

Texas Fossil Detectives

Use fossil clues to describe environments from long ago.

4.12.C "identify and describe past environments based on fossil evidence, including common Texas fossils."

NAME _____

DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each fossil or fossil evidence in the passage. Write 1, 2, or 3 beside it to show the past environment it helps describe: 1 for sea, 2 for wet land near fresh water, and 3 for a wooded area.

Clues in Texas Rocks

- ① Long ago, parts of Texas were covered by a warm, shallow sea. Scientists find coiled ammonite shells in limestone from that time. Ammonites were swimming animals with hard shells. They lived in the sea, so their fossils are clues that ocean water once covered land that is dry today across much of the state, long after the sea vanished.
- ② Other Texas rocks hold three-toed dinosaur tracks. A track is not a body fossil. It is evidence of what an animal did. Some tracks were pressed into soft mud beside ancient rivers or lakes. The mud later hardened into rock. These tracks suggest that dinosaurs walked on wet land near fresh water rather than in the sea.
- ③ Petrified wood is another common Texas fossil. It forms when minerals slowly replace buried wood. Wood comes from trees, so petrified wood points to a past place where trees grew. Fossil leaves can add the same clue. Together, these fossils help scientists describe an ancient forest or wooded area, not a bare seafloor or empty plain.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What past environment do ammonite shells show? Use one fact from the passage to support your answer.

2 How do dinosaur tracks help scientists infer wet land near fresh water?

3 A scientist finds petrified wood and fossil leaves. What past environment do these fossils suggest? Explain why.

4 How is the environment shown by ammonite shells different from the environment shown by dinosaur tracks?

3 YOUR TURN _____ Your own words

Write a three-sentence fossil detective report about one fossil clue from the passage: an ammonite shell, a dinosaur track, or petrified wood. Name the past environment it suggests, use a passage detail as evidence, and contrast it with one different environment from the passage.

PART 1 • READ AND MARK

Underline each fossil or fossil evidence in the passage. Write 1, 2, or 3 beside it to show the past environment it helps describe: 1 for sea, 2 for wet land near fresh water, and 3 for a wooded area. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What past environment do ammonite shells show? Use one fact from the passage to support your answer.	They show a warm, shallow sea. Ammonites were swimming animals that lived in the sea.
2	How do dinosaur tracks help scientists infer wet land near fresh water?	The tracks were pressed into soft mud beside ancient rivers or lakes, so they show dinosaurs walked on wet land near fresh water.
3	A scientist finds petrified wood and fossil leaves. What past environment do these fossils suggest? Explain why.	They suggest an ancient forest or wooded area because petrified wood and leaves come from trees.
4	How is the environment shown by ammonite shells different from the environment shown by dinosaur tracks?	Ammonite shells show a warm, shallow sea. Dinosaur tracks show wet land near fresh water, such as near rivers or lakes.

PART 3 • YOUR TURN (SAMPLE ANSWER)

An ammonite shell suggests that this Texas place was a warm, shallow sea. The passage says ammonites were swimming animals that lived in the sea. This environment was different from a wooded area where trees grew.

Accept equivalent descriptions of the environments, such as ocean for sea and forest for wooded area. In the open response, accept any one listed fossil if the student gives an accurate passage-based clue and contrasts it with a different environment from the passage.