

# 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.*