

# Backyard Butterflies

## Teaching Guide

### VOCABULARY

*abdomen - (AB-duh-men): the rear part of an insect's body. Ten prolegs support this part of the caterpillar. No legs support this part of the butterfly.*

*antenna - (an-TEN-uh), plural, antennae (an-TE-nee): the feelers on the head of an insect. Antennae are used for feeling, smelling, and tasting.*

*caterpillar - (CAT-er-pill-er): the second stage in life of a butterfly just after it hatches from the egg.*

*chrysalis - (KRIS-uh-lis); plural, chrysalides (KRIS-uh-lids): another name for pupa, the second stage of a butterfly's four part life.*

*cremaster - (KREE-mas-ter): the black stem with many tiny hooks on its tip that attaches the chrysalis to the silk button spun by the caterpillar.*

*exoskeleton - (ex-o-SKEL-ah-ton): the outer "skeleton" of an insect (insects do not have bones) made of the cuticle.*

*frass - the solid waste or excrement of caterpillars and butterflies and called caterpillar poop by most students.*

*hibernation - (hi-ber-NAY-shun): when an animal sleeps through the winter.*

*insect - (IN-sekt): an animal with a hard outer skin. An insect's body has 3 parts: a head, a thorax, and an abdomen. Insects have 6 legs, 2 antennae and usually, wings.*

*instar - (IN-star) a period between larval molts. There are five of these periods in the growth of some larva.*

*larva - (LAR-vuh). plural, larvae (LAR-vee): the second stage, after the egg, in metamorphosis. Also known as caterpillar.*

*Lepidoptera - (lep-uh-DOP-ter-uh): the order of insects that is made up of butterflies and moths,*

*mandibles - (MAN-da-bulz): strong "jaws" on the larval head.*

*mating - the joining of a male (father) and a female (mother) to make babies.*

*maxillary palp - (MAX-a-lary palps): small sensory organs on either side of the mouth of a caterpillar that help direct food.*

*metamorphosis - (met-ah-MOR-fa-sis): A complete change from one form to another. Through metamorphosis a butterfly is transformed from an egg, to a larva (caterpillar), to a pupa (chrysalis), to an adult (butterfly).*

*migration - when an animal travels a long way, at certain times of the year, to find a better place to live.*

*molting - the shedding of an animal's old layer of skin, scales, fur or feathers.*

*nectar - sweet, sugary syrup made by flowers to attract insects.*

*ocellus - (o-SEL-us), plural, ocelli: simple eyes of some insects. Some larvae have 12 ocelli.*

*pupa - the stage in the life of a butterfly or moth between the caterpillar and the adult insect.*

*parasites - organisms that live in or on a host's body and depend on the host for nutrients and resources necessary to complete their life cycle.*

*proboscis - (pro-BOSS-is): the long, coiled sucking tube the butterfly uses for eating its liquid diet of nectar.*

*prolegs - (PRO-legs): stubby, fleshy legs supporting the abdomen of a caterpillar. Most caterpillars have 10 prolegs, also called false legs. The six "true" legs are part of the thorax.*

*pupa - (PUE-pa) plural, pupae (PUE-pee): The third stage in the life of a butterfly between the caterpillar and the adult insect. Also called the chrysalis.*

*scales - overlapping pieces of material that insulate butterflies' bodies and wings, improve their aerodynamics, and give them color and markings. Many people think the scales look like fine dust on butterfly wings.*

*spinneret - (SPIN-ah-ret): the organ on the bottom of the larva head from which silk is spun. This is the only silk-producing organ in the larvae.*

*thorax - (THO-rax): the middle part of an insect's body. The wings, if present, and legs are attached to this segment.*

*tracheae - (TRAY-kee-uh) plural (TRAY-kee). long tubes that deliver air through the body of an insect. In caterpillars these are attached to the spiracles and are pulled out of the body during molting.*

*true legs - joined appendages located on the thoracic segment of a larva. Contract with prolegs.*

*warning coloration - bright colors that advertise poisons or other harmful defenses to potential predators.*

