Life Cycle of a Butterfly

What Is a Life Cycle?

All living things go through a life cycle. A person’s life cycle begins at birth. A baby grows into a child. A child grows into a teen. A teen grows into an adult. Many adults have babies, and the cycle starts over. While all living things have life cycles, not all life cycles are the same. Insects, like the butterfly, have a special life cycle very different from that of humans. Let’s look at the life cycle of a butterfly.

Butterflies Everywhere

Chances are, no matter where you live, you have probably seen butterflies. There are over 18,000 species of butterflies. These insects live all around the world. Wherever they live, butterflies are an important part of the habitat. Butterflies eat nectar from flowers. When they stop on a flower for a snack, pollen from the flower sticks to them. They carry this pollen to the next flower, which helps flowers in their own life cycle.

The Egg Stage

A butterfly’s life cycle begins with the egg stage. A mother butterfly lays eggs on a leaf. Different species
of butterflies have different plants they like to lay their eggs on. Most butterflies lay their eggs in the warm days of spring and summer. Each egg is as small as the head of a pin! The egg is sticky so that it stays on the leaf. Most butterfly eggs **hatch** after a few days, but some can take several weeks to hatch. A caterpillar crawls out of the egg and starts eating the leaf.

**The Larva Stage**

The second stage in a butterfly’s life is called the **larva** stage. When the egg hatches, a worm-like larva called a caterpillar crawls out. Most butterflies lay their eggs on a plant that the caterpillar will like to eat, so it can start eating right away. Most caterpillars only eat plants, but some eat insects. During the larva stage, the caterpillar eats all the time and gets bigger. In fact, the larva of some species of butterfly can increase their weight 1,000 times in a matter of weeks.

**Growing Caterpillar**

Soon, the larva grows too big for its skin! The skin
breaks open, and the caterpillar crawls out of it. This will happen as many as three or four times before the caterpillar is fully grown. Many animals like to eat caterpillars. To defend themselves some caterpillars blend in with their surroundings. This physical adaptation is called camouflage. Other caterpillars look like snakes or other more dangerous animals, so predators won’t eat them.

The Pupa Stage

The third stage in a butterfly’s life is called the pupa stage. When it is ready for the pupa stage, the larva will stop eating. It will start wandering in search of a safe place to begin its next phase. The caterpillar attaches itself to the underside of a leaf or a branch. The pupa stage may last a few days or many months, depending on the kind of butterfly.

A Hard Shell

The pupa makes a hard shell

THINK LIKE A SCIENTIST
Why is it
These pictures show a caterpillar making a hard shell around itself.
Cathy Keifer/Shutterstock.com

important for the pupa to have a hard shell? This shell keeps it safe. The shell hangs from a leaf or small branch. Inside, the pupa is changing into a butterfly. It takes a lot of energy for the pupa to transform. This is why the caterpillar must eat so much during the larva stage. If you see a butterfly in the pupa stage, it looks like not much is happening. However, beneath the shell, a great change is occurring!

**The Adult Stage**

The last stage in a butterfly’s life is the adult stage. When the pupa has changed, it breaks out of the shell. It will usually cling to the shell while it dries its wings. Soon, the adult’s new wings unfold. Now it’s a butterfly!

Most adult butterflies live a very short time. They fly away, **mate**, and search for a good place to lay eggs before dying. These eggs will hatch into new butterflies. Then the cycle starts all over.

**From Egg to Butterfly**

Once inside it’s shell, the pupa’s transformation can take anywhere from two weeks to an entire season.
Cathy Keifer/Shutterstock.com
The life cycle of the butterfly is a “complete” life cycle. This means it has four stages. Each stage looks completely different, and each serves a different purpose in the life of the insect. The butterfly must lay eggs in the right place so that the larva will have something to eat. The larva, or caterpillar, must eat all it can so it will have the energy to transform into a butterfly. All of these stages do their part. In the end, we see the amazing change into a brand new butterfly.

**Find Out More**

**The Web sites and books below can help you do more research on your topic.**

**Web Sites**

The Butterfly Site: Life Cycle


Flash Classroom: Life Cycle of a Butterfly
http://www.flashclassroom.com/docs/flash/79_butterfly_emma.swf

Cookie.com: Life Cycle of a Butterfly Game

Books


GLOSSARY
adaptations (a-dap-TAY-shunz) Changes in an animal that help it stay alive.
camouflage (KA-muh-flaj) A color or a pattern that matches the surroundings and helps hide something.
cycle (SY-kuhl) A set of actions that happen over and over in the same order.
energy (EHN-ur-jee) The power to work or act.
hatch (HACH) To break out of an egg.
larva (LAHR-vuh) A bug in early life that looks like a worm.
mate (MAYT) To join together to make babies.
physical (FIH-zih-kul) Having to do with the body.
pollen (PAHL-uhn) A yellow dust made by the male parts of flowers.
pupa (PYOO-puh) The time in a bug's life when it is changing from a larva to an adult.
stage (STAYJ) One step in a cycle.

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