Coast to Coast

Find patterns in notes from land and ocean maps

4.13 "Analyze and interpret data from maps to describe patterns of Earth's features on land and in the ocean."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the land features in the map notes and circle the ocean features. Number the three places from north to south so you can compare what appears at each one.

Map Notes from South America

1. Scientists made two maps of the Pacific coast of South America. One map shows land height. The other shows ocean depth. Their notes name three places in order from north to south: northern Peru, southern Peru, and northern Chile. At each place, they looked along a line from the shore toward the land and another line from the shore out to sea.

2. On the land map, a band of high ground appears inland from the shore at northern Peru. The same band appears inland at southern Peru and again at northern Chile. Each section has lower ground between the shore and the high band. The map calls the high ground the Andes Mountains. The three places are far apart, but each has the same labels for its land features.

3. On the ocean map, shallow water lies beside the shore at all three places. Farther west, the sea floor drops into a long, deep valley called the Peru-Chile Trench. The trench is shown off northern Peru, southern Peru, and northern Chile. Beyond the trench to the west, the sea floor rises again. These are depths below the water, not heights above it.

2 ANSWER WITH EVIDENCE

Use the passage

1. What pattern does the land map show at the three places? Name two places as evidence.

2. As you move west from the shore, how does the sea floor change?

3. Where does the ocean map show the trench? What does this tell you about the trench?

4. At southern Peru and northern Chile, how are the Andes and the trench placed in relation to the shore?

3 YOUR TURN

Your own words

Write three sentences of map notes for a made-up coast. In the first two sentences, place a land feature and an ocean-floor feature at two different places, using features other than the Andes and the trench. In the third sentence, describe a pattern across the two places.

Coast to Coast

PART 1 · READ AND MARK

Underline the land features in the map notes and circle the ocean features. Number the three places from north to south so you can compare what appears at each one. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What pattern does the land map show at the three places? Name two places as evidence.	**The Andes appear inland from the shore at all three places, including northern Peru and northern Chile.**
2	As you move west from the shore, how does the sea floor change?	**The water is shallow near shore, the sea floor drops into the deep trench, and then it rises again.**
3	Where does the ocean map show the trench? What does this tell you about the trench?	**It appears off northern Peru, southern Peru, and northern Chile. It extends along a long stretch of coast.**
4	At southern Peru and northern Chile, how are the Andes and the trench placed in relation to the shore?	**At both places, the Andes are inland from the shore and the trench is offshore to the west.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

At North Point, a flat plain lies beside the shore, and a shallow shelf lies offshore. At South Point, a flat plain lies beside the shore, and a shallow shelf lies offshore. Both places have a coastal plain on land and a shallow shelf at sea.

Accept answers that use the map notes to describe where features occur, not just name them. For Part 3, check that the third sentence identifies a pattern supported by both invented locations.