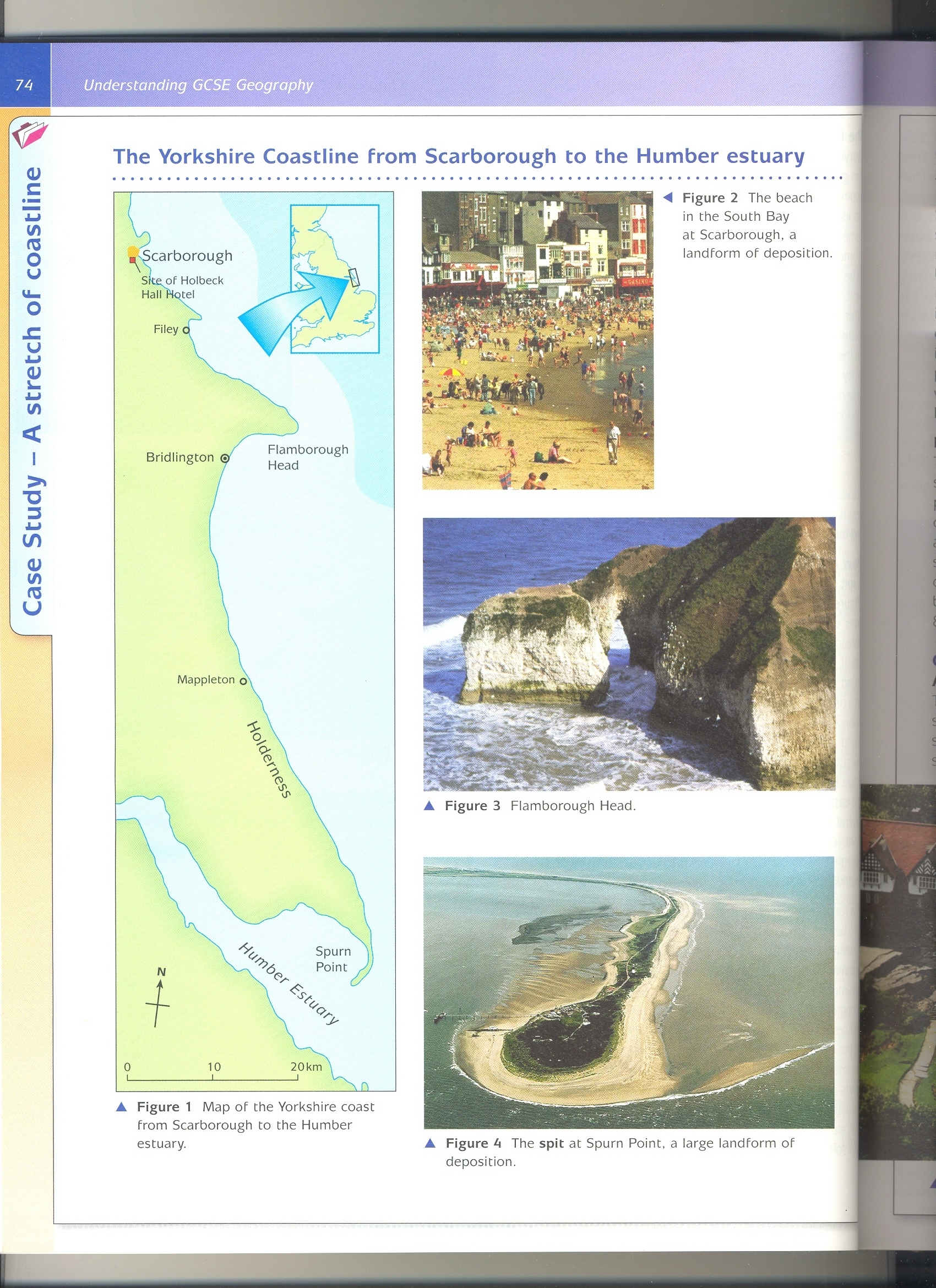
The Holderness Coastline



Farm land and cliffs

Headland with caves, arches and stacks

Settlement

Spit

Sandy beaches

Settlement

Farm land and cliffs

Where do we need coastal defences? Why?

Imagine you have been employed to manage the coast from Scarborough to Spurn Head.

Your budget is £2 million.

Task:

Use this list of coastal defence prices to decide which defences you might use:

|  |  |  |
| --- | --- | --- |
| Coastal defence | Cost | Lifespan |
| Groynes | £1500/m | 30-40 years |
| Rip rap | £1000/metre | 100-500+ years |
| Sea wall | £7000/m  £1000-2000 for repair work | Up to 100 years |
| Improving drainage | £150/metre | 10-20 years |
| Beach replenishment | £100/metre | 1 – 5 years |

Important things to note:

* The area is approximately 80km in length (from Scarborough to Spurn Point)
* Groynes are approximately 25 metres in length
* Sea walls usually run the length of a beach (could be up to 400-500 metres)
* Rip rap can be used in any quantity anywhere along the beach
* There is a road running along the coastline, linking villages like Mappleton and Bridlington

Which coastal defences would you use and why?

|  |  |  |  |
| --- | --- | --- | --- |
| Type of defence | Total cost | Where? | Why? |
| Rip rap |  |  |  |
| Sea wall |  |  |  |
| Groynes |  |  |  |
| Improved drainage |  |  |  |
| Beach replenishment |  |  |  |
| No defence |  |  |  |
| Total cost |  | | |