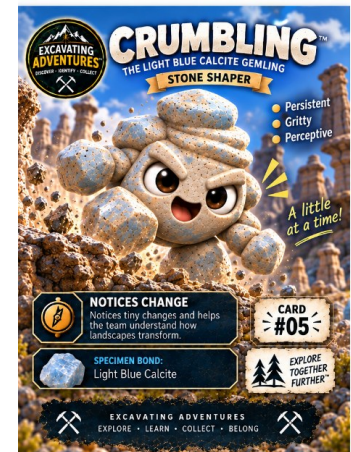


Breaking, Moving & Settling

Canyon Camp with Crumbling

Learning target

Distinguish the three main surface-change processes.



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

Weathering; erosion; deposition; linked processes

Open Canyon 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.



Breaking, Moving & Settling - key ideas

1. The first clues

Weathering breaks down rock where it is. Erosion moves rock or sediment from one place to another. Deposition is the settling of carried material.

2. How the clues connect

These processes can connect: a rock breaks, water carries the pieces, and the pieces settle when transport slows. They are different parts of a journey.

3. Our evidence record

Our cards show a cracked rock, muddy flowing water and settled sand. Follow the action in each card instead of calling every change erosion.

Keep the science accurate

Explain breaking, moving and settling distinctly. Chemical weathering is descriptive; no acid experiments are required.

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/4-ess2-earths-systems>

Talk through the evidence

1. Which process breaks rock in place?

Expected answer: Weathering

Reasoning: Weathering breaks down rock where it is. Erosion moves rock or sediment from one place to another. Deposition is the settling of carried material.

2. Which card shows erosion?

Expected answer: Muddy water carrying particles

Reasoning: Our cards show a cracked rock, muddy flowing water and settled sand. Follow the action in each card instead of calling every change erosion.

3. What is deposition?

Expected answer: Carried material settling

Reasoning: Weathering breaks down rock where it is. Erosion moves rock or sediment from one place to another. Deposition is the settling of carried material.

4. Which order fits our journey?

Expected answer: Break, move, settle

Reasoning: These processes can connect: a rock breaks, water carries the pieces, and the pieces settle when transport slows. They are different parts of a journey.

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.