



Auckland College Knowledge Organiser – Animals life cycles



All living things need to make more of themselves so that their species does not die out.

Reproduction is the process by which new living things are made.

There are two types of reproduction: sexual and asexual.

Sexual reproduction requires two parents to make one offspring.

Asexual reproduction needs only one parent, which creates offspring that are exact copies of the parent.

A **mammal** is a particular type of animal. There are two things that make mammals special:

Mammals make milk to feed their babies.

They are all warm blooded. This means they can maintain a constant body temperature, independent of the temperature of their environment.

Metamorphosis

Metamorphosis is a process by which animals undergo an abrupt and obvious change in the structure of their body and their behaviour.

Some animals undergo complete metamorphosis, in which they completely transform. Other animals experience incomplete metamorphosis, where they go through several different stages, with each stage getting bigger than the last.

Amphibians and insects are examples of animals that undergo metamorphosis. Their life cycles show the stages of their transformations.

What is an egg?

The egg is a key stage in the life cycle of a bird. All species of birds lay eggs. If the eggs are fertilised, they will contain the bird embryo, which will develop inside the egg until it is ready to hatch.

The chicken eggs that people eat are not fertilised, so they do not contain baby chickens.

These creatures are all mammals





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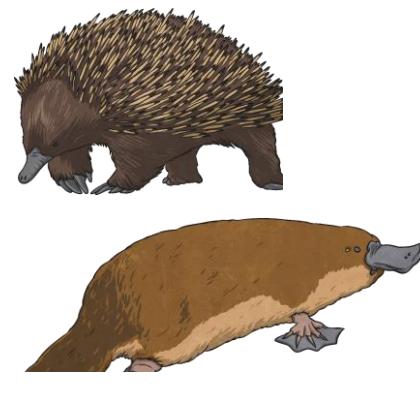
Different Mammals

There are three different groups of mammals.

Marsupials: their young are born incompletely developed. They are then carried and fed in a pouch on the female's stomach until they are fully developed.

Placentals: their young grow inside the female's body and are born fully developed.

Monotremes: their young hatch from eggs



Monotremes

There is a group of mammals called monotremes that do not grow their young inside their bodies.

Monotremes lay eggs instead of giving birth to live babies.

The only existing monotremes are the platypus and the echidna, and they live in Australia and New Guinea.

They are still classed as mammals because once their babies are hatched out they do feed them milk.

Life cycle of a mammal: Rabbit

Here are the stages of the life cycle of a rabbit, a mammal.



Adult: The adult male rabbit will mate with an adult female rabbit and reproduce.

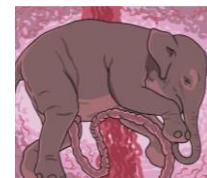
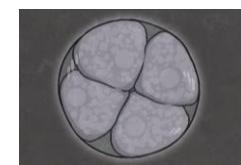
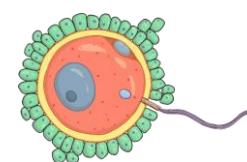
Embryo: The embryo grows inside the female rabbit.

Kitten (baby rabbit): The kitten drinks milk from the female. As it grows, it develops fur and starts to eat solid food.

Adolescent: The young rabbit grows and develops.

Sexual Reproduction

Mammals use sexual reproduction to produce their offspring.



The male gamete is called **sperm**. The sperm travels down the male's penis and enters the female's body through the vagina. A sperm cell will fuse with the **ovum**, the female gamete. When this happens, the ovum is **fertilised**.

This fertilised cell splits in half, creating two cells. These cells continue to divide, so that the number of cells doubles each time. Eventually, the cells will form a baby, and the heart starts to beat.

The baby will grow inside the female for the length of the pregnancy. This is known as the **gestation period**. At the end of the pregnancy, the baby is born.