## 3.1 Coastal landscapes and systems

### Section outline
How different coastal landscapes result from the systems that produce them.

### Key words
- geology
- rocky coastline
- igneous
- sedimentary
- metamorphic
- relief
- coastal plain
- estuary
- high-energy environment
- low-energy environment
- littoral
- tidal current
- sediment cells
- sea level

### Section outcomes
At the end of this section most students should be able to:
- draw a spider diagram to show how coastal landscapes vary physically
- draw annotated sketch maps of different coastlines to identify coastal features
- annotate coastal systems diagrams to show a high energy environment and a low energy environment
- identify one high energy and one low energy coast and compare their features
- explain why the littoral zone is constantly changing
- classify different types of coastlines

### What’s on Kerboodle?
- **Digital Books**
  - Student Book: Pages 96-99
  - Teacher Handbook:
- **Resources**
  - 3 Glossary
  - 3 Glossary worksheet
  - 3.1 Answers
- **Assessment**
  - 3 On your marks
  - 3 Test yourself 1
  - 3.1 Exam-style question
  - 3.1 Exam-style question mark scheme

### Specification coverage – Enquiry question
1 Why are coastal landscapes different and what processes cause these differences?

**Key ideas:** 2B.1a, 2B.1b, 2B.1c

### Exam link
- **Paper 1 Section C**
  - Coastal landscapes and change

### Exam-style questions
- **AS 1** Using examples, explain the characteristics of high-energy coastlines. (6 marks)
- **A 2** Referring to examples, explain the problems involved in classifying coastlines. (8 marks)
## 3.2 Geology and the coast

### Section outline
The geological reasons why coastal landscapes differ.

### Place context
Jurassic Coast, UK

### What’s on Kerboodle?
Student Book: Pages 97-105
Teacher Handbook:

### Section outcomes
By the end of this section most students should be able to:
- produce a PowerPoint presentation of annotated photos of different UK coastlines to show the influence of geological structure on cliff profiles
- create a spider diagram to show the factors which influence rates of coastal recession
- use Google Earth/Maps to identify one example each of concordant and discordant coastlines in the British Isles, and one example of each from overseas
- use the OS map of the Isle of Purbeck to identify features of its coastline that are related to its geology
- write a report on the influence of geology and lithology on the Isle of Purbeck’s coastal morphology.

### Key words
- *strata*
- *cliff profiles*
- *joints*
- *concordant*
- *folds*
- *discordant*
- *faults*
- *dalmation coast*
- *relief*
- *bedding planes*

### Integrated skills
Satellite interpretation of a variety of coastlines to attempt to classify them and Field sketches of contrasting coastal landscapes

### Assessment
- 3 On your marks
- 3 Test yourself 1
- 3.2 Exam-style question
- 3.2 Exam-style question mark scheme

### Specification coverage – Enquiry question
1 Why are coastal landscapes different and what processes cause these differences?

**Key ideas:** 2B.2a, 2B.2b, 2B.2c, 2B.3a, 2B.3b

### Exam link
**Paper 1 Section C**
Coastal landscapes and change

### Exam-style questions
**AS** 1 Explain the relationship between geology and coastal form along one named stretch of coast. (6 marks)

**A** 2 Assess the extent to which rates of coastal recession and stability depend on lithology. (12 marks)