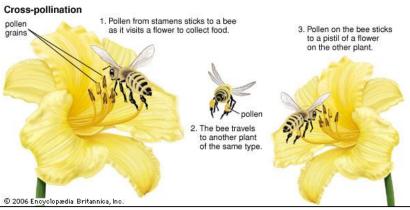
Upper Key Stage 2: Animals, including humans

| life cycle | The changes a living thing goes through, including reproduction. | ٦ |
|---------------|---|---|
| reproduce | The production of offspring by a sexual or asexual process. | ٦ |
| sexual | Offspring get genes from both mum and dad, inheriting a mix of features from both. | |
| asexual | Offspring get genes from one parent so are clones of their parents. | |
| fertilise | The process of male and female cells fusing together. | ٦ |
| egg | The roundish reproductive body produced by the female of certain animals, such as birds and most reptiles, consisting of an ovum and albumen, jelly, membranes, egg case, or shell, according to species. | |
| Live young | The opposite of hatched from an egg. The baby develops inside the mother and is then born. | |
| metamorphosis | An insect or amphibians process of transformation from an immature form to an adult form in two or more distinct stages. Such as caterpillar to butterfly. | |
| offspring | A person's child or children/ an animal's young | |
| runners | A long thin stem that usually grows horizontally along the ground and produces roots and shoots at widely spaced nodes, as in a strawberry plant. | |
| bulbs | A bulb is structurally a short stem with fleshy leaves or leaf bases that function as food storage organs during dormancy. | |
| cuttings | A plant section originating from the stem, leaf, or root and capable of developing into a new plant. | |
| pollination | The transfer of pollen to a stigma, ovule, flower, or plant to allow fertilization. | |
| plantlets | Plantlets are young or small plants. Many plants such as spider plants naturally create runners with plantlets on the ends as a form of asexual reproduction. | |

What is cross pollination?



Maria Merian

Before German-born naturalist and scientific illustrator Maria Merian began to study the life cycle of butterflies, most people believed that they were "born of mud," spontaneously generated out of the earth. She was one of the first naturalists to observe insects directly, giving her remarkable insights into the way they really lived. Although she emerged as one of the leading entomologists of her day, since she wrote in German and not in Latin, the official language of science at the time, her remarkable discoveries about the metamorphosis of insects were ignored by

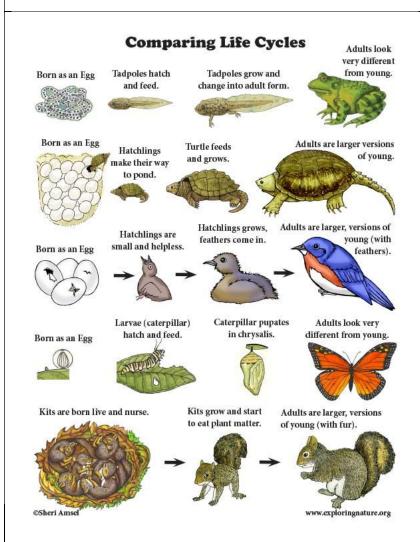
many scientists. She also raised eyebrows by funding her own, unofficial expedition to Suriname where she described many new insects and plants; a highly unusual venture for a woman of the period to undertake. Even so, her impact on science is undeniable: many of her classifications are still valid today and her exquisite paintings of plants, animals, and

insects have been widely admired throughout the centuries.

Upper Key Stage 2: Animals, including humans

Do different animal types have different life cycles?

What are the two types of reproduction?



All living things need to make more of themselves so that their species does not die out.

Reproduction is the process by which new living things are made.

There are two types of reproduction: sexual and asexual.



Asexual reproduction needs only one parent, which creates offspring that are exact copies of the parent.





Asexually reproduced













