

KS1: Minibeasts

Do minibeasts have superpowers?

MADDIE: Hello! Who likes superheroes?

CHILDREN: We do!

MADDIE: Did you know that some minibeasts have superpowers?

CHILD: No way! Like what?

MADDIE: Lots of minibeasts can fly, or breathe underwater, or run really fast... But some minibeasts have special powers that help them to do a job, or defend themselves, or help them get food. Can you think of any examples of minibeasts that do a job that helps us?

CHILD: Bees make honey that we eat.

MADDIE: That's right! Bees can collect flower nectar from plants and store the sugars inside the honeycomb of their hives. Here, they turn it into honey, and when it's ready, bee-keepers can harvest some to eat. Yum! As the bees are going from plant to plant collecting the nectar they are also doing another really important job: spreading the plant's pollen, and this helps new plants to grow. This is why bees are a vital part of our ecosystem. Can you think of any other minibeasts that help us?

CHILD: What about worms? They help the soil.

MADDIE: Yes, earthworms help to aerate the soil. This means they loosen, mix and add oxygen to the soil as they move through it. This makes the soil better for growing plants, so farmers and gardeners like to have lots of earthworms in their soil.

Some minibeasts have superpowers to help protect themselves. To understand why minibeasts need to protect themselves, it helps to look at where they sit in the food chain. A food chain describes the order of living things and how they depend on each other for food. Minibeasts are often low on the food chain. Because they are small, many bigger animals look at them as food. This means lots of minibeasts use their superpowers to protect themselves from predators. For example, Hawthorn Shield Bugs live here in the UK and mostly eat hawthorn berries. But birds want to eat the shield bugs so they defend themselves by spraying a smelly liquid. It puts off the hungry predators. This is why they are also sometimes called stink bugs.

What other superpowers can minibeasts use to defend themselves?

- CHILD: This jungle nymph comes from the tropical rainforests of Southeast Asia and uses its camouflage to turn nearly invisible!
- CHILD: It looks just like a leaf!
- MADDIE: Jungle nymphs are a type of stick insect, which all use their camouflaged appearance to blend in with their jungle habitats. This helps them to avoid predators. Some minibeasts use their superpowers for hunting and for protection, like this Asian forest scorpion. Its natural habitat is the tropical rainforests of Southeast Asia. He has a venomous stinger in his tail, which can be used to hunt and to fend off predators such as owls or bats.
- CHILD: Cool, so they use their superpower to defend themselves from bigger animals!
- MADDIE: Exactly! Even some of the smallest minibeasts have surprising superpowers - like these ants. Ants have super strength: a single ant can carry 50 times its own bodyweight, and they can work as a group to move even bigger objects! This dung beetle is the world's strongest animal by size! It can push over one thousand times its own weight, which is the equivalent to a human pulling six double decker buses! Let's hear from our expert about his favourite minibeast and its superpower!
- YUSSEF: Hi, I'm Yussef and I'm a minibeast expert. And I want to tell you about a minibeast that has a very special superpower: the glow-worm. Glow-worms are not actually a type of worm at all: they're a type of beetle. And they come out at night when it's dark so it can be quite tricky for them to find each other. Luckily, the females have a very special superpower that helps them with this problem: they can make their bottoms light up, a bit like a torch. They have a special chemical inside their bottoms and when it mixes with the oxygen in the air it creates this miraculous green glow that makes them easier to spot. The scientific name for this is bioluminescence, and it's just one of the many superpowers that minibeasts have.
- MADDIE: Minibeasts have all kinds of superpowers, but sometimes they need our help to survive. Do you have any ideas of how you might help minibeasts in your local environment?
- CHILD: We're putting out a bug hotel so the minibeasts have somewhere safe to live.
- MADDIE: Clever! Minibeasts will love crawling into all those little spaces!
- CHILD: Or we can let an area of garden grow wild!
- MADDIE: Even a small wild area of garden at your home or your school, could attract lots of minibeasts. By adding piles of leaves, or stones, you can provide a habitat for minibeasts, allowing them make the most of their superpowers!