How does a seed change as it germinates?

Pre-unit: Plants and Living Things	What are the Parts of a Flowering Plant? To understand the parts of a flowering plant and know what their jobs are. To dissect a flowering plant, observing the individual parts closely.	How do Plants Reproduce? To understand that plant reproduction can be sexual or asexual. To use my knowledge to group and classify plants based on how they reproduce.	What is the Life Cycle of Flowering Plants? To understand the stages of the life cycle of a flowering plant. To accurately draw scientific diagrams, adding labels with appropriate scientific vocabulary.	**TAPS** How do Different Seeds in the Local Area Disperse? To describe how seeds in the school ground disperse. To observe features of seeds to predict their method of dispersal.	What is the Life Cycle of Mammals? To understand and describe the life cycle of a mammal. To accurately record data on a line graph, using this to spot patterns.	What is the Life Cycle of Birds? To understand and describe the life cycle of a bird. To use drama/role play to model and demonstrate my understanding.	What is the Life Cycle of Amphibians? To understand and describe the life cycle of an amphibian. To accurately draw scientific diagrams, adding labels with appropriate scientific vocabulary.	What is the Life Cycle of Insects? To understand and describe the life cycle of an insect. To use drama/role play to model and demonstrate my understanding.	Who is Sir David Attenborough? To understand the life and key achievements of Sir David Attenborough. To accurately use secondary resources to find an answer and report these appropriately, using accurate scientific vocabulary.	Post-unit: Plants and Living Things

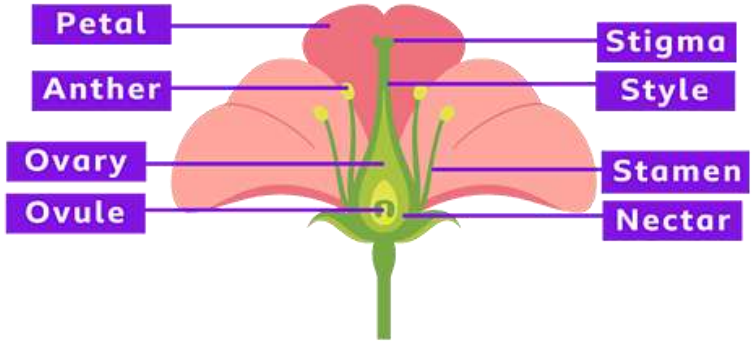
Year 5
Biology:
Living Things and Their Habitats

Key Knowledge: Plants

What are the parts of a flowering plant?
How do plants reproduce?
How do different seeds disperse?

A **plant** is a living thing, that can create its own food, that grows and reproduces.

Flowering plants produce flowers to reproduce and make seeds so new plants can grow. The flowers have multiple parts that allow them to reproduce.



Petal – attracts pollinators to the flower.
Anther – male part that contains pollen.
Stamen – male part that holds the anther up.
Stigma – female part that takes in pollen.
Style – female part that hold the stigma up.
Ovary – female part where new seeds are created.





Flowering plants reproduce **sexually**. This is when two parent cells join together, creating seeds. Pollen is always transferred.



Some plants reproduce **asexually**. This means that they can create an exact copy of themselves through bulbs, runners, tubers or spores.















Seeds can be **dispersed** (spread) in different ways:

- Wind
- Water
- Fur/feathers
- Fruit (and poop!)

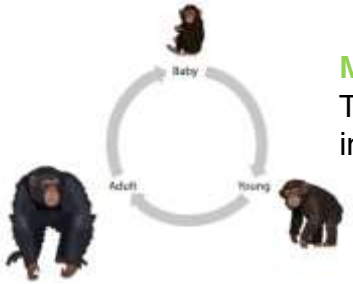
Key Knowledge: Mammals, birds, amphibians, insects

What is the life cycle of a[n]…?

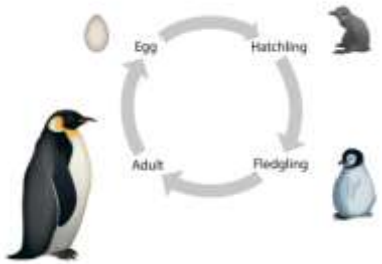
Mammals 	• Breathes using lungs • Gives birth to live young • Feeds young milk • Has body hair or fur • Warm-blooded *Humans, giraffes, dolphins, dogs…*
Amphibians 	• Born with gills then develops lungs • Lay soft eggs in water • Damp skin • Cold-blooded *Frogs, newts, axolotls, salamanders…*
Birds 	• Breathes using lungs • Lay eggs with hard shells • Have feathers • Warm-blooded *Pigeons, owls, penguins, flamingos…*
Insects 	• Three sections of the body • Six legs *Butterflies, bees, ladybirds, flies…*

Year 5
Biology:
Living Things and Their Habitats

Key Knowledge: Life Cycles
What is the life cycle of a[n]…?



Mammals have a three-part life cycle. They are born as babies, after developing in their mother's womb.



Birds have a four-part life cycle. They are born as an egg, before hatching and then fledging.



Amphibians have a five-part life cycle. They are born as eggs, then become larva. Amphibians go through **metamorphosis**, which is where they change from breathing with gills, to breathing with lungs.



Insects also go through **metamorphosis**, or incomplete metamorphosis (three stages).

Key Knowledge: Sir David Attenborough
Who is Sir David Attenborough?

Sir David Attenborough is a famous British broadcaster and natural historian – a **naturalist**.



He has spent many years making television programmes about animals, plants and the natural world.

His documentaries have taught millions of people about wildlife and the environment.

Through his programs, he tries to encourage us to protect our planet and care for nature.

More than 50 species found in recent years are named after him, recognising his work and achievements.



