Life Cycles



Wendy Conklin

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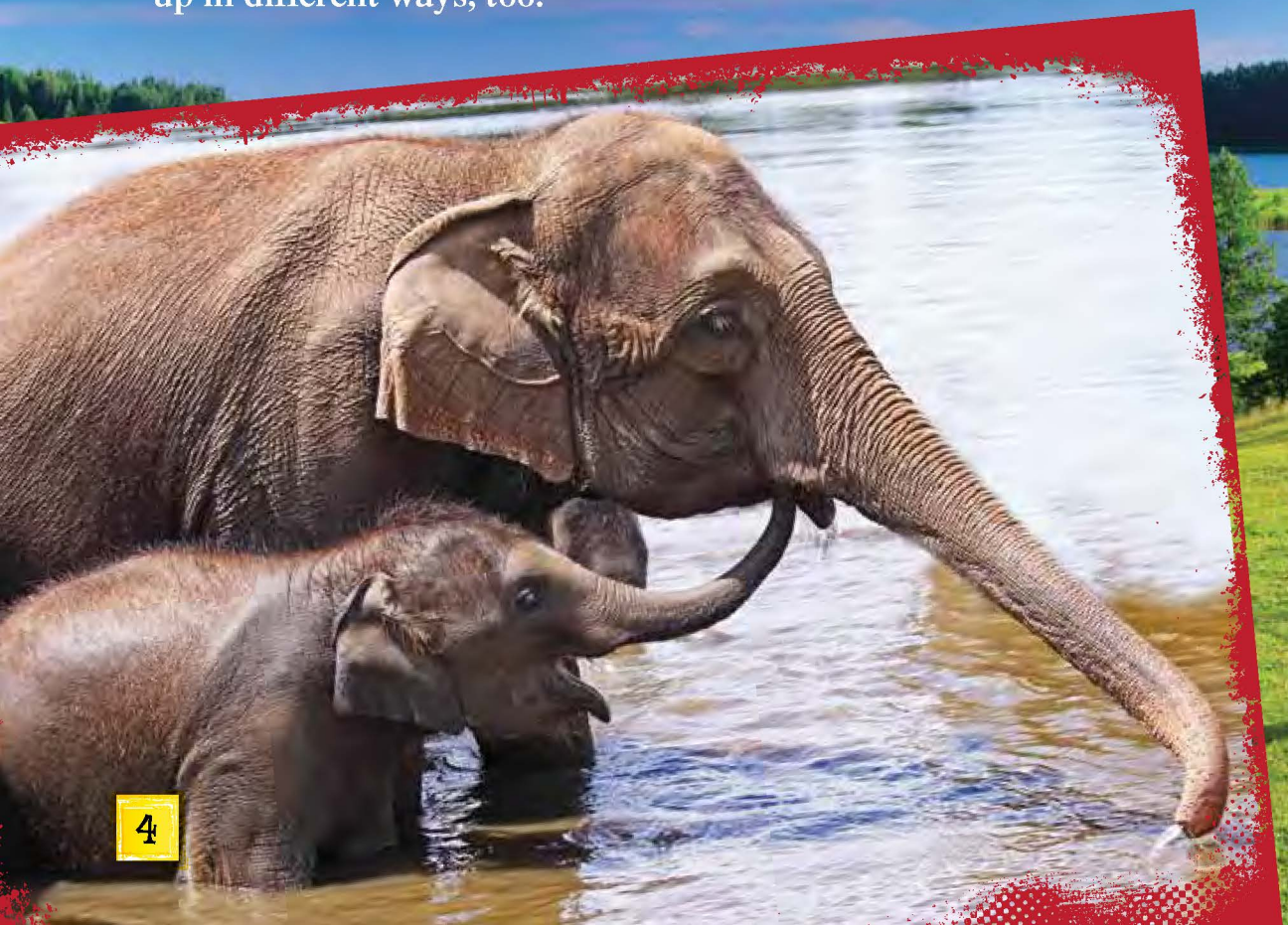
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The Circle of Life

All living things pass through a life cycle. Trees, insects, animals, and even you grow and change. At first, all cycles may seem the same. Living things are born, they grow, reproduce, and die. But take a closer look, and you'll see that each kind of life cycle is a little different. Both butterflies and dogs have life cycles. But they are not the same. A butterfly begins life as an egg that hatches. A dog is born live from its mother. They grow up in different ways, too.



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Throughout nature, the pattern repeats. Grow. Change. Thrive. Reproduce. These same events happen again and again. The end of the cycle leads back to the beginning. A new **generation** is created. This is the circle of life.

Cycles and Spans

A life cycle is a set of changes or stages. A life span is how long the animal or plant lives. The final stage for all life cycles is death.

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A Cycle for Every Life

Some creatures must travel through just one or two short stages of life before becoming an adult. Others must transform several times. For every creature, the journey leads to a new generation. And the cycle begins again.



silkworm cocoon

Mysterious Metamorphosis

What happens inside the cocoon? For hundreds of years, this was a mystery. Now, scientists know that caterpillars dissolve. Their muscles and bones break down into a kind of goo. Then, they build new bodies. The most amazing part? Scientists have proven that moths can remember things that happened when they were caterpillars—before they were goo!

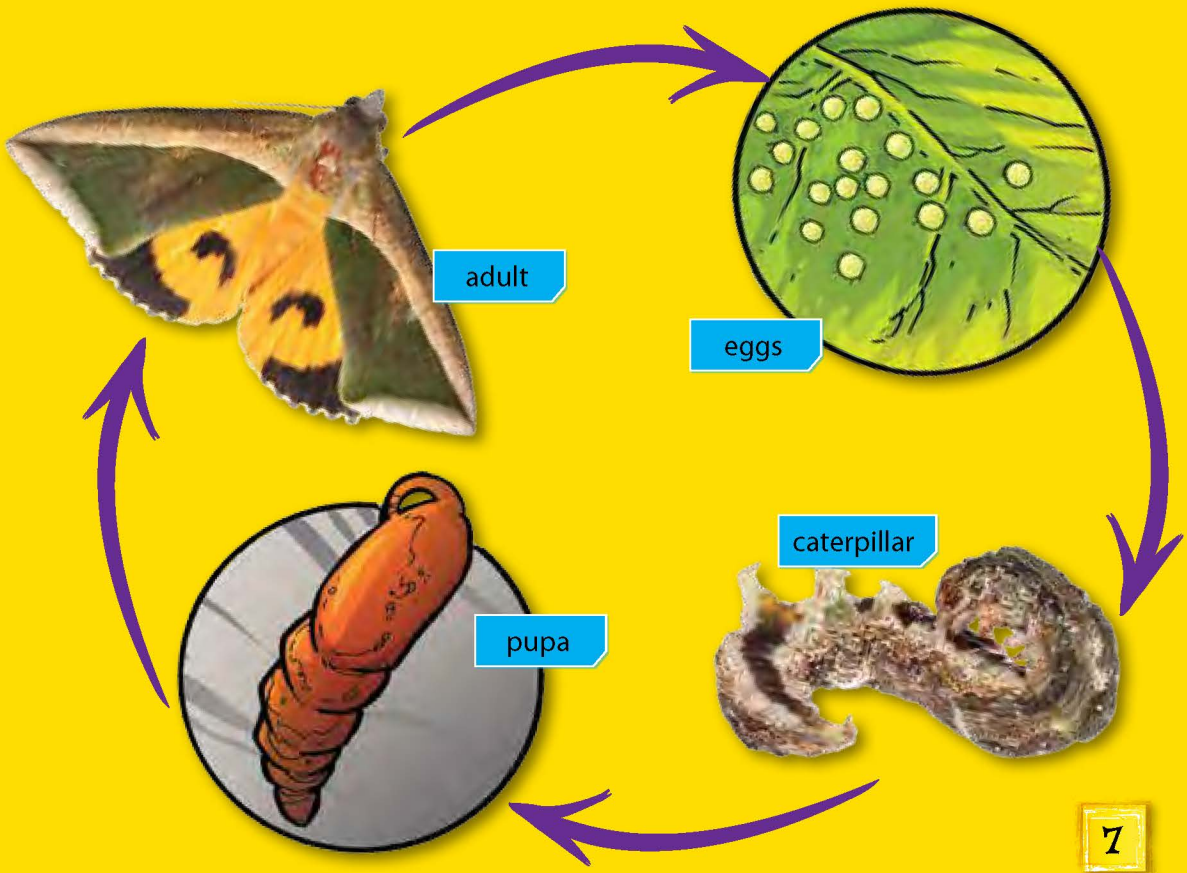
Cocoons come in all sorts of shapes, sizes, and colors. Some look like candies. Others look like twigs or leaves. Some even look like gold!

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Moth Magic

As they grow, insects change form. Some think this change is magical. But it is a natural process called **metamorphosis**.

Many insects, like moths, have four stages in their life cycle. First, adult moths lay eggs on plants. An egg hatches, and a **larva** is born. A moth larva is called a *caterpillar*. A caterpillar eats everything it can. Then, it finds a safe place to hide—perhaps under a leaf. It wraps itself in a soft shell called a *cocoon*. This is the **pupa** stage for a moth. Inside the cocoon, a moth changes. A few weeks later, an adult moth breaks out of the cocoon. Once the adult lays eggs, the cycle will repeat.

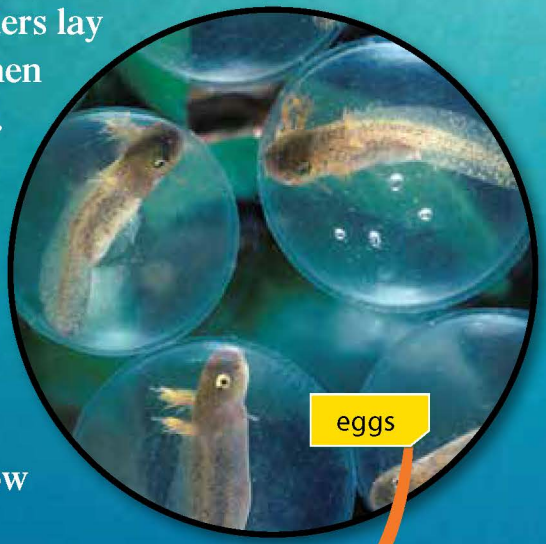


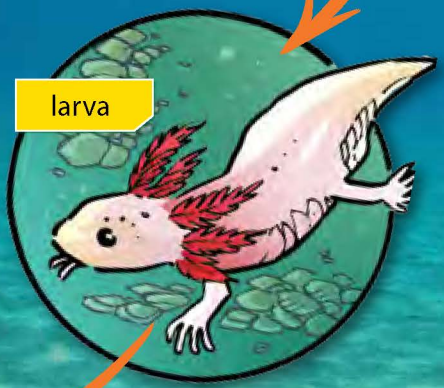
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Slippery Salamanders

Amphibians are animals that can live underwater and on land. Salamanders are a type of amphibian. Some live on land. And some live in water. Most salamanders lay eggs in water or on the wet ground. When the eggs hatch, the tadpole stage begins. These tadpoles look like tiny adults. They use their tails to help them swim. Their gills help them breathe underwater.

Salamanders that live on land go through complete metamorphosis. Their fins and gills disappear. They grow lungs and legs. But some salamanders are different. The ones known as *mud puppies* grow lungs. But they also keep their fins and gills so they can keep living in water. Their life cycles can span a few months or five years.







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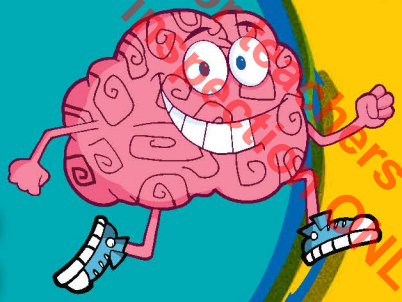
The Mexican axolotl's (ACK-suh-LAH-tuhlz) gills look like feathers floating around its head.



Another Amphibian

Caecilians (see-SIL-ee-uhns) are amphibians, too. Caecilians look like mini snakes. They have sharp teeth and a bony head that burrows in the ground. Some are small, but they can grow to five feet long!

Think Like a Scientist



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How are insect and mammal life cycles similar? Experiment and find out!

What to Get

- coloring supplies
- hole punch
- index cards
- string

