

# Monarch Magic

## The Chrysalis

The chrysalis is the pupa stage of the monarch butterfly. It is very still, but much is going on inside.

Many butterfly structures were forming inside the caterpillar, but they need time to finish developing. Old muscles that the caterpillar needed must be broken down and replaced with new muscles that the butterfly will need. The digestive tract that the caterpillar used to digest leaf matter must be reformed to digest the nectar that that butterfly will drink. The butterfly's spectacular eyes must be completed. Still from the time that it is a caterpillar through the entire chrysalis stage, the monarch's heart continues to pump and it continues to breathe, slowly, through its spiracles.

When the chrysalis is newly formed its exoskeleton is soft and weak. If the monarch falls in that first hour or so after it becomes a chrysalis it will splatter because the exoskeleton is not strong enough to hold

together yet. Because they have seen a tragedy like that, many people think that the monarch dissolves into a green soup inside the chrysalis, but this is not true.

If you carefully examine a chrysalis you can see many of the butterfly features that are developing inside.

In 8 to 10 days, the scales that give the butterfly its color and patterns develop and you can begin to see the familiar orange and black color of the wings inside the chrysalis. Very soon it will molt its exoskeleton for the last time and emerge as a beautiful monarch butterfly.

