

Living things and their habitats

SCIENCE KNOWLEDGE ORGANISER

Year 5/6 Autumn Term 2

Do all living things reproduce and develop in the same way?

What I will learn (sticky knowledge)

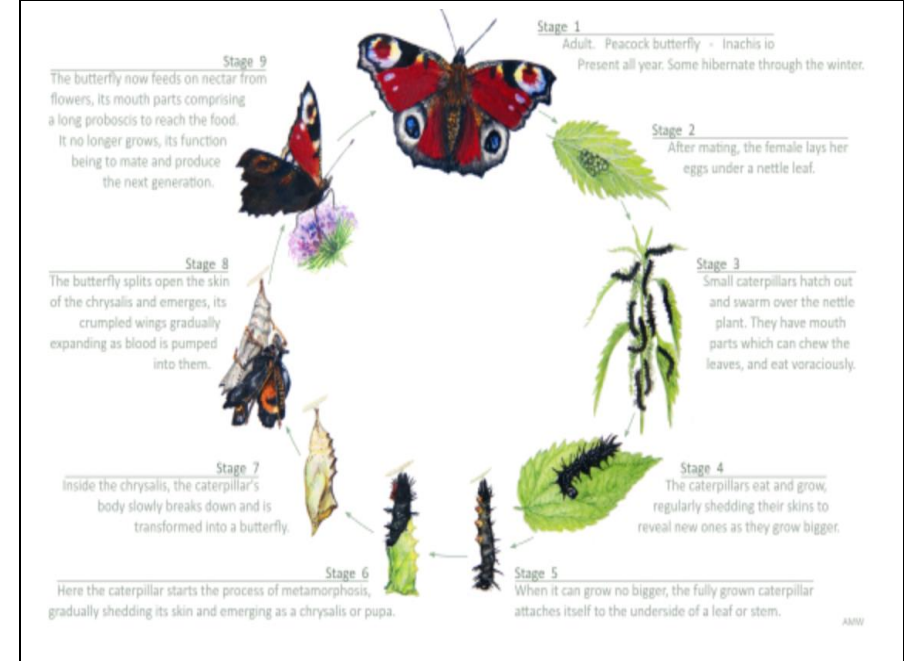
- As part of their **life cycle** plants and animals **reproduce**.
- Most animals reproduce sexually. This involves two parents where the **sperm** from the male **fertilises** the female egg.
- Animals including humans have offspring which grow into adults. In humans and some animals these offspring will be born live, such as babies or kittens, and then grow into adults.
- In other animals, such as chickens or snakes, there may be eggs laid that hatch to young which then grow to adults.
- Some young undergo a further change before becoming adults e.g. caterpillars to butterflies. This is called a metamorphosis.
- Plants reproduce both **sexually** and asexually. Bulbs, tubers, runners and plantlets are examples of asexual plant reproduction which involves only one parent.
- Gardeners may force plants to **reproduce** asexually by taking cuttings.
- Sexual** reproduction occurs through pollination, usually involving wind or insects.

Key Vocabulary

life cycle	cuttings
reproduce	bulbs
sexual	runners
sperm	asexual
fertilises	offspring
egg	plantlets
live young	metamorphosis



Life cycle of a butterfly



What I should already know

- You will have understood that animals, including humans, have offspring which grow into adults.
- The part that flowers play in the **life cycle** of flowering plants, including pollination, seed formation and seed dispersal.

What I will learn next

- In year 7 you will learn about the **reproduction** in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta.
- You will learn about the **reproduction** in plants, including flower structure, wind and insect pollination, **fertilisation**, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.