



Bees Other pollinators

Bees aren't the only type of pollinating insect, but they are definitely the most effective. Other insects generally only visit enough flowers to feed themselves, so they only pollinate a few flowers. Bees have to visit many flowers to collect enough pollen to stock their nests, so they pollinate lots of flowers.

And it's not just insects which can pollinate flowers - some birds, mammals and reptiles can be pollinators too! There are 15 pollinating animals hidden in the grid below. How quickly can you find them all?

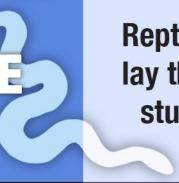
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G	E	B	E	E	T	L	E	M	U	R	I	J	P
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T	J	Z	O	A	X	Y	I	B	A	X	X	L	Z
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Y	B	D	R	A	F	O	N	R	L	Y	S	M	Z
Z	H	F	H	U	M	M	I	N	G	B	I	R	D
T	L	B	V	N	C	Q	Y	X	E	O	Q	H	Y
Y	V	E	T	I	F	E	L	Q	E	B	V	S	N
Y	C	A	I	C	Y	L	F	R	E	V	O	H	F



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Do you know which type of animal each pollinator is – amphibian, bird, fish, insect, mammal or reptile? Look at the table then test yourself by labelling each pollinator with its correct animal category.

AMPHIBIAN	 Amphibians are cold-blooded vertebrate animals. When they are born they live in water and have gills for breathing. As they grow into adults, amphibians develop lungs for breathing in air so they can live on land as well.
BIRD	 Birds are warm-blooded vertebrate animals that lay eggs. They have a beak, feathers, wings and can usually fly. Most birds have webbing between three of their toes. Water birds have fully webbed feet.
FISH	 Fish are cold-blooded vertebrate animals with no legs or arms that live in water. Fish have gills for breathing and fins to help them swim.
INSECT	 Insects are small, cold-blooded invertebrate animals with six legs and one or two pairs of wings for flying. Most insects have a body with three segments. Insects are part of a group of animals known as arthropods.
MAMMAL	 Mammals are warm-blooded vertebrate animals with furry or hairy skin. Most mammals have four legs or two arms and two legs. Females mammals produce milk to feed their young.
REPTILE	 Reptiles are cold-blooded vertebrate animals with dry scaly skin. They lay their soft-shelled eggs on land. Most reptiles have four short, stumpy legs but some, like snakes, have no legs at all.

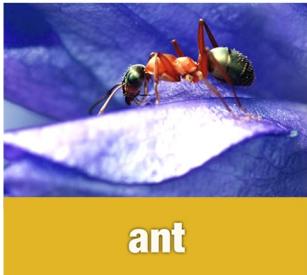
USEFUL WORDS

- Vertebrate** An animal that has a skeleton with a backbone. Mammals, birds, reptiles, amphibians and fish are all vertebrates.
- Invertebrate** An animal that does not have a backbone. About 95% of the animal kingdom are invertebrates, including insects, spiders, crustaceans and molluscs like octopuses, mussels, slugs and snails.
- Arthropod** A large group of invertebrate animals with a hard covering on the outside of their bodies. Insects, spiders, centipedes and crustaceans like crabs and prawns are all arthropods.



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Write the correct animal category under each of these pollinator pictures. Use the page 2 table or a dictionary to help you.



OPTIONS

- | | |
|-----------|---------|
| amphibian | bird |
| fish | insect |
| mammal | reptile |



Bees Other pollinators ANSWERS



Wasps are flying insects, usually with black and yellow striped bodies. There are around 75,000 wasp species in the world, many with stings. Some wasps help to pollinate plants and plants like the tropical fig tree rely on wasps for pollination.

wasp = insect

Sunbirds are small, colourful, tropical songbirds. They have long bills to drink nectar from long-tubed flowers like aloes in their native habitats. Many flowers they visit are adapted just for them, and can't be pollinated by other animals.

sunbird = bird

Moths are flying insects with four large, dull-coloured wings. They are nocturnal, feeding on nectar at night. Moths are important pollinators of night-blooming plants such as evening primrose, honey-suckle, jasmine and night-scented stock.

moth = insect

Lizards are reptiles with scaly bodies, tails and four short legs. There are 4,750+ lizard species in the world, including iguanas and geckos. In deserts where there's little water some lizards drink nectar from cactus flowers and help transfer pollen.

lizard = reptile

Lemurs are mammals with long tails and pointed snouts. The Black and White Ruffed Lemur of Madagascar is the main pollinator of the island's many travellier's palms. They open the flowers with their hands, stick their snouts inside to lick the nectar.

lemur = mammal

Hummingbirds are tiny tropical birds that beat their wings very fast to hover in the air. When they use their long bills to take nectar from flowers they pick up pollen too. As hummingbirds visit up to 3,000 flowers a day they pollinate a lot of plants!

hummingbird = bird

Hoverflies are small flying stinkflies insects that hover in the air. Most have stripes to look like stinging wasps and scare away predators. As each of the 6,000 species has a slightly different habitat, they're important pollinators of many wild plants.

hoverfly = insect

Flying squirrels are small mammals with winglike membranes between their legs for leaping and gliding up to 450 metres through the air! They pollinate some tree species in their native habitats in North America, north Eurasia, India and Southeast Asia.

flying squirrel = mammal

Flies feed on decaying matter but also like nectar, especially from long-tubed flowers like cowslips. Flies are insects with big eyes and two see-through wings. There are at least 160,000 fly species in the world, including bluebottles and mosquitos. Flies carry pollen between their legs for leaping and gliding up to 450 metres through the air!

fly = insect

Butterflies are flying insects with four large colourful wings. Unlike moths, they're active in daytime. Butterflies are one of the main pollinators of vegetables and herbs. They like plants with large clusters of flowers that they can easily perch on.

butterfly = insect

Beetles are insects with hard wings that protect their bodies. There are 350,000+ beetle species in the world; they're the largest set of pollinators simply because of their numbers! They're good at carrying sticky pollen because it clings to their wings.

beetle = insect

Bees are hairy flying insects which collect nectar and pollen from flowers. 80% of the world's plants are pollinated by its 20,000 bee species. Bumblebees have a very long proboscis which can get nectar from long-tubed flowers that other bees can't reach.

bee = insect

Bats are small, flying mammals with large, skin-covered wings. They are nocturnal, which means they are active at night. Bats help to pollinate more than 500 types of plants including agaves, bananas and mangos!

bat = mammal

Ants are small, stinging insects with no wings. They live in big social groups called colonies, usually in the ground. Ants love anything sweet and enjoy drinking nectar from flowers. Only a few plants, like some orchids, are pollinated by ants.

ant = insect