

Butterfly Anatomy and Vocabulary

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.

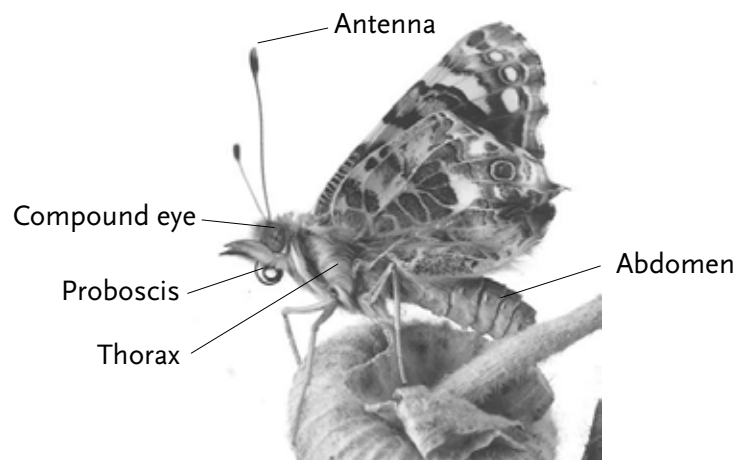
Thorax – the three front segments of the caterpillar, each segment with a pair of legs. The front part of the butterfly's body.



Caterpillar



Chrysalis



Butterfly

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!

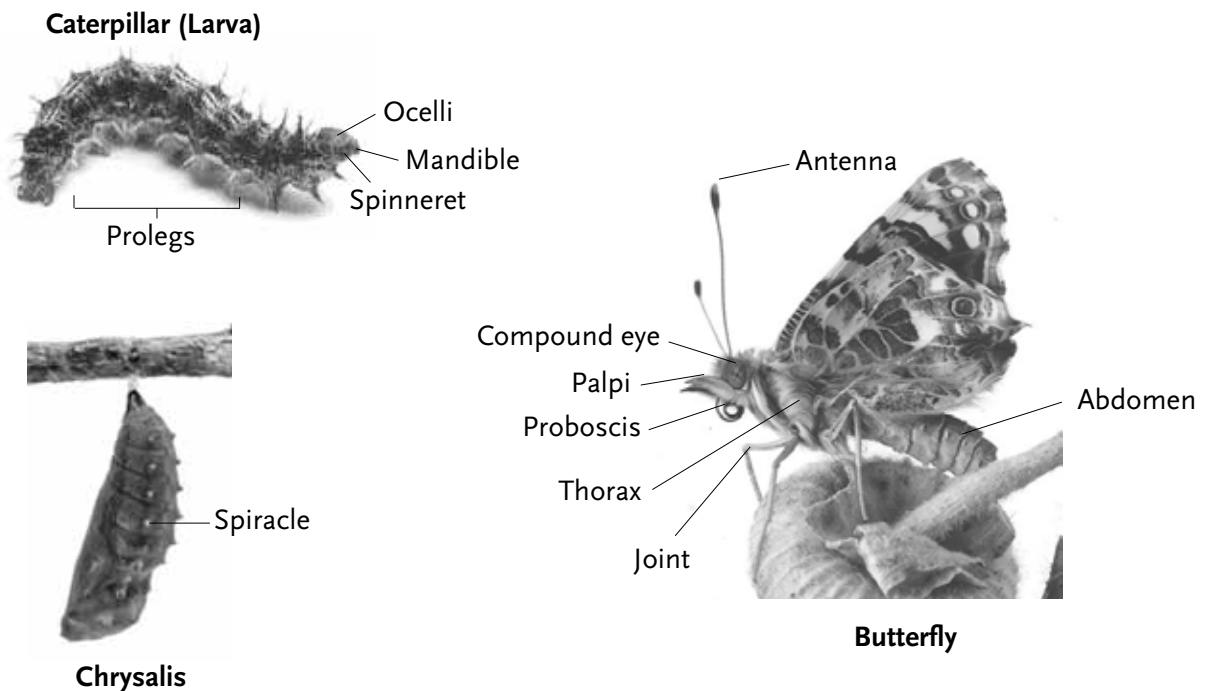
Palpi – feelers that help the caterpillar "see" where it's going — also found on the butterfly's head.

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.



Lepidopterist Vocabulary (Advanced)

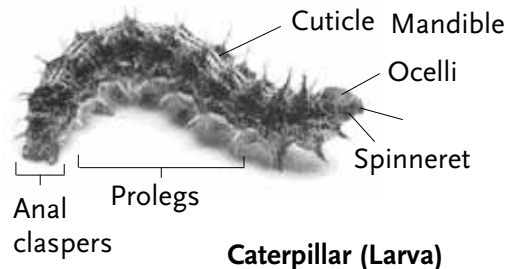
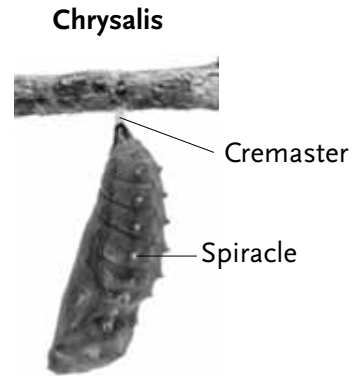
Anal claspers – hind legs on the caterpillar. Used to attach to the silk pad the caterpillar spins at the beginning of the chrysalis stage.

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.