



Lesson 1: We're going on a bug hunt

Teaching Instructions

Learning Outcomes

- Communicate; take part in conversation within a real situation, share experiences, ideas and information.
- Identify, classify and group living things in the environment.
- Explore and discover interesting features of habitats, nature and the impact of human activity.
- Develop a sense of size and amount by observing and exploring the environment.
- Investigate life cycles of invertebrates.

Required Resources

Equipment: You do not need a great deal of equipment to look for minibeasts. Small, clear plastic pots with lids, Tupperware boxes, jam jars and magnifying glasses are all useful. If you did want to buy equipment, then sweep nets and pooters (small clear pots with tubes that enable you to suck up bugs) are good choices. A large white sheet and umbrellas are also useful (see below). If you are pond dipping then kids nets or kitchen sieves can be used and white trays or boxes help the children to see what they have caught more clearly. Print off enough copies of the Bug Identification Chart. This is designed to get the children thinking about species; for example, this is not just a snail, it's a brown-lipped snail.

Preparation

Location: If you are lucky enough to have a wildlife garden in the school grounds, obviously make good use of that. But you will be able to find minibeasts in your local park or wood or anywhere there are trees and shrubs planted. The ideal would be somewhere with long grass, flowers and trees to provide a variety of habitats. The time of year you go on your bug hunt will affect what you find - late spring, summer and early autumn being the best times.

Notes

Lesson duration: We would recommend spending 60 minutes on activities 1 and 2 - the bug hunt, 60 minutes on activity 3 and 120 minutes on activity 4. You may want to split the activities into a series of lessons.



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Teaching Plan

Activity 1— Get ready for the Bug hunt

Start in the classroom with a discussion about what the children understand by the term 'minibeasts' and why they are important to us:

- Pollination and food production (bees, flies and beetles - mention that it is a fly that pollinates the cocoa plant that we get chocolate from)
- Soil production (worms and beetles— that break down organic matter)
- Biodiversity

Have a look around the classroom. Are there any signs of minibeast activity: dead flies on the window sill, spiders' webs, bugs on house plants or holes in the leaves , suggesting they may have been there.

Before venturing out discuss with the children the best behaviour for seeing minibeasts. It is best not to go charging into an area; you will frighten everything off! It is best to approach an area quietly and maybe just stand still, looking and listening

Activity 2—Bug hunting

•**Turning over logs or stones** – this is a great activity if you are in a wooded area. Look out for centipedes, woodlice and spiders underneath the deadwood. Always put the logs or stones back exactly where they were.

•**Shaking bushes/trees** – Lay a white sheet on the ground and using an umbrella or walking stick tap or shake a branch. The idea is that the bugs will fall off the twigs and leaves that they were perched on. Look out for shieldbugs, spiders and ladybirds.



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- **Exploring** – If it is sunny, visit flowers and look out for bees, hoverflies and butterflies. Talk about the role of insects in pollination.
- **Sweep netting** – if you have access to a sweep net then you can use it to sweep back and forth for about a minute in long grass or hedgerows. Place the net on the floor and ask the children to make a circle around you (so children can see into the net). Look through the net for seed bugs, grasshoppers and beetles.
- **Pond dipping** – you do not need a proper pond dipping net you can use a kitchen sieve! White plastic ice cream tubs are perfect for viewing the creatures caught in the sieve. Look out for damselfly and dragonfly larva and water boatmen. The children's safety is very important. It is best to have only a few children at the water's edge with everyone else further back with the containers. Of course all minibeasts should be returned to the water at the end of the lesson.
- **Pitfall traps** – In the school grounds you can sink some yoghurt pots so that the rim is level with the ground. The pots should be checked at least daily for any minibeasts that have fallen into them. Look out for ants, woodlice, centipedes, millipedes and beetles. This project can be ongoing for a week. Remember to remove the pots at the end of the week.

Activity 3 — What did you find?

Back in the classroom, discuss what minibeasts have been found. Try to identify exactly what species have been found (using books/internet) rather than, for instance, just a snail.

Activity 4 — Bug study

Create a booklet or poster about a particular minibeast or group of minibeasts.

Study the lifecycle of a particular minibeast, create a poster, or create a food web collage.