Minibeasts are 'small creatures', like worms, snails, insects and spiders. The scientific term for them is 'invertebrates' – a creature without a backbone. Because they don't have a backbone, minibeasts tend to have other structures which support and protect them. Snails have shells, while many insects and spiders have an 'exoskeleton', which is a hard casing on their outside. There are over 25,000 minibeast species in Britain.

Minibeasts are split into three main sub-groups or classifications: arthropods, molluscs and annelids. **Arthropods** include insects, arachnids (spiders), crustaceans (which have a hard shell or case on the outside) and miriapods (creatures with lots of legs). **Molluscs** often have a shell like a snail. **Annelids** are worms.

Minibeasts can live in most habitats, from dry deserts to lakes. They often live in what are called 'micro-habitats', like a stone, a log, a tree or some dead leaves. These might be found in a range of larger habitats, but are often perfect for minibeasts to live in or under. It is very easy to find minibeast habitats as they can and do live almost everywhere. Some people build what are called 'bug hotels', built using natural materials to create a micro-habitat.

Minibeast diets are quite varied and many have highly-designed mouth parts to help them access their food. Some minibeasts feast solely on plant materials while some eat sap and nectar. Other minibeasts eat other insects or even larger dead animals. Many minibeasts eat waste materials and dead matter. Minibeasts move in a variety of ways. Some, like water boatmen, are very good at swimming; while many, like bees, flies and dragonflies, have wings which enable them to fly.

Minibeasts have a varied number of legs – anything from none if you are a snail or slug to perhaps 750 if you are certain species of millipede. Minibeasts use these legs to help them crawl. Some minibeasts even jump – a grasshopper can jump up to 10 times its length when it jumps high, and can jump 20 times its length when it jumps long.

Minibeasts are of great importance to nature for a number of reasons: they are eaten as a food source by birds and other creatures, in the early stages of a food chain; they help to pollinate plants; they are also often decomposers and eat dead and decaying matter, essentially recycling nutrients back into the ecosystem. They also indirectly help us with farming and growing food as many minibeasts eat other minibeasts that would otherwise destroy our crops. Humans would not survive without minibeasts, so we need to make sure we take care of them and their habitats.

Read about different minibeasts below and pick 2 or 3 to write about.



## Ant

Ants are one of the smallest mini beasts; they have six legs and two antennae on their heads which are used for touch and smell. There are more ants in the world than any other animal. Even though they are very small, ants can carry 20 times their body weight. They live in huge colonies underground, usually in parks, woods and gardens. Ants will normally eat anything that they can. Some ants have wings, but only queen and male ants. All of the worker and soldier ants are females.



Beetles have 3 body parts and 3 pairs of legs. All parts of their body are attached to the middle part, called the thorax. They have two eyes and antennae on their heads, which they use to see and feel around. Beetles have two pairs of wings, the front pair is shell like, it lies over and protects the second pair of wings. Beetles tend to eat leaves and plants. Some beetles are experts at digging (burrowing), others are brilliant swimmers. There

## Worm

The common earth worm lives underground, normally in damp soil which is dark and at a mild temperature. They do not have arms or legs, because they don't need them! They burrow around and make tunnels to travel through. Worms often travel to different places to find better places to live if their current home has run out of food. They have a varied diet which changes depending on where they live. Worms eat both plants and animals (these are called omnivores). They do not catch animals; they only eat them when they are already dead.



## Ladybird

Ladybirds are beetles, they have six legs and are are known for their coloured shells and spots. Most people think that ladybirds are red; but they can also be orange or yellow. The antennae on a ladybird's head help it find food, and its strong jaws help it eat the food. They eat other very small insects, especially aphids, and may eat up to 50 a day! They normally live near hedges or trees, although others can be found in wetlands and along river banks.

are many different types of beetles.





Bees can be found all over the world, most of them live in hives with thousands of other bees. Bees are known for their black and yellow striped bodies and their stingers. They have six legs and five eyes, two compound (big) eyes that are located on each side of the bee's head and three simple eyes that are located on top of the bee's head. Bees collect nectar to make honey and pollen to feed their young. Some bees collect the pollen in pollen baskets (corbicula) which can be found on their back legs.



small insects.



You can find flies just about anywhere near humans or animals; they love the smell of rubbish, manure or anything left in a warm place. Flies can only eat liquids, they love to eat sweet liquids, rotting food and some flies, like mosquitos even feed on blood. Flies look as though they have two eyes, but in fact they have over 4,000 smaller eyes within each big eye.



Dragonflies live near water, normally near ponds, lakes or streams. Although some dragonflies do wander off into the forest and fields to search for food. Adult dragonflies normally eat mosquitoes, bees and butterflies. Dragonflies have huge eyes which help them hunt, but their legs are too weak for walking and so they only use them to catch their prey. Their long, thin bodies help the dragonfly to fly quickly which makes it easier to catch food.

