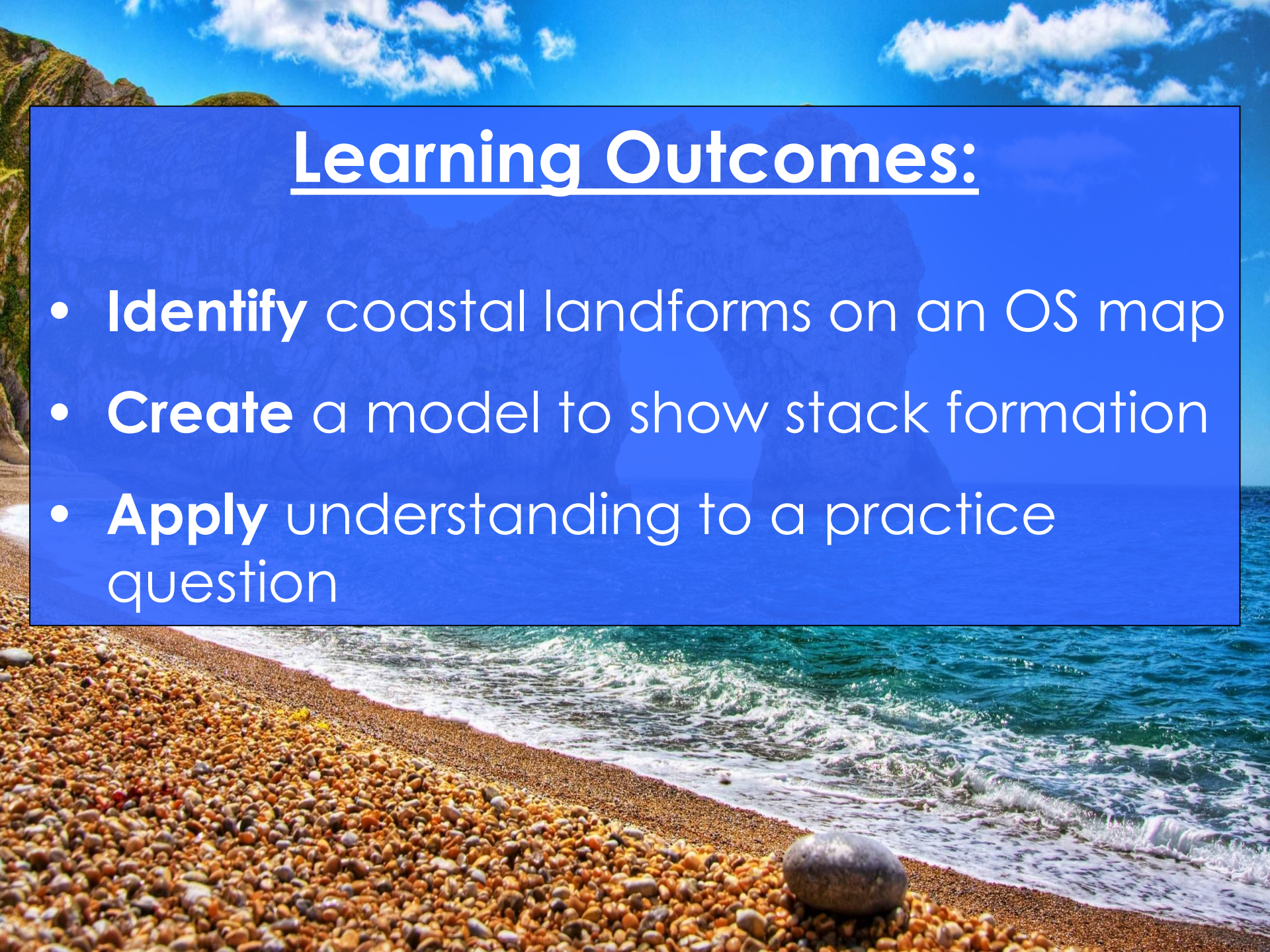
Landforms of Erosion

Learning Objective:

-**Analyse** how the sea can create new coastal features

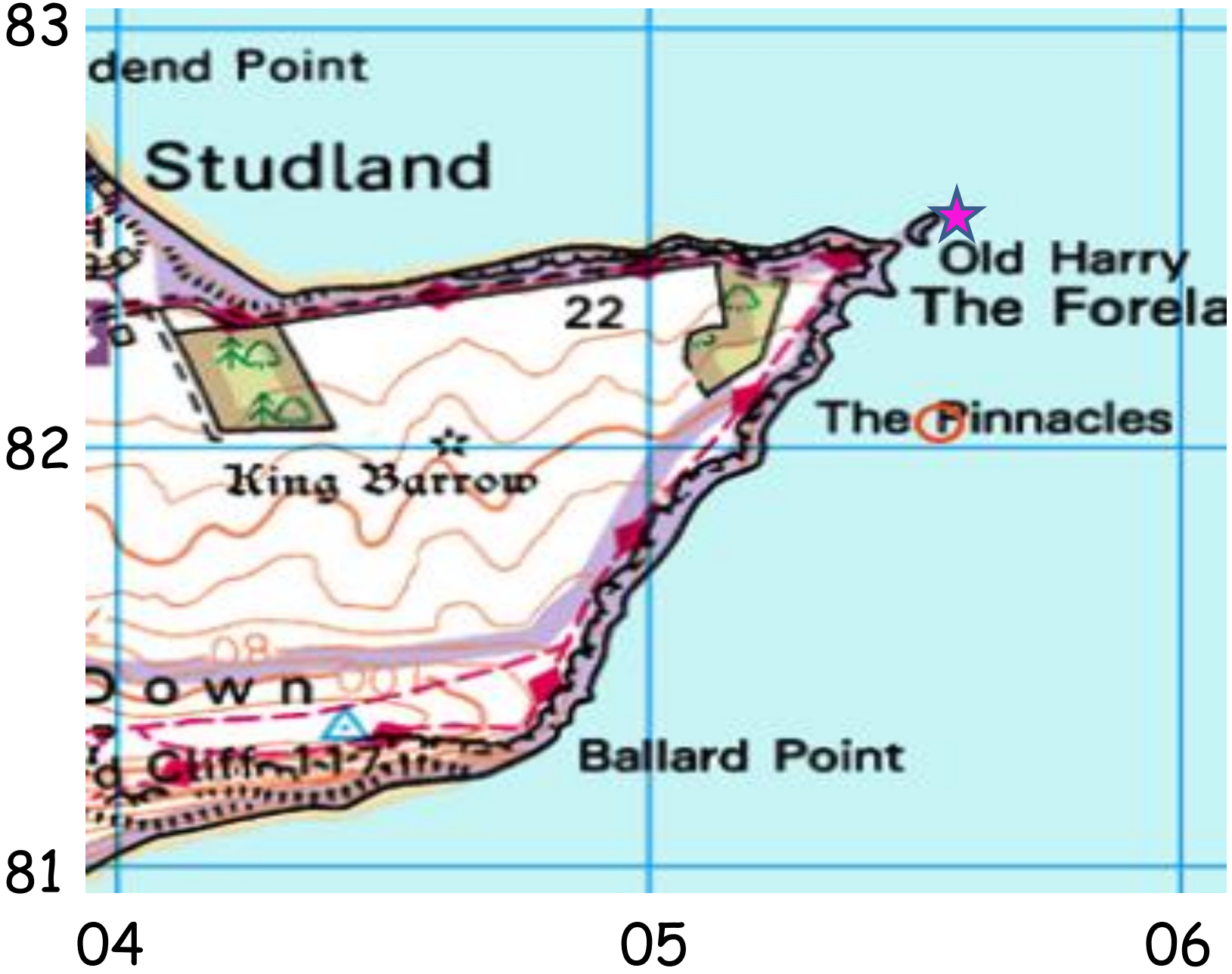


Learning Outcomes:

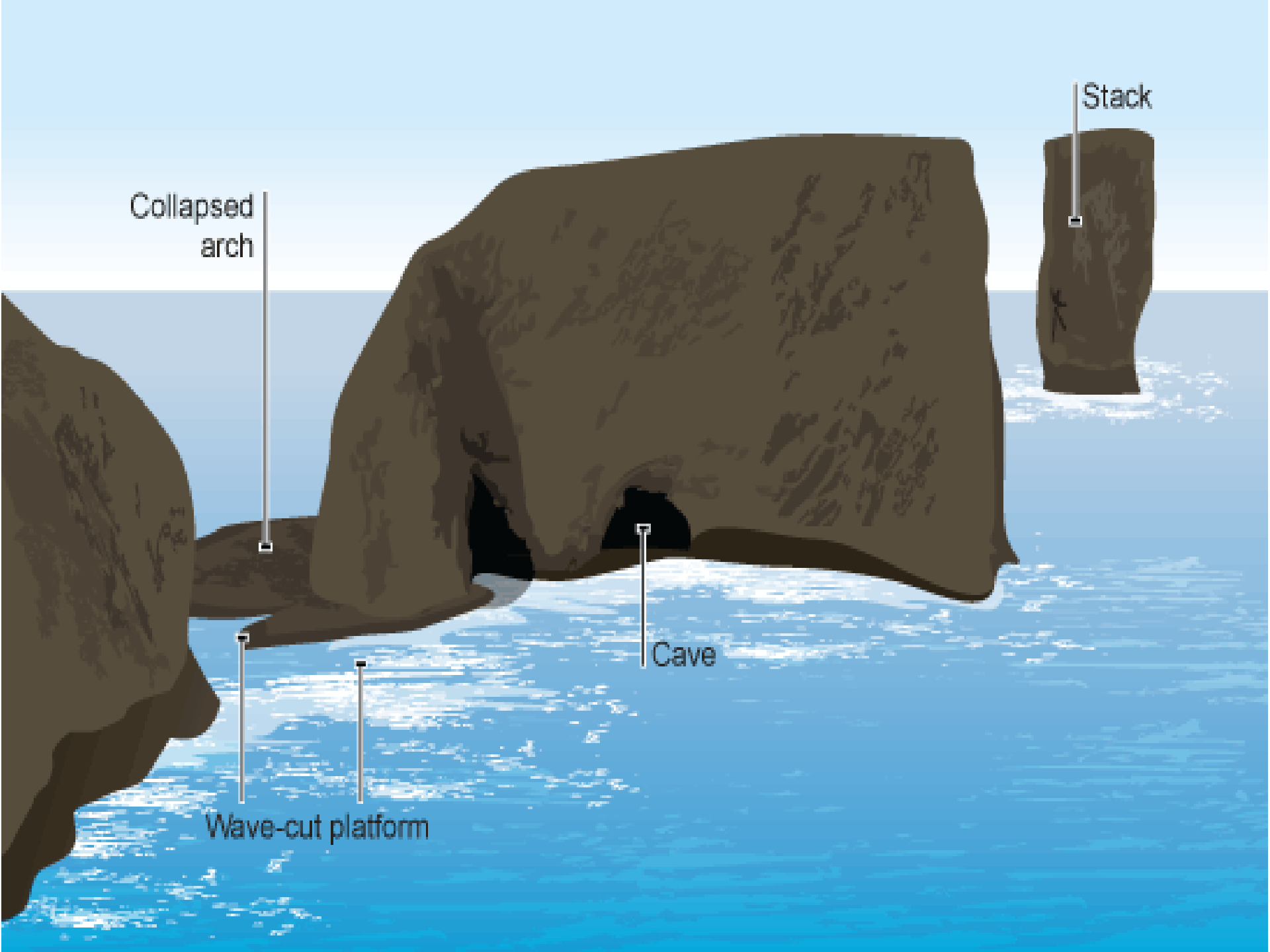
- **Identify** coastal landforms on an OS map
- **Create** a model to show stack formation
- **Apply** understanding to a practice question

Remember Old Harry and his wife?


St Lucas Leap
Natural Arch
Parson's Barn
47



Old Harry = 0582 / 056 826


Stack
Collapsed arch
Cave
Wave-cut platform

Explain the formation of a sea stack. (4 marks)

L1 – Partial sequence with separate statements. No explanation:

'A cliff or headland is attacked by the waves. Cracks are forced apart and a cave can form. If the cave is eroded all the way through it makes an arch. The arch can then collapse leaving a sea stack'.

L2 – Complete sequence and erosion processes. Clear explanation for 4 marks:

'Lines of weakness on a cliff or headland are attacked by hydraulic action. This is when water gets into cracks and compresses the air, forcing the cracks apart. As the cracks are forced apart a cave can form. If the cave is eroded all the way through by other processes such as corrasion, when rocks are flung at the cliff, then an arch is developed. The arch can become unstable because of a lack of support from underneath. The roof can then collapse through gravity to leave an isolated sea stack'.

7 (a) (ii) Explain the formation of a sea stack.

The cliff begins to be eroded away by hydraulic action and abrasion. This then creates a cave, over time this is also constantly eroded making an arch, erosion is still taking place, the roof of the arch eventually becomes too heavy and collapses and creates a stack

(4 marks)

Extra space

7 (a) (ii) Explain the formation of a sea stack.

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Extra space

(4 marks)

Crack?

detail needed

L2

Sequence is ok

3

for (3)

7 (a) (ii) Explain the formation of a sea stack.

Cracks in a headland are eroded by hydraulic action and abrasion, creating a cave. over time the cave is eroded into an arch as the water breaks the rock all the way through. More erosion continues to happen until the force of the water erodes the arch, leaving it collapse therefore leaving a

(4 marks)

Extra space Stack which is an isolated column of rock. ~~An example of~~ A named example of a stack is Old Henry.

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processes

L2

where?

4

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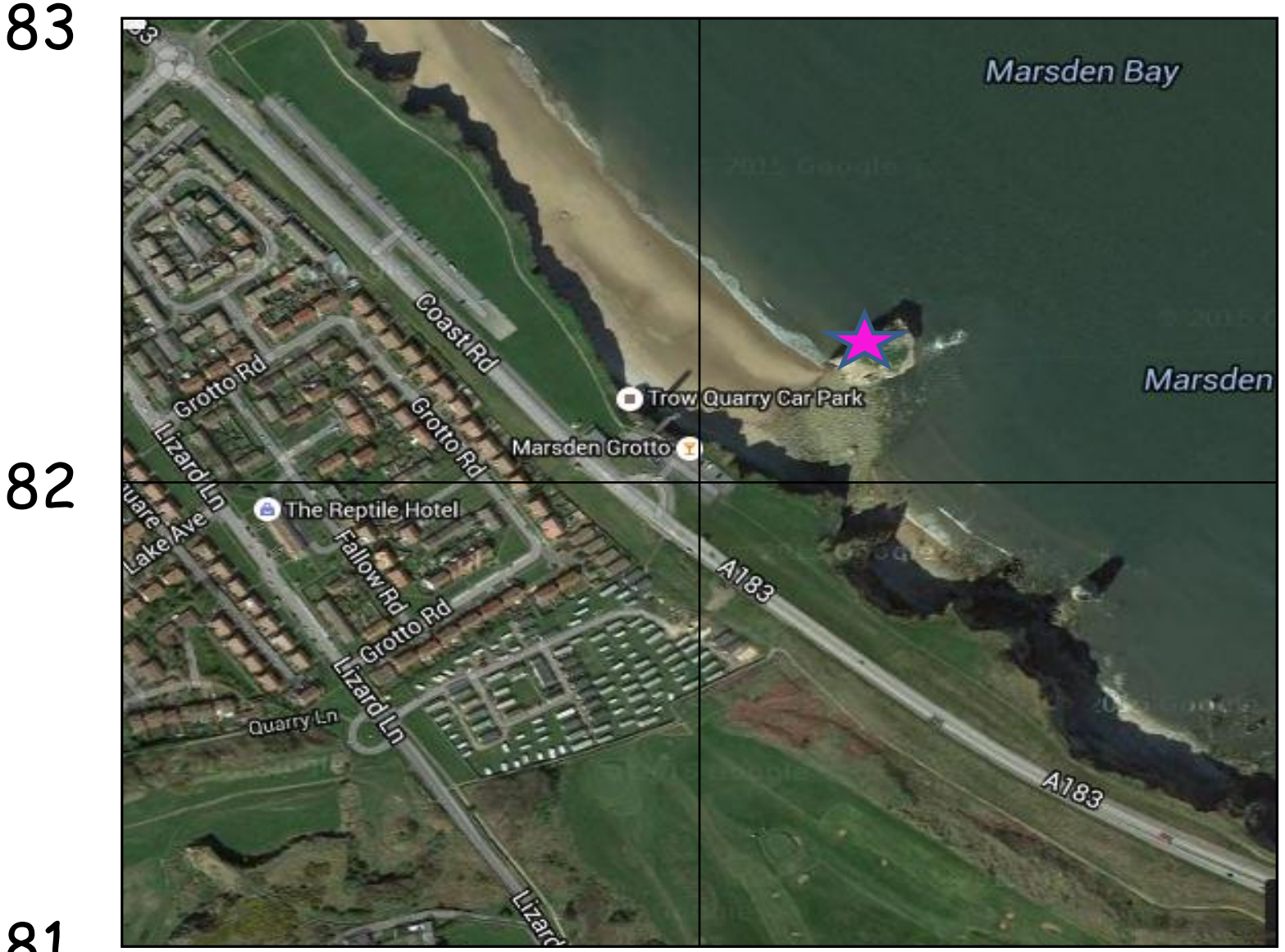
Sequence is OK for '4'



Marsden Rock = 42 82 / 423 823