



Educational Instruction Guide



Designed for Discovery



Common Milkweed

FEEDING: Caring for a caterpillar is an exciting experience. Your little friend will be growing up fast, therefore it will only need to eat for another day or two. If you want to freshen up the food, you will need to find milkweed this is the only host plant of the monarch.

Common milkweed can be found on the borders of yards and fields, as well as in ditches. When common milkweed is mature, they will have a purple flower in the shape of a globe.

Did you know? Your caterpillar will grow so big that it will periodically have to stop and change its skin. This is called molting. Every time your caterpillar molts, we say the caterpillar has entered a new instar. Your caterpillar will have five instars before becoming a butterfly. Keep in mind never to disturb your caterpillar during an instar change.

Fun Fact:

Caterpillar poop has a special name it is called "frass"

CLEANING: The container is great at protecting your caterpillar from predators and parasites, but it is up to you to protect it against pathogens. Pathogens are tiny bacteria and viruses on your hands and in your caterpillars' poop that can make it sick and die. To prevent this from happening wash your hands before touching your caterpillar, always clean enclosures between uses, and keep their enclosure clean by dumping out their poop every day.

Pupa Stage:

When your caterpillar is finished growing it will begin its amazing transformation into a butterfly. The first step of this process is to hang down into a "J" shape. During this time, the pupa is forming below the caterpillar's skin. When it is ready your caterpillars' skin will split open and the pupa will wiggle around until the skin falls off. The newly formed pupa will look weird and will be very soft for a few hours until it hardens and takes shape. Your monarch will be inside the pupa for 8-12 days before emerging as a butterfly.

Did you know? The Pupa hangs from Velcro. That's right, the cremaster which is the little black tip of the pupa is covered in tiny hooks. These hooks get stuck into a silk pad that the caterpillar lays down before J-ing up.



Ever wonder what happens inside that mysterious pupa? It all starts with DNA. DNA is like the words in a book it tells the caterpillars body how to make all the parts to build a caterpillar. This is incredible! but if the caterpillar only had the instructions to build a caterpillar, then it would always be a caterpillar. It turns out that your caterpillar has two sets of instruction, one tells its body how to make a caterpillar and the other tells its body how to make a butterfly. Inside the pupa the instructions for building a caterpillar are put away and the instruction for building a butterfly begin to be used. The butterfly instruction tells the body how to build the scales, the proboscis, the wings, and every other part needed for an adult butterfly. When this intense process is done the caterpillar's body will have been turned into a butterfly who will emerge a new creation.

CLEANING: Be sure to remove all uneaten leaves and frass from the bottom of the container otherwise it will mold - and mold can kill your pupa.

Adult Stage:



When your pupa turns dark black, you will know it is about to emerge. Your container is large enough for your butterfly to fully emerge in and inflate its wings but remember to take it out of the container as soon as its wings are dry. The container is not large enough for your butterfly to fly in.

Fun Fact: A butterfly's wings are living organs. Inside the wings are lots of little tubes that carry butterfly blood called hemolymph throughout the wings and back to the body. The wings even contain their own little beating hearts. This circulatory system in the wings allows your butterfly to carefully regulate their body temperature for flight. When you see a butterfly holding their wings open in the sun, they are absorbing heat but when you see them holding their wings together and moving them up down in one quick motion, they are dispersing their body heat and cooling themselves down. Without this amazing system your butterfly would not be able to fly on most days. It would either be too cold or too hot for them.

To release your butterfly, remember the first flight will be very short, be sure to choose a sunny spot with flowers or bushes nearby for your butterfly to land on.

Want to have more fun with butterflies and moths check out our website!



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