

3rd Grade

Butterflies and Moths

NYS Standard 4 (Science): Living Environment

- ✓ **Key Idea 1: Living things are both similar to and different from each other and from nonliving things.**
- ✓ **Key Idea 2: Organisms inherit genetic information in a variety of ways that results in continuity of structure and function between parents and offspring.**
- ✓ **Key Idea 4: The continuity of life is sustained through reproduction and development.**
- ✓ **Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.**
- ✓ **Key Idea 6: Plants and animals depend on each other and their physical environment.**

Major Understandings	Learning Experience/Objectives	Supporting Terms
<p><i>1.2a All living things: grow, consume nutrients, breathe, reproduce, eliminate waste, and die.</i></p> <p><i>5.1 a All living things grow, consume nutrients, breathe, reproduce, and eliminate waste.</i></p>	<p>This major understanding is covered through the collective learning experiences in this unit.</p>	
<p><i>1.1a Animals need air, water, and food in order to live and thrive</i></p>	<p>Arrival Day: Students will prepare butterfly larva culture vessel.</p>	<p>butterfly, larva, larvae</p>
<p><i>4.1a Plants and animals have life cycles. These may include beginning of life, developing into adults, reproducing as adults, and eventually dying.</i></p> <p><i>4.1e Each generation of animals goes through changes in form from young to adult. This completed sequence of changes in form is called a life cycle. Some insects change from egg to larva to pupa to adult.</i></p> <p><i>4.1f Each kind of animal goes through it s own stages of growth and development during its life span.</i></p> <p><i>4.1g The length of time from an animal's birth to its death is called its life span. Life spans of different animals vary.</i></p>	<p>Larva: Students will study the butterfly larva through observation gathering accurate data on the larva they observe.</p> <p>Pupa: Students will observe the chrysalis and explain that it is the pupa stage of the butterfly.</p> <p>The Adult: Students will observe the butterfly emerging form the chrysalis and be able to label its parts.</p> <p>Eggs: Students will identify the next stage of the butterfly life cycle and record any observations.</p> <p>Life Cycle of the Butterfly: Students will identify and name the stages of the life cycle of a butterfly.</p>	<p>chrysalis, pupa, pupae, adult, emerge, metamorphosis, generation, offspring, stage, development, life cycle</p>
<p><i>2.1a Some traits of living things have been inherited (e.g., color of flowers and number of limbs of animals).</i></p> <p><i>2.2a Plants and animals closely resemble their parents and other individuals in their species.</i></p> <p><i>2.2b Plants and animals transfer genetic information to their offspring when they reproduce.</i></p>	<p>Biotic Potential: Students will observe the butterfly offspring and explain their biotic potential</p>	<p>biotic potential</p>
<p><i>5.1 b An organism's external physical features enable its ability to carry out life functions in its particular environment.</i></p>	<p>Stimulus-Response: Students will describe how butterflies will respond to a stimulus.</p> <p>Butterfly or Moth??: Students will identify the differences between a butterfly and moth.</p>	<p>antenna, feeding , stimulus, response, proboscis, cocoon</p>
<p><i>6.1a All animals depend on plants. Some animals eat plants for food. Other animals (predators) eat animals (prey).</i></p>	<p>Leaves the Larva Eat: Students will predict food preference of the larva then determine the natural food (leaves) the larva prefer.</p>	<p>mallow plant, natural, thistle, hollyhock</p>

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