

Anatomy and Vocabulary Building

Getting to Know your Butterflies and Moths

Basic Butterfly Vocabulary (PreK–2)

Abdomen – the hind part of the body on the caterpillar and the butterfly. All insects have one!

Antennas – found on the butterfly's head, used to taste the air, and help with balance and orientation.

Caterpillar – the larval stage of a butterfly or moth.

Chrysalis – the hard shell covering the pupa, shaped like an upside-down teardrop.

Compound eyes – found on the butterfly's head. Thousands of tiny lenses help the butterfly see in all directions, and recognize color and pattern and movement.

Proboscis – the butterfly tongue, which works like a drinking straw. In metamorphosis, the proboscis is formed as two separate parts, which the butterfly uncoils and zips together to form a tube for drinking.

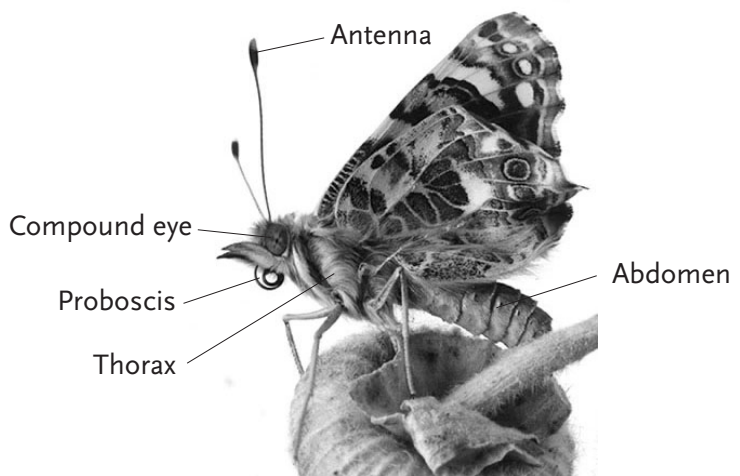
Thorax – the three front segments of the caterpillar, each segment with a pair of legs. The front part of the butterfly's body.



Caterpillar



Chrysalis



Butterfly

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Butterfly Expert Vocabulary (3–6)

Joints – located between the butterfly's leg segments, joints help the butterfly bend and move the body.

Larva – the second stage of metamorphosis — another term for caterpillar.

Mandible – the caterpillar's jaw.

Ocelli – name for the three sets of eyes your caterpillar has. The caterpillar's vision is poor even with all those eyes!

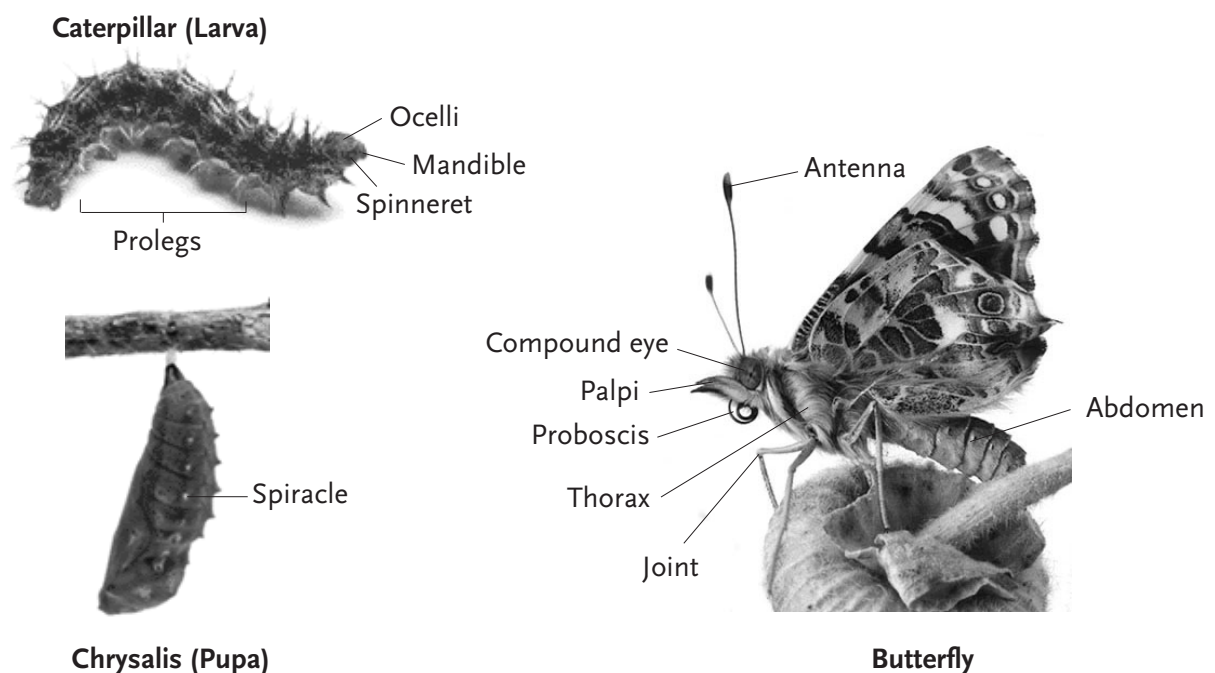
Palpi – feelers that help the caterpillar "see" where it's going — also found on the butterfly's head.

Prolegs – found on segments 3 through 8, and the last segment, of a caterpillar.

Pupa – the third stage of metamorphosis — another name for the chrysalis.

Spinneret – opening of the silk gland, found on the caterpillar's lower lip. It's used to create the silk pad to which the chrysalis attaches.

Spiracles – breathing holes. Found in pairs — one on each side of all segments of the caterpillar except the second, third, and the last. Spiracles are also found on the chrysalis and butterfly.



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Lepidopterist Vocabulary (Advanced)

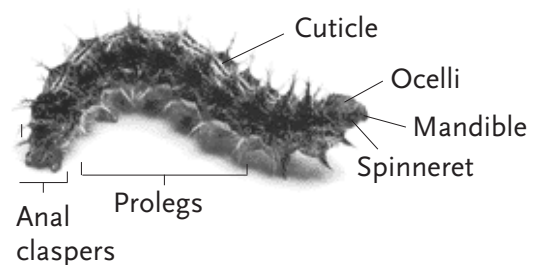
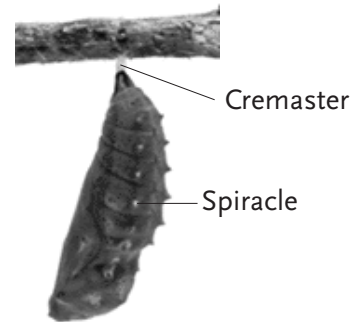
Anal claspers – hind legs on the caterpillar. Used to attach to the silk pad the caterpillar spins at the beginning of the chrysalis stage.

Cremaster – replaces the anal claspers in attaching the chrysalis to the top of the cup or to a twig.

Crochets – groups of hooks on the caterpillar's prolegs.

Cuticle – the skin or exoskeleton of the caterpillar and chrysalis. The Painted Lady caterpillars' cuticle has short spines. These spines are a defense from predators.

Exuvia – the name for the molted, caterpillar cuticle. Look for it in the bottom of the cup!



Other Important Terms

Diurnal – active during the day

Entomologist – scientist who studies insects

Frass – caterpillar excrement (those little round balls at the bottom of the cup)

Habitat – environment that supports the survival of a species

Lepidopterist – scientist who studies butterflies

Metamorphosis – the process of developmental changing from one thing into another, often marked by body changes

Migrate – to travel from one place to another, often seasonally

Molt – Caterpillars “molt” or shed their skin as they grow.

Nocturnal – active at night

Pheromones – special chemicals the butterflies give off to attract a mate

Puddling – Butterflies gather, or *puddle*, at damp spots. They are getting sodium, an essential part of their diet.