

North Sea pebbles explorers

Before you start:

- Check the tide
- This activity may be done at any time. However, care needs to be taken if it is a high tide.

Resources:

- Paint
- Chalk
- Pebble sheet
- Hand wash
- Bucket with handle

Have you ever wondered why some of our beaches along the North East are sandy and some are pebbly?

Sandy beaches are usually found in sheltered bays where the water is shallow and the waves have less energy, such as Whitburn, Roker and Crimdon. Pebbly beaches, such as the ones at Seaham, are usually found where the cliffs are being eroded, the water is deeper and where there are higher energy waves. The largest pebbles will be at the top of the beach where they have been deposited after a big storm. The smallest pebbles will be found nearest to the water's edge where the waves break and the rocks are broken up into smaller and smaller pieces.

Let us go on a pebble hunt.

Some of the beaches along our coastline have pebbles of all different shapes, colours and sizes.

Questions:

- Where have the pebbles come from? How have they got here?

Fun learning activities:

- Walk along the beach and collect pebbles that are different shapes and colours. Each pebble has to be able to fit into your hand.
- How many pebbles did you find? Can you count them? Which pebble is your favourite and why?
- Colour sort the pebbles using the **pebble chart**. Were there any colours you could not find?
- Are the pebbles all the same size? Can you order them from smallest to largest?
- Now feel each pebble. Put the smooth pebbles in one pile and the rough pebbles in the other. Which do you have more of, smooth or rough?
Waves smash the pebbles on the shore into each other and they break and become smooth.
- Use your pebbles to make a picture in the sand.
- Draw (using charcoal or chalk) a picture on a stone of something that lives on the seashore
- Make pebble cairns using flat stones. Put your picture pebble on top.





Take nothing but photographs, leave nothing but footprints.

The Coast Protection Act states that in the UK, it is unlawful to **take** any natural materials like sand and **pebbles from the beach**, no matter the amount. **You can** be at fault for **taking** just one **pebble from the beach**. This law is in place to protect the natural environment. It can lead to flooding and coastal erosion.

Stories to share:

Billy's Bucket by Kes Gray and Garry Parsons