

Types of Fossils

Amber Grove with Dinoling

Learning target

Compare what different fossil types can tell us.



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

Body fossils; trace fossils; preserved remains; amber examples

Open Amber Grove - 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.



Types of Fossils - key ideas

1. The first clues

Body fossils include preserved parts such as bones or shells. Trace fossils, such as tracks and burrows, record activity.

2. How the clues connect

Amber can preserve small remains in hardened ancient tree resin. Amber is not a frozen rock layer or proof that every trapped organism survives unchanged.

3. Our evidence record

Our cases contain a shell, a trackway and an insect in amber. The trackway can suggest movement; it cannot directly reveal the animal's skin color.

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-Is4-biological-evolution-unity-and-diversity>

Talk through the evidence

1. Which case records activity?

Expected answer: The trackway

Reasoning: Our cases contain a shell, a trackway and an insect in amber. The trackway can suggest movement; it cannot directly reveal the animal's skin color.

2. What is amber derived from?

Expected answer: Tree resin

Reasoning: Amber can preserve small remains in hardened ancient tree resin. Amber is not a frozen rock layer or proof that every trapped organism survives unchanged.

3. Which case preserves a body part?

Expected answer: A shell

Reasoning: Body fossils include preserved parts such as bones or shells. Trace fossils, such as tracks and burrows, record activity.

4. What can tracks best support?

Expected answer: An interpretation of movement

Reasoning: Our cases contain a shell, a trackway and an insect in amber. The trackway can suggest movement; it cannot directly reveal the animal's skin color.

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.