
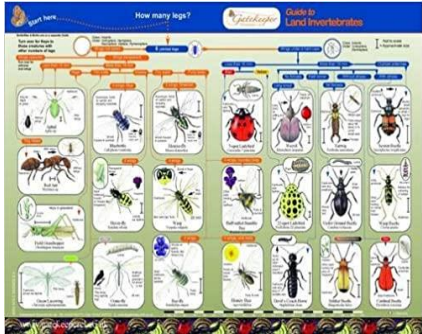


Topic: Living things and their environment – insects, invertebrates, habitats and micro-habitats

Year 2 (linked to Science – Biology)

What should I already know?

- Which things are living, dead and have never been alive.
- Name a variety of insects.
- Understand what invertebrates are.
- Animals can be grouped into vertebrates and invertebrates.

	<p>Our objectives</p>	<p>Investigate!</p> <p>(To maximise knowledge and understanding, activities will take place over a period of 6 sessions. Each session will last between 1 and 1.5 hours)</p>
<p>Session 1</p>	<p>Identify and classify different types of insects and other invertebrates: worm, butterfly, woodlouse, spider, fly and centipede, using various resources. Communicate; take part in conversation to share experiences, ideas and information about this.</p> 	<ul style="list-style-type: none"> • Take a few minutes to explore the area. What are we looking for? Where do we need to look? • Use plastic insects as well as searching for real life insects and find and name. • Minibeast hunt – use check list provided. • Identification fact sheets and books. • Discuss together what we have found. • Create a tally chart or pictogram to show results.
<p>Session 2</p>	<p>Explore and compare the different types of invertebrates through observing closely and improving understanding by identifying features: segments (worms/woodlice); special features, e.g., antennae, veins on wings, hairs on legs, breathing hole on a snail, bristles on a worm; movement.</p> 	<ul style="list-style-type: none"> • Moving bugs – describe features and engage pupils in physical movements (e.g., flap wings like a butterfly, slither like a snail and buzz like a bee). • Be a mini beast – in small groups, can pupils turn themselves into a mini beast? • Mini beast classification sheet and ID cards – what am I? game (children stand in a circle and describe the mini beast card upon their head). • Create a ground picture of one minibeast using natural materials (think about body parts, an equal number of legs on each side and lines of symmetry). Can they use the correct colours? Look at each other's work and identify each

		minibeast (take photos).
Session 3	Identify a number of habitats and micro-habitats.	<ul style="list-style-type: none"> • Habitat challenge – compare our habitats to those of insects and discuss what helps keep us alive. • Explore – what habitats and micro-habitats we can find? Where do we look? Think about unsuitable habitats. • Consider the impact of litter in the environment. (Re-visit in further lessons – waste management; clear rubbish around the school).
Session 4	Identify a number of habitats and micro-habitats within our grounds by doing a survey (link to geography – fieldwork and observational skills).	<ul style="list-style-type: none"> • Working in small groups use the school map and key to identify key areas to look, e.g., school field, walls, fence areas and drainpipes. As the children walk around, they should take photographs and mark on the map where they find a habitat, using magnifying glasses to look closer and recording what is living there. Bring findings back to forestry classroom to look at results. Compare two different micro-habitats (create a graph to find most common insect habitats and micro-habitats for next session).
Session 5	<p>Investigate the preferred habitat conditions of a particular insect or invertebrate. Using natural materials recreate a preferred habitat, considering conditions (light or dark; damp or dry).</p> <p>Consider how weather and seasonal changes impact on habitats and survival of insects and invertebrates.</p>	<ul style="list-style-type: none"> • Look at photographs previously taken and discuss them. • Create habitat – ensure that pupils have a good understanding of the habitat and ideal conditions, e.g., woodlice would prefer stones, dead leaves, soil, and moisture. Discuss the importance of caring for living things by providing them with food, water, air and returning them to their original habitat. Use adjectives to describe habitats.

Session 6	Add insects to their habitats and engage in discussions.	<ul style="list-style-type: none"> • Bug catchers – create own bug catcher considering the bug we aim to catch. Ensure air holes are made. • Create own minibeast world combining all habitats. Look closely and describe each other's, using adjectives.
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What I will have learned

- Communication through investigation – take part in conversation within a real situation, share experiences, ideas and information.
- Identify, classify and group some living things in the environment.
- Identify a number of habitats and micro-habitats.
- Identify that most living things live in habitats to which they are suited.
- Identify and classify different types of insects and other invertebrates.
- Explore and discover interesting features of habitats, nature and the impact of human activity and natural causes.
- Develop a sense of understanding for habitat survival through observing and exploring the environment.
- Investigate life cycles of invertebrates.
- Minibeasts are able to survive in their habitats because they can find the things they need to survive there, such as food and water. For example, caterpillars can survive on leaves as they provide them with food.

Pictures



Key vocabulary

- **Invertebrates** – a creature that does not have a spine, for example, an insect, a worm, or an octopus.
- **Habitats** – the natural environment in which an animal or plant normally lives or grows.
- **Micro-habitats** – a small part of the environment that supports a habitat, such as a fallen log in a forest.
- **Insects** – insects can be separated from other invertebrates as they generally have six legs and conform to a common body plan which comprises of three parts: the head, thorax and abdomen, although the parts of some insects may be more distinct than others.