

The Life Cycle of Butterflies Concept Storyline

Unifying Concept

Organisms change their forms and behaviors as part of their life cycles. Organisms can survive only in environments where their basic needs are met.

Unit Concept

Butterflies undergo a series of metamorphoses that define their life cycles.

Grade-Level Concept

Butterflies go through several changes during their life cycles. Like all other organisms, butterflies have basic needs.

Subconcept 1

Caterpillars represent one stage of a butterfly's life cycle.

Lesson 1: Pre-Unit Assessment: Getting Ready for Caterpillars
Students discuss what they know about caterpillars and butterflies.

Lesson 2: Caring for Caterpillars
Students learn about the caterpillar's food needs and begin to observe their caterpillars.

Lesson 3: Learning More about Caterpillars
Students discuss what caterpillars and other organisms need to stay alive.

Lesson 4: Observing the Caterpillars
Students discuss the caterpillar's activities and study its basic body parts.

Lesson 5: Observing Change: Growth and Molting
Students observe changes in the caterpillars.

Lesson 6: Silk Spinning
Students watch the caterpillar spin its silk and discuss how it uses the silk.

Subconcept 2

As part of its life cycle, the butterfly forms and emerges from a chrysalis.

Lesson 7: From Caterpillar to Chrysalis
Students observe the formation of a chrysalis, the third stage in the butterfly's life cycle.

Lesson 8: Observing the Chrysalis
Students observe the formation of parts of the butterfly's body.

Lesson 9: The Butterfly Emerges
Students watch the butterfly emerge from its chrysalis and observe its distinctive body parts.

Subconcept 3

The structures of a butterfly provide the means for its essential life functions.

Lesson 10: Feeding the Butterflies
Students observe how the butterfly uses its proboscis.

Lesson 11: The Butterfly's Body
Students investigate the butterfly's functions and structures and compare them to their own.

Lesson 12: The Butterflies Go Free
Students discuss how the butterflies will survive in their natural environment.

Subconcept 4

Scientists use data on organisms' structures and life cycles to understand and classify living things.

Lesson 13: Using Our Data
Students review and analyze their data on the butterfly's life cycle.

Lesson 14: Discovering that Butterflies Are Insects
Students learn about the characteristics that all insects share.

Lesson 15: Other Life Cycles
Students apply their knowledge of the butterfly's life cycle to that of other organisms.

Lesson 16: Post-Unit Assessment: Sharing What We Know about the Life Cycle of Butterflies
Students discuss and reflect on what they have learned.