

Reading Land & Water Maps

Explorer Ridge Station with Landling

Learning target

Read a simple map and identify major land and water features.



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

Landforms; water features; map keys; direction and relative location

Open Explorer Ridge Station - 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.



Reading Land & Water Maps - key ideas

1. The first clues

A map represents places with symbols. Its key explains what the symbols mean; a direction arrow helps us describe relative locations.

2. How the clues connect

A landform is a shape of Earth's surface, such as a hill or valley. Rivers and lakes are water features that maps can also show.

3. Our evidence record

Our route card says camp is west of a lake and the marked bridge is north of camp. Follow the key and north arrow, not the color you like best.

Keep the science accurate

Keep map reading and observable forms central. Detailed plate mechanics and contour calculations are extensions.

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. What explains a map symbol?

Expected answer: The map key

Reasoning: A map represents places with symbols. Its key explains what the symbols mean; a direction arrow helps us describe relative locations.

2. Which is a landform?

Expected answer: A valley

Reasoning: A landform is a shape of Earth's surface, such as a hill or valley. Rivers and lakes are water features that maps can also show.

3. Which way is the bridge from camp in our card?

Expected answer: North

Reasoning: Our route card says camp is west of a lake and the marked bridge is north of camp. Follow the key and north arrow, not the color you like best.

4. What should we check before choosing the route?

Expected answer: Key, direction arrow and marked features

Reasoning: Our route card says camp is west of a lake and the marked bridge is north of camp. Follow the key and north arrow, not the color you like best.

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.