangladesh Flood: You will identify and describe the effects of flooding in Bangladesh. You will then compare the effects of this flood with Boscastle. 19: How does Bangladesh cope with flooding? You will be able to describe each method of flood prevention/reduction. You will explore how each method could impact the lives of people in Bangladesh. You will justify
which method reduces the effects of flooding best. How will this unit help you in the future?	
Year 9	Year 10
This unit will prepare you for Year 9 geography topic "Natural Hazards" as you will practice explaining physical processes in a logical sequence, and using case study examples to support your ideas.	This unit of work will provide the foundation for a unit in the GCSE Geography course called "Physical Landscapes of the UK", which covers rivers and coasts including their processes and landforms.
Key Vocabulary	
Hydraulic Action Abrasion Attrition Solution Traction Saltation Suspension Weathering	
Longshore Drift Hard Engineering Soft Engineering Drainage Basin Waterfall Deposition Erosion	