

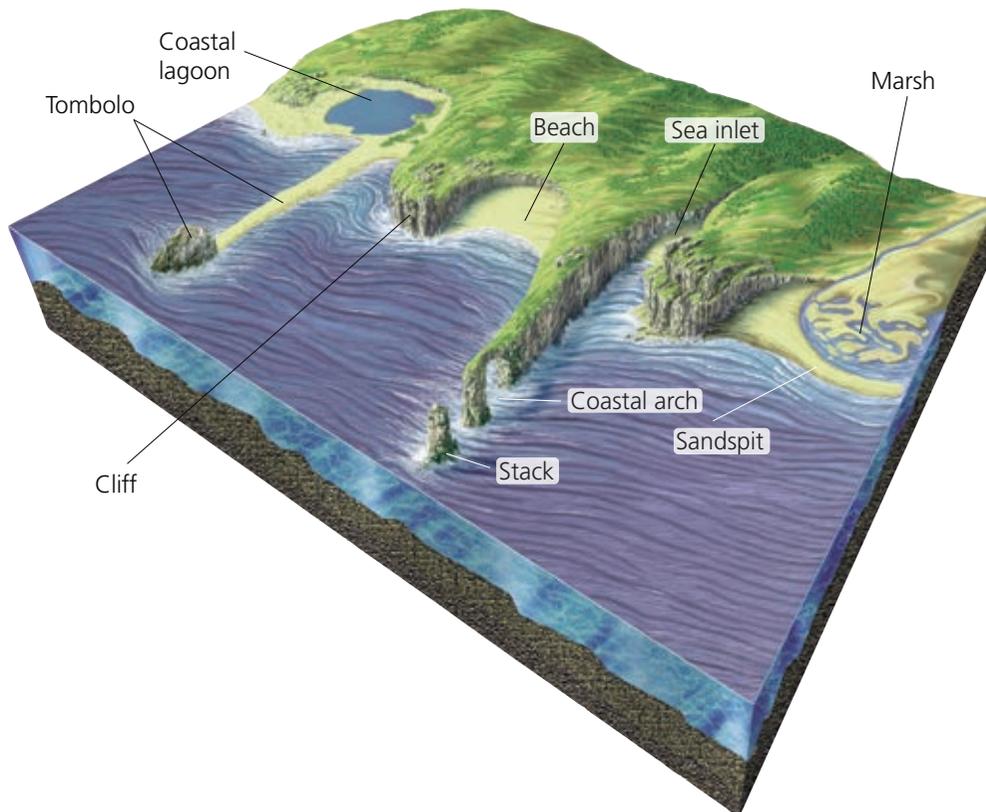
## 6 Coastal reliefs

**<sup>1</sup>dynamic:** characterised by constant change.

**<sup>2</sup>crash:** hit hard.

**<sup>3</sup>isolate:** separate.

Coastal landscapes are highly **dynamic**<sup>1</sup>. Powerful ocean waves **crash**<sup>2</sup> against the land. Rivers deposit sediments as they join the sea, forming deltas and estuaries. Even human activity changes the landscape. We can observe all of these factors at play on **beaches**.



### Landforms created by erosion

**Cliffs** and **abrasion platforms** are the main shapes created by erosion. We can also find **arches** and **stacks**.

### Landforms created by deposition

Beaches, sand dunes and **tombolos** are formed by the deposition of sediments. Tombolos are narrow stretches of land that connect islands to the coast. When a tombolo **isolates**<sup>3</sup> a bay from the open sea, they form a lagoon.

**Waves** are commonly caused by wind and are particularly powerful during storms. **Tides** constantly pull and push the sea away and towards the coast. **Drift currents** travel parallel to the coast. When drift currents meet an obstacle, they stop and deposit materials they're carrying.

### Types of coastal reliefs

The coast of Spain is 6 000 km long and displays contrasting characteristics. The **Atlantic** coastal regions show the erosive effects of strong waves and currents produced by the Atlantic Ocean. In these regions, we can find high cliffs and rivers ending in estuaries. The **Mediterranean** coast and **the Gulf of Cádiz** have fewer waves and currents, resulting in long sandy beaches. Here, the rivers form deltas where they meet the sea.

### CLIL activities

**21**  Look at the diagram and identify coastal landforms formed by erosion and by deposition. Choose an example of each to explain how it forms to a classmate.

**22**  Listen and answer the questions in your notebook.

- What is a tsunami?
- What causes most tsunamis?
- How tall can they be?
- How fast can they travel?

**23**  With a classmate, research and make a fact sheet of the advantages and disadvantages of building a sea wall.