



## Butterflies Class Medium Term Planning for Science Summer 2024, Minibeasts

### Topic: Minibeasts

- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of 'minibeasts'
- Identify basic food chains
- Investigate and describe the basic needs of invertebrates for survival (water, food and air)
- Identify and name a variety of common animals that are invertebrates.

Looking at images, stories and songs about different minibeasts.

Learning about habitats and adaptations, life cycles, diet and ways of feeding.

Describing the features of specific minibeasts: fast, slow, crawls, flies, swims, lots of legs, no legs, webs, shells, colours, camouflage...

Cross curricular:

English - stories about minibeasts, writing tasks, building vocabulary

Maths - symmetry, pattern, colour, counting, pairs and doubles

Art - creating representations of insects

PE - moving like a minibeast

Health and safety - weekly reminders about washing hands, touching the insects, not hurting the insects, not putting fingers in mouths etc.

<u>Lesson 1</u>	<u>Lesson 2</u>	<u>Lesson 3</u>	<u>Lesson 4</u>	<u>Lesson 5</u>	<u>Lesson 6</u>
<b>Snails</b>	<b>Bug hunting</b>	<b>Worms</b>	<b>Bug hunting - tree shake</b>	<b>Bees</b>	<b>Bug hunting - creature cafe</b>
Observe a real snail. Use magnifying glasses and the microscope (plugged into the big screen). What do they eat? How do they move? Are they fast or slow?	Visit the sensory garden or allotment with trays and containers for looking at bugs. Use identification keys.	Looking at worms in a wormery. Finding worms in a flower bed. What do they eat? How do they move?	Lay a large white sheet under a tree and shake to see what creatures fall out. Observe and identify.	Learn about bees. What colour are they? What do they make? Tasting and smelling honey.	Investigating the creatures who have visited the "café". Identify. What do they like to eat?

Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12
<b>Frogs and frog spawn</b>	<b>Pond dipping?</b>	<b>Butterflies and caterpillars</b>	<b>Bug hunting - using a microscope</b>	<b>Spiders</b>	<b>Bug hunting</b>
Look at videos of frogs and frog spawn. Look at the lifecycle of a frog. Frog spawn sensory tray with water-beads.	Visiting a pond or stream - or exploring pond water in class. Identify creatures. Use magnifying glasses and microscope.	The life cycle of a butterfly - attention autism session.	Another visit to an outside area for bug hunting. Focus on underneath rocks and dead-wood. Identification.	Exploring spiders. Dropping a fluffy spider down a drain. Making wooly spider webs.	In school or off site visit to explore creepy crawlies. How many bugs can we identify now?

Substantive Knowledge (Content)	Disciplinary Knowledge (Skills)
<p><b>EYFS</b> Make comments about what they have heard and ask questions to clarify their understanding. Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> <p><b>KS1 Science National Curriculum</b> Asking Questions and carrying out Fair and Competitive Tests Asking simple questions and recognising that they can be answered in different ways. Performing simple tests. <b>Children can:</b> a explore the world around them, leading them to ask some simple scientific questions about how and why things happen; b begin to recognise ways in which they might answer scientific questions; c ask people questions and use simple secondary sources to find answers; d carry out simple practical tests, using simple equipment; e experience different types of scientific enquiries, including practical activities; f talk about the aim of scientific tests they are working on.</p> <p>Observing and Measuring Changes Observing closely, using simple equipment.</p>	<p><b>EYFS</b> <b>EYFS Working Scientifically</b></p> <ul style="list-style-type: none"> <li>• Explore and respond to different natural phenomena in their setting and on trips</li> <li>• Realise that their actions have an effect on the world, so they want to keep repeating them.</li> <li>• Repeat actions that have an effect.</li> <li>• Plan and think ahead about how they will explore or play with objects.</li> <li>• Guide their own thinking and actions by referring to visual aids or by talking to themselves while playing.</li> <li>• Bring their own interests and fascinations into early years settings.</li> <li>• Respond to new experiences that you bring to their attention.</li> <li>• Talk about what they see, using a wide vocabulary.</li> <li>• Use pretend play to think beyond the 'here and now'</li> <li>• Know more, so feel confident about coming up with their own ideas.</li> <li>• Make more links between those ideas.</li> <li>• Concentrate on achieving something that's important to them. They are increasingly able to control their attention and ignore distractions.</li> <li>• Engage in non-fiction books related to science.</li> <li>• Listen to and talk about selected non-fiction to develop a deep familiarity with new knowledge and vocabulary.</li> <li>• Make some simple predictions verbally or using AAC</li> <li>• Record findings using a scribe, pictures, photographs or symbols</li> <li>• Alert/attend/anticipate/respond to/initiate activities related to investigations.</li> <li>• Sort by obvious differences</li> </ul>

<p>Children can:</p> <p>a observe the natural and humanly constructed world around them;</p> <p>b observe changes over time;</p> <p>d make careful observations, sometimes using equipment to help them observe carefully.</p> <p>Identifying, Classifying, Recording and Presenting Data</p> <p>Identifying and classifying.</p> <p>Gathering and recording data to help in answering questions.</p> <p>Children can:</p> <p>a use simple features to compare objects, materials and living things;</p> <p>b decide how to sort and classify objects into simple groups with some help;</p> <p>c record and communicate findings in a range of ways with support;</p> <p><b>Children can:</b></p> <p><b>a</b> use simple features to compare objects, materials and living things;</p> <p><b>b</b> decide how to sort and classify objects into simple groups with some help;</p> <p><b>c</b> record and communicate findings in a range of ways with support;</p> <p><b>d</b> sort, group, gather and record data in a variety of ways to help in answering questions such as in simple sorting diagrams, pictograms, tally charts, block diagrams and simple tables.</p> <p>Drawing Conclusions, Noticing Patterns and Presenting Findings</p> <p>Using their observations and ideas to suggest answers to questions.</p> <p>Children can:</p> <p>use simple and scientific language;</p>	<ul style="list-style-type: none"> <li>• Begin to measure and compare with support in non-standard units.</li> </ul> <p>With prompting, ask a few simple questions about the world around</p> <p><b>KS1</b></p> <p><u>KS1 Working Scientifically</u></p> <ul style="list-style-type: none"> <li>• Ask simple questions.</li> <li>• Observe closely, using simple equipment.</li> <li>• Perform simple tests.</li> <li>• Identify and classify.</li> <li>• Use observations and ideas to suggest answers to questions.</li> <li>• Gather and record data to help in answering questions.</li> <li>• Begin to recognise that questions be answered in different ways (different types of enquiry including - observing changes over time, noticing patterns, grouping and classifying, carrying out simple comparative tests, finding things out from secondary sources).</li> </ul>
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### Progression of Learning

'Link It'	'Learn It'	'Check It'	'Show It'	'Know It'
Applying knowledge and observations of the world around them relating to minibeasts	Identifying different minibeasts	Describing the features of different minibeasts	Discuss how the features are adaptations for survival	Compare insects to humans: homes, diet, life cycles