

## Coastline changes

**Main Focus** Geography - explore the effect of erosion on the coast

**Topic Links** Science – identify the properties of different materials

**Suitable for** Year 5/6

### Learning Objectives

3d) to explain why places are like they are

3e) to identify how and why places change and how they may change in the future

### Resources

- Photograph showing erosion
- Chalk, sandstone, limestone
- Erosion activity poster

### Introduction

Use the OHP or interactive whiteboard to show the children a photograph of a coastline where erosion is evident. Get the children to identify the location shown in the photograph. Ask them to describe what is happening to the coastline. Get the children to suggest what might be happening to cause this effect on the coastline.

Work with the class to identify materials that make up some of the coastline. Write a list of the suggested materials on the board i.e. chalk, sandstone, limestone etc. Get the children to describe the properties of each of the materials. Leave out some examples of the materials on the children's tables for them to look at more closely. Get the children to try and identify the least durable material that will suffer erosion quicker than the other materials.

Discuss with the class some of the problems caused by the erosion of the coastline i.e. loss of animal habitats, destruction of human development, unstable ground etc. Write a list of the suggested problems on the board. Ask the children to think about how some of the problems could be solved. Establish with the class that it is very difficult to control mother nature and that erosion is a natural process that can be difficult to prevent. Write a list of the children's suggested solutions on the board i.e. sea defences, move animal habitats etc. Discuss with the class what other problems each of these solutions might create.

### Activity

Tell the children that a local habitat where rare butterflies live is under threat from coastal erosion. Provide them with a poster outlining some of the problems. Get the children to discuss with a partner how they could solve some of the suggested problems.

Get the children to write a letter to the government trying to persuade them to take steps to protect the butterflies from the effects of coastal erosion. Tell them to use the ideas that they discussed with a partner to help suggest solutions to the government about the problems caused by the coastal erosion.

### Differentiation

You can support some children by getting them to work with a teaching assistant to create some posters to encourage people to protect the habitat where the rare butterflies live. The children can suggest slogans to add to their posters.

### Plenary

Get the children to suggest ways that coastal erosion could be controlled. Discuss with the class whether they think erosion should be controlled or whether nature should be allowed to take its own course.