

How Stacks and Arches are Formed

The British coastline, which is nearly 19,500 miles long, has some of the most extraordinary landscapes in the country. From glorious, sandy beaches to dangerously crumbling cliffs, our shores offer many dramatic sights.



Some of the most intriguing formations are stacks — great, upright slabs of rock that stand away from the land, as if a giant has ripped them off and planted them in the sea. These are often found alongside mysterious arches, which look as if they have been tunnelled through the rock by a mighty beast.

So if not the work of beasts and giants, where have these remarkable structures come from? The answer is the mighty power of the waves and wind. They thrash at the coastline and break down the weaker rock. Over time, a cave forms, hollowed out by the power of the water. These caves are eventually worn through, and an arch is formed. Sometimes, the continued force of the wind and water increases the arch's size so much that the top collapses, leaving a stack.

These incredible formations have given rise to names rich with mystery and folklore. Old Harry Rocks in Dorset were named for the devil (Old Harry) who, it is told, once slept there. Further afield, Risin og Kellingin are two stacks near the Faroe Islands, named after a giant and witch who were supposedly turned to stone in the sunlight. Other stacks have wonderfully descriptive names like The Sow and Piglets in Australia, later known as The Twelve Apostles.



The Twelve Apostles

One thing is certain: coastlines are constantly changing. In centuries rather than millennia, many of these landmarks will have changed beyond recognition, leaving other wonders in their place.

1. How long is the British coastline?

.....

1 mark

2. *Some of the most intriguing formations*
What does the word *intriguing* mean in this phrase?

.....

1 mark

3. Write the numbers 1 to 5 in the boxes to show how a stack is formed. The first one has been done for you.

A cave is formed in the coastline.

Waves increase the size of the arch.

The top of the arch collapses.

Weak rock is broken down by waves.

The cave wears through to form an arch.

1 mark

4. What does the word *rich* mean in the text? Circle **one** option.

valuable

shallow

abundant

independent

1 mark

5. Who are Risin og Kellingin named after?

.....

1 mark

6. In which country would you find The Twelve Apostles?

.....

1 mark

7. Why do you think people make up stories about where stacks and arches have come from? Use the text to support your answer.

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2 marks

END OF TEST

/ 8