What Fossils Are

Fossil Scout Camp with Dinoling

Learning target

Recognize fossils as evidence of past life.

Before you begin

Use the reference page and discussion prompts on their own, or open the optional browser adventure. No earlier lesson or physical kit is required.

For online play: use an internet-connected current browser with local storage enabled. Read the three-part Gemling briefing, answer the quick check, and apply the evidence at three checkpoints. Retry feedback supports review; results are not a secure test or gradebook.

Use for teacher-led review, science centers or partner practice. Independent readers may need support with the vocabulary below. The design target is grades 3-5; choose support based on the learner.

Vocabulary and concepts to discuss

Ancient remains; traces; fossils versus ordinary rocks; paleontologists

Open Fossil Scout Camp - direct lesson link

Scan the QR code or use the clickable link. This guide is usable offline; the adventure runs on an external educational website.

What Fossils Are - key ideas

1. The first clues

A fossil is preserved evidence of past life. It may be part of an ancient organism, an impression, or a trace of what an organism did.

2. How the clues connect

A footprint preserved in rock records an action even when no body remains. An ordinary crystal's shape alone does not show that something lived there.

3. Our evidence record

Paleontologists investigate fossils using observations and comparisons. At camp, a labeled ancient track is life evidence; a smooth rock with no life clues is not enough to identify a fossil.

Keep the science accurate

Use relative ages and evidence-based interpretations. Do not require exact fossil dates, detailed taxonomy or an unbroken fossil record.

Apply the evidence

Use a specific observation from this lesson to explain one choice. Point to a clue, then connect that clue to a scientific idea.

Curriculum reference: https://www.nextgenscience.org/dci-arrangement/3-ls4-biological-evolution-unity-and-diversity

Talk through the evidence

1. Which can be a fossil?

Expected answer: An ancient footprint preserved in rock

Reasoning: A fossil is preserved evidence of past life. It may be part of an ancient organism, an impression, or a trace of what an organism did.

2. What does the footprint record?

Expected answer: An organism's activity

Reasoning: A fossil is preserved evidence of past life. It may be part of an ancient organism, an impression, or a trace of what an organism did.

3. Who studies past life using fossils?

Expected answer: A paleontologist

Reasoning: Paleontologists investigate fossils using observations and comparisons. At camp, a labeled ancient track is life evidence; a smooth rock with no life clues is not enough to identify a fossil.

4. Which camp label is supported?

Expected answer: Ancient track: trace of life

Reasoning: Paleontologists investigate fossils using observations and comparisons. At camp, a labeled ancient track is life evidence; a smooth rock with no life clues is not enough to identify a fossil.

Guide the discussion

Ask learners to name the evidence that supports their answer. If an answer differs, revisit the matching key idea on page 2 and invite a revised explanation.

Online rewards: this lesson grants one fixed digital Expedition Discovery. Five saved digital Gemling friends become available only after all six distinct subject lessons are complete, in any order. Digital rewards do not establish physical ownership.