

# Amphibian life cycles

Outstanding Science Year 5 - Living things and their habitats - OS5A002

## Learning Objective



I can compare the life cycles of different amphibians.

Me:   

Teacher:   

The female **frog** lays a clump of eggs in water, which are then **fertilised** by the male. Frog eggs, collectively known as **frogspawn**, consist of an **embryo** surrounded by jelly.

After about a week, the frog **larvae** emerge from their eggs. They are known as **tadpoles**. Frog tadpoles are **aquatic** creatures.

They have **gills** rather than working lungs, and need to stay in the water to get oxygen and survive. Tadpoles lack limbs but have tails to help them swim. They tend to be **herbivores**.

Next, the tadpoles dramatically change shape to become **juvenile** (young) frogs. This change is called **metamorphosis**.

The gills disappear and the lungs develop, the legs appear and the tail is lost. Finally, the juvenile frog grows to become an adult, which can reproduce.



Adult frog

The female **salamander** usually lays her eggs in the water. Salamander eggs consist of an embryo surrounded by jelly, and are laid in clumps.



Adult salamander

National Curriculum Statutory Requirements

5A1 - describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Salamander eggs hatch into larvae, also known as tadpoles. Salamander tadpoles have a long tail, and external (outside the body) gills which allow it to breathe underwater. They gradually develop limbs.

The tadpoles undergo metamorphosis into juvenile salamanders. Their gills disappear and they develop lungs, eyelids, a tongue and teeth. These body features allow the adults to move on land, but like all amphibians, they must stay near water.

**Axolotls** start life the same way as salamanders, except that they **do not go through metamorphosis**. Instead, fully-grown axolotls look like large salamander tadpoles. They never lose their gills and remain aquatic. Adult axolotls reproduce the same way as salamanders. They have the special capacity to **regenerate** missing limbs.



Adult axolotl

## Activity

Cut out the pictures and place them in the correct place on each life cycle. Add arrows and write a description of each stage. What do these amphibians' life cycles have in common? What differences do they have?