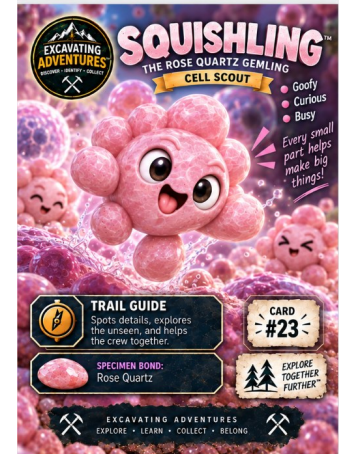


Cells: Small Units of Life

Membrane Gate with Squishling

Learning target

Explain what a cell is using a magnified model.



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

Living things made of cells; microscopic scale; one or many cells; membranes

Open Membrane Gate - 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.



Cells: Small Units of Life - key ideas

1. The first clues

Living organisms are made of cells. Some organisms are one cell; others contain many cells with different jobs.

2. How the clues connect

Most cells are too small to examine well with unaided eyes. A microscope helps reveal details; a large cell drawing is a model, not the actual scale.

3. Our evidence record

Our display compares a whole plant, a magnified cell image and a labeled drawing. All three help explain life, but only the plant is the whole multicellular organism.

Keep the science accurate

Cell parts and division are enrichment here, not a claim of universal K-5 NGSS coverage. No organelle lists, mitosis stages or biochemical pathways.

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. What are living organisms made of?

Expected answer: Cells

Reasoning: Living organisms are made of cells. Some organisms are one cell; others contain many cells with different jobs.

2. Can an organism be one cell?

Expected answer: Yes

Reasoning: Living organisms are made of cells. Some organisms are one cell; others contain many cells with different jobs.

3. Why use a microscope?

Expected answer: Many cell details are too small to see unaided

Reasoning: Most cells are too small to examine well with unaided eyes. A microscope helps reveal details; a large cell drawing is a model, not the actual scale.

4. Which display is a model?

Expected answer: The labeled drawing

Reasoning: Our display compares a whole plant, a magnified cell image and a labeled drawing. All three help explain life, but only the plant is the whole multicellular organism.

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.