

Metamorphosis

Note-taking Guide - Answer Key

metamorphosis, weeks, water, exoskeleton, aphids, insects, gradually, cocoon, gobble, day, live, larva, many, hatchlings, food, leaves, seven, tadpoles, pupa, tail, molting, transformation, yellow, lungs

A baby ladybug is called a larva. Larvae hatch out of pale yellow eggs laid on the underside of leaves. These eggs are laid near colonies of aphids or plant lice.

Aphids are the ladybug's food. The larvae that hatch after four to seven days are born hungry.

The larvae gobble them up hungrily. In fact, they eat up to 50 aphids a day and grow really fast! But their outer covering, called the exoskeleton, does not grow and has to be shed. This shedding is called molting. A larva molts many times.

Two to four weeks later, the larva begins its almost magical transformation. It stops eating and creates a cocoon, called a pupa, to completely cover itself.

One week later, an adult ladybug emerges from the pupa, ready to start another life cycle. This kind of life cycle, in which the organism changes its form in each stage, is called metamorphosis.

Metamorphosis is mostly seen in insects, but animals like the frog also undergo metamorphosis. The hatchlings that emerge from the eggs or frog spawn do not resemble the adults at all.

They look like small living comets, and live under water unlike adult frogs that live on land. These hatchlings are called tadpoles, and they have gills and tails like fish.

A tadpole gradually changes and grows into an adult frog. It changes shape, loses its tail, and grows hind and front legs. It also loses its gills and develops lungs.

Soon, the transformation, which takes about 12–16 weeks, is complete. The young frog leaves the water and begins to live mainly on land.