

Welcome to the Wonderful World of Metamorphosis!

Witness your Painted Lady Caterpillar turn into an adult butterfly! Butterflies are insects that go through complete metamorphosis as they grow. This means the animal's body looks different during each part of its life. Like other insects, butterflies have an exoskeleton, so as your Painted Lady grows, you will notice that the hard part sheds and is replaced in a new form.

This guide will tell you how to care for your caterpillar properly and what to look for as it grows, until it is ready to be released into nature.

Caterpillar: Larval Stage

- **Keep the lid on.** This way, the food inside its container stays clean and soft enough for the caterpillar to eat.
- **Keep the container still.** Be sure the caterpillar's container stays upright, and avoid shaking the container, which could be harmful to the caterpillar.
- **Keep out of direct sunlight and extreme cold.** Room temperature is perfect for these little animals.

WHAT TO WATCH FOR!

- **Silk:** Painted Lady caterpillars weave tents from their silk for protection.
- **Frass:** Like all animals, as your caterpillar eats and digests its food, it will leave waste, or frass (insect poop) behind.
- **Playing dead:** If you accidentally bump or shake the cup, your caterpillar may think you are a predator, and curl into a ball to "play dead."
- **Hanging in a "J" shape:** When your caterpillar is ready to transform into a chrysalis, it will climb to the top of the container and hang down head first in a "J" shape. In 1-2 days, it will shed its exoskeleton as it transforms into an iridescent chrysalis.



1

Chrysalis ("kris-ah-lis") Pupal Stage

- **Build a Chrysalis Carrier.** After the chrysalis finishes forming, transfer it to a carrier or habitat. See instructions on Page 4 on how to build a Chrysalis Carrier. When the butterfly emerges as an adult, it will need plenty of room to stretch and dry its wings before release.



Keep the container still. Try not to knock the chrysalis off the lid.

Refer to page 4 if chrysalis detaches. In some cases, there may be silk webbing around the cup that will make it difficult to remove the lid with the chrysalis. Use a Q-tip to gently detach the webbing from the cup while lifting the lid. This will make for an easy transfer of your

lid with the attached chrysalis.

Over the next 7 to 10 days, it looks like there is not much happening, but beneath the chrysalis, cells are rearranging themselves into a new shape!

A Butterfly Emerges! Adult Stage

- After your butterfly has pumped its wings up and is ready for flight, it's going to be hungry and dehydrated! To provide your butterfly with energy until it is ready to be released, place a fresh orange slice in the Chrysalis Carrier. This will act as a temporary substitute for nectar. There is no substitute for the real thing, so be sure to release your butterfly within the next 1-2 days!



2

WHAT TO WATCH FOR!

- Your butterfly's wings will look damp and wrinkly when it first emerges. It will find a place to rest (the small stick in the carrier) and move its wings to pump hemolymph (similar to blood) into them, giving them shape and structure. The butterfly will need to rest for a few hours before release, so their new wings have time to shape and harden.
- Once it is close to being ready to fly, your butterfly will eat the juice of the orange slice using its proboscis, a long mouthpart that uncoils to form a "straw."
- Red splotches on the floor of the carrier are waste in liquid form (similar to urine). It is produced during the transformation process and released when the butterfly emerges from the chrysalis.



How to Release Your Butterfly

Go to a park, backyard, or KIDSPACE! Receive \$3 off admission for up to 4 people when returning with your butterfly.

Families can release their butterflies together at the 11:45am Butterfly Exploration.

- Gently open the carrier next to flowers or a garden. If hesitant to fly away, transfer the butterfly to a plant with a Q-tip or paint brush.
- Avoid touching their wings – it is easy to knock off their scales.
- Avoid releasing the butterfly in the morning, when it will be a tempting breakfast for birds.



3