

# What is pollination?

When a bumblebee visits a flower, like a lavender plant, it drinks the nectar (a sugary liquid) and collects grains of pollen to use as food for its larvae or young. The bumblebee is also doing an important job for the flower because it leaves behind some of the pollen it has gathered. This is a type of pollination, and is a vital part of the process of creating many new plants and flowers.

**1** A bumblebee recognises familiar flowers by their colour, scent and markings on the petals.



**3** A flower's pollen is found on the anthers, at the tip of the stamens. As the bumblebee gathers pollen, it uses saliva to pack the grains into 'pollen baskets' – smooth indentations on its back legs surrounded by hairs – for carrying back to the nest.

**4** Foraging for food is messy work. While the bumblebee is drinking nectar or gathering pollen, lots of grains of pollen get caught on its hairy body.

**GREAT POLLINATORS**  
Some bumblebees can carry more than half their bodyweight in pollen! They are also creatures of habit: once they've learned how to get at the nectar in a particular flower, they often return to the same kind of flower again.

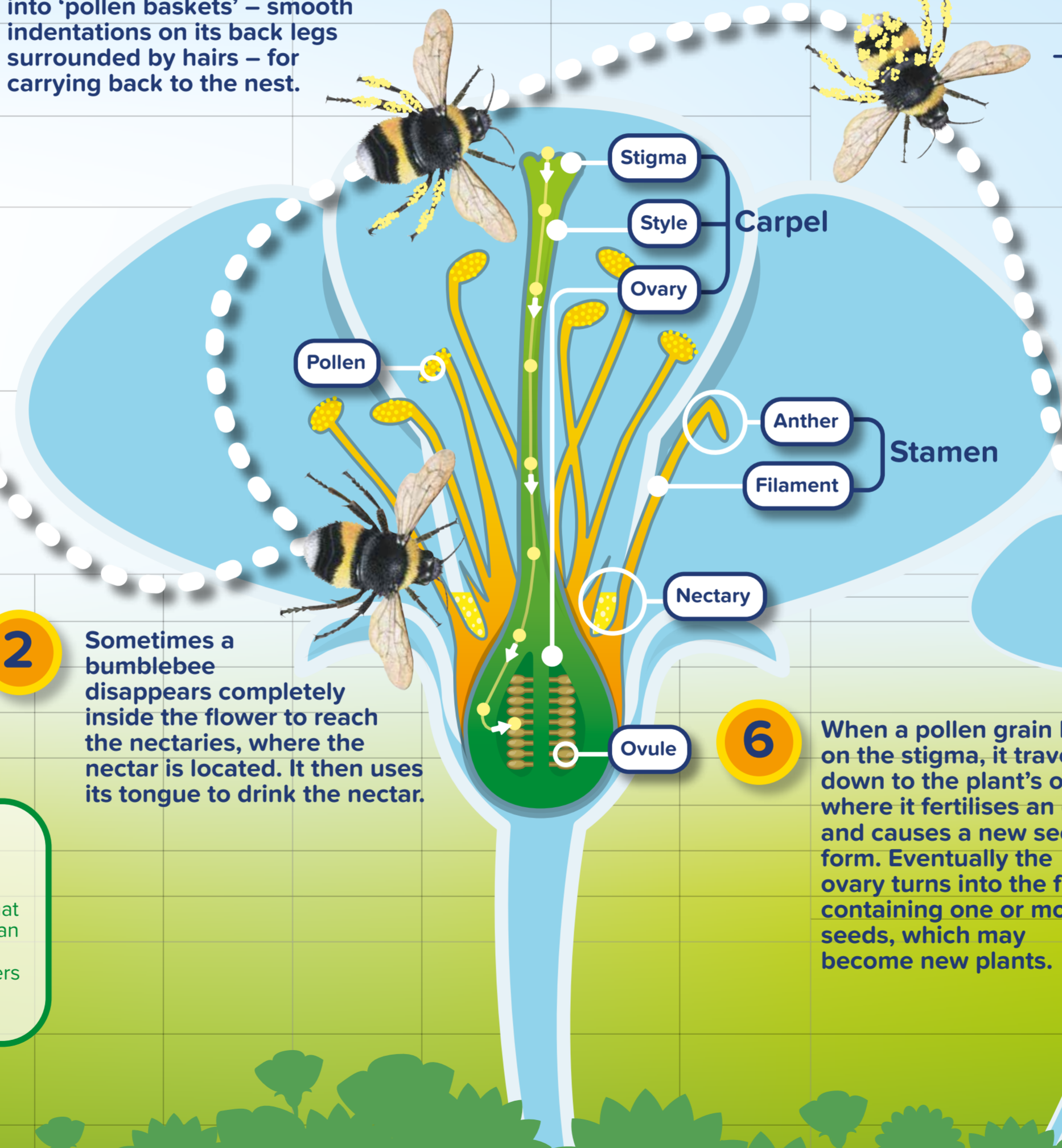
**Buzz pollination**  
Bumblebees are very effective pollinators: by grabbing the flower and 'buzzing' their wings very quickly, they can vibrate the whole flower and shake the pollen off the anthers. It's useful for pollinating crops such as tomatoes and blueberries.

**2** Sometimes a bumblebee disappears completely inside the flower to reach the nectaries, where the nectar is located. It then uses its tongue to drink the nectar.

**6** When a pollen grain lands on the stigma, it travels down to the plant's ovary, where it fertilises an egg and causes a new seed to form. Eventually the ovary turns into the fruit, containing one or more seeds, which may become new plants.

**5** When the bumblebee visits another flower, pollen grains brush off the bee on to a sticky part of the flower, called the stigma. This is at the tip of the carpel, the female part of the flower. Sometimes pollen from a flower gets onto the stigma in the same flower and it fertilises itself. This is known as self-pollination.

**Did you know?...**  
Some pollen grains are so small you could fit up to 100 across the width of a 1mm pinhead. However, some pollen grains are much larger.



**OTHER TYPES OF POLLINATION**  
Pollination doesn't only happen with insects like bumblebees. Some plants, such as oak trees, simply disperse their pollen on the wind so that it reaches other flowers. Some of it can get up our noses – if you have an allergy to pollen, this causes hayfever! Other flowers are pollinated by animals such as birds, bats, monkeys, lizards, even gerbils. These flowers are very different from insect-pollinated flowers: bat-pollinated flowers, for example, give off scent at night, when bats are active.



Source: www.bumblebee.org/foraging.htm; www.saps.plantnet.com/ku/pollen/index2.htm  
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