

# The life cycle of an insect

Insects do not grow up steadily as people do. Instead, they change shape completely at different stages in their life.

People spend most of their lives as adults. Adults and children also look much the same. Children simply get bigger as they grow up.

But this is not the case with many insects. When you watch a butterfly, for example, you are watching an insect which is coming to the end of its life cycle (Picture 1). It may only have a few weeks, or even days, to live.

Most of the life of an insect is spent in quite a different form. In the case of a butterfly, most of its life may be spent as a caterpillar.

Insects vary a lot in their life cycles, so here we will simply look at a butterfly.

## The first stage

A butterfly begins as an egg. When the egg hatches a long, many-legged caterpillar scrambles out. This first stage is called a LARVA.

### Moulting

Insects cannot grow bigger steadily in the same way as we do. This is because they have a hard outer skin which does not stretch.

As a result, an insect has to grow in stages. When an insect is ready to get bigger it sheds, or **MOULTS**, its old skin.

(Picture 1) The life cycle of a butterfly.

Caterpillars may moult several times.

The new skin is soft and will stretch to the size needed. The insect pumps up its new skin before it hardens, so the hardened skin starts out being too big, and some of the space is filled with air. But as the caterpillar grows, so the space is filled. As soon as there is no more room to grow, the caterpillar moults its skin and pumps up a new one.

### From pupa to adult

When a larva is fully grown it begins the dramatic change that will turn it into an adult. Its skin hardens in a case, called a **PUPA**, and inside it develops into an adult.

After some time, the hard case splits and the adult insect struggles out. It is no longer a fat caterpillar with many legs, but a delicate butterfly with folded wings. For a few minutes the butterfly has to let its wings dry, and then it can fly away.

#### **Summary**

- The life cycle of many insects is: egg, larva, pupa and adult.
- In their larval stage, insects grow by moulting.
- Insects finally change form completely through a stage called a pupa.

