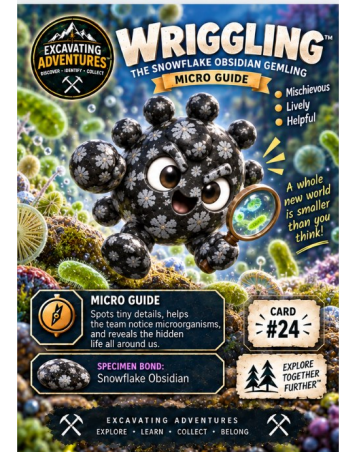


Microbes in Many Habitats

Biolume Spore Grove with Wriggling

Learning target

Explain that microorganisms live in many places and have varied roles.



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

Water; soil; other organisms; diverse conditions; food webs

Open Biolume Spore 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.



Microbes in Many Habitats - key ideas

1. The first clues

Microbes live in many habitats, including soil, water and other organisms. Different microbes tolerate different conditions and have different roles.

2. How the clues connect

Not all microbes glow, and not all make spores. A glowing grove is our fantasy setting, not a scientific rule.

3. Our evidence record

Our labeled records place one organism in pond water and another in soil. Compare their recorded habitats and roles rather than assigning the same needs to all microorganisms.

Keep the science accurate

The glowing realm name does not imply all microbes glow or that all microbes produce spores.

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/ms-ls1-molecules-organisms-structures-and-processes>

Talk through the evidence

1. Where can microbes live?

Expected answer: Soil, water and other organisms

Reasoning: Microbes live in many habitats, including soil, water and other organisms. Different microbes tolerate different conditions and have different roles.

2. Do all microbes glow?

Expected answer: No

Reasoning: Not all microbes glow, and not all make spores. A glowing grove is our fantasy setting, not a scientific rule.

3. What should guide a habitat match?

Expected answer: The labeled organism's evidence

Reasoning: Our labeled records place one organism in pond water and another in soil. Compare their recorded habitats and roles rather than assigning the same needs to all microorganisms.

4. Do all microbes produce spores?

Expected answer: No

Reasoning: Not all microbes glow, and not all make spores. A glowing grove is our fantasy setting, not a scientific rule.

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.