

Name \_\_\_\_\_

## Metamorphosis Magic: The Transformation of Butterflies

### Open-Ended Response Answer Key

1. The process of metamorphosis is considered magical because it involves a complete transformation from a crawling caterpillar to a beautiful flying butterfly, showcasing the wonders of nature and the intricate beauty of the natural world.
2. Environmental factors such as temperature and humidity can impact the development of butterflies from egg to adult by influencing the speed of development, survival rates, and overall health of the individuals.
3. An interesting question to investigate might be how different species of butterflies adapt to environmental changes during metamorphosis and how these adaptations influence their survival and reproduction.
4. Butterflies are significant in ecosystems as pollinators, helping to facilitate the reproduction of flowering plants, and as contributors to nutrient cycling, as both caterpillars and adults consume plant material and excrete waste products that enrich the soil.

