

The Butterfly Life Cycle

Not only are butterflies beautiful, with their bright colors and graceful flight, but they are truly masters of transformation! They didn't always have those glorious wings. As they grow, they undergo an amazing change – a process known as “*metamorphosis*”.



Stage 1: the egg



It all starts when a female butterfly lays her eggs, usually on leaves or stems of plants. Inside these tiny eggs, caterpillars grow. Depending on the species, the eggs can vary in shape and texture – they can be round, oval or cylindrical, and smooth, bumpy or wrinkled. The time it takes for the eggs to hatch can also vary – in some species, they will hatch within a few weeks and in others they will only hatch once the weather is warm enough.

Stage 2: the caterpillar



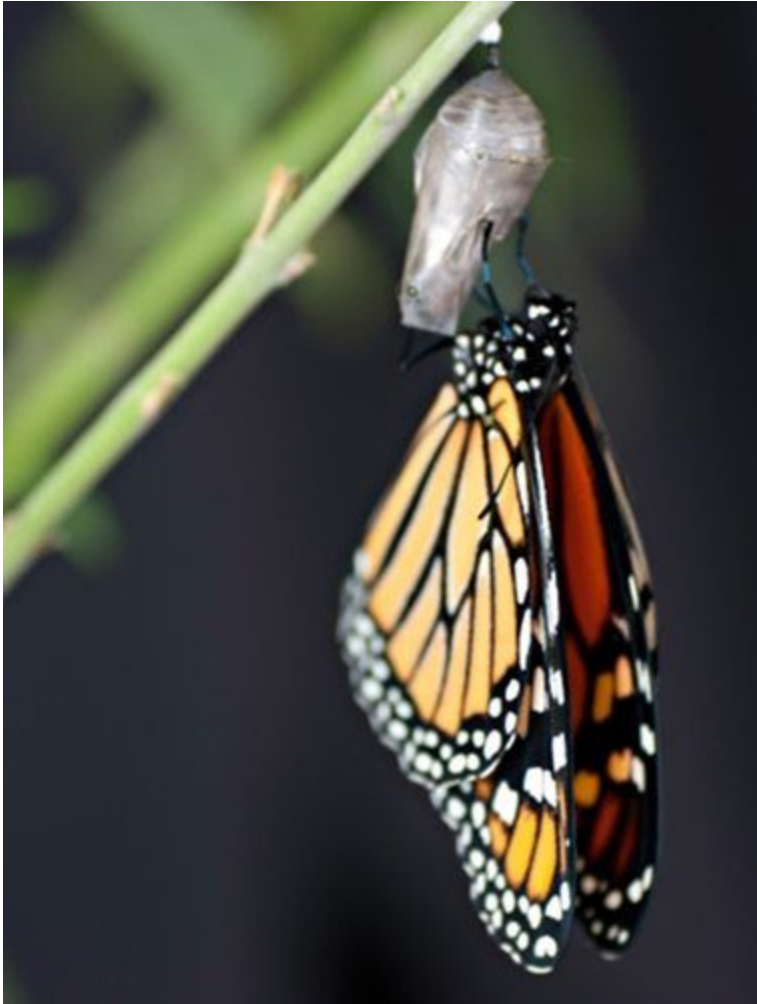
Once ready, the caterpillar leaves its egg home and enters the big outside world! And these little critters arrive as hungry as can be – they actually *eat* their way out of the egg and immediately start chomping on the leaves of the host plant. During this stage, they shed their skin four or five times – as the caterpillar grows, its skin becomes too tight and splits open, revealing a new, larger skin underneath. A fully grown caterpillar can be over 100 times larger than when it emerged from its egg. That's amazing!

Stage 3: the pupa



Once fully grown, the caterpillar forms itself into a “**pupa**” (or **chrysalis**) – a kind of container in which the caterpillar changes into a butterfly. They usually do this on twigs or safe, hidden areas around the host plant. The “pupa” stage may last a few weeks to several months depending on the species. During this time, a hardened case forms around the pupa to protect it from predators and extreme weather conditions. And inside, the tissue, limbs and organs of the caterpillar transform. The result? A wonderful winged butterfly!

Stage 4: the butterfly



Once the butterfly is ready to emerge, the case around the pupa splits open. But it's not time for take off just yet, as the wings are at first wet, soft and wrinkled against its body. The butterfly waits for its wings to dry, and pumps a liquid called hemolymph into them so that they become big and strong. Once fit for flight, the butterfly then takes to the air in search of flowers to feed on and for other butterflies to mate with. And that's the cycle complete – and ready to start all over again!

Did you know...?

Moths also go through this process of metamorphosis. Check out the four stages of the Atlas moth, below – the largest moth in the world! (Moth metamorphosis happens inside a **cocoon**, a silky case spun by the caterpillar.).



Source:

National Geographic Kids

www.biokids.umich.edu/critters/Lepidoptera/