

Year 5 Science

Biology : Lifecycles and Reproduction

What we already know:

Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.



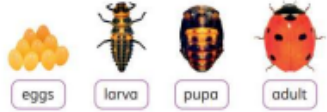

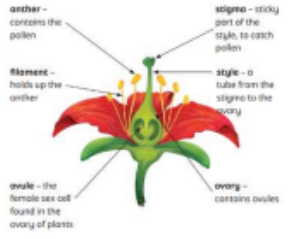




Identify that humans and some other animals have skeletons and muscles for support, protection and movement

What's next?

To know what the different types of plants are in the rainforest (Year 6)

Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. (Year 6)

Give reasons for classifying plants and animals based on specific characteristics (Year 6)

Lifecycle of Amphibians	Lifecycle of insects and birds	Reproductive parts of plants	Pollination	Vocab
<p>Amphibians are small vertebrates that need water or a moist environment to survive.</p> <p>The life cycle of a frog has four main stages: frogspawn, tadpole, froglet and adult frog.</p>  <p>Tadpoles have gills to help them to breathe under water, a tail to help them to swim and a mouth to feed.</p> <p>Tadpoles take around 14 weeks to transform into frogs.</p> 	<p>There are four main stages of the life cycle of an insect: egg, larva, pupa and adult.</p> <p>Larvae are the young form of insects.</p> <p>Pupae are insects in the stage of development between larvae and adults.</p>  <p>Birds are vertebrates with wings, feathers and a beak.</p> <p>The life cycle of birds includes five stages: egg, hatchling, nestling, fledgling and adult bird.</p> 	<p>The female part of a flowering plant is called the pistil, which consists of the stigma, style and ovary.</p> <p>The male part of a flowering plant is called the stamen, which consists of the anther and filament.</p> <p>The female sex cells in a plant are called ovules and are found in the ovary.</p> <p>The male sex cells in a plant are called pollen grains and are found on the anthers.</p> 	<p>Plants reproduce sexually through pollination.</p> <p>Pollination involves the transfer of pollen from the male anther of a flowering plant to the female stigma of a flowering plant.</p> <p>Pollen grains attach to the sticky stigma and travel down the style into the ovary.</p> <p>Fertilisation occurs when a male pollen grain joins with a female ovule inside an ovary.</p> 	<p>Tier One</p> <p>Insect Bird Frog Plant flower</p> <p>Tier Two</p> <p>Amphibian: a cold-blooded vertebrate that lives on land and in water and usually lays eggs</p> <p>metamorphosis: the process by which the young form of an insect or amphibian changes into a distinct adult form.</p> <p>Pollination: the transfer of pollen from the anther of a flowering plant to the stigma of a flowering plant</p> <p>Fertilisation: the joining of a male and a female sex cell to create a new life</p> <p>asexual reproduction: the production of identical offspring from only one parent</p> <p>clone: a plant or animal that was produced asexually and is identical to its parent</p>
<p>Asexual reproduction</p> <p>Asexual reproduction involves only one parent.</p> <p>Offspring produced by asexual reproduction are identical to the parent.</p> <p>Some plants reproduce asexually by producing new plants at the end of runners or by producing bulbs or tubers.</p> <p>A starfish is an example of an animal that reproduces asexually.</p> 			<p>Cloning Plants</p> <p>independent variable (what will change) - the plant part used for the cutting</p>  <p>dependent variable (what will be measured) - the height of the plants once they have grown</p> 	<p>Tier Three</p> <p>Tuber Ovule Stamen Pistil</p>