Two Paths Through Life

Compare two animal life cycle models

3.LS1.1 "Develop and use models to describe that organisms have unique and diverse life cycles but all have a common pattern of birth, growth, reproduction, and death."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the frog's growth stages and circle the monarch's growth stages. In paragraph 3, number the four events shared by both life cycles in order.

From Pond to Leaf

1. On a spring night, a female frog lays eggs in a pond. A young frog grows inside each egg, then hatches as a tadpole. The tadpole swims with a tail and breathes with gills. As it grows, legs appear, lungs develop, and its tail gets smaller. An adult frog can reproduce. A female may lay eggs that begin another cycle. One day, each frog dies.

2. On a milkweed leaf, a female monarch butterfly lays tiny eggs. A caterpillar hatches from each egg and eats leaves as it grows. Next, it forms a chrysalis. Inside, its body changes. An adult butterfly comes out with wings. Adult monarchs can reproduce, and females lay eggs for a new cycle. Like every living thing, each butterfly eventually dies. Its young will have their own life cycles.

3. A frog and a monarch do not grow in the same way. A young frog lives in water and changes from a tadpole. A young monarch feeds on leaves and changes inside a chrysalis. Yet both life cycles follow a shared pattern: a new animal begins life, grows, becomes able to reproduce, and dies. New eggs can begin the pattern again. A cycle can repeat even though each animal has an end.

2 ANSWER WITH EVIDENCE

Use the passage

1. Make a frog life cycle model with arrows. Show how a new cycle begins and how one frog's life ends.

2. Make a monarch life cycle model with arrows. Show how a new cycle begins and how one monarch's life ends.

3. Name one change in the frog model that is not in the monarch model and one change in the monarch model that is not in the frog model.

4. What four events must both models show, in order? Give one detail from the passage that shows how a new cycle begins.

3 YOUR TURN

Your own words

Draw an arrow model of a chicken's life cycle, from an egg to the next generation. Label how a chick grows, how adult chickens reproduce and a hen lays new eggs, and how one chicken's life ends. Write one sentence telling how this model differs from the frog or monarch model.

ANSWER KEY

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GRADE 3 · 3.LS1.1

PART 1 · READ AND MARK

Underline the frog's growth stages and circle the monarch's growth stages. In paragraph 3, number the four events shared by both life cycles in order. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Make a frog life cycle model with arrows. Show how a new cycle begins and how one frog's life ends.	**Egg → tadpole → growing frog → adult frog → eggs laid by a female frog. Each frog eventually dies.**
2	Make a monarch life cycle model with arrows. Show how a new cycle begins and how one monarch's life ends.	**Egg → caterpillar → chrysalis → adult monarch → eggs laid by a female monarch. Each monarch eventually dies.**
3	Name one change in the frog model that is not in the monarch model and one change in the monarch model that is not in the frog model.	**The frog grows legs and loses its tail. The monarch changes inside a chrysalis.**
4	What four events must both models show, in order? Give one detail from the passage that shows how a new cycle begins.	**Beginning life, growth, reproduction, and death. A female frog lays eggs that begin another cycle.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Egg with developing chick → chick hatches → young chicken grows → adult hen and rooster reproduce → hen lays eggs that can grow into chicks. Each chicken eventually dies. Unlike a frog, a young chicken does not grow as a tadpole.

Accept models that show the stages in a sensible order, reproduction beginning a new generation, and death ending an individual's life. For the chicken model, eggs can grow into chicks only when fertilized.