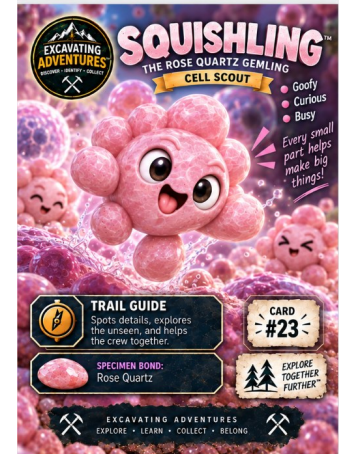


Single Cells & Organized Bodies

Builder Bay with Squishling

Learning target

Explain how cells can form parts of a larger organism.



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

Single-celled organisms; multicellular organisms; specialized cells; tissues and organs

Open Builder Bay - 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.



Single Cells & Organized Bodies - key ideas

1. The first clues

A single-celled organism carries out life processes in one cell. Multicellular organisms have many cells, often specialized for different tasks.

2. How the clues connect

Groups of cooperating cells form tissues, and tissues form organs. An organism is the whole living individual, not just one labeled organ.

3. Our evidence record

Our ordering model is cell, tissue, organ, organism. A building-team analogy can show cooperation, but cells are living systems rather than miniature human workers.

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. Which organism can perform life processes in one cell?

Expected answer: A single-celled organism

Reasoning: A single-celled organism carries out life processes in one cell. Multicellular organisms have many cells, often specialized for different tasks.

2. What is the correct order in our model?

Expected answer: Cell, tissue, organ, organism

Reasoning: Our ordering model is cell, tissue, organ, organism. A building-team analogy can show cooperation, but cells are living systems rather than miniature human workers.

3. Why can cells have different forms?

Expected answer: They can specialize in different functions

Reasoning: A single-celled organism carries out life processes in one cell. Multicellular organisms have many cells, often specialized for different tasks.

4. What is a limit of the worker analogy?

Expected answer: Cells are not tiny people

Reasoning: A single-celled organism carries out life processes in one cell. Multicellular organisms have many cells, often specialized for different tasks.

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.