

ME AND NATURE

Where Did it Come From?

Many Animals look significantly different during their **development** than they do when they reach adulthood. In this activity we are going to look at animal life cycles. The **life cycle** of the frog is a good example. We've all heard "peepers" calling on a warm evening in the spring. Although there is actually a species of frog called a spring peeper, most male frogs try to attract mates in the spring with a mating call like the spring peeper. The female frog or toad lays her eggs in the water, and the male fertilizes the eggs while clinging to her back. Frogs lay a cluster of eggs encased in a jelly-like substance; toads lay their eggs in long strands that resemble a string of beads. Frogs often guard their eggs because other animals like to eat them. Toad eggs have a bad tasting substance built into the egg string, so they don't have to worry about the eggs being eaten.

The eggs hatch into tadpoles that have a tail and no legs. Tadpoles have gills that absorb oxygen from the water. As the **life cycle** of the frog progresses, the tail recedes, legs grow, and lungs develop that allow the frog to begin breathing air. Some frogs will continue to live in or near the water when they are adults, but other frogs and toads will leave the water to live in trees, under rocks, or even in desert sand.

Grade Level: K-5

Subject Areas: Science, Art, Writing

Objective: Learn Life stages of various animals.

Materials: Drawing supplies

Key Terms: Life cycle, metamorphoses, development, juvenile, adult, larvae



Frog eggs with a growing tadpole inside



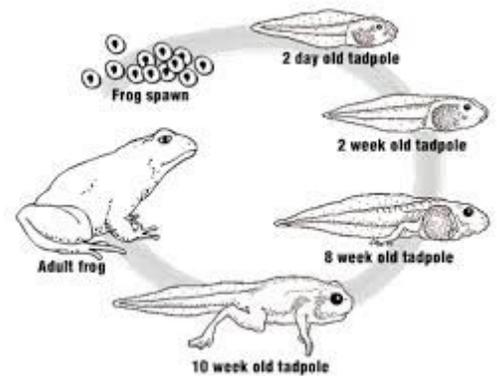
Developing Tadpole with growing legs



Adult Frog

What is a Life Cycle?

All animals have a life cycle. Sometimes it is just a **juvenile** (young) animal that grows into an **adult** animal. Some animals like the frog have a more complex life cycle. The animal goes through a **metamorphosis** (change) as it grows. When this happens, the adult animal often looks nothing like it did at the beginning of the life cycle.



Life Cycle of a frog

Investigation

Compare juvenile and adult animals

On opposite pages of a journal, or on blank sheets of paper divided in half, draw pictures that compare the juvenile and adult stages of several different animals. Do some searching on the internet for animals with interesting life cycles. Here are some suggestions:

Dragonfly

Sea turtle

Skate (a type of sea ray with an egg case sometimes called a mermaid purse)

Butterfly

Opossum

Draw a life cycle

Think of an animal that lives near you that has a complex and interesting life cycle. On a blank sheet of paper, draw the life cycle of this animal in a circle like the one of the frog on the right. Make sure you leave room in the circle to label all the stages of the life cycle.

In the Field

Go outdoors to a pond and look for frogs. If it is late winter or spring, look for clear jelly-like clumps or strings of eggs. If it is late spring or early summer, look for tadpoles swimming about near the water's edge. You might also see the **Larvae** of a dragonfly or mosquito just below the surface of the water. Make sure to take your journal or notebook to record the things you observe.