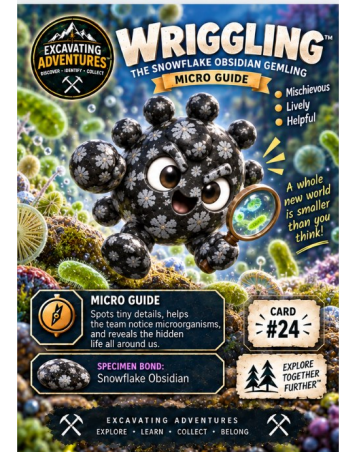


Meet Microorganisms

Petri Plaza with Wriggling

Learning target

Describe microorganisms without equating them all with germs.



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

Microscopic life; bacteria; protists; microscopic fungi; observing with tools

Open Petri Plaza - 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.



Meet Microorganisms - key ideas

1. The first clues

Microorganisms include microscopic living things such as bacteria, many protists and microscopic fungi. They have diverse structures and roles.

2. How the clues connect

A microscope reveals organisms too small to examine unaided. Viruses are not cellular organisms and are not grouped as cells in this model.

3. Our evidence record

Our supplied labeled images compare a bacterium, a protist and yeast. We use prepared images rather than growing or handling unknown samples.

Keep the science accurate

No culturing unknown microbes or handling mold. Viruses are not treated as cellular organisms. Avoid all-microbes-are-harmful framing.

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. Which tool helps examine many microorganisms?

Expected answer: Microscope

Reasoning: Microorganisms include microscopic living things such as bacteria, many protists and microscopic fungi. They have diverse structures and roles.

2. Which is a microscopic fungus?

Expected answer: Yeast

Reasoning: Microorganisms include microscopic living things such as bacteria, many protists and microscopic fungi. They have diverse structures and roles.

3. Are all microbes harmful?

Expected answer: No

Reasoning: Our supplied labeled images compare a bacterium, a protist and yeast. We use prepared images rather than growing or handling unknown samples.

4. How do we investigate in this adventure?

Expected answer: Use supplied labeled images

Reasoning: Our supplied labeled images compare a bacterium, a protist and yeast. We use prepared images rather than growing or handling unknown samples.

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.