












Year 5- Spring 2 - Life Cycles - What if life wasn't a cycle?

Key Vocabulary	
Metamorphosis 	An abrupt and obvious change in the structure of an animal's body or behaviour.
Germination 	When a seed has found the right conditions it breaks open and it sends out a root and a green shoot.
Pollination 	The transfer of pollen to a stigma to allow fertilisation.
Gestation 	The length of a pregnancy.
Gestation period 	The time period between conception until birth, during which fetal development takes place in the uterus.
Species 	A group of similar organisms that are able to reproduce
Life cycle 	The journey of changes that take place throughout the life of a living thing including birth, growing up and reproduction.
Offspring 	The young born of living organism
Seed dispersal 	The way a plant ensures its seeds are spread as far as possible from the parent plant, to give the seeds the best chance of Germination.
Mammal 	A particular type of animal.
Amphibian 	A cold-blooded vertebrate that spends some time on land but must breed and develop into an adult in water


Prior knowledge

In year 2 we:


- Identified and named a variety of common animals including fish, amphibians, reptiles, birds and mammals

In Year 4 we:


- Recognised that living things can be grouped in a variety of ways




Mammals
Hair on body
Mother produces milk for offspring




Reptiles
Scaly skin
Born on land
Cold-blooded



Amphibians
Born in the water
As they grow older, they develop lungs so they can live on land.



Birds
All have feathers
Most can fly and have wings.



Fish
Live in water
Have fins and scales
Use gills to take in gas

Movement
Respiration
Sensitivity
Growth
Reproduction
Excretion
Nutrition

Knowledge and Assessment:

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the changes as humans develop to old age.
- Describe the life process of reproduction in some plants and animals

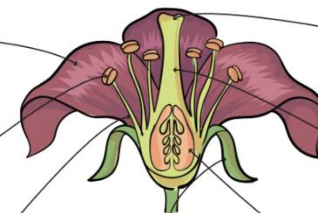
Sticky Knowledge

The Flower

The flower's main job is to create new **seeds to grow new plants**. There are lots of **different parts** of the flower.

petal

Brightly coloured to attract **insects**.



stigma

Sticky to catch the **pollen grains**.

anther

Contains the **pollen**.

style

Holds up the **stigma**. Pollen travels down it to the **ovary**.

filament

Holds the **anther** up.

sepal

Protects the **flower** when it starts to grow.

ovary

Where the **seeds** are formed.

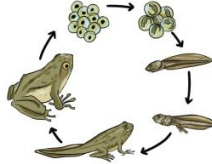
Pollination and seed dispersal

Pollination is when **pollen** from the anther is **transferred to the stigma**. This can happen **by wind** or **by a pollinator** such as **a bee** or **a butterfly**. Once the pollen is transferred to the stigma, it travels down the style to the **ovary** where the seed grows. Seeds are then dispersed and will grow in **different places**. Seeds can be dispersed by exploding plants, wind, water or animals.


Life Cycles?

All plants and animals have a **life cycle** but they are different depending on the type of **animal** or **plant**. Here are some examples:


Frog life cycle



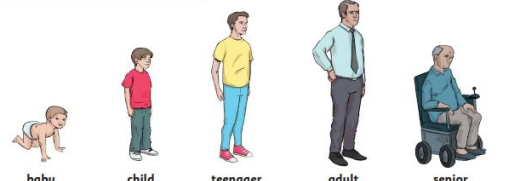
Butterfly life cycle



Dandelion life cycle

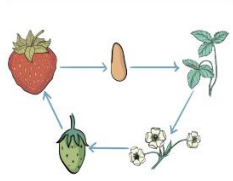


Human life cycle



baby child teenager adult senior

Strawberry life cycle



More Sticky knowledge

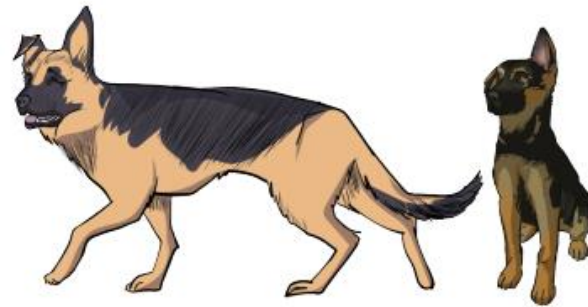
Reproduction in animals

Reproduction is the process in which living things create offspring (children or babies). Offspring will have DNA from their parents and have similar characteristics.

Mammals

A mammals **offspring grows inside** the mother's womb. The mother provides nutrients and oxygen to the foetus (unborn baby). When a mammal carries a foetus **it is pregnant**.

In order to **create a baby**, two mammal parents (a male and a female) are needed. A male **sex cell**, called **a sperm**, fertilises the female sex cell, called **an egg**.



Birds and Reptiles

Birds and reptiles **lay eggs**. The shell **protects** the baby and when it is ready they will break out of **the shell**. Baby birds will be **looked after** by their mothers, whereas adult reptiles **do not look after** their **babies**.



Amphibians and fish

Fish and most amphibians also **lay eggs** but in water. Eggs laid by amphibians are **called spawn**. Fish lay **hundreds of eggs** and when they hatch they look **after themselves**.

