Eggs to Adults

Compare two life cycles using models.

3.5 "Develop and use models to compare the diverse life cycles of organisms other than humans, including birth, growth, reproduction, and death."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline where each animal's life begins, circle the words that name its growing stages, and put a star beside what adults do to start new lives. Use your marks to compare the two life cycles.

A Pond and a Leaf

1. On a rainy spring night, a female frog lays many eggs in pond water. A male frog fertilizes the eggs, and embryos begin to develop inside them. Tadpoles hatch and swim with tails. As a tadpole grows, legs form, and its tail gets shorter. Adult frogs can reproduce, starting new frog lives. After living for some time, each adult frog dies.

2. On a leaf, a female ladybug lays a cluster of eggs. A larva hatches from each egg. It has six legs, but it does not look like a round adult ladybug. The larva eats small insects and grows. Next it becomes a pupa, a stage when its body changes. An adult ladybug comes out. Adults can reproduce, and each adult eventually dies.

3. Both animals begin life in eggs and grow before they can reproduce. Their young do not look just like their adults. A frog hatches as a tadpole, then grows legs as it becomes an adult. A ladybug hatches as a larva, then changes inside a pupa before becoming an adult. In each kind of animal, parents die, but their young can continue the life cycle.

2 ANSWER WITH EVIDENCE

Use the passage

1. How would you start a life cycle model for both animals? What different young stages would come next?

2. Which stage belongs between larva and adult in the ladybug model? How is the frog's growth different?

3. Where would you show reproduction in each model, and what new stage would it lead to?

4. If both models stopped at the adult stage, which part of each life cycle would they leave out?

3 YOUR TURN

Your own words

In two panels, draw a frog model and a ladybug model that each start with an adult. Use arrows and labels to show new eggs, how the young grow into adults, and what eventually happens to the older adults. Write one sentence explaining how each kind of animal can continue after older adults die.

ANSWER KEY

Eggs to Adults

GRADE 3 · 3.5

PART 1 · READ AND MARK

Underline where each animal's life begins, circle the words that name its growing stages, and put a star beside what adults do to start new lives. Use your marks to compare the two life cycles. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How would you start a life cycle model for both animals? What different young stages would come next?	**Both models start with eggs. A tadpole comes next for the frog, while a larva comes next for the ladybug.**
2	Which stage belongs between larva and adult in the ladybug model? How is the frog's growth different?	**A pupa belongs between larva and adult. A frog grows legs and loses its tail as it changes from a tadpole into an adult.**
3	Where would you show reproduction in each model, and what new stage would it lead to?	**Show reproduction at the adult stage. It leads to new eggs in both models.**
4	If both models stopped at the adult stage, which part of each life cycle would they leave out?	**They would leave out the adults' deaths.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Frog panel: adult frog → eggs → tadpole → new adult frog; older adult frog → death. Ladybug panel: adult ladybug → eggs → larva → pupa → new adult ladybug; older adult ladybug → death. Each kind can continue because new adults can grow from eggs even after older adults die.

Accept models that put each animal's stages in the correct order and show both new offspring and the older adults' deaths. Arrows may branch to show death without suggesting that death produces eggs.