**Concept Storyline: *The Life Cycle of Butterflies***

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| **Unifying Concept** | **Unit Concept** | **Grade-Level 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. | Butterflies undergo a series of metamorphoses that define their life cycles. | Butterflies go through several changes during their life cycles.  Like all other organisms, butterflies have basic needs. |

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| **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.* |

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