BBC Northern Ireland Schools

Teachers' notes

Landscapes
Unlocked

Coasts

Suggested activities

Learning outcomes

By the end of the unit students should be able to:

- realise that Ireland is an island surrounded by water
- recognise the difference between headlands and bays
- understand the processes of erosion, transportation and deposition in relation to coastal processes
- identify key elements of coastal geography including beaches, caves, stacks, cliffs and arches
- know the processes which have shaped the coastline of Northern Ireland.

Students will develop an understanding of issues relating to human interaction with the coastline - ie:

- respond to the diversity and beauty of the natural and human world
- understand how people interact with the coast
- recognise the effect of climate change upon the coast
- understand that coastal landscapes need to be carefully managed in order to protect them for future generations
- recognise the impact of coastal erosion upon settlement patterns.

Video clip	Learning outcomes	Suggested activities
Clip 1: Headlands, bays and beaches	• Realise that Ireland is an island surrounded by water • Recognise the difference between headlands and bays • Understand the processes of erosion, transportation and deposition in relation to coastal processes • Identify key elements of coastal geography including beaches, caves, stacks, cliffs and arches • Know the processes which have shaped the coastline of Northern Ireland • Respond to the diversity and beauty of the natural and human world • Develop a sense of place and belonging at a local level	• Atlas work on Ireland/Northern Ireland concentrating on the coastline and which counties have or do not have a coastline • Find their nearest access to the coastline. This could expand into a scale drawing or a sketch map • Investigate height and distance from coast and plot scatter graphs **Related resources:** • *News clip: Coastal erosion* • *News clip: Coastal responsibility* • *News clip: Climate changes* • *News clip: Wind power*

Clip 2: **Erosion, caves, arches, stacks and stumps / Coastal erosion animation**	• Understand the processes of erosion, transportation and deposition in relation to coastal processes • Identify key elements of coastal geography including beaches, caves, stacks, cliffs and arches • Know the processes which have shaped the coastline of Northern Ireland • Respond to the diversity and beauty of the natural and human world • Recognise the impact of coastal erosion upon settlement patterns • Develop a sense of place and belonging at a local level	• With the aid of a sketch, show how a stack is formed • Discuss as a class whether it is wise to build on or near cliffs • Write a personal account of the collapse of the kitchen at Dunluce Castle in 1639 • Discuss how the process of erosion changes the coastline • Take a still from the White Rocks clip and draw part of the coastline. On top of this drawing recreate the coastline as it might have looked at hundred year intervals in the past **Related resources** • *Coastal erosion animation* • *News clip: Coastal erosion* • *News clip: Coastal responsibility* • *News clip: Climate changes* • *News clip: Mussenden Temple*
Clip 3: **Impact of erosion**	• Understand the processes of erosion, transportation and deposition in relation to coastal processes • Identify key elements of coastal geography including beaches, caves, stacks, cliffs and arches • Know the processes which have shaped the coastline of Northern Ireland • Respond to the diversity and beauty of the natural and human world • Understand how people interact with the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations • Recognise the effect of coastal erosion upon settlement patterns	**Role-play:** Protecting Coastal Settlement • Imagine you are the owner of one of the houses on the cliff top between Portstewart and Portrush. Write a letter to the council asking what they are going to do to prevent your house falling into the sea **Related resources** • *Coastal erosion animation* • *News clip: Coastal erosion* • *News clip: Mussenden Temple*
Clip 4: **Tourism and human interaction with the coast**	• Identify key elements of coastal geography including beaches, caves, stacks, cliffs and arches • Know the processes which have shaped the coastline of Northern Ireland • Understand how people interact with the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations	**Role play:** Coastal Development A developer has plans to build 200 upmarket apartments and houses in a field to the east of Portballintrae. There is a public meeting in a local hall to debate the proposals. The pupils can select a role to play from the following list: • The farmer who wishes to sell the field • A school leaver looking for a job locally • The local rep for a cement company • The National Trust who are trying to preserve the coastline • The owner of a house in the nearby estate • The head teacher of the primary school • A couple hoping to buy a house locally • The local Tourist Information Officer **Related resources** • *News clip: Coastal responsibility* • *News clip: Wind power* • *News clip: Mussenden Temple*

News Clip: Coastal erosion	• Understand the processes of erosion, transportation and deposition in relation to coastal processes • Know the processes which have shaped the coastline of Northern Ireland • Understand how people interact with the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations • Recognise the effect of coastal erosion upon settlement patterns	**Role play:** Save Our Golf Course • Divide into two groups and debate EITHER to try and save the golf course in some way OR to let nature take its course and move the tee and the hole away from the threatened coast
News clip: Climate change	• Realise that Ireland is an island surrounded by water • Understand how people interact with the coast • Recognise the effect of climate change upon the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations	For those living near the coast, investigate the effects of the sea level rising by 5cm, 10cm etc. Draw up a coastal survival plan to protect the school/town in the event of the sea levels rising
News clip: Mussenden Temple	• Understand the processes of erosion, transportation and deposition in relation to coastal processes • Know the processes which have shaped the coastline of Northern Ireland • Understand how people interact with the coast • Recognise the effect of climate change upon the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations • Recognise the effect of coastal erosion upon settlement patterns	**Role play:** Saving Mussenden Temple • Debate EITHER to try and save the temple in some way OR to let nature take its course
News Clip: Coastal responsibility	• Realise that Ireland is an island surrounded by water • Understand how people interact with the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations	Discuss the possible impact to coasts if there are different bodies responsible for different parts of the coastline. What are the threats and how can they be alleviated? e.g. What would happen if there was an oil spill?
News Clip: Wind power	• Realise that Ireland is an island surrounded by water • Understand how people interact with the coast • Understand that coastal landscapes need to be carefully managed in order to protect them for future generations	Wind energy is a form of renewable energy. Debate the positive and negative outcomes of building a wind farm off Portrush