

Clues in Stone

Use fossils to learn about long-ago organisms and environments.

3.4.c “fossils provide evidence about the types of organisms that lived long ago as well as the nature of their environments.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the names of fossils. Circle words that tell what the place was like long ago.

Rock Layers Tell a Story

- ① Long ago, a shallow sea covered part of land that is now dry ground. In one rock layer, scientists found clam shells and a shark tooth. Clams and sharks lived in water. These fossils are evidence that a sea once covered this place. The rocks formed as mud settled on the sea floor over time.
- ② In a different layer, scientists found a large dinosaur bone beside a leaf print from a fern. The dinosaur ate plants, and ferns grow where there is enough water. Together, these fossils suggest that this area later had a wet, leafy land environment. It was not the same shallow sea shown by the clam shells.
- ③ A third layer holds footprints from a small three-toed animal. The prints are pressed into mud that later hardened into rock. Ripple marks near the prints show that water moved across the muddy ground. Fossils can show both the organisms that lived long ago and clues about their environments. Scientists compare fossils from layers to learn how a place changed.

2 ANSWER WITH EVIDENCE Use the passage

1 Which fossils show that a shallow sea once covered the place?

2 What kind of land environment do the dinosaur bone and fern leaf print suggest? Use one detail from the passage.

3 What do the ripple marks near the footprints tell about the environment?

4 How did the environment change from the layer with clam shells to the layer with the dinosaur bone and fern print?

3 YOUR TURN Your own words

Choose a fossil not named in the reading. Write two sentences: name an organism it shows lived long ago, then tell what its environment may have been and give one reason.

PART 1 • READ AND MARK

Underline the names of fossils. Circle words that tell what the place was like long ago. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Which fossils show that a shallow sea once covered the place?	The clam shells and the shark tooth.
2	What kind of land environment do the dinosaur bone and fern leaf print suggest? Use one detail from the passage.	They suggest a wet, leafy land environment. Ferns grow where there is enough water.
3	What do the ripple marks near the footprints tell about the environment?	They show that water moved across muddy ground.
4	How did the environment change from the layer with clam shells to the layer with the dinosaur bone and fern print?	The place changed from a shallow sea to wet, leafy land.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A coral fossil shows that coral animals lived here long ago. It suggests warm, shallow seawater because corals grow where sunlight reaches the sea floor.

Accept reasonable organism and environment inferences that match the chosen fossil. The student should include a fossil-based reason for the environment claim.