

The Knowledge

Supporting the National Curriculum



Knowing More Remembering More Learning More

Living Things and Their Habitats

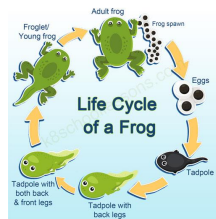
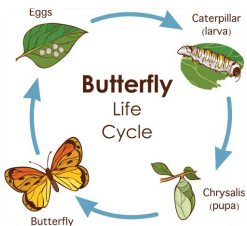
ARDLEIGH GREEN
JUNIOR SCHOOL

Year 5
Science

Metamorphosis

Amphibians are a bit different. Many are **born live** or **underwater**. They complete a **metamorphosis** as adults and can live and breathe on land.

Metamorphosis is the **change in body form** and habits during the life cycle.



Key Facts

Mammals

Mammals reproduce and give birth to **live young**. They can be either placental, monotreme or marsupial.



Birds and Reptiles

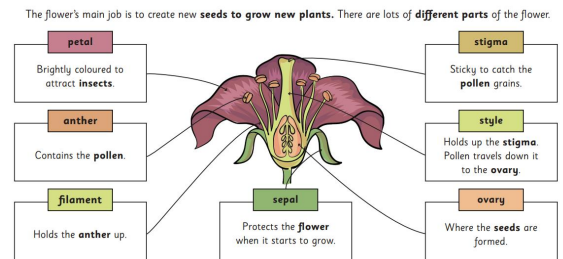
Birds and reptiles **lay eggs**. The shell protects the baby and when it is ready they will break out of the shell. Baby **birds** will be **looked after** by their mothers, whereas adult **reptiles do not look after** their babies.



Reproduction in plants

Plants contain both **male** and **female** cells. Some need to be **pollinated** in order to be fertilised. Others use **asexual** reproduction to **reproduce**.

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**.



Key People

David Attenborough and **Jane Goodall** study living things. They present the life of animals on earth and have made important documentaries so we can learn about the world around us.



Key Vocabulary

- living organism:** something that can **move**, use **energy** and **reproduce**
- Naturalist:** an expert in the studies of **natural history** (David Attenborough)
- Primatologist:** a person who carries out a scientific study of **primates** (Jane Goodall)
- metamorphosis:** when **insects** and **amphibians** transform from **larval** stage to their **adult** form
- asexual:** where only **one parent** is needed to create **offspring**
- reproduction:** to make **offspring** either **sexually** or **asexually**
- fertilisation:** when a **sperm** and **egg** cell join together
- placental mammal:** has **live young** which develop **before birth** inside a female **mammal**
- monotreme mammal:** a mammal who **lays eggs** to reproduce

Test Yourself

- What are the life process of a plant?
- What are the life cycles of mammals?
- How do the life cycles of insects and amphibians compare?
- What is metamorphosis?
- What are the life cycle of birds and reptiles?
- Why is the life and work of Jane Goodall and David Attenborough so important?