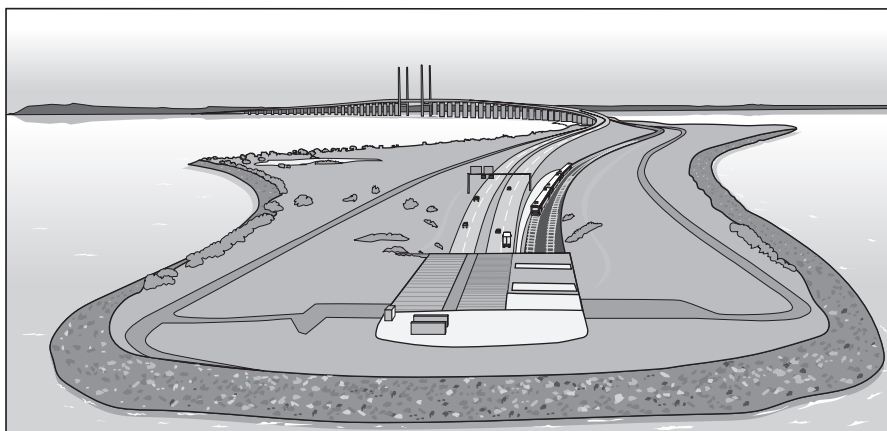


Exercise 1

Read the article about a tunnel and a bridge between two European countries, Denmark and Sweden, and then answer the questions.



The Øresund Link

Denmark and Sweden are connected by the Øresund Link, a tunnel and bridge crossing which goes under and over the sea between the two countries. As only having a bridge to join the two countries was simply not practical, this was seen as the best option. The idea of connecting the two countries was first discussed in the early twentieth century, but it wasn't until the 1990s that work started on the plans. The construction itself started in 1995, and the crossing was officially opened in 2000 by the Queen of Denmark and the King of Sweden.

The plans for the crossing had to allow both cars and trains to use it, and the result is impressive. The complete Øresund Link is made up of three sections. The first section is the tunnel which starts in Denmark. Cars and trains travel for 3.5 km under the sea and return to land on an island called Peberholm in the middle of the sea. The second section, consisting of 4 km of road and train track across this island, takes travellers to the start of the final section. They complete the final 7.7 km section of the crossing to Sweden by bridge.

As the design for the crossing involved both a tunnel and a bridge, an island was essential to connect the two. There was already an island called Saltholm in a potentially suitable location. However, in the end it was decided to create an artificial island nearby. It was named Peberholm Island, and although it does not have the range of wild birds that Saltholm Island is known for, it has now become a home for rare plant species. Scientists have regular access to the whole of Peberholm Island to carry out research, but travellers using the Øresund Link are not permitted to stop on the island or leave their vehicles. A vast amount of building material was needed for the complete project. The tunnel and bridge sections required steel and concrete, with the latter being transported from Denmark. Rock and soil, which were taken from the bottom of the sea, were used in the construction of the artificial island.

The Øresund Bridge is the final section of the connection between Denmark and Sweden and is probably the main reason why the Øresund Link has become something of a tourist attraction. Parts of the metal supports which hold the bridge are 204 metres high, but the height of the road and rail track was designed to be much lower, at only 57 metres above the sea. This was vital as while cars can handle difficult climbs, trains cannot run up a steep track.



Question 6

What was important in the design of the tunnel and bridge sections of the Øresund Link?
Give **three** details.

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..... [3]

[Total: 8]

