

## BUTTERFLY LIFE CYCLE

Butterflies and moths undergo complete metamorphosis during their lives, developing from eggs into larvae, then pupae and finally adults. Butterflies lay their variously shaped eggs on or near the plants needed for larval feeding. The eggs can be smooth to wavy and a variety of colors such as pink, brown, white, yellow and green.

### Eggs



After four or five days the eggs hatch and the larva, or caterpillar, concentrates on eating and growing. From almost microscopic in size, the larvae grow and will eat over twenty times their weight over the course of a week. Covered with a non-stretchy exoskeleton, they must shed or molt this skin to grow larger.

### Larvae



There are five molt processes called instars. Just before the last one, the caterpillar will find a stem to attach itself to and spin a silk thread from which it can hang. The new skin hardens into a chrysalis.

### Chrysalis



Now the caterpillar is ready for the process of metamorphosis. This change is possible because it possesses two complete genetic

blueprints, one for a caterpillar and the other for a butterfly. During its time in the chrysalis, the caterpillar's body parts are broken down and rearranged into the body parts needed by a flying butterfly.

### Rupture of pupal case



When the new butterfly is completely formed, it breaks free of the chrysalis and pumps fluid into its crumpled wings to straighten them. It may rest and soak up the sun for a few hours until it is ready to go in search of food and a mate. As a butterfly, the caterpillar's jaws have been replaced by a sipping proboscis and it will look for drinkable meals such as nectar, water, fruit juices and urine.

### Emergence



Butterflies live by instinct. Once the metamorphosis is complete, the caterpillar instincts are gone and only the butterfly ones remain. These provide a blueprint for avoiding predators, feeding, migrating, and finding a mate to ensure that the cycle continues.

### Adult

