# Life Cycles: Mammals, Amphibians, Insects and Birds



### What Do You Know About...

mammals?

amphibians?

insects?

birds?



### What Is...

#### a mammal?

A mammal is a warm-blooded creature that gives birth to live babies. A mammal has fur or hair. The largest mammal in the world is the blue whale and the smallest is the bumblebee bat.



#### an amphibian?

An amphibian is a cold-blooded creature. Amphibians can breathe in and out of water. Frogs and toads are amphibians.

Click on each picture to find out more.

### What Is...

#### an insect?

An insect is a creature whose body is split into three sections called the head, the thorax and the abdomen. Insects have an exoskeleton. There are around one million species of insects, including ants, bees and butterflies.





#### a bird?

A bird is a vertebrate. It has a beak, feathers and wings, although not all birds can fly. Owls, swans and sparrows are all species of birds.

Click on each picture to find out more.

### The Life Cycle of a Mammal

Independent adult usually seeks company from the opposite sex and mates. Adult female nurses their young.



Embryo growing inside the mother, where it is completely reliant upon the mother.



Main period of growth and developing independence from the parents.



### The Life Cycle of an Amphibian



The tail disappears and it starts to eat insects instead of plants. It takes 2-4 years to become an adult, when it can lay eggs.



The female lays a mass of eggs which are fertilized by the male.



The tadpole grows front legs and its tail shortens. It uses nutrients in its tail as food. It jumps out of the water on to land.



After 2-25 days the tadpole hatches from the egg.



The tadpole grows fins and a stronger tail. Then, it develops lungs and hind legs.



It swims and eats plants. It breathes through gills.



#### Insects

Insects come under two categories. 'Metamorphosis' means 'to change'. Click on a heading to find out more.

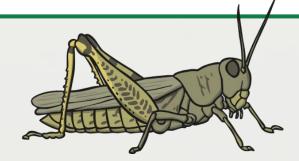
#### **Complete Metamorphosis**

The life cycle of these insects has four stages: egg, larva, pupa and adult.
Insects in this category include beetles, butterflies and flies.

#### **Incomplete Metamorphosis**

The life cycle of these insects has three stages: egg, nymph and adult.
Insects in this category include grasshoppers, crickets and cockroaches.





#### The Life Cycle of an Insect (Complete Metamorphosis)

It metamorphoses into an adult which breaks out of the pupa, matures and lays eggs.





Eggs are laid by the female insect.



Egg hatches into a larva. This varies depending on species. Common forms are caterpillars, maggots, grubs.



The pupa is usually where a hard case is formed around the larva.

#### The Life Cycle of an Insect (Incomplete Metamorphosis)

Eggs are laid by the female insect. Sometimes this is in water.



Egg hatches into a nymph.
This varies depending on species. Nymph looks like small adult. In some cases, it lives in water.



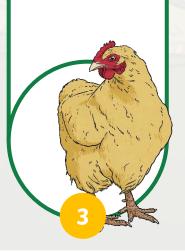
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The nymph grows into the adult form, sometimes shedding skin.
Adults sometimes fly. Adult females lay eggs.



### The Life Cycle of a Bird

Independent adult usually seeks company from the opposite sex and mates.





Eggs are laid by the mother and the mother and father care for the egg until it hatches.



Mother and father feed the young bird until it is old enough to fly and find its own food.



### Similarities and Differences

#### Task 1:

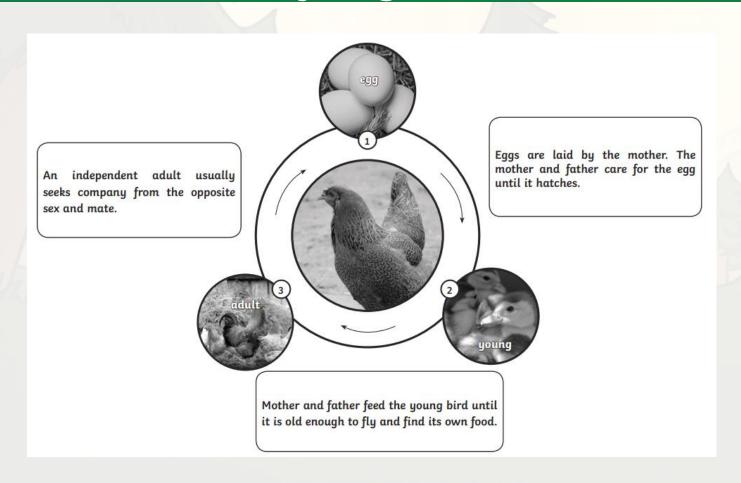
Create a table or Venn diagram and describe the similarities and differences between any 2 or 3 of the different life cycles. Make sure you use scientific language.

### Reptiles

Task 2:

Research the life cycle of reptiles. Choose a type of reptile (e.g. turtle) and draw it's life cycle, describing each step.

## An example of how to lay out your life cycle.



### The Tempest

Pick 1 character from The Tempest and draw their lifecycle. Ensure you draw a picture of them in the middle.

Think about what animals might be on Prospero's island (remember that the island is located somewhere between Italy and Spain- so no polar bears). Draw this animal's lifecycle too (do not pick another mammal).

For example, you may draw a poster split into 2. One half showing King Alonso's life cycle (mammal) and the other half showing the life cycle of a Cobra (reptile).