



Do all animals and plants start life as an egg?



1. Do all plants reproduce in the same way?
2. How can we make new plants?
3. What is a life cycle?
4. Who are Jane Goodall and David Attenborough?
5. What is metamorphosis?
6. How can you create a presentation to show the life cycles of two very different animals?

Hook for Learning:

- Dissect flowering plants identifying structures and key features.

As Talkers can we...?

- Describe situations in such clear detail and language that others can identify it easily and confidently?
- Talk in extended turns to express straightforward ideas?

Vocabulary:

- reproduction
- cell
- fertilisation
- pollination
- male
- female
- pregnancy
- gestation
- Jane Goodall
- David Attenborough
- mammal
- metamorphosis
- amphibian
- insect
- egg
- embryo
- bird
- classification
- precision

We learn the following scientific knowledge and skills:

- Grow new plants from parts of a parent plant e.g. seed stems, root cutting, tubers and bulbs) **(2)**
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird? **(3,5,6,)**
- Describe the life processes and reproduction of common plants and animals? **(1,2,3,5,6,)**
- Explore the work of well know naturalists and animal behaviourists? (David Attenborough and Jane Goodall) **(4)**
- Describe the process of sexual and asexual reproduction in plants and animals? **(1,2,3,5,6,)**
- Observe and compare the life cycles of two different animals (e.g those in the local environment to a prehistoric animal) **(6)**
- Know that many insects have four stages in their life cycle and what those stages are **(5)**
- Observe and compare the life cycles of two different plants (e.g. plants in our school grounds to plants in the rainforest, desert or ocean) **(6)**

Using Technology can we...?

- Create a PowerPoint to show the life cycle of two different animals?

RE Links:

- Faith, Theory and Evidence – GATTB
- In science, some 'everyday' words like 'theory', 'proof' and 'evidence' are used to mean very specific things. What makes science questions different from non-science questions?
- What questions might we ask which need more than science to help us decide what is true?

As Mathematicians can we...?

- Create a timeline of Jane Goodall's life

As Thinkers can we...?

- Organise things well, including resources and others?
- Link ideas from different topic areas to solve problems and present findings?
- Persevere even when the solution is not readily available?

As Writers can we...?

- Write a scientific explanation about the life cycle of a spider or fly.

Previous knowledge from Year 1

Plants

- I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- I can identify and describe the basic structure of a variety of common flowering plants, including trees.

Animals including humans

- I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.

Previous knowledge from Year 2

Living things and their habitats

- I can identify and name a variety of plants and animals in their habitats, including microhabitats
- I can describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Plants

- I can observe and describe how seeds and bulbs grow into mature plants
- I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Animals including humans

- I can notice that animals, including humans, have offspring which grow into adults.

Expected outcomes from this unit

Exceeding:

- I can compare the life cycle of plants and animals locally and in prehistoric times.
- I can suggest reasons for similarities and differences in life cycles of plants and animals.
- **Secure:**
- I can explain the difference between sexual and asexual (cloning) reproduction.
- I can explain how a plant reproduces (pollination/fertilization)
- I can explain the function of bulbs, runners and tubers in asexual reproduction.
- I can explain basic animal reproduction.
- I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- I can compare life cycles of plants and animals in my local environment to around the world (rainforests, oceans, desert areas).
- I can find out about the work of Jane Goodall or David Attenborough.
- I can observe growing new plants from different parts of a parent plant e.g. seeds, stem and root cuttings, tubers, bulbs.

Previous knowledge from Year 3

Plants

- I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- I can explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- I can investigate the way in which water is transported within plants
- I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.