

## Kids Ask Dr. Bug

Home to more than plants, kids ask Dr. Tamra Reall about the curious things found in the garden.

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### Why do yellow jackets sting? Alijah, 9

Some people think yellow jackets are just plain mean! However, yellow jackets, like other wasps, sting when they feel threatened or if they feel like their nest is threatened. Even if you aren't trying to hurt them, if you have unintentionally bumped their nest or come near their territory, you might get an unpleasant surprise. Nests can be underground or aboveground. Yellow jackets eat other critters, such as caterpillars, flies, and spiders so they can be beneficial. However, sometimes they eat the food we like to eat, too, so they can also be pests. Did you know that only female wasps can sting? Males don't have stingers.

### How many legs do caterpillars have? Acelyn, 8

While adult insects never have more than 6 legs (they may have less if they lose a few), younger insects can have fewer or more legs. Caterpillars usually have 6 legs coming out from their thorax, the area just below their head. Some caterpillars also have stubby bumps, called prolegs, on their abdomen. Prolegs aren't real legs, but they act like legs and help caterpillars move their big bodies around. A caterpillar may have up to 5 sets of prolegs. That means some caterpillars have 16 "legs"! When they become an adult, the prolegs disappear.

### How long do caterpillars stay in their chrysalis? Haylee, 9

When the caterpillar is done growing as big as it will get, it stops eating, hangs upside down from a leaf or twig, and transforms into a pupa, also known as a chrysalis. A lot happens in a chrysalis, and depending on the type of butterfly, it can take about 1 to 3 weeks.

### What happens when a butterfly is in its chrysalis? Sierra, 9

For a long time, it was a mystery about what happens inside the chrysalis. A lot is happening in the hardened shell of what used to be a caterpillar. Metamorphosis – where the leaf-eating caterpillar that crawled along leaves becomes the adult butterfly with wings covered in colorful scales, looking more like a flying flower, and also able to drink nectar through straw-like mouthparts. If you open a chrysalis, it will mostly be goo as the caterpillar is dissolved and a special set of cells develop into the adult butterfly. Wings, antennae, eyes and legs slowly appear and soon a butterfly emerges from the chrysalis shell. Follow the link (<https://www.youtube.com/watch?v=qiGus6bmgGU>) in the QR code for a video to see this process!

### How long does a butterfly live? Aliyah, 8

It depends! Some butterflies, such as the Coppers and Small Blues, only live a few days. Others, like Monarchs and Mourning Cloaks can live for 6-9 months. Most butterflies, however, live only for 2-4 weeks if they can avoid being eaten by birds, bats, praying mantises, or other hungry animals. They literally wear out their wings flying from flower to flower.

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Image: Caterpillar by Aaron Burden

