

Growing & Changing

Tadpole Pools with Hatchling

Learning target

Explain how an organism can change form as it grows.



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

Young versus adult forms; gradual growth; frog metamorphosis

Open Tadpole Pools - 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.



Growing & Changing - key ideas

1. The first clues

Some young animals resemble smaller adults, while others change body form greatly. Frogs undergo metamorphosis.

2. How the clues connect

A simple frog sequence is egg, tadpole, developing frog with legs, adult. Changes include structures used for movement and obtaining oxygen.

3. Our evidence record

Our comparison shows a tadpole changing form much more than a young dog growing into an adult dog. Both grow, but growth patterns differ.

Keep the science accurate

A life cycle continues through generations, not an individual returning from death. Complete/incomplete metamorphosis labels apply to insect comparisons here.

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/3-Is1-molecules-organisms-structures-and-processes>

Talk through the evidence

1. Which stage follows the egg in our frog model?

Expected answer: Tadpole

Reasoning: A simple frog sequence is egg, tadpole, developing frog with legs, adult. Changes include structures used for movement and obtaining oxygen.

2. What appears as the frog develops?

Expected answer: Legs

Reasoning: A simple frog sequence is egg, tadpole, developing frog with legs, adult. Changes include structures used for movement and obtaining oxygen.

3. Does a young dog follow a tadpole stage?

Expected answer: No

Reasoning: Our comparison shows a tadpole changing form much more than a young dog growing into an adult dog. Both grow, but growth patterns differ.

4. Which comparison fits?

Expected answer: Both grow, but the frog changes form more greatly

Reasoning: Our comparison shows a tadpole changing form much more than a young dog growing into an adult dog. Both grow, but growth patterns differ.

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.